



STATE OF HAWAII
DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

LAND USE COMMISSION

P.O. Box 2359
Honolulu, Hawaii 96804-2359
Telephone: 808-587-3822
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September 26, 2005

RECEIVED
05 SEP 26 P 3:16
OFFICE OF ENVIRONMENTAL
QUALITY CONTROL

Ms. Genevieve Salmonson, Director
Office of Environmental Quality Control
235 South Beretania Street, Room 702
Honolulu, Hawaii 96813-2437

Dear Ms. Salmonson:

Subject: LUC Docket No. A05-758/A Charitable Foundation Corporation
Finding of No Significant Impact (FONSI) for Pupukeya Ridge Preservation Project
Pupukeya, Koolauloa and Waiialua, Oahu, Hawaii
Tax Map Keys: 5-9-23: por. 1; 5-9-24: 1; and 6-1-02: por. 22

On September 8, 2005, the Land Use Commission, after reviewing the comments received during the 30-day public comment period that began on July 23, 2005, determined that the subject project will not have significant environmental effects and issued a FONSI.

We respectfully request the publication of this notice in the next available issue of The Environmental Notice.

We have enclosed a completed OEQC Publication Form, Project Summary (hard copy and diskette) and four copies of the Final Environmental Assessment.

A copy of the Commission's Order reflecting its action of September 8, 2005, will be provided to you under separate cover.

Please feel free to contact Bert Saruwatari of my office at 587-3822, should you require clarification or any further assistance.

Sincerely,


ANTHONY J. H. CHING
Executive Officer

Enclosures

c: Benjamin M. Matsubara, Esq. (w/o enclosures)
Rodney Funakoshi (w/o enclosures)

2005-10-8 OA FONSI PUPUKEA RIDGE PRESERVATION PROJECT

OCT - 8 2005
FILE COPY

Final Environmental Assessment

LAND USE COMMISSION
STATE OF HAWAII

2005 SEP 23 P 1:27

**Pupukea Ridge
Preservation Project
Pupukea, Oahu, Hawaii**

RECEIVED

05 SEP 26 P 3:16

DEPT. OF ENVIRONMENTAL
QUALITY CONTROL

Prepared for:
A Charitable Foundation
P.O. Box 909
Haleiwa, Hawaii 96712

Prepared by:
Wilson Okamoto Corporation
1907 S. Beretania Street, Suite 400
Honolulu, Hawaii 96826

September 2005

**FINAL
ENVIRONMENTAL ASSESSMENT**

PUPUKEA RIDGE PRESERVATION PROJECT

**Prepared for:
A Charitable Foundation
P.O. Box 909
Haleiwa, Hawaii 96712**

**Prepared by:
Wilson Okamoto Corporation
Engineers and Planners
1907 S. Beretania Street, Suite 400
Honolulu, Hawaii 96826**

September 2005

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- Appendix B Pupukea Ridge: Agricultural Suitability of Lands Proposed for Redistricting to Agriculture, Decision Analysts Hawaii, Inc., April 2005
- Appendix C Botanical Survey Report for the Pupukea Ridge Preservation Project Site, Botanical Consultants, December 2004
- Appendix D Fauna Report for the Proposed Pupukea Ridge Preservation Site, Botanical Consultants, March 21, 2005
- Appendix E Archaeological Inventory Survey Report For A 14-Acre Parcel Located at TMK:5-9-23:01 & 5-9-24:01 (por.) and 6-1-02:22 (por.) in Pupukea and Waimea Ahupuaa, Koolauloa and Waialua Districts, Island of Oahu, Archaeological Consultants of the Pacific, Inc., February 2005
- Appendix F Phase I Environmental Site Assessment Pupukea Highlands Petition Area TMK (1) 5-9-23: Parcel 01 (Portion), 5-9-24: Parcel 01, and 6-1-02: Parcel 22, Pupukea, Oahu, Hawaii, Masa Fujioka & Associates, May 26, 2004

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PREFACE

A Charitable Foundation (ACF) is the owner of three parcels on Pupukea Ridge totaling approximately 94.175 acres. ACF proposes to consolidate and resubdivide the lots in order to donate approximately 79.03 acres to the State of Hawaii for a State Park Reserve, with the balance to be retained. A State Land Use District Boundary Amendment is needed initially to facilitate this transfer of lands. Pursuant to Chapter 343, Hawaii Revised Statutes and Chapter 200 of Title 11, Department of Health Administrative Rules, this Final Environmental Assessment (EA) / Finding of No Significant Impact (FONSI) has been prepared due to the involvement of State Conservation District lands as part of the proposed reclassification.

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SUMMARY

PETITIONER: A Charitable Foundation

PERMITTING AGENCY: State of Hawaii Land Use Commission

PROJECT LOCATION: Pupukea, Oahu, Hawaii

TAX MAP KEY: 6-1-002: 22, 5-9-023:01, and 5-9-024:01

PROJECT SITE: Approximately 94.175 acres

PETITION AREA: Approximately 33.978 acres

EXISTING USE: Open, undeveloped

STATE LAND USE DESIGNATION: Agricultural and Conservation

ZONING DESIGNATION: Preservation (P-1) and Agriculture (AG-2)

PROPOSED ACTION: Consolidation/Re-Subdivision
Donation for State Park Reserve

DETERMINATION: Finding of No Significant Impact

IMPACTS: The proposed action is not anticipated to have any significant short-term or long-term impacts upon the environment.

PARTIES CONSULTED DURING PRE-ASSESSMENT: Federal
U.S. Fish and Wildlife Service

State
Office of Planning, Department of Business, Economic Development, and Tourism
Land Division, Department of Land and Natural Resources
Historic Preservation Division, Department of Land and Natural Resources
Division of State Parks, Department of Land and Natural Resources
Office of Hawaiian Affairs

City & County of Honolulu
Department of Planning & Permitting

Other

North Shore Neighborhood Board

Sunset Beach Community Association

1. SETTING AND PROJECT DESCRIPTION

1.1 Project Site

The Project Site is situated along a ridge in Pupukea, approximately 6.25 miles east of Haleiwa town center on Oahu's North Shore (see Figure 1-1). The Project Site encompasses 94.175 acres and is further identified as Tax Map Keys (TMK) 5-9-023:1, 5-9-024:1, and 6-1-002:22 (see Figure 1-2). A Charitable Foundation (ACF) proposes to donate approximately 79.03 acres of land to the State of Hawaii for the creation of a State Park Reserve under the jurisdiction and management of the Hawaii Department of Land and Natural Resources (see Figure 1-3). The remaining land area, 15.144 acres, will be consolidated/resubdivided and retained by ACF.

To the immediate north and east of the Project Site is Pupukea residential/agricultural community. To the west is a fallow and undeveloped Agricultural parcel. Mauka and to the east of the residential Pupukea development, the highlands are dominated by an extensively zoned Conservation District. To the south is Waimea Valley, home of Waimea Falls Park, which offers recreational, educational and cultural experiences to both residents and visitors.

1.2 Project Description

A State Land Use District Boundary Amendment petition has been filed with the State Land Use Commission to reclassify approximately 28.759 acres of the 38.684 acres (TMK 5-9-023:1 and 5-9-024:1) from the Agricultural District to the Conservation District, and to reclassify approximately 5.219 acres of the 55.491 acres (TMK 6-1-002:22) from the Conservation District to the Agricultural District (see Figure 1-3). The Petition Area encompasses approximately 33.978 acres. This will have the effect of placing all of the lands to be donated for State Parks use within the Conservation District, and all of the lands to be privately retained within the Agricultural District. There are no plans at this time for the development of the Agricultural lands to be retained, however, this area could subsequently be developed with up to four (4) farm dwellings with agricultural uses (see Figure 1-4).

There are no apparent hazards posed by rock, soil or other slope movement that would affect land suitability relative to subdivision approvals. This pertains in general to the Project Site, but in particular to the approximately 15.144 acres to be retained by ACF, as the remaining 79.03 acres would be donated to the State. There are no residences or other potentially affected uses of concern in the area below the ridge.

1.3 Background

ACF, a 501C3 non-profit organization, has been involved in this project involving 94 acres of land on the ridge above Waimea Valley's northern rim since 2001. ACF purchased this property to:

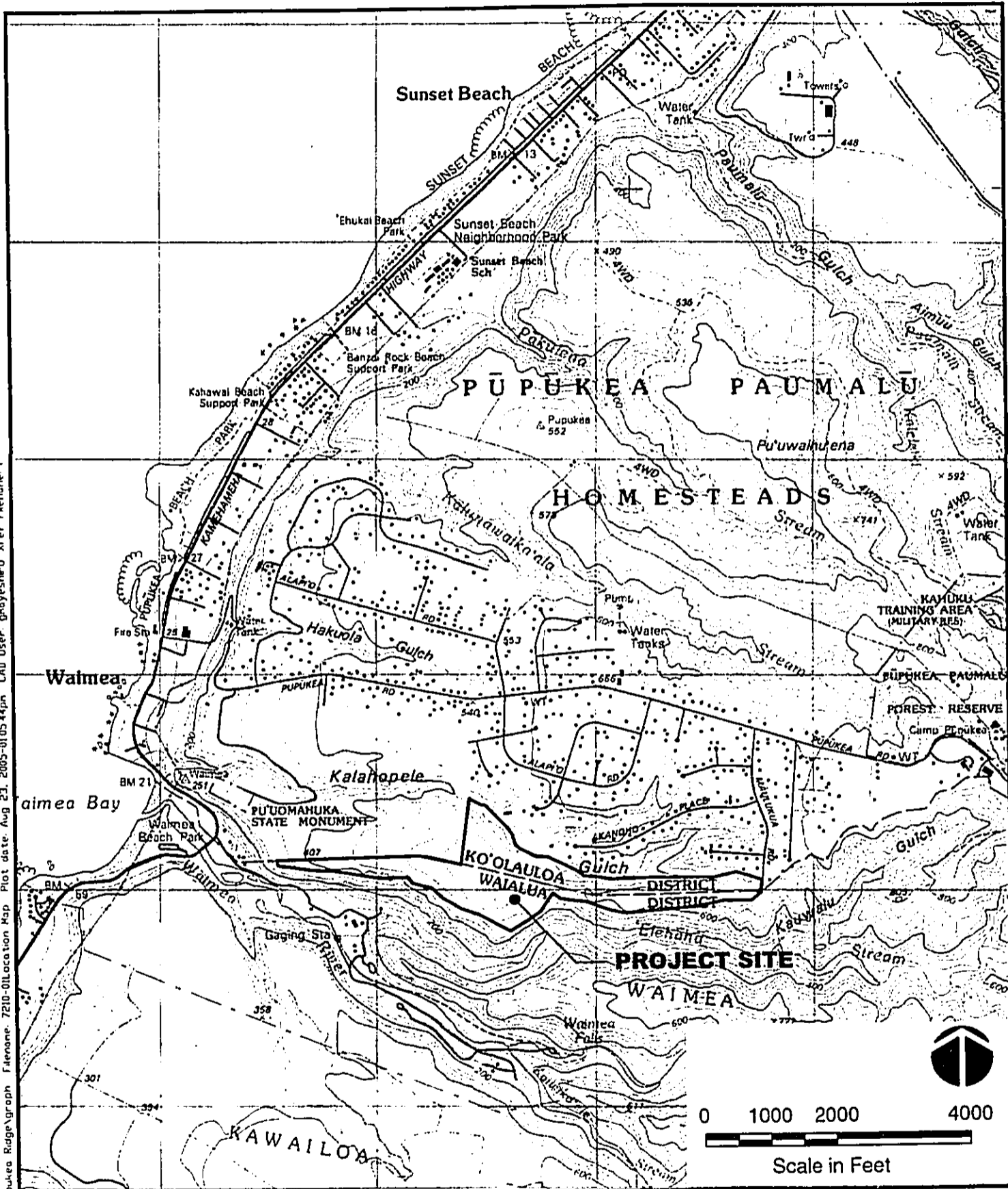
- Preserve the land on the ridge and protect the view planes looking up the Valley

- Preempt subsequent rezoning and development of this land
- Open up the land to the community and create a community resource

ACF's Limited Warrant Deed for the subject property is attached as Appendix A. To accomplish these goals ACF proposed in August 2002 to donate an approximately 63-acre portion of these lands to State Parks with accompanying conservation easements and/or restrictions on deed to ensure that these goals are met in perpetuity. Subsequent to the September 11, 2001 terrorist attacks, the non-profit, nonsectarian Kahi Malu Spiritual Sanctuary was also proposed on the remaining 31 acres in attempts to foster unity among religions as a secondary charitable use of the property. This required the following:

- a) Redesignation of a portion of TMK (1) 6-1-02:22 from State Conservation District Limited Subzone to the General Subzone
- b) Preparation of an Environmental Assessment since the proposed project lies within the Conservation District

Following a September 2002 public hearing where community concerns were expressed regarding the development of the Kahi Malu Sanctuary, the proposal for a non-sectarian spiritual retreat on the retained lands was abandoned. ACF's primary objective remains to donate the majority of the property, increased to 79.03 acres, for the preservation of the ridge and the establishment of a future State Park.



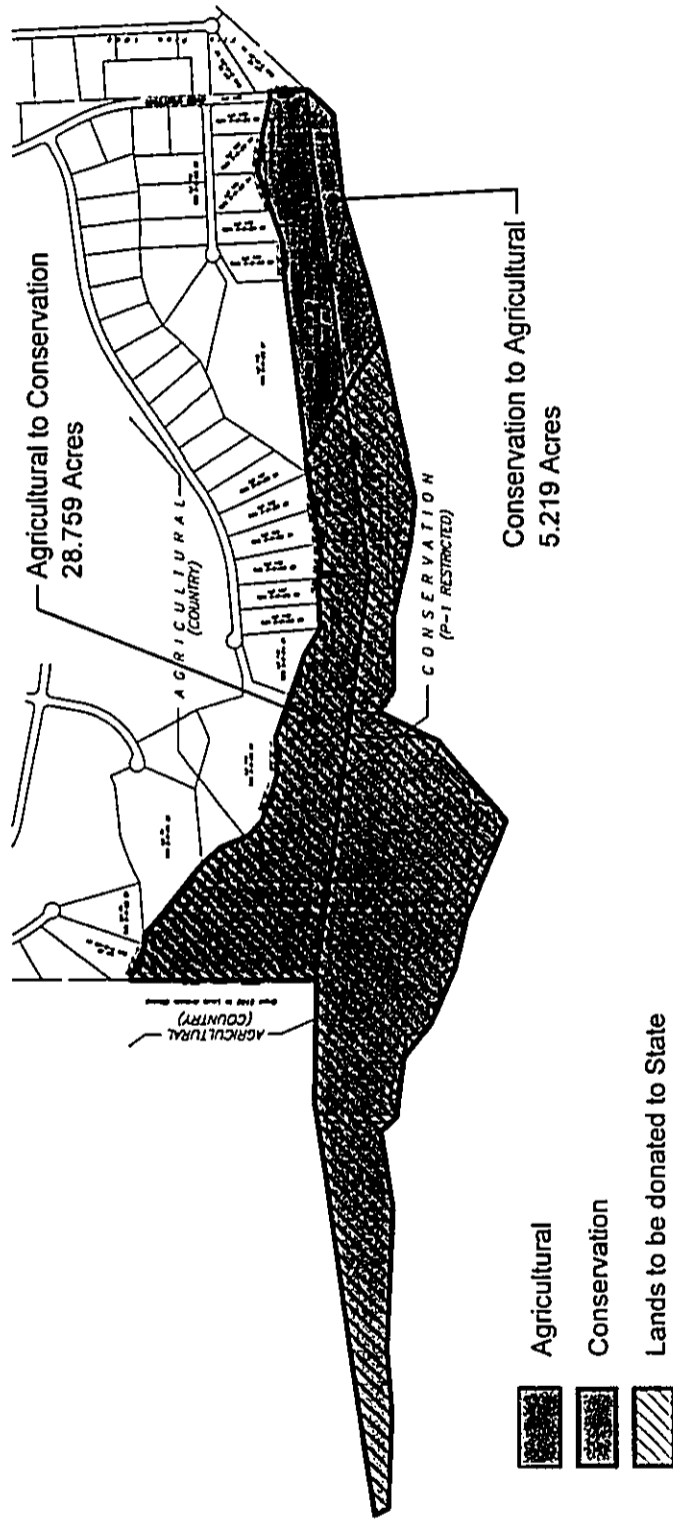
Path M:\V00A\7210-01 Pūpūkea Ridge\graph Filename: 7210-01 Location Map Plot date: Aug 23, 2005 01:05:44pm CAD User: groyeshro Xref File: none 1



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PUPUKEA RIDGE PRESERVATION PROJECT
LOCATION MAP

FIGURE
1-1

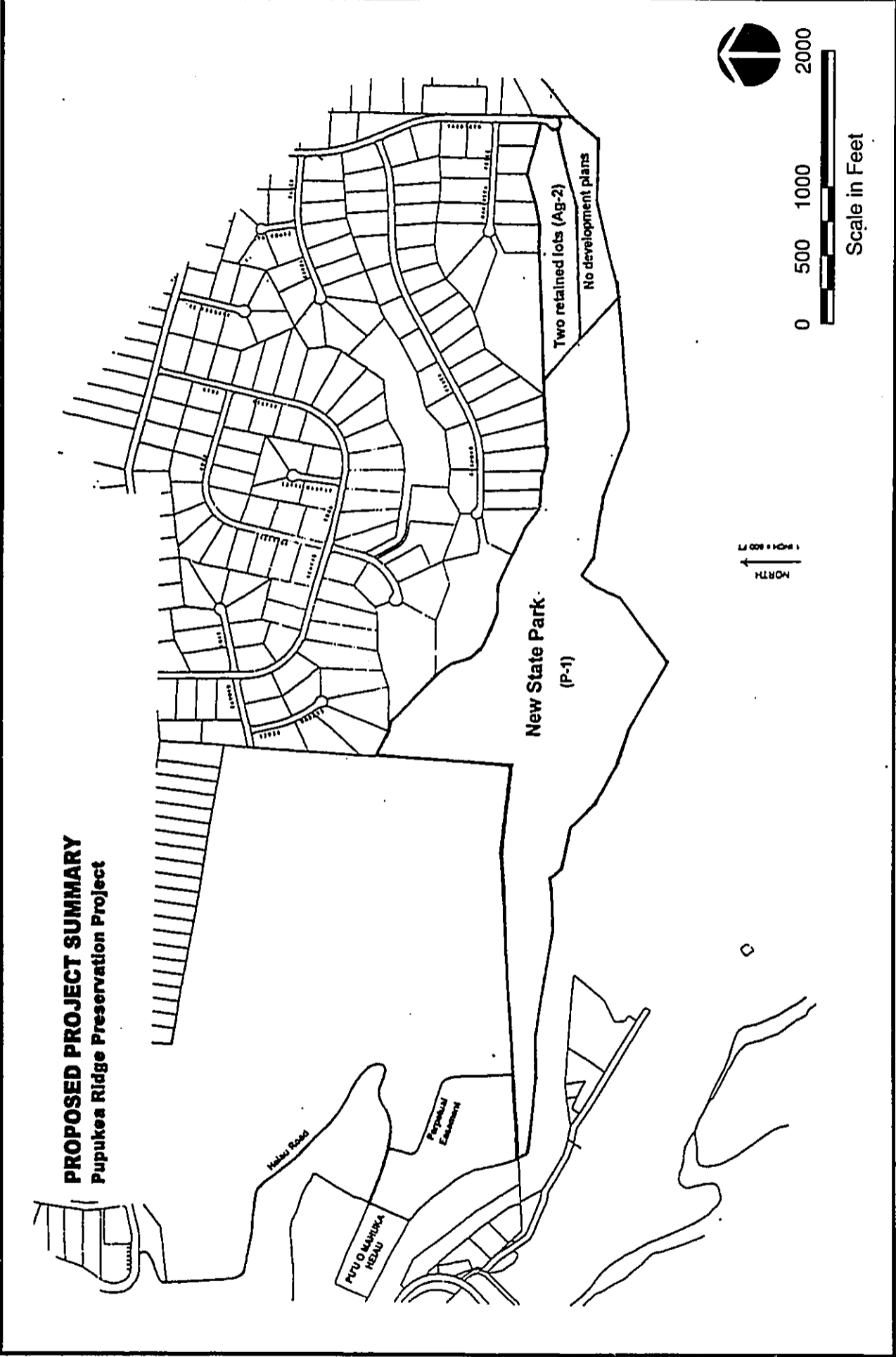



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PUPUKEA RIDGE PRESERVATION PROJECT

PROPOSED PARK DONATION

FIGURE 1-3



 WILSON OKAMOTO CORPORATION ENGINEERS • PLANNERS	PUPUKEA RIDGE PROJECT PROPOSED PROJECT SUMMARY	FIGURE 1-4
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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

2. DESCRIPTION OF EXISTING ENVIRONMENT, PROJECT IMPACTS AND MITIGATION MEASURES

2.1 Climate

The median annual rainfall in the project vicinity is estimated between 40 – 70 inches. Historically, January and February are the wettest months of the year, and June through September are the driest months. Trade winds predominate from the northeast at 10 – 25 miles per hour (mph). On occasion, these trade winds can approach 50 mph. The trades are especially prevalent during the summer months between May and September. From October through April storm-generated Kona winds become a common occurrence bringing moisture laden clouds to the project area. The annual mean temperature of the project area is approximately 75 degrees Fahrenheit. Temperatures range between a low of 50 degrees Fahrenheit and a high of 96 degrees Fahrenheit.

2.2 Geology and Topography

The Project Site is situated on the ridge above the northern rim of Waimea Valley. A small plateau is formed along the top of the ridge, which descends gradually toward the sea at varying gradients between 5 to 15 percent. Upon either side of the plateau the topography falls off more abruptly. To the south, the plateau carries over into TMK 6-1-02:22 whose southern boundary is essentially established by the top of a steep cliff which descends to Waimea Valley below. To the north, the Project Site descends less dramatically into the Kalahopele Gulch.

Elevations range from about 200 feet above mean sea level (msl) at the makai end, to 575 feet msl at the center, up to 750 feet msl at the mauka end of the Project Site.

Approximately 15.144 acres will be retained by ACF. Approximately 59.9% of the retained area has less than a 20% slope and 37.9% of the retained area has less than a 10% slope (see Figure 2-1).

2.3 Soils

The soils in the Project Site belong to the following soil associations:

- Helemano-Wahiawa association – Deep, nearly level to moderately sloping, well-drained soils that have a fine-textured subsoil; on uplands.
- Lolekaa-Waikane Association – Deep, nearly level to very steep well-drained soils that have a dominantly fine textured subsoil; on fans, terraces, and uplands.

According to the U.S. Natural Resources Conservation Service (NRCS), formerly known as Soil Conservation Services (1972), the following soil types are found in the Project Site (see Figure 2-2):

- Helemano Silty Clay, 30-90% (HLMG) – This series consists of well-drained soils on alluvial fans and colluvial slopes on the sides of gulches. They developed in alluvium and colluvium derived from basic igneous rock. They are

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PUPUKEA RIDGE PRESERVATION PROJECT

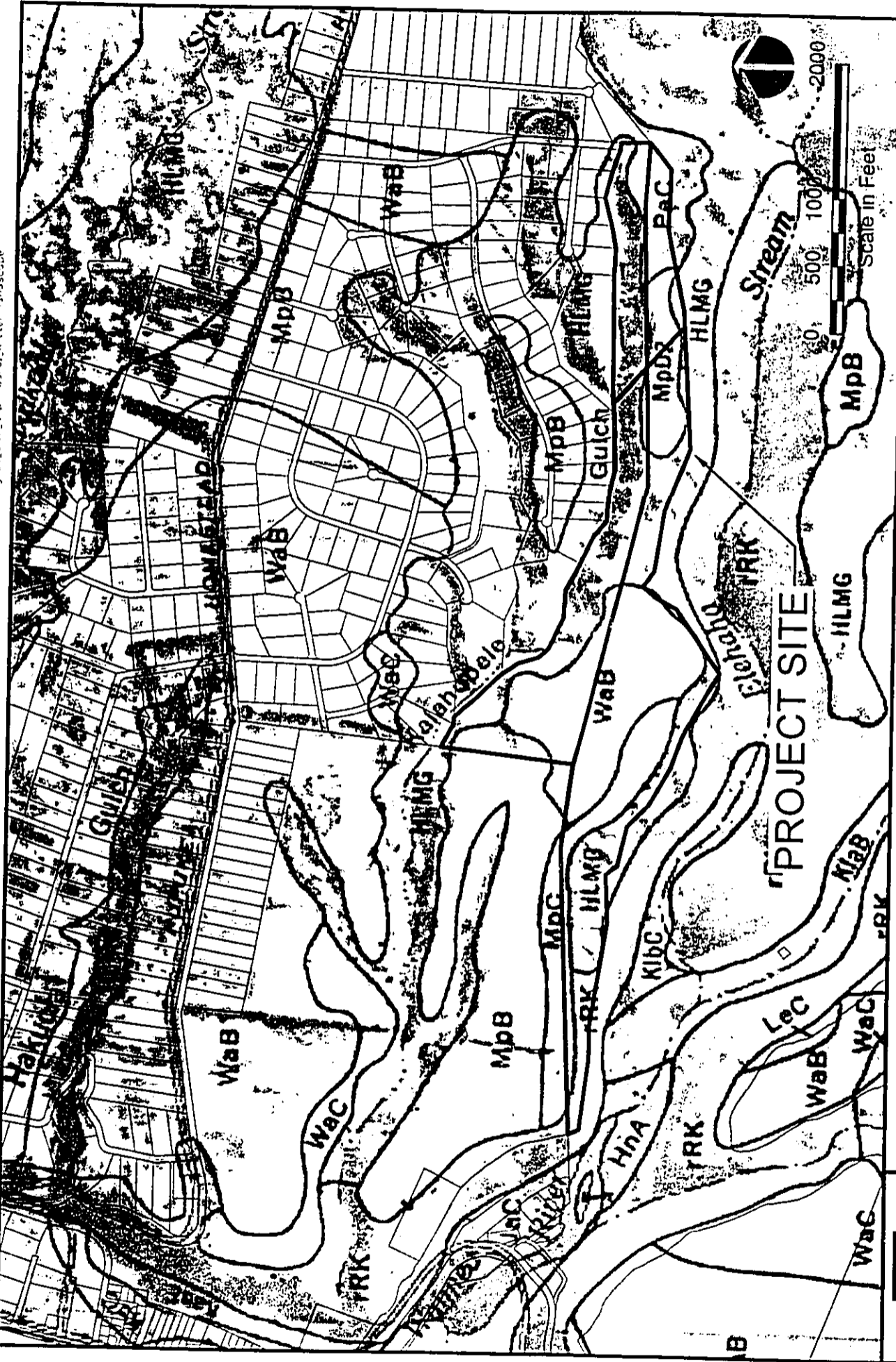
FIGURE
2-1


SLOPE MAP



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PUPUKEA RIDGE PRESERVATION PROJECT
SOIL CLASSIFICATION MAP

FIGURE
2-2

steep to extremely steep. Elevations range from 500 to 1,200 feet. These soils are used for pasture, woodland, and wildlife habitat. In a representative profile the surface layer is dark reddish-brown silty clay about 10 inches thick. The subsoil, about 50 inches thick, is dark reddish-brown and dark-red silty clay that has subangular blocky structure. The substratum is soft, highly weathered basic igneous rock. The soil is neutral in the surface layer and neutral to slightly acid in the subsoil.

- Manana Silty Clay, 3 to 8% Slopes (MpB) – This series consists of well drained soils on uplands that developed in material weathered from basic igneous rock. They are gently sloping to steep. Elevations range from 500 to 1,200 feet. On this soil, runoff is slow and the erosion hazard is slight. The depth to the panlike sheet is 30 to 50 inches. This soil is used for sugarcane and pineapple.
- Manana Silty Clay, 8 to 15% slopes (MpC) – On this soil, the depth to the panlike sheet is 30 to 50 inches. This soil is used for sugarcane, pineapple, and pasture.
- Manana Silty Clay, 12 to 25% slopes, eroded (MpD2) – This soil is similar to Manana silty clay loam, 6 to 12 percent slopes, except that it is moderately steep, is eroded, and has a silty clay texture. In most areas nearly all of the original surface layer has been removed by erosion. Runoff is rapid, and the erosion hazard is severe. This soil is used for sugarcane, pasture, and homesites.
- Paaloa Silty Clay, 3 to 12% slopes (PaC) – This soil occurs as narrow areas bounded by steep gulches. The slope range is 3 to 12 percent, but in most places it is 3 to 8 percent. The slopes are smooth. In a representative profile the surface layer, about 17 inches thick, is a mixture of dark-brown and dark reddish-brown silty clay and clay. The subsoil, about 43 inches thick, is dark reddish-brown silty clay and clay that has subangular blocky structure. The substratum is soft, weathered rock. The soil is strongly acid to very strongly acid. Permeability is moderately rapid. Runoff is slow to medium, and the erosion hazard is slight to moderate. This soil is used primarily for pasture and sugarcane.
- Wahiawa Silty Clay, 3 to 8% Slopes (WaB) – This series consists of well-drained soils on uplands that formed in residuum and old alluvium derived from basic igneous rock. On this soil, runoff is slow and the erosion hazard is slight. This soil is used for sugarcane, pineapple, and pasture.
- Rock Land (rRK) is made up of areas where exposed rock covers 25 to 90 percent of the surface. The rock outcrops and very shallow soils are the main characteristics. The rock outcrops are mainly basalt and andesite. This land type is nearly level to very steep. Elevations range from nearly sea level to more than 6,000 feet. Rock land is used for pasture, wildlife habitat, and water supply.

The *Detailed Land Classification – Island of Oahu* published by the University of Hawaii Land Study Bureau (LSB) (1972), evaluates the quality of productive capacity of certain lands on Oahu for selected crops and overall suitability in agricultural use. A five class productivity rating system was established with "A" representing the highest productivity and "E" the lowest. Approximately 35% of the Project Site has an "E" rating which indicates very poor productivity (see Figure 2-3). Approximately 25% and 31% of the Project Site is rated "B" and "C". The "B" rating indicates good productivity for most agricultural uses while "C" indicates fair productivity.

The *Agricultural Lands of Importance in the State of Hawaii (ALISH) Map*, prepared by the State Department of Agriculture, classifies lands into three categories: 1) prime agricultural land, 2) unique agricultural land, and 3) other important agricultural land. Most of the Project Site is classified as "prime agricultural land" although most of this designation is with the Conservation District (see Figure 2-4).

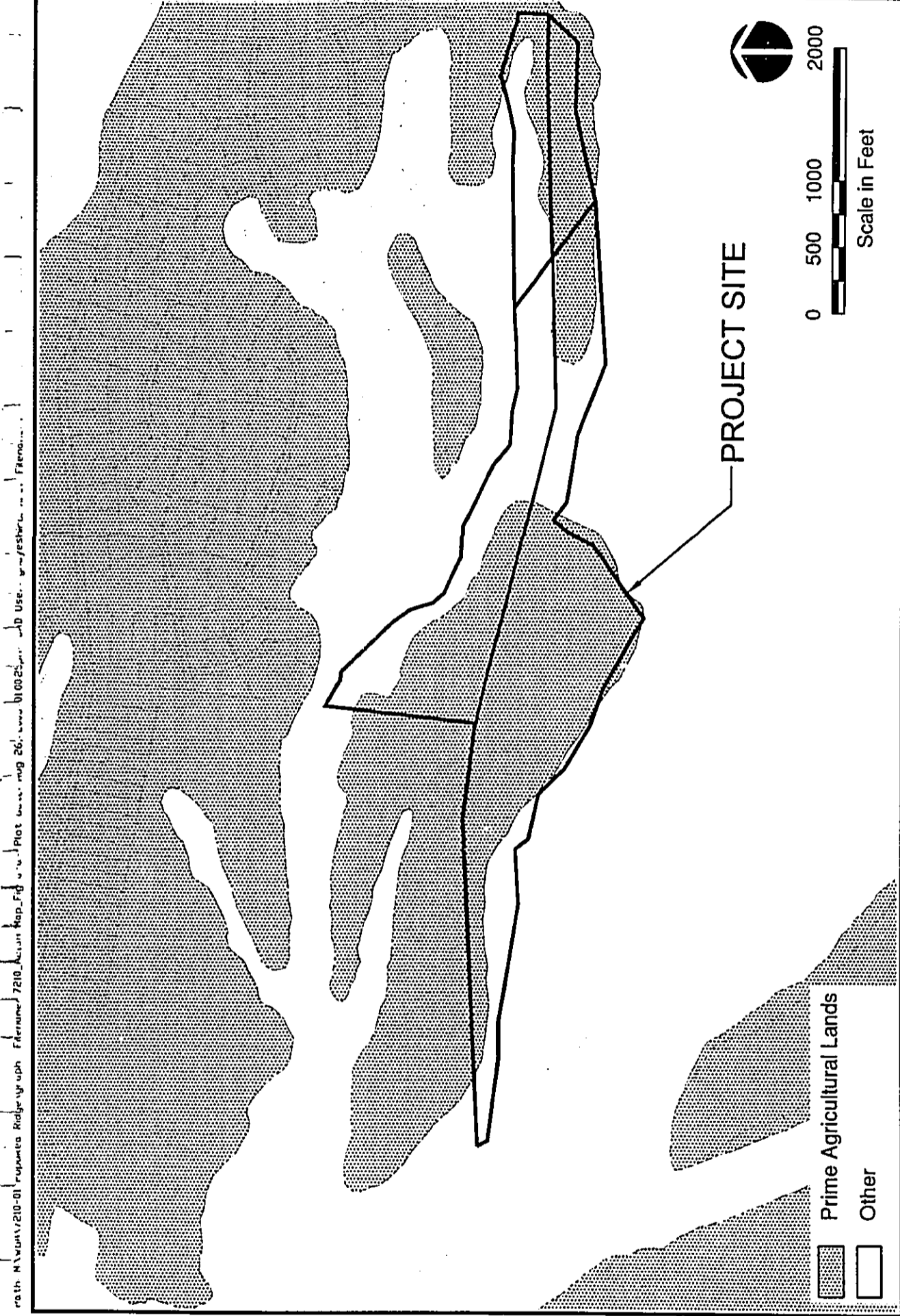
Impacts and Mitigation Measures

ACF proposes to reclassify 28.759 acres of the 38.684 acres (TMK 5-9-023:1 and 5-9-024:1) from the Agricultural District to the Conservation District and reclassify 5.219 acres of the 55.491 (TMK 6-1-002:22) acres from Conservation District to the Agricultural District, as shown in Figure 1-3.

There is a small reduction in the State's overall agricultural land capacity. The net loss to the State's Agricultural District is approximately 23.54 acres, however, most of the agricultural lands have a poor productivity rating (as shown in Figure 2-3).

The 5.219 acres to be retained by ACF will be reclassified to the Agricultural District. A study was done by Decision Analysts Hawaii, Inc (April 2005) and is included herein as Appendix B. to address the suitability of using the 5.219 acres for agriculture in conjunction with the adjacent 9.925 acres already in the Agricultural District. Of the combined 15 acres of land to be retained in the Agricultural District, approximately 6 acres are relatively flat lands (10% slope or less). As mentioned earlier, the UH LSB developed the Overall Productivity Rating which classifies soils according to five levels, with "A" representing the class of highest productivity and "E" the lowest. In the proposed Agricultural Area, about 4 acres (77%) of the soils are rated C and remaining 1.2 acres (23%) is rated E. The study indicated that the 5.219 acres to be retained are suitable for agriculture as indicated by the following advantages and limitations:

- Good access
- Reasonable although fairly long trucking distance to the Honolulu markets and to shipping terminals
- About 3 acres of adequate (but not good) soils
- Relatively steep slopes and related erosion problems over much of the property
- Favorable climatic conditions, with sunny conditions and high rainfall
- Relatively expensive water for irrigation



PUPUKEYA RIDGE PROJECT

ALISH MAP

FIGURE
2-4

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c:\pup\1210-01 Pupukeya Ridge\y\uph\Plan\7210_Alish Map_Fig 2-4.dwg 26/08/2008 10:02:51 AM Use: Project

- Nearby homes that limit the chose of activities in order to avoid potential nuisance problems

Most of the 5.219 acres would be suitable for low-elevation crops that are grown commercially on small farms. But, the land would not be suitable for large farm operations (i.e., over 5 acres). The land is good for grazing cattle, but the acreage is too small to support a commercial ranch. Nuisance (e.g., odors and/or noise) issues would preclude intensive livestock operations (i.e., hog or egg operations).

2.4 Hydrology

2.4.1 Ground Water

The Project Site is located in the critical wastewater disposal area as determined by the Oahu Wastewater Advisory Committee and in an unsewered area. It is also located above the Department of Health's (DOH) Underground Injection Control Line and in the Board of Water Supply's "No Pass Zone". The purpose of the "No Pass Zone" is to protect underground drinking water aquifers from contamination, which could result from the ground disposal of wastewater.

The Project Site is situated within the Kawailoa aquifer system of the North Aquifer Sector. This aquifer is basal (fresh water in contact with seawater), unconfined (the water table is the upper surface of the saturated aquifer), and occurs in flank (horizontally extensive) lavas.

Impacts and Mitigation Measures

Any residential development would be limited to a maximum of two (2) septic tanks or individual wastewater systems by the State Department of Health (Personal Communication, Tom See, Department of Health, Wastewater Branch, January 21, 2005). Accordingly, no significant impacts to the ground water underlying the Project Site are anticipated as a result of the proposed action.

2.4.2 Surface Water

No surface waters are present on the Project Site. Intermittent surface water runoff associated with episodes of heavy rainfall finds drainage via the Kalahopele Gulch to the north and west of the Project Site. There are no wetlands in the project area.

Waimea Bay is located east of the property. Waimea River and Elehaha Stream are both located south, below the property in Waimea Valley.

Impact and Mitigation Measures

No significant impacts to surface water bodies are anticipated as a result of the proposed action.

2.5 Flood Hazard

Based on the Flood Insurance Rate Map (FIRM), Community Panel Number 15003C0020 E (revised November 20, 2000) the Project Site is located within Zone

"D", Areas in which flood hazards are undetermined, but possible and Zone "X", Areas to be determined to be outside 0.2% annual chance flood plain (see Figure 2-5).

Impacts and Mitigation Measures

No impacts to flood hazards are anticipated as a result of the proposed action.

2.6 Flora

A botanical survey of a portion of the Conservation-zoned properties was undertaken by Botanical Consultants, Inc. in December 2004. Three distinct vegetation types were observed: 1) ironwood trees, seedlings and saplings; 2) grass species such as Hilo grass, Henry's crab grass, foxtail grass, Guinea grass, sourgrass, and low flowering plants such as *Calyptocarpus vialis* Less. and brass buttons; and 3) Weedy scrub. The only native species found on this site was a single, vegetative Bidens (Kookoolau) plant. The project area is now dominated by alien plant species and there are no known threatened or endangered plant species on the project area. A complete listing of plant species recorded is contained in Appendix C.

Impacts and Mitigation Measures

The only native species found on this site was a single, vegetative Bidens plant. No candidate, proposed, or listed threatened or endangered species were encountered during the survey. The proposed action will not impact rare, candidate, proposed or listed threatened or listed endangered species.

2.7 Fauna

A faunal survey was conducted by Evangeline Funk of Botanical Consultants in March 2005 and is included herein as Appendix D. During the site visit, six bird species were observed, migratory golden plover (*Pluvialis dominica*); spotted doves (*Streptopelia chinensis*), zebra doves (*Geopelia striata*); mynas (*Acridotheres tristis*); Brazilian cardinals (*Paroaria coronata*); and house sparrows (*Passer domesticus*). Except for the golden plover, all of the birds are introduced species.

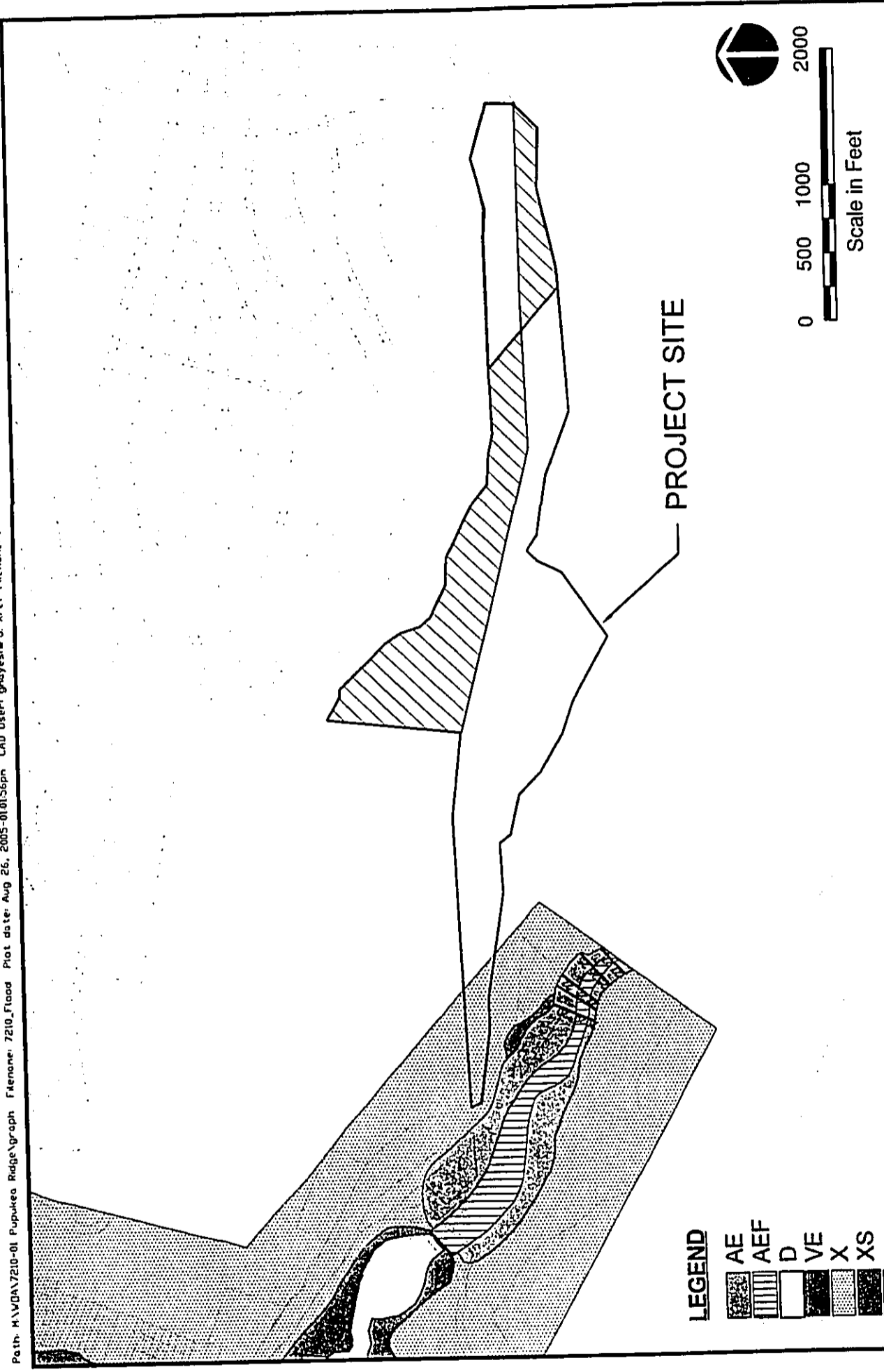
Mongoose, feral cats, and mice were not observed, but are likely to be present.

Follow-up consultation was also undertaken with the U.S. Fish and Wildlife Service, which indicated that there are no concerns relative to invertebrates or other endangered species in the area (personal communication, Lorena Wada, Steve Miller, and Gordon Smith, Pacific Islands Eco Region, June 30, 2005).

Impacts and Mitigation Measures

The proposed action will not impact rare, candidate, proposed or listed threatened or listed endangered species.

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PUPUKEYE RIDGE PRESERVATION PROJECT

FLOOD ZONE MAP

FIGURE 2-5

2.8 Historical, Archaeological and Cultural Resources

An Archaeological Inventory Survey Report was prepared by Archaeological Consultants of the Pacific Inc. in February 2005 and is included herein as Appendix E. *Pupukea Ahupuaa*: Commercial agriculture began in Pupukea Ahupuaa as early as the 1860's with the production of sugarcane. Pineapple production began in the uplands in 1910 when Honolulu Pineapple Co., Ltd. acquired a lease for lands surrounding the Puu o Mahuka Heiau. Cultivation of pineapple continued until the 1960's.

Waimea Ahupuaa: Prior to western contact, Waimea Valley was known to have been a well populated and intensively cultivated district. Waimea Ahupuaa has undergone significant changes in post-contact times. After the floods in the late 1800's, occupation of the valley declined. Presently, much of Waimea Ahupuaa is used for recreational/tourist industry purposes.

Given the location of the Project Site, it is unlikely that the land was used for habitation. The project area was more likely used for collection of raw materials and possible dry land agriculture. The area was used for pineapple in the post-contact period which makes it possible that structures associated with commercial agriculture could be encountered.

Several cultural sites are located within the Pupukea and Waimea Ahupuaa (see Table 2-1). Puu O Mahuka Heiau is on the National and State Register of Historic Places and is one of the most significant and largest heiau on Oahu. The Puu O Mahuka Heiau State Monument is located northwest of the Project Site.

A Cultural Impact Assessment was prepared by Archaeological Consultants of the Pacific, Inc. in August 2002. In addressing Hawaiian cultural practices and cultural features the assessment consisted of historic background research and community consultations. Two individuals were consulted regarding the cultural significance of the project area and the possible impacts from the project, Mr. Butch Heleman and Ms. Alice Greenwood.

According to Mr. Heleman, habitation in the project area would have been unlikely prior to pre-contact area, because of the location of heiaus on the ridge. Habitation would not have been occurred in such close proximity of the heiaus and Puu o Mahuka. During the post-contact era, the land was utilized for growing pineapple, avocados, apples, and sisal. Following the 1900's, the land was seeded with eucalyptus, paperbark and ironwoods for the creation of watershed areas.

Ms. Greenwood mentioned that Mango and Guava was also grown in the area. She felt Puu o Mahuka Heiau was "good" and people should not fear the heiau.

Table 2-1 State Inventory of Historic Places in Pupukea and Waimea Ahupuaa	
Site Number	Name
Pupukea Ahupuaa	
249	Puu o Mahuka Heiau
252	Piliaama
253	Kamaee Koa, a fishing shrine
254	Several stones in the water at Three Tables
255	Large stones at Kulalua Point
Waimea Ahupuaa	
242	Akua stone on the south side of Waimea Bay
244	Keahu o Hapuu, a fishing shrine
245	Fishing shrine at Palipilo Bluff
248	Kuhale Heiau
250	Fishing lookout stones on bluffs on either side of Waimea Bay
246	Numerous burials located in caves and shelters along south cliff of Waimea Valley
251	Numerous burials located in caves and shelters along north cliff of Waimea Valley
243	Kaahakii, sacred tongue shaped stone
247	Agricultural terraces

Impacts and Mitigation Measures

No significant impacts to historical, archaeological, or cultural resources are anticipated, given that the surrounding area has already been developed. In the unlikely event that historic sites, including human remains, are encountered the proper mitigation measures will be taken.

2.9 Hazardous and Toxic Materials

Masa Fujioka & Associates (MFA) conducted a Phase I Environmental Site Assessment to evaluate the Project Site for hazardous and toxic waste substances (see Appendix F).

The purpose of the assessment was to investigate past and present land uses for the property and surrounding areas to determine if the potential for hazardous materials contamination exists. The assessment included review of site history, regulatory records, and site geology and hydrogeology; site reconnaissance; and data evaluation and report preparation.

MFA performed a site reconnaissance on April 26, 2004 and observed no evidence of hazardous wastes or hazardous substances. Due to the dense nature of the vegetation in areas and steep slopes of the southern portion of the site, some areas were not assessed. Review of available regulatory records and DOH files did not

indicate reported releases to the environment on or immediately adjacent to the subject property.

Impacts and Mitigation Measures

No hazardous wastes or substances were observed during the site reconnaissance. Should any hazardous materials be found, the proper mitigation measures will be taken.

2.10 Scenic Characteristics

The Project Site is readily visible from Waimea Beach, Waimea Valley, and sections of Kamehameha Highway, between Haleiwa and Waimea. The proposed action will create lands for a new State Park Reserve, therefore preserving the northern ridgeline.

The 5.219 acre portion of TMK: 6-1-002: 22 within the Petition Area is neither visible from Kamehameha Highway nor from publicly accessible portions of Waimea Valley. As shown in Figure 1-1, this portion of the Project Site is over one mile inland from the highway and obscured by the valley ridge.

Impacts and Mitigation Measures

The proposed action will preserve the natural character of the northern ridgeline and prevent any future/incompatible development from occurring. There will be a substantial positive impact upon the perpetual preservation of the viewplane of a large section of the northern ridgeline above Waimea Valley, a viewplane which is readily visible from Waimea Beach, Waimea Valley, and sections of Kamehameha Highway between Haleiwa and Waimea.

There are no visual impacts from any farm dwellings that could be developed in the 5.219 acre portion of TMK 6-1-002: 22 within the Petition Area.

2.11 Roadway System

Access to TMK 5-9-023:01 and 5-9-024:01 is provided via Maulukua Road. Legal access to TMK 6-1-002:22 is currently by way of a perpetual easement running north from the Project Site across the adjacent 212-acre Agricultural parcel. The easement connects with the road from Puu O Mahuka Heiau State Monument and follows its course to the intersection at Pupukea Road.

Impacts and Mitigation Measures

No significant impacts to the roadway system are anticipated as a result of the proposed action. Up to four dwellings may be accommodated at the site, resulting in minimal impacts to the surrounding residential neighborhood.

2.12 Noise

The Project Site is located at the edge of a residential neighborhood and is bordered mostly by undeveloped land. Predominant sources of sound within the Project Site include noise generated by the wind, that of people talking and/or working on nearby

parcels, and occasionally the sound of motor vehicles and/or overhead aircraft. The project area has a very low noise level, as one would expect of such a rural site.

Impacts and Mitigation Measures

No significant impacts on noise quality are anticipated as a result of the proposed action.

2.13 Air Quality

The rural character of the project area, the prevailing winds, and a close proximity to the ocean all combine to buffer the area against significant airborne pollutants, therefore, air quality is very good.

Impacts and Mitigation Measures

No significant impacts on air quality are anticipated as a result of the proposed action.

2.14 Socioeconomic Characteristics

2.14.1 Population and Economy

Population and Housing: Pupukea is a rural, residential community on the North Shore of Oahu. The 2000 Census reported the population of North Shore at 18,380. According to a demographic profile of various Oahu planning regions (Development Plan/Sustainable Community Plans) prepared by the City's Department of Planning and Permitting using the 2000 Census Data, the Sunset Beach/Pupukea sub-area had a population 4,353. In comparison to North Shore as a whole, the Sunset Beach/Pupukea population is generally older; has a racial mix proportionately more Whites and Asians and less Native Hawaiians; a fairly even proportion of family households; and higher vacancy and homeownership rate (see Table 2-2).

Economy: According to the 2000 Census, the median household income for Pupukea Census Designated Place was \$56,146, which is higher than the median household income of \$51,914 for the City and County of Honolulu.

Impacts and Mitigation Measures

No significant impacts on the population of Pupukea are anticipated as a result of the proposed action. The proposed donation of approximately 79.030 acres, together with adjacent Conservation district lands, for a State Park Reserve is not expected to have any significant impact on the housing needs of low, low-moderate and gap groups, as no employment generated activities are proposed. Reclassifying the approximately 5.219 acres from the Conservation district to the Agricultural district should not have any impact on the housing needs of low, low-moderate and gap groups. Should agricultural employees be requested for farming activities, the allowance of up four (4) dwellings could enable the on-site accommodation of housing to support four workers.

Subject	Sunset Beach/ Pupukea		North Shore	
	Number	Percent	Number	Percent
Total population	4,353	100	18,380	100
AGE				
Under 5 Years	284	6.5	1,511	8.2
5 – 17 years	742	17.0	3,149	17.1
18 – 64 years	3,008	69.1	11,846	64.5
65 years and over	319	7.3	1,874	10.2
Median age (years)	34.0	--	31.1	--
RACE (alone or in combination with other races)				
White	3,190	73.3	9,874	53.7
Black or African American	35	0.8	864	4.7
American Indian and Alaska Native	128	2.9	500	2.7
Asian	1,242	28.5	8,385	45.6
Native Hawaiian and other Pacific Islander	765	17.6	3,808	20.7
Other	184	4.2	1,194	6.5
HOUSEHOLD (BY TYPE)				
Total Households	1,490	100	5,893	100
Family households (families)	961	64.5	4,361	74.0
With own children under 18 years	486	32.6	2,102	35.7
Married-couple family	711	47.7	3,314	56.2
With own children under 18 years	359	24.1	1,602	27.2
Female householder, no husband present	157	10.5	682	11.6
With own children under 18 years	83	5.6	337	5.7
Non – families	529	35.5	1,532	26.0
Living with nonrelatives	253	17.0	509	8.6
Living alone and 65 years and over	49	3.3	275	4.7
Average persons per household	2.91	--	3.05	--
HOUSING OCCUPANCY AND TENURE				
Total Housing Units	1,726	100	6,648	100
Occupied units	1,490	86.3	5,893	88.6
By owner	767	44.4	2,595	39.0
By renter	723	41.9	3,298	49.6
Vacant units	236	13.7	755	11.4
Available housing vacancy rate (%)	4.1	--	3.7	--
Homeownership rate (%)	51.5	--	44.0	--

Source: 2001 Census File, City & County of Honolulu, Department of Planning & Permitting

No significant impacts on the economy of the Pupukea area are anticipated as a result of the proposed action.

2.14.2 Public Services

Fire Protection is provided by the City & County of Honolulu. The nearest station is the Sunset Fire Station, located at 59-719 Kamehameha Highway, approximately 1.25 miles from the Project Site.

Emergency medical services is provided by the City & County of Honolulu, Emergency Medical Service. The closest ambulance station is at 66-420 Haleiwa Road in Waialua.

Police protection is provided by the City & County of Honolulu, through the Wahiawa Police Station, located at 330 North Cane Street in Wahiawa, approximately 17 miles from the Project site.

Impacts and Mitigation Measures

No significant impacts to police, fire, ambulance and medical services are anticipated as a result of this proposed action.

2.15 Utilities

The water system in the project vicinity includes a 12-inch waterline along Maulukua Road and an 8-inch waterline along Maulukua Place.

The Project Site is located in the critical wastewater disposal area as determined by the Oahu Wastewater Advisory Committee and in an unsewered area. It is also located above the Department of Health's (DOH) Underground Injection Control Line and in the Board of Water Supply's "No Pass Zone". The purpose of the "No Pass Zone" is to protect underground drinking water aquifers from contamination, which could result from the ground disposal of wastewater.

Solid waste is collected at curbside on Maulukua Road. Collected waste is taken to the Kawaihoa transfer station where it is consolidated and compacted before being transferred to the H-power facility at Campbell Industrial Park for incineration and power generation.

Electrical power is provided by Hawaiian Electric and telephone service is provided by Verizon Hawaii. Utilities are supplied via overhead distribution lines along Maulukua Road.

Impacts and Mitigation Measures

No significant impacts to any of the infrastructure systems are anticipated as a result of this proposed action.

3. RELATIONSHIP TO LAND USE, POLICIES, AND CONTROLS

The plans and policies relating to the proposed action range from broad program guidance to land use controls governing the Project Site. The proposed action is in consonance with the various plans, policies and regulatory controls, as discussed below.

3.1 Hawaii State Plan

The Hawaii State Plan (Chapter 226, Hawaii Revised Statutes, as amended) provides the overall theme, goals, objectives, policies and priority guidelines for statewide planning. The Hawaii State Plan also directs the appropriate State agencies to prepare functional plans for their respective program areas. The proposed project supports and is consistent with the following State Plan objectives:

Physical environment – land based, shoreline, and marine resources

- (a)(2): *Effective protection of Hawaii's unique and fragile environmental resources.*
- (b)(1): *Exercise an overall conservation ethic in the use of Hawaii's natural resources.*
- (b)(3): *Take into account the physical attributes of areas when planning and designing activities and facilities.*
- (b)(4): *Manage natural resources and environs to encourage their beneficial and multiple use without generating costly or irreparable environmental damage.*
- (b)(8): *Pursue compatible relationships among activities, facilities, and natural resources.*
- (b)(9): *Promote increased accessibility and prudent use of inland and shoreline areas for public recreational, educational, and scientific purposes.*

Comment: The proposed action will provide a park resource with mountain and ocean views that look out toward the Waianae mountain range, Kaena Point, and the coastline. Furthermore, the proposed action will protect the natural character of the northern ridgeline of Waimea Valley as it is viewed from the Waimea Valley, Waimea Beach and Kamehameha Highway.

Physical environment – scenic, natural beauty and historic resources

- (b)(1): *Promote the preservation and restoration of significant natural and historic resources.*
- (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.*
- (b)(4): *Protect those special areas, structures, and elements that are an integral and functional part of Hawaii's ethnic and cultural heritage.*

Comment: The proposed action will provide a park resource with mountain and ocean views that look out toward the Waianae mountain range, Kaena Point, and the coastline. Furthermore, the proposed action will protect the natural character of the northern ridgeline of Waimea Valley as it is viewed from the Waimea Valley,

Waimea Beach and Kamehameha Highway. The donation of the 79.03 acres will be an extension to the existing Puu O Mahuka Heiau State Monument.

Physical environment – land, air, and water quality

(b)(2): Promote the proper management of Hawaii's land and water resources.

(b)(8): Foster recognition of the importance and value of land, air, and water resources to Hawaii's people, their cultures and visitors.

Comment: ACF proposes to reclassify approximately 28.759 acres from Agricultural to Conservation for the creation of a State Park Reserve and public resource. A primary objective of this action is to preempt the future development of the Project Site, which overlooks Waimea Valley. ACF is preserving open space, creating additional recreational resources and maintaining the undeveloped character of the ridgeline overlooking Waimea Valley.

3.2 State Functional Plans

State Functional Plans serve the primary implementing vehicle for the goals, objectives and policies of the Hawaii State Plan. The functional plans guide implementation of State and county actions in the following areas: agriculture, transportation, conservation lands, education, tourism, water resources, energy, recreation, historic and preservation, health, housing, higher education, employment, and human services. The following are related objectives and policies applicable to the proposed action:

State Conservation Lands Functional Plan:

Policy IIC(2): Expand and enhance outdoor recreation opportunities and other resource uses.

Policy IID(1): Develop and expand resources to protect natural shorelines and wilderness recreation areas.

Policy IID(3): Develop recreational and archaeological resources on the shoreline and mauka areas.

Comment: The proposed action will promote new recreational opportunities, create new wilderness recreation areas on Oahu's North Shore and sustain the open space resource. ACF proposes to reclassify 28.759 acres of Agricultural District to Conservation District for the creation of a State Park Reserve. The donation of the 79.03 acres will be an extension of the existing Puu O Mahuka Heiau State Monument.

State Recreation Functional Plan:

Policy IA(4): Develop areas mauka of existing beach parks to increase their capacities and to diversify and encourage activities away from the shoreline.

Policy IIA(1): Plan and develop facilities and areas that feature the natural and historic/cultural resources of Hawaii. Develop interpretive programs for these areas.

Policy IIA(2): Plan and develop camp sites and other recreational amenities in mauka area.

Policy IIA(3): Proceed with planning, acquisition, and development of trails.

Policy IIC(1): Meet the demand for recreational opportunities in local communities.

Policy VC(1): Explore alternative land acquisition strategies.

Comment: The proposed action to donate 79.03 acres to the State for a park should alleviate the demand of the usage of other State parks. The proposed action will establish an open space resources for perpetuity, effectively creating a buffer between the residential development of Pupukea Heights and a large section of the highly visible northern ridgeline overlooking Waimea Valley. This will sustain the natural character of Waimea Valley along with its recreational, cultural, and visual resources. The proposed donation to the State for the development of a State Park Reserve represents an ideal acquisition from the State's perspective. The reclassification of the subject property would preserve and protect views and vistas, preserve and protect natural resource and provide the public a source of recreational opportunities that are compatible with the natural environment.

3.3 State Land Use Designation

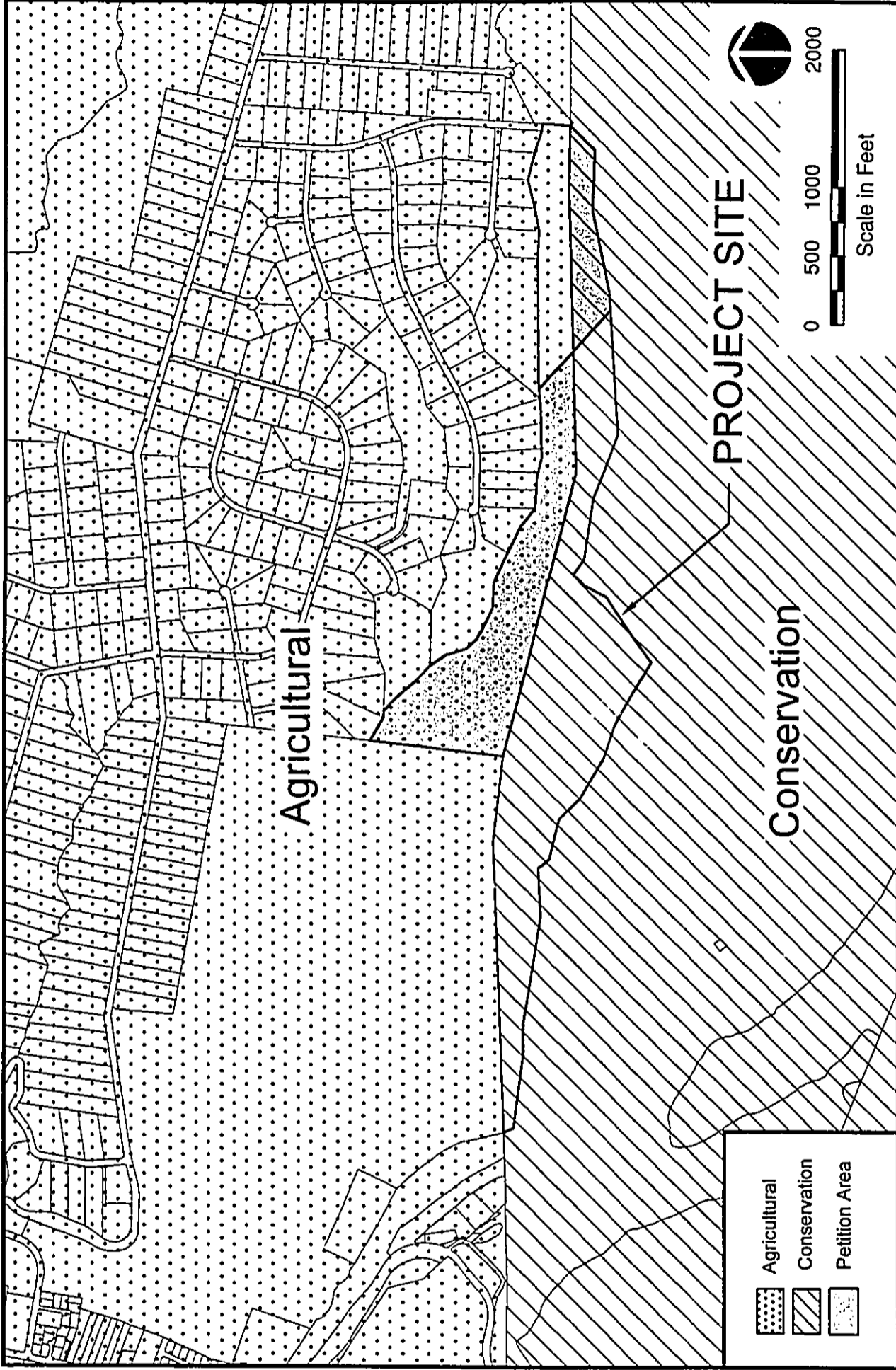
The State Land Use Law is intended to preserve, protect, and encourage the development of lands in the State for uses which are best suited to the public health and welfare of Hawaii's people. The Hawaii Land Use Law in Chapter 205, Hawaii Revised Statutes (HRS), classifies all land in the State into four land use districts: Urban, Agricultural, Conservation, and Rural. The Project Site lies within the Conservation and Agricultural District (see Figure 3-1). The 50.272 acres to be donated to the State lies within the Conservation District's General and Limited Subzones (see Figure 3-2). The 5.219 acres to be retained by ACF lies within the General and Limited Subzones.

3.3.1 Conformance to the State Conservation District Standards

ACF proposes to reclassify 28.759 acres from Agriculture District to Conservation District, as shown in Figure 1-3. The proposed action to reclassify the Project Site for the purpose of donating 79.03 acres to the State of Hawaii and preserving the undeveloped viewplane of this ridgeline above Waimea Valley conforms to the standards for determining Conservation District boundaries.

The State Land Use Commission (SLUC), in accordance with Chapter 15-15, Hawaii Administrative Rules (HAR), must specifically consider the extent to which the proposed reclassification conforms to the applicable district standards. The standards for determining the boundaries for the Conservation District include nine (9) areas which are listed and discussed below:

Path: H:\VDA\7210-01 Pupukeya Ridge\graph Filename: 7210_State Land Use Plot date: Aug 26, 2005-01:03:57pm CAD User: grayeshko. Xref Filename: I bor01_letter-landscape I







PUPUKEYA RIDGE PRESERVATION PROJECT

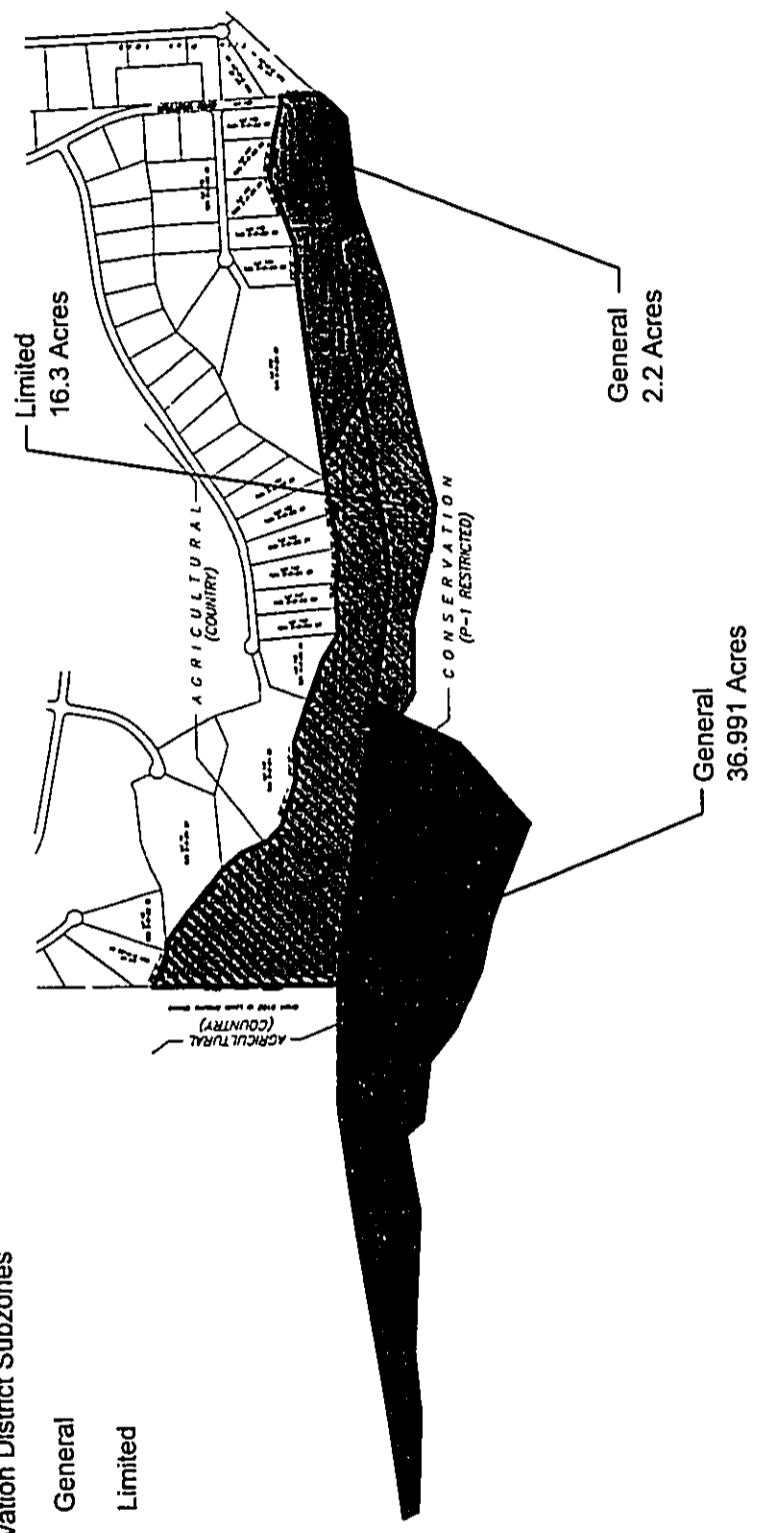
**STATE LAND USE
BOUNDARY CLASSIFICATION**

FIGURE
3-1



**WILSON OKAMOTO
CORPORATION**
ENGINEERS • PLANNERS

-  Lands to be donated to State
-  Agricultural District
- Conservation District Subzones**
-  General
-  Limited



PUPUKEYA RIDGE PRESERVATION PROJECT
CONSERVATION SUBZONES

FIGURE
 3-2



- 1) *It shall include lands necessary for protecting watersheds, water resources, and water supplies;*

The Project Site is located above the Department of Health's (DOH) Underground Injection Control Line and in the Board of Water Supply's "No Pass Zone". The purpose of the "No Pass Zone" is to protect underground drinking water aquifers from contamination, which could result from the ground disposal of wastewater.

Any residential development would be limited by the DOH to a maximum of two (2) septic tanks or individual wastewater systems for the 15.144 acres to be consolidated and retained in the Agricultural District. Accordingly, no significant impacts to the ground water underlying the Project Site are anticipated as a result of the proposed action.

- 2) *It may include lands susceptible to floods and soil erosion, lands undergoing major erosion damage requiring corrective attention by the state and federal government, and lands necessary for the protection of the health and welfare of the public by reason of the land's susceptibility to inundation by tsunami and flooding, to volcanic activity, and landslides;*

Based on the Flood Insurance Rate Map (FIRM), Community Panel Number 15003C0020 E (revised November 20, 2000) the Project Site is located within Zone "D", Areas in which flood hazards are undetermined, but possible and Zone "X", Areas to be determined to be outside 0.2% annual chance floodplain (as shown in Figure 2-5). No impacts to flood hazards are anticipated as a result of the proposed action.

- 3) *It may include lands used for national or state parks;*

ACF proposes to donate approximately 79.03 acres of land to the State of Hawaii for the creation of a State Park Reserve under the jurisdiction and management responsibility of the Department of Land and Natural Resources (see Figure 1-3). The remaining land area, 15.144 acres, will be consolidated and retained by ACF. The lands to be donated are adjacent to the Puu O Mahuka Heiau State Monument and will be an extension to the existing Monument.

- 4) *It shall include lands necessary for the conservation, preservation, and enhancement of scenic, cultural, historic, or archaeological sites and sites of unique physiographic or ecologic significance;*

The proposed action will preserve the natural character of the northern ridgeline and prevent any future/incompatible development from occurring. There will be a substantial positive impact upon the perpetual preservation of the viewplane of a large section of the northern ridgeline above Waimea Valley, a viewplane which

is readily visible from Waimea Beach, Waimea Valley, and sections of Kamehameha Highway between Haleiwa and Waimea.

- 5) *It shall include lands necessary for providing and preserving parklands, wilderness and beach, reserves, for conserving natural ecosystems of indigenous or endemic plants, fish, and wildlife, including those which are threatened or endangered, and for forestry and other related activities to these uses;*

The area to be donated will be an extension of the existing Puu O Mahuka Heiau State Monument located to the northwest of the Project Site. The proposed action will preserve the natural character of the northern ridgeline and prevent any future/incompatible development from occurring. There will be a substantial positive impact upon the perpetual preservation of the viewplane of a large section of the northern ridgeline above Waimea Valley, a viewplane which is readily visible from Waimea Beach, Waimea Valley, and sections of Kamehameha Highway between Haleiwa and Waimea.

- 6) *It shall include lands having an elevation below the shoreline as state by section 205A-1, HRS, marine waters, fish ponds, and tidepools of the State, accreted portions of lands pursuant to section 501-33, HRS, unless otherwise designated on the district maps. All offshore and outlying islands of the State are classified conservation unless otherwise designated on the land use district maps;*

The Project Site is situated on the ridge above the northern rim of Waimea Valley. Elevations range from about 200 feet above mean sea level (msl) at the makai end, to 575 feet msl at the center, up to 750 feet msl at the mauka end of the Project Site.

- 7) *It shall include lands with topography, soils, climate, or other related environmental factors that may not be normally adaptable or presently needed for urban, rural, or agricultural use, except when those lands constitute areas not contiguous to the conservation district;*

There is no current agricultural cultivation of any kind within the Project Site. ACF proposes to reclassify the 28.759 acres from Agricultural to Conservation to facilitate the donation of the property, together with adjacent lands, to the State DLNR for the purposes of establishing a State Park Reserve. Seventy-five percent of the Project Site has an agricultural productivity rating of "E", the lowest classification.

- 8) *It may include lands with a general slope of twenty percent or more which provide for open space amenities or scenic values; and*

The Project Site is situated on the ridge above the northern rim of Waimea Valley. A small plateau is formed along the top of the ridge, which descends

gradually toward the sea at varying gradients between 5 to 15 percent. Upon either side of the plateau the topography falls off more abruptly. To the south, the plateau carries over into TMK 6-1-02:22 whose southern boundary is essentially established by the top of a steep cliff which descends to Waimea Valley below. To the north, the Project Site descends less dramatically into the Kalahopele Gulch.

Elevations range from about 200 feet above mean sea level (msl) at the makai end, to 575 feet msl at the center, up to 750 feet msl at the mauka end of the Project Site.

The proposed action will preserve the natural character of the northern ridgeline and prevent any future/incompatible development from occurring. There will be a substantial positive impact upon the perpetual preservation of the viewplane of a large section of the northern ridgeline above Waimea Valley, a viewplane which is readily visible from Waimea Beach, Waimea Valley, and sections of Kamehameha Highway between Haleiwa and Waimea.

- 9) *It may include lands suitable for farming, flower gardening, operation of nurseries or orchards, growing of commercial timber, grazing, hunting, and recreational uses including facilities accessory to those uses when the facilities are compatible with the natural physical environment.*

There is no current agricultural cultivation of any kind within the Project Site. ACF proposes to reclassify the 28.759 acres from Agricultural to Conservation to facilitate the donation of the property, together with adjacent lands, to the State DLNR for the purposes of establishing a State Park Reserve. Seventy-five percent of the Project Site has an agricultural productivity rating of "E", the lowest classification.

3.3.2 Conformance to the State Agricultural District Standards

ACF proposes to reclassify 5.219 acres from Conservation District to Agricultural District, as shown in Figure 1-3.

The State Land Use Commission (SLUC), in accordance with Chapter 15-15, Hawaii Administrative Rules (HAR), must specifically consider the extent to which the proposed reclassification conforms to the applicable district standards. The standards for determining the boundaries for the Agricultural District include three (3) areas which are listed and discussed below:

- 1) *It shall include lands with a high capacity for agricultural production;*

According to the *Detailed Land Classification – Island of Oahu* published by the University of Hawaii Land Study Bureau (LSB) (1972), approximately 75% of the Project Site has a an "E" rating which indicates very poor productivity (see Figure 2-2). The remaining 25% of the Project Site is rated "B" and "C". The "B" rating

indicates good productivity for most agricultural uses while "C" indicates fair productivity.

- 2) *It may include lands with significant potential for grazing or for other agricultural uses; and*

The project area was once used for sugarcane and pineapple production and left fallow when commercial agriculture declined. The project area is now forested with ironwood trees and non-native species of plants (see Section 2.6 and 2.7). An agricultural study was undertaken which showed that the proposed agricultural lands are suitable for agriculture, including flowers and nursery products, fruits and vegetable crops, and domestic farm animals such as horses, chickens, ducks and goats.

- 3) *It may include lands surrounded by or contiguous to agricultural lands or which are not suited to agricultural and ancillary activities by reason of topography, soils, and other related characteristics.*

The Project Site is situated on the ridge above the northern rim of Waimea Valley. A small plateau is formed along the top of the ridge, which descends gradually toward the sea at varying gradients between 5 to 15%. Upon either side of the plateau the topography falls off more abruptly. To the south, the plateau carries over into TMK 6-1-02:22 whose southern boundary is essentially established by the top of a steep cliff which descends to Waimea Valley below. To the north, the Project Site descends less dramatically into the Kalahopele Gulch.

The Project Site was previously cultivated and is adjacent to agricultural lands. The Project Site is surrounded by lands with a productivity rating of "E", which indicates poor productivity.

3.4 City and County of Honolulu

3.4.1 General Plan

The General Plan for the City and County of Honolulu is a statement of the long-range social, economic, environmental, and design objectives for the general welfare and prosperity of the people of Oahu. The Plan is also a statement of broad policies that facilitate the attainment of the objectives of the Plan. Eleven subject areas provide the framework for the City's expression of public policy concerning the needs of the people and functions of government. These areas include population; economic activity; the natural environment; housing; transportation and utilities; energy; physical development and urban design; public safety; health and education; culture and recreation; and government operations and fiscal management. As presented in Chapter 1 and assessed in Chapter 2 of this environmental assessment, the proposed action is in consonance with the following objectives and policies of the General Plan:

Economic Activity

Objective C: To maintain the viability of agriculture on Oahu.

Policy 5: Maintain agricultural land along the Windward, North Shore and Waianae Coasts for truck farming, flower growing, aquaculture, livestock production and other types of diversified agriculture.

Comment: According to the Department of Planning and Permitting's proposed Agricultural Protection Ordinance, Bill 74 (2004), a portion of the proposed Project Site is preserved for agricultural use in the North Shore Sustainable Communities Plan Land Use Map and the North Shore Agricultural Protection Area Map.

There is no current agricultural cultivation within the Project Site. ACF proposes to reclassify the 28.759 acres from Agricultural to Conservation and reclassify 5.219 acres from Conservation District to Agricultural District. There will be a small reduction in the State's overall agricultural land capacity, of approximately 23.54 acres, although most of the agricultural lands have a poor productivity rating. Approximately 15.144 acres will be maintained in the Agricultural District for activities such as truck farming and flower growing.

Of the 5.219 acres to be retained by ACF approximately 4 acres (77%) of the soils are rated C and remaining 1.2 acres (23%) is rated E. The 5.219 acres is suitable for agriculture as discussed in Section 2.3.

Natural Environment

Objective A: To protect and preserve the natural environment.

Policy 1: Protect Oahu's natural environment, especially the shoreline, valleys, and ridges, from incompatible development.

Comment: The proposed action will protect in perpetuity 79.03 acres situated along the northern ridgeline of Waimea Valley from the prospect of future development.

Objective B: To preserve and enhance the natural monuments and scenic views of Oahu for the benefit of both residents and visitors.

Policy 1: Protect the Island's well-known resources: its mountains and craters; forests and watershed areas; marshes, rivers, and streams; shoreline, fishponds, and bays; and reefs and offshore islands.

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

Policy 4: Provide opportunities for recreational and educational use and physical contact with Oahu's natural environment.

Comment: The proposed action will protect scenic views from the proposed park towards the Waianae mountain range, Kaena Point, and the northern coast of Oahu. The proposed action will also protect the natural character of the northern ridgeline of Waimea as viewed from Waimea Valley, Waimea Beach and Kamehameha Highway.

The proposed park will also provide new opportunities for outdoor recreational use and interaction with the natural environment.

Culture and Recreation

Objective D: To provide a wide range of recreational facilities and services that are readily available to all residents of Oahu.

Policy 1: Develop and maintain community-based parks to meet the needs of the different communities on Oahu.

Policy 2: Develop and maintain a system of regional parks and specialized recreation areas.

Policy 5: Encourage the State to develop and maintain a system of natural resource-based parks, such as beach, shoreline, and mountain parks.

Comment: The proposed park will have a beneficial impact upon the Pupukea residential community due to its close proximity to the Project Site. The proposed action will also facilitate the creation of a new State Park Reserve.

3.4.2 Development and Sustainable Communities Plan

The City and County of Honolulu's Development/Sustainable Communities Plan program provides a relatively detailed framework for implementing the objectives and policies of the General Plan on an area wide basis. Eight community-oriented plans have been adopted covering the entire island. Each of the plans is intended to help guide public policy, investment, and decision making within their representative region.

3.4.2.1 North Shore Sustainable Community Land Use Map

The Project Site is located within the North Shore Sustainable Communities Plan area that extends from Kaena Point to Waialeale Gulch near Kawela Bay, and from

the shoreline to Helemano and the slopes of the Waianae and Koolau mountain ranges.

The vision for the North Shore is implemented through several key elements. Two of the following elements are related to the proposed project:

- 2.2.1 *Establish Rural Community, Agriculture, and Preservation Boundaries to Protect Agricultural, Open Space, and Natural Resources*
- 2.2.2 *Support and Promote a Diversified Agricultural Industry*

Comment: According to the North Shore Sustainable Communities Plan Land Use Map, a portion of the proposed Project Site is designated for agricultural use.

There is no current agricultural cultivation within the Project Site. ACF proposes to reclassify the 28.759 acres from Agricultural to Conservation and reclassify 5.219 acres from Conservation District to Agricultural District. There will be a small reduction in the State's overall agricultural land capacity of approximately 23.54 acres, although most of the agricultural lands have a poor productivity rating. Approximately 15.144 acres will be maintained in the Agricultural District for activities such as truck farming and flower growing.

Of the 5.219 acres to be retained by ACF approximately 4 acres (77%) of the soils are rated C and remaining 1.2 acres (23%) is rated E. The 5.219 acres is suitable for agriculture as discussed in Section 2.3.

The proposed action is consistent with the following guidelines, policies, and principles contained in the plan:

3.1 *Open Space and Natural Environment*

3.1.1 *General Policies*

- *Protect significant natural features*
- *Preserve cultural and historic features*
- *Provide recreational resources*
- *Protect scenic views*

Comment: The proposed action will preserve the natural character of the northern ridgeline and prevent any future/incompatible development from occurring. There will be a substantial positive impact upon the perpetual preservation of the viewplane of a large section of the northern ridgeline above Waimea Valley, a viewplane which is readily visible from Waimea Beach, Waimea Valley, and sections of Kamehameha Highway between Haleiwa and Waimea.

3.1.2. *Planning Principles*

The general policies listed above provide the basis for the following principles:

Preservation of Scenic Views. Scenic resources include the Waianae and Koolau mountain ranges, coastal pali, the coastline, and the Pacific Ocean. Views of these resources from public spaces, including major roadways, should be preserved. More open space should be provided along the shoreline to preserve and enhance views of the ocean. New developments should seek to minimize impact to these scenic resources.

Protection of Recreational Resources. Recreational resources include the ocean, beach parks, regional parks, district parks, community parks, and other quasi-public recreational facilities. These resources are important to the North Shore's open space quality and should be protected.

Accessibility of Recreational Open Space. Public parks should be accessible for recreation use. The shoreline and mountain areas should also be made accessible and appropriate recreational opportunities, such as biking, walking, running and equestrian activities, should be provided in ways consistent with principles of sound natural resource management.

Allowable uses should be limited to activities which do not require intensive facility development, do not detract from, degrade, or deplete natural resource values, and do not create or intensify hazard conditions.

Comment: The proposed action will preserve the natural character of the northern ridgeline and prevent any future/incompatible development from occurring. There will be a substantial positive impact upon the perpetual preservation of the viewplane of a large section of the northern ridgeline above Waimea Valley, a viewplane which is readily visible from Waimea Beach, Waimea Valley, and sections of Kamehameha Highway between Haleiwa and Waimea.

3.1.3 Guidelines

3.1.3.3 Mountain Areas

Guidelines pertaining to mountain areas are as follows:

- *Maintain, protect, and/or restore native forests and ecosystems within the State Conservation District and Sustainable Communities Plan Preservation District. Ensure the protection of conservation lands on the Kaena coastline and Mokuleia foothills.*
- *Support public-private partnership in cooperative efforts to preserve and manage watersheds, native ecosystems, and other environmental resources. Encourage coordination of natural resource protection and management efforts between the State DLNR and private landowners, as well as U.S. Military, especially where the Kahuku and Kawaihoa Training Areas overlap with environmentally sensitive areas.*

Comment: The proposed action will preserve the natural character of the northern ridgeline and prevent any future/incompatible development from occurring. ACF

proposes to donate approximately 79.03 acres of land to the State of Hawaii for the creation of a State Park Reserve under the jurisdiction and management responsibility of the Department of Land and Natural Resources

3.1.3.7 *Scenic Resources and Scenic Views*

Guidelines pertaining to scenic resources and scenic views are as follows:

- *Conduct planning with attention to preservation of natural open spaces, protecting coastal and mauka views from public roadways, and conserving important viewsheds.*

Many of the region's scenic resources encompass privately-owned lands. In some cases, view reductions may come from diversified agriculture activities which intrude into viewplanes or otherwise degrade or diminish scenic qualities. The protection of roadway views should be balanced with the operating requirements of diversified agriculture.

- *Encourage interagency and private sector participation and cooperation in the creation, maintenance and enhancement of views and visual resources on the North Shore.*

Comment: The proposed action will preserve the natural character of the northern ridgeline and prevent any future/incompatible development from occurring. ACF proposes to donate approximately 79.03 acres of land to the State of Hawaii for the creation of a State Park Reserve under the jurisdiction and management responsibility of the Department of Land and Natural Resources

3.3 *Parks and Recreation*

3.3.1 *General Policies*

The following general policies relate to parks and recreational resources for the North Shore:

- *Maintain and improve recreational areas and facilities to provide high quality recreational experiences for residents and visitors*
- *Promote recreational activities that are compatible with the preservation of open space, rural character, scenic resources, and environmental quality. Wilderness and wildlife activities should be explored and promoted if appropriate.*

Comment: ACF proposes to donate approximately 79.03 acres of land to the State of Hawaii for the creation of a State Park Reserve under the jurisdiction and management responsibility of the Department of Land and Natural Resources. The proposed action will preserve the natural character of the northern ridgeline and prevent any future/incompatible development from occurring.

3.3.2 *Planning Principles*

The general policies for parks and recreational resources are supported by the following principles:

Environmental Compatibility. *Uses that generate high noise levels should be located and operated in a way that keeps noise to an acceptable level in existing and planned residential areas. The built environment should avoid adverse impacts on natural resources or processes in the coastal zone or any other environmentally sensitive areas. Expansive recreational uses, such as golf courses, should be designed to minimize environmental impacts. To retain sense of place, the design of recreation areas should incorporate natural or cultural features of the site and use landscape materials that are indigenous to the area where feasible.*

Comment: ACF proposes to donate approximately 79.03 acres of land to the State of Hawaii for the creation of a State Park Reserve under the jurisdiction and management responsibility of the Department of Land and Natural Resources. The proposed action will preserve the natural character of the northern ridgeline and prevent any future/incompatible development from occurring.

3.3.3 Guidelines

- *Provide additional parks and facilities to meet resident and islandwide recreational needs for a variety of recreational activities, including both facility based recreational activities*
- *Acquire and maintain public and/or private campgrounds and hiking trails in the mauka areas. Develop a system of mauka trails and paths to interconnect the major recreational areas of the North Shore for use by non-motorized transportation modes, e.g. walking, biking, horseback riding.*

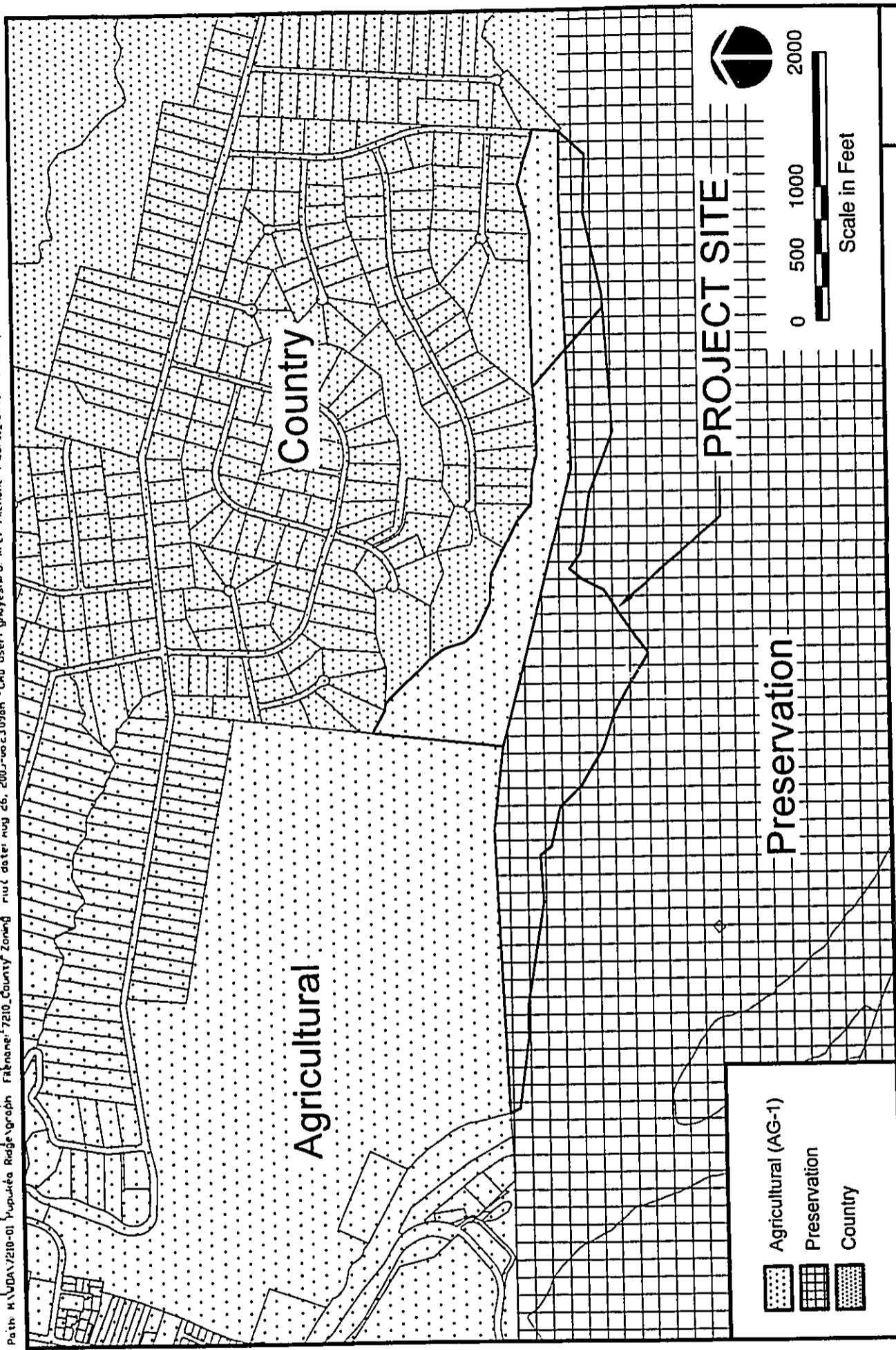
Comment: The proposed action to donate 79.03 acres to the State for a park should alleviate the demand of the usage of other State parks. The proposed action will establish an open space resources for perpetuity, effectively creating a buffer between the residential development of Pupukea Heights and a large section of the highly visible northern ridgeline overlooking Waimea Valley. This will sustain the natural character of Waimea Valley along with its recreational, cultural, and visual resources. The proposed donation to the State for the development of a State Park Reserve represents an ideal acquisition from the State's perspective. The reclassification of the subject property would preserve and protect views and vistas, preserve and protect natural resource and provide the public a source of recreational opportunities that are compatible with the natural environment.

The North Shore Sustainable Community Land Use Map depicts land use patterns that are consistent with the objectives and policies of the General Plan. The Project Site is located within an area designated Preservation and Agriculture (see Figure 3-3).

3.4.3 Land Use Ordinance and Zoning

The City and County of Honolulu Land Use Ordinance (LUO) regulates land use in accordance with adopted land use policies, including the General Plan and DPs. The provisions are also referred to as the zoning ordinance. The Project Site is zoned Agriculture (AG-2) and Restricted Preservation (P-1) (see Figure 3-4).

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- Agricultural (AG-1)
- Preservation
- Country

Preservation

PROJECT SITE



PUPUKEYA RIDGE PRESERVATION PROJECT

COUNTY ZONING

FIGURE 3-4



Comment: The purpose of the preservation districts is to preserve and manage major open space and recreation lands and lands of scenic and other natural resource values (Department of Planning and Permitting, April 2003). Approximately 28.759 acres are proposed for reclassification from Agricultural District to Conservation District for the purpose of donating 79.03 acres to the State for a creation of a State Park Reserve under the jurisdiction and management of the Department of Land and Natural Resources. It will be the responsibility of the State to conform to all requirements relating to the P-1 Preservation district.

There are no plans for the 15.144 acres to be retained by ACF, however this area could subsequently be developed with up to four (4) farms dwellings with agricultural uses. If ACF develops this area of land, the development will conform to all requirements relating to AG-2 Agricultural District.

3.4.4 Special Management Area

Pursuant to the Hawaii Coastal Zone Management Act (Chapter 205A, Hawaii Revised Statutes) all counties have enacted ordinances establishing Special Management Areas (SMA). Any development within the SMA, including development proposed by the State, requires a SMA Use Permit. On Oahu, the SMA Permit is administered by the City Department of Planning and Permitting (DPP) and acted upon the City Council pursuant to Ordinance No. 84-4.

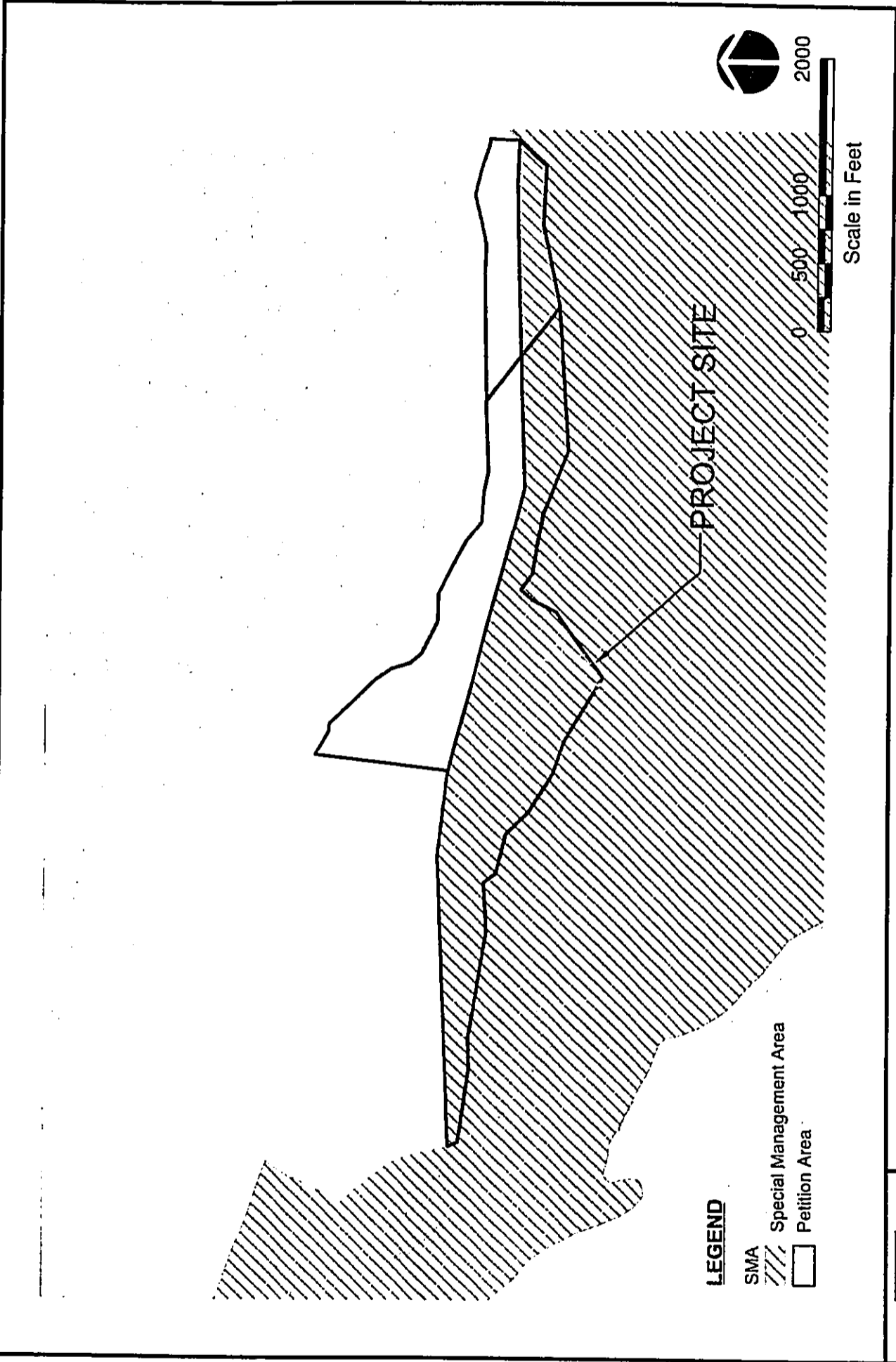
The 55.49 acres of TMK 6-1-02:022 is located within the boundaries of the City's SMA (see Figure 3-5). The 5.219-acre portion of Parcel 22 is exempt from SMA permit review based on the definition of "development" (Section 205A-22, HRS):

- B. "Development" does not include the following uses, activities or operations:
- (12) *Subdivision of a parcel of land into four or fewer parcels when no associated construction activities are proposed; provided that any land which is so subdivided shall not thereafter qualify for this exception with respect to any subsequent subdivision of any of the resulting parcels.*

Future development of Parcel 22 may require the approval of an SMA Permit from the City and County of Honolulu.

The proposed project's consistency with the applicable objectives and policies of the Hawaii Coastal Zone Management Program is discussed below.

Path: M:\VGA\7210-01 Pupukeya Ridge\graph File name: 7210_SMA Map_Fig 3-5 Plot date: Aug 26, 2000 User: gmayeshiro Area: 1.000000



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ENGINEERS • PLANNERS

PUPUKEYA RIDGE PROJECT

SPECIAL MANAGEMENT AREA MAP

FIGURE 3-5

Recreational Resources

Objective: Provide coastal recreational opportunities accessible to the public.

Policy A: Provide adequate, accessible, and diverse recreational opportunities in the coastal zone management area.

Comment: The proposed action to donate 79.03 acres to the State for a park will establish an open space resource in perpetuity, effectively preserving a buffer between the residential development of Pupukea Heights and a large section of the highly visible northern ridgeline overlooking Waimea Valley. This will sustain the natural character of Waimea Valley along with its recreational, cultural, and visual resources. The proposed donation to the State for the development of a new park represents an ideal acquisition from the State's perspective. The proposed action is not anticipated to have negative impacts on recreational resources.

Historic resources

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

Policy A: Identify and analyze significant archaeological resources

Comment: The proposed action will not impact historical, archaeological, or cultural resources, given that the surrounding area has already been developed. The Puu O Mahuka Heiau State Monument is located northwest of the Project Site. Puu O Mahuka Heiau is on the National and State Register of Historic Places and is one of the most significant and largest heiau on Oahu. The proposed action will not impact this site.

In the unlikely event that historic sites, including human remains, are encountered the proper mitigation measures will be taken.

Scenic and open space resources

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

Policy C: Preserve, maintain, and where desirable, improve and restore shoreline open space and scenic resources

Comment: The proposed action will provide a park resource with mountain and ocean views that look out toward the Waianae mountain range, Kaena Point, and the coastline. Furthermore, the proposed action will protect the natural character of the northern ridgeline of Waimea Valley as it is viewed from the Waimea Valley, Waimea Beach and Kamehameha Highway. The

proposed action is not anticipated to have negative impacts on scenic and open resources.

Coastal ecosystems

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

Comment: The proposed action will not impact coastal ecosystems.

Economic uses

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

Comment: ACF proposes to reclassify approximately 28.759 acres from Agricultural District to Conservation District for the creation of a State Park Reserve and public resource. A primary objective of this action is to preempt the future development of the Project Site, which overlooks Waimea Valley. ACF is preserving open space, creating additional recreational resources and maintaining the undeveloped character of the ridgeline overlooking Waimea Valley.

Coastal hazards

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

Comment: The proposed action will not impact coastal hazards.

Managing development

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

Comment: Project summaries were disseminated to the North Shore Neighborhood Board and Sunset Beach Community Association as part of the EA Pre-Assessment consultation process. Coordination meetings have also been held with the State Land Use Commission, Department of Land and Natural Resources – Division of State Parks, and Office of Conservation on Environmental Affairs, and the City Department of Planning and Permitting.

Public participation

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

Comment: The current project has been endorsed by the Sunset Beach Community Association in March 2005, the North Shore Neighborhood Board No. 27 in April 2005, the North Shore Outdoor Circle in March 2005, and the North Shore Chamber of Commerce in April 2005. The public will also be

afforded an opportunity to review and comment on the EA pursuant to the requirements of Chapter 343 Hawaii Revised Statutes and Section 11-200 of Title 11 Department of Health Administrative Rules.

Beach protection

Objective: Protect beaches for public uses and recreation.

Comment: The proposed action will not impact beaches.

Marine resources

Objective: Promote the protection, use, and development of marine and coastal resources to assure their sustainability.

Comment: The proposed action will not impact marine resources.

4. ALTERNATIVES

4.1 No Action Alternative

The "No Action" alternative would not result in the donation of 79.03 acres of land to the State Department of Land and Natural Resources for a State Park Reserve. The 28.759 acres of Agricultural District would not be reclassified a Conservation District and 5.219 acres of Conservation District would not be reclassified to Agricultural District. There would remain the potential for significant future development of the ridge, and the State would lose an opportunity to obtain lands for future park expansion and preserve at no cost.

4.2 Leaving the Conservation District Intact

This alternative involves donating the entire 55.491-acre parcel (TMK: 6-1-002: 22) and leaving the Conservation District intact. The proposed project involves donating all 24.227 acres of TMK 5-9-024: 1 and 50.272 acres (90.5%) of TMK 6-1-002: 22.

This alternative is not being pursued for several reasons. Rather than the donation of all of Parcel 22, retention of the 5.19-acre portion would facilitate future uses since this is the area of the Project Site that has roadway access off Maulukua Road. There are no scenic views from this portion of Parcel 22. The donation of 28.759 acres of the Agricultural District area, including all of TMK 5-9-024: 1 would enable a consolidated, better use of the lands for the State Park and anticipated future trails. If more land area along this strip were to be privately retained, access would be constrained since the only public road access is from Maulukua Road.

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5. DETERMINATION OF FINDING OF NO SIGNIFICANT IMPACT

This Final EA was prepared in accordance with the consultation process of Chapter 343, Hawaii Revised Statutes. Based on the significance criteria of Section 200-12 of Title 11, Administrative Rules, Department of Health, State of Hawaii it is determined that the proposed project will not have a major effect on the environment, and therefore this Finding of No Significant Impact (FONSI) will be filed with the State Office of Environmental Quality. The proposed project's relationship to each of the significance criteria is discussed below.

(1) Involve an irrevocable commitment to loss or destruction of any natural cultural resource;

There will be no loss or destruction of any natural or cultural resource. To the contrary, the donation of the Agricultural lands in the Petition Area and the remaining Conservation District lands will serve to protect and preserve a large portion of the northern ridgeline above Waimea Valley.

(2) Curtail the range of beneficial uses of the environment;

The proposed project will preserve and enhance the range of beneficial uses of the environment, as approximately 79 acres will be donated to the Division of State Parks for the general public's long term use for outdoor recreation.

(3) Conflict with the state's long-term environmental policies or goals and guidelines as expressed in Chapter 343, 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, goals and guidelines. Consistent with the State's environmental policy in Section 344-3, HRS, the proposed project will preserve the natural resources of the area in perpetuity by the donation of 79 acres for a State Park Reserve. Consistent with the environmental guidelines in Section 344-4, HRS, it will enable the State to establish, preserve, and maintain park and recreational areas for public recreational uses.

(4) Substantially affect the economic or social welfare of the community or state;

The proposed action will not adversely impact the economic or social welfare of the community. The potential agricultural development on the remaining agricultural lands would have minimal effects on the economic or social welfare of the community. The preservation of lands for public recreational use will benefit and enhance the social welfare of the community. The Sunset Beach Community Association and the North Shore Neighborhood Board have both reviewed and endorsed the proposed project.

(5) Substantially affect public health;

The proposed action is anticipated to have positive impacts on public health by providing an expanded public recreational resource and preserving the natural resources of the area.

(6) Involve substantial secondary impacts, such as population changes or effects on public facilities;

No secondary effects are anticipated with the proposed action. The potential development of up to four farm dwellings will have negligible effects on the population of the area and public facilities such as roads, utilities, police, fire and medical facilities.

(7) Involve a substantial degradation of environmental quality;

The proposed action will reduce the potential for degradation of environmental quality of the area by donating lands for a State Park Reserve and thereby precluding further development along the ridge.

(8) Individually limited but cumulatively has considerable effect upon the environment or involves a commitment for larger actions;

The proposed action will not create a commitment for any larger actions, nor will it contribute to cumulative negative effect upon the environment. The subdivision of the parcels' main purpose is to preserve and donate 79.03 acres to the State of Hawaii. There are no apparent hazards posed by rock, soil, or other slope movement that would affect land suitability relative to subdivision approvals. This pertains in general to the Project Site, but in particular to the approximately 15.144 acres to be retained by ACF, as the remaining 79.03 acres would be donated to the State. There are no residences or other potentially affected uses of concern in the area below the ridge.

(9) Substantially affect a rare, threatened or endangered species, or its habitat;

There are no known rare, threatened or endangered species of flora or fauna or associated habitat on the project site that could be adversely affected by the proposed action.

(10) Detrimently affect air or water quality or ambient noise levels;

The proposed action is not anticipated to affect air, water or ambient noise levels. Air, water quality, wastewater, and noise regulations of the Department of Health will be adhered to in any subsequent development of the property.

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

The project site is located within Zone "D", Areas in which flood hazards are undetermined, but possible and Zone "X", Areas to be determined to be outside 0.2% annual chance floodplain (as shown in Figure 2-6). No significant impacts to flood hazards are anticipated as a result of the proposed action.

- (12) *Substantially affect scenic vistas and viewplanes identified in county or state plans or studies; or*

The proposed action will preempt any future possibility of large scale development on the subject parcel. Therefore, it will have a substantial positive impact upon the perpetual preservation of the viewplane of a large section of the northern ridgeline above Waimea Valley – a viewplane with is readily visible from Waimea Beach, Waimea Valley, and sections of Kamehameha Highway between Haleiwa and Waimea. The preservation of ridgelines and viewplanes is an expressed objective of the North Shore Sustainable Communities Plan (July 2000).

- (13) *Require substantial energy consumption.*

The proposed action will not require substantial energy consumption with the potential development of up to four farm dwellings and agricultural uses on the 15 acres of retained lands.

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6. LIST OF REQUIRED PERMIT APPROVALS

- State Land Use District Boundary Amendment Petition
- Conservation District Use Application
- County Zoning Amendment
- Subdivision Approval
- A Special Management Area Permit from the City and County of Honolulu may be required depending on the nature of future development.

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7. CONSULTATION

7.1 Pre-Assessment Consultation

The following agencies and organizations were contacted during the preparation of the Draft EA. Of those who formally replied during the pre-assessment period, some had no comments while others provided substantive comments as indicated by the ✓ and ✓✓, respectively. All written comments are reproduced herein.

Federal

U.S. Fish and Wildlife Service (✓)

State

Land Division, Department of Land & Natural Resources
Historic Preservation Division, Department of Land & Natural Resources
Division of State Parks, Department of Land & Natural Resources (✓✓)
Office of Hawaiian Affairs (✓✓)
Department of Business, Economic Development, and Tourism, Office of Planning

City & County of Honolulu

Department of Planning & Permitting (✓✓)

Other

North Shore Neighborhood Board (✓✓)
Sunset Beach Community Association

7.2 Parties Consulted During Draft EA

The following agencies and organizations were consulted and comments solicited for the Draft EA. Of those who formally replied during the Draft EA period, some had no comments while others provided substantive comments as indicated by the ✓ and ✓✓, respectively. All written comments are reproduced herein.

State

Office of Environmental Quality Control (✓✓)
Department of Agriculture
Department of Health
Land Division, Department of Land & Natural Resources (✓✓)
Historic Preservation Division, Department of Land & Natural Resources
Division of State Parks, Department of Land & Natural Resources (✓✓)
Department of Business, Economic Development, and Tourism, Office of Planning (✓✓)
Department of Business, Economic Development, and Tourism, Land Use Commission (✓✓)
Office of Hawaiian Affairs (✓✓)
Department of Transportation (✓)

City & County of Honolulu

Board of Water Supply (✓✓)

Department of Design and Construction (✓)

Department of Planning and Permitting (✓✓)

Other

North Shore Neighborhood Board

Hawaiian Electric Company

Waialua Public Library

Hawaii State Library

Ryf

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 7TH FLOOR • HONOLULU, HAWAII 96813
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MUFTI HANAFI MANSUR
DIRECTOR

PETER J. YOUNG
CHIEF OF BUREAU
BOARD OF LAND AND NATURAL RESOURCES
COMMISSIONER OF THE STATE PARKS, HISTORICAL
PRESERVATION AND RECREATION DEPARTMENT



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF STATE PARKS
POST OFFICE BOX 871
HONOLULU, HAWAII 96809



Mr. Rodney Funakoshi
Wilson Okamoto Corp.
1907 S. Beretania Street, Suite 400
Honolulu, Hawaii 96826

February 8, 2005

RECEIVED
FEB 11 2005

WILSON OKAMOTO CORPORATION

Dear Mr. Funakoshi:

SUBJECT: Environmental Assessment Pre-Assessment Consultation
Pūpūkea, O'ahu TMK: 5-9-23: 1, 5-9-24: 1, and 6-1-02: 22

Thank you for the opportunity to comment on the proposed donation of 79 acres on Pūpūkea Ridge to the Division of State Parks. The project involves a resubdivision of parcels such that all the lands being donated for a State Park Reserve will be along the rim of Waimea Valley and zoned Conservation.

We have supported the donation of this land for park purposes based on the following:

- Promotes open space along the northern rim of Waimea Valley which in turn, promotes the historical landscape for Pu'u O Mahuka Heiau;
- Promotes the view corridors of Waimea Valley, including the length of the valley or ahupua'a from the mountains to the sea; and
- Provides passive recreational opportunities for visitors to Pu'u O Mahuka Heiau and the neighboring Pūpūkea community, including walking trails, lookouts, and picnic sites.

We look forward to continued discussions on this project. If you have additional questions, please contact me at 587-0290 or Martha Yent at 587-0287.

Very truly yours,

Daniel S. Quinn

DANIEL S. QUINN
State Parks Administrator

cc: David Druz, ACF
Gavin Chun, Land Division

Ryf

DEPARTMENT OF PLANNING AND PERMITTING
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MUFTI HANAFI MANSUR
DIRECTOR

PETER J. YOUNG
CHIEF OF BUREAU
BOARD OF LAND AND NATURAL RESOURCES
COMMISSIONER OF THE STATE PARKS, HISTORICAL
PRESERVATION AND RECREATION DEPARTMENT



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF STATE PARKS
POST OFFICE BOX 871
HONOLULU, HAWAII 96809



Mr. Rodney Funakoshi, AICP
Wilson Okamoto Corporation
1907 S. Beretania Street, #400
Honolulu, HI 96826

March 11, 2005

Dear Mr. Funakoshi:

Subject: Pre-Assessment Consultation for Pūpūkea Ridge Project
Pūpūkea, O'ahu, Hawaii
Tax Map Key: 5-9-23: 1, 5-9-24: 1, and 6-1-2: 22

The Department of Planning and Permitting has reviewed your request and have the following comments:

1. The DPP reviewed a similar proposal by A. Chantable Foundation (ACF) in the past. At that time, the applicant proposed the development of a spiritual sanctuary and accessory uses. Copies of our review of the previous proposal have been included for your information.

Although the current proposal has no plans for development, future plans to develop uses and structures may be subject to further environmental review pursuant to Section 11-200-7, Multiple or Phased Applicant or Agency Actions, Hawaii Administrative Rules. We suggest you consult with the Office of Environmental Quality Control for more information.

2. Re-zoning the portion of the site to be retained by ACF may be subject to a prior amendment of the North Shore Sustainable Communities Plan if it results in an expansion of the Rural Community Boundary.

If you have any questions, please contact Raymond Young of our staff at 527-5839.

Sincerely yours,

Henry Eng

HENRY ENG, FAICP
Acting Director of Planning & Permitting

HE:lh
dx: 354332

Encls.
cc: OEQC

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU

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P-017



PERMITTING
DIVISION

MANUAL K. FUJIKI, III
DIRECTOR
LORETTA K.C. CHEZ
DEPUTY DIRECTOR

2002/EL0G-2481 (RY)

September 24, 2002

Ms. Dierdre S. Mamiya, Administrator
Department of Land and Natural Resources
Land Division
State of Hawaii
P.O. Box 621
Honolulu, Hawaii 96809

Dear Ms. Mamiya:

Subject: Draft Environmental Assessment (DEA) and Conservation District Subzone
Redesignation For Pupukea Ridge Preservation Project and Kahi Malu Spiritual
Sanctuary, Tax Map Key 6-1-2: 22, 5-9-23: J, and 5-9-24: L, Pupukea, North Shore

We have reviewed the above document and have the following comments:

1. Zoning
 - a. State Land Use District Boundary Amendment and Rezoning

State Land Use District Boundary amendments involving land area of 15 acres or less, except for amendments that remove land from the Conservation District, are decided by the City Council. The Land Use Commission decides boundary amendments involving land area exceeding 15 acres and any amendments that remove land from the Conservation District.

Land reclassified to the State Conservation District requires a zone change to rezone such land to the P-1 Restricted Preservation District. While the district amendment to Conservation effectively remove zoning jurisdiction out of the City's hands, a rezoning ordinance is still required to change the City's zoning map. Therefore, the applicant must submit a zone change application to the DPP for regular processing and is not "automatic" as indicated on Page 9 of 33.

Ms. Dierdre S. Mamiya, Administrator
Department of Land and Natural Resources
Land Division
September 24, 2002
Page 2

Should the City Council be the deciding body for the State Land Use Boundary Amendment, the petition to amend the State Land Use District Boundary may be processed concurrently with an application to rezone AG-2 land to the P-1 District.

b. The proposed Kahi Malu Spiritual Sanctuary, located on TMK 6-1-2: 22, is within the Special Management Area (SMA) and is subject to permitting requirements as specified in Chapter 25, Revised Ordinance of Honolulu. The SMA permit should be listed in Section IV "Necessary Permits and Environmental Requirements" on page 12 of the Draft Environmental Assessment (DEA).

c. Under the City's proposed Agricultural Protection Area (APA) ordinance, TMK 5-9-23: 1 and 5-9-24: 1 are designated within the Agricultural Protection Zone. In addition, portions of both parcels are designated "Prime Agricultural Land" by the State Department of Agriculture's Agricultural Land of Importance to the State of Hawaii. Furthermore, a portion of TMK 5-9-24: 1 is rated "B", Master Productivity Rating by the Land Study Bureau.

The above information and any agricultural impacts and proposed mitigation measures associated with removing good agricultural land from the State and City Agricultural Districts and the proposed APA should be disclosed in the final document.

2. Engineering

The project is subject to obtaining a grading permit.

On page 23, Section L, Natural Hazards, this section should be expanded to include discussion pertaining to potential impacts to properties located below the site due to unstable soil, loose boulders, etc., and any mitigative measures to be taken.
3. North Shore Sustainable Communities Plan (SCP)

The DEA does not address the project's relationship to the SCP's guidelines and planning principles for land in the Preservation Boundary and how lands within the Rural Community Boundary is not more suited for the retreat.

Ray

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU

430 SOUTH KING STREET - HONOLULU, HAWAII 96813
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ARLENE HARRIS
WASON

RANDALL K. FUJIKI, AIA
DIRECTOR
LANDMARK CONSULTING

2001/CLOG-2798(RV)

July 18, 2001

Ms. Dierdre S. Mamiya, Administrator
Department of Land and Natural Resources
Land Division
September 24, 2002
Page 3

In addition, we note that the DEA concludes that the retreat is not visible from any "...nearby beaches, roadways, public vistas, Waimea Valley or the adjoining facilities of Waimea Falls Park" without the benefit of a view analysis. We reiterate our recommendation that a view analysis be prepared to support such a conclusion.

Moreover, if impacts are anticipated, mitigation measures and alternatives should be discussed.

Thank you for the opportunity to comment. If you have any questions, please contact Raymond Young of our staff at 527-5839.

Sincerely yours,

Raymond Young
of RANDALL K. FUJIKI, AIA
Director of Planning and Permitting

RKF:lh
Doc 177717

cc: Landmark Consulting

Mr. Ben Welborn
Environmental Consulting Services
P.O. Box 1261
Hanalei, Hawaii 96714

Dear Mr. Welborn:

Pre-Assessment Consultation for Conservation District Use Application (CDUA)
and Draft Environmental Assessment for a Single Family Dwelling and Access Road
Tax Map Key 6-1-2-22, Puukoa, North Shore, Oahu

We have reviewed the subject project and have the following comments:

The draft environmental assessment and CDUA should describe how the project addresses the policies of the North Shore Sustainable Communities Plan. In particular, whether the proposed development of preservation designated land is consistent with policies promoting the protection of: 1) the North Shore's rural character, 2) significant natural features such as Waimea Valley, 3) ecologically sensitive lands, 4) cultural and historic features, 5) recreational resources, 6) scenic views; and, 7) development within the Rural Community Boundary. To address scenic views, we suggest a view analysis with appropriate photographs of the site and proposed structures from public view points be included in the draft environmental assessment.

With respect to grading and erosion control, a grading permit will be required as required in Chapter 14, Article 13 of the Revised Ordinance of Honolulu (ROH), 1990, as amended. Measures shall be implemented to mitigate the effects of erosion during the construction and/or grading activities.

With respect to wastewater disposal, this area is not serviced by the municipal sewer system and there are no plans to construct a new sewer system in the near future. Private disposal systems are under the jurisdiction of the State Department of Health.

If you have any questions, please call Raymond Young of our staff at 527-5839.

Sincerely yours,

Randall K. Fujiki
RANDALL K. FUJIKI, AIA
Director of Planning and Permitting

RKF:lh
doc 104789

PHONE (808) 594-1865



STATE OF HAWAII
OFFICE OF HAWAIIAN AFFAIRS
711 KAPOLANI BOULEVARD, SUITE 500
HONOLULU, HAWAII 96813

FAX (808) 594-1865

David S. Druz
May 5, 2005
Page 2

'O wau iho nō.

Clyde W. Nāmu'o
Administrator

11RD051670C

May 05, 2005

David S. Druz
A Charitable Foundation Corporation
P.O. Box 969,
Haleiwa, HI 96712

CC: Laura H. Thielens
Director, Office of Planning
P.O. Box 2359
Honolulu, HI 96813

RE: Pupukea Ridge Preservation Project, Pōpōkea and Waimea, Kō'olauloa and
Waiānua Districts, O'ahu, Hawaii, TMK: (1) 5-9-23:001 (portion), (1) 5-9-24:001 and (1)
6-1-02:022 (portion)

Dear Mr. Druz,

The Office of Hawaiian Affairs (OHA) is in receipt of your April 12, 2005, request for
comments on the above project, TMK: (1) 5-9-23:001 (portion), (1) 5-9-24:001 and (1) 6-1-
02:022 (portion). OHA offers the following comments.

The Draft Environmental Assessment states that the only surviving native flora within the
parcels is the Kō'oko'olua (*Bidens* sp.). Certain varieties of the Kō'oko'olua have been
traditionally used by Native Hawaiians for medicinal purposes. OHA recommends that any
planned landscaping incorporate native species including the Biddens variety.

The archaeological and botanical studies appear to be thorough. If future construction activities
are planned for the area, an Archaeological Monitoring Plan should be implemented and all
ground disturbing activities should be monitored by a professional archaeologist. Please contact
OHA if, in the future, you plan to develop the agricultural portion of the parcel.

OHA further requests your assurances that if the project goes forward, should iwi or Native
Hawaiian cultural or traditional deposits be found during ground disturbance, work will cease,
and the appropriate agencies will be contacted pursuant to applicable law.

Thank you for the opportunity to comment. If you have further questions or concerns, please
contact Jesse York at 594-1962 or jesssey@oha.org.

7210-02
August 29, 2005

Mr. Anthony J.H. Ching
Executive Officer
State of Hawaii
Department of Business, Economic Development and Tourism
Land Use Commission
P.O. Box 2359
Honolulu, Hawaii 96804-2359

**WILSON
OKAMOTO
CORPORATION**



**ENGINEERS
PLANNERS**
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SUITE 400
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PH: (808) 946-2277
FAX: (808) 946-2253

Subject: Draft Environmental Assessment (EA)
Pupukea Ridge Preservation Project
Pupukea, Oahu, Hawaii
Tax Map Key: (1) 5-9-023; 1; 5-9-024; 1; and 6-1-002; 22

Dear Mr. Ching:

Thank you for your letter of August 22, 2005 regarding the subject Draft EA. In response to your comments:

- 1 & 2. The Conservation District Subzones within the proposed project area will be identified in a new figure in the Final EA.
- 3. A discussion on the impacts on housing for low income, low-moderate income and gap groups has been added to Section 2.14 Socioeconomic Characteristics.

We appreciate your review of the Draft EA.

Sincerely,

Rodney Funakoshi, AICP
Project Manager

cc: Mr. David S. Druz, A Charitable Foundation
Mr. Ben Matsubara, Matsubara, Lee & Kotake

LINDA LUNCLE
COMMISSIONER OF HAWAII



STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY CONTROL
225 SOUTH KING STREET
HONOLULU, HAWAII 96813
TELEPHONE: (808) 548-1100
FAX: (808) 548-1100
E-MAIL: oeqc@hawaii.gov

GENEVIEVE SALMONSON
DIRECTOR

July 29, 2005

Anthony Ching
Land Use Commission
P.O. Box 2359
Honolulu, Hawaii 96804

Attention: Bert Saruwatari

Dear Mr. Ching:

Subject: Draft Environmental Assessment (EA) for Pupukea Ridge Preservation Project

In order to reduce bulk and save on paper, please print on both sides of the pages in the final document. We have no other comments at this time.

If you have any questions call Nancy Heinrich at 586-4185.

Sincerely,

GENEVIEVE SALMONSON
Director

cc: Rodney Funakoshi, Wilson Okamoto

7210-02
August 29, 2005

Ms. Genevieve Salmonson
Director
State of Hawaii
Office of Environmental Quality Control
235 S. Beretania Street, Suite 702
Honolulu, Hawaii 96813

Subject: Draft Environmental Assessment (EA)
Pupukea Ridge Preservation Project
Pupukea, Oahu, Hawaii
Tax Map Key: (1) 5-9-023: 1; 5-9-024: 1; and 6-1-002: 22

Dear Ms. Salmonson:

Thank you for your letter of July 29, 2005 regarding the subject Draft EA.
We will print on both sides of the pages for the Final EA.

We appreciate your review of the Draft EA.

Sincerely,

Rodney Funakoshi

Rodney Funakoshi, AICP
Project Manager

cc: Mr. Anthony Ching, Land Use Commission
Mr. David S. Druz, A Charitable Foundation
Mr. Ben Matsubara, Matsubara, Lee & Kotake

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LESLIE L. HARRIS
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF STATE PARKS
POST OFFICE BOX 671
HONOLULU, HAWAII 96809

August 22, 2005

Mr. Anthony Ching, Director
State of Hawaii
Land Use Commission
P.O. Box 2359
Honolulu, Hawaii 96804-2359

Dear Mr. Ching:

SUBJECT: Draft Environmental Assessment for Pūpūkeā Ridge Preservation Project
Pūpūkeā, O'ahu TMK: 6-1-02-22, 5-9-23-01, and 5-9-24-01

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AUG 23 2005

WILSON OKAMOTO CORPORATION

Our comments on an earlier version of the DEA for the Pūpūkeā Ridge Preservation Project were provided in March 2005. We reviewed the June 2005 DEA and did not find any major changes that affect the donation of land to the State for park purposes. The project involves a consolidation and resubdivision of the 3 parcels on Pūpūkeā Ridge and a donation of 79 acres to the State. The project will involve a reclassification of agricultural and conservation lands and therefore, will require a State Land Use District Boundary Amendment and a Conservation District Use Permit. The result will be that all the 79 acres proposed for donation to the State will be zoned conservation and the 15 acres being retained by the private landowner will be agricultural.

The subject parcels are located along the northern rim of Waimea Valley and about 1,000 feet east of Pu'u O Mahuka Heiau State Historical Site. State Parks has expressed a willingness to accept the donation for a park reserve based on the following:

- Promotes open space along the northern rim of Waimea Valley which in turn, promotes the historical landscape for Pu'u O Mahuka Heiau;
- Promotes the view corridors of Waimea Valley, including the length of the valley or *ahupua'a* from the mountains to the sea; and
- Provides passive recreational opportunities for visitors to Pu'u O Mahuka Heiau and the neighboring Pūpūkeā community, including trails, lookouts, and picnic sites.

Mr. Anthony Ching
August 22, 2005
Page 2

We do not believe that the resubdivision and donation of 79 acres to the State for park purposes will have any significant environmental impacts. The intent of the donation is to preserve the natural character of the ridge and prevent any future development that is incompatible with this natural setting. Because State parks tend to be areas with natural and cultural resource values and passive recreational opportunities, we believe that the intent of the donation is in keeping with the mission of our state park system.

At various public meetings held in the Pūpūkea and Waimāea communities, the community members expressed support for the park. Those living nearby expressed some concerns about the public use of the area, such as parking, trash, and noise. If the donation is executed, State Parks will hold additional public meetings in the future to seek public input and develop a conceptual plan for the park.

The DEA does not address any plans for the 15 acres of agricultural land to be retained by the landowner. However, any future plans for these lands should be sensitive to the adjacent parks (Waimāea Valley and Pu'u O Mahuka Heiau) and the natural setting along the ridge.

Thank you for the opportunity to comment on this DEA. If you have any questions, you may contact me at 587-0290 or Martha Yent at 587-0287.

Very truly yours,



DANIEL S. QUINN
State Parks Administrator

cc: Ms. Genevieve Salmonson, OEQC
Rodney Funakoshi, Wilson Okamoto Corp.
Land Division

7210-02
August 29, 2005

Mr. Daniel S. Quinn
Administrator

State of Hawaii
Department of Land and Natural Resources
Division of State Parks
P.O. Box 621
Honolulu, Hawaii 96809

Subject: Draft Environmental Assessment (EA)
Pūpūkea Ridge Preservation Project
Pūpūkea, Oahu, Hawaii
Tax Map Key: (1) 5-9-023: 1; 5-9-024: 1; and 6-1-002: 22

Dear Mr. Quinn:

Thank you for your letter of August 22, 2005 concerning the subject Draft EA.

Upon the donation, we acknowledge that the State Parks will hold additional public meetings to seek public input and develop a conceptual plan for the park.

There are no plans at this time for the development of the Agricultural lands to be retained. Should ACF develop the parcel in the future, the development will be sensitive to the adjacent parks and natural setting along the ridge.

We greatly appreciate your continued cooperation and support of the project.

Sincerely,



Rodney Funakoshi, AICP
Project Manager

cc: Mr. Anthony Ching, Land Use Commission
Mr. David S. Druz, A Charitable Foundation
Mr. Ben Matsubara, Matsubara, Lee & Kotake

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BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU
630 SOUTH BERETANIA STREET
HONOLULU, HI 96843



August 18, 2005

Mr. Anthony Ching, Director
State of Hawaii
Land Use Commission
P.O. Box 2359
Honolulu, Hawaii 96804-2359

Dear Mr. Ching:

Subject: Draft Environmental Assessment for Pupukea Ridge Project,
TMK: 5-9-23-1; 5-9-24-1; 6-1-2-22

Thank you for the opportunity to comment on the subject document.

The existing water system is presently adequate to accommodate the domestic requirements of the agricultural lots.

The applicant should research and address the availability and use of non-potable water for irrigation.

The availability of water will be confirmed when the building permits are submitted for our review and approval. When water is made available, the applicant will be required to pay our Water System Facilities Charges for resource development, transmission and daily storage.

If you have any questions, please contact Joseph Kaakua at 748-5442.

Very truly yours,

Herbert H. Minakami
HERBERT H. MINAKAMI
Interim Manager and Chief Engineer

cc: Ms. Genevieve Salmonson, Office of Environmental Quality Control
Mr. Rodney Funakoshi, Wilson Okamoto Corporation

7210-02
August 29, 2005

Mr. Herbert H. Minakami
Interim Manager and Chief Engineer
Board of Water Supply
City and County of Honolulu
630 S. Beretania Street
Honolulu, Hawaii 96843

Subject: Draft Environmental Assessment (EA)
Pupukea Ridge Preservation Project
Pupukea, Oahu, Hawaii
Tax Map Key: (1) 5-9-023: 1; 5-9-024: 1; and 6-1-002: 22

Dear Mr. Minakami:

Thank you for your letter of August 18, 2005 regarding the subject Draft EA.

There are no readily available sources of non-potable water for irrigation use. Should farm dwellings be developed, there is some potential for reuse of wastewater effluent which could be considered.

We acknowledge the requirement to pay applicable Water System Facilities charges.

We appreciate your review of the Draft EA.

Sincerely,

Rodney Funakoshi

Rodney Funakoshi, AICP
Project Manager

cc: Mr. Anthony Ching, Land Use Commission
Mr. David S. Druz, A Charitable Foundation
Mr. Ben Matsubara, Matsubara, Lee & Kotake

Ryf

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AUG 24 2005
WILSON OKAMOTO CORPORATION

**WILSON
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MURTI NARAYAN, Mayor
RANGALY S. CHAND, Chairman
HERBERT H. MINAKAMI, Interim Manager and Chief Engineer
ALVIN P. PARK
RODNEY K. HANAKA, Esq., Oahu
LAVENE HIGA, Esq., Oahu
HERBERT H. MINAKAMI, Interim Manager and Chief Engineer
DOHAN FAY K. KITOSAO, Deputy Manager and Chief Engineer

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU

830 SOUTH BERRANIA STREET, 2ND FLOOR • HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-4132 • FAX: (808) 527-8743
POST INTERNET: www.honolulu.gov • INTERNET: www.honolulu.gov



HAWAIIAN
STATE

KJF

HENRY LWC, ACFP
DIRECTOR
GREG S. LAMON
DEPUTY DIRECTOR

2005/TELOG-1669 (r/s)

August 22, 2005

RECEIVED
AUG 23 2005
WILSON OKAMOTO CORPORATION

Mr. Rodney Funakoshi, Project Manager
Wilson Okamoto Corporation
1907 South Beretania Street, Suite 400
Honolulu, Hawaii 96826

Dear Mr. Funakoshi:

Subject: Pupukea Ridge Preservation Project, Pupukea, Oahu, Hawaii
Draft Environmental Assessment (DEA)
TMK: 5-9-023: 001; 5-9-024: 001; and 6-1-002: 022

This is in response to your July 20, 2005 request for comments on the Draft Environmental Assessment (DEA) dated June 2005 for the proposed Pupukea Ridge Preservation Project, which you are preparing in support of A Charitable Foundation's (ACF) petition to the Land Use Commission to reclassify approximately 28,759 acres of land from the State Agricultural Land Use District to the Conservation District, and approximately 5,219 acres from Conservation to the Agricultural District. We have reviewed the DEA and offer the following comments for your review and consideration for inclusion in the Final Environmental Assessment (FEA), and the anticipated issuance of a "Finding of No Significant Impact" (FONSI):

1. Sections 1.1 Project Site and 1.2 Project Description on page 1-1: The "Project Area" (94,175 acres) and the "Petition Area" (33,978 acres) for the reclassification should be clearly distinguished in the narrative and all relevant figures (including Figure 3-1 State Land Use Boundary Classification).
2. Section 1 Project Site, Section 5(8) Determination and Compliance, and Section 6 List of Required Permit Approvals on pages 1-1, 5-2, and 6-1, respectively. The DEA should state whether the lands are suitable for subdivision in accordance with Section 4-403 (Land Suitability) of DPP's *Subdivision Rules and Regulations*. The DEA should explain whether potential hazards posed by rock, soil or other slope movement exists, which may affect the subject site and to adjacent properties. If such hazards exist, the DEA should describe measures to mitigate the hazardous conditions to make the land suitable for subdivision.

Mr. Rodney Funakoshi, Project Manager
Wilson Okamoto Corporation
August 22, 2005
Page 2

We note that an expanded discussion as requested in previous DPP comments is not included in the DEA regarding the potential impacts due to unstable soil, large boulders and the mitigation measures to be taken. This should be included in the FEA.

3. Section 1.2 Project Description on page 1-1: There is an apparent discrepancy in the Petitioner's plans for development of the agricultural lands between the DEA, which states "There are no plans at this time for the development of the Agricultural lands to be retained," and page 34 of the March 15, 2005 Petition, where the Petitioner alleges (19) "the adjacent Agricultural district land is expected to be developed with up to four (4) farm dwellings and agricultural uses within 10 years of Commission approval." This apparent inconsistency should be clarified in the FEA.
4. Section 2.2 Geology and Topography on page 2-1: Please provide a topographic map with steep slopes in categories of steepness and significant features and landmarks identified.
5. Section 2.3 Soils on pages 2-1 to 2-4: Add a new map showing the ALLSIH soil categories overlaying the parcels to support the narrative on page 2-4.
6. Section 2.5 Flood Hazard on page 2-6 and Section 3.3.1 Conformance to the State Conservation District Standards on page 3-5, and Flood Zone Map Figure 2-3: Revise the narrative and map to reflect that the "Petition Area" is located within the FIRM Zone "D", but that the "makai" portion of TMK: 6-1-002: 022 within the "Project Area" is also located in Flood Zone "X" and within the Special Management Area (SMA). The "Petition Area" should be added to Figure 2-3 with cross-hatching to facilitate this distinction.
7. Section 2.10 Scenic Characteristics on pages 2-10 and 2-11 and Section 3.3.1 Conformance to the State Conservation District Standards on pages 3-3 to 3-7. Additional discussion should be added of the visibility from Kamehameha Highway and Waimea Valley of the 5,219 acre portion of TMK: 6-1-002: 022 within the Petition Area, which is directly above Waimea Valley. The anticipated impacts, mitigation measures and alternatives (including but not limited to setbacks of the two possible farm dwellings) should be presented.
8. We note that a view analysis as requested in previous DPP comments is not included in the DEA. This should be included in the FEA.
Section 2.11 Roadway System: DPP does not generally grant subdivision approval to create lots with roadway access only via an easement.

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU

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WU/PI HAWAIIAN WAY
81508

RNF

PHOTO, BAC, FACT
SUBMISSION
DANIEL A. HANAUSS
DEPUTY DIRECTOR

2005/PELOG-1669 (rfs)

August 22, 2005

RECEIVED
AUG 23 2005
WILSON OKAMOTO CORPORATION

Mr. Rodney Funakoshi, Project Manager
Wilson Okamoto Corporation
1907 South Beretania Street, Suite 400
Honolulu, Hawaii 96826

Dear Mr. Funakoshi:

Subject: Pupukea Ridge Preservation Project, Pupukea, Oahu, Hawaii
Draft Environmental Assessment (DEA)
TMK: 5-9-023: 001; 5-9-024: 001; and 6-1-002: 022

This is in response to your July 20, 2005 request for comments on the Draft Environmental Assessment (DEA) dated June 2005 for the proposed Pupukea Ridge Preservation Project, which you are preparing in support of A Charitable Foundation's (ACF) petition to the Land Use Commission to reclassify approximately 28,759 acres of land from the State Agricultural Land Use District to the Conservation District, and approximately 5,219 acres from Conservation to the Agricultural District. We have reviewed the DEA and offer the following comments for your review and consideration for inclusion in the Final Environmental Assessment (FEA), and the anticipated issuance of a "Finding of No Significant Impact" (FONSI):

- Sections 1.1 Project Site and 1.2. Project Description on page 1-1: The "Project Area" (94.175 acres) and the "Petition Area" (33,978 acres) for the reclassification should be clearly distinguished in the narrative and all relevant figures (including Figure 3-1 State Land Use Boundary Classification).
- Section 1 Project Site, Section 5(8) Determination and Compliance, and Section 6 List of Required Permit Approvals on pages 1-1, 5-2, and 6-1, respectively: The DEA should state whether the lands are suitable for subdivision in accordance with Section 4-403 (Land Suitability) of DPP's *Subdivision Rules and Regulations*. The DEA should explain whether potential hazards posed by rock, soil or other slope movement exist, which may affect the subject site and to adjacent properties. If such hazards exist, the DEA should describe measures to mitigate the hazardous conditions to make the land suitable for subdivision.

Mr. Rodney Funakoshi, Project Manager
Wilson Okamoto Corporation
August 22, 2005
Page 2

We note that an expanded discussion as requested in previous DPP comments is not included in the DEA regarding the potential impacts due to unstable soil, large boulders and the mitigation measures to be taken. This should be included in the FEA.

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4. Section 2.2 Geology and Topography on page 2-1: Please provide a topographic map with steep slopes in categories of steepness and significant features and landmarks identified.

5. Section 2.3 Soils on pages 2-1 to 2-4: Add a new map showing the ALISII soil categories overlaying the parcels to support the narrative on page 2-4.

6. Section 2.5 Flood Hazard on page 2-6 and Section 3.3.1 Conformance to the State Conservation District Standards on pages 3-5, and Flood Zone Map Figure 2-3: Revise the narrative and map to reflect that the "Petition Area" is located within the FIRM Zone "D", but that the "makai" portion of TMK: 6-1-002: 022 within the "Project Area" is also located in Flood Zone "X" and within the Special Management Area (SMA). The "Petition Area" should be added to Figure 2-3 with cross-hatching to facilitate this distinction.

7. Section 2.10 Scenic Characteristics on pages 2-10 and 2-11 and Section 3.3.1 Conformance to the State Conservation District Standards on pages 3-3 to 3-7: Additional discussion should be added of the visibility from Kamehameha Highway and Waimea Valley, of the 5,219 acre portion of TMK: 6-1-002: 022 within the Petition Area, which is directly above Waimea Valley. The anticipated impacts, mitigation measures and alternatives (including but not limited to setbacks of the two possible farm dwellings) should be presented.

We note that a view analysis as requested in previous DPP comments is not included in the DEA. This should be included in the FEA.

8. Section 2.11 Roadway System: DPP does not generally grant subdivision approval to create lots with roadway access only via an easement.

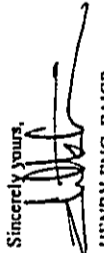
9. Section 3.3.1(1) Conformance to the State Conservation District Standards on page 3-5: Include the Department of Health's written confirmation of the "maximum of two (2) septic tanks or individual wastewater systems" for the 15,144 acres proposed to be consolidated and retained in the Agricultural Land Use District.
10. Section 3.4.1 General Plan on pages 3-8 to 3-10: The two agricultural parcels (TMK: 5-9-024: 001 and 5-9-023: 001) were preserved for agricultural use in the North Shore Sustainable Communities Plan's Land Use Map, and included in the North Shore Agriculture Protection Area map in DPP's proposed Agricultural Protection Ordinance, Bill 74 (2004). Bill 74 passed second reading/public hearing on November 10, 2004 and was recommended to the Zoning Committee on December 14, 2004.
- The FEA should explain how removal of the 28,759 acres from the Agricultural District satisfies and implements the objectives and policies (specifically, Objective C: To maintain the viability of agriculture on Oahu in Chapter II Economic Activity) of the City and County of Honolulu *General Plan* as amended on October 3, 2002 by Resolution 02-205, CD-1.
11. Section 3.4.2.1 North Shore Sustainable Community Land Use Map on pages 3-10 to 3-13: More information should be provided on the potential agricultural development of the 5,219 acres and how the reclassification to the Agricultural District will satisfy the vision for the North Shore's future (specifically, Section 2.2 Key Elements of the Vision, such as the Agriculture Boundary, and Support for the diversified agriculture industry in Sections 2.2.1 and 2.2.2 on pages 2-6 and 2-8 of the North Shore *Sustainable Communities Plan* (NS SCP), respectively).
- No SCP amendment will be required for the 5,219-acre property proposed for boundary amendment from Conservation to Agricultural unless future zoning is inconsistent with the agricultural intent for these lands. Rezoning to County or other residential zoning districts will be subject to amending the SCP to revise the Rural Community boundary.
12. Section 3.4.3 Land Use Ordinance and Zoning on page 3-13: Include a discussion of the purpose and intent and uses and development standards for P-1 and AG-2 zoning districts according to the LUO (Sections 21-3.40 and 40-1 and 21-3.50 of the LUO, respectively).
- As stated in our September 24, 2002 letter to DLNR, submittal and processing of a zone change application will be needed for any change in County Zoning Districts. The DPP reserves the right in the subsequent zone change application to require additional information on this and other sections, such as a more detailed view analysis and geo-technical study.

13. Section 3.4.4 Special Management Area on page 3-16: Include the explanation that the entire TMK: 6-1-002: 022, including the proposed 5,219 acre Petition area, is located within the SMA. Please add a map of the SMA.
- Based on the petitioner's statement on page 1-1 that there "are no plans at this time for the development of the Agricultural lands to be retained, ..." we concur that the proposed project is exempt from the SMA permit review pursuant to Section 25-1.3(2)(L), ROH. The subsequent discussion of the proposal's consistency with SMA objectives (pages 3-16 to 3-18) is therefore unnecessary.
- However, the petitioner is reminded that future development of this portion of the site (Parcel 22) may require the approval of an SMA permit from our Land Use Permits Division.
14. Section 4. Alternatives on page 4-1: Add a discussion of why the following alternative was rejected in favor of the current proposal for the 5,219-acre property. Evaluate the alternative of retaining the 55,491-acre parcel (TMK: 6-1-002: 022) in Conservation and instead, reclassify either the entire 24,227 acres (TMK: 5-9-024: 001) or a portion of the parcel from the State Agricultural Land Use District to Conservation. Both properties (Parcel 22 and 1 or a portion of Parcel 1) could be donated to the State for future park expansion. The scenic views of the entire southern boundary of Parcel 22 above Waimea Valley from Kamahameha Highway and Waimea Valley would be preserved, and a minimum of 14,451 acres (in TMK: 5-9-023: 001) would be retained for agricultural use.
- The Decision Analysts Hawaii, Inc. April 2005 study in Appendix B should be expanded to compare the option of retaining the current State Agricultural properties for agricultural use, with the current proposal of reclassifying the 5,219 acres from Conservation to Agricultural, and the DEA should provide justification for reclassifying said acreage, and discuss the potential of said property for viable agricultural use.
15. Section 8 References on page 8-1: The following editing changes are suggested:
- 1. Add "as amended October 3, 2002 by Resolution 02-205, CD1" after the City and County of Honolulu, Department of Planning and Permitting *General Plan Objectives and Policies*, 1992.
 - 2. Add "July 2000 (adopted on May 10, 2000 as Ordinance 00-15)" after City and County of Honolulu, Department of Planning and Permitting. *North Shore Sustainable Communities Plan*.

Mr. Rodney Funakoshi, Project Manager
Wilson Okamoto Corporation
August 22, 2005
Page 5

Should you have any questions, please contact Ray Sakai of our staff at 523-4047.

Sincerely yours,



-fe
HENRY ENG, FAICP
Director of Planning and Permitting

HE:mo

cc: Genevieve Salmonson, Director
Office of Environmental Quality Control

Anhony Ching, Director
Land Use Commission

Benjamin M. Matsubara, Esq.
Matsubara, Lee and Kotake

Lori K.K. Sunakoda, Deputy Corporation Counsel
Department of the Corporation Counsel

p:\Div\Function\EA_eia\2005\4log-1669.doc

7210-02
August 29, 2005

Mr. Henry Eng
Director
Department of Planning and Permitting
City and County of Honolulu
650 S. King Street, 7th Floor
Honolulu, Hawaii 96813

**WILSON
OKAMOTO
CORPORATION**



**ENGINEERS
PLANNERS**
1907 S. BEREI AVE, SUITE 51
HONOLULU, HI 96826
PH: 808/246-2272
FAX: 808/246-2253

Subject: Draft Environmental Assessment (EA)
Pupukea Ridge Preservation Project
Pupukea, Oahu, Hawaii
Tax Map Key: (1) 5-9-023: 1; 5-9-024: 1; and 6-1-002: 22

Dear Mr. Eng:

This is in response to your letter of August 22, 2005 (2005/ELOG-1669 (nys)) concerning the subject Draft EA. We note at the outset that the current project is quite different from that previously proposed – the spiritual sanctuary project has been abandoned and the primary thrust of the current project is the donation of lands for a State Park Preserve. The following responses are offered in the respective order of your comments:

1. Clarification about the "Project Site" (equivalent to your term "Project Area") and "Petition Area" will be made in Section 1.2. Figures 3-1 will reflect the "Project Site" (94.175 acres) and the "Petition Area" (33.978 acres).
2. The Final EA will be revised to indicate that there are no apparent hazards posed by rock, soil or other slope movement that would affect land suitability relative to subdivision approvals. This pertains in general to the Project Site, but in particular to the approximately 15.144 acres to be retained by the Petitioner, as the remaining 79.03 acres would be donated to the State of Hawaii. There are no residences or other potentially affected uses of concern in the area below the ridge.
3. The statements in the Petition and the EA are not necessarily inconsistent. It is true that at this time, there are no specific plans for the development of the Agricultural lands to be retained. Within the next 10 years, however, it is expected that this area could be developed with up to four (4) dwellings with agricultural uses. The latter statement was provided to meet a requirement of the Land Use Petition that a timetable for development be provided.
4. A slope map based on topography of the Project Site and surroundings will be provided in the Final EA (Figure 2-1).

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WILSON
OKAMOTO
CORPORATION

7210-02
Letter to Mr. Henry Eng
August 29, 2005
Page 2 of 2

5. An ALISH map will be included in the Final EA (Figure 2-4)
6. Sections 2.5, 3.3.1 and Figure 2-3 will be revised to reflect the project site also lies within "Zone X".
7. The Final EA will be revised to reflect that the 5.219 portion of TMK: 6-1-002: 22 within the Petition Area is neither visible from Kamehameha Highway nor from publicly accessible portions of Waimea Valley. AS shown by the USGS topographical map in Figure 1-1, this portion of the project site is over one mile inland from the highway and obscured by the valley ridge. Accordingly, there would be no visual impacts from any farm dwellings that could be developed in this area.
8. We acknowledge that DPP does not generally grant subdivision approval to create lots with roadway access only via an easement. It is for this reason that the land use boundary amendment is being sought, otherwise the donated area would include an Agricultural zoned lot served only by the roadway easement.
9. Section 3.3.1 (1) will be revised to reference our communication with the State Department of Health's Wastewater Branch as the basis for this limitation.
10. A discussion about the removal of 28.759 acres of Agricultural District and its consistency with Chapter II Economic Activity, Objective C of the City's General Plan and DPP's proposed Agricultural Protection Ordinance, Bill 74 (2004), will be provided in Section 3.4.1.
11. A discussion on the proposed project's consistency with the vision of the North Shore Sustainable Communities Plan will be included in Section 3.4.2.1. We acknowledge that a SCP amendment is not required for the 5.219 acres of property proposed for boundary amendment, unless future zoning is inconsistent with the agricultural intent of these lands.
12. A discussion on the purpose and intent and uses and development standards for P-1 and AG-2 zoning districts will be included in Section 3.4.3.
13. A Special Management Area Map will be included in the Final EA (Figure 3-5) and the text revised to reflect that the 5.219-acre portion of the Petition Area lies within the SMA. We acknowledge that future development will be subject to the requirements of the SMA permit. The included discussion of consistency has been retained since it

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7210-02
Letter to Mr. Henry Eng
August 29, 2005
Page 3 of 3

WILSON
OKAMOTO
CORPORATION

relates to the broader objectives and policies of the Hawaii Coastal Zone Management Program and remain applicable.

14. As suggested, we will include a discussion of the alternative to leave in Conservation and donate the entire 55.491-acre parcel (TMK 6-1-002:22) as well as all or a portion of TMK 5-9-024:1. We would note that the proposed project includes the donation of all 24.227 acres of TMK 5-9-024: 1 and 50.272 acres (90.5%) of TMK 6-1-002: 22. The suggested alternative is not being pursued for several reasons. Rather than the donation of all of Parcel 22, retention of the 5.19-acre portion would facilitate future use since this is the area of the Project Site that has roadway access off Maulukua Road. There are no scenic views from this portion of Parcel 22. The donation of 28.759 acres of the Agricultural District area, including all of TMK 5-9-024: 1 would enable a consolidated, better use of the lands for the State Park and anticipated future trails. If more of the land area along this strip were to be privately retained, access would be constrained since the only public road access is from Maulukua Road.
 15. Section 8 will be revised to incorporate the suggested edits.
- We appreciate your thorough review of the Draft EA and trust that the foregoing satisfactorily addresses your concerns. Please feel free to call me if you should have any questions or require further information.

Sincerely,

Rodney Funakoshi

Rodney Funakoshi, AICP
Project Manager

cc: Mr. Anthony Ching, Land Use Commission
Mr. David S. Druz, A Charitable Foundation
Mr. Ben Matsubara, Matsubara, Lee & Kotake

M:\11\0A17210-01 Popoiaa Ridge\Draft EA\Draft EA Response - DPP 8-26-05.doc

RIF

LINDA LINDLE
GOVERNOR
THEODORE E. LIU
DIRECTOR
MARK S. ANASTAS
COUNTY DIRECTOR
LAURA H. THIELER
DIRECTOR
OFFICE OF PLANNING

Telephone (808) 587-2844
Fax: (808) 587-2824



**DEPARTMENT OF BUSINESS,
ECONOMIC DEVELOPMENT & TOURISM**

OFFICE OF PLANNING
235 South Berkeleys Street, 8th Floor, Honolulu, Hawaii 96813
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

Ref. No. P-11074

August 24, 2005

RECEIVED
AUG 25 2005
WILSON OKAMOTO CORPORATION

To: Anthony Ching, Executive Officer
Land Use Commission

From: Laura H. Thielen, Director
Office of Planning

Subject: Draft Environmental Assessment (DEA), A Charitable Foundation (ACF)
Pupukea Ridge Project, Pupukea, Oahu, Hawaii
TMK: 5-9-023: 1; 5-9-024: 1, and 6-1-002: 22
State Land Use Commission Docket No. A05-758

We have reviewed the subject DEA to consolidate and resubdivide three parcels on Pupukea Ridge which total about 94.175 acres. The Petitioner proposes to reclassify approximately 28.759 acres from the State Agricultural District into the Conservation District, and to reclassify about 5.219 acres from the Conservation District to the Agricultural District.

The Petitioner proposes to donate approximately 79.03 acres of land of the total 94.175 acres to the State Department of Land and Natural Resources (DLNR) for the creation of a State Park Preserve. The remainder of the land area or 15.144 acres is partly designated Agricultural and Conservation. The Petitioner proposes to reclassify 5.219 acres of the 15.144 acres from the Conservation to the Agricultural District. The 15.144 acres will be subdivided into two Agricultural lots. According to the DEA, there are no plans at this time for the development of the Agricultural lots, however, these lots "could subsequently be developed with up to four farm dwellings with agricultural uses."

We are working with the Department of Land and Natural Resources (DLNR) to ascertain the final comments.

We note that the reclassification of land and donation of parklands could permit up to two farm dwellings on each of the two agricultural lots.

If there are any questions on the comments, please contact Lorene Maki of the Land Use Division at 587-2888.

c: Genevieve Salmonson, Director, OEQC
✓ Rodney Funakoshi, Wilson Okamoto Corporation

DEPARTMENT OF DESIGN AND CONSTRUCTION
CITY AND COUNTY OF HONOLULU
850 SOUTH KING STREET, 11TH FLOOR
HONOLULU, HAWAII 96813
Phone: (808) 523-4584 • Fax: (808) 523-4587
Website: www.honolulu.gov



MARU HAIREMANNI
MAYOR

WAYNE M. HASHIRO, P.E.
DIRECTOR
EUGENE C. LEE, P.E.
DEPUTY DIRECTOR
113135

August 22, 2005

RECEIVED
AUG 26 2005
WILSON OKAMOTO CORPORATION

Mr. Anthony Ching, Director
Land Use Commission
State of Hawaii
P. O. Box 2359
Honolulu, Hawaii 96804-2359

Dear Mr. Ching:

Subject: Draft Environmental Assessment (EA)
Pupukea Ridge Project, Pupukea, Oahu, Hawaii
Tax Map Key: (1)5-9-023: 1; 5-9-024: 1, and 6-1-002: 22

Thank you for the opportunity to comment on the draft EA for the proposed donation of 79 acres on Pupukea Ridge.

We do not have any comments to make on the draft EA.

Should there be any questions, please contact Gary Doi, Planner, at 527-6699.

Very truly yours,

FOR Wayne M. Hashiro, P.E.
Director

WMH:ci

c: Ms. Genevieve Salmonson, OEQC
✓ Rodney Funakoshi, Wilson Okamoto Corporation

DEPARTMENT OF LAND AND NATURAL RESOURCES
Division of State Parks

May 11, 2005

MEMORANDUM:

TO: Harry Yada, Acting Administrator
Land Division

FROM: Daniel Quinn, State Parks Administrator

SUBJECT: Draft Environmental Assessment for Pūpūkea Ridge Preservation Project
Pūpūkea, O'ahu TMK: 6-1-02: 22, 5-9-23: 01, and 5-9-24: 01

Thank you for the opportunity to review the Draft EA for this project that involves a consolidation and resubdivision of the 3 subject parcels and donation of 79 acres to the State for park purposes. The project will involve a reclassification of agricultural and conservation lands and therefore, will require a State Land Use District Boundary Amendment and a Conservation District Use Permit. The result will be that all the 79 acres proposed for donation to the State will be zoned conservation and the 15 acres being retained by the private landowner will be agricultural.

The subject parcels are located along the northern rim of Waimea Valley and about 1,000 feet east of Pu'u O Mahuka Heiau State Historical Site. State Parks has expressed a willingness to accept the donation for a park reserve based on the following:

- Promotes open space along the northern rim of Waimea Valley which in turn, promotes the historical landscape for Pu'u O Mahuka Heiau;
- Promotes the view corridors of Waimea Valley, including the length of the valley or *shuipua'a* from the mountains to the sea; and
- Provides passive recreational opportunities for visitors to Pu'u O Mahuka Heiau and the neighboring Pūpūkea community, including trails, lookouts, and picnic sites.



We do not believe that the resubdivision and donation of 79 acres to DLNR for park purposes will have any significant environmental impacts. However, access and use of the property for park purposes will need to be addressed by DLNR if this donation is executed. At various public meetings held in the community, the community members generally expressed support for the park. Those living nearby expressed some concerns about the public use of the area, such as parking, trash, and noise. State Parks will hold additional public meetings in the future to seek public input and develop a conceptual plan for the park.

If you have any questions on our comments, please contact Martha Yent at 587-0287.

PETER F. YOUNG
DIRECTOR OF LAND AND NATURAL RESOURCES
CHAIRMAN OF THE STATE LAND USE COMMISSION

ROBERT E. BAKER
ACTING DIRECTOR OF LAND AND NATURAL RESOURCES

DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION
POST OFFICE BOX 671
HONOLULU, HAWAII 96809



July 21, 2005
PUPUKEARIDGE.CMT

Suspense Date: 8/1/05

MEMORANDUM:

TO: XXX Engineering Division
XXX Division of Forestry and Wildlife
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: Draft Environmental Assessment for Pūpūkea Ridge
Preservation Project, Island of Oahu, Hawaii

Please review the attached document pertaining to the subject matter and submit your comment (if any) on Division letterhead signed and dated by the suspense date.

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.

Signed: _____ Date: _____

Name: _____ Division: _____

LETTERS & LOGS
 TO BE FILED IN THE PROJECT'S WORKFOLDER
 PROJECT'S NAME
 DATE
 BY
 PROJECT'S NAME
 DATE
 BY
 PROJECT'S NAME
 DATE
 BY



STATE OF HAWAII
 DEPARTMENT OF LAND AND NATURAL RESOURCES
 LAND DIVISION
 POST OFFICE BOX 621
 HONOLULU, HAWAII 96809



July 21, 2005
 PUPUKEARIDGE.CMT

Suspense Date: 8/1/05

MEMORANDUM:

TO: XXX Engineering Division
 XXX Division of Forestry and Wildlife
 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: Draft Environmental Assessment for Pupukea Ridge
 Preservation Project, Island of Oahu, Hawaii

Please review the attached document pertaining to the subject matter and submit your comment (if any) on Division letterhead signed and dated by the suspense date.

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.

Signed: *Eric T. Hirano* Date: *7/21/05*

Name: ERIC T. HIRANO, CHIEF ENGINEER Division: Engineering

RECEIVED
 DIVISION
 JUL 21 2005

DEPARTMENT OF LAND AND NATURAL RESOURCES
 ENGINEERING DIVISION

LANAI
 Ref: PUPUKEARIDGE.CMT
 Oahu.495

COMMENTS

- () We confirm that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Zone _____
- () Please take note that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Zone _____
- (X) Please note that the correct Flood Zone Designations for the project site according to the Flood Insurance Rate Map (FIRM) are Zones D and X. The National Flood Insurance Program does not have any regulations for development within Zones D and X.
- () 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, Mr. Carol Tysau-Beams, 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 ordinance, please contact the applicable County NFIP Coordinator below:
 - () Mr. Robert Summalo at (808) 523-4254 or Mr. Mario Su Li at (808) 523-4247 of the City and County of Honolulu, Department of Planning and Permitting.
 - () Mr. Kelly Gomez at (808) 961-8327 (Hilo) or Mr. Kiran Emter 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 Monahan of the Planning Branch at 557-0229.

Signed: *Eric T. Hirano*
 ERIC T. HIRANO, CHIEF ENGINEER
 Date: *7/21/05*

PLEASE ADVISE
 CONTACT THE OFFICE OF THE ATTORNEY GENERAL
 DEPARTMENT OF LAND AND NATURAL RESOURCES
 ROBERT E. MALDEN
 DEPUTY ATTORNEY GENERAL
 1505 KALANOAUE AVENUE, SUITE 1100
 HONOLULU, HAWAII 96813
 TEL: 521-1100
 FAX: 521-1101

STATE OF HAWAII
 DEPARTMENT OF LAND AND NATURAL RESOURCES
 LAND DIVISION
 POST OFFICE BOX 621
 HONOLULU, HAWAII 96809



July 21, 2005
 PUPUKEARIDGE.CHT
 Suspension Date: 8/1/05

MEMORANDUM:
 TO: XXX Engineering Division
 XXX Division of Forestry and Wildlife
 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

RECEIVED
 OFFICE OF CONSERVATION
 AND COASTAL LANDS
 JUL 22 10 20 05

SUBJECT: Draft Environmental Assessment for Pupukea Ridge
 Preservation Project, Island of Oahu, Hawaii

Please review the attached document pertaining to the subject
 matter and submit your comment (if any) on Division letterhead
 signed and dated by the suspension date.

If this office does not receive your comments by the suspension
 date, we will assume there are no comments.

We have no comments. Comments attached.

Signed: Dawn Hege Date: July 25, 2005

Name: Dawn Hege Division: OCCL

PLEASE ADVISE
 CONTACT THE OFFICE OF THE ATTORNEY GENERAL
 DEPARTMENT OF LAND AND NATURAL RESOURCES
 ROBERT E. MALDEN
 DEPUTY ATTORNEY GENERAL
 1505 KALANOAUE AVENUE, SUITE 1100
 HONOLULU, HAWAII 96813
 TEL: 521-1100
 FAX: 521-1101

STATE OF HAWAII
 DEPARTMENT OF LAND AND NATURAL RESOURCES
 OFFICE OF CONSERVATION AND COASTAL LANDS
 POST OFFICE BOX 621
 HONOLULU, HAWAII 96809



July 27 2005
 Correspondence: OA-06-16

MEMORANDUM:
 TO: Samuel J. Lemmo, Administrator
 Office of Conservation and Coastal Lands
 FROM: Harry Yada, Acting Administrator
 Land Division

SUBJECT: Draft Environmental Assessment (DEA) for Pupukea Ridge Preservation Project,
 Island of Oahu, Subject Parcels TMK's: (1) 6-1-002:022, 5-9-023:001, and 5-9-
 024:001

The Department of Land and Natural Resources' (DLNR), Office of Conservation and Coastal
 Lands (OCL) has received the DEA for the Pupukea Ridge Preservation Project Island of Oahu,
 Subject Parcels TMK's: (1) 6-1-002:022, 5-9-023:001, and 5-9-024:001.

The OCCL notes Boundary Amendment OA-02-06 to amend 2.2 acres of subject parcel TMK: (1)
 6-1-002:022 from the Limited to the General subzone, was approved by the Board of Land and
 Natural Resources (Board) on December 13, 2002, and was filed with the Lieutenant Governor's
 Office on March 31, 2003 (Exhibit 1).

The OCCL notes after the decision from the State Land Use Commission (LUC) regarding approval
 of a Boundary Amendment¹, you will need to apply for a Conservation District Use Application
 (CDUA) to consolidate and resubdivide the subject parcels. The OCCL notes A Charitable
 Foundation (ACF) will donate 79.03 acres (of 94.175 acres) to the State of Hawaii for a State Park
 Preserve. This is an identified land use, pursuant to Hawaii Administrative Rules (HAR), Section
 13-5-22, P-11, SUBDIVISION AND CONSOLIDATION OF PROPERTY, D-1, "subdivision of
 property into two or more legal lots of record which serves a public purpose and is consistent with
 the objectives of the subzone." This requires a Board permit.

Please call Dawn Hege of the Office of Conservation and Coastal Lands at 587-0380, should you
 have any questions on this matter.

¹ The proposed action will reclassify 28,759 acres of 38,684 from the Agricultural District to the Conservation District,
 and 5,219 acres from the Conservation District to Agricultural District; the remainder zoning will
 remain as is.

8. REFERENCES

1. City and County of Honolulu, Department of Planning and Permitting. *General Plan Objectives and Policies*. 1992 (as amended October 3, 2002 by Resolution 02-205, CD1).
2. City and County of Honolulu, Department of Planning and Permitting. *Land Use Ordinance*. April 2003.
3. City and County of Honolulu, Department of Planning and Permitting. *North Shore Sustainable Communities Plan*. July 2000 (adopted on May 10, 2000 as Ordinance 00-15).
4. Decision Analysts Hawaii, Inc. *Pupukea Ridge: Agricultural Suitability of Lands Proposed for Redistricting to Agriculture*. February 2005
5. George A.L. Yuen & Associates. *State Water Resources Protection Plan*. State of Hawaii, Review Draft March 1992.
6. Hawaii State Department of Agriculture. *The Agricultural Lands of Importance in the State of Hawaii*. 1977.
7. Hawaii State Department of Business, Economic Development and Tourism. *Hawaii Census 2000*.
8. Hawaii State Department of Health. *Annual Summary of Hawaii Air Quality Data*. 2003
9. Landmark Consulting Services prepared for A Charitable Foundation Corporation. *Draft Environmental Assessment Pupukea Ridge Preservation Project*. August 5, 2002.
10. Land Study Bureau. *Detailed Land Classification- Island of Oahu*. L.S.B. Bulletin No. 11, December 1972.
11. Masa Fujioka & Associates. *Phase I Environmental Site Assessment for Pupukea Highlands Petition Area*. May 2004.
12. Macdonald, Gordon A., A.T. Abbott and Frank L. Peterson. *Volcanoes in the Sea, The Geology of Hawaii*. Second Edition 1986.
13. United States Department of Agriculture Soil Conservation Service. *Soil Survey of Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii*, August 1972.

14. University of Hawaii, Department of Geography. *Atlas of Hawaii*. The University Press of Hawaii, Honolulu, Third Edition 1998.
15. Personal communication, Tom See, State of Hawaii, Department of Health Wastewater Branch, January 21, 2005.
16. Personal communication, Lorena Wada, Steve Miller, and Gordon Smith, Pacific Islands Eco Region, June 30, 2005.

Appendix A

**Limited Warranty Deed,
May 23, 2003**

I hereby certify that this is a true copy from the records of the Bureau of Conveyances.

Carl T. Watanabe
Registrar of Conveyances
Assistant Registrar, Land Court
State of Hawaii



R-1001 STATE OF HAWAII
BUREAU OF CONVEYANCES
RECORDED
MAY 30, 2003 08:01 AM
Doc No(s) 2003-107293



20 67 23

/s/ CARL T. WATANABE
REGISTRAR OF CONVEYANCES

CONVEYANCE TAX: \$514.80

LAND COURT SYSTEM REGULAR SYSTEM
AFTER RECORDATION, RETURN TO: BY: MAIL PICKUP

Ashford & Wriston
Attn: Galen C. K. Leong, Esq.
1099 Alakea Street
P.O. Box 131
Honolulu, Hawaii 96810

(b) RLS

TG04 200218970-C
TGES 200218970/
TGES A2-101-1429
BARBARA PAILO

THIS DOCUMENT CONTAINS 7 PAGES

Tax Map Key No. (1) 5-9-23-1; (1) 5-9-24-1

Total Pages:

LIMITED WARRANTY DEED

THIS DEED, made this 23 day of May, 2003, by FINANCE REALTY, LTD., a Hawaii corporation, formerly known as Finance Realty Company, Limited, as Trustee of the land trust known as the Pupukea Land Trust dated April 3, 1986, hereinafter called the "Grantor", in favor of A CHARITABLE FOUNDATION CORPORATION, a Nevada non-profit corporation, whose business address is 2657 Windmill Parkway # 220, Henderson, Nevada 89014, hereinafter called the "Grantee", --

WITNESSETH THAT:

The Grantor, in consideration of the sum of TEN DOLLARS (\$10.00) and other valuable consideration paid by the Grantee, the receipt of which is hereby acknowledged by the Grantor, does hereby grant, bargain, sell and convey unto the Grantee, in fee simple, all of the property more particularly described in Exhibit A attached hereto and made a part hereof;

And the reversions, remainders, rents, issues and profits thereof and all of the estate, right, title and interest of the Grantor, both at law and in equity, therein and thereto;

TO HAVE AND TO HOLD the same, together with all buildings, improvements, rights, easements, privileges and appurtenances thereon and thereunto belonging or appertaining or held and enjoyed therewith, unto the Grantee according to the tenancy hereinafter set forth, forever.

The Grantor does hereby covenant and agree with the Grantee that the Grantor has good right to convey and sell the property hereinabove described and that the Grantor has not heretofore done,



committed or willingly suffered to be done or committed any act or thing whatsoever whereby the title and estate hereby conveyed, or any part thereof, are or shall be charged or encumbered, except as aforesaid.

This conveyance and the warranties of the Grantor are expressly declared to be in favor of the Grantee, as tenant in severalty, its successors and assigns.

The rights and obligations of the Grantor and the Grantee shall be binding upon and inure to the benefit of their respective successor-in-trust, successors and assigns. All obligations undertaken by two or more persons shall be deemed to be joint and several unless a contrary intention is clearly expressed elsewhere herein.

Finance Realty, Ltd. is signing this Limited Warranty Deed in its fiduciary (or trustee) capacity and not in its individual corporate capacity. Any liability of Finance Realty, Ltd. which may arise as a result of Finance Realty, Ltd. signing this Limited Warranty Deed is a liability of the Pupukea Land Trust dated April 3, 1986, and not the personal liability of Finance Realty, Ltd.

The parties hereto agree that this instrument may be executed in counterparts, each of which shall be deemed an original, and said counterparts shall together constitute one and the same agreement, binding all of the parties hereto, notwithstanding all of the parties are not signatory to the original or the same counterparts. For all purposes, including, without limitation, recordation, filing and delivery of this instrument, duplicate unexecuted and unacknowledged pages of the counterparts may be discarded and the remaining pages assembled as one document.

[The remainder of this page is intentionally left blank – signature page(s) follow]

IN WITNESS WHEREOF, the Grantor and the Grantee have executed these presents on the day and year first above written.

FINANCE REALTY, LTD., a Hawaii corporation, formerly known as Finance Realty Company, Limited, as Trustee of the land trust known as the Pupukca Land Trust dated April 3, 1986

By [Signature]
Jed Sueoka
Its Vice President, Treasurer

By [Signature]
Howard Mural
Its President, COO

Grantor

A CHARITABLE FOUNDATION CORPORATION, a Nevada non-profit corporation

By _____
Its

By _____
Its

Grantee

IN WITNESS WHEREOF, the Grantor and the Grantee have executed these presents on the day and year first above written.

FINANCE REALTY, LTD., a Hawaii corporation, formerly known as Finance Realty Company, Limited, as Trustee of the land trust known as the Pupukea Land Trust dated April 3, 1986

By _____

Its

By _____

Its

Grantor

A CHARITABLE FOUNDATION CORPORATION, a Nevada non-profit corporation

By David S. King

Its President

By _____

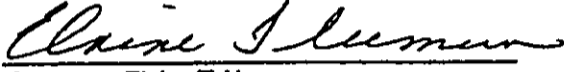
Its

Grantee

STATE OF HAWAII)
) SS.
CITY AND COUNTY OF HONOLULU)

On this 22 day of May, 2003, before me personally appeared
Howard Mural and Jed Sueoka, to me personally known, who,
being by me duly sworn or affirmed, did say that such person(s) executed the foregoing instrument as the
free act and deed of such person(s), and if applicable in the capacity shown, having been duly authorized
to execute such instrument in such capacity.

u

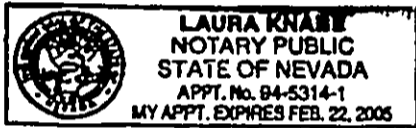

Name: Elaine T. Uemura
Notary Public, State of Hawaii
My commission expires: 4/12/06

STATE OF NEVADA

Clark County

)
) SS.
)

On this 23RD day of May, 2003, before me personally appeared DAVID S. DRUZ and _____ to me personally known, who, being by me duly sworn or affirmed, did say that such person(s) executed the foregoing instrument as the free act and deed of such person(s), and if applicable in the capacity shown, having been duly authorized to execute such instrument in such capacity.



Laura Knabe
Name: LAURA KNABE
Notary Public, State of Nevada
My commission expires: 2 2 2 0 5

EXHIBIT "A"

ALL of that certain parcel of land situate at Pupukea, Koolauloa, City and County of Honolulu, State of Hawaii, being LOT 179 of the "PUPUKEA HIGHLANDS", as shown on File Plan Number 860, filed in the Bureau of Conveyances of the State of Hawaii, and containing an area of 38.684 acres, more or less.

BEING the same parcel of land acquired by Grantor by that certain Warranty Deed in Trust dated April 3, 1986, recorded in said Bureau in Liber 21627 at Page 555.

SUBJECT, HOWEVER, to:

1. The terms and provisions, including the failure to comply with any covenants, conditions and reservations, contained in that certain Encroachment Agreement dated July 9, 2001, recorded in said Bureau as Document No. 2001-149812.

2. Structure position discrepancies as shown on the survey map prepared by Peter H. Souza, Jr., Land Surveyor, with M & E Pacific, Inc., dated July 6, 2000, revised May 8, 2002, subject to the provisions of Chapter 669, Hawaii Revised Statutes.



DOUBLE SYSTEM

2-24

76



L-351 STATE OF HAWAII
OFFICE OF ASSISTANT REGISTRAR
RECORDED
MAY 30, 2003 08:01 AM
Doc No(s) 2936207
on Cert(s) 486,574
Issuance of Cert(s) 647,646



R-1002 STATE OF HAWAII
BUREAU OF CONVEYANCES
RECORDED
MAY 30, 2003 08:01 AM
Doc No(s) 2003-107294



20 717 23 R1002

/s/ CARL T. WATANABE
ASSISTANT REGISTRAR
CONVEYANCE TAX: \$485.20



20 717 23 L351

/s/ CARL T. WATANABE
REGISTRAR OF CONVEYANCES

72

LAND COURT SYSTEM

REGULAR SYSTEM

AFTER RECORDATION, RETURN TO: BY: MAIL PICKUP

Ashford & Wriston
Attn: Galen C. K. Leong, Esq.
1099 Alakea Street
P.O. Box 131
Honolulu, Hawaii 96810

DIS

TGOH 200218968 -C
TGES A2-101-1429
BARBARA PAULO

THIS DOCUMENT CONTAINS (1) PAGE

Tax Map Key No. (1) 6-1-2-22
TCT No. 486,574

LIMITED WARRANTY DEED

THIS DEED, made this 23 day of May, 2003, by FINANCE ENTERPRISES, LTD., a Hawaii corporation, and KALANI HOLDINGS, LTD., a Hawaii corporation, hereinafter collectively called the "Grantor", in favor of A CHARITABLE FOUNDATION CORPORATION, a Nevada non-profit corporation, whose business address is 2657 Windmill Parkway # 220, Henderson, Nevada 89014, hereinafter called the "Grantee", -

WITNESSETH THAT:

The Grantor, in consideration of the sum of TEN DOLLARS (\$10.00) and other valuable consideration paid by the Grantee, the receipt of which is hereby acknowledged by the Grantor, does hereby grant, bargain, sell and convey unto the Grantee, in fee simple, all of the property more particularly described in Exhibit A attached hereto and made a part hereof;

And the reversions, remainders, rents, issues and profits thereof and all of the estate, right, title and interest of the Grantor, both at law and in equity, therein and thereto;

TO HAVE AND TO HOLD the same, together with all buildings, improvements, rights, easements, privileges and appurtenances thereon and thereunto belonging or appertaining or held and enjoyed therewith, unto the Grantee according to the tenancy hereinafter set forth, forever.

The Grantor does hereby covenant and agree with the Grantee that the Grantor has good right to convey and sell the property hereinabove described and that the Grantor has not heretofore done, committed or willingly suffered to be done or committed any act or thing whatsoever whereby the title

I hereby certify that this is a true copy from the records of the Bureau of Conveyances.

Barbara Paulo

Registral of Conveyances
Assistant Registrar, Land Court
State of Hawaii

and estate hereby conveyed, or any part thereof, are or shall be charged or encumbered, except as aforesaid.

This conveyance and the warranties of the Grantor are expressly declared to be in favor of the Grantee, as tenant in severalty, its successors and assigns.

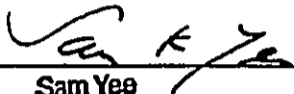
The rights and obligations of the Grantor and the Grantee shall be binding upon and inure to the benefit of their respective successors and assigns. All obligations undertaken by two or more persons shall be deemed to be joint and several unless a contrary intention is clearly expressed elsewhere herein.


The parties hereto agree that this instrument may be executed in counterparts, each of which shall be deemed an original, and said counterparts shall together constitute one and the same agreement, binding all of the parties hereto, notwithstanding all of the parties are not signatory to the original or the same counterparts. For all purposes, including, without limitation, recordation, filing and delivery of this instrument, duplicate unexecuted and unacknowledged pages of the counterparts may be discarded and the remaining pages assembled as one document.

[The remainder of this page is intentionally left blank -- signature page(s) follow]

IN WITNESS WHEREOF, the Grantor and the Grantee have executed these presents on the day and year first above written.

FINANCE ENTERPRISES, LTD., a Hawaii corporation

By 
Sam Yee
Its Senior Vice President

By 
Jed Sueoka
Its Vice President, Treasurer

KALANI HOLDINGS, LTD., a Hawaii corporation

By 
Howard Mural
Its President, COO

By 
JUNE KIP
Its Vice President, Controller

Grantor

A CHARITABLE FOUNDATION CORPORATION, a Nevada non-profit corporation

By _____
Its

By _____
Its

Grantee

IN WITNESS WHEREOF, the Grantor and the Grantee have executed these presents on the day and year first above written.

FINANCE ENTERPRISES, LTD., a Hawaii corporation

By _____

Its

By _____

Its

KALANI HOLDINGS, LTD., a Hawaii corporation

By _____

Its

By _____

Its

Grantor

A CHARITABLE FOUNDATION CORPORATION, a Nevada non-profit corporation

By David Sperry

Its President

By _____

Its

Grantee

STATE OF HAWAII)
CITY AND COUNTY OF HONOLULU) SS.
)

On this 22 day of May, 2003, before me personally appeared
Sam Yee and Jed Sueoka, to me personally known, who,
being by me duly sworn or affirmed, did say that such person(s) executed the foregoing instrument as the
free act and deed of such person(s), and if applicable in the capacity shown, having been duly authorized
to execute such instrument in such capacity.


LS

Elaine T. Uemura
Name: Elaine T. Uemura
Notary Public, State of Hawaii
My commission expires: 4/12/06

STATE OF HAWAII)
CITY AND COUNTY OF HONOLULU) SS.
)

On this 22nd day of MAY, 2003, before me personally appeared
HOWARD MURAI and JUNE YIP, to me personally known, who,
being by me duly sworn or affirmed, did say that such person(s) executed the foregoing instrument as the
free act and deed of such person(s), and if applicable in the capacity shown, having been duly authorized
to execute such instrument in such capacity.

4.

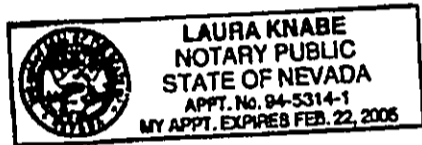

Name: ELAINE T. JEMURA
Notary Public, State of Hawaii
My commission expires: 6/12/06

STATE OF NEVADA

Clark County

)
) SS.
)

On this 23RD day of May, 2003, before me personally appeared DAVID S. DRAZ and _____ to me personally known, who, being by me duly sworn or affirmed, did say that such person(s) executed the foregoing instrument as the free act and deed of such person(s), and if applicable in the capacity shown, having been duly authorized to execute such instrument in such capacity.



Laura Knabe
Name: LAURA KNABE
Notary Public, State of Nevada

My commission expires: 2.22.05

EXHIBIT "A"

ITEM I:

ALL of that certain parcel of land (being portion(s) of the land(s) described in and covered by Royal Patent Grant 880 to Kaeliwai and Mahele Award 13 to Paalua) situate, lying and being at Waimea, District of Koolauloa, City and County of Honolulu, State of Hawaii, being LOT 1-B-2 bearing Tax Key designation (1) 6-1-002-022, and containing an area of 55.491 acres, more or less.

ITEM II:

ALL of that certain parcel of land situate at Waimea, District of Koolauloa, City and County of Honolulu, State of Hawaii, described as follows:

LOT 1-B-2, area 55.491 acres, more or less, as shown on Map 8, filed in the Office of the Assistant Registrar of the Land Court of the State of Hawaii with Land Court Application No. 561 of Mary F. Van Valkenburg and others.

BEING the land(s) described in Transfer Certificate of Title No. 486,574 issued to Finance Enterprises, Ltd., a Hawaii corporation, as to an undivided 41.5% interest, and Kalani Holdings, Ltd., a Hawaii corporation, as to an undivided 58.5% interest.

AS TO ITEM I AND ITEM II:

TOGETHER with ADDITIONAL EASEMENT being 1.481 acres, more or less, as set forth by Land Court Order No. 22150, filed January 10, 1964, being more particularly described as follows:

A. A. Wilson by indenture dated October 27, 1911, has granted to the owners and tenants of the Ahupuaa of Waimea, their successors and assigns, a perpetual right of way over the wagon road over Lot 14 of Pupukea Homesteads to connect said lands of the Ahupuaa of Waimea with Pupukea Government Road.

A portion of said wagon road passes over Lot 15 of Pupukea Homesteads, and Libby, McNeill & Libby of Honolulu, Limited, the owner of said Lot 15 by Grant of Easement dated December 25, A.D. 1923, granted a perpetual easement of right of way over so much of said wagon road as passes over said Lot 15 -- the center line of which is described in said grant by direct azimuth and distance.

That a description of said right of way as it exists upon the ground of said Lot 14 and as it was granted by azimuth and distance upon said Lot 15 is as follows:

Beginning at a point in the center line of 14 foot roadway, on the boundary between the land of Waimea and Grant 5087 to A. A. Wilson, the coordinates of said point of beginning referred to Government Survey Triangulation Station "Waimea" being 1317.25 feet south and 1960.37 feet east, and also the true azimuth being 267° 31' 7.06 feet, and running by true azimuths, along the center line of said Lot 14 foot roadway, from the above described initial point as follows:

- 1. 185° 00' 438.00 feet;
- 2. 163° 30' 52.80 feet;

3.	134° 20'	44.00	feet;
4.	117° 40'	58.00	feet;
5.	109° 50'	453.00	feet;
6.	127° 16'	36.00	feet;
7.	165° 00'	35.00	feet;
8.	189° 00'	140.00	feet;
9.	207° 10'	32.00	feet;
10.	264° 10'	36.00	feet;
11.	287° 24'	127.00	feet;
12.	266° 20'	169.00	feet;
13.	259° 00'	38.40	feet;
14.	240° 50'	47.00	feet;
15.	255° 30'	44.00	feet;
16.	296° 54'	137.65	feet to the boundary between Grant 5087 and 5162; from this point on, for the next 6 courses, the center line of roadway runs through Lot 15 Grant 5162 to L. A. Ginaca;
17.	296° 54'	26.00	feet;
18.	273° 00'	25.80	feet;
19.	224° 00'	23.00	feet;
20.	181° 00'	17.80	feet;
21.	139° 57'	78.30	feet;
22.	162° 16'	20.00	feet to the boundary between Grants 5087 to A. A. Wilson and 5162 to L. A. Ginaca; thence from here on the center line runs through Lot 14 Grant 5087 to A. A. Wilson;
23.	162° 16'	40.10	feet;

24.	133° 09'	87.20	feet;
25.	119° 30'	100.00	feet;
26.	106° 50'	91.00	feet;
27.	125° 00'	31.00	feet;
28.	150° 40'	130.30	feet;
29.	122° 40'	83.70	feet;
30.	136° 11'	108.30	feet;
31.	117° 53'	170.00	feet;
32.	130° 20'	272.30	feet;
33.	114° 05'	138.50	feet;
34.	103° 53'	189.30	feet;
35.	88° 10'	142.00	feet;
36.	96° 51'	201.00	feet;
37.	122° 50'	27.00	feet;
38.	154° 30'	43.00	feet;
39.	177° 30'	27.00	feet to a point that is by true azimuth 223° 25' 30" and distant 751.10 feet from Waimea Triangulation Station;
40.	188° 48'	563.00	feet a little more or less to the south side of Main Government Road on the north side of Grant 5087 to A. A. Wilson and containing an area of 1.481 acres of which 1.42 acres are in Lot 14 and 0.061 acre in Lot 15.

BEING all of land having been acquired as follows:

1. By Kalani Holdings, Ltd., a Hawaii corporation, as to an undivided 58.5% interest, by that certain Limited Warranty Deed of L & M Custom Exchange, Ltd., a Hawaii corporation, dated September 27, 1996, recorded in said Office as Land Court Document No. 2338607, and also recorded in the Bureau of Conveyances of the State of Hawaii as Document No. 96-139748; and that certain Correction Deed dated December 5, 1996, recorded in said Office as Land Court Document No. 2361170, and also recorded in said Bureau as Document No. 97-009350.

2. By Finance Enterprises, Ltd., a Hawaii corporation, as to an undivided 41.5% interest, by (a) that certain Limited Warranty Deed of L & M Custom Exchange, Ltd., a Hawaii corporation, dated September 27, 1996, recorded in said Office as Land Court Document No. 2338607, and also recorded in

said Bureau as Document No. 96-139748, and (b) that certain Limited Warrant Deed of L & M Custom Exchange, Ltd., a Hawaii corporation, dated December 19, 1996, recorded in said Office as Land Court Document No. 2361171, and also recorded in said Bureau as Document No. 97-009351.

SUBJECT, HOWEVER, as to Item I: Reservation in favor of the State of Hawaii of all mineral and metallic mines.

15.000000

Appendix B

**Pupukea Ridge: Agricultural
Suitability of Lands Proposed for
Redistricting to Agriculture**

**Decision Analysts Hawaii, Inc.
April 2005**

**PUPUKEA RIDGE:
AGRICULTURAL SUITABILITY OF LANDS
PROPOSED FOR REDISTRICTING TO AGRICULTURE**

Decision Analysts Hawai'i, Inc.

April 2005

1. INTRODUCTION⁽¹⁾

A Charitable Foundation (ACF) owns three parcels on Pupukea Ridge totaling approximately 94.175 acres. ACF proposes to consolidate and resubdivide the lots in order to donate about 79.03 acres to the State of Hawai'i for a State Park Preserve under the jurisdiction and management of the State Department of Land and Natural Resources (DLNR). The remaining 15.145 acres would be retained by ACF.

To facilitate this transfer of land, a State Land Use District Boundary Amendment is needed. Of the land to be retained by ACF, about 5.22 acres are proposed for redistricting from the Conservation District to the Agricultural District ("the Proposed Agricultural Area"). The remaining 9.925 acres of the Proposed Agricultural Area on the north and are already in the Agricultural District.

This document addresses the suitability of using the 5.22 acres for agriculture in conjunction with the adjacent 9.925 acres.

2. PROPOSED AGRICULTURAL USES AND DEVELOPMENT⁽¹⁾

The Proposed Agricultural Area will be available for agricultural uses, although no specific plans have been developed. If reclassified to the Agricultural District, up to four farm dwellings eventually could be developed on this land.

3. LOCATION AND ACCESS

The Proposed Agricultural Area is located along a ridge in Pupukea, approximately 6.25 miles northeast of the Haleiwa town center on O'ahu's North Shore. Access is provided by Mauluku Road, which connects to Pupukea Road and then Kamehameha Highway.

The Proposed Agricultural Area is within a reasonable, although fairly long, trucking distance from the Honolulu markets and, for exports, the Honolulu International Airport and Honolulu Harbor.

4. AGRICULTURAL CONDITIONS

The agricultural conditions of the Proposed Agricultural Area are summarized below.

a. Soil Types^[2]

The Proposed Agricultural Area contains three soil types, as indicated in Table 1. The soil rating is discussed in the following subsection.

For each of the three soil types, the complete name, range of slopes, and soil descriptions are:

- PaC: Paaloa silty clay, 3 to 12% slopes

The Paaloa series consists of well-drained soils on uplands. These soils occur as narrow areas bounded by steep gulches. The slope range is 3 to 12%, but in most places it is 3 to 8%. The surface layer, about 17 inches thick, is a mixture of dark brown and dark reddish-brown silty clay and clay. The subsoil, about 43 inches thick, is dark reddish-brown silty clay and clay that has a subangular blocky structure. The substratum is soft, weathered rock. The soil is

**Table 1. Pupukea Ridge Proposed Agricultural Area:
 Soil Types and NRCS Ratings**

<u>Soil Types</u>	<u>Acres</u>		<u>NRCS Ratings</u>
PaC	3.3	64%	IIIe
MpD2	1.5	29%	VIe
HLMG	<u>0.4</u>	<u>7%</u>	VIIe
Total	5.2	100%	

strongly acid to very strongly acid. Permeability is moderately rapid. Runoff is slow to medium, and the erosion hazard is slight to moderate. In places, roots penetrate to a depth of 5 feet or more. Workability is slightly difficult because of the slope.

— MpD2: Manana silty clay, 12 to 25% slopes

This soil, which is found on smooth slopes in the uplands, is moderately steep, eroded, and has silty clay texture. The surface layer is 4 to 6 inches thick as a result of past erosion. The subsoil, about 42 inches thick, is dusky-red, dark reddish-gray, and dark reddish-brown silty clay that has subangular blocky structures. Runoff is rapid, and the erosion hazard is severe.

— HLMG: Helemano silty clay, 30 to 90% slopes

This series consists of well-drained soils on alluvial fans and colluvial slopes on the sides of V-shaped gulches. The surface layer is dark reddish-brown silty clay about 10 inches thick. The subsoil, about 50 inches thick, is dark reddish-brown and dark-red silty clay that has subangular blocky structures. The substratum is soft, highly weathered basic igneous rock. The soil is neutral in the surface layer and neutral to slightly acid in the subsoil. Permeability is moderately rapid. Runoff is medium to very rapid, and the erosion hazard is severe to very severe.

b. Soil Ratings

Three classification systems are commonly used to rate Hawai'i soils: (1) Land Capability Grouping, (2) Agricultural Lands of Importance to the State of Hawai'i, and (3) Overall Productivity Rating.

Land Capability Grouping (NRCS Rating)^[2]

The 1972 Land Capability Grouping by the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS) (formerly known as the Soil Conservation Service) rates soils according to eight levels, with "I" representing the highest classification level and "VIII" the lowest.

As shown in Table 1, about 3.3 acres (64%) the Proposed Agricultural Area have soils that are rated IIIe. Class III soils have severe limitations that reduce the choice of plants, require special conservation practices, or both. The sub-classification "e" indicates that the soils are subject to severe erosion if they are cultivated and not protected.

About 1.5 acres (29%) of the Proposed Agricultural Area has soils rated VIe. Class VI soils have severe limitations that make them generally unsuitable for cultivation and limit their use largely to pasture or range, woodland, or wildlife habitat. The subclassification "e" indicates that the soils are severely limited by the hazard of erosion.

The remaining soils (0.4 acre, or 7%), located on the side of a V-shaped gulch, are rated VIIe. Class VII soils have very severe limitations that make them unsuitable for cultivation and restrict their agricultural use largely to pasture. The subclassification "e" indicates that the soils are very severely limited by the risk of erosion.

Overall Productivity Rating (LSB Rating)^[3]

In 1972, the UH Land Study Bureau (LSB) developed the Overall Productivity Rating which classifies soils according to five levels, with "A" representing the class of highest productivity and "E" the lowest.

In the Proposed Agricultural Area, about 4 acres (77%) of the soils are rated C, of which about 1.9 acres would be rated B if irrigated. The remaining 1.2 acres (23%) are rated E.

Agricultural Lands of Importance in the State of Hawai'i (ALISH)^[4]

ALISH ratings were developed in 1977 by the NRCS, the University of Hawai'i (UH) College of Tropical Agriculture and Human Resources, and the State of Hawai'i, Department of Agriculture. This system classifies land into three broad categories: (a) "Prime" agricultural land which is land that is best suited for the production of crops because of its ability to sustain high yields with relatively little input and with the least damage to the environment; (b) "Unique" agricultural land which is non-Prime agricultural land used for the production of specific high-value crops; and (c) "Other" agricultural land which is non-Prime and non-Unique agricultural land that is important to the production of crops.

All or nearly all of the soils in the Proposed Agricultural Area are rated Prime. This reflects its former use for pineapple cultivation.

c. Soil Characteristics^[2,3]

Consistent with the above soil ratings, the better agricultural lands in the Proposed Agricultural Area exhibit a number of favorable characteristics for farming: soil depths exceeds 30 inches or more, textures are moderately fine to

fine and not stony, the soils have moderate to good machine tillability and are well-drained. However, these lands have slopes that range from 3 to 25% (see below) and, as a result, are subject to erosion.

d. Elevation^[5]

The ground elevation of the Proposed Agricultural Area ranges from 600 to about 740 feet above mean sea level.

e. Terrain and Slopes^[2,5]

Most of the Proposed Agricultural Area is located along a ridge, but some of the land is on the upper portions of a V-shaped gulch. As indicated by the soil types (Subsection 4.a.), slopes are as follows:

- 3 to 12% for about 3.3 acres (PaC soils)
- 12 to 25% for about 1.5 acres (MpD2 soils)
- 30 to 90% for about 0.4 acre (HLMG soils)

f. Climatic Conditions

Like other areas in Hawai'i, Pupukea has a mild *semitropical* climate due primarily to three factors: (1) Hawai'i's mid-Pacific location near the Tropic of Cancer, (2) the surrounding warm ocean waters that vary little in temperature between the winter and summer seasons, and (3) the prevailing northeasterly tradewinds that bring air having temperatures that are close to those of the surrounding waters.

Sunshine^[6]

Average daily insolation on O'ahu ranges from less than 300 calories per square centimeter in the Ko'olau mountains to over 500 calories per square centimeter in leeward areas.

Most of the North Shore, including Pupukea, is relatively sunny with average daily insolation of about 450 calories per square centimeter.

Rainfall^[7]

Annual rainfall on O'ahu ranges from less than 20 inches per year in leeward areas to over 250 inches in the Ko'olau mountains. Most of this rainfall occurs during the winter season (October through April), while the summer months (May through September) are drier.

Rainfall in the Pupukea area is relatively high for farming areas on O'ahu, averaging approximately 50 inches per year.

Temperatures^[8]

For most of the North Shore, average low temperatures range from about 60° Fahrenheit in the winter to about 70° in the summer. Average high temperatures range from about 75° in the winter to 82° in the summer.

Winds and Storms^[7]

The prevailing surface winds are tradewinds that blow from a northeasterly direction. The tradewinds tend to break down during the fall, giving way to lighter, more variable wind conditions through the winter and into the early spring. Storms are infrequent, occurring mostly from the south in the winter months.

At 50 meters above the surface (164 feet), mean wind speeds on O'ahu range from below 12 miles per hour (mph) to over 21 mph. Pupukea Ridge has moderate wind speeds that average less than 14.5 mph.

g. Irrigation Water^[9-12]

Irrigation water would presumably be provided by the Honolulu Board of Water Supply. For volumes exceeding 13,000 gallons per month, the current agricultural rate is 75 cents per 1,000 gallons.

This compares to 62 cents per 1,000 gallons for surface water from State irrigation systems, 40 cents for surface water from Waiahole Ditch, and about 40 cents for surface water from the Dole irrigation system.

5. SURROUNDING LAND USES^[5]

Except for the access road at the western end of the property, the Proposed Agricultural Area is surrounded by gulches. This includes the abutting 9.925 acres of agricultural land to the north which forms the upper part of a gulch.

Homes are north of the Proposed Agricultural Area, with the nearest ones located about 750 feet from the property. These homes would be downwind from the property during southern (Kona) winds.

6. PAST AND CURRENT AGRICULTURAL LAND USES^[1]

In the early 1970s, most of the Proposed Agricultural Area was planted in pineapple. Since then, the land has been fallow.

7. CONCLUSIONS: SUITABILITY FOR AGRICULTURE

Based on the above assessment, the Proposed Agricultural Area is suitable for agriculture as indicated by the following advantages and limitations:

- good access
- reasonable although fairly long trucking distance to the Honolulu markets and to shipping terminals
- about 3.3 acres of adequate (but not good) soils
- relatively steep slopes and related erosion problems over much of the property
- favorable climatic conditions, with sunny conditions and high rainfall
- relatively expensive water for irrigation
- nearby homes that limit the choice of activities in order to avoid potential nuisance problems

Most of the Proposed Agricultural Area would be suitable for low-elevation crops that are grown commercially on small farms in Hawai'i, or which are grown in support of a country lifestyle. Such crops would include those that do well in the surrounding area, such as flowers and nursery products; papaya, bananas and other tropical fruits; Asian vegetables; etc. In addition, the land would be suitable for a small number of domestic farm animals, such as horses, chickens, ducks, and goats.

But the land would not be suitable for large farm operations (i.e., over 5 acres), crops that require dry conditions, crops that require a large volume of inexpensive water, or crops that could create nuisance problems (e.g., frequent chemical spraying and/or early morning harvesting using noisy equipment).

The land is good for grazing cattle, but the acreage is too small to support a commercial ranch. In combination with the abutting agricultural land to the north, the resulting 15.145 acres could support only about two cow-and-calf units.

Finally, nuisance issues (e.g., odors and/or noise) would preclude intensive livestock operations (i.e., hog or egg operations).

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Appendix C

**Botanical Survey Report for the
Pupukea Ridge Preservation
Project Site**

**Botanical Consultants
December 2004**

**BOTANICAL SURVEY REPORT FOR
THE PUPUKEA RIDGE PRESERVATION PROJECT SITE**

**FOR
WILSON OKAMOTO AND ASSOCIATES
1907 SOUTH BERETANIA STREET, SUITE 400
HONOLULU, HAWAII 96826
DECEMBER 2004**

**BY
EVANGELINE J. FUNK, PHD.
BOTANICAL CONSULTANTS
HONOLULU, HAWAII**

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INTRODUCTION AND METHODS

The Pupukea Ridge Preservation project site is located at the end of Maulukua Road in Pupukea, Oahu, Hawaii. It consists of 5.22 acres of partially wooded pasture land that is presently being used to pasture two horses. On December 21, 2004 a botanical survey of the area was conducted by a two person field team. Using the walk through method, data were collected from all parts of this small site. The results of the survey are presented here.

RESULTS

Three distinct vegetation types are found on the Pupukea Ridge Preservation Project site. Near the front gate, on both sides of the entry road is a wooded area. The vegetation here consists entirely of ironwood trees, seedlings, and saplings (*Casuarina equisetifolia* L.). The trees are thirty to thirty-five feet in height. The only understory plant found in this area is some *Wedelia trilobata* (Cav.) Hitchc. This small ironwood forest covers about one half acre of land.

A second vegetation type is found approximately fifty feet from the entry gate. It consists of a broad circular area that has been cleared and is covered by a neatly mowed, mixed grass lawn. Within the mowed lawn the most commonly found grass species is Hilo grass (*Paspalum conjugatum* Bergius). In addition there is Henry's crab grass (*Digitaria ciliaris* (Retz.) Koeler), foxtail grass (*Setaria gracilis* Kunth) as well as weedy low growing flowering plants such as *Calyptracarpus vialis* Less. and Brass buttons (*Cotula australis* J.D. Hook)

At the fringe of the mowed area big grasses such as Guinea grass (*Panicum maximum* Jacq.), sourgrass (*Digitaria insularis* (L.) Mez. Ex Ekman, Indian dropseed

(*Sporobolus diander* (Retz.) P. Beauv.) and elephant grass (*Pennisetum purpureum* Schumach) fill the space. All together the mowed area consists of about one quarter of an acre of cleared land.

The third vegetation type is open Weedy Scrub. It covers the remaining approximately four acres of the site. The tallest plants in this vegetation type are some yellow guava (*Psidium guajava* Jacq.) trees that are six to twelve feet in height. There is also some Pua nana honua (*Solanum mauritianum* Scop), a big weedy taxon in the tomato family that averages five to six feet in height. The ground level vegetation is mostly sensitive plant (*Mimosa pudica* L) and vervain (*Stachytarpheta urticifolia* (Salisb.) Sims. The same grasses as found in the Mowed Grass area as well as ironwood seedlings and saplings are found within the Weedy Scrub.

CONCLUSIONS

The only native Hawaiian taxon found on this site was a single, vegetative *Bidens* plant. Aside from that the vegetation of this site is made up of introduced, weedy species all of which are found in many other places. This vegetative cover will quickly regenerate if the area is cleared.

ENDANGERED SPECIES

No candidate, proposed, or listed threatened or endangered species as set forth in The Endangered Species Act of 1973, as amended (16 U.S.C. 1531-1543) are known from this site and none were found during this survey.

SPECIES LIST OF THE PLANTS FOUND ON THE PUPUKEA RIDGE PRESERVATION SITE

The plant families in the following species list have been alphabetically arranged within two groups, Monocotyledons, and Dicotyledons. The genera and species are arranged alphabetically within families. The taxonomy and nomenclature follow that of Wagner, Herbst, and Sohmer (1990). For each taxon the following information is provided:

1. An asterisk before the plant name indicates a plant introduced to the Hawaiian Islands since Cook or by the aborigines.
2. The scientific name of the plant.
3. The Hawaiian name or the most widely used common name of the Plant.
4. Abundance ratings are for this site only and they have the following meanings:
 - Uncommon = a plant that was found less than five times.
 - Occasional = a plant that was found between five and ten times.
 - Common = a plant considered an important part of the vegetation.
 - Locally abundant = plants found in large numbers over a limited area. For example the plants found in grassy patches.

This species list is the result of an extensive survey of this site during rainy, cool winter weather (December 2004) and it reflects the vegetative composition of the flora during a single growing season. Minor changes in the vegetation will occur due to introductions and losses and a slightly different species list would result from a survey conducted during a different growing season.

Scientific Name	Common Name	Abundance
-----------------	-------------	-----------

MONOCOTYLEDONS

POACEAE - Grass Family

* <i>Cenchrus ciliaris</i> L.	Buffelgrass	Common
* <i>Digitaria ciliaris</i> (Retz.) Koeler	Henry's crabgrass	Common
* <i>Digitaria insularis</i> (L.) Mez. Ex Ekman	Sourgrass	Occasional
* <i>Panicum maximum</i> Jacq.	Guinea grass	Common
* <i>Paspalum conjugatum</i> Bergius	Hilo grass	locally abundant
* <i>Setaria gracilis</i> Kunth	Yellow foxtail	Occasional
* <i>Sporobolus diander</i> (Retz.) P. Beauv.	Indian dropseed	Occasional
* <i>Themeda villosa</i> (Poir.) A. Camus	Lyon's grass	Uncommon

DICOTYLEDONES

ARALIACEAE -- Ginseng Family

* <i>Schefflera actinophylla</i> (Endl.) Harms	Octopus tree	Uncommon
--	--------------	----------

ASTERACEAE -- Sunflower Family

* <i>Ageratum conyzoides</i> L.	Maile hohono	Common
<i>Bidens</i> sp.	Ko'oko'olau	Uncommon
* <i>Bidens cynapiifolia</i> Kunth		Locally abundant
* <i>Calypocarpus vialis</i> Less.		Common
* <i>Coryza bonariensis</i> (L.)	Hairy horseweed	Occasional
* <i>Cotula australis</i> J.D. Hook	Brass buttons	Common
* <i>Lactuca serriola</i> L.	Prickly lettuce	Common
* <i>Pluchea symphytifolia</i> (Mill.) Gillis	Sourbush	Common
* <i>Wedelia trilobata</i> (L.) Hitchc.		Common

CASUARINACEAE -- She-oak Family

* <i>Casuarina equisetifolia</i> L.	Ironwood	Common
-------------------------------------	----------	--------

EUPHORBIACEAE -- Spurge Family

* <i>Phyllanthus debilis</i> Klein ex Wild.	Niruri	Uncommon
---	--------	----------

FABACEAE -- Bean Family

* <i>Chamaecrista nictitans</i> (L.) Moench	Partridge pea	Occasional
* <i>Desmanthus virgatus</i> (L.) Willd.	Slender mimosa	Uncommon

<u>Scientific Name</u>	<u>Common Name</u>	<u>Abundance</u>
FABACEAE – Bean Family con't		
* <i>Desmodium incanum</i> DC	Spanish clover	Occasional
* <i>Desmodium incanum</i> DC	Spanish clover	Occasional
* <i>Desmodium tortuosum</i> (Sw.) DC	Florida beggarweed	Occasional
* <i>Leucaena leucocephala</i> (Lam.) de Wit	Koa haole	Common
* <i>Mimosa pudica</i> L.	Sensitive plant	Common
* <i>Stylosanthes fruticosa</i> (Retz.) Alston		Common
LYTHRACEAE – Loosestrife – Family		
* <i>Cuphea carthagenensis</i> (Jacq.) Macbr.	Tarweed	Uncommon
MALVACEAE – Mallow Family		
* <i>Hibiscus rosa-sinensis</i> L.	Hibiscus	Uncommon
* <i>Malachra alceifolia</i> Jacq.		Uncommon
* <i>Malvastrum coromandelianum</i> (L.) Garcke	False mallow	Occasional
* <i>Sida rhombifolia</i> L.		Occasional
* <i>Sida spinosa</i> L.	Prickly sida	Occasional
MYRTACEAE – Myrtle Family		
* <i>Psidium cattleianum</i> Sabine	Strawberry guava	Occasional
* <i>Psidium guajava</i> L.	Yellow guava	Occasional
POLYGALACEAE – Milkwort Family		
* <i>Polygala paniculata</i> L.		Uncommon
PASSIFLORACEAE – Passion Flower Family		
* <i>Passiflora foetida</i> L.	Love-in-a-mist	Common
RUBIACEAE – Coffee Family		
* <i>Hedyotis biflora</i> Lam. (L.) Lam.		Uncommon
SOLANACEAE – Nightshade Family		
* <i>Solanum mauritianum</i> Scop	Pua nana honua	Occasional

<u>Scientific Name</u>	<u>Common Name</u>	<u>Abundance</u>
TILIACEAE – Linden – Family		
* <i>Triumfetta semitriloba</i> Jacq.	Sacramento bur	Uncommon
VERBENACEAE – Verbena Family		
* <i>Stachytarpheta urticifolia</i> (Salisb.L.) Sims	Vervain	Common

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Appendix D

**Fauna Report for the Proposed
Pupukea Ridge Preservation Site**

**Botanical Consultants
March 21, 2005**

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BOTANICAL CONSULTANTS

240 makee road, suite 7b, Honolulu, Hawaii 96815 808-923-4193

March 21, 2005

**Mr. Rodney Funakoshi
Wilson Okamoto and Associates
1907 South Beretania Street, Suite 400
Honolulu, Hawaii 96826**

RECEIVED
MAR 22 2005
WILSON OKAMOTO CORPORATION

Dear Mr. Funakoshi,

Subject: Fauna Report for the Proposed Pupukea Ridge Preservation Site

A two person team carried out a survey of the fauna of the proposed Pupukea Ridge Preservation site in March 2005. Fauna sightings at three listening positions were recorded.

The study site is currently being used to pasture two old horses and the vegetation is mostly ironwood trees and weedy herbs. There is very little animal food in the form of seeds and fruit that would be attractive to birds on this site.

No rats, mice or mongoose were seen but they are assumed to be present on sites such as the Pupukea Ridge Preservation site.

A total of six bird species were detected including one migratory golden plover (*Pluvialis dominica*). The plover was seen along the entry road in the open grassy area.

Two species of doves were seen and heard at all three listening sites. Spotted doves (*Streptopelia chinensis*), the larger of the two, were seen and heard less frequently than zebra doves (*Geopelia striata*). These ground dwelling birds appear to prefer the open areas along the roads and openings in the vegetation.

The next most plentiful species was mynas (*Acridotheres tristis*). Mynas frequent the open grassy places along the entry road and the yards of the neighboring houses.

Less common species were Brazilian cardinals (*Paroaria coronata*) and house sparrows (*Passer domesticus*). Brazilian cardinals and house sparrows appear to prefer the ironwood trees. Both species were seen in low numbers and never on the ground.

Except for the visiting golden plover all of the birds found on the study site are introductions and all can be found at low elevations near houses on all of the Hawaiian Islands.

Yours truly,

Evangelina J. Funk Ph.D.
Evangelina J. Funk, Ph.D.

Appendix E

**Archaeological Inventory Survey
Report for A 14-Acre Parcel Located
at TMK 5-9-23:01 & 5-9-24:01 (por.)
and 6-1-02:22 (por.) in Pupukea and
Waimea Ahupuaa, Koolauloa and
Wailua Districts, Island of Oahu**

**Archaeological Consultants of the
Pacific, Inc.
February 2005**

**AN ARCHAEOLOGICAL INVENTORY SURVEY REPORT
FOR A 14 ACRE PARCEL LOCATED AT
TMK: 5-9-23: 01 & 5-9-24: 01 (Por.) AND 6-1-02: 22 (Por.)
IN PUPUKEA AND WAIMEA AHUPUA'A,
KO'OLAULOA AND WAIALUA DISTRICTS,
ISLAND OF O'AHU
FEBRUARY 2005**

**Prepared for: Mr. David Druz
P.O. Box 976
Haleiwa, Hawaii 96712**

**Prepared by: Archaeological Consultants of the Pacific, Inc.
James R. Moore, B.S.
Joseph Kennedy, M.A.
59-624 Pupukea Road
Haleiwa, Hawaii 96712**



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e-mail: archaeologypacific@hawaii.rr.com**

Abstract

An Archaeological Inventory Survey has been conducted on a property located at TMK: 5-9-23: 01 & 5-9-24: 01 (Por.) and 6-1-02: 22 (Por.), in Pupukea and Waimea Ahupua'a on the Island of O'ahu. The purpose of the current investigations was to determine if significant historic properties exist within the project limits and, if present, properly document and evaluate those sites.

Investigations took the form of a 100% surface survey of the subject property. One site considered significant to the interests of historic preservation was identified during the surface survey consisting of the extremely deteriorated remains of a former water tank. The remains of the water tank will be designated State Inventory of Historic Places Site number 50-80-01-*. The location of the site was plotted from a known, fixed point on the subject property and the site has been described and photographed.

Based upon the results of the current investigations, Archaeological Consultants of the Pacific, Inc. recommends that a determination be made that future development would have an "effect" on significant historic properties. However, sufficient information has been recovered during the current investigations such that the potential "effect" has been mitigated. No further archaeological work is recommended for the current subject property.

* Following repeated requests, at the time of this writing ACP has been unable to obtain a site number from the DLNR-SHPD.

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**An Archaeological Inventory Survey Report
for a 14 Acre Parcel Located at
TMK: 5-9-23: 01 & 5-9-24: 01 (Por.) and 6-1-02: 22 (Por.)
in Pupukea and Waimea Ahupua'a,
Ko'olauloa and Waialua District,
Island of O'ahu**

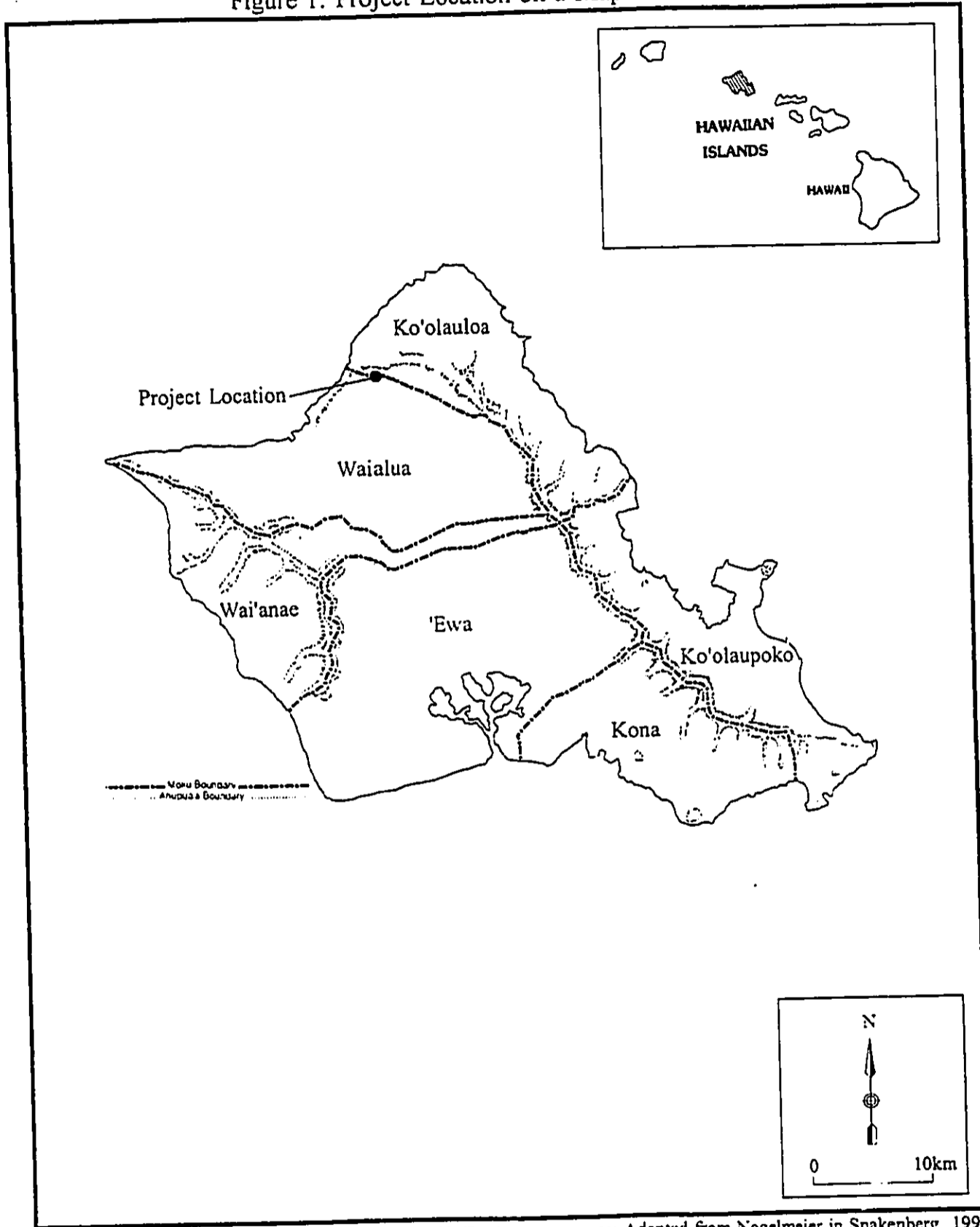
Section 1: Introduction

At the request of Mr. Rodney Funakoshi of Wilson Okamoto Corporation acting on behalf of A Charitable Foundation Corporation, Archaeological Consultants of the Pacific, Inc. (ACP) has conducted an Archaeological Inventory Survey of a property located in the *ahupua'a* of Pupukea and Waimea, districts of Ko'olauloa and Waialua, on the island of O'ahu (see Figure 1). The subject property is currently owned by Finance Realty Ltd. and Kalani Holdings Ltd..

The purpose of these archaeological investigations was to perform the tasks and meet the requirements specified by the Department of Land and Natural Resources, State Historic Preservation Division (DLNR-SHPD). These investigations would allow for the evaluation of the significance of potential historic resources located on the property including their eligibility for inclusion in the National Register of Historic Places. These investigations also allow for the making of recommendations concerning the mitigation of the impact of future construction activities upon potentially significant historic resources.

The following report presents a background of the region which includes summaries of the previous archaeology conducted in the region, previous land uses and settlement patterns. Following these sections are descriptions of the methodology utilized during the current investigations and of the findings of the survey. The current Archaeological Inventory Survey investigations have determined that one site of historic significance (Temporary Feature 1) is located on the current subject property which has been thoroughly documented as part of this survey. No further archaeological work is recommended.

Figure 1: Project Location on a Map of Oahu



TMK: 5-9-23: 01 & 5-9-24: 01 (Por.) and 6-1-02: 22 (Por.)

source: Adapted from Nogelmeier in Snakenberg 1990

Section 2: Physical Setting

The current subject property, TMK: 5-9-23: 01 & 5-9-24: 01 (Por.) and 6-1-02: 22 (Por.), is located atop the northern rim of Waimea Valley skirting both Pupukea and Waimea Ahupua'a, Ko'olaupia and Waialua Districts, O'ahu Island (see Figure 2). The boundary between Pupukea and Waimea Ahupua'a also forms the boundary between Ko'olaupia and Waialua Districts as well as the boundary between TMK: 5-9-23: 01 & 5-9-24: 01 and TMK: 6-1-02: 22.

The subject area is located at the eastern (*mauka*) end of TMK: 5-9-23: 01 & 5-9-24: 01 and 6-1-02: 22 and is bordered by Waimea Valley on the south and east, the existing house lots of a residential subdivision to the north and continuing portions of TMK: 5-9-23: 01 & 5-9-24: 01 and 6-1-02: 22 to the west (see Figure 3). The parcel measures approximately 625 meters (m) in length by 190m in width at its greatest dimensions covering an area of approximately 14 acres. The subject property is located between 2200 and 3300m from the coast at an elevation of between 520 and 750 feet (ft) above mean sea level.

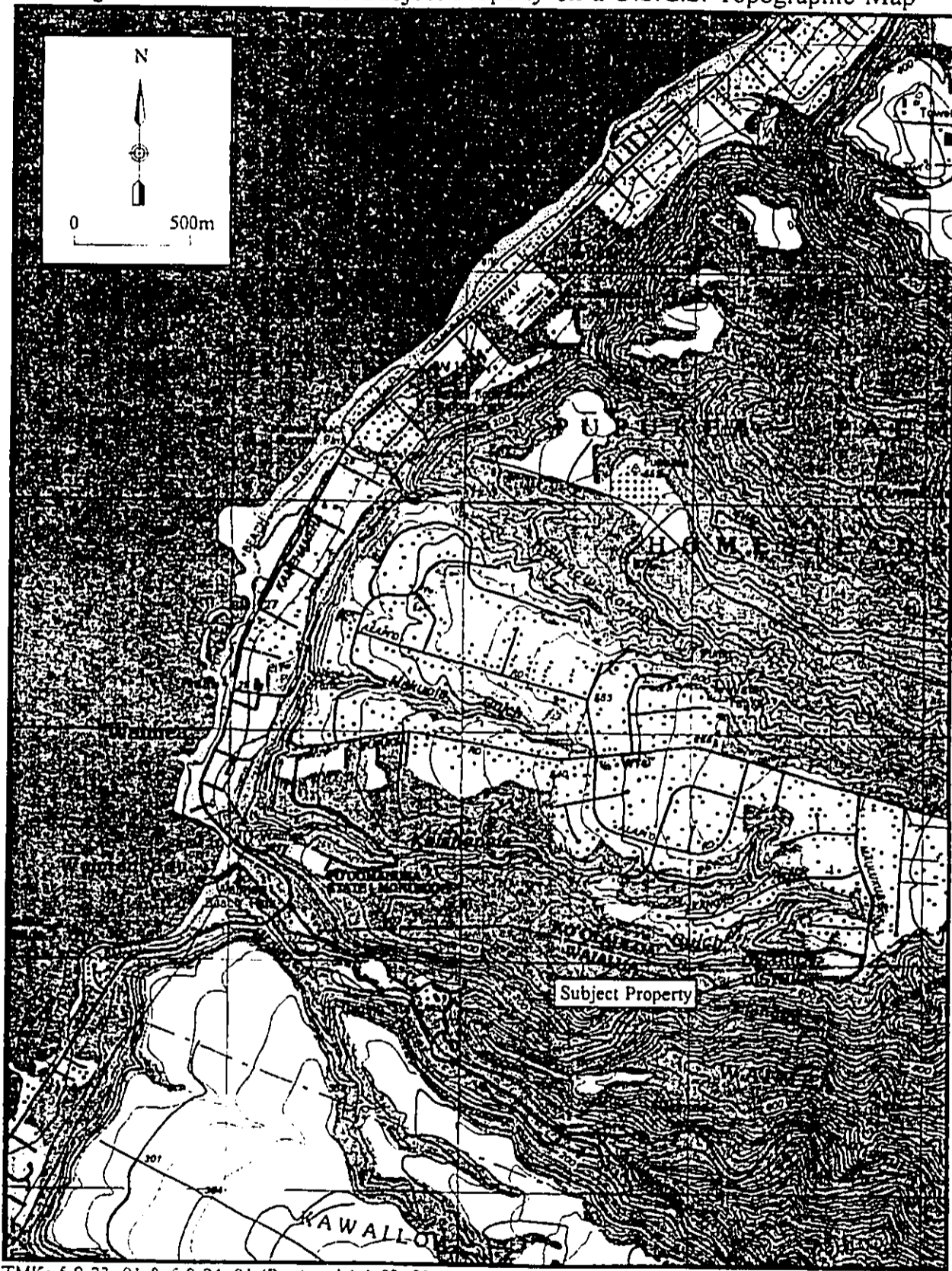
The project area is located along a relatively thin ridge of land between the northern edge of Waimea Valley on the south and Kalahopele Gulch on the north. In general, the gently undulating terrain slopes from east to west (*mauka* to *makai*) with the steepness increasing along the southern boundary of the project area and towards the southwestern end of the property where the parcel drops over the rim of Waimea Valley in places. Steepness also increases from east to west along the northern boundary of the subject parcel where the property line runs along the floor of Kalahopele Gulch which increases in both depth and in the steepness of its banks from *mauka* to *makai*.

The remains of portions of early 20th century agricultural access roads run along the southern boundary of the property and through the center of the parcel on either side of the boundary between TMK: 5-9-23: 01 & 5-9-24: 01 and TMK: 6-1-02: 22 although large segments have been washed out through erosion and/or overgrown with vegetation. Portions of these access roads have been used in the past as horse trails. In places, short side trails had been cleared to link sections of the former access roads although some of these have also become overgrown. Because of the degradation of the original roads as well as the modifications made to them, they no longer retain their original integrity.

The *Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai and Lanai, State of Hawaii* depicts the soils in the area as consisting of Manana silty clay and Wahiawa silty clay (Foote, Hill, Nakamura & Stevens 1972). Soils encountered on the subject parcel during previous investigations consisted of a shallow, slightly organic clay layer on top of a deposit of extremely hard packed clay.

Vegetation on the subject property consists predominately of alien plant species with ironwood trees (*Casuarina equisetifolia*) being most prevalent. Also present are small patches of strawberry guava (*Psidium cattleianum*), castor bean (*Ricinus communis*) and guava (*Psidium guajava*) interspersed between stands of ironwood. In addition, ground cover consisted of large areas covered with ironwood needles along with patches of California grass (*Brachiaria mutica*) and lantana (*Lantana camara*) along with liliko'i vine (*Passiflora* sp.) and various weeds.

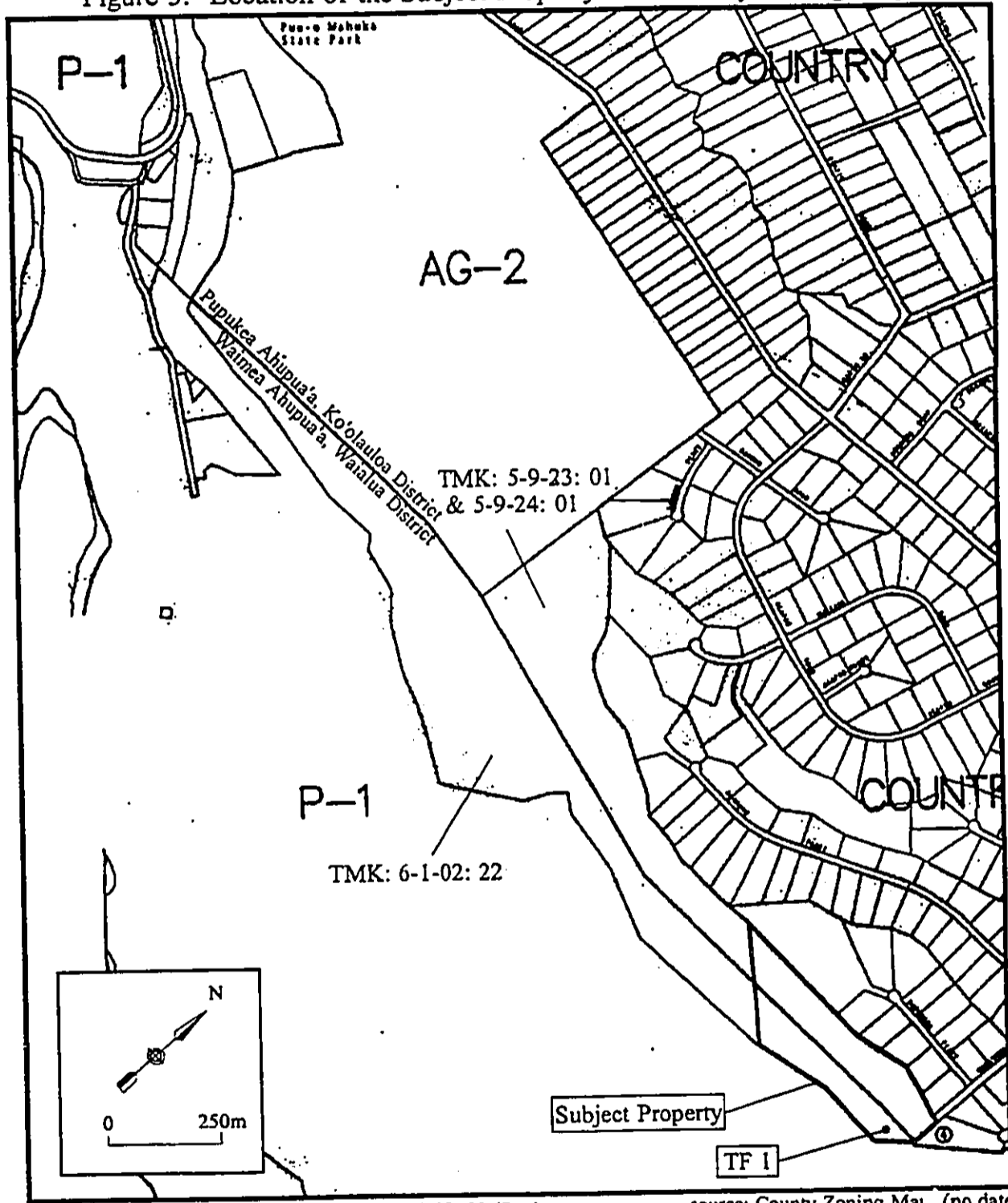
Figure 2: Location of the Subject Property on a U.S.G.S. Topographic Map



TMK: 5-9-23: 01 & 5-9-24: 01 (Por.) and 6-1-02: 22 (Por.)

source: U.S.G.S. 7.5 Minute Series (Topographic)
Waimea Quadrangle 1998

Figure 3: Location of the Subject Property on a County Zoning Map



TMK: 5-9-23: 01 & 5-9-24: 01 (Por.) and 6-1-02: 22 (Por.)

source: County Zoning Map (no date)

Section 3: Historic Background

Section 3.1: Traditional Accounts and Land Use History

Pupukea Ahupua'a

Numerous traditional accounts and varying land uses have been documented in Pupukea Ahupua'a. Several sites, some of which are associated with legendary accounts, have been identified in this area. Historically Pupukea belonged to the *kahuna* "from ancient times" (Kamakau in Sterling & Summers 1978:126).

One of the most significant sites in Pupukea is Pu'u o Mahuka Heiau, State Inventory of Historic Places (SIHP) Site Number 249, the largest *heiau* on O'ahu. One account credits its construction to the *menehune*, said to have built the *heiau* in a single night utilizing stones gathered from Paumalu Ahupua'a (Thrum 1924). The construction of the *heiau* has also been linked to the high priest Kaopulupulu who resided in Waimea around 1773-1783 (Yent 1999). The *heiau* is believed to be associated with Malae Heiau in Wailua on Kaua'i. Through the use of signal fires, the two *heiau* are believed to have been utilized in association with communications between the islands (Taylor in Yent 1999):

The altar commands a magnificent view of Oahu's mountains as a background, the channel between Oahu and Kauai and on clear days, the coastline of Kauai about the mouth of the Wailua River. Priests at Puu-o-Mahuka could plainly see smoke curling from the fires built for services at the Malae heiau on Kauai and know when to synchronize services with those on the Garden Island.

Pu'u o Mahuka is also associated with the landing of Vancouver's ship *Daedalus* at Waimea Bay in 1792, wherein three men from the ship were murdered while attempting to gather fresh water. It is believed that their bodies were taken to Pu'u o Mahuka Heiau for sacrifice, although a separate account indicates that they were taken to a *heiau* in Mokuleia (Thrum 1924).

Thrum (1907:51-52) was the first to document Pu'u o Mahuka:

It is a walled heiau of two divisions, its upper section being 127x281 feet and the lower 168x186 feet, giving a total length of 467 feet. Both sections have been paved with stones but at this time innumerable mounds and a maze of stone divisions predominate. The upper end has a double wall, the inner one having a ledge or base of two feet from which five terraces of uneven width extend, but averaging 15 feet, ranging about eight to twelve inches below each other, occupy this upper end. In the middle at this upper end, six feet from the wall, is a raised ground 24x32 feet in the front of which, but a little lower, is a smaller raised section 12x15 feet. On the two sides of this upper division a low ledge runs the entire length of the walls. This is about two and a half feet from the floor and runs mostly eight feet wide on the west side, but on the east side it is ten feet. A similar ledge runs across the upper end wall of the lower division, and toward the middle of which are three curved formations, joining, each about 12x15 feet, similar to like tri-curved places noted on each side of the upper division ledge opposite each other about fifty feet from its lower end. ...In only one other heiau as yet, has a similar ledge been found. The walls of Puu o Mahuka are light for the most part, say three feet in thickness, and stand from five to ten feet high according to slope of the ground.

A square enclosure 56x56 feet joins on the lower end of this heiau, which is said to be of more modern construction, to commemorate a kahuna's successful wager with an alii, but is no part of it, though the ruins of two small structures nearer the point is thought to have been connected with Puu o Mahuka in its working.

Additional detailed descriptions were later provided by Stokes, Brigham and McAllister (McAllister 1933:147-150). The site has been in various stages of repair since that time, with substantial efforts at restoration being conducted in recent years.

Four additional sites were documented by McAllister in Pupukea. Site 252, Piliaama, consists of a stone with a depression "said to be the footprint of a man and of a crab" which resulted when a handsome *maka'ainana* man was pursued by an *ali'i* woman (McAllister 1933). In other accounts, the site is said to have been the footprint of a fisherman named Piliaama who hid there from Hiiaka (from the Angus Collection in Sterling & Summers 1978). Chants relating to Piliaama are documented in Sterling and Summers (1978). Site 253, Kamae'e Ko'a, is a fishing shrine comprised of a stone mound with a depression into which fish offerings were placed. Site 254 is comprised of several stones in the water at Three Tables, one named Kalua o Maua, after the story of a woman who had gone torching and was found by her husband in this form. The presence of the stone is also said to indicate the presence of fresh water. Site 255 consists of large stones at Kulalua Point said to be followers of Pele "who she turned into stone, so that they might become immortal" (McAllister 1933).

The majority of the lands along the northern rim of Waimea Valley, where the current project area is located, are considered to be a portion of Pupukea Ahupua'a. At some point in time, however, possibly in 1886 when Waimea Ahupua'a became part of Waialua District, the boundary between Waimea and Pupukea Ahupua'a was shifted slightly to the north and TMK: 6-1-02: 22 became part of Waimea Ahupua'a. Along with Paumalu Ahupua'a, Pupukea Ahupua'a is not believed to have been utilized for agriculture in the pre-Contact period (Handy & Handy 1972:463).

Utilizing the Waihona 'Aina Mahele Database, Haun & Associates has compiled a thorough list of LCA claims and awards for Pupukea Ahupua'a. The reader is referred to Haun and Henry, Table 1 (2001:6-8) for a complete listing of LCA information. Haun and Henry summarized their findings well:

The Waihona 'Aina (2000) Mahele Database ... lists thirty-one Land Commission Award (LCA) claims for ninety parcels within Pupukea. Only twenty parcels were awarded to nineteen claimants. The awarded *kuleana* parcels range from 0.51 to 6.5 acres in area. ...

The majority of claimed land parcels were conveyed to the claimants between the time of Kamehameha I and 1843. None of the awarded claims appear on modern tax maps. Most were apparently located on the lower slopes and coastal plain on either side of the government road based on boundary description testimony.

Fifteen claims included house lots with at least sixteen houses. Four claims included a fishery and two mention *ko'a* trees, which were probably intended for making canoes. Sixteen salt lands or beds are mentioned in the claim testimony. The testimonies refer to 29 *mo'o* and *'ili*, 24 cultivated places or lots, thirteen *kula*, seven lands, four patches, two uplands, and two *pali*. The dominant crop mentioned is sweet potato with references to 38 plots including four referred to as

steep or *pali* plots. Other named plants are taro plots (8), *noni* plots (4), six *hala* (*Pandanus* sp.) trees, and one *wauke* plot (Haun & Henry 2001:5).

Commercial agriculture began in Pupukea Ahupua'a as early as the 1860's with the production of sugarcane along the coastal plains (McIntosh & Cleghorn 2000). The extension of the O'ahu Railroad and Land Company railway from Waialua to Kahuku in 1899 set the stage for more substantial agricultural production in Pupukea (Hungerford 1963). Pineapple production began in the uplands in 1910 when the Honolulu Pineapple Co. Ltd. acquired a lease for lands surrounding Pu'u o Mahuka Heiau. Photographs from the 1920's and 1930's depict the land in the area extending to the edge of the rim of the valley as being cultivated in pineapple (Estioko-Griffin 1986:26-27). Handy in *Hawaiian Planter* (1940:87) indicated that:

Pineapples and avocado orchards now extend over the high level uplands as far back as the Pupukea-Paumalu Forest Reserve, but there is evidence that this land was suitable for taro cultivation in earlier times. ... there were no terraces in the gulches either along Pupukea or Kuaikala Streams or in the vicinity of Waipi Spring, inland from Kuaikala Stream.

On the current subject property, the level portions of TMK: 6-1-02: 22 are thought to have been in pineapple during this time. The cultivation of pineapple in Pupukea is believed to have continued until the 1960's although, eventually, the area fell out of use.

Within the past several decades, substantial portions of Pupukea have been developed for private residences and commercial businesses, particularly along the coast and in the upland areas between Waimea Valley and Kalunawaikaala Stream. In more recent times, portions of the current subject property and adjacent parcels have been utilized recreationally for horseback riding.

Waimea Ahupua'a

Waimea, which literally translates to "reddish water" (Pukui & Elbert 1971), was named for the reddish waters of Waimea River. Prior to Western contact, Waimea Valley was known to have been "... a well-populated, intensively cultivated district and a favored dwelling place" (Handy & Handy 1972:463). Thrum in *Hawaiian Annual* (1907) notes that Waimea was famous for its pink taro which was favored by the *ali'i*, and that Waimea Bay was "noted for quantity and superiority of fish." Atop the northern rim of Waimea Valley, overlooking the valley is the largest *heiau* on O'ahu, Pu'u o Mahuka, discussed briefly above. The presence of this *heiau* and its proximity to Waimea Valley has been seen as evidence of the importance of the inhabitants of the valley. Along with the *ahupua'a* of Pupukea, Waimea belonged to the *kahuna* "from ancient times" (Kamakau in Sterling & Summers 1978:126). Estioko-Griffin cites the probable residence of two notable people, the priest Kaopulupulu and Hewahewa, an *ali'i* of the Paa'o lineage, as support for the importance of the area (Estioko-Griffin 1986:1-4).

Several sites, many of which are associated with legendary accounts, have been identified in Waimea Ahupua'a. Of these, several are also associated with fishing practices. Site 242 consists of an *akua* stone on the south side of Waimea Bay. The stone was caught by two *kahuna* in a fishing net and said to be a representation of a god. A wood idol was retrieved from Mokuleia and placed next to the stone under instructions from Kaneaukai, a fish god (Thrum in

Sterling & Summers 1978:127). Site 244, Keahu o Hapuu, is a rectangular stone fishing shrine on the south side of Waimea Bay which is said to have formerly enclosed the stone image, Site 242 (McAllister 1933). Site 245 is comprised of another fishing shrine once located on Palipilo Bluff above Waimea Bay. Site 248, Kuhale Heiau, was described by McAllister as a "small heiau on the Kahuku side of the inlet, said to have been a fishing shrine (*ko'a*) or *unu*. The present site is occupied by a haunted house which usually stands vacant and in which few people have ever lived." Site 250 consists of fishing lookout stones on bluffs on either side of Waimea Bay from which fishermen below could be signaled. One called Kalaku on the north side below Pu'u o Mahuka Heiau, the other called Kalakoi on the south side at Keahu o Hapuu (Site 244). These stones are also called Ku and Ahuena in a Hiiaka chant (McAllister 1933).

McAllister also recorded two burial sites in Waimea Valley. Site 246 consists of numerous burials located in caves and shelters along the south cliff of Waimea Valley within which remnants of coffins, canoes, *tapa* and *lauhala* were found along with human remains. Also found were a "hair lei (emblem of rank), idols, pipes (?), round stones for games, kapa and poi pounders, stone axes and lamps" (Andwich in Sterling & Summers 1978:130). Similarly, Site 251 is comprised of numerous burials located in caves and shelters along the north cliff of Waimea Valley. One cave contained a decayed wooden platter along with what appeared to be wooden spears (McAllister 1933).

Other sites recorded in Waimea by McAllister include Sites 243 and 247. Site 243, Kaahakii, is a sacred tongue shaped stone which marked the (former) boundary between the districts of Waialua and Ko'olauloa. Another sacred stone nearby was reportedly removed during the construction of the railroad. A story associated with this stone is that of a man, Waikumailani, who after failing to heed his wife's threat to leave him and take revenge on her rival if he took another woman, was turned into stone at the boundary of Waialua and Ko'olauloa Districts (Kamaakamahiai in Sterling & Summers 1978:128). Site 247 consists of agricultural terraces in Waimea Valley which extend for 2 miles inland, most of which are stone faced, some of which are irrigated. McAllister (1933) noted the presence of breadfruit trees further inland, and indicated that the valley was believed to have contained a sizable population prior to a devastating flood in the late 1800's.

Waimea Ahupua'a has undergone significant changes in post-Contact times. Occupation of the valley declined significantly following devastating floods in the late 1800's. Waimea Ahupua'a, formerly in Ko'olauloa District, was added to Waialua District in 1886 (Coulter in Sterling & Summers 1978:126). With the extension of the O'ahu Railroad and Land Company (O.R. & L. Co.) railway from Waialua to Kahuku in 1899, a bridge was constructed across Waimea River, allowing ease of travel to and from Waimea. The beach at Waimea Bay was considerably altered during sand mining operations which occurred from the 1930's to the 1960's. McIntosh and Cleghorn (2000) discuss these alterations and its negative impact:

In a 1960 *Honolulu Advertiser* article, Castle & Cooke is reported as owning the beach at Waimea and had been mining it from at least 1931 (*Honolulu Advertiser* 1960). Castle & Cooke contracted Pacific Concrete and Rock Co. to remove sand from the beach. They were instructed not to remove any sand from below the high water mark. Needless to say, a vast amount of sand could have been removed from the beach in some 30 years. Indeed, a photo recovered from the Hawaii State Archives ... shows what Waimea Beach looked like in the early 1900's just after the introduction of the railroad. There is clearly much more sand on the beach then (sic) there is

today. What is commonly referred to as "jump rock" can be seen ... totally surrounded and almost covered with sand. Today, the rock is surrounded by water and used by visitors as a spot to jump into the ocean. Needless to say, the sand mining at Waimea Bay had a negative impact to the beach and surrounding areas.

Thrum in *Hawaiian Annual* (1907) noted that the mouth of the river was once open to the passage of canoes. The sport of *waipu 'eone* was popular in Waimea Bay, where during times that the river was swollen, people would ride the surf up into the channel (Pooloa in Sterling & Summers 1978:130).

Presently, much of Waimea Ahupua'a is being used for recreational/tourist industry purposes. Waimea Bay is a public beach park and much of Waimea Valley (under the jurisdiction of the City and County of Honolulu and managed by the Audubon Society) attracts tourists with its extraordinary botanical garden, restored archaeological sites, educational tours, etc..

Section 3.2: Previous Archaeology

A small portion of the current project area was the subject of an archaeological inventory survey conducted by ACP in 2002 (Berdy, Elmore, Moore & Kennedy 2002). The results of those investigations will be discussed below following brief reviews of the archaeological studies conducted in Pupukea and Waimea Ahupua'a.

Pupukea Ahupua'a

A limited number of previous archaeological investigations have been conducted in Pupukea Ahupua'a. The earliest investigations of an archaeological nature were conducted by Thrum and McAllister in the early 1900's. Sites identified during those surveys have been described above.

Modern archaeological investigations first took place in 1988 when PHRI conducted a reconnaissance survey with limited subsurface testing for the Pupukea-Paumalu Development Project (Mayberry & Haun 1988). Over 1100 acres were surveyed resulting in the discovery of 54 sites comprised of 117 features. Sixty-one of the features identified were post-Contact in nature while 33 were determined to be pre-Contact era habitation sites. Two burials and several specialized sites were also identified.

In 1991, Archaeological Consultants of Hawaii (ACH) conducted an archaeological inventory survey at Ehukai Beach Park (Kennedy 1991). Backhoe testing was conducted across the project area but no sites of historic significance were encountered. Subsequent to the inventory survey, monitoring was conducted at Ehukai Beach Park by ACH in association with a park improvement project (Kennedy & Denham 1992). One site, a human burial was identified during the monitoring program.

Also in 1991, the results of a series of archaeological projects conducted by the Division of State Parks at Pu'u o Mahuka Heiau and two adjacent sites were documented (Smith & Yent

1991). The results of those investigations suggested that the *heiau* had been built in sections and expanded over time. Evidence of at least two phases of construction were identified.

In 1998, International Archaeological Research Institute, Inc. conducted an archaeological inventory survey at Sunset Beach Park (Athens & Magnuson 1998). Two sites were identified, both of which were determined to consist of pre-Contact era habitations.

Finally, in 2001, Haun & Associates conducted an archaeological inventory survey of the proposed Sunset Beach Agricultural Subdivision (Haun & Henry 2001). Investigations identified 14 sites comprised of 17 individual features. Features identified included walls, terraces, cisterns, alignments and caves which were hypothesized to have been utilized for agricultural purposes, water storage and the interment of the deceased. Utilization of the agricultural features was believed to have occurred from the mid-1600's to the mid-1800's.

Waimea Ahupua'a

Waimea Ahupua'a has seen a somewhat greater amount of archaeological investigation over the years than has Pupukea. A substantial number of those archaeological investigations were conducted within Waimea Valley in the valley's cultural/botanical park in the 1970's and 1980's (Moore & Luscomb 1974; Riley 1980; Mitchell & Cleghorn 1980; Mitchell & Jenkins 1980; Cleghorn 1981; Nakamura 1982; and Mitchell 1987). Numerous sites were documented during these investigations attesting to the substantial agricultural development and density of population in the valley. Feature types identified included burial platforms, habitation platforms, enclosures, shrines, walls, agricultural terraces and mounds, as well as post-Contact features including a Buddhist shrine, walls and a *furo*.

In 1981, B.P. Bishop Museum (BPBM) conducted a reconnaissance survey of two parcels located on the south side of Waimea Bay (Welch 1981). A total of ten archaeological sites were identified including Keahu o Hapuu (McAllister's Site 244) and the former O.R. & L. Co. railroad bed. Subsequent investigations by BPBM yielded large amounts of cultural materials and evidence of at least two episodes of utilization between AD 1500 to 1800 (Shun 1981 and Athens & Shun 1982).

In 1999, during the excavation of a leach field for the existing park rest room facilities at Waimea Bay Beach Park, a human burial was inadvertently discovered (Jourdan & Collins 1999). Based upon its interment in a sandy matrix near the beach and the presence of a burial pit as well as a possible cultural layer, the burial was determined to likely be that of a Hawaiian interred in the pre-Contact period. The burial was subsequently disinterred by Cultural Surveys Hawaii (McDermott, Medeiros & Hammatt 1999).

The most recent archaeological investigations which have taken place in the Pupukea and Waimea Ahupua'a area were conducted by ACP on an approximately 1.25 acre portion of the current subject property in 2002 (Berdy *et al.* 2002; refer to Section 5, Figure 4). A surface survey of the parcel determined that no surface sites were present in the project area and the excavation of the five trenches revealed stratigraphy which was remarkably consistent across the property. Two stratigraphic layers were identified underlying a surface cover of grasses, roots and detritus. In all trenches, Layer I consisted of a dark reddish brown (2.5YR 3/3) clay with a

slightly greater organic component in its matrix than Layer II, a hard packed, dark reddish brown clay that became somewhat darker in color with depth and was, therefore, subdivided into Layers IIa and IIb. No cultural deposits of any kind were encountered during the subsurface testing and no further work was recommended.

Section 3.3: Summary of Settlement Patterns

Settlement patterns previously proposed for the Hawaiian Islands suggest that occupation initially occurred in coastal areas on the windward sides of the islands (Green 1980 in Rosendahl 1990:6, Cuddihy & Stone, and others). The area near the mouth of Waimea Valley was likely a favorable locale for early occupation. The coastal portions of Pupukea and Waimea Valley offered access to a perennial river, large areas of fertile alluvial and colluvial soils, and various offshore reef environments which supported a variety of marine resources.

Expansion of pre-Contact settlement within this area was probably concentrated within the river valley and along nearby coastal flats, with the upland forest used for scattered agricultural pursuits and the collection of various raw materials. Religious activities, as evidenced by the remains of several *heiau*, took place near the coast and on the bluffs above Waimea Valley.

By the late pre-Contact to early post-Contact period, Waimea had become a center of population. Waimea River provided a source for irrigation of *lo'i*. Rainfall in the valley and on the *kula* lands above its rim would have been sufficient for the growing of dry taro at higher elevations, without the need for extensive terracing. By the late 1800's the population in Waimea and Pupukea had waned, largely due to a series of large floods in the valley. Also in the late 1800's, large scale commercial agriculture entered the area following the extension of the O.R. & L. Co. railway to Kahuku.

Section 3.4: Predicted Finds

From the above summaries of land use history and previous archaeological investigations conducted in Pupukea and Waimea, the expected finds for the current project area may be surmised. Given the location of the subject property in the interior of the *ahupua'a* on *kula* lands along the rim above Waimea Valley, it is unlikely that the land was utilized for permanent habitation or the cultivation of *lo'i*. The project area was more likely utilized simply for the collection of various raw materials although it is possible that dry land agriculture was also practiced in the area. Occasional temporary habitation sites may also be found in this inland location.

Surface structures which could be found would include simple stone platforms and/or pavements, walled enclosures, C-shaped structures, terraces, etc.. Typically, subsurface cultural remains could include buried stone structures, midden deposits, post holes, fire pits and traditional artifacts such as fishing gear and stone tools, as well as historic debris. The use of the area in the post-Contact period for raising pineapple also makes it possible that structures associated with commercial agriculture could be encountered.

Section 4: Archaeological Methodology

The current archaeological investigations were conducted between February 7th and 12th, 2005 under the direction of the principal investigator, Joseph Kennedy, M.A.. Fieldwork was conducted by field supervisor James R. Moore, B.S., along with the assistance of field archaeologists Elizabeth Gregg, B.A., Kristen Jeremiah, B.A., and Elena Kouneski, B.A.. No more than three members of the field crew were in the field at any one time.

A pedestrian survey was utilized to systematically investigate the subject property. The purpose of the pedestrian survey was to identify all potentially significant historic properties which may be located on the surface of the subject property. The pedestrian survey was conducted by having the field crew sweep the parcel on foot using transects spaced approximately 5 to 10 meters (m) apart. Due to changes in the direction and steepness of the slope, transects ran roughly southeast/northwest over the western portion of the property trending to north/south towards the eastern end of the property. Visibility was fair to good with relatively dense weedy vegetation encountered in the areas not covered in ironwood. Through the use of this procedure, a 100% surface survey of the subject property was completed and any potentially significant historic properties would have been identified.

When features believed to be potentially significant historic properties were encountered during the pedestrian survey they were flagged with engineer's flagging tape marked with the date, job name, company name (ACP) and temporary identification numbers using the prefix "TF" to indicate the temporary designation. Temporary features which upon completion of all investigations were considered significant historic properties will subsequently be assigned permanent State site numbers to be incorporated in the final draft of this document. The locations of potential sites and features across the subject property were mapped with compass and tape from known fixed points found on the property. Site and feature locations were subsequently plotted onto a base map of the subject property for presentation in this report.

A variety of techniques were utilized to ensure proper data collection. As mentioned above, the locations of features identified on the subject property were mapped using a compass and measuring tape and plotted on plans of the property drawn to scale. Photographs were taken of features with representative photographs presented in this document. Notes were taken in the field describing the environmental setting of the subject property including indications of former modifications and/or modern developments made to the parcel. These methods in data collection were conducted in order to provide an accurate and detailed visual and written record of the findings on the subject property.

This report provides complete descriptions of the investigations undertaken. All materials collected during the current investigations will be bagged and/or labeled appropriately, placed in labeled and inventoried boxes, and curated at ACP facilities located at 59-624 Pupukea Road, Hale'iwa, Hawai'i.

Section 5: Archaeological Findings

The current investigations consisted of a 100% surface survey of the subject property. One site considered significant to the interests of historic preservation was identified during the current investigations (Temporary Feature 1). Temporary Feature 1 consists of the remains of a former water tank which will be described below.

Temporary Feature 1 (TF 1)

Temporary Feature 1 consists of the extremely deteriorated remains of a former water tank located near the southeastern corner of the current subject property (see Figure 4). The water tank was round measuring approximately 16 feet (ft)(4.9m) in diameter and standing approximately 9ft (2.75m) in height. The tank had been constructed out of a heavy gauge iron-based metal forming the walls and floor.

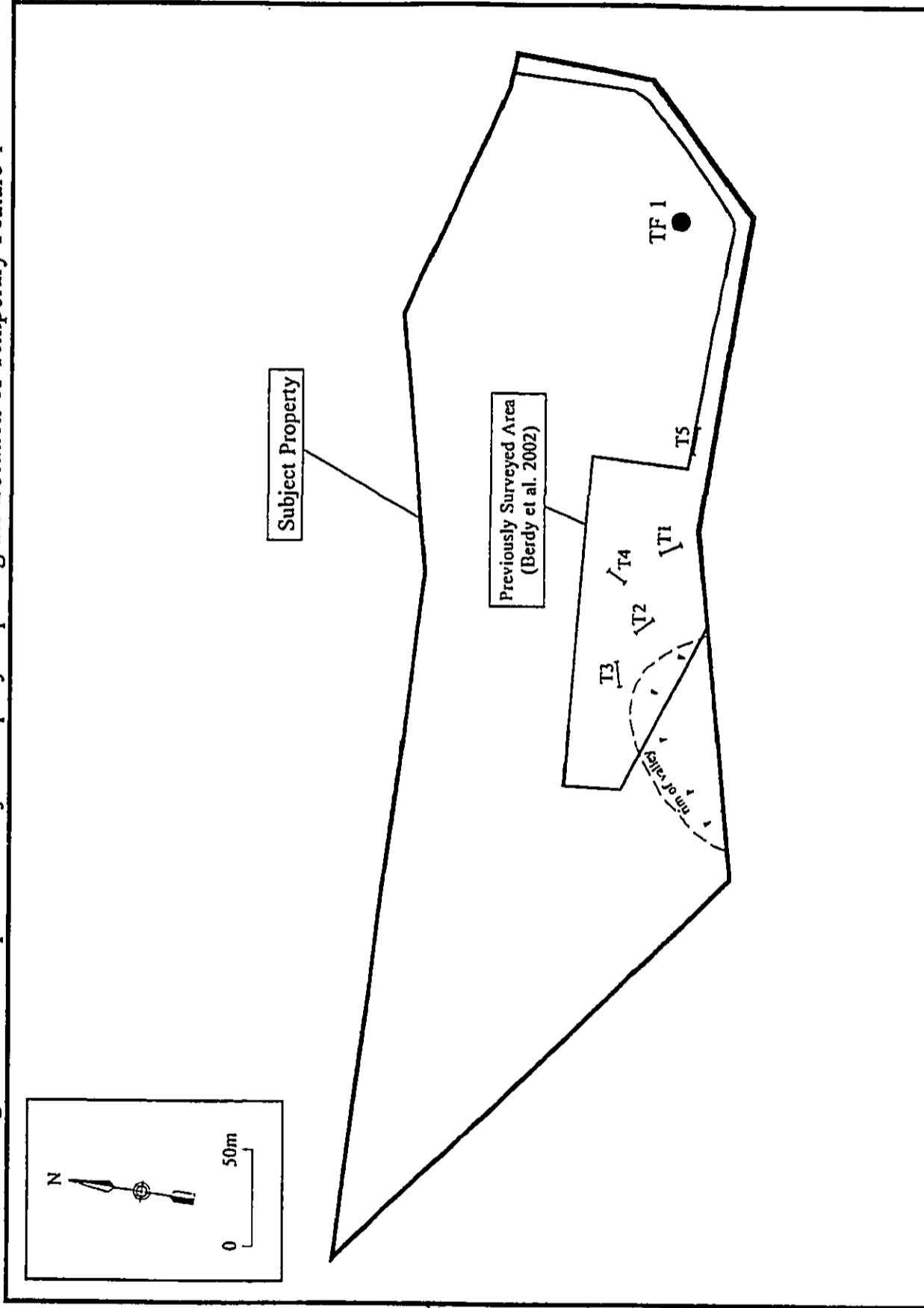
The metal walls of the tank are currently extremely deteriorated through oxidation with one section on the northwestern side totally collapsed and an adjacent section visibly slumped. The deterioration has caused numerous holes in the portions of the metal structure that are still standing giving the walls an appearance similar to that of a slice of Swiss cheese, especially on the southeastern side of the tank (see Figure 5).

Collapsed corrugated roofing lies across the interior floor of the structure, although it appears to be fabricated of a more modern material than the tank itself. This implies that the tank may not have originally been covered and that the corrugated roofing was an addition to the structure. A pair of metal ladders (one on the exterior of the tank and the second on the interior) are located on the northern side of the tank which would have provided access to its interior. In addition, a water valve is located on the exterior of the tank at ground level on its southern side (see Figure 6). The name "THE LUNKENHEIMER CO. CIN. O." is cast into the handle of the valve. Over the years, The Lunkenheimer Co. has been a manufacturer of steam whistles, valves and other assorted cast metal items. It was originally established in 1862 under the name "Cincinnati Brass Works" eventually becoming "The Lunkenheimer Co." in 1893 and continuing in business to this day.

Based upon the extremely deteriorated condition of the water tank and the amount of corrosion which has affected the walls, it is believed that this structure is more than fifty years of age. It is likely that Temporary Feature 1 was utilized in association with the pineapple industry which is known to have cultivated large portions of the Pupukea area in the first half of the twentieth century.

Although no subsurface testing was conducted as part of the current investigations, as discussed above, previous archaeological testing within a portion of the current project area included the excavation of five backhoe trenches. The excavation of these trenches revealed an extremely homogenous stratigraphy with a complete absence of cultural remains (refer to Section 3.2).

Figure 4: Plan Map of the Subject Property Depicting the Location of Temporary Feature 1



TMK: 5-9-23: 01 & 5-9-24: 01 (Por.) and 6-1-02: 22 (Por.)

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

Figure 5: Photograph of the Interior of Temporary Feature 1



view facing southeast

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TMK: 5-9-23: 01 & 5-9-24: 01 (Por.) and 6-1-02: 22 (Por.)

Figure 6: Photograph of the Water Valve on Temporary Feature 1



view facing north

TMK: 5-9-23: 01 & 5-9-24: 01 (Por.) and 6-1-02: 22 (Por.)

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Section 6: Evaluation of Site Significance

The current archaeological inventory survey has identified one site of significance to the interests of historic preservation (Temporary Feature 1). Temporary Feature 1 consists of the remains of an extremely deteriorated water tank believed to have been utilized in association with twentieth century agricultural activities. This site qualifies to be considered significant under Criterion D (site has yielded, or is likely to yield, information important in prehistory or history) of the National Register of Historic Places criteria (refer to Table 1). Because sufficient information has been recovered during the current investigations, no further archaeological work is recommended for this site.

Table 1: Summary of Significance Criteria Evaluations

<u>Site</u>	<u>Feature</u>	<u>Description</u>	<u>Function</u>	<u>Significance Criteria</u>	<u>Recommended Treatment</u>
TF 1		Water Tank	Ag	D	NFW

Code for Significance Criteria Evaluations

- A - Site is associated with events that have made a significant contribution to the broad patterns of history.
- B - Site is associated with the lives of persons significant in the past.
- C - Site embodies the distinctive characteristics of a type, period, or method of construction; or is the work of a master; or possesses high artistic values; or represents a significant distinguishable entry.
- D - Site has yielded or is likely to yield information important in prehistory or history.
- E - Site has Cultural Significance (*heiau*, shrine, burial, etc.).

Criteria A - D represent National Register of Historic Places criteria.
 Criterion E represents Hawaii Register of Historic Places criterion.

note:

Ag = Agricultural
 NFW = No Further Work

Conclusion

An Archaeological Inventory Survey has been conducted on a property located at TMK: 5-9-23: 01 & 5-9-24: 01 (Por.) and 6-1-02: 22 (Por.), in Pupukea and Waimea Ahupua'a on the Island of O'ahu. Investigations took the form of a 100% surface survey of the subject property. One site considered significant to the interests of historic preservation was identified during the surface survey consisting of the extremely deteriorated remains of a former water tank (TF 1).

Based upon the results of the current investigations, Archaeological Consultants of the Pacific, Inc. recommends that a determination be made that future development would have an "effect" on significant historic properties. However, sufficient information has been recovered during the current investigations such that the potential "effect" has been mitigated. No further archaeological work is recommended for the current subject property.

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Appendix F

**Phase I Environmental Site
Assessment Pupukea Highlands
Petition Area TMK (1) 5-9-23: Parcel
01 (Portion), 5-9-24: Parcel 01, and 6-
1-02: Parcel 22, Pupukea, Oahu,
Hawaii**

**Masa Fujioka & Associates
May 26, 2004**

Wilson Okamoto Corporation
 May 26, 2004
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It has been a pleasure performing this assessment for you. Please contact us at (808) 484-5366 if you have any questions regarding this report.

Respectfully submitted,

MASA FUJIOKA & ASSOCIATES
 A Professional Partnership

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JCM/km

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ACF	A Charitable Foundation
AST	Above-ground Storage Tank
ASTA	American Society for Testing and Materials
CAS	California Advocates Society
COH	City and County of Honolulu
CRCLA	Comprehensive Environmental Response, Compensation and Liability Act
CRCLIS	Comprehensive Environmental Response, Compensation and Liability Information System
CFR	Code of Federal Regulations
CORRACTS	TSR facilities subject to Corrective Action under RCRA
DOH	Department of Health (State of Hawaii)
DPP	Department of Planning and Permitting (City and County of Honolulu)
EDR	Environmental Data Resources, Inc.
EPA	U.S. Environmental Protection Agency
ERNS	Emergency Response Notification System
EPA	Environmental Site Assessment
FRS	Facility Registry System
DOH	DOH Office of Hazard Evaluation and Emergency Response
RCRA	Hawaii Emergency Planning and Community Right to Know Act
HRS	Hawaii Revised Statutes
LESI	Leaking underground storage tank
MPA	Maui Fupuka and Associates
MST	Mean Sea Level
NFRAP	No Further Remedial Action Planned
NOS	National Ocean Service
NPL	National Priorities List
RCRA	Resource Conservation and Recovery Act
RCRIS	Resource Conservation and Recovery Information System
SHWH	Solid and Hazardous Waste Branch
SHWS	Solid and hazardous waste site
TMK	Tax map key
TSD	Treatment, storage or disposal (category of RCRA facility)
USACE	United States Army Corps of Engineers
USC	United States Code

M F A
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CONSULTING ENGINEERS AND ARCHITECTS

HSDA United States Department of Agriculture
USGS United States Geological Survey (U.S. Dept. of the Interior)
USF Undergroud storage tank
UR Undergroud Injection Control
VRP Voluntary Response Program
WOC Wilson Okamoto Corporation

PHASE I ENVIRONMENTAL SELF-ASSESSMENT
PUUKEA HIGHLANDS PETITION AREA
TMK (1) 5-9-23: PARCEL 01 (PORTION), 5-9-24: PARCEL 01,
AND 6-1-02: PARCEL 22
PUUKEA, OAHU, HAWAII

1.0 INTRODUCTION

1.1 OVERVIEW

This report presents the results of Masa Fujioka & Associates' (MFA's) Phase I Environmental Site Assessment (ESA) for the subject property on the Island of Oahu, in the State of Hawaii. The subject property is denoted by Tax Map Key (TMK) (1) 5-9-23 Parcel 61, 5-9-23 Parcel 01 (Portion), and 6-1-02 Parcel 22, and is located at the southern end of Maunakea Road, along the northern ridge line overlooking Waimea Valley to the south in Puukeya, as shown on Figure 1 (Map of Area).

Our work was performed as summarized in our proposal dated April 20, 2004, which constitutes the contractual agreement between MFA and Wilson Okamoto Corporation (WOC) for the services provided. Our Phase I investigation was performed in accordance with the American Society for Testing and Materials (ASTM) "Standard Practice for Environmental Site Assessments Phase I Environmental Site Assessment Process" (ASTM Designation E1527-00).

1.2 PURPOSE AND SCOPE OF WORK

MFA conducted this ESA to evaluate whether materials considered hazardous to human health or the environment, present at the subject property or in the surrounding areas, may affect the subject property. We conducted the environmental assessment using available information sources with the potential to identify past or on-going activities that may have affected the project site. MFA performed the following tasks in our ESA:

- Review of site history. MFA examined readily available documents, including previous environmental assessments, previous archaeological reports, topographic maps, City and County of Honolulu (CCH) permit records, historical on-line resources, and aerial photographs.
- Review of regulatory records. We examined government records regarding environmental conditions, citations, complaints, and permits at the site and at neighboring properties. We employed a regulatory database search service, Environmental Data Resources, Inc. (EDR), to search available public agency databases for environmental incidents that might affect the subject site. We supplemented the data from the EDR report with a review of additional public agency sources, including U.S. Environmental

Protection Agency (EPA) databases, and State Department of Health (DOH) databases, and files from the DOH Hazard Evaluation and Emergency Response Branch (HEER)

- **Site reconnaissance.** We performed a site reconnaissance of the property on April 26, 2004 to note visual signs of contamination, interview the property owner, and conduct a brief assessment of neighboring properties. During our site reconnaissance we specifically looked for stained soil, stressed vegetation, hazardous materials, above-ground, and underground storage tanks, disposal areas, and storm drains.
- **Review of site geology and hydrology.** We reviewed readily available published information on surface and subsurface conditions at the site and surrounding area. We used this information to assess topography, drainage, surface water bodies, anticipated subsurface geology, groundwater occurrence and usage in the area, and potential migration paths for contamination, if present.
- **Data evaluation and report preparation.** We evaluated the information collected and prepared this report documenting our assessment and providing our findings.

1.3. SPECIAL TERMS AND CONDITIONS

WOC* contracted MFA to perform an environmental site assessment to identify potential environmental concerns at the site. The ESA was conducted and this report was prepared for the sole use of WOC* and their client, A Charitable Foundation (ACF). This report shall not be relied upon by any other party without express written authorization from MFA.

1.4. LIMITATIONS AND EXCEPTIONS OF ASSESSMENT

Phase I ESAs, by their very nature, are limited. MFA has endeavored to meet what it believes is the applicable standard of care and, in so doing, is obliged to advise the users of this report of Phase I ESA limitations. This ESA did not include any investigation with respect to site geotechnical concerns, and did not include any investigation with respect to the following issues, which comprise the ASTM standard "non-scope considerations": asbestos-containing materials, radon, lead-based paint, lead in drinking water, wetlands, regulatory compliance, cultural and historic resources, endangered species, industrial hygiene, health and safety, ecological resources, endangered species, or high-voltage power lines. Our investigation was limited to the procedures described in the Phase I-ESA Standard Practice (ASTM E1527-00).

1.5. LIMITING CONDITIONS

The conclusions presented in this report are professional opinions based solely upon visual observations of the site and vicinity, and our interpretation of the available historical and regulatory information and documents reviewed. They are intended exclusively for the purpose outlined herein and apply only to the site location and project indicated. This report is intended for the sole use of WOC* and their client, ACF. The scope of services performed

in execution of this investigation may not be appropriate to satisfy the needs of other users, and any use or re-use of this document or the findings, conclusions, or recommendations presented herein is at the sole risk of said user.

Opinions and recommendations presented herein apply to site conditions existing at the time of our investigation and those reasonably foreseeable; they cannot necessarily apply to site changes of which this office is not aware, and has not had the opportunity to evaluate.

2.0. SITE DESCRIPTION

2.1. LOCATION AND LEGAL DESCRIPTION

The subject property is situated in Pupukea on the north shore of Oahu (Figure 1). The property is on a outcrops overlooking Waimea Valley to the south. The property is denoted by State of Hawaii Tax Map Key (TMK) Division 1, Zone 5, Section 9, Plat 23, Parcel 01, Zone 5, Section 9, Plat 23, Parcel 01 (Portion), and Zone 6, Section 1, Plat 05, Parcel 22 (Figure 2).

ACF* located by David Diaz, has owned the subject property since 2001. The designated properties are reserved for conservation or agricultural use.

2.2. SITE AND VICINITY CHARACTERISTICS

The site is currently uncultivated and generally unimproved, other than cleared areas. The majority of the site is densely vegetated with cane grasses (*Stenotaphrum secundatum*), and stands of nonwoody trees (*Casuarina equisetifolia*). There are scattered patches of shrubbery, grasses (*Pennisetum polystachyon*), and various weeds and other vegetation.

Residential properties are located to the north of the property across Kalabapohi Gulch, Waimea Valley Audubon Center, formerly Waimea Falls Park, is situated at the base of the ridge, below and south of the property. Camp Pupukea Boy Scout Camp, Camp Punaiea, Girl Scout Camp, the Pupukea-Punaiea Forest Reserve, and the Army, Kaluku Framing Ground are located at the end of Pupukea Road, east and northeast of the subject site.

2.3. DESCRIPTIONS OF STRUCTURES AND OTHER IMPROVEMENTS ON THE SITE

The site is vacant. There are no water, sewer, or electrical connections or service. There is no physical evidence of any buildings having been on the site. David Diaz (Diaz), personal communication, April 26, 2004 informed MFA that prior to the purchase of the property by ACF, a small dwelling with no utility connections was present on the property near the entrance off Maunohala Road. ACF requested that the structure be removed prior to purchase, and no remains of the structure were observed.

Areas have been cleared in the past for cattle grazing and possibly agricultural use. Currently, on TMK 6-1-02 Parcel 22, areas are cleared for horseback riding and hiking.

2.4 ENVIRONMENTAL LIENS OR SPECIALIZED KNOWLEDGE OR EXPERIENCE
 According to David Druz, owner of the property, to the best of his knowledge, there are no environmental liens against the subject property (D Druz, ACE, personal communication, April 26, 2004). Mr. Druz did not report knowledge or experience of environmental issues that might negatively affect the subject site.

2.5 CURRENT USES OF THE PROPERTY
 The site is currently unoccupied. The Conservation Land area, TMK 6-1-02-22, is used by Happy Trails Riding Stables for horseback tours, with several horse trails running through portions of the property. Local residents reportedly hike the trails.

2.6 PAST USES OF THE PROPERTY
 MFA reviewed previous environmental reports, historical aerial photographs, and historical topographic maps to gather information about the subject property history. Sanborn Fire Insurance maps were unavailable for the site. The subject property was vacant pre-contact, possibly developed for sweet potato plots in scattered areas by the 1800s, and portions may have been cultivated for pineapple and avocado production in the early to mid-1900s. Large portions are likely to have been used to pasture cattle from the early 1900s until at least the late 1960s, and in recent times for recreational purposes (horseback riding and hiking).

At least one of the horse trails is believed to follow portions of early 20th century agricultural access roads (ACP, 2002). Old cattle fencing still stand on portions of the property.

2.7 CURRENT AND PAST USES OF ADJOINING PROPERTIES
 The adjoining parcel in Waimea Valley has been used for residential purposes since pre-contact times (though to a much lesser extent since catastrophic floods of the late 1800s), and for recreational/botanical study purposes since the Waimea Valley Park was developed. The land adjoining the north boundary of the site has been used for religious purposes (pre-contact), scattered residential and agricultural purposes in the early to mid-1900s, and for development of subdivision abutting since the 1970s.

Past uses of the subject property and adjacent areas include cattle grazing, pineapple cultivation, and avocado orchards.

3.1 STANDARD ENVIRONMENTAL RECORD SOURCES
3.1.1 Overview

MFA used a regulatory database search service, Environmental Data Resources, Inc (EDR), to review standard federal and state government databases of known or potential sources of hazardous materials or waste. The site assessment report provided to MFA by EDR is attached in Appendix A. ASTM E 1527-00 (ASTM, 2000) specifies a minimum search distance for specific environmental record sources. The record sources listed in the following table were searched for incidents or sites within specified search distances of the proposed project site.

Table 1. ASTM Search Distances for Standard Environmental Record Sources

Standard Environmental Record Sources	Search Distance (miles)
Federal NPL site list	10
Federal CERCLIS list	0.5
Federal CERCLIS FUSRAP site list	10
Federal RCRA CORRIAC IS facilities list	10
Federal RCRA non-CORRIAC IS facilities list	0.5
Federal RCRA generators list (RCRIS)	property and adjoining properties
Federal ERNS list	property only
State-registered CERCLIS list (SHW5)	0.5
State landfill and/or solid waste disposal site list	0.5
State DUST (leaking underground storage tank) list	0.5
State-registered DUST list	property and adjoining properties

3.1.2 U.S. EPA National Priorities List (NPL)

The NPL, also known as the Superfund list, is a subset of the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) and lists properties with the highest priority for cleanup under the EPA Hazard Ranking System (40 CFR Part 300). The list is compiled by the EPA pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) 42 USC §9605 (a)(8)(H). EDR found no NPL sites within one mile of the subject property (EDR, 2004).

3.1.3 U.S. EPA CERCLIS and CERCLIS-NTRAP Site List

The CERCLIS list is compiled by the EPA and contains sites that the EPA has investigated or is currently investigating for potential hazardous substance contamination for possible inclusion on the NPL (ASTM, 2000). The CERCLIS No Further Remedial Action Planned (NFRAP) list includes sites for which, after initial investigation, no contamination was found, or contamination was not serious enough to require Federal Superfund action or

3.1.4 U.S. EPA RCRA CORRACTS Facilities List
 The Resources Conservation and Recovery Act (RCRA) list is compiled by the EPA and contains those regulated facilities that have notified EPA that they are hazardous waste generators, transporters or treatment, storage or disposal (TSD) facilities under RCRA, as summarized on the Resource Conservation and Recovery Information System (RCRIS). CORRACTS identifies hazardous waste handlers with RCRA corrective action activity. No RCRA CORRACTS facilities were found within one mile of the subject property. (EDR, 2004)

3.1.5 U.S. EPA RCRA Non-CORRACTS TSD Facilities List
 RCRA non-CORRACTS TSD facilities are those facilities at which treatment, storage, and/or disposal of hazardous wastes takes place, as defined and regulated by RCRA. EDR listed no RCRA TSD facilities within one-half mile of the subject property. (EDR, 2004)

3.1.6 U.S. EPA RCRA Generator's List
 The ASTM-recommended search area for RCRA generators is the subject property and adjoining properties Waimea Falls Park, a small quantity generator, is technically on adjoining property, however, buildings at Waimea Falls Park (i.e., the area where waste activities are likely to occur) are located more than 500 feet south of and 100 to 200 feet in elevation below the subject site, and is therefore unlikely to have affected it. MFA found no other RCRA generators on or adjacent to the subject property. (EDR, 2004 and EPA, 2004)

3.1.7 U.S. EPA ERNS List
 The Emergency Response Notification System (ERNS) list is compiled by the EPA. The ERNS list compiles information on reported releases of oil and hazardous substances. EDR found no reported ERNS incidents to have occurred on the subject property. (EDR, 2004)

3.1.8 Hawaii SHWS List
 The DOI office of Hazard Evaluation and Emergency Response (HEER) compiles the State Hazardous Waste Sites (SHWS) database, which includes facilities, sites, or areas in which the DOI has an interest, has investigated, or may investigate under Hawaii Revised Statute (HRS) 128D, and includes CERCLIS sites. (EDR, 2004) Waimea Falls Park is listed with "initial site survey team" status in the 2002 fiscal year HEER report to the Hawaii State Legislature (HEER, 2004). No details are provided in the listing, however, the facility is also listed in the Releases database (discussed in Section 3.1.12). Given that the active part of the

facility is more than 500 feet south of and about 100-200 feet lower in elevation than the subject property, the Park activities are unlikely to have affected the subject property. MFA found no other listings of SHWS facilities within one-half mile of the subject property. (EDR, 2004, HEER, 2004, and DOI, 2000)

3.1.9 State of Hawaii Landfill/Solid Waste Disposal Sites
 The Hawaii Solid Waste Facilities List contains information pertaining to all permitted landfills located within the State of Hawaii. EDR reported no landfill facilities within one-half mile of the subject property. (EDR, 2004)

3.1.10 State of Hawaii LUST List
 The Hawaii State DOI Solid and Hazardous Waste Branch (SHWB) Underground Storage Tank (UST) Section compiles a record of Leaking Underground Storage Tank (LUST) inventoried incidents. MFA found no listings for LUST facilities located within one-half mile of the subject property. (DOI, 2003, EDR, 2004)

3.1.11 State of Hawaii UST List
 The UST database is compiled by the State DOI Solid and Hazardous Waste Branch (SHWB) UST Section. The ASTM-recommended search area for USTs is the subject property and adjoining properties. Waimea Falls Park, located on adjoining LMK 6-1-02 002, is listed for one closed (1,000 gallon gasoline) UST that was in operation from 1971 to 1993, however, the active part of the park is more than 500 feet south of and 100-200 feet lower in elevation than the subject property, and the UST is unlikely to have affected the subject property. MFA found no other UST facility addresses. (DOI, 2003 and EDR, 2004) for sites on the subject property or on adjoining properties.

3.1.12 Additional State Regulatory Databases
 DOI HEER maintains databases (last updated in 2000) which include sites that HEER has examined for additional investigation, including the Releases database and the Hawaii Emergency Planning and Community Right-to-Know Act (HLEPCRA) database. (DOI, 2000), and site and event entries published in the HEER office reports for the fiscal years 1992 and 2002 (HEER, 2004). MFA searched the databases and reports for facilities listed near the subject property. The State's Voluntary Response Program (VRP) sites and Brownfield sites databases were also searched by EDR. The results are reported below.

Releases Database
 The Releases database lists hazardous substance release incidents reported to the DOI HEER office since 1988. Release incidents include a range of events, from found syringes and drug lab cleanups to fuel leaks. MFA searched the Releases database and found five cases that occurred near the subject property. HEER assigned "no further action"

(MFA) status to a 1990 case at Tuff Job Cooke Industries on Popukea Road, located about 0.75 mile north of the subject property, at a distance unlikely to have affected it. Four incidents were recorded for the Waimea Falls Park facility: a 1994 potential illegal dumping of photo developing chemical waste, a 1996 spill of hydraulic fluid (from a broken line in a backhoe) into Waimea River, and two 1999 events, one for abandoned drums and alleged fugitive dumping of chemical waste, and the second for a fire that burned a chemical battery storage building that was allegedly not cleaned up properly. Although HEER assigned the 1999 events "initial site survey" and "active" status, respectively, it is unlikely that they or the 1994 and 1996 NFA cases would have affected the subject property, given its distance from and elevation above the active area of Waimea Falls Park. No other spills were found for sites situated less than one-quarter mile from the subject property.

HEPCRA Database

HEPCRA requires that facilities report annually on hazardous substances stored on their premises if the amounts stored exceed specified reportable quantities (i.e., the threshold Planning Quantity of 500 pounds, whichever is lower, for Extremely Hazardous Substances, and 10,000 pounds for all other hazardous chemicals for which Material Safety Data Sheets are required). According to a database administrator at HEER, DOH began compiling HEPCRA records by 1993 (H. Cooke, personal communication, December 19, 2002). MFA searched the database (DOH, 2000) and found no listed facilities on the subject property or on adjoining properties.

Hawaii Brownfields Assessment Program

The Hawaii DOH and State Department of Business, Economic Development & Tourism (DBEDT), in conjunction with other State agencies, maintain a list of potential brownfield sites in Hawaii (DBEDT, 2002). A brownfield site is a site with actual or perceived contamination, which also has an active potential for redevelopment or reuse. EDR found no brownfield sites on or near the subject property (EDR, 2004).

Voluntary Response Program (VRP) Sites

Hawaii's VRP, established by statute in 1997 (Chapter 128D, Part II, HRS), encourages voluntary cleanup of contaminated properties. The DOH has the authority to grant prospective purchasers or developers an exemption from future liability if cleanup is performed to DOH specifications under the program. Current or past property owners can participate in this program, but exemptions from liability can only be given to future purchasers. Completion of the voluntary cleanup action is accompanied by a Letter of Completion, issued by the DOH, and recorded on the property deed (HEER, 2004). EDR listed no VRP sites on or near the subject property (EDR, 2004).

3.1.1.3 Supplementary Federal Regulatory Databases

A number of other regulatory databases, not specified by ASTM guidance, are included in EDR's report, or are found on the EPA's public electronic database query systems: Enforcement and Compliance History Online (ECHO) is an e-Government tool

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designed for the public to access environmental compliance information about facilities within their communities. ECHO retrieves EPA and State compliance data under the Clean Air Act, Clean Water Act, and RCRA, and provides helpful links to additional State information (ECHO, 2004). The Facility Registry System (FRS) is a source of comprehensive (air, water, and waste) environmental information about facilities, sites, or places subject to environmental regulations or of environmental interest. FRS information is incorporated from program national systems, state master facility records, data collected from EPA's Central Data Exchange registrations, and data management personnel (EPA, 2004).

MFA searched the FRS and ECHO databases and the EDR report results, and found no facilities near the subject property other than those with records discussed in previous sections.

3.2 PHYSICAL SETTING

3.2.1 Topography and Drainage

Topographic map coverage of the site and vicinity is provided by the U.S. Geological Survey Waimea quadrangles at a scale of 1:24,000 (USGS, 1998) (Figure 1). The property is elongated with the axis centered on the northern ridge of Waimea Valley within the *ahupua'a* of Popukea and Waimea, in the districts of Kōloa and Waialeale (ACT, 2002). The center of the subject property is at approximately 21°38'17.5" north latitude, 158°22'51.0" west longitude. Elevations range from about 200 feet above mean sea level (MSL) at the western (main) end, to 575 feet MSL at the center, up to 750 feet above MSL at the eastern end of the site.

There were no observed streams, ponds, or other water bodies on the site. Steep areas of erosion were evident in the eastern portion of the property created by periods of heavy rainfall and past clearing activities. Runoff generally flows towards the south and south-west end of the property.

3.2.2 Current Land Use and Zoning

The site is currently unoccupied. According to the Department of Planning and Permitting (DPP, 2004), TMK 5-9-23-01 and TMK 5-9-23-01 are zoned AG-2, General Agricultural District. State Land Use for these two TMKs is classified as Agricultural District. TMK 6-1-02-022 is zoned P-1, Restricted Preservation. State Land Use for this TMK is classified as Conservation District.

3.2.3 Geologic and Hydrogeologic Setting

MFA reviewed published geologic and hydrogeologic reports and maps to obtain available information regarding conditions in the general area of the site. A review of the

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geology and hydrogeology of the site and surrounding area indicates the following site characteristics:

Geology

The island of Oahu is formed from the remnants of two large shield volcanoes, the younger Koolau volcano on the east, and the older Waianae volcano to the west. These volcanoes have been subject to extensive erosion and now consist of long, narrow ridges. The Koolau Mountains were built by eruptions that took place primarily along a north-south rift. The subject property is situated on the North Shore of Oahu near the northern end of the Koolau Range, at the top of the northern slopes of Waimea Valley.

Soils

According to the U.S. Soil Conservation Service Survey (Foose, et al., 1972), several soil types, Helemano, Manana, Paalooa, and Waiaawa series are present at the subject site. The Manana, Paalooa and Waiaawa series are typically well-drained soils on uplands. The Helemano silty clay soil is typically found on the sides of V-shaped gulches. Permeability is moderately rapid and runoff is medium to very rapid, and the erosion hazard is severe to very severe. Three types of Manana silty clay are mapped in this area. Runoff ranges from slow to rapid, and the erosion hazard ranges from slight to severe on the steeper slopes. The Paalooa silty clay occurs as narrow areas bounded by steep gulches. Permeability is moderately rapid, runoff is medium, and the erosion hazard is slight to moderate. The Waiaawa silty clay is characterized by slow runoff and a slight erosion hazard.

Hydrogeology

The project area is reported by Mink and Lau (1990) to be situated within the Kawaiaoa aquifer system of the North Aquifer Sector. This aquifer is basal (fresh water in contact with seawater), unconfined (the water table is the upper surface of the saturated aquifer), and occurs in flank (horizontally extensive) lavas. The status code of the groundwater indicates that it is currently used as a drinking water source (fresh salinity < 250 mg/l Cl), and is classified as irreplaceable.

The subject site is located above the DOIH Underground Injection Control (UIC) line (DOIH, 1983).

Surface Waters

No surface waters are present on the subject property. Waimea Bay is located east of the property. Waimea River and Elehaha Stream are both located south, below the property in Waimea Valley (Figure 2). The seasonal pond on Figure 2, described in section 3.1 was not evident at the time of the ESA site visit.

Climate

Average maximum temperature for Waimea, immediately north of the subject property, is 84°F, and average minimum temperature is 66.7°F. Average total precipitation is 22.14 inches per year.

3.3 HISTORICAL USE INFORMATION

Readily available historical documents were examined for topographic, cultural, and land use changes within the subject property area that may have affected its environmental conditions. Sanborn Fire Insurance Maps were not available for the subject site (HDR, 2001). The reviewed sources are listed and summarized below.

- *Archaeological Report For the Subject Property (ACT, 2002)*
 The inventory survey report was reviewed for early (pre-contact) and general history of the subject property and site vicinity.
- *U.S. Geological Survey (USGS 1951), U.S. Department of Agriculture (USDA, 1962), and National Ocean Service (NOIS, 1991 and 2000) Aerial Photographs*
 Structures, signs of construction, roadways, vegetation, and other features are sometimes visible in aerial photographs. Resolution of the available photographs set varied from moderate to good, however, coverage was missing for eastern portions of the subject property in 1951.
- *Topographic maps for: Hawaiian Government Survey (Lyons, 1881); U.S. Army Sheet 18115: 1909-1913; U.S. Geological Survey 1:62,500 Island Of Oahu (USGS, 1917 and 1938) and 1:24,000 Waimea Quadrangle (USGS, 1953, 1966, 1983 and 1998)*
 Topographic maps depict roads, individual buildings and built up areas, forests, trails, waterways, and other features of interest.
- *Tax Maps (First Division): 5-9-000, 5-9-005, 5-9-023, 5-9-024, 6-1-002 and 6-8-022*
 Road alignments, subdivisions, and owner-lessee information are depicted on TMSK base maps drawn in 1912, 1933, 1939, and 1963.
- *City and County of Honolulu Planning Maps (CCH, 1969) and Building Permit Online Records (CCH DPPWeb, 2004)*
 Topography, road alignments, and subdivision plans are depicted on maps. Property details (size, structure types, and build dates, records of alteration and demolition, etc.) and current ownership/leasing information are available on building records cover the period 1972 to present.
- *Internet Information*
 Various web sites have records of miscellaneous historical land use information (CAS, 1940).

Historical Land Use Summary

Archaeological Report. Pu'u O Mahuka Heiau, the largest heiau on O'ahu, is located approximately 800 feet north-northwest of the western end of the subject property, and may have been used for signal fires between Kamae and Oahu, as well as for worship (possibly including rites of sacrifice).

Most of the land north of Waimea Valley, including the subject site, was part of the Pupukea ahupua'a (watershed). In pre-contact times, the ahupua'a was not used for agriculture (except possibly limited dry land practices), nor were permanent dwellings constructed there. It was likely utilized for collection of raw materials. Commercial agriculture began in the Pupukea ahupua'a as early as the 1860s with the production of sugarcane along the coastal plain. Pineapple production began in the uplands in 1910 when the Honolulu Pineapple Co. Ltd. acquired a lease for lands surrounding the Pu'u O Mahuka Heiau and photographs to the 1930s indicate pineapple was cultivated from the heiau to the rim of Waimea Valley. The cultivation of pineapple ceased after the 1960s.

Adjoining parcels have been used for residential purposes since pre-contact times (though to a much lesser extent since catastrophic floods of the late 1800s), and for recreational botanical study purposes since the Waimea Valley Park was developed in the 1900s. In recent years, portions of the subject property have been used for recreational purposes.

1881 Topographic Map. The subject property straddled the boundary (possibly indicated by fences) between Pupukea (Town Land) and Waimea (Half School Land, half made a division of illegible ownership) ahupua'a. A railway was located along the ocean shoreline a few hundred feet west of the subject property by 1898. Two structures are indicated, one on either side of Waimea River, south of the western end of the subject property. No roads or structures are indicated on the subject property or on other adjoining properties.

1909-1913 Topographic Map. The subject property is indicated to be mostly grassland, and the present-day north boundary of the site's TMK 6-1-002-022 was fenced, suggesting that the site was ranch property used for pasturing stock. A trail or crude road descended from the south-central portion of the subject property to Waimea Valley and connected with the valley trail system. Two structures were located approximately 400 to 1,000 feet south of the subject property (below), near the fork of Elehaha and Kamae Streams (Figure 1). An improved road ascended from the coastal highway up the ridge of Pupukea, aligned with present-day Pupukea Road north of the subject site. Pineapple fields and several structures were located immediately south of Pupukea Road (at least several hundred feet north of the subject property), but none were mapped on the subject site or on other adjoining properties.

1917 Topographic Map. Three structures are indicated on the north bank of Waimea Stream (or Elehaha branch of the stream) a few hundred feet south-below the subject property. Several new structures are mapped to the north of the subject site, two of which are about 200 feet north of the northwestern boundary and the northernmost corner of the site's TMK 5-9-024-001, respectively. No structures are shown on the subject property.

1918 The "Haley" variety of avocado reportedly originated in 1918 on the Haley Bros. Ranch in Pupukea (CAS, 1946), indicating that avocado orchards and ranching were active in the site vicinity by this period.

1930s Tax Maps. By 1932, the Waialua - Ko'olauloa District Boundary line is evident. The present-day Pu'u O Mahuka Monument (Figure 1) is indicated approximately 800 feet northwest of the site, labeled "Heiau Reserve." By 1933, a road extended east from the heiau to a north-south land division boundary, and then south to the northern edge of the western end of the property. This "heiau road" (Figure 2) is labeled as a 14-foot wide easement (Land Court App 5617). By at least 1939, the heiau was designated "Pu'u O Mahuka Heiau Site, State of Hawaii." An unimproved road along Waimea River (aligned along former trails) extended to the Elehaha and Kamae streams of Waimea River by at least 1933.

1938 Topographic Map. Pu'u O Mahuka Heiau is mapped. An unimproved road connected it to the subject property's western corner. An unimproved road extended from the Pupukea Road to near the northern corner boundary line of the subject property.

1951 Aerial Photograph. The photo coverage of the western half of the subject property indicates that it was mostly scrub-wooded land, except for a pasture-like area toward the central plateau region of the site. A rectangular small clearing or structure is visible immediately north of the subject property, at the intersection of Plats 5 and 27 of Zone 5 Section 9 (Figure 2), immediately north of the subject property. A road or trail was present along the district boundary (within the western portion of the subject property).

1953 Topographic Map. Pupukea Homestead Road and Pupukea Homestead (south of the road) are indicated north of the subject property. No other roads were mapped in the site vicinity. The subject site and vicinity are mostly wooded. Orchards (possibly, avocado as indicated by previously discussed documents) were mapped in the area north and north-west of the subject site near the heiau.

1962 Aerial Photograph. By 1962, the subject property appears to have been mostly grassy, vacant, pasture land. A small but prominent circular depression on the site, located at the northern corner, appears to be dry. No signs of development are visible on the subject property, except for fence lines along the district boundary and along the southern subject property boundary along the heiau road across the western corner of the subject property, possibly continuing along the southern boundary to nearly mid-property line, at which point the road or trail dropped down into the Elehaha Stream valley. Another road or trail is visible winding in the valley, along the northernmost portion of the subject property (TMK 5-9-024-001).

Cultivated land, likely an orchard, was present in the area between the western end of the subject property and the heiau. A square building is visible along the east edge of the orchard, in the clearing rectangular footprint (Figure 2) tentatively identified in the 1951

Road, approximately 300 feet north of the subject property. No other structures were mapped on adjoining properties.

1976 and later Building Permits. Building permits indicate that subdivisions/drawings were built after 1976 on parcels adjoining the north subject site boundary. The majority of new buildings were started in the early 1970s. (See the end of this section for details.)

1977 Orthophotogrammetry: There appears to be a cleared area on the eastern end of the subject property near the ridge line. Akamohi Road is located north of the property. The northern portion of Akamohi Road appears to be heavily wooded. The subject site appears to be heavily wooded as well.

1966 Topography Map. The subject site vicinity is indicated to be mostly open land with limited residential development. Orchards are identified north of Pupukea Road at the western end, near the heiau. An intermittent lake pond or reservoir is indicated at the end of Maulukua Road, near the entrance to adjoining TMK 5-9-023 001. There appears to have been active grading/clearing in the vicinity of the water body (reservoir).

1969 CCH Planning Maps. The subject site was mostly cleared land, except for the forested southern boundary, within the north half of the subject property along the Kalahopele (which stream drainage Maulukua Road terminated at the adjoining TMK 5-9-023 001 northern boundary, and a trail extended southwest from the termination point to the north side of the fenced district/site boundary. The trail descended westward on fenced ridge boundary line for approximately 1,000 feet, terminating at a knob within the subject property. The seasonal pond adjoining the site's eastern end (Figure 2) is indicated to be about 12 feet deep (from an elevation of 744.5 feet above MSL). An above ground storage tank (AST) was located south of the seasonal pond and fenced subject property line (Figure 2). Available records do not indicate if the AST was used for watering stock, or if it was used for some other purpose.

1983 Aerial Photograph. The subject property was vacant and mostly scrub with some wooded areas. A few small grassy and bare earth patches were present in woods near the site's center. The trace of the old fence line/district boundary is visible, however, the road trail from the heiau road (along the south side of the boundary) branched away from the boundary to the southeast, meaning through the center of TMK 6-1-002 022, and then back up to the boundary line. Other trails are barely visible along valley runs, site boundaries. A large cleared area is visible on the northeast corner of the subject property and adjoining portion of TMK 5-9-023 001, near the termination of an unpaved extension of Maulukua Road. Two new structures had been built on the former (1969) nursery parcel to the east of Maulukua Road.

No structures are indicated on the subject property. The nearest structure was located along the heiau road as a square building footprint (as observed in the 1962 aerial photograph), approximately 150 feet from the western portion of the subject site. The Waimea Valley Road is indicated. The valley road was still unpaved, but side roads extended north toward the subject property within a cluster of structures, including a large building mapped about 300 feet south of the subject site.

A trail extended southwest from Maulukua Place to the northern property line of the subject site, where it terminated. No structures are indicated at two nurseries mapped immediately north of the adjoining eastern portion of TMK 5-9-023 001 (one on each side of Maulukua

The portion of the heiau road along the east side of the adjoining orchard land was partially vegetated and apparently out of use except as a trail. The orchard appears to have been abandoned and is difficult to distinguish from surrounding scrub land. The structure on the east side of the former heiau road had been demolished, and a rectangular, cleared (red dirt) area remained. The Waimea Falls Park area was essentially unchanged.

1998 Topographic Map. The subject property is indicated to be vacant land, completely forested. Approximately 10 structures had been built on parcels adjoining the northern subject property line since the 1983 topographic map was drawn. A structure previously mapped in 1983 within the northern adjoining parcels had been expanded to a large size. Waimea Valley Road had been paved, and the large 1983 structure within 300 feet of the subject site had been replaced by a small building. The Waimea Valley Road alignment was slightly changed near the former large structure. Several small buildings mapped in 1983

Phase I Environmental Site Assessment
 Pupukea Highlands Petition Area
 TMK (I) 5-9-23 Parcel 01 (Portion), 5-9-24 Parcel 01, and 6-1-02 Parcel 22
 MFA Project Number 04096-056
 May 2004

Phase I Environmental Site Assessment
 Pupukea Highlands Petition Area
 TMK (I) 5-9-23 Parcel 01 (Portion), 5-9-24 Parcel 01, and 6-1-02 Parcel 22
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Phase I Environmental Site Assessment
 Pupukea Highlands Petition Area
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 MFA Project Number 04096-056
 May 2004

adjoining property Waimea Falls Park, as discussed in Section 3.1. However, the active portions of Waimea Falls Park are situated more than 500 feet south of and 100 to 200 feet lower in elevation than the subject property, and Park activities are unlikely to have had any effect on the subject site.

4.6 OTHER ENVIRONMENTAL ISSUES

No other environmental issues were identified that may affect the subject property.

5.0 CONCLUSIONS

We have performed a Phase I Environmental Site Assessment of the subject property in Pupukea. Our work was conducted in accordance with the scope and limitations of ASTM Practice E 1527-00. Any exceptions to, or deletions from, this practice are described in Section 1.4 of this report.

The subject site is currently unoccupied. Review of available regulatory records and DGH files did not indicate reported releases to the environment on or immediately adjacent to the subject property. Our investigation did not find environmental concerns at the subject property.

We note that due to the dense nature of the vegetation in areas and steep slopes of the southern portion of the site, we were unable to access or observe the entire surface area of the site. While we did access areas such as the dirt trails, and clearings, where disposal of hazardous materials or wastes could have occurred, such items may be located beneath dense vegetation in other areas. Should potentially hazardous materials be found during clearing and grading of this site, the disposition of such materials should be appropriately addressed.

6.0 REFERENCES

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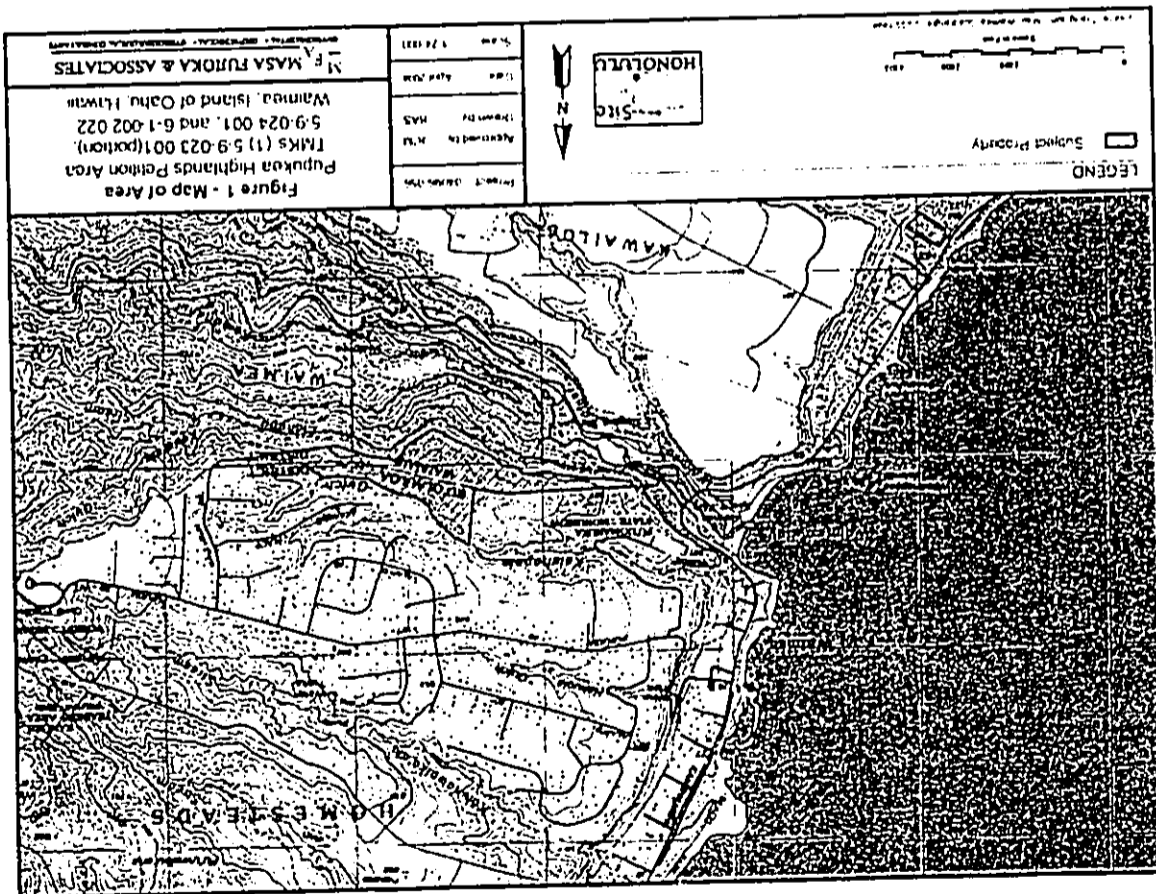
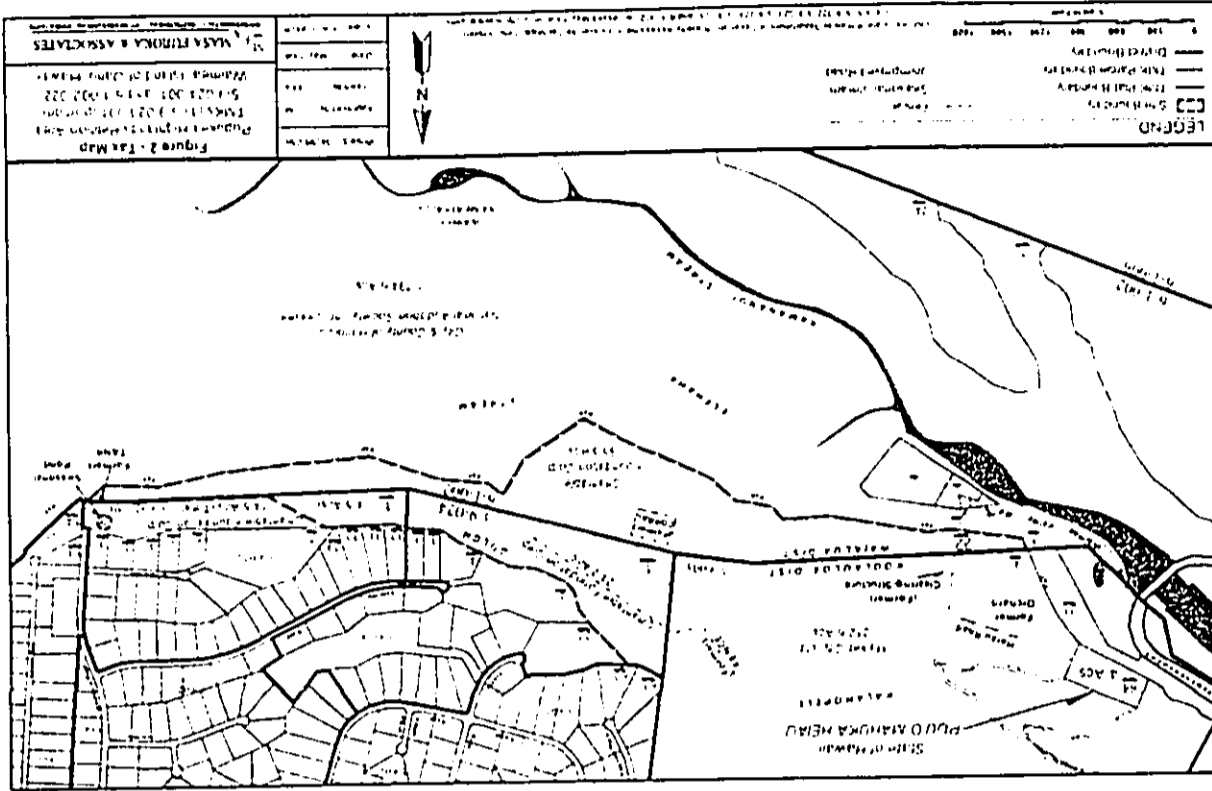
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M F A
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- US Army, 1909-1913 *Topographic Maps, Island of Oahu (1:16,000)* United States Army Military Survey of Oahu, Sheet W8315, Washington
- USDA, 1962 *Aerial Photograph EKM FCC-105* United States Department of Agriculture December 4, 1962
- USGS, 1951 *Aerial Photograph GNF M 0 1-16* United States Department of the Interior Geological Survey, Washington, May 14, 1951
- USGS, 1917, 1938 *Topographic Maps, Island of Oahu (1:62,500)* United States Department of the Interior Geological Survey, Washington
- USGS, 1977 *Orthophotorectangle, Waimoa Quadrangle (1:24,000)* United States Department of the Interior Geological Survey, Washington
- USGS, 1953, 1966, 1983 and 1998 *Topographic Maps, Waimoa Quadrangle (1:24,000)* United States Department of the Interior Geological Survey, Washington

FIGURES





The EDR Radius Map™ Report

Papouka Highlands Petition Area
Waimea Valley Road
Haleiwa, HI 96712

Enquiry Number: 01177852.1r

April 23, 2004

APPENDIX A

ENVIRONMENTAL DATA RESOURCES, INC. REPORT

(incl. Sanborn Map No Coverage Letter)

**The Standard in
Environmental Risk
Management Information**

440 Wheelers Farms Road
Milford, Connecticut 06460

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

EXECUTIVE SUMMARY

FEDERAL ASIM SUPPLEMENTAL

SWIFL Permitted Landfills in the State of Hawaii
LUST Leachate Underground Storage Tank Database
VCP Voluntary Response Program Sites

FEDERAL ASIM SUPPLEMENTAL

CONSENT Subpart 111.1 (EPA) General Reviews
ROD Records of Decision
DELETED RPL Regional Priority List Detections
HRIIS Hazardous Materials Information Reporting System
HALES Material Handling Tracking System
HALES Mines Master Index File
RPL Items Federal Superfund Sites
PADS PCB Activity Database System
INDIAN RESERV Indian Reservations
US BROWNFIELDS A Listing of Brownfields Sites
RAATS Department of Defense Sites
TRIS RCRA Administrative Action Tracking System
ISCA Toxic Substances Control Act
SSTS Section 106 Reporting System
FTTS INSP FTTS/TSCA Tracking System, FTTS/TSCA (Toxic Substances Control Act)
Multi-State Act/TSCA (Toxic Substances Control Act)

EDR PROPRIETARY HISTORICAL DATABASES

Coal Oils Former Manufactured Coal (Low Coal) Sites

INCINERATOR DATABASES

US BROWNFIELDS A Listing of Brownfields Sites
BROWNFIELDS Brownfields Sites
VCP Voluntary Response Program Sites

SURROUNDING SITES - SEARCH RESULTS

Surrounding sites were identified

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property. Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in **bold italics** are in multiple databases.

Unmistakable (or/ran) sites are not considered in the foregoing analysis.

FEDERAL ASIM STANDARD

EXECUTIVE SUMMARY

RCRIS Resource Conservation and Recovery Information System. RCRIS includes site information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Consignees of small quantity generators (SQGs) generate less than 100 kg of hazardous waste or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month. Large quantity generators (LQGs) generate over 1,000 kg of hazardous waste or over 1 kg of acutely hazardous waste from the generator off site to a facility that can recycle, treat, store, or dispose of the waste. TSCA's treat, store or dispose of the waste.

A review of the FIRMOS list as provided by EDR and dated 02/29/2004 has revealed that there is 1 FIRMOS SQG site which approximately 1 mile of the target property.

Lower Elevation	Address	Dist/Dir	Map ID	Page
WAINEA FALLS PARK UTILITY SITE	59 864 KAMEHAMEHA HWY	14 - 1/2 WSW	B4	5

STATE ASIM STANDARD

USE The Underground Storage Tank Database includes petroleum, toxic, and flammable liquids. The database includes information on the location, ownership, and capacity of USTs. The database also includes information on the status of USTs and the date of their removal.

Equal/Higher Elevation	Address	Dist/Dir	Map ID	Page
OAHU LANDSCAPING	59 661 ALAPIO RD	14 - 1/2 WSW	A2	6

Lower Elevation	Address	Dist/Dir	Map ID	Page
WAINEA FALLS PARK	59 864 KAMEHAMEHA HWY	14 - 1/2 WSW	B4	5

FEDERAL ASIM SUPPLEMENTAL

FINDS The Facility Index System contains both facility information and "toxicity" to other sources of information that contain more detail. These include RCRA, Permit Compliance System (PCS), Air Quality Information Retrieval System (AIRS), FTS (FTS/Federal Insecticide Fungicide Rodenticide Act) and TSCA Enforcement System (FTS/FIRRA/TSCA Tracking System) CERCLA, RCRA (Enforcement Database) used to manage and track information on federal enforcement cases for all environmental statutes. Federal Underground Storage Tank (UST) Federal Report (Data System (FRDS)), Surface Impoundments (SIA), TSCA Chemicals in Commerce System (CICS), PADS, RCRA (Federal Waste Transfer/Disposers) TRIS, and TSCA. The source of the database is the U.S. EPA/NTIS.

A review of the FIRMOS list as provided by EDR and dated 02/29/2004 has revealed that there are 2 FIRMOS sites which approximately 0.75 miles of the target property.

Equal/Higher Elevation	Address	Dist/Dir	Map ID	Page
OAHU LANDSCAPING	59 661 ALAPIO RD	14 - 1/2 WSW	A1	6

EXECUTIVE SUMMARY

Lower Elevation Address Dist/Dir Map ID Page
WAIMEA FALLS PARK UTILITY SITE **59 864 KAMENAMEHA HWY** **1/4 - 1/2 WSW B4** **8**

STATE OR LOCAL ASTM SUPPLEMENTAL

SPILLS: Releases of hazardous substances to the environment reported to the Office of Hazard Evaluation and Emergency Response since 1989

A review of the SPILLS list, as provided by EDR, and dated 03/01/2000 has revealed that there are 3 SPILLS sites within approximately 0.75 miles of the target property

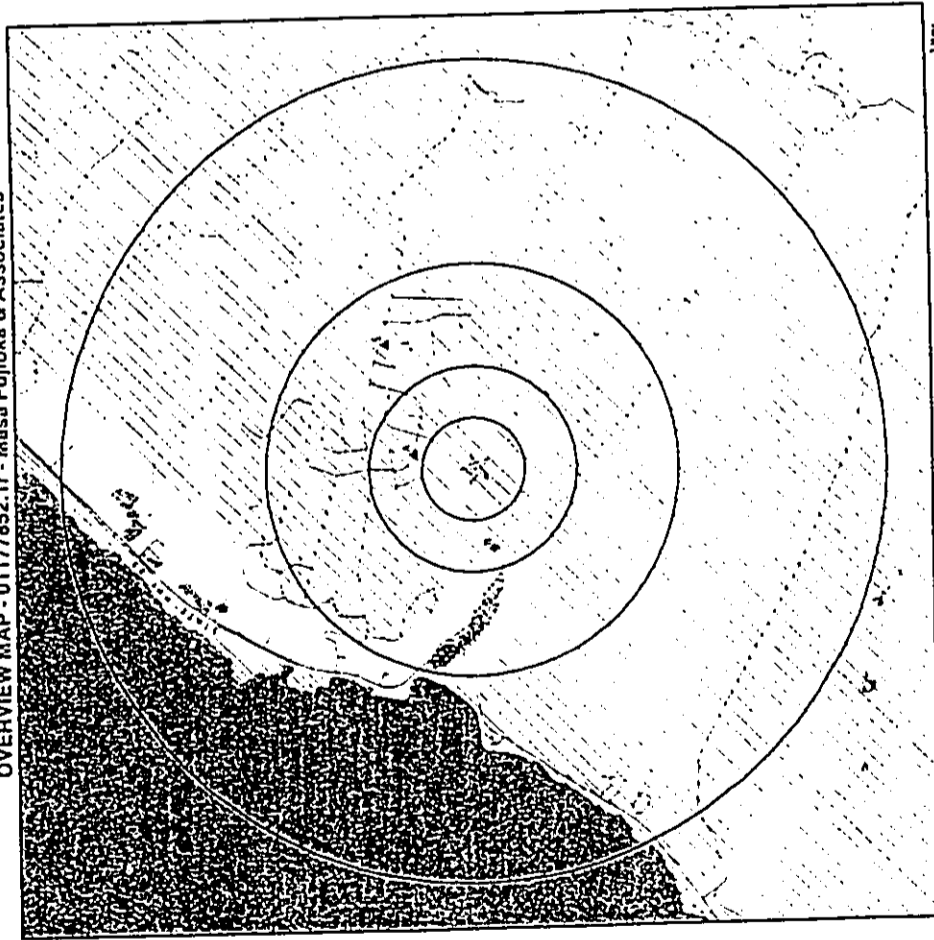
Equal/Higher Elevation	Address	Dist/Dir	Map ID	Page
TUFF JOBCOKE INDUSTRIES S1	59-536 PUPIKEA RD	1/2 - 1	1/4 - 1/2 WSW B4	8
Lower Elevation	Address	Dist/Dir	Map ID	Page
WAIMEA FALLS PARK	59-864 KAMENAMEHA HWY	1/4 - 1/2 WSW B3		6
WAIMEA FALLS PARK UTILITY SITE	59-864 KAMENAMEHA HWY	1/4 - 1/2 WSW B4		8

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped:

Site Name	Databases(s)
KAWAULOA LANDFILL	SWP/LS
KAPAA LANDFILL	SWP/LS
NEW HANULUA LANDFILL	SWP/LS
OLD WILIAHI LANDFILL	SWP/LS
KAWAOKA BROS LIMITED	REFRIG-SOG EPHOS
TRIPCAL SS RD 0713	REFRIG-SOG EPHOS
PULUKA ROOSTER #11	PHOS

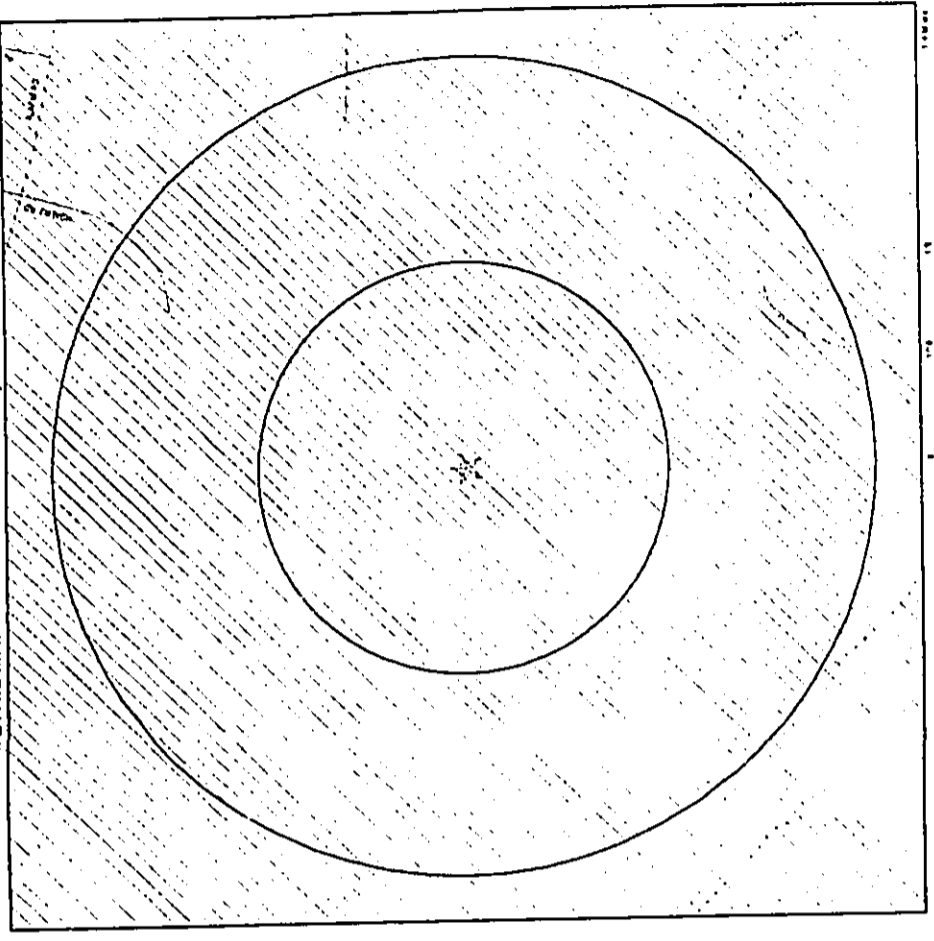
OVERVIEW MAP - 01177852.1r - Masa Fujioka & Associates



- Target Property
 - Sites at elevations higher than or equal to the target property
 - Sites at elevations lower than the target property
 - Coal Gasification Sites
 - National Priority List Sites
 - Launch Sites
 - Dept. Defense Sites
- Indian Reservations MA
- 04 & Gas pipelines
 - 100 year flood zone
 - 500 year flood zone
 - Federal Airstrip

TARGET PROPERTY	Punahoa Highlands Picnic Area	CUSTOMER	Masa Fujioka & Associates
ADDRESS	Waimoa Valley Road	CONTACT	Beth Sargent
CITY/STATE/ZIP	Honolulu HI 96712	INQUIRY #	01177852.1r
LAT/LONG	21 6332 / 158 0475	DATE	April 23, 2004 6:55 pm

DETAIL MAP - 01177852.1r - Masa Fujioka & Associates



- Target Property
 - Sites at elevations higher than or equal to the target property
 - Sites at elevations lower than the target property
 - Coal Gasification Sites
 - National Priority List Sites
 - Launch Sites
 - Dept. Defense Sites
- Indian Reservations MA
- 04 & Gas pipelines
 - 100 year flood zone
 - 500 year flood zone

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CITY/STATE/ZIP	Honolulu HI 96712	INQUIRY #	01177852.1r
LAT/LONG	21 6332 / 158 0475	DATE	April 23, 2004 6:55 pm

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

The following records of the following Federal and State Agencies (EPA) contain the appropriate government records as follows:
 An Agency's records have been accessed

Digitized ASIM Data Provides information on all the EIR report records as reported in the ASIM database

FEDERAL ACTION MANAGEMENT BY CURBS

API System Version 1.01
 Source: EPA
 Telephone: 914
 National Database - List (Supplement) The list is a subset of CERCLIS and is derived from EPA's data base for the
 re-implementation of the Superfund program. It lists all sites which are currently under EPA's jurisdiction, including
 sites for which EPA has issued a Remedial Investigation Report (RI) or a Remedial Action Plan (RAP) or a
 (RI) and (RAP) and (RI) and (RAP) sites.

Date of Government Version: 01/27/04
 Date Made Active: EIR: 02/27/04
 Database Release Frequency: Semi Annual

API Site Headlines
 Source: EPA
 Telephone: 914
 National Database - List (Supplement) The list is a subset of CERCLIS and is derived from EPA's data base for the
 re-implementation of the Superfund program. It lists all sites which are currently under EPA's jurisdiction, including
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Date of Government Version: 01/27/04
 Date Made Active: EIR: 02/27/04
 Database Release Frequency: Semi Annual

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Date of Government Version: 01/27/04
 Date Made Active: EIR: 02/27/04
 Database Release Frequency: Semi Annual

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Date of Government Version: 01/27/04
 Date Made Active: EIR: 02/27/04
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 Date Made Active: EIR: 02/27/04
 Database Release Frequency: Semi Annual

API Site Headlines
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 Telephone: 914
 National Database - List (Supplement) The list is a subset of CERCLIS and is derived from EPA's data base for the
 re-implementation of the Superfund program. It lists all sites which are currently under EPA's jurisdiction, including
 sites for which EPA has issued a Remedial Investigation Report (RI) or a Remedial Action Plan (RAP) or a
 (RI) and (RAP) and (RI) and (RAP) sites.

Date of Government Version: 01/27/04
 Date Made Active: EIR: 02/27/04
 Database Release Frequency: Semi Annual

API Site Headlines
 Source: EPA
 Telephone: 914
 National Database - List (Supplement) The list is a subset of CERCLIS and is derived from EPA's data base for the
 re-implementation of the Superfund program. It lists all sites which are currently under EPA's jurisdiction, including
 sites for which EPA has issued a Remedial Investigation Report (RI) or a Remedial Action Plan (RAP) or a
 (RI) and (RAP) and (RI) and (RAP) sites.

Date of Government Version: 01/27/04
 Date Made Active: EIR: 02/27/04
 Database Release Frequency: Semi Annual

API Site Headlines
 Source: EPA
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 (RI) and (RAP) and (RI) and (RAP) sites.

Date of Government Version: 01/27/04
 Date Made Active: EIR: 02/27/04
 Database Release Frequency: Semi Annual

API Site Headlines
 Source: EPA
 Telephone: 914
 National Database - List (Supplement) The list is a subset of CERCLIS and is derived from EPA's data base for the
 re-implementation of the Superfund program. It lists all sites which are currently under EPA's jurisdiction, including
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 (RI) and (RAP) and (RI) and (RAP) sites.

Date of Government Version: 01/27/04
 Date Made Active: EIR: 02/27/04
 Database Release Frequency: Semi Annual

API Site Headlines
 Source: EPA
 Telephone: 914
 National Database - List (Supplement) The list is a subset of CERCLIS and is derived from EPA's data base for the
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 (RI) and (RAP) and (RI) and (RAP) sites.

Date of Government Version: 01/27/04
 Date Made Active: EIR: 02/27/04
 Database Release Frequency: Semi Annual

Site ID	Site Name	Site Address	State
ED01	KAWAIA BROS LIMITED	PO BOX 1000	HI
ED02	PUPUEA BOOSTER NO 1	PO BOX 1000	HI
ED03	UNOOL, SS NO 213	PO BOX 1000	HI
ED04	KAWAIA LANDFILL	PO BOX 1000	HI
ED05	KAWAIA LANDFILL	PO BOX 1000	HI
ED06	KAWAIA LANDFILL	PO BOX 1000	HI
ED07	KAWAIA LANDFILL	PO BOX 1000	HI
ED08	KAWAIA LANDFILL	PO BOX 1000	HI
ED09	KAWAIA LANDFILL	PO BOX 1000	HI
ED10	KAWAIA LANDFILL	PO BOX 1000	HI
ED11	KAWAIA LANDFILL	PO BOX 1000	HI
ED12	KAWAIA LANDFILL	PO BOX 1000	HI
ED13	KAWAIA LANDFILL	PO BOX 1000	HI
ED14	KAWAIA LANDFILL	PO BOX 1000	HI
ED15	KAWAIA LANDFILL	PO BOX 1000	HI
ED16	KAWAIA LANDFILL	PO BOX 1000	HI
ED17	KAWAIA LANDFILL	PO BOX 1000	HI
ED18	KAWAIA LANDFILL	PO BOX 1000	HI
ED19	KAWAIA LANDFILL	PO BOX 1000	HI
ED20	KAWAIA LANDFILL	PO BOX 1000	HI

CHRYSLER SUMMARY

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

BAAS - RCRA & Superfund Action Tracking System
 Date of Last EPC Control N/A
 Date of Next Scheduled EPC Control N/A
 Source: EPA
 Telephone: 202-564-1001
 This is a permit action tracking system. BAAS contains data on all permit actions issued under RCRA, CERCLA, and Superfund. It also contains data on all RCRA, CERCLA, and Superfund permit actions. The system is updated daily. A copy of the database is available to the public. The system is available to the public on a 24-hour basis.

EBIS - Toxic Chemical Release Inventory System
 Source: EPA
 Telephone: 202-564-1001
 This is a permit action tracking system. EBIS contains data on all permit actions issued under RCRA, CERCLA, and Superfund. It also contains data on all RCRA, CERCLA, and Superfund permit actions. The system is updated daily. A copy of the database is available to the public. The system is available to the public on a 24-hour basis.

ETIS - Emergency Response System
 Source: EPA
 Telephone: 202-564-1001
 This is a permit action tracking system. ETIS contains data on all permit actions issued under RCRA, CERCLA, and Superfund. It also contains data on all RCRA, CERCLA, and Superfund permit actions. The system is updated daily. A copy of the database is available to the public. The system is available to the public on a 24-hour basis.

ETIS - Emergency Response System
 Source: EPA
 Telephone: 202-564-1001
 This is a permit action tracking system. ETIS contains data on all permit actions issued under RCRA, CERCLA, and Superfund. It also contains data on all RCRA, CERCLA, and Superfund permit actions. The system is updated daily. A copy of the database is available to the public. The system is available to the public on a 24-hour basis.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PAAS - PCB Activity Database System
 Date of Last EPC Control 03/17/01
 Date of Next Scheduled EPC Control 05/24/01
 Source: EPA
 Telephone: 202-564-1001
 This is a permit action tracking system. PAAS contains data on all permit actions issued under RCRA, CERCLA, and Superfund. It also contains data on all RCRA, CERCLA, and Superfund permit actions. The system is updated daily. A copy of the database is available to the public. The system is available to the public on a 24-hour basis.

STORMWATER - Storm Water General Permits
 Source: Environmental Protection Agency
 Telephone: 202-564-0246
 This is a permit action tracking system. STORMWATER contains data on all permit actions issued under RCRA, CERCLA, and Superfund. It also contains data on all RCRA, CERCLA, and Superfund permit actions. The system is updated daily. A copy of the database is available to the public. The system is available to the public on a 24-hour basis.

INDIAN RESERVE - Indian Reservations
 Source: EPA
 Telephone: 202-564-1001
 This is a permit action tracking system. INDIAN RESERVE contains data on all permit actions issued under RCRA, CERCLA, and Superfund. It also contains data on all RCRA, CERCLA, and Superfund permit actions. The system is updated daily. A copy of the database is available to the public. The system is available to the public on a 24-hour basis.

US BROWNFIELDS - Aiming of Brownfields Sites
 Source: Environmental Protection Agency
 Telephone: 202-564-1001
 This is a permit action tracking system. US BROWNFIELDS contains data on all permit actions issued under RCRA, CERCLA, and Superfund. It also contains data on all RCRA, CERCLA, and Superfund permit actions. The system is updated daily. A copy of the database is available to the public. The system is available to the public on a 24-hour basis.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

STATE OF HAWAII
 Date of Government Version: 01/01/01
 Database Release Frequency: Quarterly

SHWS - Sites List

Source: Department of Health
 Telephone: 808-586-4249
 Facilities: Sites in areas in which the State of Hawaii Environmental Emergency Response has an ordered RUC
 are displayed in many areas under 1005, 1003 (includes all RUCs sites)

Date of Government Version: 01/01/01
 Database Release Frequency: Semi-Annually

SWHE - Promote safety in the workplace
 Source: Department of Health
 Telephone: 808-586-4249
 Facilities: Sites in areas in which the State of Hawaii Environmental Emergency Response has an ordered RUC
 are displayed in many areas under 1005, 1003 (includes all RUCs sites)

JUST - Justice Department Storage List Database

Source: Department of Health
 Telephone: 808-586-4249
 Facilities: Sites in areas in which the State of Hawaii Environmental Emergency Response has an ordered RUC
 are displayed in many areas under 1005, 1003 (includes all RUCs sites)

UST - Utility and Storage Tank Database

Source: Department of Health
 Telephone: 808-586-4249
 Facilities: Sites in areas in which the State of Hawaii Environmental Emergency Response has an ordered RUC
 are displayed in many areas under 1005, 1003 (includes all RUCs sites)

VCP - Voluntary Remediation Program Sites

Source: Department of Health
 Telephone: 808-586-4249
 Facilities: Sites in areas in which the State of Hawaii Environmental Emergency Response has an ordered RUC
 are displayed in many areas under 1005, 1003 (includes all RUCs sites)

STATE OF HAWAII SUPPLEMENTAL RECORDS

SHWS - Sites List
 Source: Department of Health
 Telephone: 808-586-4249
 Facilities: Sites in areas in which the State of Hawaii Environmental Emergency Response has an ordered RUC
 are displayed in many areas under 1005, 1003 (includes all RUCs sites)

FOR PROPERTIES HISTORICAL DATABASES

Source: Department of Health
 Telephone: 808-586-4249
 Facilities: Sites in areas in which the State of Hawaii Environmental Emergency Response has an ordered RUC
 are displayed in many areas under 1005, 1003 (includes all RUCs sites)

Disclaimers Provided by Real Property Scan, Inc.
 The information contained in this report has been prepared by Real Property Scan, Inc. from publicly available sources produced by either
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 Scan, Inc. does not warrant the accuracy of this report. Any liability for the use of this report is limited to the amount of the
 fee paid for this report. Disclaimers made for this report are in effect at all times. This report does not constitute a legal
 opinion.

PHONOLITHS DATABASES

Source: Department of Health
 Telephone: 808-586-4249
 Facilities: Sites in areas in which the State of Hawaii Environmental Emergency Response has an ordered RUC
 are displayed in many areas under 1005, 1003 (includes all RUCs sites)

VCP - Voluntary Remediation Program Sites

Source: Department of Health
 Telephone: 808-586-4249
 Facilities: Sites in areas in which the State of Hawaii Environmental Emergency Response has an ordered RUC
 are displayed in many areas under 1005, 1003 (includes all RUCs sites)

US BROWNFIELD - At-Risk of Brownfields Sites

Source: Environmental Protection Agency
 Telephone: 202-566-7777
 Facilities: Sites in areas in which the State of Hawaii Environmental Emergency Response has an ordered RUC
 are displayed in many areas under 1005, 1003 (includes all RUCs sites)

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: N/A
Database Release Frequency: Semi-Annually
Date of Last EDR Update: N/A
Date of Last Software EDR Update: N/A

OTHER DATABASE(S)

Depending on the geographic area covered by the report, the data presented in these specialty databases may or may not be complete. For example, the evidence of wellhead information data in a specific report does not mean that all wellheads in the area covered by the report are included. Moreover, the absence of any reported wellhead information does not necessarily mean that wellheads do not exist in the area covered by the report.

Oil/Gas Pipelines: This data was obtained from the EDR from the USGS in 1993. It is updated by USGS in calendar years of one to two years from 1993. State Maps. It was obtained from the Department of Energy by updating some of the primary data files.

Electric Power Transmission Line Data
Source: Fossil Fuel Corporation
Telephone: (408) 823-6277
This map includes information researched by Fossil Fuel Corporation. The information is provided on a best effort basis and Fossil Fuel Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been compiled in the possession of Fossil Fuel Corporation.

Sensitive Receptions: These are facilities deemed sensitive receptors due to their highly sensitive systems and special security, environmental discharge, or other sensitive receptors. These sensitive receptors typically include the city and children. While the term of all sensitive receptors cannot be determined, EDR indicates these buildings and facilities. Schools, daycares, hospitals, medical centers, and nursing homes, where children are in sensitive receptors, are likely to be included.

ANA Hospitals
Source: American Hospital Association, Inc.
Telephone: 312-769-5591
The database includes listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Center for Disease Control & Prevention
Telephone: (410) 786-9000
A listing of hospitals with telephone provider numbers provided by Centers for Disease Control & Prevention's National Nursing Homes.

Source: National Institute of Health
Telephone: 301-524-2248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-512-7350
The National Center for Education Statistics primary database on elementary and secondary public education in the United States. It is a comprehensive annual national statistical database of all public elementary and secondary schools and school districts which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics primary database on private school students in the United States.

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1993 from the Federal Emergency Management Agency (FEMA). Data covers 100 year and 500 year flood zones as defined by FEMA.

NWI National Wetlands Inventory: This data is available in select counties across the country, was obtained by EDR in 2002 from the US Fish and Wildlife Service.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: N/A
Database Release Frequency: Semi-Annually
Date of Last EDR Update: N/A
Date of Last Software EDR Update: N/A

OTHER DATABASE(S)

Depending on the geographic area covered by the report, the data presented in these specialty databases may or may not be complete. For example, the evidence of wellhead information data in a specific report does not mean that all wellheads in the area covered by the report are included. Moreover, the absence of any reported wellhead information does not necessarily mean that wellheads do not exist in the area covered by the report.

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Information on Medicare and Medicaid certified nursing homes in the United States.

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Source: National Center for Education Statistics
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NWI National Wetlands Inventory: This data is available in select counties across the country, was obtained by EDR in 2002 from the US Fish and Wildlife Service.



The EDR Radius Map™ Report

Pupukea Highlands Petition Area
Waimea Valley Road
Haleiwa, HI 96712

Inquiry Number: 01177852.1r

April 23, 2004

The Standard in Environmental Risk Management Information

440 Wheelers Farms Road
Milford, Connecticut 06460

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrmet.com

EXECUTIVE SUMMARY

RCRIS Resource Conservation and Recovery Information System. RCRIS includes selective information on sites which generate hazardous waste and/or RCRA Title II (RCRA) Conditional Exemption Small Quantity Generators (CESQSGs) generate less than 100 kg of hazardous waste or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month. Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste or over 1 kg of acutely hazardous waste from the generator off site to a facility multistage air treatment or disposal of the waste. TSOs treat, store, or dispose of the waste.

A review of the RCRIS SQG list, as provided by EDR, and dated 01/19/2001 has revealed that there is 1 RCRIS SQG site within approximately 1 mile of the target property.

Lower Elevation	Address	Dist/Dir	Map ID	Page
59-661 ALAPIO RD	59-661 KAMEHAMEHA HWY	1.4 - 1/2 N/E	A1	6

STATE ASM STANDARD

UST - The information on page 1 of the information system report dated 01/19/2001 has revealed that there is 1 UST site within approximately 1 mile of the target property. The data come from the Department of Health's listing of underground storage tanks.

A review of the UST list, as provided by EDR, and dated 01/19/2001 has revealed that there are 2 UST sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Dist/Dir	Map ID	Page
0-0 HUI LAH-DSCAPING	59-661 ALAPIO RD	1.4 - 1/2 N/E	A2	6
Lower Elevation	Address	Dist/Dir	Map ID	Page
WAIKICA FALLS PARK	59-664 KAMEHAMEHA HWY	1.4 - 1/2 W/SW	D3	6

FEDERAL ASIM SUPPLEMENTAL

FNDS - The Facility Inspection System contains both facility information and "pointers" to other sources of information that contain more detail. These include RCRIS, Permit Compliance System (PCS), Aromatics Information Retrieval System (AIRS), FATES (FIFRA/Federal Insecticide Fungicide Rodenticide Act) and TSCA Enforcement System (FTS) (FIFRA/TSCA Tracking System), CERCLA/RCRA Docket (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), Federal Underground Injection Control (FURIC) Federal Reporting Data System (FRDS), Surface Impoundments (SIA), TSCA Chemicals as Commercial Information System (CICIS), PADS, RCRA-J (hazardous waste treatment operations), TRIS, and TSCA. The source of this database is the U.S. EPA/RTIS.

A review of the FNDS list, as provided by EDR, and dated 02/04/2001 has revealed that there are 2 FNDS sites within approximately 0.75 miles of the target property.

Equal/Higher Elevation	Address	Dist/Dir	Map ID	Page
0-0 HUI LAH-DSCAPING	59-661 ALAPIO RD	1.4 - 1/2 N/E	A1	6

EXECUTIVE SUMMARY

Inventory Lists in the State of Hawaii
Leaking Underground Storage Tank Database
Voluntary Remediation Program Sites

FEDERAL ASIM SUPPLEMENTAL

- CONSENT - Superfund (CERCLA) Consent Deeds
- ADD - National Priority List Database
- Denial/NPL - Hazardous Materials Information Reporting System
- IMIRS - National Leaking Tracking System
- MLTS - Kings Master Index File
- BIMES - Federal Superfund Sites
- NPL Sites - PCB Activity Database System
- PADS - Indian Reservations
- INDIAN RESERV - A Listing of Brownfields Sites
- US BROWNFIELDS - Department of Defense Sites
- DOD - RCRA Administrative Action Tracking System
- RAATS - Toxic Chemical Release Inventory System
- THIS - Toxic Substances Control Act
- TSCA - Section 7 Tracking Systems
- SSTS - FIFRA/TSCA Tracking System - FIFRA (Federal Insecticide Fungicide & Rodenticide Act)/TSCA (Toxic Substances Control Act)
- FTIS INSP

EDR PRIORITY PARK HISTORICAL DATABASES

- Coal Gas - Fuel of Hazardous Waste in Island Database

WAIKICA FALLS DATABASES

- US BROWNFIELDS - A Listing of Brownfields Sites
- BROWNFIELDS - Brownfields Sites
- VCP - Voluntary Remediation Program Sites

SURROUNDING SITES SEARCH RESULTS

Surrounding sites were identified
Evaluations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been identified below from sites with an elevation lower than the target property. Page numbers and map identification numbers refer to the EDR Robust Map report where detailed data on individual sites can be reviewed.

Sites listed in **bold italics** are at multiple databases.

Unacceptable (orphan) sites are not considered in the foregoing analysis.

FEDERAL ASIM STANDARD

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped:

- | | |
|-------------------------|--------------------|
| Site Name | Disturbance |
| KAWAIOA LANDFILL | SWMS LUST |
| KAPAAI LANDFILL | SWMS LF |
| HEWLETTPACKARD LANDFILL | SWMS LF |
| CADWELL JARLAND FILL | RECORDS 5000 FRIED |
| KAWAIOA BROOKS FILL | RECORDS 5000 FRIED |
| UPPCAL SS HOLLOW | FRUIT |
| PUPUKEA BROWSEWAY | |

EXECUTIVE SUMMARY

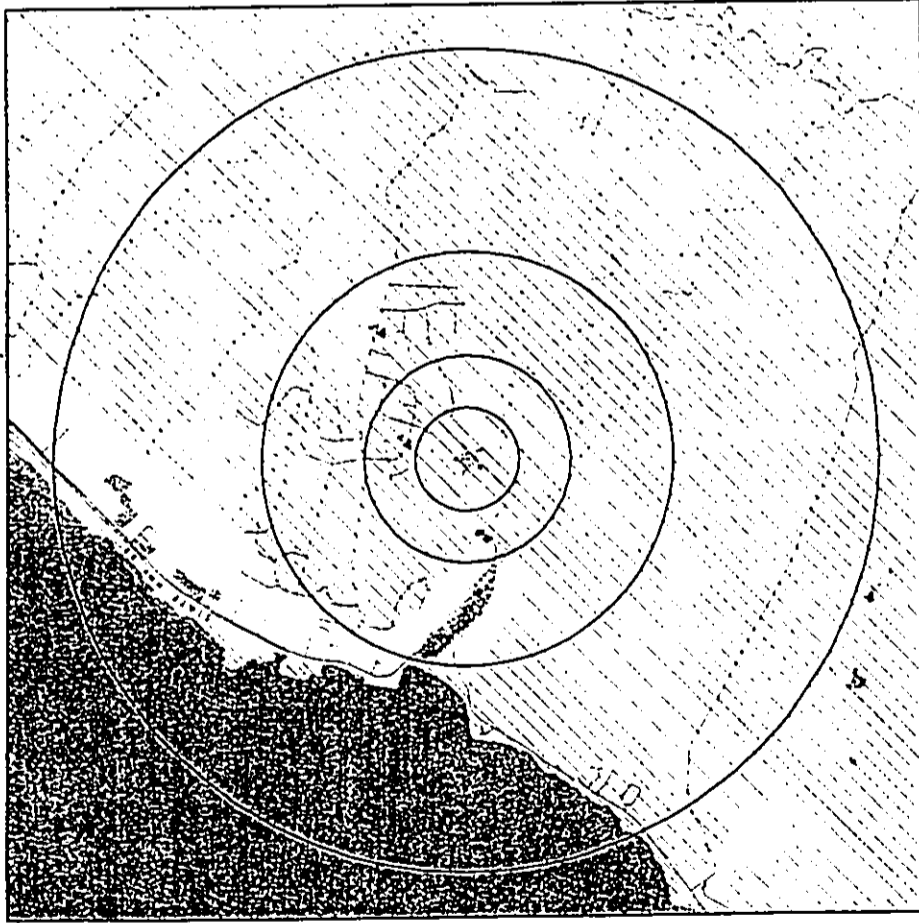
Lower Elevation: WAIHEA FALLS PARK UTILITY SITE
 Address: 59 864 KAMEHAMEHA HWY
 Dist/Di: 1/4 - 1/2 WSW B4
 Map ID: 8
 Page: 8

STATE OR LOCAL ASTM SUPPLEMENTAL SPILLS. Reports of hazardous substances to the environment reported to the Office of Hazard Evaluation and Emergency Response since 1984.

A review of the SPILLS list, as provided by EDR, and dated 09/01/2000 has revealed that there are 3 SPILLS sites within approximately 0.75 miles of the target property.

Equal/Higher Elevation	Address	Dist/Di	Map ID	Page
TUFF JERICHOKE INDUSTRIES 59	59 530 PUPUKEA RD	1/2 - 1/4 E 5	5	10
Lower Elevation	Address	Dist/Di	Map ID	Page
WAIHEA FALLS PARK UTILITY SITE	59 864 KAMEHAMEHA HWY	1/4 - 1/2 WSW B3	8	8
WAIHEA FALLS PARK UTILITY SITE	59 864 KAMEHAMEHA HWY	1/4 - 1/2 WSW B4	8	8

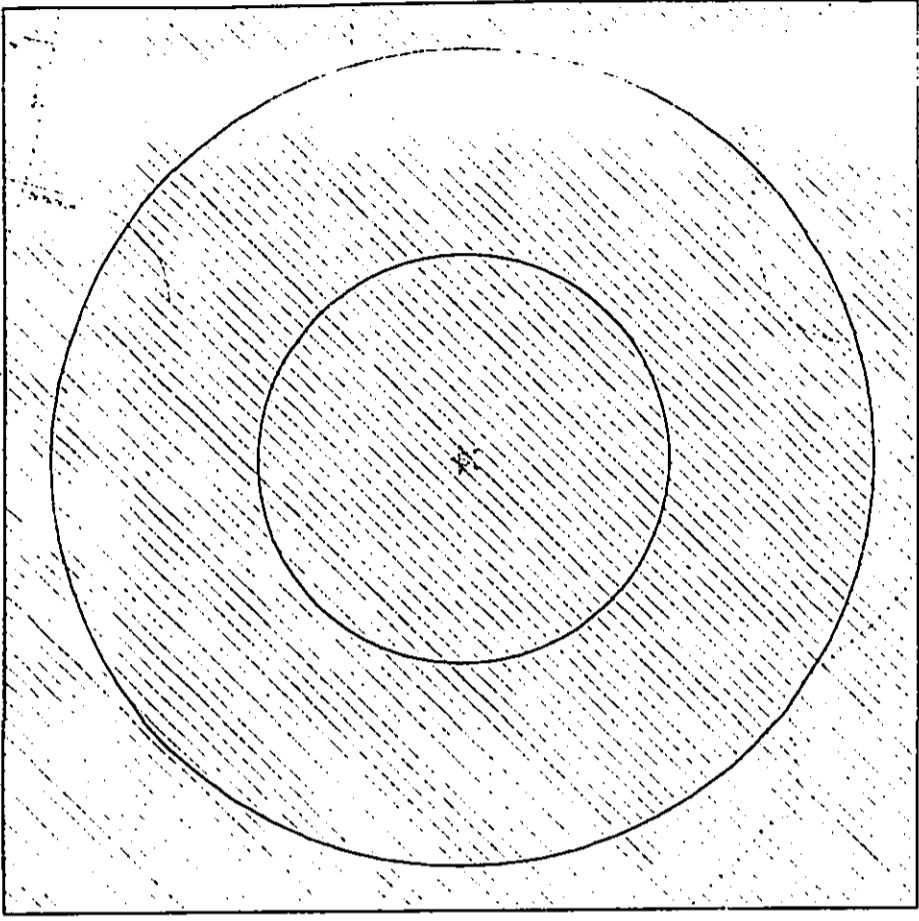
OVERVIEW MAP - 01177852.1r - Masa Fujjloka & Associates



- Target Property**
- Sites at elevations higher than or equal to the target property
 - Sites at elevations lower than the target property
 - Coast Gasification Sites
 - Natural Priority List Sites
 - Large Sites
 - Dist. Debris Sites
- Indian Reservations (IA)**
- Coast Gasification Sites
 - 100-year flood zone
 - 500-year flood zone
 - Federal Wetlands

TARGET PROPERTY	Pupulea Highlands Pension Area	CUSTOMER	Masa Fujjloka & Associates
ADDRESS	Waimea Valley Road	CONTACT	Ben Sarguere
CITY/STATE/ZIP	Haloa HI 96712	INDUSTRY #	01177852.1r
LAT/LONG	21.6387 / 158.0475	DATE	April 23, 2004 6:55 pm

DETAIL MAP - 01177852.1r - Masa Fujjloka & Associates



- Target Property**
- Sites at elevations higher than or equal to the target property
 - Sites at elevations lower than the target property
 - Coast Gasification Sites
 - Sensitive Receptors
 - Natural Priority List Sites
 - Large Sites
 - Dist. Debris Sites
- Indian Reservations (IA)**
- Coast Gasification Sites
 - 100-year flood zone
 - 500-year flood zone

TARGET PROPERTY	Pupulea Highlands Pension Area	CUSTOMER	Masa Fujjloka & Associates
ADDRESS	Waimea Valley Road	CONTACT	Ben Sarguere
CITY/STATE/ZIP	Haloa HI 96712	INDUSTRY #	01177852.1r
LAT/LONG	21.6387 / 158.0475	DATE	April 23, 2004 6:55 pm

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Picked
REINVENTIONS		1250	0	0	0	0	0	0
VCP		1250	0	0	0	0	0	0

NOTES:
 1. Target Property
 2. Not Registered at this Search Distance
 3. Sites may be listed in more than one database

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Picked
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FEDERAL ASTM STANDARD

RPL		1750	0	0	0	0	0	0
Proposed RPL		1750	0	0	0	0	0	0
CERCLIS		1250	0	0	0	0	0	0
CERCLIS		1000	0	0	0	0	0	0
CERCLIS		1750	0	0	0	0	0	0
CORRACTS		1250	0	0	0	0	0	0
CORRECT		1000	0	0	0	0	0	0
RECLIN Chain Gen		1000	0	0	0	0	0	0
RECLIN Chain Gen		1000	0	0	0	0	0	0
ERNS		0750	0	0	0	0	0	0

STATE ASTM STANDARD

STARS		1750	0	0	0	0	0	0
State LHM/PI		1750	0	0	0	0	0	0
LIST		1000	0	0	0	0	0	0
LIST		1000	0	0	0	0	0	0
VCP		1250	0	0	0	0	0	0

FEDERAL ASTM SUPPLEMENTAL

CONSENT		1750	0	0	0	0	0	0
ROD		1750	0	0	0	0	0	0
DAMAGED RPL		1750	0	0	0	0	0	0
PIADS		0750	0	0	0	0	0	0
HWERS		0750	0	0	0	0	0	0
MULTS		0750	0	0	0	0	0	0
MINES		1000	0	0	0	0	0	0
RPL Links		0750	0	0	0	0	0	0
PADS		0750	0	0	0	0	0	0
INDIAN RESERV		1250	0	0	0	0	0	0
US BROWNFIELDS		1750	0	0	0	0	0	0
DTXO		0750	0	0	0	0	0	0
RAATS		0750	0	0	0	0	0	0
TRIS		0750	0	0	0	0	0	0
TSCA		0750	0	0	0	0	0	0
SSIS		0750	0	0	0	0	0	0
FTIS		0750	0	0	0	0	0	0

STATE OR LOCAL ASTM SUPPLEMENTAL

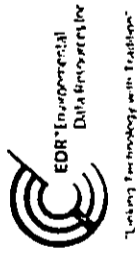
SPILLS		0750	0	0	2	1	1	4
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EDR PROPRIETARY HISTORICAL DATABASES

Coal Gas		1750	0	0	0	0	0	0
----------	--	------	---	---	---	---	---	---

BROWNFIELDS DATABASES

US BROWNFIELDS		1250	0	0	0	0	0	0
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Sanborn® Map Report

Ship To: Beth Sanguine
Masa Fujioka &
99-1205 Halawa Valley
Aiea, HI 96701

Order Date: 4/23/2004 **Completion Date:** 4/26/2004

Inquiry #: 11778522s

P.O. #: ICM

Site Name: Pupukea Highlands Petition Area
Address: Waimea Valley Road
City/State: Halewa, HI 96712

Customer Project: Pending
8017521MER 808-484-5366

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AUG - 8 2005

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**FINAL
Environmental Assessment**

**KEO
EMERGENCY SHELTER
AND
TRANSITIONAL HOUSING PROGRAM
Lihue, Kauai, Hawaii**

Tax Map Key: (4) 3-8-5:1

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QUALITY CONTROL

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RECEIVED

**Preparer:
Agor Architecture
4374 Kukui Grove Dr., Suite 204
Lihue, Kauai, Hawaii, 96766**

**Applicant:
Kauai Economic Opportunity, Inc.
2804 Wehe Road
Lihue, Kauai, Hawaii, 96766**

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List of Maps:

- Site Location Map
- Tax Map Key Map
- Land Use Map
- Soils Map
- Design Map (existing/new facilities)

List of Exhibits:

- Exhibit 1 - Site Plan
- Exhibit 2 - Phase 1 Environmental Site Assessment
- Exhibit 3 - Historic Preservation
- Exhibit 4 - Flood Map Panel
- Exhibit 5 - National Wetlands Inventory Data
- Exhibit 6 - Coastal Zone Management
- Exhibit 7 - Sole Source Aquifers Data
- Exhibit 8 - Wild and Scenic River Data
- Exhibit 9 - Clean Air Act
- Exhibit 10 - Hazardous Operations (storage tank)
- Exhibit 11 - Hazardous Operations
- Exhibit 12 - Airport Clear Zone
- Exhibit 13 - Water Discharge and Runoff
- Exhibit 14 - Municipal Water Service
- Exhibit 15 - Wetlands
- Exhibit 16 - Cultural Impact Assessment
- Exhibit 17 - Comments to Draft Environmental Assessment

**KEO EMERGENCY SHELTER
AND TRANSITIONAL HOUSING PROGRAM**

PROJECT FEATURES:

Project Title: KEO Emergency Shelter and Transitional Housing Program

Tax Map Key: (4) 3-8-5:1

Location: 2804 Wehe Road, Lihue, Kauai, 96766

Land Area: 1.93 Acres

Zoning: Urban District

Land Owner: County of Kauai

Applicant: Kauai Economic Opportunity, Inc.
2804 Wehe Road
Lihue, Kauai, Hawaii, 96766

Consultant: Agor Architecture
4374 Kukui Grove Dr., Suite 204
Lihue, Kauai, Hawaii, 96766

**Responsible Entity:
(Approving Agency)** County of Kauai
Offices of Community Assistance, Housing Agency
4444 Rice Street, Suite 330
Lihue, Kauai, Hawaii, 96766

Certifying Officer: Bryan J. Baptiste
Mayor, County of Kauai

Proposed Use: Emergency shelter and transitional housing for
Kauai's homeless population

Existing Use: Site vacant. Formerly used by State DAGS for storage of lighting
fixtures, classroom furniture and vehicles until June 2004.

Proposed Funding: Community Development Block Grant Program
HOME Investment Partnerships Program
Economic Development Initiative – Special Project Grant
Private Foundation

1.0 PROJECT DESCRIPTION

1.1 Location

The KEO Emergency Shelter and Transitional Housing Program site is located in the community of Lihue town, the county seat and urban center of the island of Kauai. The parcel is bounded by KEO's facility immediately adjacent on the western boundary. The County automotive repair shop is to the parcels eastern boundary. Road access is off Wehe Road. On the opposite side of Wehe Road is the State DLNR property known as Pua Loke Arboretum. Haleko Road borders to the south and is not suitable for site access. See site map (Map 1).

The parcel, identified by Tax Map Key (4) 3-8-5:1, is 1.93 acres in size (Map 2). The parcel has a State land use designation of Urban (Map 3). The County zoning is Urban District, and the intended use as an emergency shelter and transitional housing requires that the applicant obtain a project development use permit.

1.2 Proposed Action

Kauai Economic Opportunity, Inc. ("KEO") is a private, non-profit community action agency. KEO plans to develop homeless facilities to address two key components of the island's homeless facilities – an emergency shelter and transitional housing units. See proposed site layout (Exhibit 1).

Emergency Shelter – An emergency shelter will be designed to serve approximately 19 homeless people, providing overnight shelter. The larger schoolhouse building on site will be rehabilitated and converted into a 19-bed emergency shelter, complete with connecting bathroom facility. A smaller building will be rehabilitated and used as a training center for employment services, educational classes, lifeskills, etc., for program participants. Both structures will be repositioned on-site from their existing footprints.

Transitional Housing – A transitional housing program will include eight rental apartment units. Transitional housing programs typically provide up to two years of affordable rental housing to homeless families and individuals, and provides essential support services to help tenants make a transition to permanent housing and attain self-sufficiency. Renovation of four portable buildings donated by the County of Kauai will produce eight rental units. The buildings are portable structures located adjacent to the parking lot of the Kauai War Memorial Convention Hall in Lihue. The portables are no longer used as administrative offices and will be moved to the project site. Portable buildings are in fair condition.

Each portable building will be converted into duplex apartments. Interior modifications are required to achieve this use and each unit will have its own kitchen and bathroom.

Storage/Laundry – A storage structure existing on site will be preserved and redesigned for a dual use as a storage room and laundry facility. Upgrades are required for this structure.

Site Improvements - The facility will require installation of on-site improvements (parking lot, sidewalks, walkways, utility connections, wastewater system, water lines, fencing, etc.).

1.3 Environmental Review

The proposed expenditure of federal funds for the rehabilitation of structures and installation of site improvements requires an environmental review under 24 CFR Part 58 (National Environmental Policy Act). The proposed use of County land requires an environmental review under Chapter 343, Hawaii Revised Statutes.

1.4 Land Development

1.4.1 Land Use and Zoning

State of Hawaii Land Use Classification: The land use classification of the project site is Urban.

County of Kauai General Plan: The project adheres to the policies and objectives of the Kauai General Plan. Section 8.1.10 of the General Plan, as it relates to housing and community development provides, among other things, to support the development of housing and support services for special needs groups, including the homeless and other at-risk populations needing shelter.

County of Kauai Zoning: The applicable County of Kauai zoning map designates the project site as Urban District. Under this zoning, the Comprehensive Zoning Ordinance requires a use permit for the project development. Such use may be allowed if it is demonstrated that the development is compatible to the generally permitted uses and to public health, safety and welfare, and compatible to uses on lands adjacent to the project development site and to uses in the general vicinity.

1.4.2 Roads

Access to the project is off Wehe Road to an entry driveway. The project is expected to generate low-volume traffic along Wehe Road. No vehicular or pedestrian access is available or is to be provided off Haleko Road.

1.4.3 Electrical/Telephone/Cable Systems

The project will be designed to install underground electrical lines and to obtain service from Kauai Island Utility Cooperative. Underground telephone lines will

be installed with service from Verizon Hawaii, Inc. Cable television lines also will be installed underground.

1.4.4 Slope

The site is relatively flat at 220 feet above sea level, except for the 1 percent slope from the north/northwest to the south/southeast boundary ending near Haleko Road.

1.4.5 Soil Suitability

A Soil Survey prepared by the U.S. Department of Agriculture, Soil Conservation Service dated August 1972 has categorized the soils of the Lihue area as Lihue-Puhi Association. The Lihue-Puhi Association is made up of well-drained, medium textured soils, having nearly level to steep slopes. The soils were developed from material weathered from basic igneous rock; they make up about 12% of the island. The Lihue soils make up about 40 percent of the association and the Puhi soils 35 percent. (Map 4).

1.4.6 Hazards and Nuisances

Clayton Group Services, Inc. conducted a Phase I Environmental Site Assessment of the proposed site using ASTM E1527-00, Standard Practice for Environmental Site Assessments. See Clayton Group Services, Inc. Environmental Site Assessment for findings and recommendations (Exhibit 2).

1.4.7 Noise

Noise levels from the proposed project are considered to be within the range of normal suburban levels. The proposed use is equivalent to a residential project that should not generate or be impacted by large amounts of noise. The County Automobile Base Yard operates Monday through Friday, from 7:00 a.m. to 3:30 p.m. The addition of eight residential rental units should not adversely affect noise quality in the surrounding area.

1.4.8 Air Quality

The proposed project will not impact air quality of the surrounding area.

1.5 Socio-Economic Characteristics

1.5.1 Statement of Need and Purpose

According to KEO, widespread homelessness continues to exist on Kauai. In a 2003 Homeless Point-In-Time count conducted by SMS Research and Marketing, Inc., the count revealed that the number of homeless persons increased on Kauai

by 20% over the past 6 years. In the past fiscal year ending June 30, 2004, KEO's Homeless Outreach Care-A-Van program assisted over 500 homeless unsheltered persons.

In addressing this community problem, KEO has initiated a number of programs and supportive services structured after HUD's Continuum of Care concept. The Continuum of Care concept is aimed at breaking the cycle of homelessness and empowering individuals and families to become self-sufficient. In order to carry out this objective, homeless facilities are required. The main component missing from Kauai's continuum of care is a homeless emergency shelter. Kauai is still the only county in the State without an emergency shelter for its homeless population.

The need for an emergency homeless shelter and transitional housing has been identified in a Gaps Analysis conducted by the Continuum of Care Committee, as a high priority need. The County of Kauai Consolidated Plan (July 1, 2005 - June 30, 2010) recognizes a gap in homeless facilities and prioritizes the use of federal housing and community development resources for development of emergency shelter facilities and transitional housing units.

1.5.2 Existing Conditions and Trends

The primary cause of homelessness is the growing gap between housing costs and income. Over the past few years, KEO and other service agencies have reported an increase in the number of families (single parent & intact families) who are experiencing homelessness. With fewer affordable rental units available, higher rents, and escalation of housing costs on Kauai, an increase in homelessness will probably continue. The proposed project can offer some relief to the island's shortage in homeless facilities.

1.5.3 Social Benefit

The immediate social benefit to the community will be to offer shelter and care for homeless persons who may be living in unsafe conditions. The emergency shelter will offer homeless overnight shelter and some essential services. This "safety net" will benefit many homeless that are living in outdoor and exposed areas (e.g. beach parks; automobiles). Some homeless may be assessed as qualified to move to the next level of assistance along the continuum of care (e.g. transitional housing). Transitional housing can offer homeless the prospect of a stable living environment and help to resolve barriers to self-sufficiency. From there, those tenants who are successful in the transitional program can ultimately move into permanent housing for long-term independent living.

The long-term social benefit is that the community will have a safety net to assist homeless living in unsafe and unsanitary living conditions. Other social benefit can be achieved by assisting working homeless to stabilize their living situation in

the transitional housing program, and to obtain permanent housing for the long term.

1.6 Community Facilities and Services

1.6.1 Educational Facilities

The nearest schools are Wilcox Elementary (grades K-5), Chiefess Kamakahelei Middle School (grades 6-8) and Kauai High School (grades 9-12). The present enrollment and capacity for these schools are as follows:

	<u>Enrollment</u>	<u>Capacity</u>	<u>Difference</u>
Wilcox	945	1039	94
Chiefess	1043	1183	140
Kauai High	1285	1730	445

1.6.2 Health Care

Wilcox Hospital, approximately 1.7 miles from the site, is the nearest major medical facility. Other medical services in the area are available at the Kuhio Medical Center and various private physicians within Lihue Town.

1.6.3 Social Services

Social services in the project area are readily accessible to homeless. Many services on the island are based in the greater Lihue Area, including the State Dept. of Human Services, Dept. of Health, Dept. of Vocational Rehabilitation, Dept. of Labor, Workforce Development Division, Young Women Christian Association (YWCA), Kauai Economic Opportunity, Inc., Catholic Charities, Salvation Army, Alu Like, Queen Lili'uokulani Children's Center, and Veterans Center.

1.6.4 Solid Waste

The Solid Waste Division of the Department of Public Works, County of Kauai, or a private refuse service, will collect solid waste generated from the emergency shelter and transitional housing units. Solid waste not appropriate for pick up by the Solid Waste Division or private refuse service can be taken to the Lihue Transfer Station on Ahukini Road for transfer to the landfill in Kekaha.

1.6.5 Wastewater

A municipal sewage treatment plant serves portions of Lihue. However, there are no sewer lines in the immediate vicinity of the site. The closest County line is on Haleko Road near Rice Street. The sewage pumping station that pump sewage from this line is at capacity and will need to be upgraded to serve any new facility

in the vicinity of the proposed facility. Some residential developments nearby are connected to the Kukui Grove wastewater treatment plant, a private plant owned by Grove Farm. Grove Farm has no obligation to connect other users outside of their development master plan area.

An aerobic wastewater system will be designed by Aqua Engineers to meet the capacity needs for the proposed facility. The wastewater system will be designed in accordance with State of Hawaii, Dept. of Health - Wastewater Division standards and requirements. As part of the design, a proper soil test will be conducted to verify the actual percolation rate.

1.6.6 Drainage

The proposed on-site improvements will increase the impervious area of the site. The site design will include measures to keep storm run off on-site.

1.6.7 Water Supply

The County of Kauai, Department of Water, provides water service to the Lihue area. The 8-inch water line along Wehe Road is adequate to serve the KEO Building. However, consultation with the Department of Water will be made to determine the adequacy of the water main line, source and storage, and any additional fire hydrant requirements as a result of the proposed facility improvements and usage.

1.6.8 Public Safety

The nearest police station is the Lihue Police Station, which is approximately 1.34 miles from the site. The nearest fire station is the Lihue Fire Station, which is an approximately .59 miles from the site.

1.6.9 Open Space and Recreation

The Pua Loke Arboretum is located adjacent to the proposed project. The Arboretum is used mainly as a community park. It is owned and maintained by the State of Hawaii. In addition, there are numerous public and commercial recreational facilities within the Lihue area including, Kalapaki Beach, Lihue Sports Complex, Isenberg Field, and other baseball and softball fields.

1.6.10 Transportation

The County's Agency on Transportation operates an islandwide Kauai Bus transportation system. The nearest bus stop is located at the Kukui Grove Shopping Center, or .36 miles from the project site. The Kukui Grove bus stop serves as a major transportation hub with routes available from Lihue to Kekaha (Highway 50) and Lihue to Hanalei (Highway 56).

1.7 Environmental Characteristics

The project site in its present condition is a blighted area, having been used for storage of miscellaneous schoolhouse materials and vehicles. The buildings are in disrepair and require substantial rehabilitation. The proposed project will increase the productive use of the property and significantly upgrade buildings and other site improvements.

Construction of the proposed improvements will temporarily impact existing air quality and noise levels. Construction will increase the amount of dust in the air. Noise levels in the surrounding area will increase during this time. These impacts are considered short-term and are addressed in Section 2.0.

2.0 AFFECTED ENVIRONMENT, POTENTIAL IMPACTS, AND MITIGATION MEASURES

2.1 Existing Land Use

The subject site is located in Lihue. The parcel is further identified as Tax Map Key (4) 3-8-5:1. The site was formally used as the Lihue Grammar School. More recently, the State Department of Education has used the site as a storage facility. In July 2004, the State relocated all of their stored materials to a new facility in Puhi. The project site lays vacant.

The State of Hawaii Land Use Classification of the project site is Urban. Under this zoning, the Comprehensive Zoning Ordinance requires a use permit for the project development. Such use may be allowed if it is demonstrated that the development is compatible to the generally permitted uses and to public health, safety and welfare, and compatible to uses on lands adjacent to the project development site and to uses in the general vicinity.

Impacts and Mitigation Measures

The proposed project is not anticipated to have any significant impact on land uses in the area. The restoration of buildings located at the project site, and the addition of site improvements will be compatible with existing neighboring properties. A Class IV Zoning Permit will be submitted to the County of Kauai Planning Department to seek a use permit.

2.2 Topography, Geology, Soils, Climate

The site is relatively flat at 220 feet above sea level, except for the steep slopes at the southeastern boundary running along Haleko Road. A Soil Survey prepared by the U.S. Department of Agriculture, Soil Conservation Service dated August 1972 has categorized the soils of the Lihue area as Lihue-Puhi Association.

Lihue-Puhi Association is made up of well-drained, medium textured soils, having nearly level to steep slopes. The soils were developed from material weathered from basic igneous rock; they make up about 12% of the island. The Lihue soils make up about 40 percent of the association and the Puhi soils 35 percent.

The climate is mild semitropical and mean annual temperature at sea level is approximately 75 degrees Fahrenheit with seasonal fluctuation seldom exceeding +/-10 degrees of this mean. The average annual precipitation at the site is approximately 45 inches per year.

Impacts and Mitigation Measures

If necessary, soil borings of the site will be conducted to determine soil characteristics for design purposes. The soil tests will be done to determine:

- a) soil bearing capacity for the foundation design of the structures
- b) soil percolation rate for the design of the leaching field
- c) slope stability analysis for the design of the retention basin

2.3 Geotechnical

If necessary, a geotechnical specialist shall monitor sitework construction to ensure proper soils compaction, and adherence to County of Kauai construction standards and requirements.

Impacts and Mitigation Measures

As the soil is suitable for existing and new structures, there should be no adverse impact from the proposed project.

2.4 Drainage

A drainage study may be conducted in conjunction with the site work construction plans and, if so, will be available upon completion.

Impacts and Mitigation Measures

The site is relatively flat with a slight slope to the south (rear) of the property. The existing soil provides good permeability, thus making for slow storm run offs. The site design will include measures to keep storm run offs on-site. A storm retention pond exists on the south side of the property. No use of the existing retention pond for site drainage of construction area is expected.

2.5 Flood Hazard

Federal Emergency Management Flood Insurance Rate Map, Panel 202, dated June 30, 1995, shows the site to be in Zone X (unshaded). Zone X (unshaded) means that the Federal Emergency Management Agency (FEMA) determined this

area to be outside the 500-year flood plain. The site is well above the Puali (Niumalu) Stream, Huleia Stream, and Nawiliwili Harbor. There are no scenic rivers or wetlands on or near the site.

Impacts and Mitigation Measures

The project site does not lie within the tsunami inundation zone as shown on the Flood Insurance Rate Map. It is much higher in elevation than Niumalu Stream, Huleia Stream and Nawiliwili Harbor and is not in the path of any major flood ways. Further, the project site is not at risk to flooding from stream overflow or heavy localized rainfall. Therefore, flooding is not expected to be a problem.

2.6 Hazardous Materials

The Clayton Group Services Phase I Assessment includes an asbestos survey, lead-based paint survey, and survey inspection of the property for the presence of recognized environmental conditions and suspected hazardous materials. The Assessment identifies the presence of asbestos containing material (e.g. roof sealant; floor tile; seal undercoating) and lead-based paint above the regulatory of 0.5%. Mitigation of these recognized environmental conditions is required. The project consultant will incorporate the finding and recommendations of Clayton Group Services into the rehabilitation and site development scope of work.

Impact and Mitigation Measures

Materials identified as containing asbestos shall be removed, segregated and disposed of in accordance with USEPA regulations. Lead paint materials shall be removed and disposed, or encapsulated, in accordance with Hawaii Occupational Safety and Health regulations.

2.7 Flora and Fauna

Flora

The site has been completely cleared from prior uses and is covered in grass, weeds, and trees. The lands are highly disturbed, and the existence of endangered species is unlikely. Consultation letter sent to the Department of Land and Natural Resources on September 29, 2004 received no comments back.

Fauna

According to the Hawaii Natural Diversity Database, there have been no recordings of rare species or ecosystems within the vicinity of the project site. Considering the current activity and the proximity of urban areas, threatened or endangered birds would not be expected.

2.8 Historic, Cultural and Archaeological Resources

According to the Historic Preservation Division, State Department of Land and Natural Resources, no historic properties will be affected by the proposed undertaking. The Kauai Historic Preservation Review Commission (KHPRC) has also been consulted with regard to the school buildings that are over 50 years old.

Impacts and Mitigation Measures

The proposed project will have no adverse impact on historical or cultural resources as determined by the State Historical Preservation Division, DLNR. However, should historic sites, including human burials, be uncovered during construction, all work in the area will terminate and the State of Hawaii, Historic Preservation Division will be contacted for further action. With regard to the rehabilitation of the school buildings, plans and drawings will be submitted to KHPRC for review and comments.

2.9 Site Preparation, Grading and Grubbing, Construction Waste

The property may harbor rodents that will be dispersed to the surrounding areas when the site is cleared.

Temporary fugitive dust emissions could be emitted during site preparation and construction and impact nearby properties.

There will be grubbed materials and construction waste generated by the project.

Impacts and Mitigation Measures

In accordance with Title 11, HAR, Chapter 11-26, entitled "Vector Control", the applicant will ascertain the presence or absence of rodents on the property. Should the presence of rodents be determined, the applicant shall eradicate the rodents prior to clearing the site.

In accordance with Title 11, HAR, Chapter 11-60.1, entitled "Air Pollution Control", effective air pollution control measures will be provided to prevent or minimize any fugitive dust emissions caused by the construction work from impacting the surrounding area. Best Management Practices will be used to reduce the impact of any polluted runoff to the environment.

Grubbed material and construction waste that will be generated by the project shall be disposed of at a Solid Waste Division, the following methods can be used to dispose of materials produced during the site improvement phase of the project. Green waste can be separated for recycling. The Kauai Resource Center can recycle any scrap metals that may be generated. Other construction materials and debris would be placed in the landfill.

2.10 Noise

There may be temporary noise generated from the equipment and machinery used during the site preparation, moving of buildings, and construction of site improvements. Under normal tradewind conditions, the neighboring Pua Loke Subdivision would be upwind and should not be significantly affected by temporary construction noise. The operation of the facility improvement should not adversely affect noise quality in the surrounding area.

Impacts and Mitigation Measures

During the construction phase of the project, there will be short-term, temporary noise impacts on the surrounding area. Construction machinery will increase noise levels. Contractors will work during reasonable hours of the day, install appropriate devices, e.g. mufflers on heavy equipment, and comply with State Department of Health noise regulations during construction. Should the noise levels exceed permissible sound levels, a noise permit will be obtained from the Department of Health, as stated in Title 11, HAR, Chapter 11-46, entitled "Community Noise Control."

Post construction, there will be an increase in traffic noise generated by the proposed project, but the noise levels should not be significantly increased above the familiar traffic occurring in the vicinity of the project.

2.11 Air and Water Quality, Wastewater, Solid and Hazardous Waste

The proposed facility will not impact air or water quality in the surrounding area. During the construction phase of the project there may be short-term, temporary impacts from dust. According to the Federal Environmental Protection Agency, there are no toxic sites within the immediate surrounding area, nor will there be any generated by the project.

Impacts and Mitigation Measures

Building rehabilitation and site improvements will increase the amount of fugitive dust in the air. Construction machinery will increase exhaust gases in the area of the proposed project. These temporary construction nuisances cannot be avoided but can be mitigated by frequent water sprinkling of the exposed dirt surfaces. The Contractor will be responsible for keeping adjacent areas free of mud, sediment, and construction debris.

To mitigate the dust problems during the site preparation phase, contractors will comply with the County of Kauai, Department of Public Works and State of Hawaii, Department of Health, Clean Air Branch requirements to utilize Best Management Practices.

KEO and its contractor(s) will obtain any necessary permits for each activity, including the National Pollutant Discharge Elimination System permit. KEO will require its contractor(s) to comply with all applicable Federal, State and County permitting requirements such as Section 401 Water Quality Certification; Hawaii Administrative Rules, Chapter 11-60.1, Air Pollution Control, Section 11-60.1-33, Fugitive Dust. In accordance with Title 11, Chapter 11-55, Water Pollution Control, and Chapter 11-54, Water Quality Standards, HAR, KEO will be responsible for ensuring that the Best Management Practices be implemented to minimize or prevent the discharge of sediments, debris and other water pollutants into State waters.

2.12 Traffic and Circulation

The project site is accessed off Wehe Road. Wehe Road is not a thoroughfare and no interior road on-site is required or will be constructed. The site will have one driveway entry for vehicular access. The facility is expected to generate low-volume traffic for Wehe Road.

Impacts and Mitigation Measures

During the construction phase of the project, there will be impacts on Wehe Road. These impacts will be temporary, and short-term. Contractors will work during reasonable hours of the day and lessen potential impacts on the surrounding area.

Traffic impacts post-construction will be generated from facility use. It is estimated that 8 rental units may generate approximately 32 additional vehicle trips per day, in an out of the facility (8 units x 2 vehicles per unit x 2 trips per day). It is estimated that the homeless shelter with a carrying capacity of 19 people may generate an estimated 19 additional trips per day.

2.13 Utilities

Utilities will be underground.

Electricity, Cable TV

Kauai Island Utility Company (KIUC) will provide electric service. The proposed project will require service typical for school buildings and residences and will not require substantial energy consumption. Oceanic Time Warner Cable will provide cable television service.

Telephone

Verizon Hawaii services the area where the proposed project is located.

Impacts and Mitigation Measures

The rental units will be rehabilitated to comply with County and State building code and building permit procedures, including but not limited to the Uniform Building Code, as amended, and Title 11, Chapter 11-14, Housing, HAR.

No negative impacts are anticipated from the installation of electrical, cable TV or telephone services to the project.

2.14 Scenic and Visual Resources

The project is nestled between KEO's office building and County automobile base yard. No appreciable change in building scale will occur, although four additional buildings will be moved onto the site for transitional housing. The rehabilitation of buildings and other site improvements will improve the visual character of the immediate community. The project will not interfere with the makai or mauka view planes.

Impacts and Mitigation Measures

The proposed facility is in keeping with the mixed commercial use of the surrounding area. To the north of the project is the State Pua Loke Arboretum that will remain open space. Therefore, there will be no adverse impacts to scenic or visual resources of the surrounding area.

2.15 Economic Activity

The proposed project will entail the planning, design and construction of on-site improvements and rehabilitation of buildings.

Impacts and Mitigation Measures

The planning, design, and construction of the proposed project will create direct employment opportunities. This will improve Kauai's economy in the short-term. The operation of the emergency shelter and social services may benefit employment opportunities to some small degree.

2.16 Affordable Housing

The proposed project will provide 8 rental units for the transitional housing program. This will increase the islands stock of decent affordable rental housing for extremely low (below 30% of HUD's median income) and very low (below 50% of HUD's median income) persons. Kauai has an acute housing shortage and nearly no housing stock reserved for its homeless population.

Impacts and Mitigation Measures

The proposed project is designed to enhance the social welfare of the community and will help to alleviate some of the housing shortage, especially for homeless that are ready to take part in transitional housing programs. The availability of affordable rental housing will meet the needs of the existing population rather than stimulate a new population growth.

3.0 ALTERNATIVES TO THE PROPOSED ACTION

3.1 "No-Action" Alternative

An alternative to the proposed action is not to proceed with the emergency shelter or the transitional housing program. A "No-Action" alternative would not address the pressing need to provide a safety net for unsheltered homeless. A "No-Action" alternative would leave the island with an unmet gap in critical homeless facilities needed to carry out an effective continuum of care program.

3.2 Consider Alternative Sites

Although there are other vacant parcels in the Lihue area, the subject site has several advantages. Two other potential sites in the Lihue area were assessed and determined infeasible in terms of development costs and availability of basic infrastructure. The subject site is cost-effective to develop, being there are no acquisition costs. This is vital in keeping the project feasible and sustainable. The site also has building improvements that can be restored for use as the emergency shelter, training facility, office, storage and laundry. The site is centrally located to the island population and infrastructure is available. An alternative site is not considered a viable option.

3.3 Proceed with Project

The proposed action will offer a safety net for homeless to find shelter and, for some, transition housing will lead to permanent housing. The proposed action will assist service providers' to more effectively address the community problem of homelessness.

4.0 DETERMINATION

The impacts of the proposed action have been assessed. The proposed project is not anticipated to cause significant negative impacts to the environment. Therefore, a proposed Finding of No Significant Impact (FONSI) can be made. The determination is based on the following:

1. ***The proposed action does not involve an irrevocable commitment to loss or destruction of any natural or cultural resources;***

The proposed emergency shelter and transitional housing is consistent with land use plans for the area. Based on consultations and site inspection, no natural or cultural resources will be destroyed by the proposed action.

2. ***The proposed action will not curtail the range of beneficial uses of the environment;***

The urban character of the proposed homeless facility will blend into the existing community and surrounding properties. The only adverse impacts on the physical environment will be temporary during construction. The removal of asbestos containing materials and lead-based paint from the existing on-site improvements will be a long-term benefit to the environment.

3. ***The proposed action does not conflict with the State's long-term goals or guidelines as expressed in Chapter 344, HRS, State Environmental Policy;***

The project is consistent with the State of Hawaii's long-term environmental goal. By its overall development plan and implementation of mitigative measures to conserve resources and remove blight, the project will establish a community facility that provides "a sense of identity, wise use of land, and aesthetic and social satisfaction in harmony with the natural environment that is uniquely Hawaiian."

4. ***The proposed action does not substantially affect the economic or social welfare of the community or state;***

The proposed action enables unsheltered homeless to have a "safety net" from sleeping in exposed and high risk areas. The proposed action offers homeless an opportunity to be placed in transitional housing to assist them in transitioning to independent living and permanent housing. The economic and social impacts of this project are positive.

5. ***The proposed action does not substantially affect public health;***

The developer will take all measures during construction to minimize noise, dust, and disruption to surrounding and adjacent properties. The proposed action will have a beneficial affect on public health by arranging for essential services to assist the unsheltered homeless population

6. ***The proposed action does not involve substantial secondary effects;***

The development of an emergency shelter and eight rental units for transitional housing will have minimal effect on population growth or the use of public facilities.

7. ***The proposed action does not involve substantial degradation of environmental quality;***

The proposed action will have little or no effect on environmental quality due to minimal grading of the site. The proposed action will remove urban blight and benefit environmental quality of the area.

8. ***The proposed action does not cumulatively have a considerable effect on the environment or involve a commitment to larger actions;***

The developer has no plans for shelter capacity, housing units, or site improvements, other than what is proposed.

9. ***The proposed action does not affect a rare, threatened, or endangered species or its habitat;***

There are no known rare, threatened, or endangered species or critical habitat on these lands.

10. ***The proposed action does not detrimentally affect air or water quality or ambient noise levels;***

Aside from temporary disruptions during construction of site improvements and rehabilitation of buildings, air, water and noise impacts will be minimal. As previously mentioned, mitigative measures will be taken during construction.

11. ***The proposed action does not affect an environmentally sensitive area;***

The project site is not considered an environmentally sensitive area.

12. ***The proposed action does not substantially affect scenic vistas and view plans; and***

There are no scenic vistas and view planes that will be impacted by the proposed action.

13. ***The proposed action does not require substantial energy consumption.***

The proposed project will not require substantial energy consumption. The eight rental units will have solar water heating systems.

5.0 CONDITIONS FOR APPROVAL

A determination and proposed finding of no significant impact is based on compliance with the following conditions for approval:

5.1 Air Quality

Frequent watering of exposed dirt surfaces using best management practices should mitigate short-term fugitive dust from construction related activities.

5.2 Noise

Limiting work to reasonable work hours and installing appropriate devices, e.g. mufflers on heavy equipment should mitigate temporary noise generated by equipment and machinery used for construction.

5.3 Cultural Resources

If, upon discovery of a cultural site or human burial, work shall immediately cease until DLNR-Historic Preservation official is notified and a determination is made.

5.4 Hazardous Materials

Materials identified as containing asbestos shall be removed, segregated and disposed of in accordance with USEPA regulations. Lead paint materials shall be removed and disposed, or encapsulated, in accordance with Hawaii Occupational Safety and Health regulations.

6.0 CERTIFICATION

Finding of No Significant Impact
(The project will not result in a significant impact on the quality of the human environment)


Finding of Significant Impact
(The project may significantly affect the quality of the human environment)

Preparer Signature:

 Date: 6/1/05

Name/Title/Agency: Ron Agor, Architect, Agor Architecture

Responsible Entity Approving Official Signature:

 Date: June 27, 2005

Name/Title/Agency: Bryan J. Baptiste, Mayor, County of Kauai

7.0 AGENCIES CONSULTED

The following agencies, organizations and individuals were consulted or contacted in the preparation of the draft Environmental Assessment:

Federal

U. S. Department of Housing and Urban Development
Department of Interior, Fish & Wildlife Service, Endangered Species
Department of the Army

State

Office of Environmental Quality Control
DLNR, Hawaii Historic Preservation Division
Department of Health, Clean Air Branch
Department of Health, Clean Water Branch
Department of Health, Hazard Evaluation and Emergency Response
State Land and Natural Resources
Department of Transportation, Airports Division

County

Kauai Historic Preservation Review Commission
Department of Water
Fire Department

Private Organizations

Kauai Continuum of Care Homeless Committee
ConVault

8.0 PERMITS REQUIRED

Building Permit
Project Development Use Permit

9.0 REFERENCES

Clayton Group Services, Inc., *Phase I Environmental Site Assessment for Proposed Kauai Homeless Shelter, May 2005.*

County of Kauai, Planning Department. *Kauai General Plan, November 2002.*

SMS Research & Marketing, Inc., *Hawaii Housing Policy Study Update, 2003.*

Belt Collins and Associates, *Draft Environmental Assessment for Kauai Economic Opportunity Building (Phase 1) and Lihue Multi-Agency Storage Facility (Phase 2).*

Federal Emergency Management Agency. "National Flood Insurance Program FIRM Flood Insurance Rate Map." Kauai County, Hawaii, Community Panel No. 202.

United States Fish & Wildlife Services. Online at <http://www.nwi.fws.gov>.

U.S. Environmental Protection Agency. Online at <http://map3.epa.gov/environmapper>.

National Wild & Scenic Rivers By State. Online at <http://www.nps.gov/rivers/wild>.

State of Hawaii Data Book, Kauai Data Book, Seventh Edition, 2001

Statutory Checklist

[24 CFR §58.5]

Record the determinations made regarding each listed statute, executive order or regulation. Provide appropriate source documentation. [Note reviews or consultations completed as well as any applicable permits or approvals obtained or required. Note dates of contact or page references]. Provide compliance or consistency documentation. Attach additional material as appropriate. Note conditions, attenuation or mitigation measures required.

FACTORS DOCUMENTATION	DETERMINATION AND COMPLIANCE
Historic Preservation [36 CFR 800]	PRINTED. No effect on historic properties per letter dated October 18, 2004 from the DLNR State Historic Preservation Office (Exhibit 3).
Floodplain Management [24 CFR 55, Executive Order 11988]	PRINTED. No effect. Review of pertinent Flood Insurance Rate Map, Community Panel No. 202, indicates Project is in Zone X (unshaded), not in Zones A or V (Exhibit 4).
Wetlands Protection [Executive Order 11990]	SITE INSPECTION/PRINTED. No effect. Project site is not situated between terrestrial and aquatic systems or is saturated or covered by water. See attached U.S. Fish & Wildlife definition (Exhibit 5).
Coastal Zone Management Act [Sections 307(c), (d)]	PRINTED. No effect. Per State DBEDT letter dated June 24, 2004, CZM consistency approval no longer required. Per Planning Dept., project is outside Special Management Area (Exhibit 6).
Sole Source Aquifers [40 CFR 149]	PRINTED. No effect. Per EPA web site, there are no designated sole source aquifers for Kauai. See EPA Map (Exhibit 7).
Endangered Species Act [50 CFR 402]	CONTACT. No effect. Per Gordon Smith, Fish and Wildlife Biologist, Ecological Services, U.S. Fish & Wildlife Service, no record of threatened or endangered species by project.
Wild and Scenic Rivers Act [Sections 7 (b), (c)]	PRINTED. No effect. According to National Park Service Website, there are no Wild & Scenic Rivers in Hawaii. See Website state by state listing (Exhibit 8).
Air Quality [Clean Air Act, Sections 176 (c) and (d), and 40 CFR 6, 51, 93]	PRINTED. No effect. Per State of Hawaii letter dated March 18, 2003 and website map for Region 9: Air Programs. Project is in an "attainment area" per EPA Region IX, National Ambient Air Quality Standards (Exhibit 9).
Farmland Protection Policy Act [7 CFR 658]	PRINTED. No effect. Project is located in an area that the State of Hawaii has designated as Urban and is committed to urban use. See Map 3.
Environmental Justice [Executive Order 12898]	The project is not in a neighborhood that suffers from adverse human health concerns or recognized environmental conditions.

HUD ENVIRONMENTAL STANDARDS DOCUMENTATION	DETERMINATION AND COMPLIANCE
Noise Abatement and Control [24 CFR 51 B]	Short-term mitigation required for construction activity. Mitigation per Title II, HAR, Chapter 11-46, Community Noise, Subsection 2.9.
Toxic/Hazardous/Radioactive Materials	PRINTED. Mitigation required for potentially hazardous materials (e.g. asbestos; lead-based paint). Clayton Group Services Report

	dated May 11, 2005 (Exhibit 2).
Contamination, Chemical or Gases [24 CFR 58.5(I)(2)]	PRINTED. Mitigation possible for suspected ground contamination. See Clayton Group Services Report dated May 11, 2005 (Exhibit 2).
Siting of HUD-Assisted Projects near hazardous Operations [24 CFR 51 C]	SITE INSPECTION/PRINTED. No effect from above ground storage tanks at Lihue Repair Shop. See Con Vault letter dated April 29, 2005 (Exhibit 10) and State of Hawaii Dept. of Health letter dated April 27, 2005 (Exhibit 11).
Airport Clear Zones and Accident Potential Zones [24 CFR 51 D]	PRINTED. No effect. Per Assistant Airport Superintendent for Lihue Airport, State of Hawaii Department of Transportation letter dated April 16, 2005. (Exhibit 12).

Environmental Assessment Checklist

[Environmental Review Guide HUD CPD 782, 24 CFR 58.40; Ref. 40 CFR 1508.8 & 1508.27]

Evaluate the significance of the effects of the proposal on the character, features and resources of the project area. Enter relevant base data and verifiable source documentation to support the finding. Then enter the appropriate impact code from the following list to make a determination of impact. **Impact Codes: (1)**– No impact anticipated; **(2)** – Potentially beneficial; **(3)** – Potentially adverse; **(4)** – Requires mitigation; **(5)** – Requires project modification. Note names, dates of contact, telephone numbers and page reference. Attach additional material as appropriate. Note conditions or mitigation measures required.

LAND DEVELOPMENT	CODE	SOURCE or DOCUMENTATION
Conformance with Comprehensive Plans and Zoning	4	Proposed project complies with Kauai General Plan policies. The Comprehensive Zoning Ordinance requires project development use permit approval for Urban District.
Compatibility and Urban Impact	4	See above.
Slope	1	
Erosion	1	Land Study Bureau, Detailed Land Classification-Island of Kauai
Soil Suitability	1	Land Study Bureau, Detailed Land Classification-Island of Kauai
Hazards and Nuisances including Site Safety	4	Title 11, Hawaii Administrative Rules (HAR), Chapters 11-26, Vector Control, 11-60.1, Air Pollution Control, and 11-58.1, Solid Waste Management Control
Energy Consumption	1	Kauai Island Utility Cooperative
Noise – Contribution to Community Noise Levels	4	Title 11, HAR, Chapter 11-46, Community Noise Control
Air Quality – Effects of Ambient Air Quality on Project and Contribution to Community Pollution Levels	4	Title 11, HAR, Chapter 11-60.1, Air Pollution Control
Environmental Design – Visual Quality - Coherence, Diversity, Compatible Use and Scale	1	The proposed project is designed to have minimal impact on the physical environment by utilizing existing topography and grade. Facility will remove blighted area and be compatible in use and scale with the surrounding commercial uses.

SOCIOECONOMIC	CODE	SOURCE or DOCUMENTATION
Demographic Character Changes	1	No data available.
Displacement	1	The land is currently vacant. No displacement will occur from the proposed activities.
Employment and Income Patterns	2	No data available.

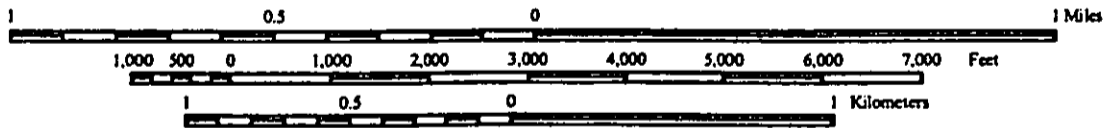
COMMUNITY FACILITIES AND SERVICES	CODE	SOURCE or DOCUMENTATION
Educational Facilities	1	Department of Education, Complex Area Superintendent's Office.
Commercial Facilities	1	2001 State of Hawaii Data Book; Kauai Data Book, Seventh Edition
Health Care	1	2001 State of Hawaii Data Book; Kauai Data Book, Seventh Edition
Social Services	1	2001 State of Hawaii Data Book; Kauai Data Book, Seventh Edition
Solid Waste	4	Title 11, HAR, Chapter 11-58.1
Waste Water	4	Individual wastewater system to be designed by Aqua Engineers for proposed project capacity.
Storm Water	1	PRINTED. Per State of Hawaii, Dept. of Health letter dated October 11, 2004, NPDES permit will be obtained for project construction, as required (Exhibit 13).
Water Supply	1	PRINTED. Per Department of Water, existing storage & transmission adequate. Adequate source is expected when Grove Farm surface source is constructed (Exhibit 14).
Public Safety - Police	1	Lihue Police Station is 1.34 miles from project.
Public Safety - Fire	1	Lihue Fire Station is .59 miles from project. No new hydrant system anticipated.
Emergency Medical	1	Wilcox Hospital emergency room is 1.7miles from project
Open Space and Recreation	1	Site design will not obstruct view planes for adjacent properties or reduce open space in general vicinity of project site.
- Open Space	1	Numerous public recreation facilities are located in Lihue area.
- Recreation		
-Cultural Facilities	1	Letter from State Historic Preservation Office dated 10/12/04 determination of no affect.
Transportation	1	Kauai Bus transportation system serving island is .36 miles from project.

NATURAL FEATURES		SOURCE or DOCUMENTATION
Water Resources	1	PRINTED. No impact on perennial or intermittent streams. See Dept. of the Army letter dated May 13, 2005 (Exhibit 15).
Surface Water	1	Site drainage will be designed to channel to an existing drainage basin.
Unique Natural Features and Agricultural Lands	1	Farmland Protection Policy Act (7 CFR 658) not applicable to lands already committed to urban development.
Vegetation and Wildlife	1	SITE INSPECTION

OTHER FACTORS		SOURCE or DOCUMENTATION
Flood Disaster Protection Act [Flood Insurance][§58.6(a)]	1	FEMA Flood Insurance Rate Map, Panel 202.
Coastal Barrier Resources Act/ [§58.6(c)]	1	Per Dept. of Interior, no coastal barriers (e.g. sand bars, spits, dunes) are present with the State of Hawaii
Airport Runway Clear Zone or Clear Zone Disclosure[§58.6(d)]	1	PRINTED. No effect. Per Assistant Airport Superintendent for Lihue Airport, State of Hawaii Department of Transportation letter dated April 16, 2005. (Exhibit 12).



SCALE 1:24,000

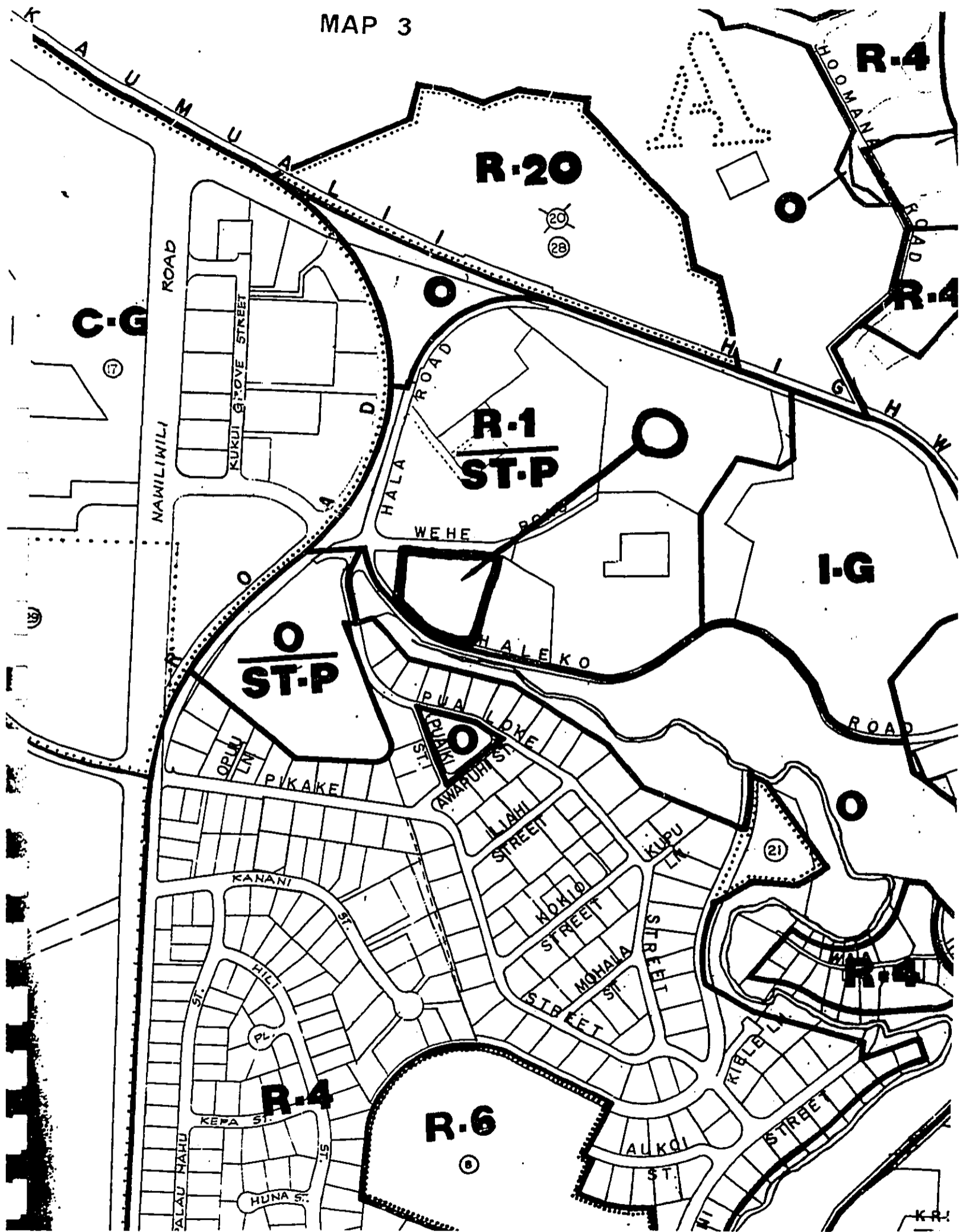


Portion of 7.5-minute Series (Topographic) Maps
 United States Department of Interior
 United States Geological Survey
 Lihue Quadrangle, Kauai County, Hawaii
 1996

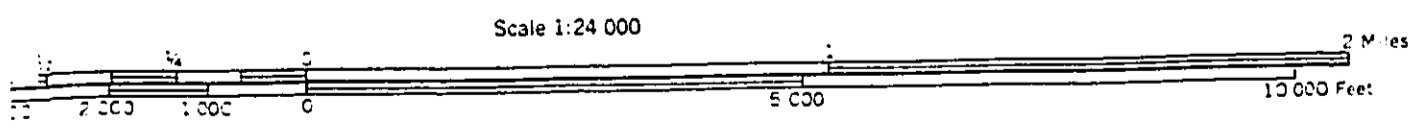
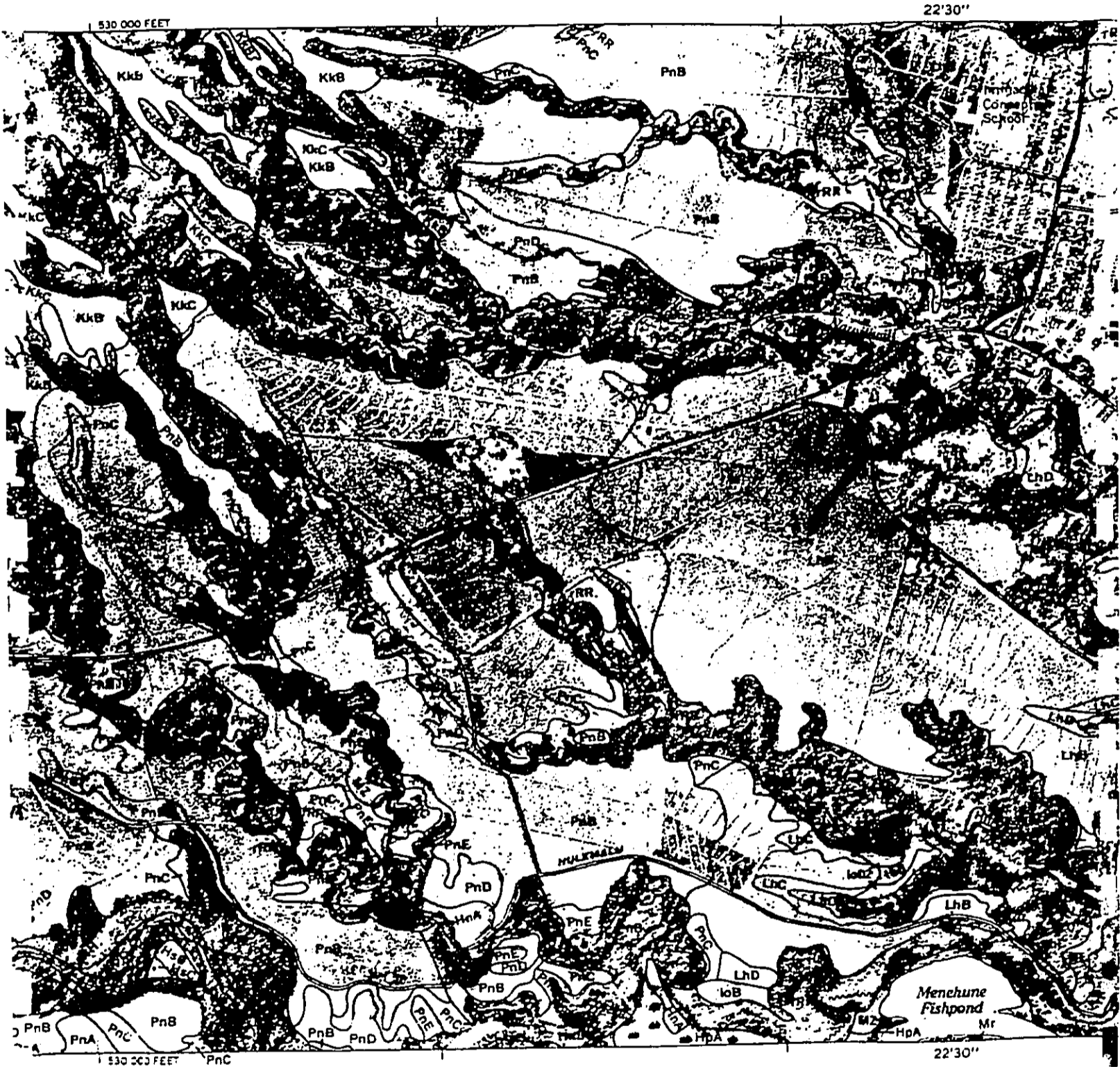
Project No.:	Title:	Site Location Map
Date:	Location:	TMK [4] 3-8-005:001 Lihue, Kauai, Hawaii
Revised By:	Client:	Agor Architecture
Checked By:		

MAP 1

MAP 3



KAUAI ISLAND, HAWAII — SHEET NUMBER 31



MAP 4

KEO Homeless and Transitional Housing Center
 2804 Mehe Road
 Liliue, Kauai, Hawaii
 TRK: (4) 5-B-5-1
 DATE: 11/20/08

AGOR ARCHITECTURE
 4374 KUKUI OLOVE DR., # 204
 LILIUKE, KAUAI, HAWAII 96766
 (808) 245-4590 FAX: (808) 244-1091

This work was prepared by me or under my supervision and I am a duly licensed professional architect in the State of Hawaii. I am responsible for the accuracy of the information and the content of this report with the exception of the information provided by others.

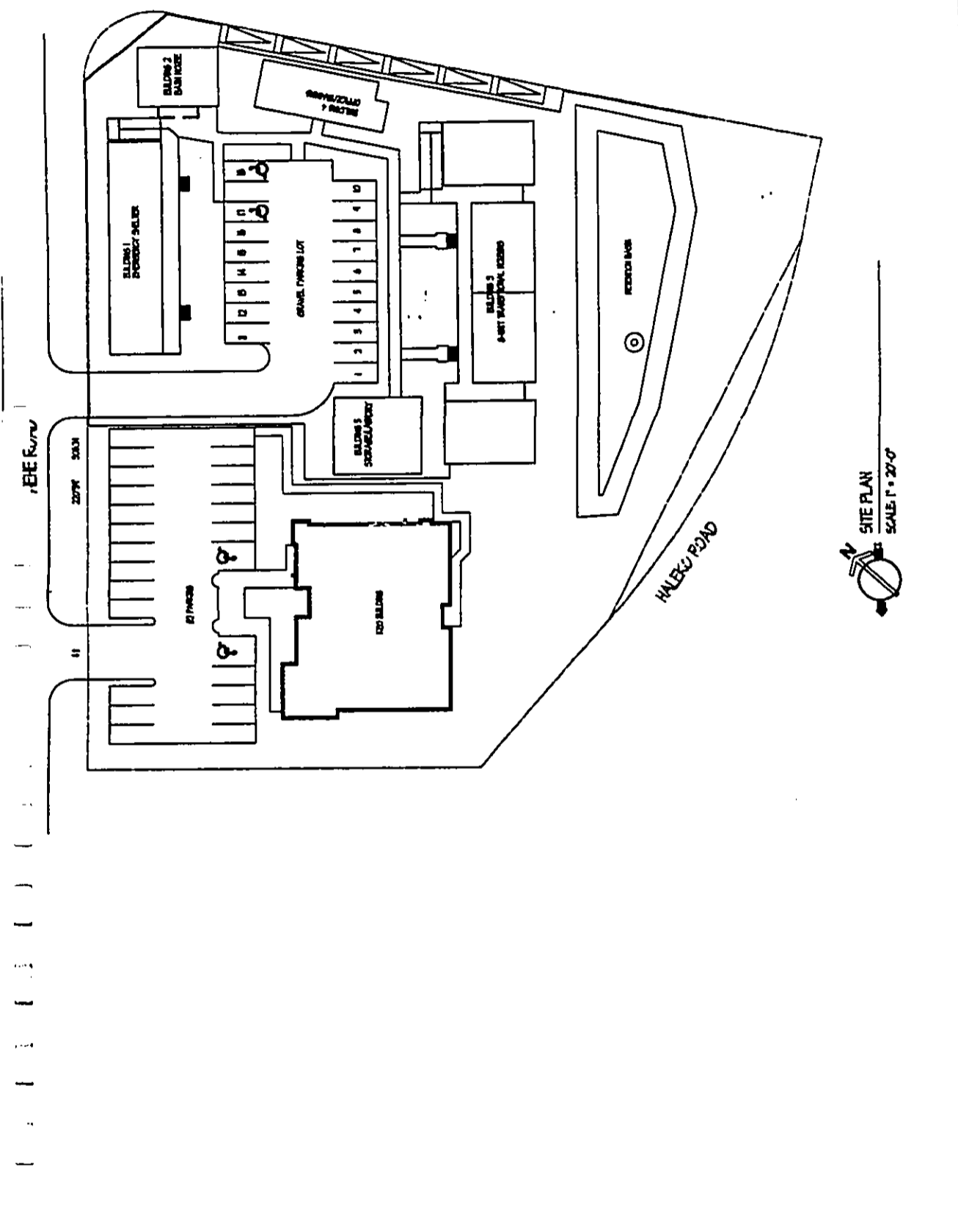
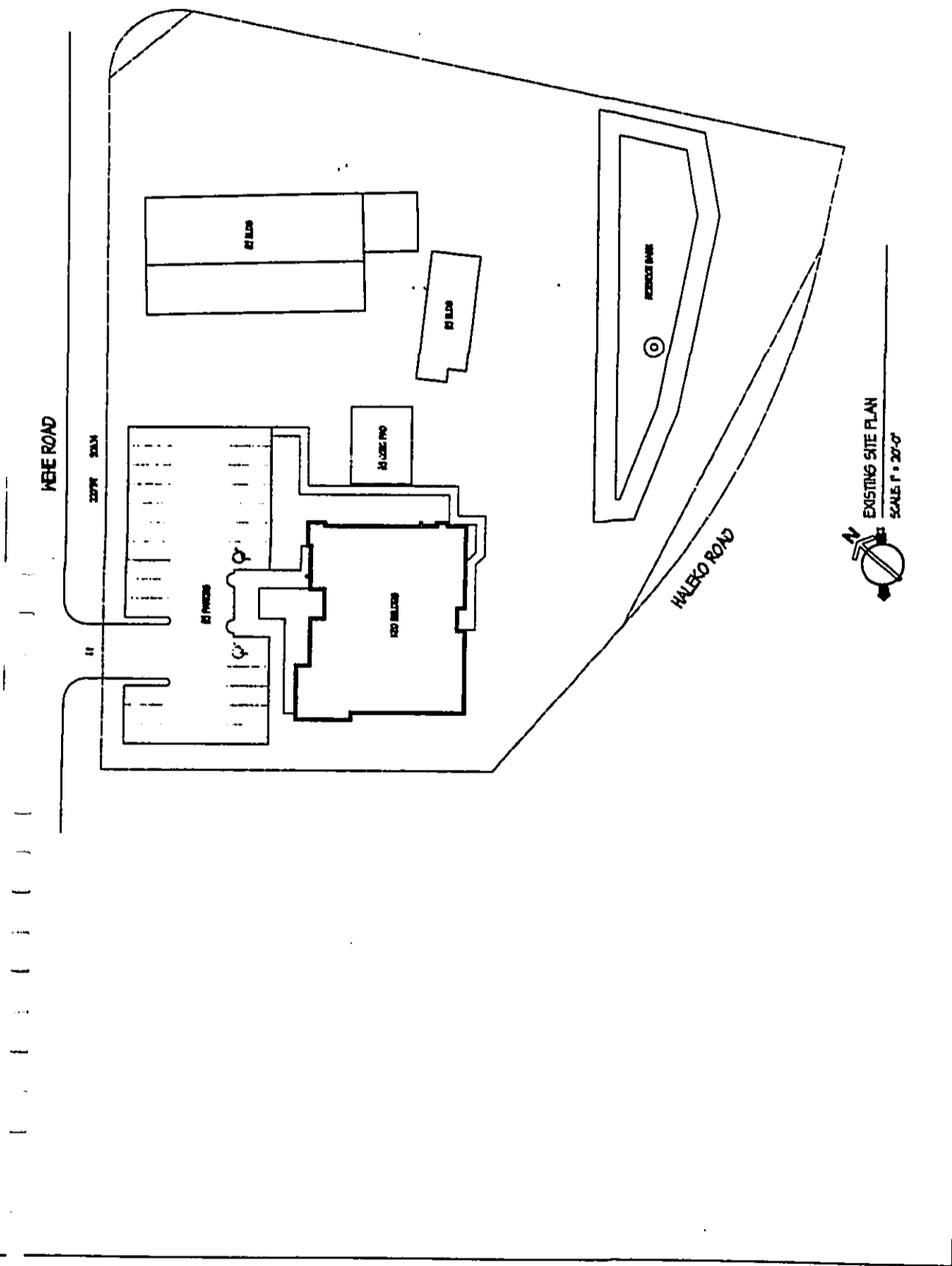


EXHIBIT 1

<p>KEO Homeless and Transitional Housing Center 2804 Wehe Road Lihue, Kauai, Hawaii</p>							
<p>AGOR ARCHITECTURE 4374 KIHEKI GROVE DR. # 204 LIHUE, KAUAI, HAWAII 96746 (808) 245-4330 FAX: (808) 244-1091</p>							



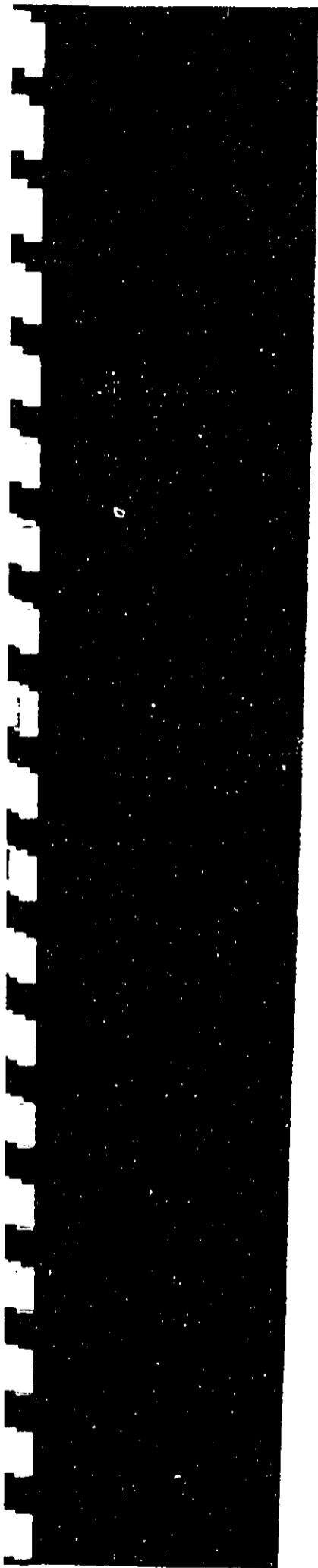


EXHIBIT 2

***Phase I Environmental Site
Assessment***

Proposed Kauai Homeless Shelter
2804 Wehe Road
TMK No.: (4) 3-8-005: Parcel 1
Lihue, Kauai, Hawaii

Prepared for:

AGOR ARCHITECTURE

4374 Kukui Grove Drive
Suite 204
Lihue, Kauai, Hawaii 96766

Clayton Project No. 85-05262.00
May 11, 2005

Prepared by:

Clayton Group Services, Inc.
970 N. Kalahoe Avenue
Suite C-316
Kailua, Hawaii 96734
808.531.6708

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Executive Summary

Agor Architecture retained Clayton Group Services, Inc. (Clayton) to conduct a Phase I Environmental Site Assessment of the Proposed Kauai Homeless Shelter property located at 2804 Wehe Road in Lihue, Kauai, Hawaii, the "subject property," also described as Tax Map Key (TMK) Numbers: (4) 3-8-005: Parcel 1. The objective of the assessment was to provide an independent, professional opinion regarding recognized environmental conditions, as defined by ASTM, associated with the subject property. The objective of the assessment was in association with a real estate financial transaction.

This assessment was performed under the conditions of, and in accordance with Clayton's Proposal Number PR-85ES05.554 dated March 17, 2005, using ASTM E1527-00, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* as a guideline. Any exceptions to, additions to, or deletions from the ASTM practice are described in the report. Details of the work performed, sources of information, and findings are presented in the report. Limitations of the assessment are described in Sections 1.2 and 1.3.

The subject property is located northeast of the intersection at Pua Loke Street and Wehe Road in Lihue and is zoned "R1, Residential" and "STP, Special Treatment Public Facilities." The State land use zoning designation for the subject property is "U, Urban District."

The subject property currently contains a total of 1.928 acres of land area and has been partially improved on the northern side of the site with three school buildings (currently vacant), which is known as the former Lihue Grammar School. A fourth commercial office building is located on the southern end of the subject property and is currently occupied by Kauai Economic Opportunity, Inc. (KEO). The vacant school buildings were reportedly built in 1939, while the KEO building was constructed in 1993. The school area is mostly unpaved and consists of exposed gravel or top layer soil. The area around the KEO building consists of an asphalt- and concrete-paved parking lot and walkways. Wastewater from the KEO building flows into an onsite aerobic wastewater system, which currently discharges directly into an onsite cesspool formerly utilized by the Lihue Grammar School.

A baseyard area, formerly utilized by the Lihue Department of Accounting and General Services (DAGS), occupies approximately 2,500 square feet of land area along the northeastern section of the subject property. Abandoned heavy machinery and vehicles were parked on this portion of the subject property, and evidence of minor refuse dumping and *de minimis* petroleum hydrocarbon staining was observed on exposed gravel or dilapidated asphalt-paved surfaces of this area.

The historical research presented in this report has established the use of the subject property since 1910. Based upon Clayton's review of topographical maps (1910 through 1996) and aerial photographs (1950-1992), the subject property was depicted as agricultural land in 1910. Subsequent topographic maps and aerial photographs showed

the subject property occupied by structures that appeared as the currently vacant school buildings.

Based on available tax assessment records, the subject parcel was reportedly owned by the State of Hawaii since 1958. The subject property was leased to various State agencies including DAGS (1962) and Lihue Grammar School (prior to 1958).

This assessment has revealed no evidence of *recognized environmental conditions* (RECs), as defined by ASTM, in connection with the subject property, except for the following:

- Evidence of fugitive dumping, including heavy machinery, vehicles, and *de minimis* staining, was observed in the area of the subject property's former baseyard.

The former baseyard and the abandoned machinery and vehicles are considered a recognized environmental condition because of the site activities (i.e., oil changes, fueling) normally associated with these types of operations. Clayton recommends that the discarded items should be removed and properly disposed of prior to development of the property.

After removal of the refuse, the underlying ground surface should be inspected for stains or releases of suspect hazardous materials. If staining is observed, the impacted soil and/or rocks should be sampled prior to being removed and sent to a proper disposal facility. *De minimis* stains in the former baseyard area should be removed from the area.

Clayton also recommends that the baseyard portion be surveyed with ground penetrating radar to confirm the presence or absence of underground storage tanks at the subject property.

- Based on Clayton's review of the Environmental Data Resources, Inc. (EDR) report and State of Hawaii-Department of Health database records, the Lihue Department of Water Baseyard, 2820 Wehe Road, is listed as an underground storage tank (UST) and leaking underground storage tank (LUST) site. This site is located on the adjacent property to the northeast in an upgradient position relative to the subject property. This site reportedly maintained three, 5,000-gallon USTs used to store gasoline (two USTs) and diesel (one UST) fuels. The USTs were installed in 1977 and were closed and removed from the property in 1998. The USTs were each listed with the status of "Permanently Out of Use." Details of the closure were not provided; however this site's LUST listing (facility identification no. 9-701076) is listed with the status of "Site Cleanup Completed."

Although the status of this operation indicates a "closed" status, given the lack of specific information on this closure, Clayton recommends conducting a file review to confirm the site's UST and LUST history.

The following environmental issues were identified in connection with the subject property, although not deemed to be *recognized environmental conditions* as defined by ASTM:

- The subject property maintains an aerobic wastewater system, which is located directly behind the KEO building and is utilized to handle wastewater generated from the KEO building's sinks and toilets. Due to defective issues related to the system's associated irrigation field, it is currently linked to an onsite abandoned cesspool, which was utilized by the former Lihue Grammar School. According to the State of Hawaii Department of Health-Wastewater Division, the onsite system in its current operational state has not been approved for use.

The subject property's wastewater system is not considered a recognized environmental condition because there is no evidence of hazardous materials releases into the system. However, according to the federal regulations published in Federal Register 68546, dated December 7, 1999, existing large capacity commercial cesspools are required to be closed by April 5, 2005.

- Clayton observed up to 10 discarded vehicle batteries in the area of the subject property's former baseyard.

The batteries are not considered a recognized environmental condition because material staining or release, were not noted in these areas. Clayton recommends that the batteries be collected and sent to a proper disposal or recycling facility.

- An asbestos assessment survey was conducted as part of this Phase I assessment. The results of polar light microscopy (PLM) analysis identified four materials which tested positive for asbestos content. These materials included:

- Approximately 10 square feet of roofing sealant
- Approximately 16 linear feet of roofing sealant
- Approximately 900 square feet of floor tile
- Approximately one sink with sink undercoating

These materials were observed to be non-friable (not easily crumbled under hand pressure) and in good condition. Although considered non-friable in their present conditions, these materials may become friable if disturbed during renovation or demolition activities. Clayton recommends the proper removal of all ACM prior to demolition activities by a licensed asbestos abatement contractor, under the supervision of a qualified industrial hygienist, in order to comply with regulatory requirements.

According to the USEPA regulations, removal of some non-friable ACM is not mandatory prior to demolition of a structure unless there is a potential for these materials to become friable (and thereby release fibers) during these activities. However, the ACM may need to be segregated from the other building materials prior to acceptance by the landfill.

- A lead paint assessment survey was conducted as part of this Phase I assessment. Clayton's survey resulted in the collection of 19 paint-chip samples for lead analysis. Of the paint samples collected, nine samples reported lead concentrations above the regulatory level of 0.5 % lead by weight. These paints included:
 - Lime green paint located on the walls and window frames of Building #1
 - Brown paint located on the interior doors of Building #1
 - Brown paint located on the interior window frames of Building #1
 - Beige paint located on the exterior walls and support columns of Building #1
 - Blue paint located on the lower foundation beam
 - Brown paint located on the north exterior door, door frame and stairs of Building #1
 - Brown paint located on the exterior window frames, doors and door frames of Building #2
 - White paint located on the exterior walls of Building #2

These paints were observed to be in poor to good condition. If the subject building or portions of the building with LBP are demolished, a licensed lead abatement contractor should properly remove the loose and flaking LBP prior to demolition.

The intact paint may remain in place during demolition activities; however, landfills require toxicity characteristic leaching procedure (TCLP) lead analysis of the demolition debris for landfill acceptance. Lead demolition debris with a TCLP lead concentration above 5.0 milligrams per liter (mg/l) may require disposal at an approved landfill on the mainland U.S.A.

In addition to the confirmed LBP, five other paint samples collected contained lead concentrations at or above the laboratory detection limit. The Hawaii Occupational Safety and Health (HIOSH) regulations must be followed whenever paint that contains lead, regardless of the concentration, will be disturbed (e.g., during renovation or demolition). Clayton recommends conducting air monitoring during renovation/demolition activities to ensure that airborne lead dust levels are below the HIOSH permissible exposure limit (PEL).



Clayton inspected the subject building for suspect arsenic-containing materials such as canec (particle board). Based on our assessment, the canec ceiling board in Building #2 contains arsenic at concentrations of 530 parts per million (ppm).

When detectable concentrations of arsenic are identified, there are Hawaii Occupational Safety and Health (HIOSH) requirements to protect workers during the disturbance of arsenic-containing materials. These requirements include air monitoring during disturbance activities such as demolition. In addition, the arsenic-containing materials must undergo TCLP-Arsenic analysis prior to disposal.

- The historical research indicates that the subject property was formerly used as agricultural land. Past use of agricultural chemicals on lands previously used for commercial agricultural purposes has the potential to impact the subject property. However, there was no evidence of storage, mixing or excessive use of agricultural chemicals at the subject property. Moreover, according to Hawaii Administrative Rules (HIAR) Chapter 128D Environmental Response Law, the presence of agricultural chemicals does not constitute a release of a hazardous substance. Section 128D-1 of the HIAR, excludes "any release resulting from the legal application of a pesticide product registered under the Federal Insecticide, Fungicide, and Rodenticide Act."

This finding is not considered a recognized environmental condition because there was no evidence of storage, mixing, or excessive use of pesticides and/or herbicides on the property. In addition, according to HIAR Chapter 128D, the presence of agricultural chemicals does not constitute a release. The subject property is zoned "A-5, Agriculture" and Clayton understands that the subject property is to be developed as residential properties; therefore, testing for agricultural chemicals may be required.

1.0 INTRODUCTION

Agor Architecture retained Clayton Group Services, Inc. (Clayton) to conduct a Phase I Environmental Site Assessment of the Proposed Kauai Homeless Shelter property at 2804 Wehe Road located in Lihue, Kauai, Hawaii, the "subject property," also described as Tax Map Key (TMK) Numbers: (4) 3-8-005: Parcel 1. The objective of the assessment was in association with a real estate financial transaction.

1.1 PURPOSE

The objective of this environmental site assessment is to provide an independent, professional opinion regarding *recognized environmental conditions*, as defined by ASTM, associated with the subject property. The term *recognized environmental conditions* (RECs) is defined as the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be *de minimis* are not RECs.

1.2 METHODOLOGY AND EXCEPTIONS

This assessment was performed under the conditions of, and in accordance with Clayton's Proposal Number PR-85ES05.554 dated March 17, 2005, using ASTM E1527-00, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* as a guideline.

The assessment included the following components:

- A site walkthrough inspection of the property for visual evidence of potential environmental concerns including existing or potential soil and groundwater contamination, as evidenced by soil or pavement staining or discoloration, stressed vegetation; indications of waste dumping or burial, pits, ponds, or lagoons; containers of hazardous substances or petroleum products; electrical and hydraulic equipment that may contain polychlorinated biphenyls (PCBs), such as electrical transformers and hydraulic hoists; and underground and aboveground storage tanks.
- An investigation of historical use of the site by examining locally available aerial photographs (one source) and other readily available historical information such as fire insurance maps for evidence of prior land use that could have led to recognized environmental conditions.

- A review of information available on general geology and topography of the subject property, local groundwater conditions, sources of water, power, and sewer, and proximity to ecologically sensitive receptors, such as streams, that might be impacted by recognized environmental conditions and environmental issues.
- A review of environmental records available from the property owner or site contact including regulatory agency reports, permits, registrations, and consultants' reports for evidence of recognized environmental conditions.
- A site property line visual assessment of adjacent properties for evidence of potential offsite environmental conditions that may affect the subject property.
- A review of a commercial database summary of federal and state regulatory agency records pertinent to the subject property and offsite facilities located within ASTM-specified search distances from the subject property.
- Evaluation of information gathered and development of this report.
- Interviews with key site personnel, as available, regarding current and previous uses of the property, particularly activities involving hazardous substances and petroleum products.

This assessment also included the following non-ASTM items:

- Visual inspection of building materials to identify suspect asbestos-containing materials (ACM).
- Visual inspection of predominant painted surfaces to identify suspect lead-based paint (LBP).

This assessment did not include sampling or analysis of soil, groundwater or other materials except:

- Sampling and analysis of suspect asbestos containing building materials
- Sampling and analysis of peeling paint

Mr. Steven Cho, Environmental Scientist, and Mr. John Willard, Staff Industrial Hygienist, from Clayton's Honolulu Regional Office, conducted the site walkthrough portion of the assessment on March 22, 2005, and was accompanied by Mr. James Nishida, Housing Coordinator with Kauai Economic Opportunity, Incorporated.

Resumes for environmental professionals involved in this assessment are included in Appendix A. Photographs taken at the time of the assessment are included behind the *Photographs* tab.

1.3 LIMITING CONDITIONS OF ASSESSMENT

Information for the assessment was obtained from sources listed in Appendix B. This information, to the extent it was relied on to form our opinion, is assumed to be correct and complete. Clayton is not responsible for the quality or content of information from these sources. Rear portions of the subject property included densely vegetated land, which could not be accessed for the purpose of this site investigation.

The information and opinions rendered in this report are exclusively for use by Agor Architecture will not distribute or publish this report without consent except as required by law or court order. The information and opinions expressed in this report are given in response to a limited assignment and should be considered and implemented only in light of that assignment. The services provided by Clayton in completing this project were consistent with normal standards of the profession. No other warranty, expressed or implied, is made.

2.0 SUBJECT PROPERTY DESCRIPTION

2.1 LOCATION AND LEGAL DESCRIPTION

The subject property is located at 2804 Wehe Road, northeast of the intersection at Pua Loke Street and Wehe Road in Lihue, Kauai and is further described as the irregular-shaped parcel of land lying in the designated TMK Number: (4) 3-8-005: Parcel 1 in the County of Kauai, Real Property Tax Assessment records (Figures 1 and 2, *Figures* tab). The subject property is located northeast of the intersection at Pua Loke Street and Wehe Road in Lihue and is zoned "*RI, Residential*" and "*STP, Special Treatment Public Facilities.*" The State land use zoning designation for the subject property is "*U, Urban District.*"

No record of environmental liens was found in the property records reviewed (EDR, March 30, 2005).

2.2 CURRENT USE OF SUBJECT PROPERTY

The subject property currently contains a total of 1.928 acres of land area and has been partially improved on the northern side of the site with three school buildings (currently vacant), which is known as the former Lihue Grammar School. A fourth commercial office building is located on the southern end of the subject property and is currently occupied by Kauai Economic Opportunity, Inc. (KEO). The vacant school buildings were reportedly built in 1939, while the KEO building was constructed in 1993. The school area is mostly unpaved and consists of exposed gravel or top layer soil. The area around the KEO building consists of an asphalt- and concrete-paved parking lot and walkways. Wastewater from the KEO building flows into an onsite aerobic wastewater system, which currently discharges directly into an onsite cesspool formerly utilized by the Lihue Grammar School.

A baseyard area, formerly utilized by the Lihue Department of Accounting and General Services (DAGS), occupies approximately 2,500 square feet of land area along the northeastern section of the subject property. Abandoned heavy machinery and vehicles were parked on this portion of the subject property, and evidence of minor refuse dumping and *de minimis* petroleum hydrocarbon staining was observed on exposed gravel or dilapidated asphalt-paved surfaces of this area.

The subject property is accessed via driveways, located along the northwestern perimeters facing Wehe Road. The subject property is relatively flat but slopes down slightly (an approximate 1 percent slope) from the north/northwest to the south/southeast, in line with the summit of Mt. Waialaele to the north, to the ocean shoreline by Nawiliwili Bay to the southeast. Nawiliwili Stream is located approximately 1,200 feet to the northeast of the subject property.

Based on interviews with Mr. James Nishida, Housing Coordinator with KEO, as well as observations made during the site visit, the following information was obtained:

- The Kauai Island Utility Cooperative (KIUC) provides electricity.
- Sewage is directed to an underground septic system located to the rear of the KEO building.
- The subject property's school buildings have been abandoned for several decades. The onsite abandoned school buildings no longer generate wastewater. Instead, wastewater is generated solely from the KEO building's sinks and toilets. Raw sewage is handled by the subject property aerobic wastewater system, which currently discharges into the onsite abandoned cesspool, which formerly serviced the Lihue Grammar School.
- Storm drains were not observed at the subject property. Stormwater runoff infiltrates directly into the soil subsurface, or, in the case of oversupply, exits the site via the adjoining roads (Wehe Road and Pua Loke Street), and natural contours.
- The planned short-term use for the subject property is demolition of the school buildings and baseyard and subsequent development into a homeless shelter.

2.3 CURRENT USES OF ADJOINING PROPERTIES

The area surrounding the subject property consists of light industrial operations and residential dwellings. Adjoining properties were observed (from the subject property or from public access areas) for signs of recognized environmental conditions and their potential to pose an environmental concern to the subject property (Figure 2). The uses and features of adjoining properties are described below.

- **Northwest:** Wehe Road, beyond which is a State Park.
- **Northeast:** Department of Public Works Baseyard



shield volcano forms the majority of the island and consists mainly of tholeiitic basalt flows many hundreds of feet thick. After a period of repose when no new lava erupted and large valleys were eroded into the volcanic shield, the Kauai volcano resumed eruptions, which were designated as the Koloa Volcanic Series.

The subject property is located in the southeast quadrant of the island of Kauai. The southeast portion of the island is comprised of a lower volcanic basement (Waimea Canyon series), separated from upper later eruptive deposits (Koloa volcanic series) by an erosional unconformity.

The shallow subsurface conditions in this region generally consist of silty clay alluvial soils that form a thin mantle over basalts of the Koloa Volcanic Series. The base of the stratigraphic section is the Napali Basalts of the Waimea Canyon Volcanic Series, which are overlain by lavas of the Koloa Volcanic Series. The Koloa Volcanic Series was often interrupted by long periods of weathering and erosion, resulting in local unconformities within the layers of lava.

Clayton reviewed the U.S. Department of Agriculture (USDA) Soil Conservation Service Survey (dated August 1972) for information regarding the soil at the subject property.

According to the USDA, the soil beneath the subject property is identified as Lihue silty clay, with 0 to 8 percent slopes (mapping unit *LhB*).

The Lihue series consists of well-drained soils on uplands that developed in material weathered from basic igneous rock. Lihue silty clay typically occurs atop broad interfluvies, in areas are gently sloping to steep.

In a representative profile the surface layer is dusky-red silty clay about 12 inches thick. The subsoil, more than 48 inches thick, is dark-red and dark reddish-brown, compact silty clay that has subangular blocky structure. The substratum is soft, weathered rock. The surface layer is strongly acid. The subsoil is slightly acid to neutral. Permeability is moderately rapid, runoff is slow, and the erosion hazard is no more than slight.

2.4.2 Groundwater Conditions

Although the depth to groundwater was not directly measured at the site, based on the regional topography, it is anticipated to be approximately 250 feet below ground surface (bgs). Also, the regional groundwater flow direction is anticipated to follow surface topography and flow in a southeasterly direction towards the Pacific Ocean coastline by Nawiliwili Bay. However, topography is not always a reliable basis for predicting groundwater flow direction. The local gradient under the subject parcels may be influenced naturally by zones of higher or lower permeability, or artificially by nearby pumping or recharge, and may deviate from the regional trend.

Clayton reviewed Aquifer Identification and Classification Technical Report No. 186, published by the Water Resources Center at the University of Hawaii for the island of Kauai, for information on groundwater conditions below the subject property. The report

describes the aquifer below the subject property as part of the Hanamaulu aquifer system of the Lihue sector.

The upper aquifer in this area is described as an unconfined basal aquifer (fresh water in contact with seawater) of the sedimentary type, with nonvolcanic lithology. Its status is described as an ecologically important, irreplaceable water supply with a potential for use that has low salinity (250-1,000 mg/L Chlorides) and a high vulnerability to contamination.

The lower aquifer in this area is described as an unconfined basal aquifer of the flank type, occurring in horizontally extensive lavas. Its status is described as an ecologically important, irreplaceable drinking water supply with a potential for use that has low salinity (250-1,000 mg/L Chlorides) and a moderate vulnerability to contamination.

3.0 HISTORICAL AND AGENCY REVIEW

3.1 AERIAL PHOTOGRAPHS

Clayton reviewed aerial photographs at the State Archives building in Honolulu and Clayton's collection of aerial photographs, to assess past land use at and adjacent to the subject property. Photographs reviewed are summarized as follows:

Date: 1950 Aerial Photograph No. GSMF K-2-26

In the 1950 aerial photograph, the subject property appeared developed with the three onsite buildings (former school buildings), as well as an additional building located in the area of the current KEO office building. The roadways, which currently include Wehe Road, Pua Loke Street, and Haleko Road, appeared developed. Other structural development in the area was sparse and included residential houses. Areas not occupied with structures in the immediate area were undeveloped and heavily vegetated.

Areas to the west and south of the subject property included large tracts of agricultural lands cultivated with sugarcane crops. Major thoroughfares in the area included Kaumualii Highway, located to the northwest, and a paved road (Nawiliwili Road) located to the southwest. Numerous single-family dwellings were also observed along Nawiliwili Road to the west and southwest, and several shipping containers were observed further south along this major thoroughfare. Agricultural lands and undeveloped raw land containing dense groves of trees and low-lying vegetation characterized land across Kaumualii Highway to the north.

Date: 10-15-60 Aerial Photograph No. 1-30 GS VXJ

The 1960 aerial photograph appeared similar to the 1950 aerial photograph for the subject property and vicinity, except the residential area across Nawiliwili Road to the west appeared increasingly developed.



Date: 1978 Aerial Photograph No. Lihue, Hawaii USGS Ortho Photo Quad

In the 1978 aerial photograph, the subject property and adjacent properties appeared similar to the 1960 aerial photograph, except an additional building, currently occupied by the Department of Water Baseyard, was observed on the northeast adjacent property. Other commercial buildings were visible further west-northwest, and residential neighborhoods across Nawiliwili Road to the east appeared more densely developed.

Date: 9-29-92 Aerial Photograph No. NASA 92-166 A-B

In the 1992 aerial photograph, the subject property and adjacent properties appeared similar to the 1978 aerial photograph, except the general vicinity was marked by increased numbers of residential housing to the south and further east.

No readily apparent evidence of recognized environmental conditions at the subject or adjoining properties was noted in the aerial photographs reviewed.

3.2 USGS TOPOGRAPHIC MAPS

Historic topographic maps for the subject property and vicinity were observed at the State Archives building in Honolulu and Clayton's collection of topographical maps, to assess past land use at and adjacent to the subject property. Topographic maps were available for the period 1910 to 1996. The maps depicted the following:

Date: 1910 U.S. Army Engineers, Lihue, Kauai Quadrangle

The subject and surrounding properties were depicted as agricultural or undeveloped land. The road currently known as Nawiliwili Highway (Highway 50) was depicted to the west of the subject property. No apparent road development was observed in the immediate vicinity of the subject property.

Date: 1963 U.S. Geological Survey, Lihue, Kauai
Quadrangle

In the 1963 topographic map, property delineations were difficult to estimate; however, up to three structures were located on the subject property, and one may have been located on the northwest adjacent property. Streets currently identified in the area (Pua Loke Street and Wehe Road) were depicted during this year. Other structures in the area included single-family residential homes on the western and southern properties.

3.5 AGENCY CONTACTS

3.5.1 Planning and Permitting Department

The Hawaii County Department of Planning database was reviewed on March 23, 2005, to obtain historical use information of the subject property.

No permits were indicated for the subject property.

3.5.2 Department of Health, Solid and Hazardous Waste Branch

The State of Hawaii, Department of Health (DOH), Solid and Hazardous Waste Branch, Underground Storage Tank (UST) and Leaking Underground Storage Tank (LUST) databases (2004) were reviewed to obtain information regarding environmental concerns or violations at the subject property.

The subject property was not listed in either the UST or the LUST databases reviewed. However, the Department of Public Works Baseyard, located on the adjoining property to the northeast, was identified as a UST and LUST facility. The site reportedly maintained three USTs which were used to store gasoline and diesel. Each tank was indicated with the status of "Permanently Out of Use" and the LUST status for this facility is currently "Site Cleanup Completed." Therefore, the identification of this site within these databases is not expected to represent an environmental condition for the subject property.

Department of Health, Hazard Evaluation and Emergency Response Office

The State of Hawaii, Department of Health, Hazard Evaluation and Emergency Response (HEER) Office databases (2002) were reviewed to obtain information regarding environmental concerns or violations at the subject property.

The subject and adjoining properties were not listed in the reviewed HEER database.

3.5.3 Department of Land and Natural Resources

The Department of Land and Natural Resources (DLNR) *Groundwater Well Index Summary* (February 1991) was reviewed to obtain information regarding registered wells on the subject property.

No registered wells were identified at or within a reasonable distance from the subject property.

3.6 PREVIOUS ENVIRONMENTAL REPORTS

No previous reports were available for review during this assessment.

3.7 SUMMARY OF HISTORICAL REVIEW

The historical research presented in this section has established the use of the subject property since 1910. Based upon Clayton's review of topographical maps (1910 through 1996) and aerial photographs (1950-1992), the subject property was depicted as agricultural land in 1910. Subsequent topographic maps and aerial photographs showed the subject property occupied by structures that appeared as the currently vacant school buildings.

Based on available tax assessment records, the subject parcel was reportedly owned by the State of Hawaii since 1958. The subject property was leased to various State agencies including Accounting and General Services (1962) and Lihue Grammar School (prior to 1958). Clayton's review of tax records did not indicate readily apparent evidence of recognized environmental conditions at the subject property.

4.0 STANDARD ENVIRONMENTAL RECORD SOURCES, FEDERAL, STATE, AND LOCAL

Available government database information prepared by Environmental Data Resources, Inc. (EDR) on March 28, 2005 was reviewed to evaluate both the subject property and any listed sites within ASTM-recommended search distances. Federal, state, and local databases reviewed are included in Appendix B.

The subject property was not listed in the State Department of Health (DOH) or EDR databases reviewed.

The database review identified a total 17 sites within the specified search distances from the subject property. A complete listing of these sites is included in Appendix B. Most of the sites present no environmental concern to the subject property because they only hold an operating permit (which does not imply a release), require no further action, or based upon Clayton's review, are too distant and/or topographically downgradient or crossgradient relative to the subject property to reasonably affect it.

The following sites that may pose an environmental concern to the subject property were evaluated in more detail:

- Lihue Department of Water Baseyard, 2820 Wehe Road, is located on the adjacent property to the northeast in a relative upgradient position with regard to the subject property. According to the database, this site is listed as a UST and LUST site. Based on the information provided in the EDR report, this site previously maintained three, 5,000-gallon USTs used to store gasoline (two USTs) and diesel (one UST) fuels. The USTs were installed in 1977 and were closed and removed from the property in 1998. The USTs were each listed with the status of "Permanently Out of Use." This site's LUST listing (facility identification no. 9-701076) is listed with the status of "site cleanup completed." Therefore, this facility is not expected to represent an environmental condition to the subject property.

- State of Hawaii Division of Forestry and Wildlife, 4398-D Pua Loke Street, is located relatively upgradient and less than 100 feet to the south-southwest of the subject property. According to the database, this site is listed as a Resource Conservation Recovery Information System-Small Quantity Generator (RCRIS-SQG) site. The RCRIS-SQG listing indicates no violations or notices of infractions being served against this facility. Therefore, this facility is not expected to represent an environmental condition to the subject property.
- Lihue Department of Water, 4398 Pua Loke Street, is located relatively upgradient and less than 100 feet to the south-southwest of the subject property. According to the database, this site is listed as an UST and LUST site. The database indicated that this facility previously maintained one, 1,000-gallon UST (diesel) and one, 2,000-gallon UST (gasoline) which were installed at the facility in 1971. Both tanks are listed as "permanently out of use" as of 1994. With regard to this site's LUST listing (facility identification no. 9-700446), the site is listed with the status of "site cleanup completed." Therefore, this facility is not expected to represent an environmental condition to the subject property.
- Lihue Department of Water, 4398 Pua Loke Street, is located relatively upgradient and less than 100 feet to the south-southwest of the subject property. According to the database, this site is listed as an UST and LUST site. The database indicated that this facility previously maintained one, 1,000-gallon UST (diesel) and one, 2,000-gallon UST (gasoline) which were installed at the facility in 1971. Both tanks are listed as "permanently out of use" as of 1994. With regard to this site's LUST listing (facility identification no. 9-700446), the site is listed with the status of "site cleanup completed." Therefore, this facility is not expected to represent an environmental condition to the subject property.

A total of 28 unmapped sites were also identified in the EDR database report. Unmapped sites cannot be plotted with confidence, but can be located by zip code or city name. In general, a site cannot be geocoded due to inaccurate or missing information in the environmental database record provided by its applicable agency. Cross-referencing addresses and site names, as well as a visual reconnaissance of surrounding properties, has been completed for the unmappable facility sites. The subject and adjacent properties were not identified on the unmapped sites listing in the environmental database report. No unmapped sites were identified with the potential to impact the subject property.

5.0 SITE RECONNAISSANCE AND INTERVIEWS

5.1 METHODOLOGY AND LIMITATIONS

Mr. Steven Cho, Environmental Scientist, and Mr. John Willard, Staff Industrial Hygienist, from Clayton's Honolulu Regional Office, conducted the site walkthrough portion of the assessment on March 22, 2005, accompanied by Mr. James Nishida, Housing Coordinator with Kauai Economic Opportunity, Incorporated. All areas of the

property were accessed and inspected. Rear portions of the subject property included densely vegetated land, which could not be fully accessed during this site investigation.

5.2 GENERAL OBSERVATIONS

At the time of the walkthrough, the subject property was improved with the three school buildings, which are currently vacant, and one new office building currently occupied by Kauai Economic Opportunity, Inc. (KEO). The abandoned school buildings, which were reportedly constructed on the subject property in 1939, consisted mostly of wood materials and were in weathered and dilapidated condition. With the exception of the onsite buildings, most surface portion of the subject property were observed to be unpaved or consisted of topsoil or gravel. The southeast rear portion of the subject property consisted of vegetated land where a wastewater septic tank system and cesspool is reportedly located.

A baseyard formerly managed by City of Lihue DAGS was observed on the northeastern side of the subject property and consisted of an area of approximately 2,500 square feet. Weathered concrete- or asphalt-paved surfaced portions of the area were occupied by several pieces of abandoned heavy machinery and vehicles. Up to ten vehicle batteries and general refuse were also observed discarded on the baseyard grounds. Clayton observed several locations of *de minimis* (less than five gallons) staining on the surface of the baseyard, including one 5- by 4-foot stain, along the school classroom perimeter.

No evidence of USTs (i.e., fill ports or vents) and/or unusual surface anomalies was observed on the subject property. Clayton did not observe evidence of significant surface staining onsite.

One pad-mounted transformer was observed at the front (northern perimeter) of the subject property. The transformer was labeled "No PCBS," and therefore, does not represent an environmental condition.

Summarized below is the site inspection and findings overview. All items that are, or are known to have been present at the subject property are noted in the table. The table also notes items that may present concerns to the subject property. Additional information about items noted can be found in the referenced section of this report.

Category	Observed	Concern	Reference
Hazardous Substances or Petroleum Products	Y	N	5.3, 5.4
Underground Storage Tanks	N	N	
Aboveground Storage Tanks	N	N	
Odors	N	N	
Air Emissions (stacks, hoods, other point sources)	N	N	

Pools of Liquid	N	N	
Drums	N	N	
Unidentified Substance Containers	N	N	
Electrical Equipment/Possible PCBs	Y	N	5.2, 5.7
Hydraulic Equipment/Possible PCBs	N	N	
Stains or Corrosion	Y	N	5.2, 5.4
Drains	N	N	
Sumps	N	N	
Pits, Ponds, or Lagoons	N	N	
Stained Soil or Pavement	Y	N	5.2, 5.4
Stressed Vegetation	N	N	
Evidence of Spills or Releases	N	N	
Artificially Filled Areas (Solid Waste Disposal)	N	N	
Waste Water	Y	N	5.2, 5.3
Wells	Y	N	5.8
Septic Systems	Y	N	5.2, 5.3
Dry Cleaning Operations	N	N	
Agricultural Use (Pesticides/herbicides)	Y	N	3.2
Oil/Gas Production or Exploration	N	N	
Railroad Spur	N	N	
Remedial Activities	N	N	

5.3 INTERVIEWS

On March 21, 2005, Clayton interviewed Mr. James Nishida, Housing Coordinator with Kauai Economic Opportunity, Incorporated. According to Mr. Nishida, the subject property was initially improved sometime prior to 1940 as the site of an elementary school (Lihue Grammer School). The onsite commercial office building currently occupied by KEO, Inc. was constructed in 1993.

Mr. Nishida was unaware of the former uses of the subject property but indicated that the site was most likely undeveloped. According to Mr. Nishida, associated light maintenance activities reportedly occurred onsite and may have included oil changes and battery changes. Fueling activities were not known to have occurred onsite.

A septic tank system formerly serviced the school buildings, and the system is located to the rear of the school on the southeastern side of the subject property. The area was overgrown with dense vegetation during Clayton's site visit. Mr. Nishida stated that a newer aerobic wastewater septic system was installed for the KEO building in 1993; however, due to operational issues, the associated irrigation system was not functioning properly, and the effluent hose was subsequently rerouted into the abandoned cesspool for the Lihue Grammar School. Mr. Nishida indicated that no environmental issues associated with the wastewater system and cesspool have been reported.

Mr. Nishida stated that to the best of his knowledge, no underground storage tanks have historically existed at the subject property, and he was unaware of any recognized environmental conditions existing at the subject property. He also indicated that no prior asbestos or lead-based paint surveys were conducted for the subject property's school buildings.

Clayton contacted Mr. Joe Tatihada, Engineer with the State of Hawaii Department of Health concerning the wastewater system at the subject property. According to Mr. Tatihada, the current septic tank system for the onsite KEO building was approved but has not yet been permitted for use. Mr. Tatihada also stated the subject property's current system effluent connection to the former septic tank's cesspool is in violation of Federal and State regulations.

On March 21, 2005, Clayton also interviewed Mr. Jason Alfiler, Site Manager of the adjacent Department of Public Works Baseyard for the last three and half years. Mr. Alfiler was familiar with the subject property's history. According to Mr. Alfiler, the subject property was developed into the school site several decades ago, and the baseyard, which was utilized by the Department of Accounting and General Services, has been on the site since approximately the 1960s or 1970s. He was unaware of USTs being maintained at the subject property.

According to Mr. Alfiler, the Department of Public Works Baseyard no longer maintains USTs onsite. Three USTs were reportedly removed from his operation in the 1990s. According to Mr. Alfiler, the USTs, which were reportedly installed in the 1970s, were removed without incident.

The baseyard is currently utilized for the maintenance of State of Hawaii heavy machinery and local police vehicles.

5.4 HAZARDOUS MATERIAL AND WASTE

The subject property was assessed for signs of storage, use, or disposal of hazardous materials. The assessment consisted of noting evidence (e.g., drums, unusual vegetation patterns, staining) indicating that hazardous materials are currently or were previously located on the subject property.

The subject property consists of a vacant school (Lihue Grammar School) and an office building currently occupied by KEO, Inc. Potentially hazardous materials are currently not used or stored at the subject property. However, Clayton observed indications of *de minimis* (less than five gallons) petroleum staining on the surface of the former baseyard area.

Up to ten vehicle batteries were also observed discarded on the baseyard grounds. The batteries appeared to be in tact with no evidence of staining observed. These batteries should be disposed of properly at an approved disposal or recycling facility.

5.5 STORAGE TANKS

5.5.1 Underground Storage Tanks

The subject property was inspected for evidence of underground storage tanks (USTs) (e.g., vent piping, dispensing equipment, pavement variations).

Evidence of USTs was not observed at the subject property during the assessment. In addition, there are no USTs registered with the State of Hawaii Department of Health Underground Storage Tank (UST) Branch for the subject property. Mr. Nishida stated that to the best of his knowledge, USTs have not been maintained at subject property.

However, the lack of visible evidence and owner/operator knowledge that USTs could be present at the subject property does not preclude the possibility that USTs could be present at the subject property. Visible evidence of USTs may have been removed or obscured from view and USTs could have been present at the subject property without the knowledge of the current owner/operator.

5.5.2 Aboveground Storage Tanks

The subject property was inspected for indications of aboveground storage tanks (ASTs) (e.g., concrete bolts, containers, reservoirs, generators). No evidence of ASTs was observed at the subject property.

5.6 INDICATIONS OF SOLID WASTE DISPOSAL

Currently, the subject property includes a vacant elementary school and an office building, which is occupied by KEO, Inc. Refuse mostly in the form of administrative (i.e., waste paper) trash is generated and collected within an onsite dumpster. According to Mr. Nishida, a waste hauler is contracted to collect and discard the trash at an offsite landfill on a weekly or bi-weekly basis.

5.7 INDICATIONS OF POLYCHLORINATED BIPHENYLS (PCBS)

The subject property was inspected for the presence of liquid-cooled electrical units (transformers, light ballasts, and capacitors), and major sources of hydraulic fluid (elevators and lifts). Such units are notable because they may be potential PCB sources.

One pad-mounted transformer (No. 95053) is located at the front (northern perimeter) of the subject property. The transformer was labeled "No PCBS," and therefore, does not represent an environmental condition for the subject property.

5.8 WELLS

According to the State of Hawaii Department of Land and Natural Resources (DLNR) records, there are no records of active, inactive, destroyed wells, or dry wells at the subject property.

However, one former drinking water well is located on the southwest adjacent property. According to the DLNR, the well, identified as the Lihue Grammar School Well (No. 2-5822-01), is the property of the State of Hawaii and was drilled in 1961. The well status is currently listed as "Unused," and records indicate that the well was closed in 1972. The presence of this well is not expected to represent an environmental condition for the subject property.

6.0 NON-ASTM ISSUES

6.1 SUSPECT ASBESTOS-CONTAINING MATERIALS

During this Phase I assessment, a limited asbestos assessment survey, consisting of the collection of 34 samples, was conducted that included sampling and analysis of suspect asbestos-containing (ACM), as summarized below. Based upon the years of construction, asbestos sampling was limited to the three school related structures onsite. The samples were sent to NVL Laboratories, Inc., a National Voluntary Laboratory Accreditation Program (NVLAP)-accredited laboratory located in Seattle, Washington. The asbestos samples were analyzed for asbestos content using the Environmental Protection Agency (EPA) recommended standard method of polarized light microscopy (PLM) for determining asbestos fibers in bulk materials. The laboratory analytical report is included as Appendix D.

The results of our asbestos assessment, including material locations, suspect ACM sampled, friability, laboratory results, and sample identification numbers are included in the following table:

Asbestos Assessment Results

Location	Suspect ACM	Friable/Non-Friable	Asbestos Content % and Type	Sample ID Number
Classroom #1	Green chalk board	Non-friable	ND	B1-B3
Classroom #1	Window glazing	Non-friable	ND	B4-B6
Classroom #1	Exterior scratch coat	Non-friable	ND	B7-B9

Location	Suspect ACM	Friable/Non-Friable	Asbestos Content % and Type	Sample ID Number
Classroom #1	90 pound roll roofing material, green stone	Non-friable	ND	B10-B12
Classroom #1	Black, weathered gray roofing sealant	Non-friable	3% Chrysotile	B13-B15
Classroom #1	Black roofing sealant	Non-friable	3% Chrysotile	B16-B18
Classroom #2	12- by 12-inch floor tile and associated mastic	Non-friable	ND	B19-B21
Classroom #2	9- by 9-inch floor tile and associated mastic	Non-friable	2% Chrysotile (tile) 3% Chrysotile (mastic)	B22-B24
Classroom #2	Window glazing	Non-friable	ND	B25-B27
Classroom #2	Sink undercoating	Non-friable	15% Chrysotile	B28
Classroom #2	Roofing material	Non-friable	ND	B29-B31
Carport	Gypsum wall board and joint compound	Non-friable	ND	B32-B34

ND: None Detected

The results of PLM analysis identified four materials which tested positive for asbestos. These materials included:

- Approximately 10 square feet of roofing sealant located on the attached storage shed roof for Building #1
- Approximately 16 linear feet of roofing sealant located on old roof flashing laying on the south end of the fenced in yard of Building #1
- Approximately 900 square feet of floor tile in Building #2
- Approximately one sink with sink undercoating located in Building #2

These materials were observed to be non-friable (not easily crumbled under hand pressure) and in good condition. Although they are considered non-friable in their present conditions, these materials may become friable if disturbed during renovation or demolition activities.

According to the USEPA regulations, removal of some non-friable ACM is not mandatory prior to demolition of a structure unless there is a potential for these materials to become friable (and thereby release fibers) during these activities. However, the ACM may need to be segregated from the other demolition materials prior to acceptance by the landfill.

All of the remaining suspect ACM sampled from the planned renovation areas tested negative for asbestos content.

6.2 RADON

Radon is a naturally occurring radioactive gas formed by the decay of uranium in bedrock and soil. The potential adverse health effects associated with radon gas depend on various factors, such as the concentration of the gas and duration of exposure. The concentration of radon gas in a building depends on subsurface soil conditions, the integrity of the building's foundation, and the building's ventilation system.

Due to the relatively young geological age of the Hawaiian Islands (approximately two million years old), radon gas does not occur at elevated levels in Hawaii. Therefore, no further investigation of radon is recommended for the subject property.

6.3 LEAD-BASED PAINT

Because the school buildings on the subject property were built prior to 1978, lead-based paint could be an issue at the school site. Sampling was conducted to determine the presence or absence of lead-based paint in the former school buildings.

Clayton collected paint chips from predominant painted surfaces thought most likely to be disturbed during the planned demolition/renovation activities. Paint samples were collected from approximately 1- to 2- square-inch areas by scraping paint from the substrate. The samples were placed in appropriate containers that were closed, labeled, and transported to NVL Laboratories, Inc., located in Seattle, Washington, which is an AIHA IHLAP/ELLAP-accredited laboratory. The paint samples were analyzed for lead content utilizing EPA Method 6010B. Descriptions of the paint samples and analytical results are summarized in the table below.

SUSPECT LBP

Sample ID	Paint Description	Location	Condition	Lead Concentration (%)
5262-P1	Lime green	Classroom #1, interior walls and window frames,	Poor	5.0000
5262-P2	Brown	Classroom #1, interior doors	Fair	2.1000
5262-P3	White	Building #1, ceiling	Fair	0.4700

Sample ID	Paint Description	Location	Condition	Lead Concentration (%)
5262-P4	Brown	Classroom #1, Interior window frames	Fair	2.3000
5262-P5	Beige	Classroom #1, exterior walls and support columns	Poor	15.0000
5262-P6	Green	Classroom #1, exterior doors and window frames	Poor	5.9000
5262-P7	White	Classroom #1, storage room, exterior walls	Good	0.0550
5262-P8	Blue	Classroom #1, lower foundation beam	Poor	4.9000
5262-P9	Brown	Classroom #1, exterior door, door frame and stairs, north side entrance	Good	0.9100
5262-P10	White	Classroom #2, interior ceiling	Good	0.0180
5262-P11	Lime green	Classroom #2, interior walls	Fair	0.1500
5262-P12	Dark brown	Classroom #2, interior baseboard trim	Good	0.1600
5262-P13	Beige over lime green	Classroom #2, S/W side of building, interior walls	Good	<0.0075
5262-P14	Brown	Classroom #2, exterior window frames, doors and door frames	Poor	0.5300
5262-P15	White	Classroom #2, exterior walls	Poor	1.5000
5262-P16	White	Carpport, interior walls	Good	<0.0095
5262-P17	White	Carpport, exterior walls	Good	<0.0051
5262-P18	Brown	Carpport, door, door frame and roof support beams	Good	<0.0063
5262-P19	Green	Wood post for fenced in area, rear of carport	Good	<0.0220

The laboratory analytical report of the paint sampling is included as Appendix F.

If paint contains lead at a concentration equal to or greater than 0.5% by weight, it is considered to be lead-based paint under the Lead-Based Paint Poisoning Prevention Act. The paints containing at least 0.01% lead by weight are considered lead containing paint, but are not regulated under the Lead-Based Paint Poisoning Prevention Act.

The lead-based paint sampling was inherently limited in nature. The results of the analysis should not be interpreted to presume the presence or absence of lead-based paint in specific building materials. Also note that the Occupational Safety and Health Administration (OSHA) regulations must be followed whenever paint that contains lead, regardless of the concentration, will be disturbed (e.g., during renovation or demolition).

6.4 ARSENIC-CONTAINING MATERIALS

Clayton inspected the subject building for suspect arsenic-containing materials such as canec (particle board). Based on our assessment, the canec ceiling board in building #2 contains arsenic at concentrations of 530 parts per million (ppm).

When detectable concentrations of arsenic are identified, there are Hawaii Occupational Safety and Health (HIOSH) requirements to protect workers during the disturbance of arsenic-containing materials. These requirements include air monitoring during disturbance activities such as demolition. In addition, the arsenic-containing materials must undergo TCLP-Arsenic analysis prior to disposal.

The laboratory results of the arsenic analysis from NVL Laboratories, Inc. are included in Appendix E.

6.5 SENSITIVE ECOLOGICAL AREAS

The subject property was inspected for the presence of sensitive ecological areas by noting environmental indicators (e.g., wetlands vegetation, floodplains) located on or immediately adjoining the subject property.

No sensitive ecological areas were observed on the subject property. The 1996 USGS 7.5-Minute Lihue, Kauai, Hawaii Topographic Map, which includes the subject and adjoining properties, was reviewed. No bodies of water or delineated wetlands were shown adjacent to or adjoining the subject property on the USGS map. A United States Fish and Wildlife Service (USFWS) National Wetland Map was not available for review.

The Federal Emergency Management Agency Flood Insurance Rate Maps (FEMA/FIRM Panel Nos. 150002-0201C and 150002-0202C, Revised March 4, 1987) were reviewed to determine if the subject property was located in a flood hazard area. The maps indicated that the subject property lies within Flood Zone X, an area determined to be outside both the 500-year and 100-year flood plains.

7.0 FINDINGS, OPINIONS, CONCLUSIONS, AND RECOMMENDATIONS

We have performed a Phase I Environmental Site Assessment in conformance with the guidelines of ASTM Practice E-1527-00 of the Proposed Kauai Homeless Shelter property at 2804 Wehe Road located in Lihue, Kauai, Hawaii, the "subject property," also described as Tax Map Key (TMK) Numbers: (4) 3-8-005: Parcel 1. Any exceptions to or deletions from this practice are described in Sections 1.2 and 1.3.

This assessment has revealed no evidence of *recognized environmental conditions* (RECs), as defined by ASTM, in connection with the subject property, except for the following:

- Evidence of fugitive dumping, including heavy machinery, vehicles, and *de minimis* staining, was observed in the area of the subject property's former baseyard.

The former baseyard and the abandoned machinery and vehicles are considered a recognized environmental condition because of the site activities (i.e., oil changes, fueling) normally associated with these types of operations. Clayton recommends that the discarded items should be removed and properly disposed of prior to development of the property.

After removal of the refuse, the underlying ground surface should be inspected for stains or releases of suspect hazardous materials. If staining is observed, the impacted soil and/or rocks should be sampled prior to being removed and sent to a proper disposal facility. *De minimis* stains in the former baseyard area should be removed from the area.

Clayton also recommends that the baseyard portion be surveyed with ground penetrating radar to confirm the presence or absence of underground storage tanks at the subject property.

- Based on Clayton's review of the Environmental Data Resources, Inc. (EDR) report and State of Hawaii-Department of Health database records, the Lihue Department of Water Baseyard, 2820 Wehe Road, is listed as an underground storage tank (UST) and leaking underground storage tank (LUST) site. This site is located on the adjacent property to the northeast in an upgradient position relative to the subject property. This site reportedly maintained three, 5,000-gallon USTs used to store gasoline (two USTs) and diesel (one UST) fuels. The USTs were installed in 1977 and were closed and removed from the property in 1998. The USTs were each listed with the status of "Permanently Out of Use." Details of the closure were not provided; however this site's LUST listing (facility identification no. 9-701076) is listed with the status of "Site Cleanup Completed."

Although the status of this operation indicates a "closed" status, given the lack of specific information on this closure, Clayton recommends conducting a file review to confirm the site's UST and LUST history.

The following environmental issues were identified in connection with the subject property, although not deemed to be *recognized environmental conditions* as defined by ASTM:

- The subject property maintains an aerobic wastewater system, which is located directly behind the KEO building and is utilized to handle wastewater generated from the KEO building's sinks and toilets. Due to defective issues related to the

system's associated irrigation field, it is currently linked to an onsite abandoned cesspool, which was utilized by the former Lihue Grammar School. According to the State of Hawaii Department of Health-Wastewater Division, the onsite system in its current operational state has not been approved for use.

The subject property's wastewater system is not considered a recognized environmental condition because there is no evidence of hazardous materials releases into the system. However, according to the federal regulations published in Federal Register 68546, dated December 7, 1999, existing large capacity commercial cesspools are required to be closed by April 5, 2005.

- Clayton observed up to 10 discarded vehicle batteries in the area of the subject property's former baseyard.

The batteries are not considered a recognized environmental condition because material staining or release were not noted in these areas. Clayton recommends that the batteries be collected and sent to a proper disposal or recycling facility.

- An asbestos assessment survey was conducted as part of this Phase I assessment. The results of polar light microscopy (PLM) analysis identified four materials which tested positive for asbestos content. These materials included:
 - Approximately 10 square feet of roofing sealant
 - Approximately 16 linear feet of roofing sealant
 - Approximately 900 square feet of floor tile
 - Approximately one sink with sink undercoating

These materials were observed to be non-friable (not easily crumbled under hand pressure) and in good condition. Although considered non-friable in their present conditions, these materials may become friable if disturbed during renovation or demolition activities. Clayton recommends the proper removal of all ACM prior to demolition activities by a licensed asbestos abatement contractor, under the supervision of a qualified industrial hygienist, in order to comply with regulatory requirements.

According to the USEPA regulations, removal of some non-friable ACM is not mandatory prior to demolition of a structure unless there is a potential for these materials to become friable (and thereby release fibers) during these activities. However, the ACM may need to be segregated from the other building materials prior to acceptance by the landfill.

- A lead paint assessment survey was conducted as part of this Phase I assessment. Clayton's survey resulted in the collection of 19 paint-chip samples for lead analysis. Of the paint samples collected, nine samples reported lead concentrations above the regulatory level of 0.5 % lead by weight. These paints included:
 - Lime green paint located on the walls and window frames of Building #1
 - Brown paint located on the interior doors of Building #1
 - Brown paint located on the interior window frames of Building #1
 - Beige paint located on the exterior walls and support columns of Building #1
 - Blue paint located on the lower foundation beam
 - Brown paint located on the north exterior door, door frame and stairs of Building #1
 - Brown paint located on the exterior window frames, doors and door frames of Building #2
 - White paint located on the exterior walls of Building #2

These paints were observed to be in poor to good condition. If the subject building or portions of the building with LBP are demolished, a licensed lead abatement contractor should properly remove the loose and flaking LBP prior to demolition.

The intact paint may remain in place during demolition activities; however, landfills require toxicity characteristic leaching procedure (TCLP) lead analysis of the demolition debris for landfill acceptance. Lead demolition debris with a TCLP lead concentration above 5.0 milligrams per liter (mg/l) may require disposal at an approved landfill on the mainland U.S.A.

In addition to the confirmed LBP, five other paint samples collected contained lead concentrations at or above the laboratory detection limit. The Hawaii Occupational Safety and Health (HIOSH) regulations must be followed whenever paint that contains lead, regardless of the concentration, will be disturbed (e.g., during renovation or demolition). Clayton recommends conducting air monitoring during renovation/demolition activities to ensure that airborne lead dust levels are below the HIOSH permissible exposure limit (PEL).


Clayton inspected the subject building for suspect arsenic-containing materials such as canec (particle board). Based on our assessment, the canec ceiling board in Building #2 contains arsenic at concentrations of 530 parts per million (ppm).

When detectable concentrations of arsenic are identified, there are Hawaii Occupational Safety and Health (HIOSH) requirements to protect workers during the disturbance of arsenic-containing materials. These requirements include air monitoring during disturbance activities such as demolition. In addition, the arsenic-containing materials must undergo TCLP-Arsenic analysis prior to disposal.

- The historical research indicates that the subject property was formerly used as agricultural land. Past use of agricultural chemicals on lands previously used for commercial agricultural purposes has the potential to impact the subject property. However, there was no evidence of storage, mixing or excessive use of agricultural chemicals at the subject property. Moreover, according to Hawaii Administrative Rules (HIAR) Chapter 128D Environmental Response Law, the presence of agricultural chemicals does not constitute a release of a hazardous substance. Section 128D-1 of the HIAR, excludes "any release resulting from the legal application of a pesticide product registered under the Federal Insecticide, Fungicide, and Rodenticide Act."

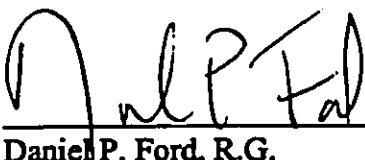
This finding is not considered a recognized environmental condition because there was no evidence of storage, mixing, or excessive use of pesticides and/or herbicides on the property. In addition, according to HIAR Chapter 128D, the presence of agricultural chemicals does not constitute a release. The subject property is zoned "A-5, Agriculture" and Clayton understands that the subject property is to be developed as residential properties; therefore, testing for agricultural chemicals may be required.

This report prepared by:



Steven Cho
Environmental Scientist
Honolulu Regional Office

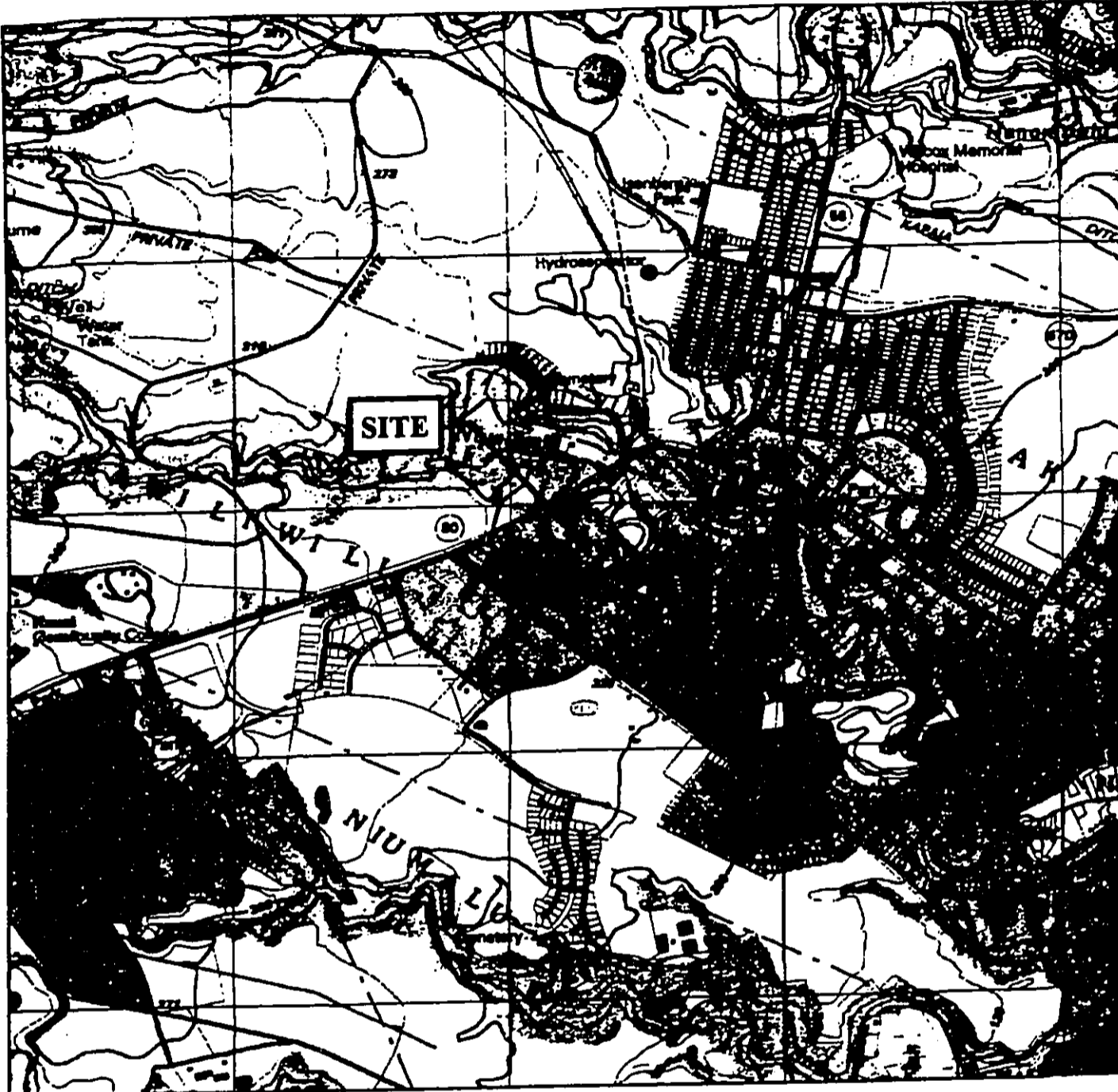
This report reviewed by:



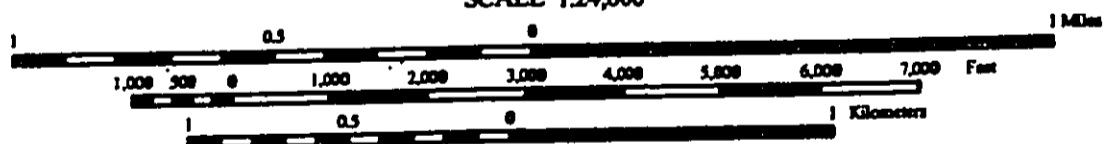
Daniel P. Ford, R.G.
Vice President
Honolulu Regional Office

May 11, 2005

FIGURES



SCALE 1:24,000



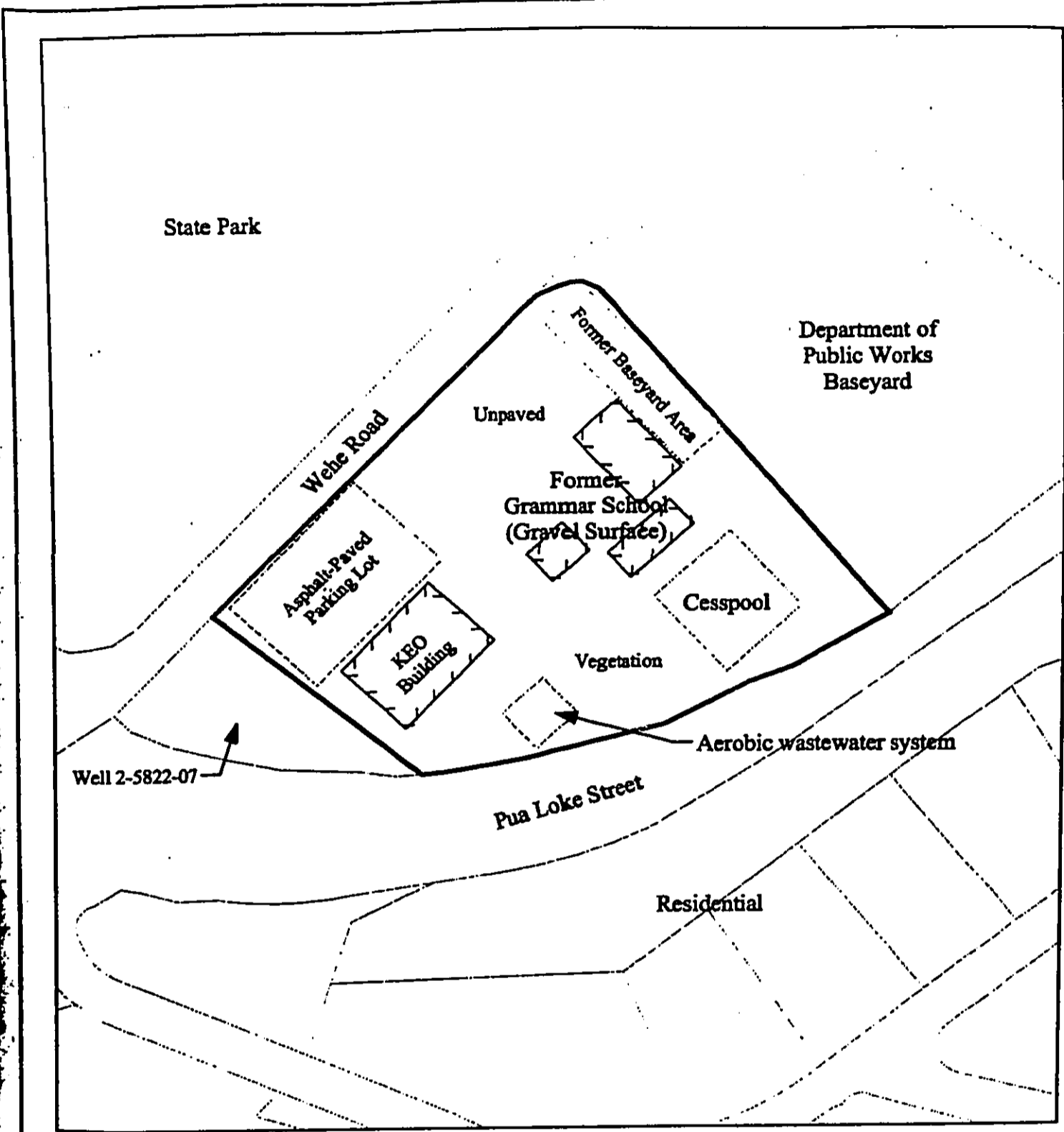
Portion of 7.5-minute Series (Topographic) Maps
 United States Department of Interior
 United States Geological Survey
 Lihue Quadrangle, Kauai County, Hawaii
 1996



Project No.: 85-05262.00
 Date: 04/05/2005
 Revised By: JT
 Checked By: SC

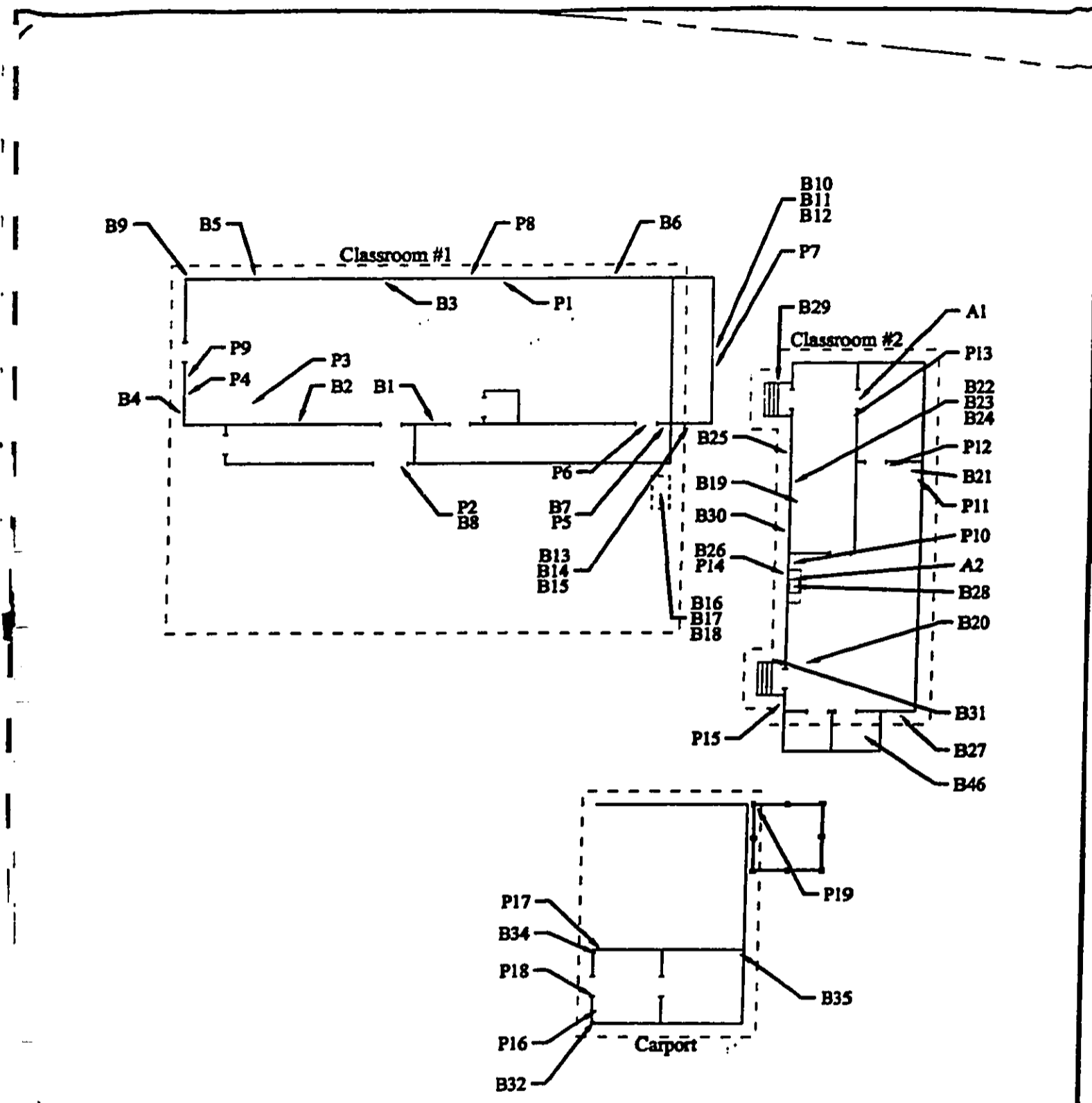
Title: Site Location Map
 Location: TMK [4] 3-8-005:001
 Lihue, Kauai, Hawaii
 Client: Agor Architecture

FIGURE
 1



50 25 0 50 100 150 200 250 300 350 Feet Approximate Scale 1" = 100'

	Project No.: 85-05262.00	Title: Site Vicinity Map	FIGURE 2
	Date: 04/05/2005	Location: TMK [4] 3-8-005:001 Lihue, Kauai, Hawaii	
	Revised By: JT	Client: Agor Architectural	
	Checked By: SC		



Approximate Scale 1" = 20'

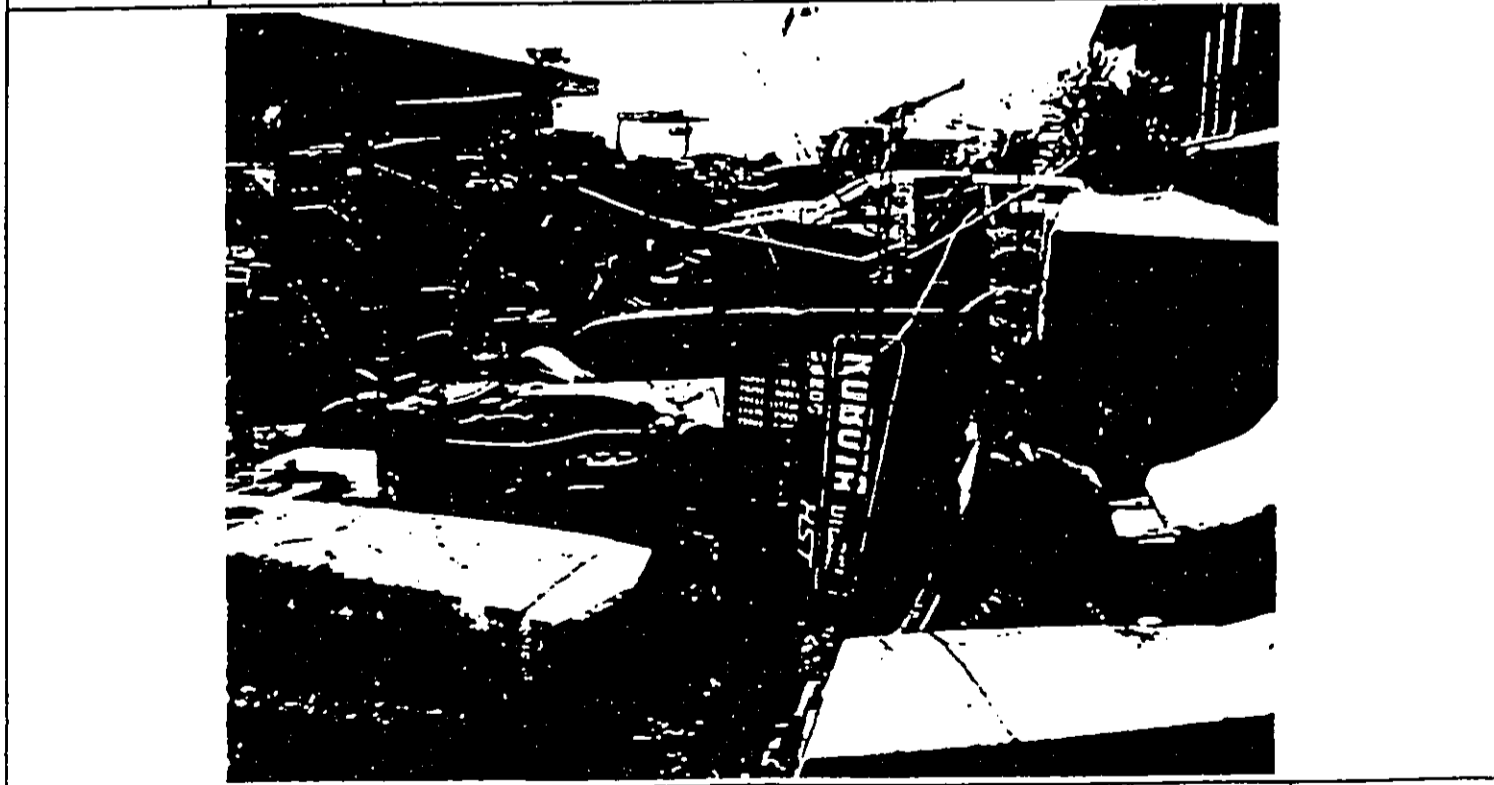
	Project No.	85-05262.00	Title	Lead and Asbestos Sampling Locations	FIGURE 3
	Date	04/05/2005		TMK [4] 3-8-005:001	
	Prepared by:	JT		Lihue, Kauai, Hawaii	
	Checked by:	JW		Agor Architecture	

PHOTOGRAPHS

RECEIVED AS FOLLOWS



Clayton Project Number 85-05262.00	Description	View of the subject property's vacant school buildings and unsurfaced areas	Photo 1
	Site Name	Kauai Homeless Shelter, 2804 Wehe Road, Lihue, Kauai, Hawaii	Photo Date
	Client	Agor Architecture	3-22-2005



Clayton Project Number 85-05262.00	Description	View of discarded equipment located in the former baseyard area	Photo 2
	Site Name	Kauai Homeless Shelter, 2804 Wehe Road, Lihue, Kauai, Hawaii	Photo Date
	Client	Agor Architecture	3-22-2005

RECEIVED AS FOLLOWS

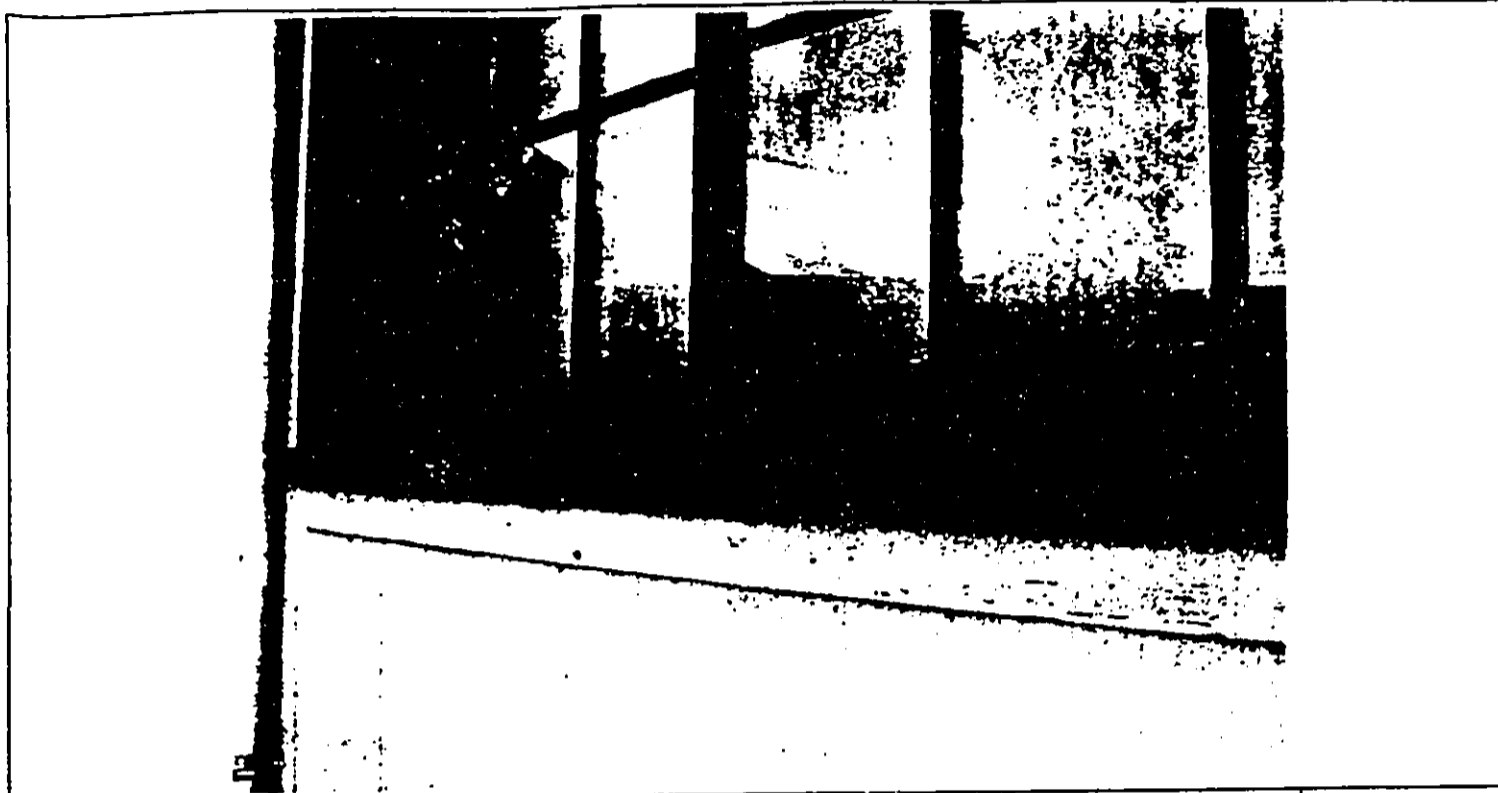


Clayton Project Number 85-05262.00	Description	View of the Kauai Economic Opportunity, Inc. (KEO) building on the subject property	Photo 3
	Site Name	Kauai Homeless Shelter, 2804 Wehe Road, Lihue, Kauai, Hawaii	Photo Date
	Client	Agor Architecture	3-22-2005

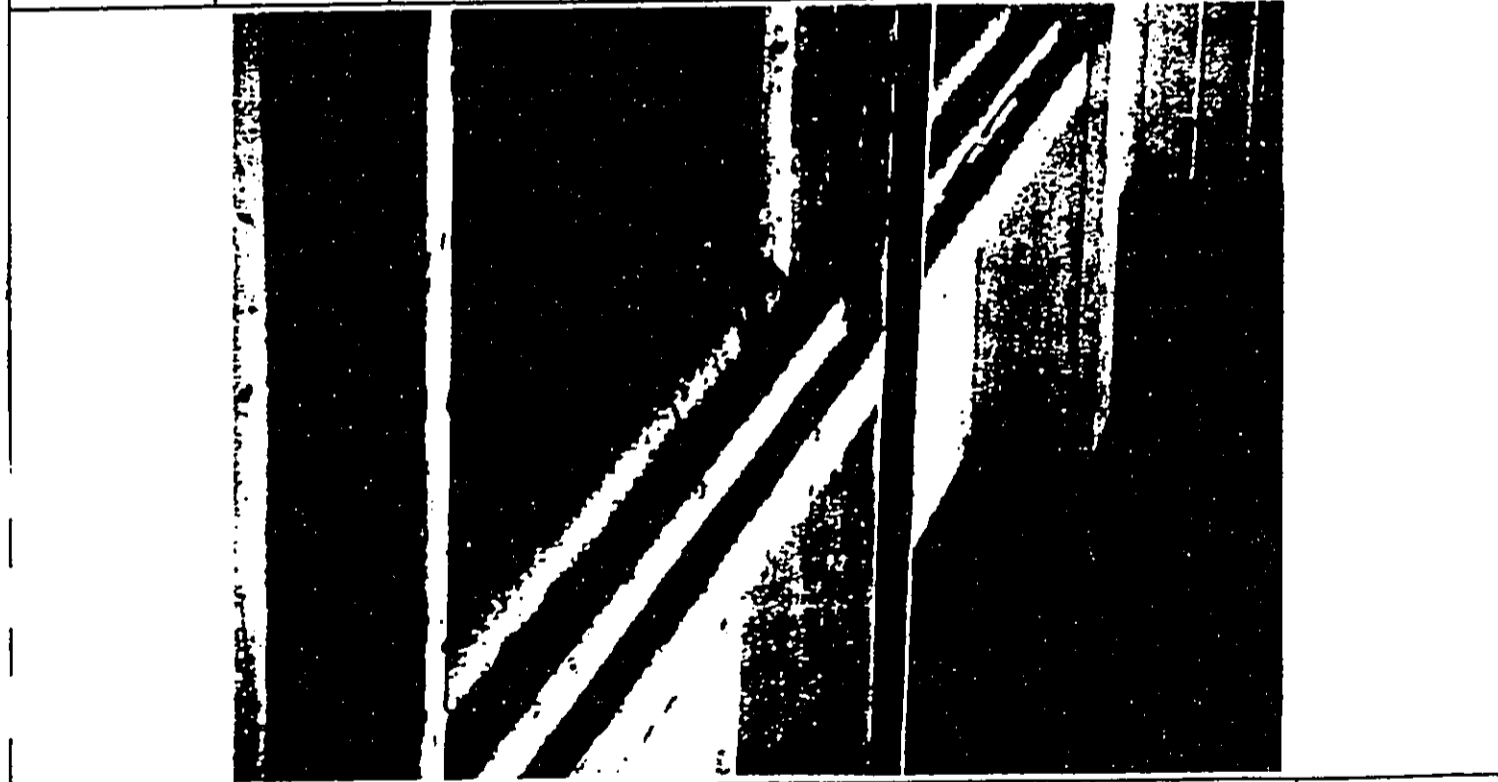


Clayton Project Number 85-05262.00	Description	View of the smaller school classroom building	Photo 4
	Site Name	Kauai Homeless Shelter, 2804 Wehe Road, Lihue, Kauai, Hawaii	Photo Date
	Client	Agor Architecture	3-22-2005

RECEIVED AS FOLLOWS



Clayton Project Number 85-05262.00	Description	View of building materials and painted window sill	Photo 5
	Site Name	Kauai Homeless Shelter, 2804 Wehe Road, Lihue, Kauai, Hawaii	Photo Date 3-22-2005
	Client	Agor Architecture	

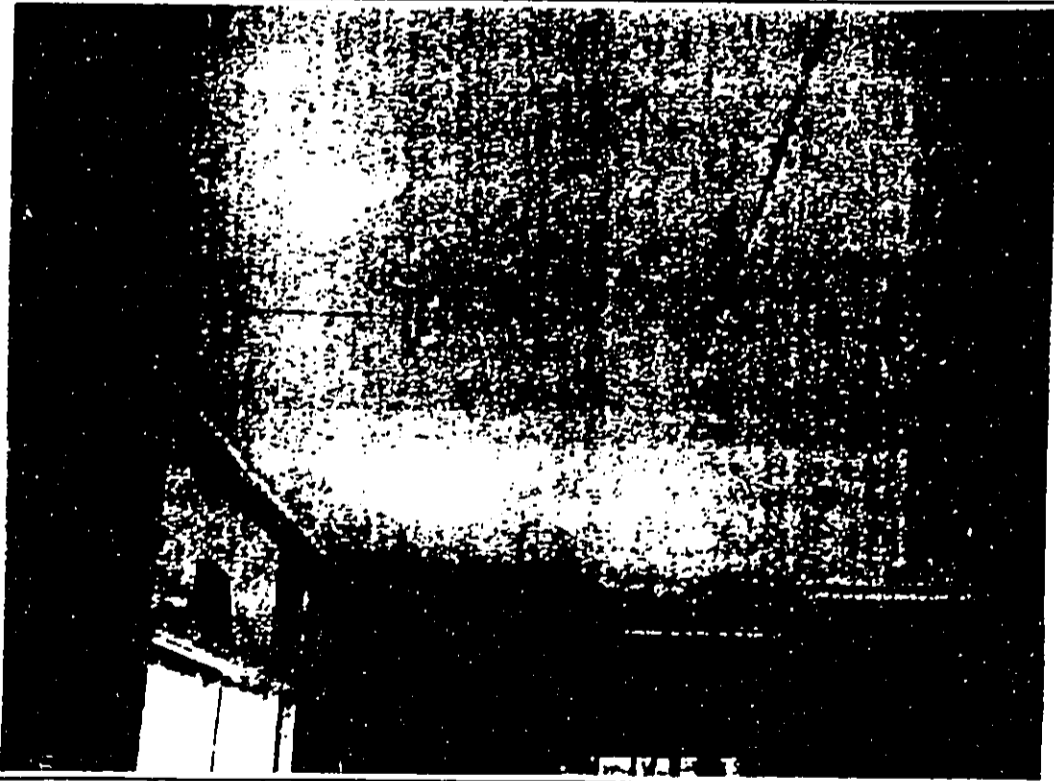


Clayton Project Number 85-05262.00	Description	View of the chalkboard area within the main classroom building	Photo 6
	Site Name	Kauai Homeless Shelter, 2804 Wehe Road, Lihue, Kauai, Hawaii	Photo Date 3-22-2005
	Client	Agor Architecture	

RECEIVED AS FOLLOWS



Clayton Project Number 85-05262.00	Description	View of flooring materials within the main classroom building	Photo 7
	Site Name	Kauai Homeless Shelter, 2804 Wehe Road, Lihue, Kauai, Hawaii	Photo Date
	Client	Agor Architecture	3-22-2005



Clayton Project Number 85-05262.00	Description	View of the canec ceiling structure	Photo 8
	Site Name	Kauai Homeless Shelter, 2804 Wehe Road, Lihue, Kauai, Hawaii	Photo Date
	Client	Agor Architecture	3-22-2005

RECEIVED AS FOLLOWS



Clayton Project Number 85-05262.00	Description	Interior view of the window sill area within the smaller classroom building	Photo 9
	Site Name	Kauai Homeless Shelter, 2804 Wehe Road, Lihue, Kauai, Hawaii	Photo Date
	Client	Agor Architecture	3-22-2005

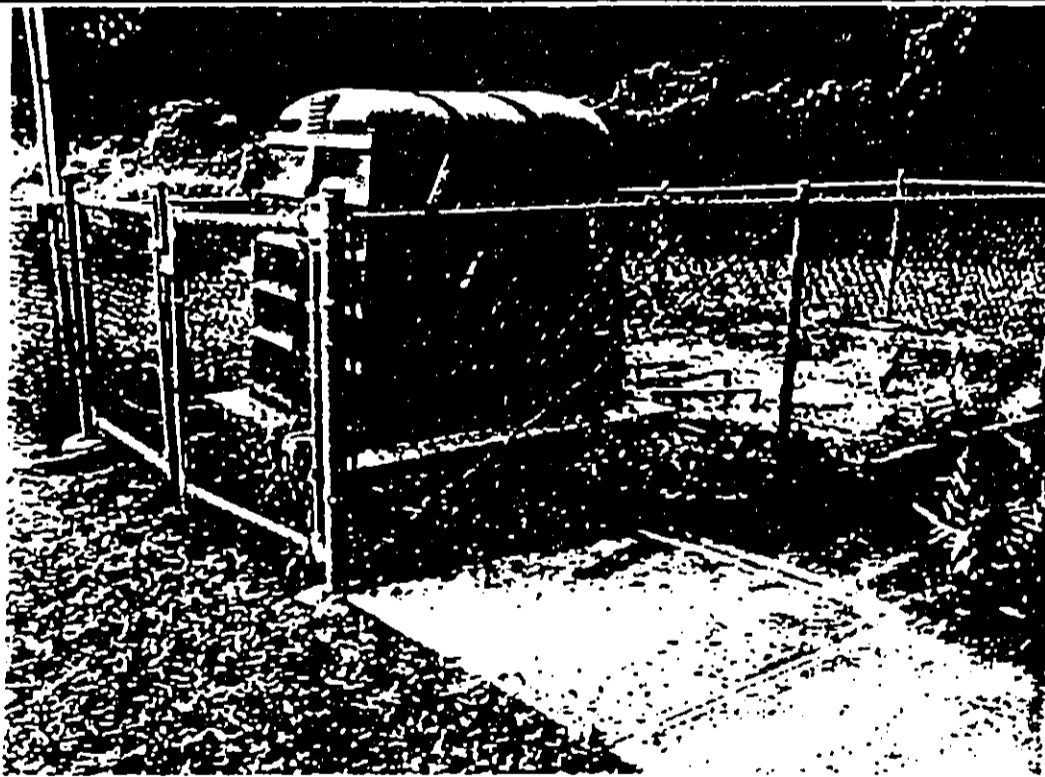


Clayton Project Number 85-05262.00	Description	View of the subject property's open area of the main classroom building	Photo 10
	Site Name	Kauai Homeless Shelter, 2804 Wehe Road, Lihue, Kauai, Hawaii	Photo Date
	Client	Agor Architecture	3-22-2005

RECEIVED AS FOLLOWS





Clayton Project Number 85-05262.00	Description	View of the subject property's former baseyard area	Photo 11
	Site Name	Kauai Homeless Shelter, 2804 Wehe Road, Lihue, Kauai, Hawaii	Photo Date
	Client	Agor Architecture	3-22-2005



Clayton Project Number 85-05262.00	Description	View of the subject property's aerobic wastewater system located to the rear of the KEO building	Photo 12
	Site Name	Kauai Homeless Shelter, 2804 Wehe Road, Lihue, Kauai, Hawaii	Photo Date
	Client	Agor Architecture	3-22-2005

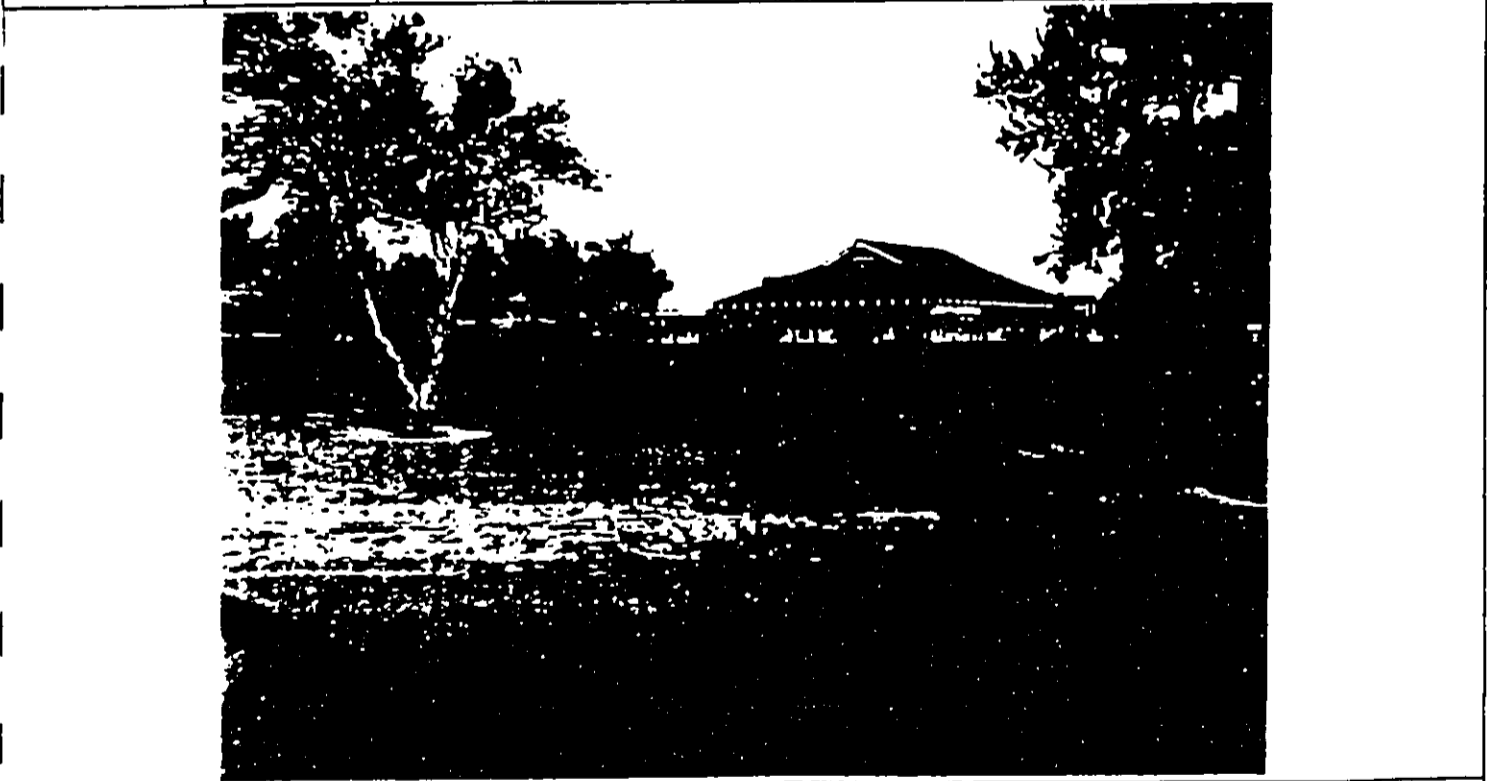
RECEIVED AS FOLLOWS

			Photo 13
Clayton Project Number 85-05262.00	Description	View of discarded used batteries viewed in the baseyard of the subject property	Photo Date 3-22-2005
	Site Name	Kauai Homeless Shelter, 2804 Wehe Road, Lihue, Kauai, Hawaii	
	Client	Agor Architecture	
			Photo 14
Clayton Project Number 85-05262.00	Description	View of the undeveloped area behind the school. Cesspool reported in this area	Photo Date 3-22-2005
	Site Name	Kauai Homeless Shelter, 2804 Wehe Road, Lihue, Kauai, Hawaii	
	Client	Agor Architecture	

RECEIVED AS FOLLOWS



Clayton Project Number 85-05262.00	Description	View along Wehe Road the adjacent State Park to the left, facing north-northeast	Photo 15
	Site Name	Kauai Homeless Shelter, 2804 Wehe Road, Lihue, Kauai, Hawaii	Photo Date 3-22-2005
	Client	Agor Architecture	



Clayton Project Number 85-05262.00	Description	View of the State Park located across from the subject property, of north-northeast along Wehe Road	Photo 16
	Site Name	Kauai Homeless Shelter, 2804 Wehe Road, Lihue, Kauai, Hawaii	Photo Date 3-22-2005
	Client	Agor Architecture	

LINDA LINGLE
GOVERNOR OF HAWAII



COUNTY OF KAUAI
HOUSING AGENCY



~~04~~ OCT 18 9 12 AM '05 OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

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

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
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CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

HAWAII HISTORIC PRESERVATION
DIVISION REVIEW

Log #: 2004.3053
Doc #: 0410NM10.doc

Applicant/Agency: Kenneth Rainforth, Executive on Housing/KEO

Address: Office of Community Assistance, Kauai County Housing Agency
4444 Rice St., Suite 330, Lihue, HI 96766

SUBJECT: National Historic Preservation Act – Section 106 Review – Kauai Economic
Opportunity Emergency Shelter and Transitional Housing Program on
Wehe Road, Lihue, Kauai

Ahupua`a: Lihue
District, Island: Lihue, Kauai
TMK: (4) 3-8-5: 1

1. We believe there are no historic properties present, because:
- a) intensive cultivation has altered the land
 - b) residential development/urbanization has altered the land
 - c) previous grubbing/grading has altered the land
 - d) an acceptable archaeological assessment or inventory survey found no historic properties
 - e) other

2. This project has already gone through the historic preservation review process, and mitigation has been completed .

Thus, we believe that "no historic properties will be affected" by this undertaking

Peter Young
Staff: Peter Young

Date: 10/12/04

Title: State Historic Preservation Officer



U.S. Fish & Wildlife Service

National Wetlands Inventory

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Service Wetlands Definition

The Service's wetlands definition is adopted from the Service publication "*Classification of Wetlands and Deepwater Habitats of the United States*." "In general terms, wetlands are lands where saturation is the dominant factor determining the nature of soil development and the types of plant and animal communities living in the soil and on its surface. The single feature that most wetlands share is a substrate that is at least periodically saturated with or covered by water. The water creates special physiological problems for all plants and animals except those that are adapted for life in water saturated soil."

DEFINITION:

"WETLANDS are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For purposes of this classification wetlands must have one or more of the following three attributes: (1) at least periodically, the land supports predominantly hydrophytes; (2) the substrate is predominantly undrained hydric soil; and (3) the substrate is nonsoil and is saturated with water or covered by shallow water at some time during the growing season of the year."

Classification of Wetlands and Deepwater Habitats of the United States
by

Lewis M. Cowardin, U.S. Fish and Wildlife Service, Northern Prairie Wildlife Research Center, Jamestown, North Dakota
Virginia Carter, U.S. Geological Survey, Reston, Virginia

Francis C. Golet, Department of Natural Resources Science, University of Rhode Island, Kingston, RI,
Edward T. LaRoe, U.S. National Oceanographic and Atmospheric Administration, Office of Coastal Zone Management, Washington, DC

Performed for
U.S. Department of the Interior, U.S. Fish and Wildlife Service, Office of Biological Services, Washington, DC
FWS/OBS-79/31 December 1979

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EXHIBIT 5

4/18/05



**DEPARTMENT OF BUSINESS,
ECONOMIC DEVELOPMENT & TOURISM**

LINDA LINGLE
GOVERNOR
THEODORE E. LIU
DIRECTOR
STEVE BRETSCHNEIDER
DEPUTY DIRECTOR
MARY LOU KOBAYASHI
ADMINISTRATOR
OFFICE OF PLANNING

Telephone: (808) 587-2846
Fax: (808) 587-2824

OFFICE OF PLANNING

235 South Beretania Street, 6th Floor, Honolulu, Hawaii 96813
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

Ref. No. P-10520

June 24, 2004

Mr. Gordan Y. Furutani, Field Office Director
U.S. Department of Housing and Urban Development
Hawaii State Field Office
500 Ala Moana Boulevard, Suite 3A
Honolulu, Hawaii 96813

Dear Mr. Furutani:

Subject: Hawaii Coastal Zone Management (CZM) Program Federal Consistency
Requirements for U.S. Department of Housing and Urban Development
(HUD) Grant Programs

We have recently revised the Hawaii CZM Program list of federal assistance programs that require CZM federal consistency review by our office. We no longer review any HUD assistance programs, including Community Development Block Grants, and housing programs such as the Public Housing Capital Fund. Applicants for HUD assistance are no longer required to obtain CZM federal consistency approval for HUD assisted activities. Other CZM regulations such as the Special Management Area and Shoreline Setback provisions which are administered by the Counties, are still valid and may apply to HUD assisted projects. Each County Planning Department should be consulted for the applicability of Special Management Area and Shoreline Setback Area requirements. We suggest that the environmental checklist that applicants for HUD assistance must complete be modified to reflect the change in CZM requirements.

Thank you for your cooperation in ensuring compliance with Hawaii's CZM Program. If you have any questions, please contact John Nakagawa at 587-2878 or Debra Tom at 587-2840, of our CZM Program.

Sincerely,

Mary Lou Kobayashi

Mary Lou Kobayashi
Administrator

EXHIBIT 6



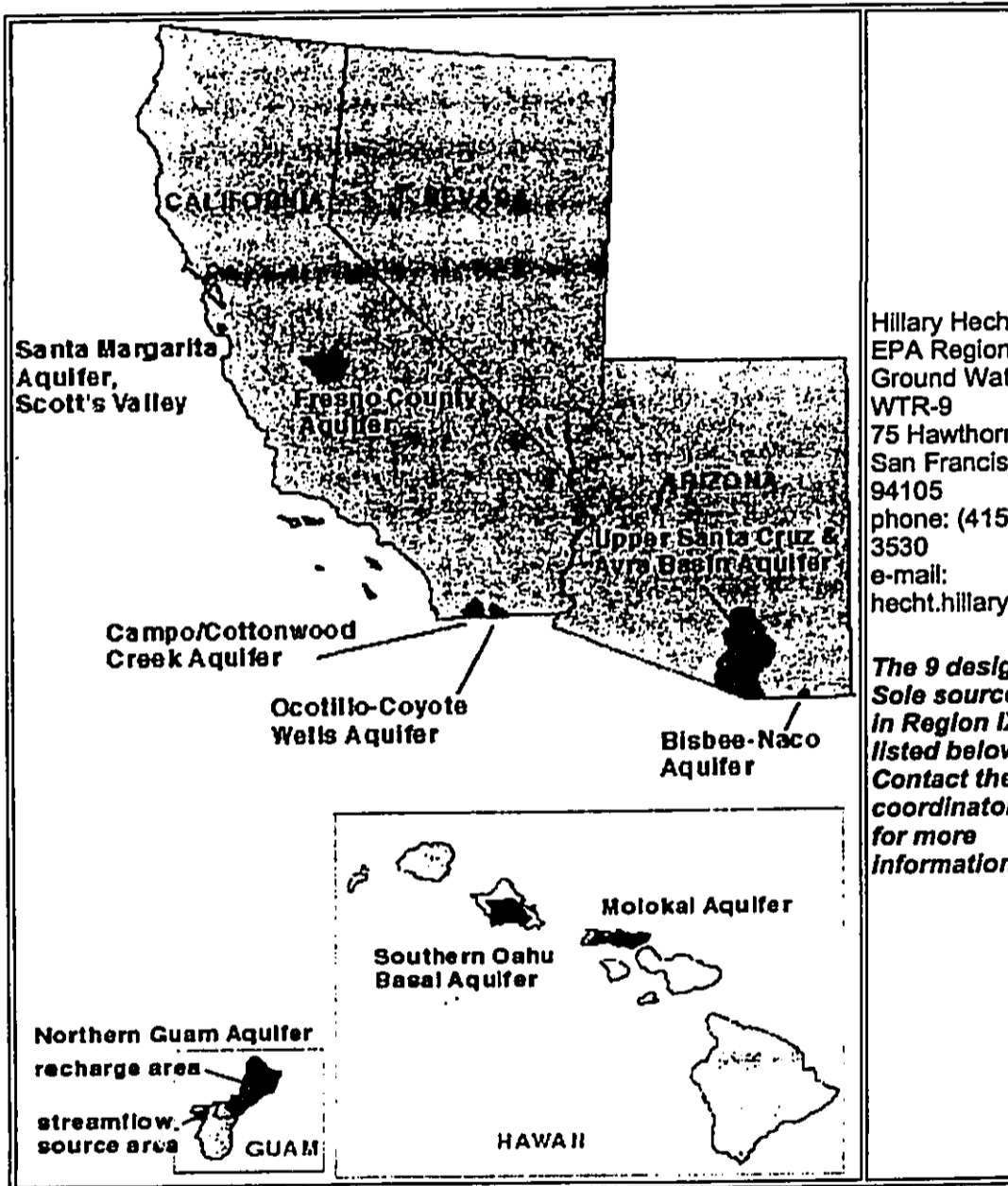
U.S. Environmental Protection Agency Source Water Protection

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Designated Sole Source Aquifers in EPA Region IX Arizona, California, Hawaii, Nevada, Guam, and American Samoa



Hillary Hecht
EPA Region IX
Ground Water
WTR-9
75 Hawthorn
San Francisco
94105
phone: (415)
3530
e-mail:
hecht.hillary@

*The 9 designated
sole source
aquifers in Region IX
listed below
Contact the
coordinator
for more
information.*

DESIGNATED SOLE SOURCE AQUIFERS IN REGION IX:

State	Sole Source Aquifer Name	Federal Reg. Cit.	Publ. Date
AZ	Upper Santa Cruz & Avra Basin Aquifer	49 FR 2948	01/24/84

AZ	Bisbee-Naco Aquifer	53 FR 38337	09/30/88
CA	Fresno County Aquifer	44 FR 52751	09/10/79
CA	Santa Margarita Aquifer, Scotts Valley	50 FR 2023	01/14/85
CA	Campo/Cottonwood Creek	58 FR 31024	05/28/93
CA	Ocotillo-Coyote Wells Aquifer	61 FR 47752	09/10/96
GU	Northern Guam Aquifer System	43 FR 17867	04/26/78
HI	Southern Oahu Basal Aquifer	52 FR 45496	11/30/87
HI	Molokai Aquifer	59 FR 23063	04/20/93

Return to: [Sole Source Aquifer program home page](#)

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URL: <http://www.epa.gov/safewater/swp/ssa/reg9.html>



Wild & Scenic Rivers By State

"... the time has also come to identify and preserve free-flowing stretches of our *g* before growth and development make the beauty of the unspoiled waterway a mem
- President Lyndon Johnson

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- [Wyoming](#)

- [Printable table of the National Wild & Scenic Rivers System.](#)
- [Instructions for National Atlas Wild & Scenic Rivers Site \(PDF\)](#)
 - [GIS shape files \(270 KB Self-Extracting Zipped File\).](#)

Managing Agencies

- ACOE = [Army Corps of Engineers](#)
- BLM = [Bureau of Land Management -- BLM Rivers](#)
- NPS = [National Park Service](#)
- USFS = [U.S. Forest Service](#)
- USFWS = [U.S. Fish & Wildlife Service](#)
- Various states

Multiple listings of some rivers indicate more than one segment of the river is de
Some rivers also have tributaries designated.

Alabama

- [Sipsey Fork of the Black Warrior, USFS](#)

Apr-19-03 02:14pm From-CLEAN AIR BRANCH

808 5864358

T-714 P.002/003 F-105

recd 7/22/04

to docket 7/22/04

02:1216440



EXECUTIVE CHAMBERS
HONOLULU

LINDA LINGLE
GOVERNOR

March 18, 3003

03-474M&A CAB

Mr. Wayne Nastri
Regional Administrator
U.S. EPA - Region IX
75 Hawthorne Street
San Francisco, California 94105

Dear Mr. Nastri:

Pursuant to Section 107(d) of the Clean Air Act, I am recommending that the State of Hawaii be designated as an attainment area for the new 8-hour ozone, National Ambient Air Quality Standards. This recommendation is based on the results of the ozone monitoring from the past three years.

The Department of Health, which manages the air monitoring stations, has determined that the quality-assured, ozone data for the calendar years 2000 through 2002 is well in compliance with the new federal 8-hour ozone standard. As required, this monitoring data has already been inputted to the U.S. Environmental Protection Agency (EPA) air database, Aerometric Information Retrieval System. The ozone monitoring data has been summarized in a table format and is enclosed for your information.

We look forward to working with EPA Region IX in the coming year on this important public health and environmental issue. If you have any questions, please contact Mr. Wilfred Nagamine at the Clean Air Branch, Department of Health, at (808) 586-4200.

Sincerely,

A handwritten signature in cursive script that reads "Linda Lingle".

LINDA LINGLE

Enclosure

cc: Dr. Chiyome L. Fukino

EXHIBIT 9

STATE OF HAWAII 8-HOUR OZONE AVERAGES: 2000, 2001 and 2002

Site: Sand Island, Honolulu
AIRS #: 150031004

Year	Percent Valid Days	1 st Highest Daily Max 8-Hr. Conc. (ppm) (Date)	2 nd Highest Daily Max 8-Hr. Conc. (ppm) (Date)	3 rd Highest Daily Max 8-Hr. Conc. (ppm) (Date)	4 th Highest Daily Max 8-Hr. Conc. (ppm) (Date)	5 th Highest Daily Max 8-Hr. Conc. (ppm) (Date)
2000	98%	0.048 4/8/00	0.047 4/10/00	0.045 4/5/00	0.045 4/8/00	0.044 3/18/00
2001	84%	0.047 3/21/01	0.044 3/20/01	0.043 3/22/01	0.042 4/10/01	0.042 4/12/01
2002	87%	0.045 4/1/02	0.045 12/8/02	0.044 3/19/02	0.043 12/9/02	0.043 3/20/02
Average		0.047	0.045	0.044	0.043	0.043

The 8-hour running averages and the daily maximum 8-hour average concentrations were computed according to 40 CFR 50 Appendix I.

Attainment is determined by comparing the 3-year average of the fourth-highest daily maximum 8-hour average concentration to the Federal primary and secondary ozone ambient air standards of 0.08 ppm. The State of Hawaii's 3-year average of the fourth-highest daily maximum 8-hour concentration was 0.043, which is 54% of the Federal primary and secondary standards.



U.S. Environmental Protection Agency

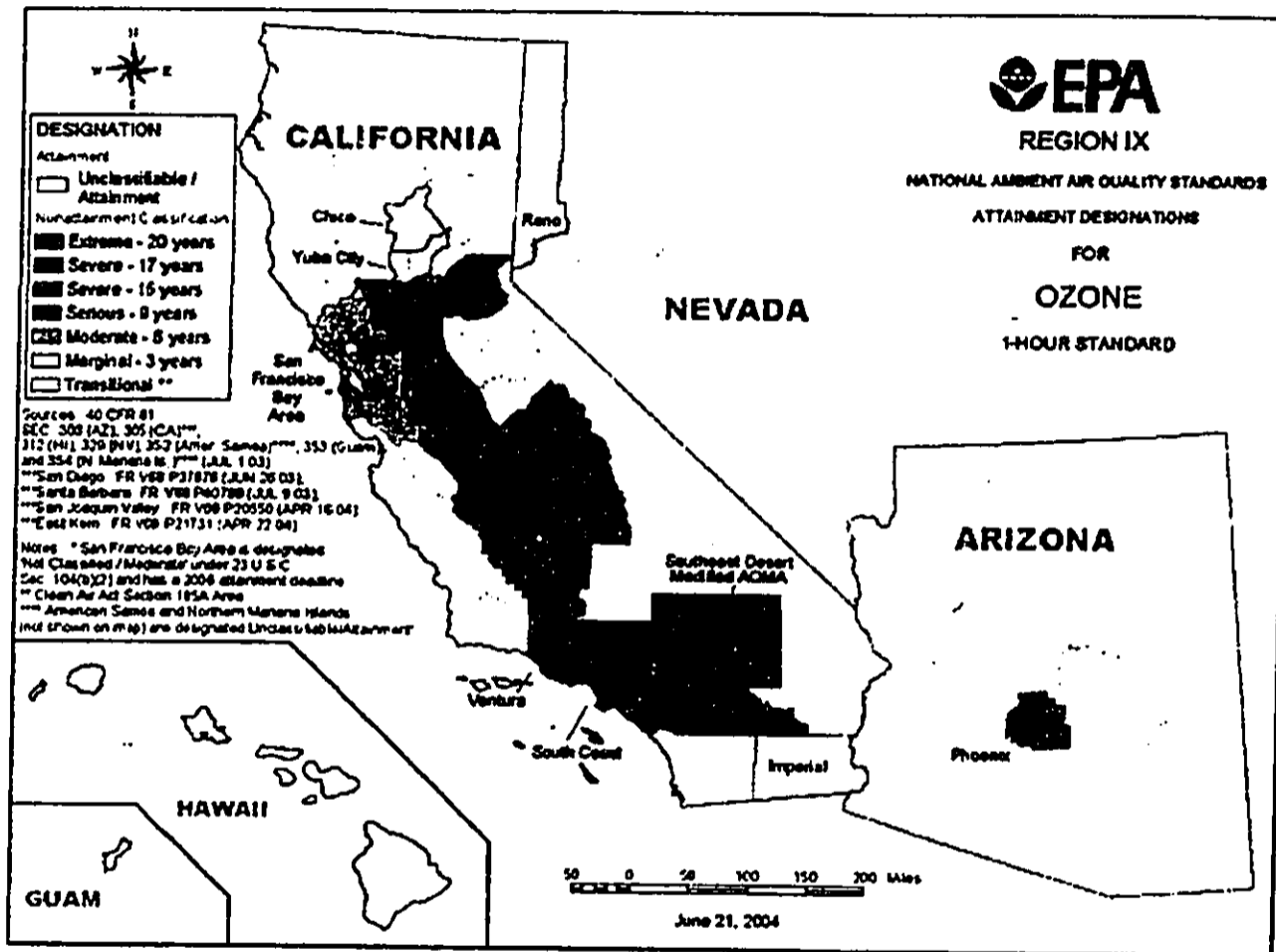
Region 9: Air Programs

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Ozone (O₃) Attainment Designations in Region 9 (1-hour Standard)



- [View a larger version of this map \(JPG, 224 K\)](#)
- [View a high-resolution PDF of this map \(PDF, 1 pp. map, 256 K \[About PDF\]\(#\)\)](#)
- [View the Ozone Designation Map for the 8-hour standard](#)
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E-mail quiliano.dave@epa.gov with questions.

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4109 Zeering Rd., Denair, CA 95316
<http://www.convault.com>, dave@convault.com
800-222-7099, 209-632-7571
FAX 209-632-4711

April 29, 2005

Mr. James Nishida
Kauai Economic Opportunity Inc.
2804 Wehe Rd.
Lihue, HI 96766
(808) 245-4077

Re: ConVault Aboveground Storage Tanks

Dear Mr. Nishida:

This letter is to confirm our conversation that the 2000-gallon tanks with serial numbers 515668, 515676, and 515685 located at the Lihue Repair Shop in Hawaii were manufactured according to the requirements of UL 142. These tanks were also tested according to UL 142 and ConVault requirements and passed the required tests of the primary tank. The tanks were shipped August 1991. At that time ConVault tanks were listed under UL 142 Standard for Aboveground Tanks for Flammable and Combustible Liquids, as the UL 2085 Standard was not yet adopted.

ConVault tanks have been listed under UL 2085 since 1996. However, the ConVault manufacturing procedures for UL 2085 are basically the same as when the ConVault tanks were listed under UL 142. The tanks in question have secondary containment and monitoring ports for leak detection devices. The secondary containment is over 100% of total capacity, has been approved by EPA as meeting the intent of the code, and is protected from impact and ballistics damage. The "concrete vaults" have the same capability of two-hour fire resistance, vehicle impact resistance and ballistic impact resistance as UL 2085 listed tanks. However the units do not have the UL 2085 listing mark and the secondary was not tested according to the UL 2085 standard.

If you have any questions, please do not hesitate to contact me.

Very Truly Yours,

A handwritten signature in cursive script that reads "David P. Harris".

David P. Harris
VP MARKETING

EXHIBIT 10

End User	LIHUE REPAIR SHOP	LIHUE REPAIR SHOP	LIHUE REPAIR SHOP
ULNumber	515668	515671	515685
Model	R 20003PF	R 20003PF	R 20003PF
Size	2000	2000	2000
DateSold	7/17/1991	7/25/1991	7/25/1991
Address	2820 WEHE RD	2820 WEHE RD	2820 WEHE RD
City	KAUAI	KAUAI	KAUAI
St/Prov	HI	HI	HI
Zip	96766	96766	96766
Phone			
SICCode	5541	5541	5541

Gary Mackler

From: richard_l._knight@hud.gov
Sent: Wednesday, May 04, 2005 1:57 PM
To: mark_a._chandler@hud.gov; Gary Mackler
Cc: richard_l._knight@hud.gov
Subject: Re: Acceptable Separation Distance

See below – Kauai project

— Forwarded by Richard L. Knight/CPD/HON/HUD on 05/04/2005 01:56 PM —



pic00047.gif

Ernest Molins

05/04/2005 12:30 PM

To: "keo" <keo@keoinc.org>
Cc: JOEL SEGAL/CPD/HHQ/HUD@HUD, Richard L. Knight/CPD/HON/HUD@HUD
Subject: Re: Acceptable Separation Distance

Dear Mr. Nishida,

The technical advisor in Washington and I agree that these steel reinforced cement tanks meet the HUD requirements for safety without additional mitigation. I'm enclosing the correspondence for your documentation. See below. Please include this documentation in the environmental record for the project. I hope this helps.

Sincerely,

Ernest Molins

Regional Environmental Officer
HUD San Francisco Regional Office - Region IX
600 Harrison Street
San Francisco, CA 94107
Tel. (415) 489-6731
Fax (415) 489-6732

— Forwarded by Ernest Molins/CPD/SFC/HUD on 05/04/2005 03:24 PM —

JOEL SEGAL

05/04/2005 10:49 AM

LINDA LINGLE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF HEALTH
P.O. Box 3378
HONOLULU, HAWAII 96801-3378

KAUAI ECONOMIC
OPPORTUNITY INCORP.

05 APR 29 AM 5:

RECEIVED
CHIYOME L. FUKINO, M.D.
DIRECTOR OF HEALTH
In reply, please refer to:
File: HEER Office
2005-218MGC

April 27, 2005

Mr. James Nishida
Housing Coordinator
Kauai Economic Opportunity, Inc.
P.O. Box 1027
Lihue, HI 96766

Subject: Wehe Road, Lihue, Kauai, Hawaii: TMK (4)-3-8-5:1

Dear Mr. Nishida:

The State of Hawaii, Department of Health, Hazard Evaluation and Emergency Response reviewed the parcel, with TMK No. (4) - 3-8-5:1 and found no reported notification of releases in our data base.

The PA/SI Section under the Cooperative Agreement with EPA is presently conducting a Site Inspection on Lihue Sugar Mill, which is approximately 0.2 mile from the Site. The parcel is not part of this investigation.

If you have any further questions, please give me a call at (808) 586-7577.

Sincerely yours,

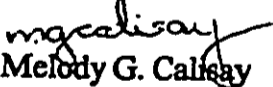

Melody G. Calvey
HEER Office
Department of Health

EXHIBIT 11

LINDA LINGLE
GOVERNOR

RECEIVED

15 APR 20 12:19

KAUAI ECONOMIC
OPPORTUNITY INCORPORATED



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
AIRPORTS DIVISION - KAUAI DISTRICT
Lihue Airport
3901 Mokulele Loop, Unit 6
Lihue, Hawaii 96768-9706

RODNEY K. HARAGA
DIRECTOR

Deputy Directors
BRUCE Y. MATSUI
BARRY FUKUNAGA
VINCENT T. MORIOKA
J. H. BEKUGUCHI

REFER TO:
AIR-K1
05.132

April 16, 2005

Mr. James Nishida
Housing Coordinator
Kauai Economic Opportunity, Inc.
2804 Wehe Road
Lihue, Hawaii 96766

Dear Mr. Nishida:

Subject: Review of KEO Emergency Shelter and Transitional Housing Program

Thank you for providing Lihue Airport the opportunity to review the impacts, if any, that airport operations might impose on the planned Homeless Housing Project.

From a preliminary review of the project's location in relationship to the airport, we see no impact from an airspace issue. The planned location is located at the boundary of the Horizontal Surface and the Conical Surface. As long as the planned height of the development does not exceed 303' above ground level (AGL), and does not exceed the 20:1 ratio for the Conical Surface, there appears to be no impact.

Further, development is well outside of the 55LDN contour, identified as having no impact to occupants at the planned site. The studies used to make this determination were our approved Federal Aviation Regulation (FAR) Part 150 Noise Study, dated 1989, and updated contours used to assess the impact of our heliport in 1999.

We are forwarding these findings to our planning department for confirmation and final approval. As soon as we receive their concurrence, we will provide you final approval by your April 25, 2005 suspense date.

If you have any questions, please call me at 246-1456.

Sincerely,

A handwritten signature in black ink, appearing to read "Timothy A. Skinner".

Timothy A. Skinner, A.A.E., MBA, MS
Assistant Airport Superintendent V

cc: DEP-A, AIR-L, AIR-EP

EXHIBIT 12

LINDA LINGLE
GOVERNOR OF HAWAII



CHIYOME L. FUKINO, M.D.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
P.O. BOX 3378
HONOLULU, HAWAII 96801-3378

In reply, please refer to:
EMO / CWB

10033PKP.04

October 11, 2004

Mr. Kenneth N. Rainforth
Executive on Housing
Kauai County Housing Agency
Offices of Community Assistance
County of Kauai
4444 Rice Street, Suite 330
Lihue, Hawaii 96766

Dear Mr. Rainforth:

**Subject: Kauai Economic Opportunity Emergency Shelter
and Transitional Housing Program
Wehe Road, Lihue, Kauai, Hawaii**

04 OCT 14 AM 11:27

The Department of Health (DOH), Clean Water Branch (CWB), has reviewed the subject application and offers the following comments:

1. The Army Corps of Engineers should be contacted at 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 Control 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.

EXHIBIT 13

Mr. Kenneth N. Rainforth
October 11, 2004
Page 2

- 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 an 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.hawaii.gov/health/environmental/water/cleanwater/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 State 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.hawaii.gov/health/environmental/water/cleanwater/index.html>
4. Hawaii Administrative Rules (HAR), Section 11-55-38, also requires the applicant 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.
5. The DOH is in the process of readopting HAR, Chapters 11-54 and 11-55 to regulate the application of pesticides to surface waters of the State. This may include overspray of pesticide applied adjacent to surface waters. Therefore, the applicant may be required to apply for NPDES permit coverage should the revised regulations be in effect during the length of the project.

If you have any questions, please contact Ms. Kris Poentis of the Engineering Section, CWB, at (808) 586-4309.

Sincerely,


DENIS R. LAU, P.E., CHIEF
Clean Water Branch

KP:np



March 3, 2005

RECEIVED

05 MAR -7 11:20

UID #4520

KAUAI ECONOMIC OPPORTUNITY INCORP.

Mr. James Nishida
Kauai Economic Opportunity, Inc.
P.O. Box 1027
Lihue, HI 96766

Dear Mr. Nishida:

Subject: Water Service Inquiry: Emergency and Transitional Homeless Shelter,
TMK: 3-8-05:001, Wehe Road, Lihue, Kauai

This is in regard to your letter dated February 3, 2005. Any actual development of this area will be dependent on the adequacy of the source, storage and transmission facilities existing at that time. At the present time, the existing storage and transmission facilities are adequate. The existing source facilities for the Lihue area are operating at capacity; however, the Department of Water (DOW) is allowing water meter service for up to three 5/8-inch water meters (or equivalent 1/4-inch water meter) or three single family dwellings per existing lot of record.

Prior to the DOW recommending water meter service or building permit approval, the applicant must:

1. Submit detailed water demand calculations along with the proposed water meter size. Water demand calculations submitted by your engineer or architect should include fixture count and water meter sizing worksheets. The Department's comments may change depending on the approved water demand calculations.
2. Prepare and receive DOW's approval of construction drawings for necessary water system facilities and construct said facilities. These facilities shall include but not be limited to:
 - a. The domestic service connection, if applicable.
 - b. The fire service connection, if applicable.
 - c. The interior plumbing plans with the appropriate backflow prevention device.
 - d. Additional source facilities for this area, if applicable. The applicant may wait until others (including the DOW) construct additional source facilities for this area. Grove Farm is presently in the process of constructing a surface water treatment plant which will provide additional source capacity to the Lihue area. Upon completion of this source facility the DOW will re-evaluate our current water policy for the Lihue area.

EXHIBIT 14

Mr. James Nishida

Subject: Water Service Inquiry: Emergency and transitional homeless shelter,
TMK: 3-8-05:001, Wehe Road, Lihu'e, Kaua'i

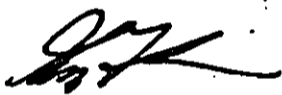
March 3, 2005

Page 2

3. Pay the applicable charges in effect at the time payment is made to the Department. At the present time, these charges shall include but are not limited to the Facilities Reserve Charge which will be dependent on the approved water meter size.
4. If applicable, a "Certification of Completion" notice must be issued by the DOW for the construction of the necessary water system improvements required for the proposed development.
5. Be made aware that the proposed development is located within a 1,000 foot radius of our existing well. The applicant will be required to satisfy the Department of Health's concerns regarding waste water disposal for the proposed project, as applicable.

If you have any questions, please call Edward Doi at 245-5417.

Sincerely,



Gregg Fujikawa
Chief of Water Resources and Planning

ED:ml
25-053 Lihu'e, Nishida



DEPARTMENT OF THE ARMY
U. S. ARMY ENGINEER DISTRICT, HONOLULU
FT. SHAFTER, HAWAII 96858-6440

May 3, 2005

REPLY TO
ATTENTION OF

Regulatory Branch

Mr. James Nishida
Housing Coordinator for Kauai Economic Opportunity, Inc.
Agor Architecture
4374 Kukui Grove Drive, Suite 204
Lihue, HI 96766

5 MAY 13 PM 12:57

Dear Mr. Nishida:

This responds to your request for written comments for a draft federal Environmental Assessment (dEA) which will address activities and impacts of the proposed Kauai Economic Opportunity Emergency Shelter and Transitional Housing Program Project at 2804 Wehe Road, Lihue, Kauai Island (unstated acreage at TMK (4) 3-8-05: por. 1).

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 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 Emergency Shelter and Transitional Housing Program Project.

Thank you for your consideration of potential impacts to the aquatic environment of the Lihue watershed. We look forward to receiving a copy of the dEA for review and comment. Please contact Mr. Farley Watanabe of my staff at 808-438-7701, or facsimile 808-438-4060, if you have any questions or need additional information. Please refer to File Number POH-2005-262 in any future correspondence regarding this project.

Sincerely,

George P. Young, P.E.
Chief, Regulatory Branch

EXHIBIT 15

CULTURAL IMPACT ASSESSMENT

A Cultural Impact Assessment, consisting of information provided by knowledgeable informants of the site, including traditional cultural practitioners, has been compiled to analyze the impact of the proposed action on cultural practices and features associated with the project area. Based on the consultations and information collected, no impact on cultural practices or cultural features is anticipated by the proposed action.

Reference:

Wilcox Elementary School Centennial Memory Book – Old Lihue School moved to Wehe Road site in spring 1923. Old Lihue School closed in 1958 when it was moved to present Wilcox Elementary School site.

Interviews:

Interviews with knowledgeable Lihue residents and Old Lihue School students suggest that no traditional or customary rights of Native Hawaiians have been practiced on the site since the site was designated for a school site. The following is a summary of comments received:

“Site heavily impacted because it is an old school site for many years. I attended Lihue School. I can remember walking with cousin to school. Mrs. Kuraoka was a teacher there, as well as Eva Fountain and Gabriel Nishida. I can remember going down a sidewalk to mill site on Haleko Road.”

“In general, need to look at the site in relation to the Ahupua’a. Also, the site needs to be seen as to its impact on any neighboring streams and you need to look for burials on site. In relation to the Wehe Road site, the area is heavily impacted due to history of sugar cultivation and being on old school site. Most of the cultural and historical impact will be as a school site. Any below ground level artifacts and remains need to be dealt with as required by law.”

“The site had the Principal’s house as well as teacher’s cottage. Galdys Brandt had an office on site when she was superintendent of schools. Old Lihue School was closed when they opened Wilcox Elementary School.”

“Around 1968, one of the old school classrooms was moved to the DOE office building.”

“I taught school as well as attended. The office building looks like it was one of the old teacher’s cottages that were duplexes. However, location isn’t familiar. It may be that both buildings were moved. When I attended Lihue School, her classroom has six classes. Lihue School had a lot of students. Each building has three classrooms. Big building still there looks like the classroom building.”

"I played in area. Went to bunkers at one time. There were boxes of C Rations in bunker.
Cannot remember exactly where bunkers were."

Tony Rita used to play in area. Talked of bunkers with old papers in it in the area."

"Save the avocado tree."

Eryan J. Baptiste
Mayor

Gary K. Heu
Administrative Assistant



OFFICES OF COMMUNITY ASSISTANCE
KAUAI COUNTY HOUSING AGENCY

Bernard P. Carvalho Jr.
Director

Kenneth N. Rainforth
Executive on Housing

July 11, 2005

Ms. Genevieve Salmonson, Director
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, Hawaii 96813

Subject: Draft Environmental Assessment for KEO Emergency Shelter and Transitional Housing Program, TMK (4) 3-8-5:1, Lihue, Kauai, Hawaii.

Dear Ms. Salmonson:

Reference is made to the comments offered in your letter dated June 23, 2005, regarding the above-referenced Draft Environmental Assessment. The following response corresponds to the order of comments received:

1. **Two-sided pages:** Final document will be printed on both sides of the pages.
2. **Table of Contents:** A table of contents (enclosed) will be included in the final EA.
3. **Cultural Impacts Assessment:** A cultural impacts assessment (enclosed) has been conducted and will be included in the final EA.
4. **Timeframe:** Based on project milestones and related timeframes, remaining predevelopment tasks (e.g. environmental clearance; use permit; construction bid solicitation) should be complete by mid-October 2005. Construction should start November 2005 and end April/May 2006.
5. **Funding:** Kauai Economic Opportunity, Inc. KEO has secured the following federal grant funds for this project:

Community Development Block Grant (\$664,257)
HOME Investment Partnerships Program (\$727,000)
Economic Development Initiative – Special Project Grant (\$250,000).
State CIP (2005 Legislative Session) – Pending Approval by Governor



Development Section (808) 241 4444 FAX (808) 241 4495
TDD (808) 241 4411

Piikoi Building 4444 Rice Street Suite 33
Lihue Hawaii 96766

Section 8 (HUD) (808) 241 4440 FAX (808) 241 4496
cok_hsg@aloha.net

EXHIBIT 17

July 11, 2005

Ms. Genevieve Salmonson, Director

Subject: Draft Environmental Assessment for KEO Emergency Shelter

Page Two

6. Alternatives: As discussed in Section 3.2 of draft EA, other alternative sites were given preliminary site feasibility review and, for various reasons, determined economically infeasible due to lack of infrastructure, or incompatible with surrounding use.

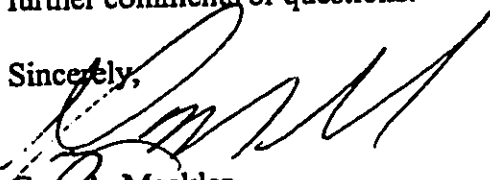
With regard to alternative design configurations, site design has gone through several iterations. KEO and County staff has held at least three meetings with the project design consultant, Agor Architecture, to refine site design for function, safety, and other related site issues.

7. Figures: As requested, site plans with the location of existing facilities and proposed location of new facilities (enclosed) will be included in the final EA. Figure 2 (enclosed), missing in the draft EA, will be included in the final EA.

8. Permits and Approvals: As noted in Section 8.0 of draft EA, two permits are required for the project. Agor Architecture will submit a Use Permit Application to the County Planning Department on or about July 15, 2005. The Use Permit Application will be put before the Planning Commission. This process involves at least one public hearing and should take an estimated 45 days to resolve. Also, a building permit is required for the construction. Agor Architecture will submit the building permit application shortly after the Use Permit process.

Thank you for sending comments to the draft EA. Please contact me at 241-4429 if you have any further comments or questions.

Sincerely,



Gary A. Mackler
Development Coordinator

Enclosures (4)

cc: MaBel Fujiuchi, KEO
Ron Agor, Agor Architecture

LINDA LINGLE
GOVERNOR OF HAWAII



GENEVIEVE SALMONSON
DIRECTOR

STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY CONTROL

235 SOUTH BERETANIA STREET
SUITE 702
HONOLULU, HAWAII 96813
TELEPHONE (808) 586-4165
FACSIMILE (808) 586-4166
E-mail: oeqc@health.state.hi.us

June 23, 2005

Gary Mackler
Office of Community Assistance
Kauai Housing Agency
4444 Rice Street #330
Lihue, HI 96766

Dear Mr. Mackler:

Subject: Draft Environmental Assessment (EA)
Lihue Emergency Shelter and Transitional Housing Program

RECEIVED
05 AUG -5 P 1:00
OFFICE OF ENVIRONMENTAL
QUALITY CONTROL

We have the following comments to offer:

Two-sided pages: In order to reduce bulk and save on paper, please print on both sides of the pages in the final document.

Table of contents: A table of contents would be very helpful for the reviewer. Please include one in the final EA.

Cultural impacts assessment:

Act 50 was passed by the legislature in April 2000. This mandates an assessment of impacts to current cultural practices by the proposed project. In the final EA include such an assessment.

If the subject area is in a developed urban setting, cultural impacts must still be assessed. Many incorrectly assume that the presence of urban infrastructure effectively precludes consideration of current cultural factors. For example, persons are known to gather kauna'oa, 'ilima, 'uhaloa, noni or ki on the grassy slopes and ramps of the H-1 freeway and some state highways on the neighbor islands. Certain landmarks and physical features are used by Hawaiian navigators for sailing, and the lines of sight from landmarks to the coast by fisherman to locate certain fishing spots. Blocking these features by the construction of buildings or tanks may constitute an adverse cultural impact.

For assistance in the preparation refer to our *Guidelines for Assessing Cultural Impacts*. Contact our office for a paper copy or go to our homepage at <http://www.state.hi.us/health/oeqc/guidance/index.html>. You will also find the text of Act 50 linked to this section of our homepage.

Gary Mackler
June 23, 2005
Page 2

Timeframe: What are the anticipated start and end dates of construction?

Funding: The total project cost is not given. Please disclose all state or county funds involved, including any federal funds flowing through the state or county.

Alternatives: In the final EA discuss any alternatives considered for this project, such as alternative sites or alternative design configurations.

Figures:

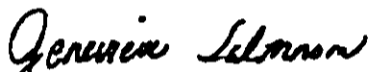
Site plan: In the final EA include a site plan showing the location of existing facilities and the proposed locations of new facilities. Also indicate any proposed landscaping.

Figure 2: This figure is missing. Please include it in the final EA.

Permits and approvals: List all required permits and approvals for this project and the status of each.

If you have any questions, call Nancy Heinrich at 586-4185.

Sincerely,


GENEVIEVE SALMONSON
Director

c: Ron Agor

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

RECEIVED

05 SEP 13 P2:14

OFFICE OF ENVIRONMENTAL
QUALITY CONTROL

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
Environmental Planning Division
Naval Facilities Engineering Command, Pacific
258 Makalapa Drive, Suite 100
Pearl Harbor, HI 96860-3134
Telephone: (808) 472-1395

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 ²	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 ²	square meter(s)
m ³	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 [m²]) 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 m²) 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.

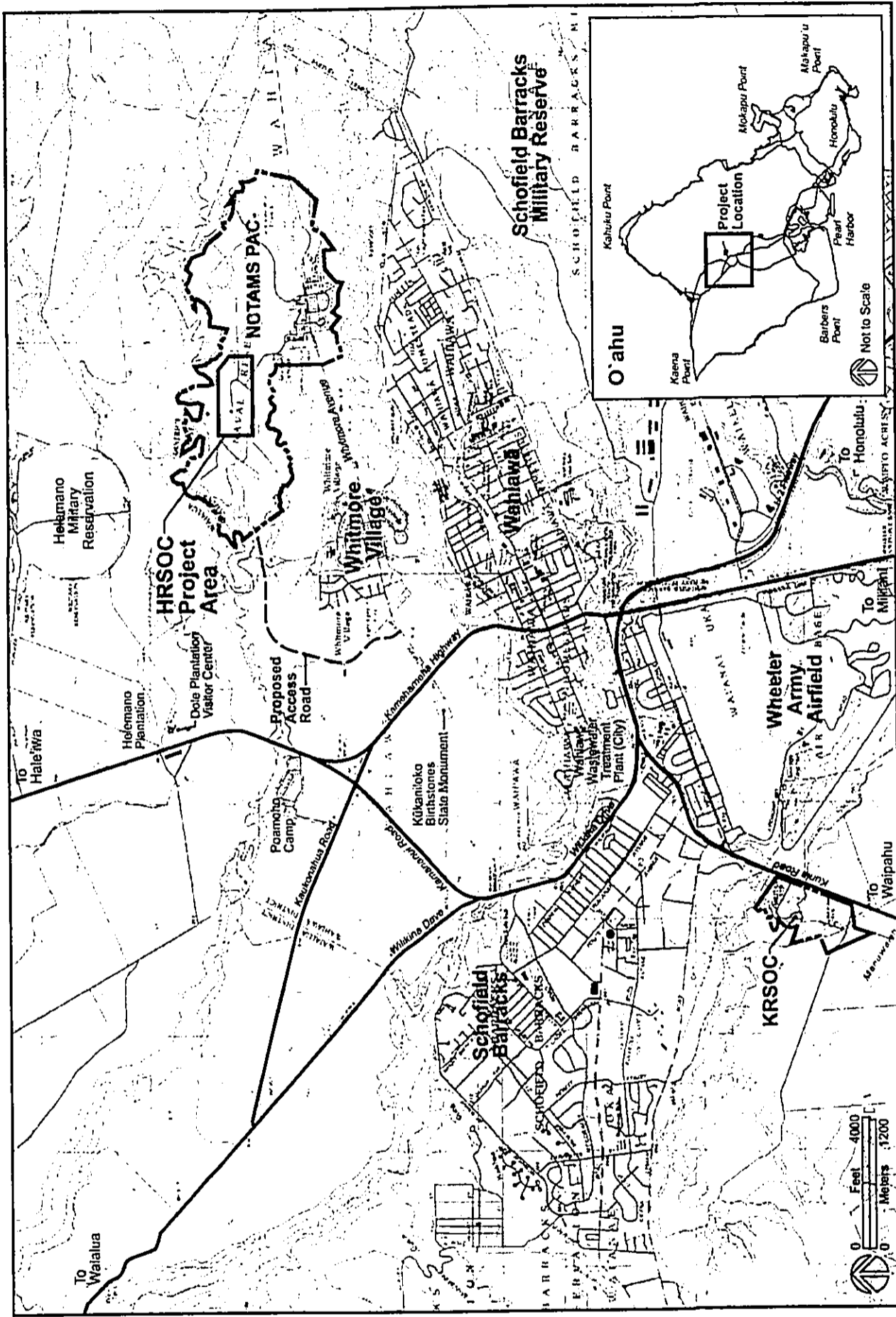


Figure 1

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

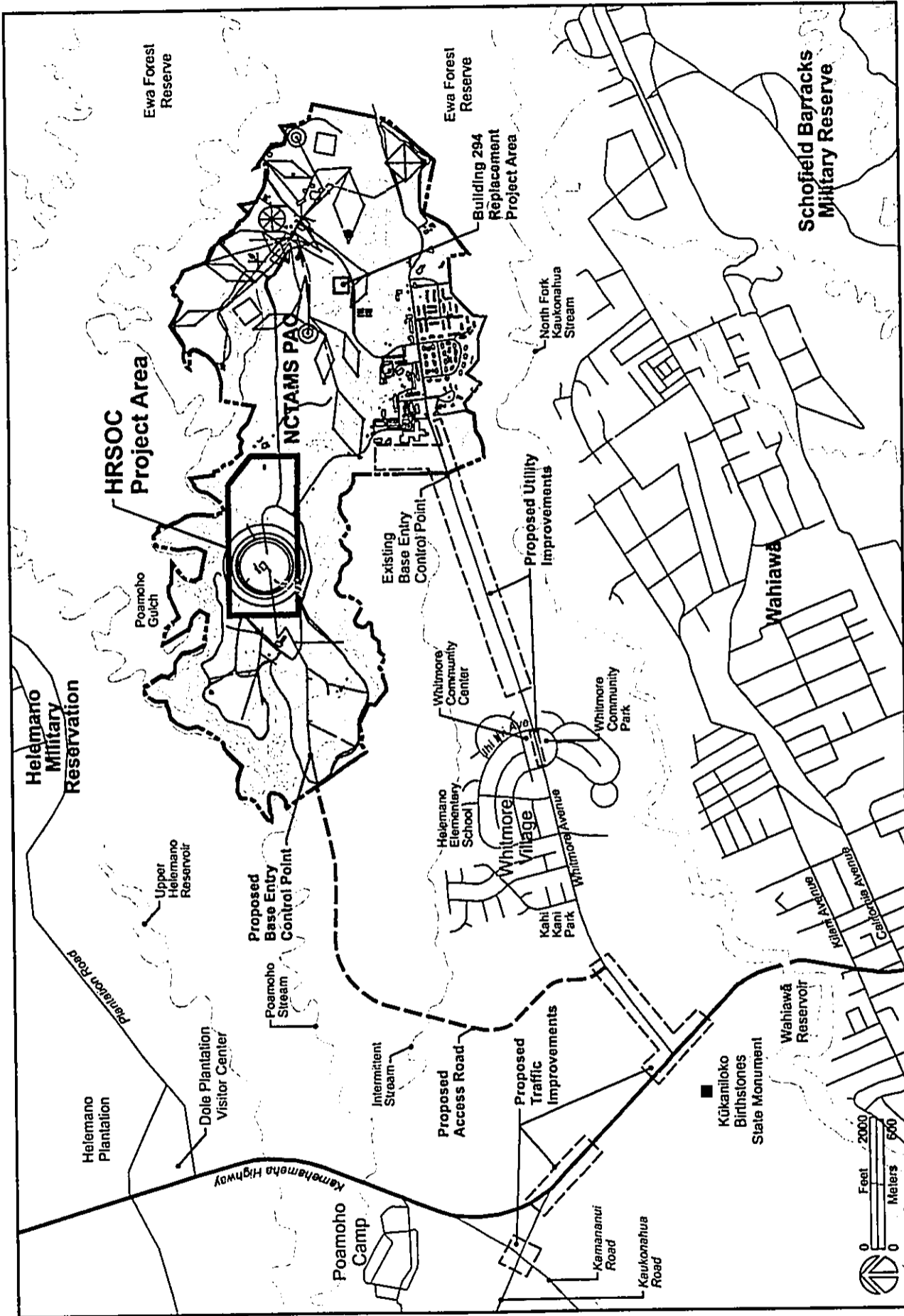


Figure 2

NCTAMS PAC Project Location
 Hawaii Regional Security Operations Center EA
 O'ahu, Hawaii

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 [m²]) 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 m²) 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 KRSOC 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**

Permit/Approval/Consultation	Agency
Federal	
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
State of Hawai'i	
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
City and County of Honolulu	
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 m²). 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 m²) 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 m²). A decommissioned CDAA and related infrastructure, including Building 294 and its

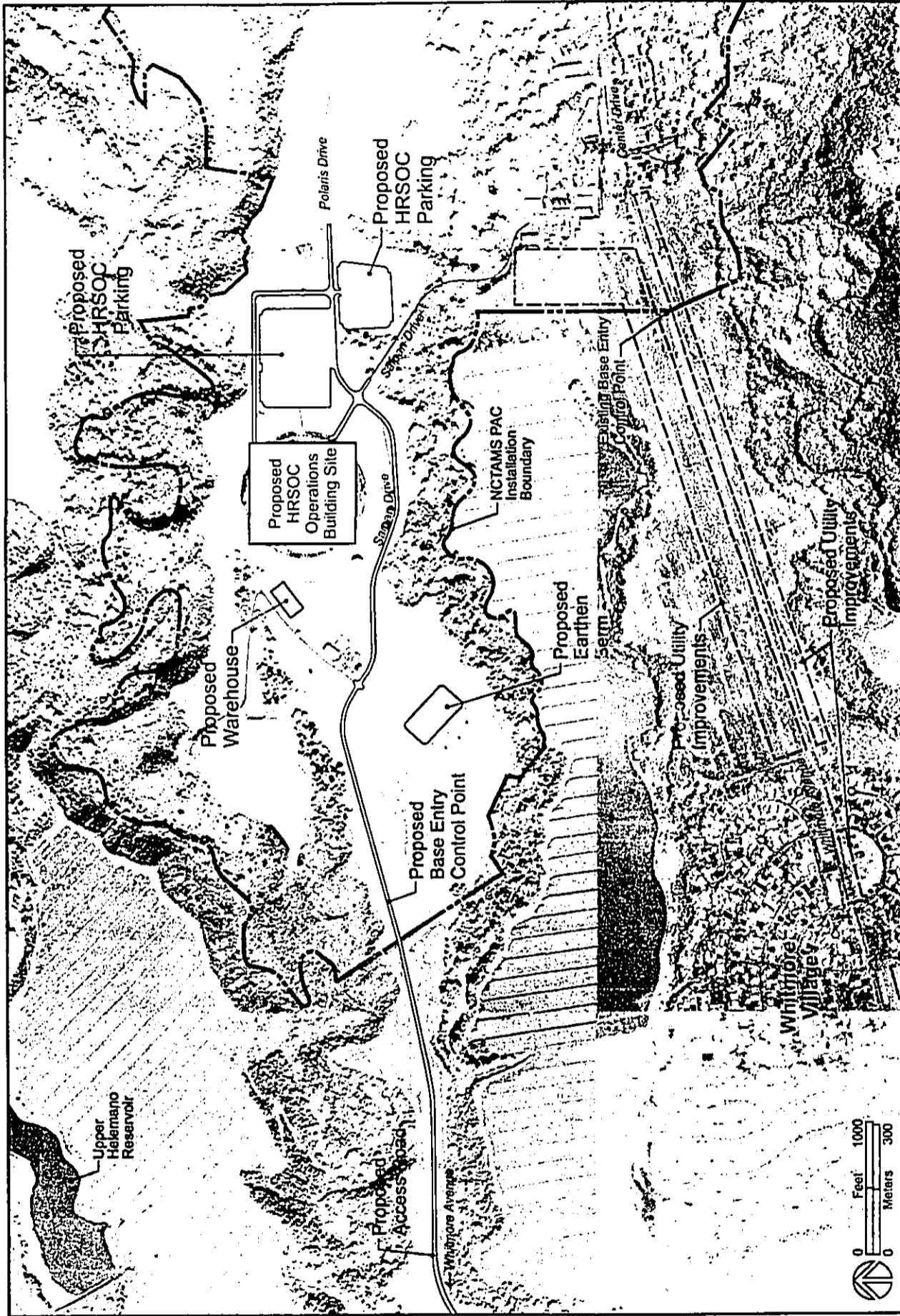
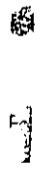


Figure 3

HRSOC Proposed Conceptual Site Plan
 Hawaii Regional Security Operations Center EA
 Oahu, Hawaii



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

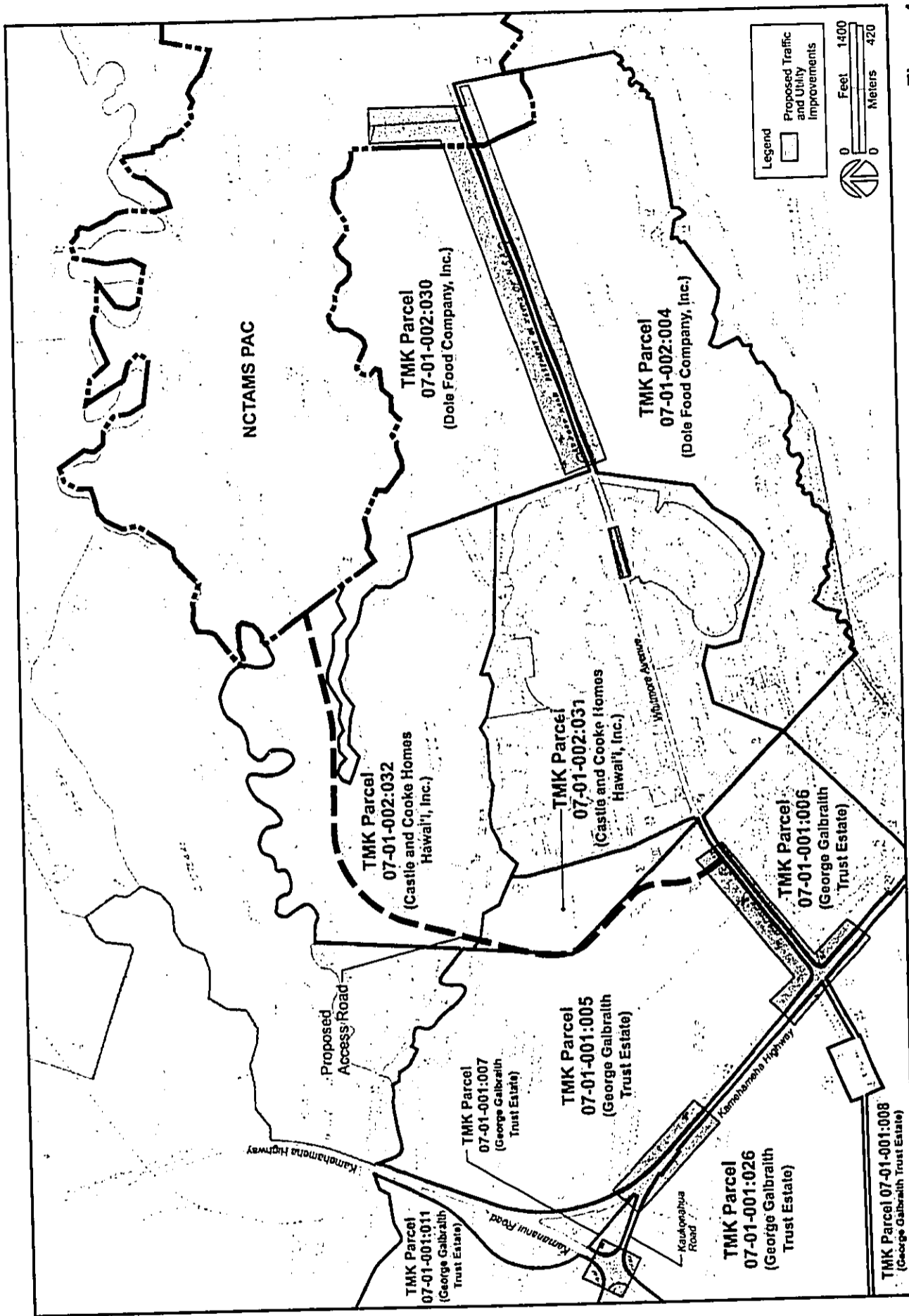


Figure 4

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

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 pair) 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 m²) 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 m²) below grade expansion to the third floor of the operations building and an adjacent 30,000 sf (2,787 m²) 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.

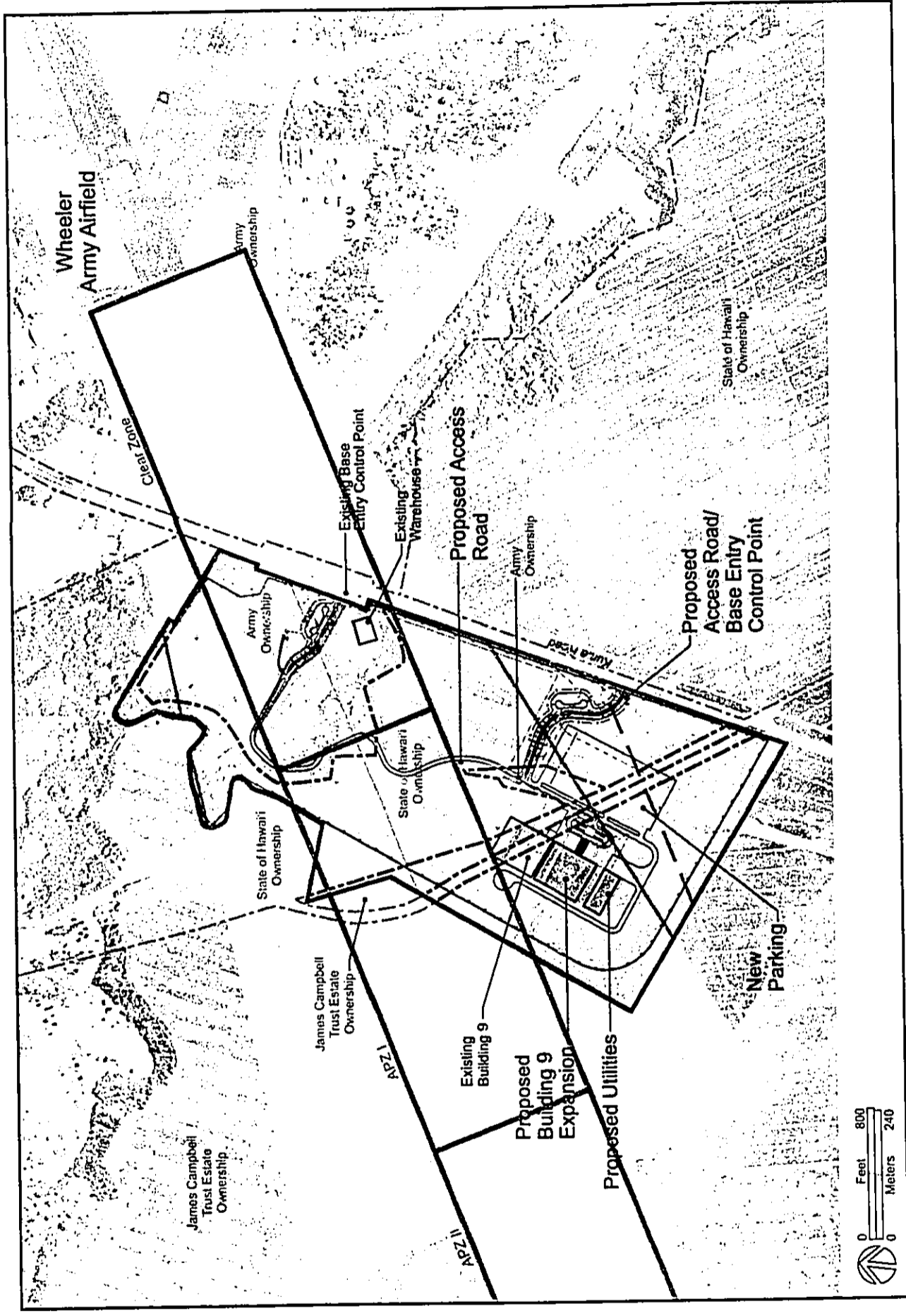


Figure 5

KRSOC Proposed Site Plan
 Hawaii Regional Security Operations Center EA
 Oahu, Hawaii

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 m²), 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 *Hawaii 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 *Hawaii 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

Resource Issue	Proposed Action	Modernization/Expansion	No-Action
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 Kamananui 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 Waihawā 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.

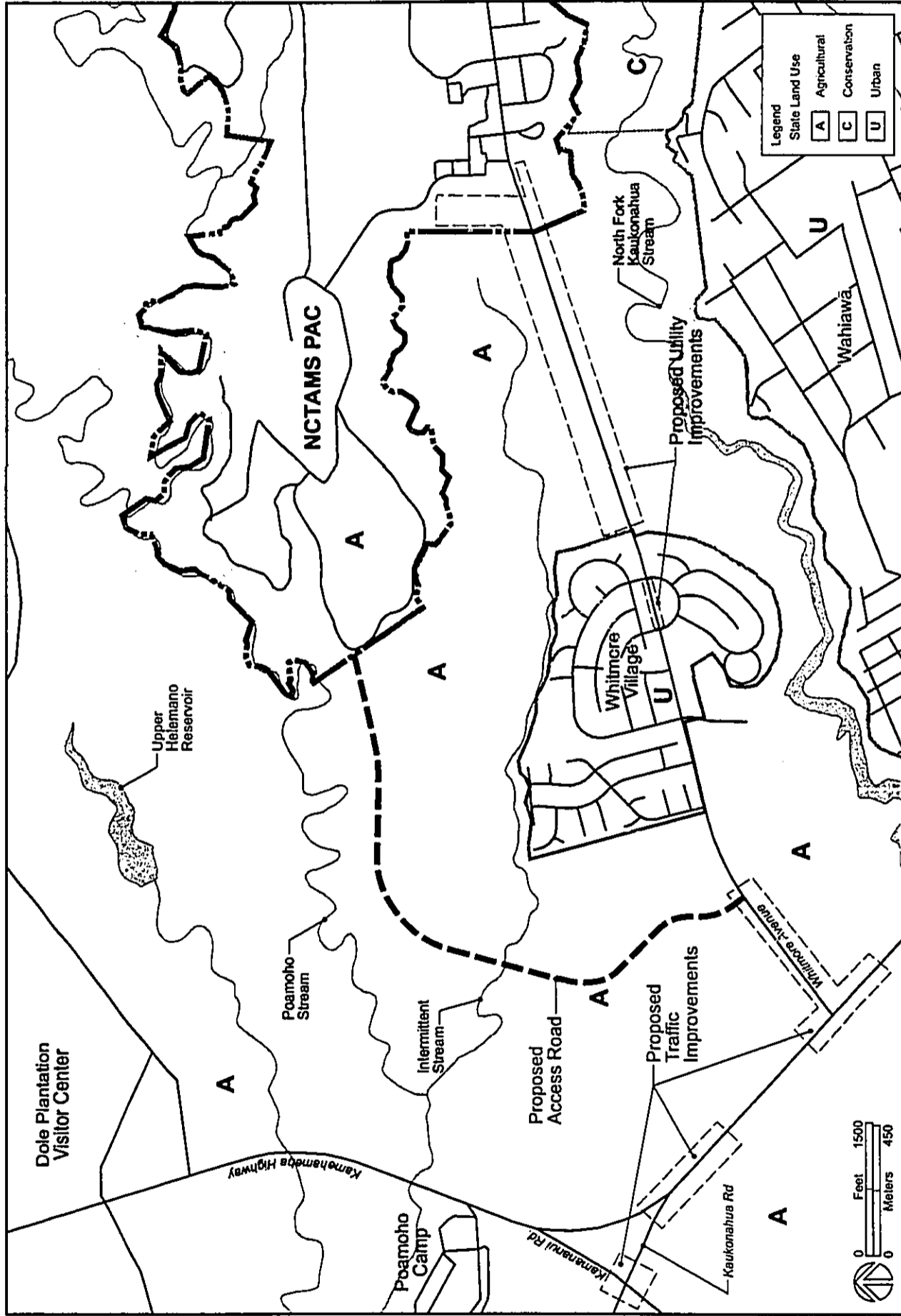


Figure 6

State Land Use District Classifications
Hawaii Regional Security Operations Center EA
Oahu, Hawaii

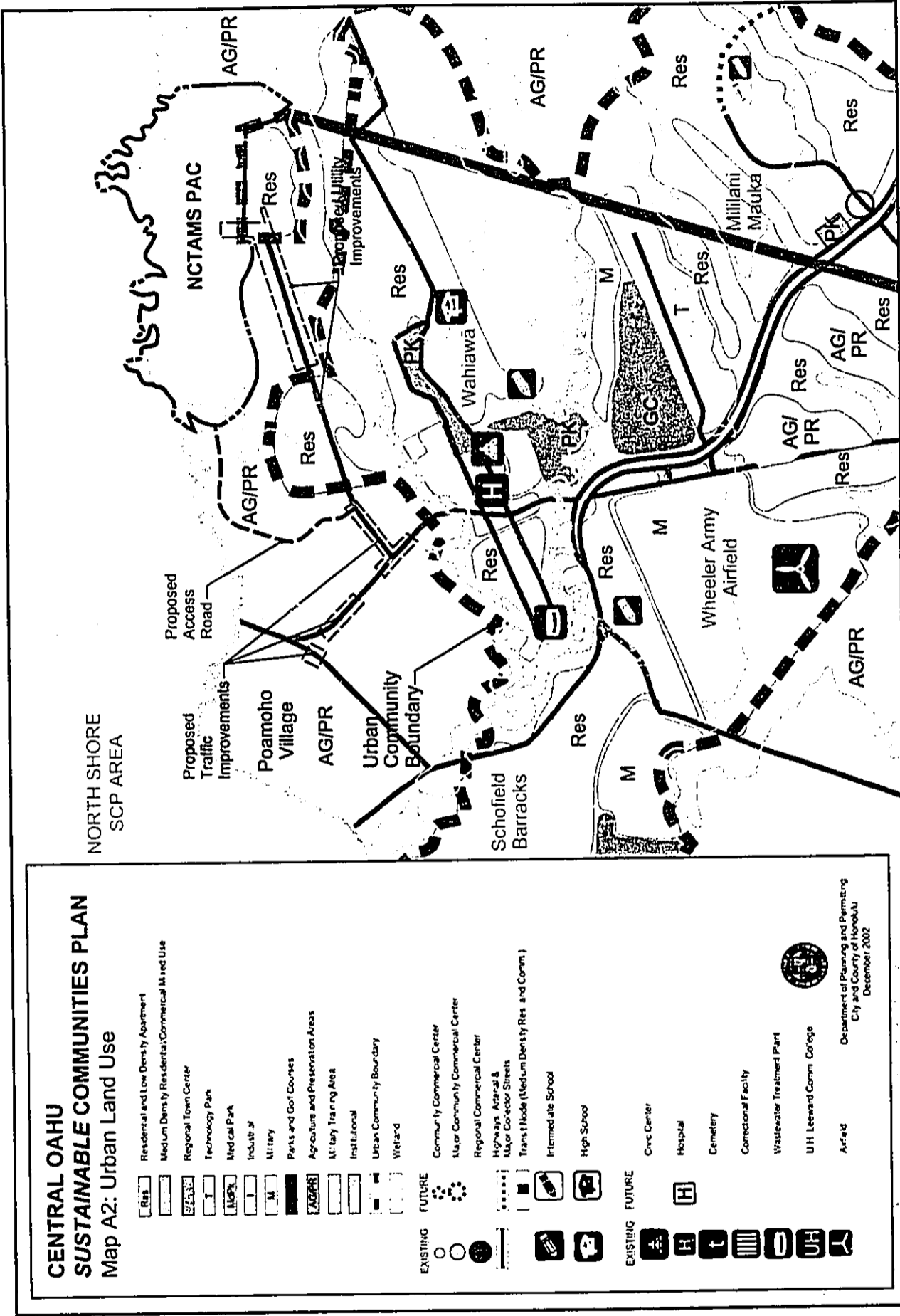


Figure 7

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

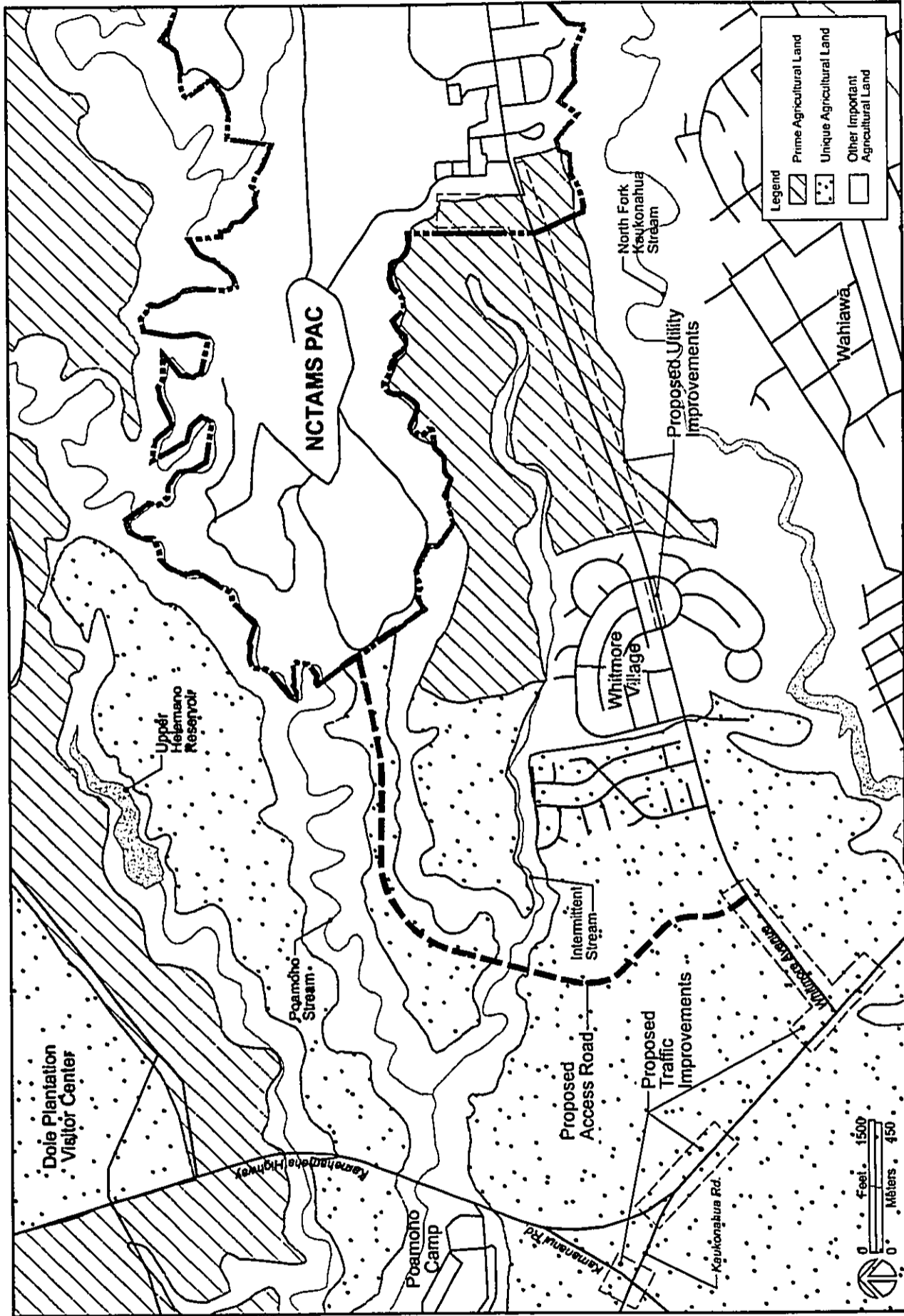


Figure 8

Agricultural Lands of Importance to the State of Hawaii'i

Hawaii Regional Security Operations Center EA

Oahu, Hawaii

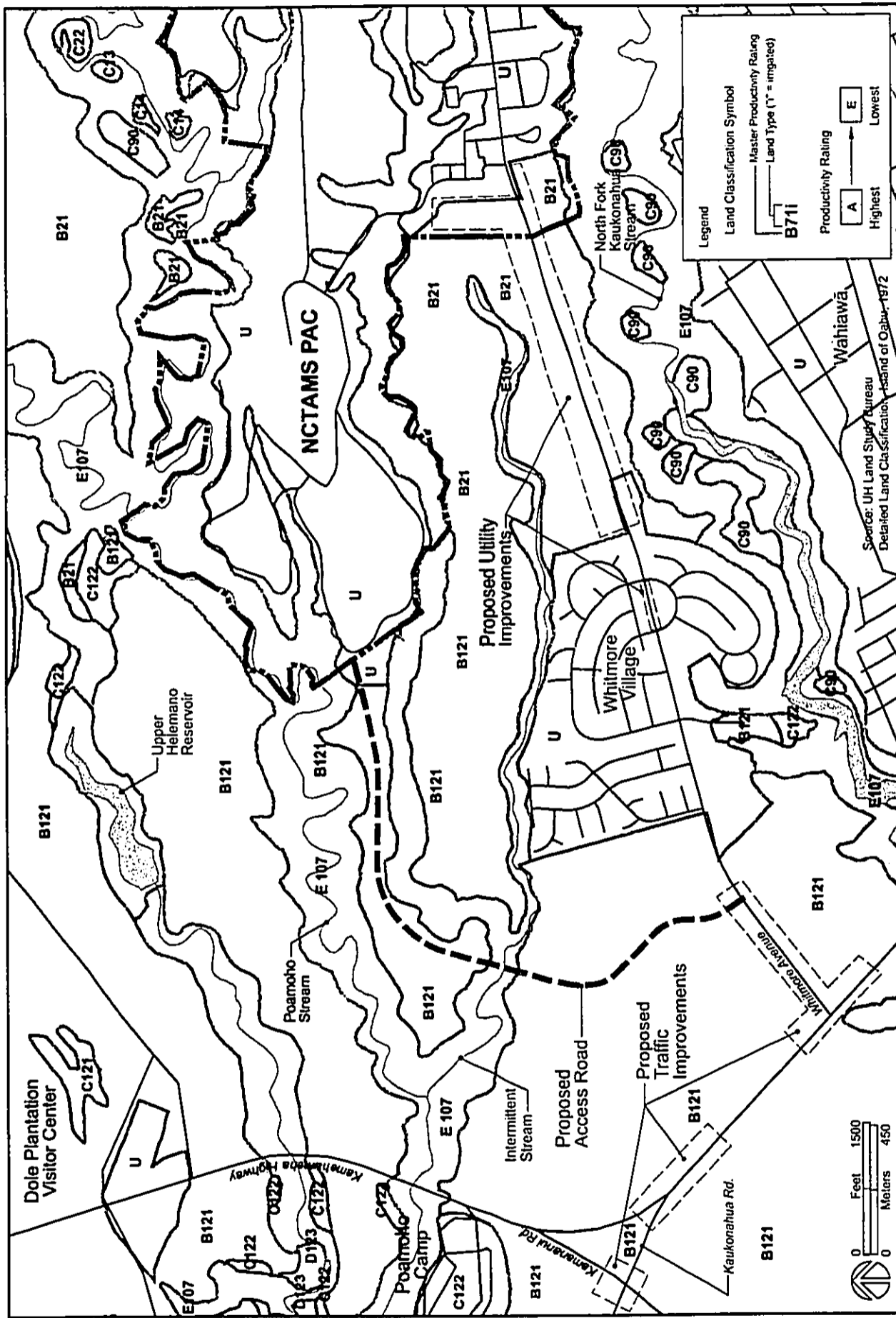


Figure 9

Land Study Bureau Soil Conditions

Hawaii Regional Security Operations Center EA
Oahu, Hawaii

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 14th or 15th 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 (PACNAVFACENGCOM, 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 PACNAVFACENGCOM 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 Lafe. 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.

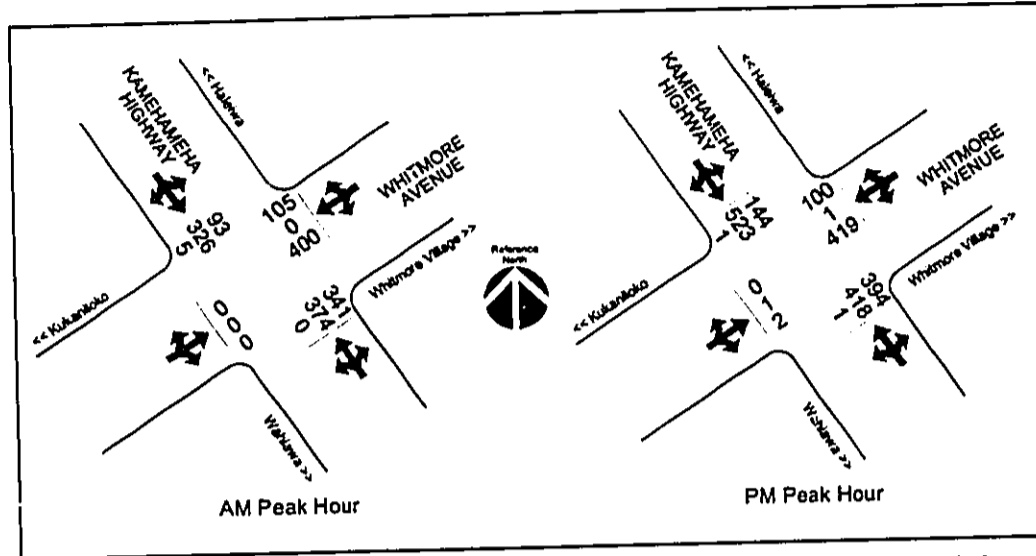


Figure 10 – Existing Traffic at Whitmore Avenue and Kamehameha Highway

Table 4
Existing Conditions – Whitmore Avenue and Kamehameha Highway

		AM Peak Hour			PM Peak Hour		
		V/C	ADPV	LOS	V/C	ADPV	LOS
Overall signalized intersection		0.74	28.1	C	0.76	26.7	C
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		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
ADPV = average delay per vehicle, seconds
LOS = level of service

LT = left turn
TH = through movement
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.

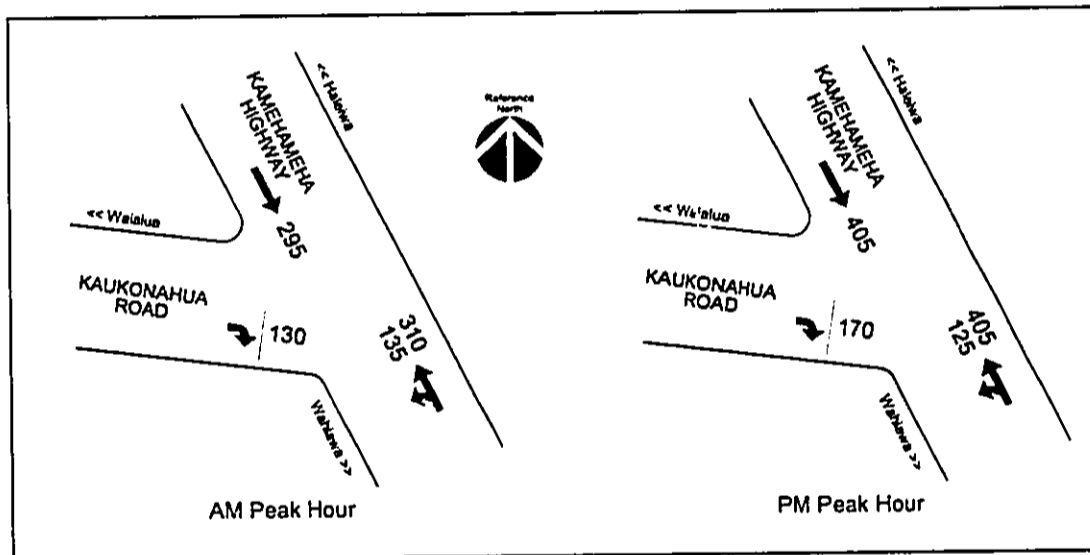


Figure 11 – Existing Traffic at Kamehameha Highway and Kaukonahua Road

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.

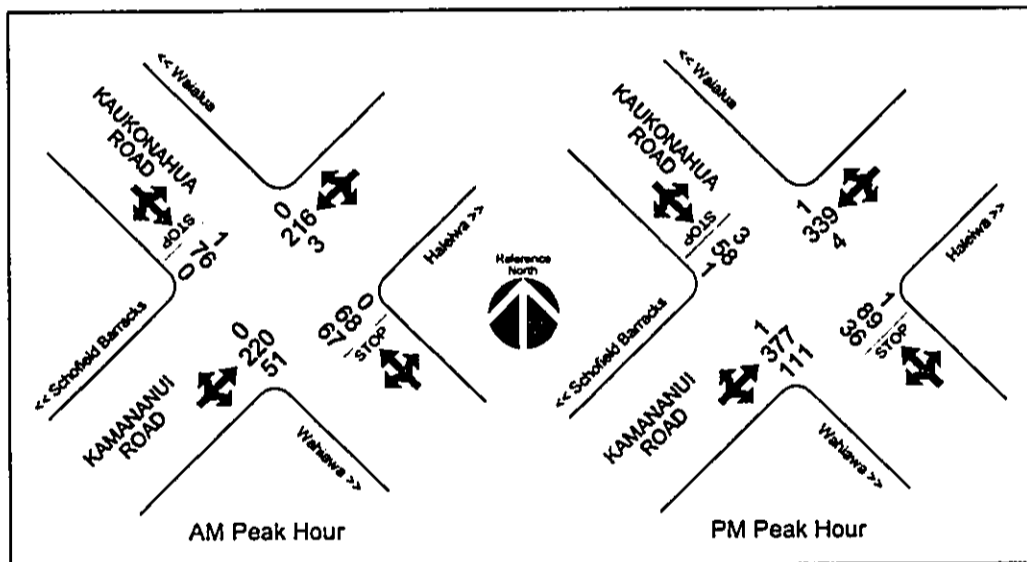


Figure 12 – Existing Traffic at Kaukonahua Road and Kamananui Road

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 Waiialua. 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 Waiialua 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.

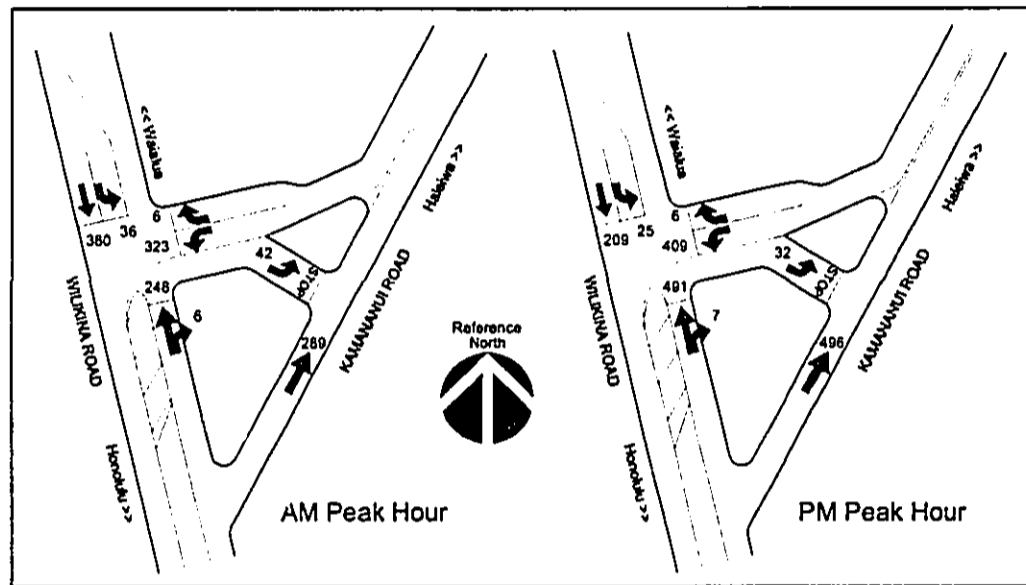


Figure 13 – Existing Traffic at Kamananui Road and Wilikina Drive

Table 7
 Existing Conditions – Kamananui Road and Wilikina Drive

	AM Peak Hour			PM Peak Hour		
	V/C	ADPV	LOS	V/C	ADPV	LOS
Overall signalized intersection	0.55	17.7	B	0.66	24.9	C
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 Ko'olau rift zone to the east and the Wai'anae 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 Ko'olau and Wai'anae 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 O'ahu 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 Hawai'i, 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 Hawaii* identifies Kaiaka Bay as a Category 5 water body, indicating that the water is impaired or threatened and a Total Maximum Daily Loads¹ (TMDL) is needed. However, for State of Hawaii, 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 Wahiawā aquifer.

Both Waikele Stream and Pearl Harbor are identified as Category 5 waters according to the *Final 2004 List of Impaired Waters in Hawaii*, 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 Hawaii, 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
- Wahiawā silty clay, 0 to 3 percent slopes
- Wahiawā 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

¹ 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:

- Wahiaiwā silty clay, 0 to 3 percent slopes
- Wahiaiwā 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 upper 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 contours² 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

² 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

	Whitmore Village*	Kunia Camp*	Honolulu County
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 940 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 m²), 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 m²). 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 Wai'anae 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 O'ahu 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 2nd Brigade, 25th 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 O'ahu 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 O'ahu. 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.

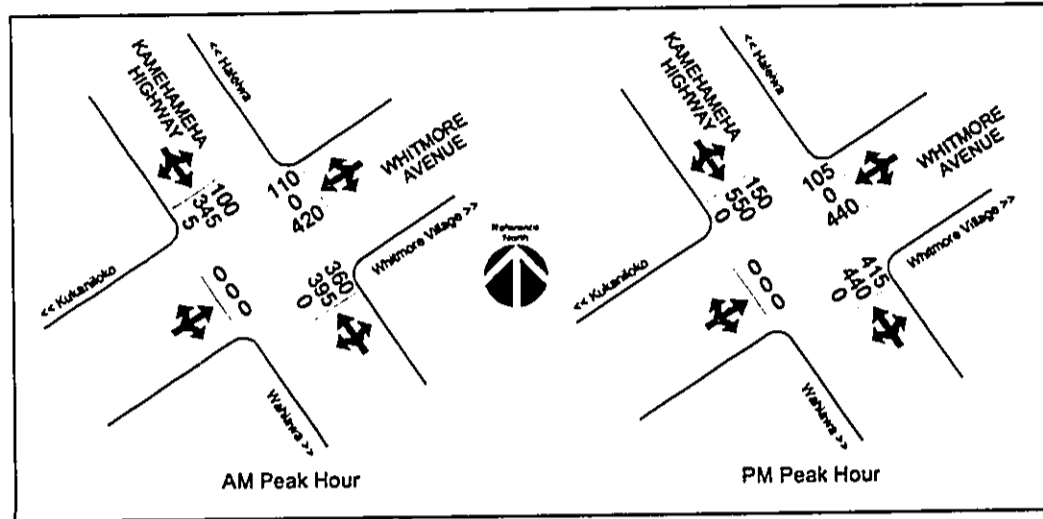


Figure 14 – Future (2010) Baseline Traffic at Whitmore Avenue and Kamehameha Highway

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
Overall signalized intersection	0.78	30.2	C	0.80	31.4	C
Kamehameha Highway southbound approach	0.54	51.1	D	0.64	52.6	D
Whitmore Avenue westbound approach	0.92	52.2	D	0.90	51.0	D
Dirt road from Kūkaniloko eastbound approach	0.00	18.6	B	0.00	19.3	B
Kamehameha Highway northbound approach	0.00	48.0	D	0.00	48.0	D
	0.72	35.7	D	0.75	38.2	D
	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

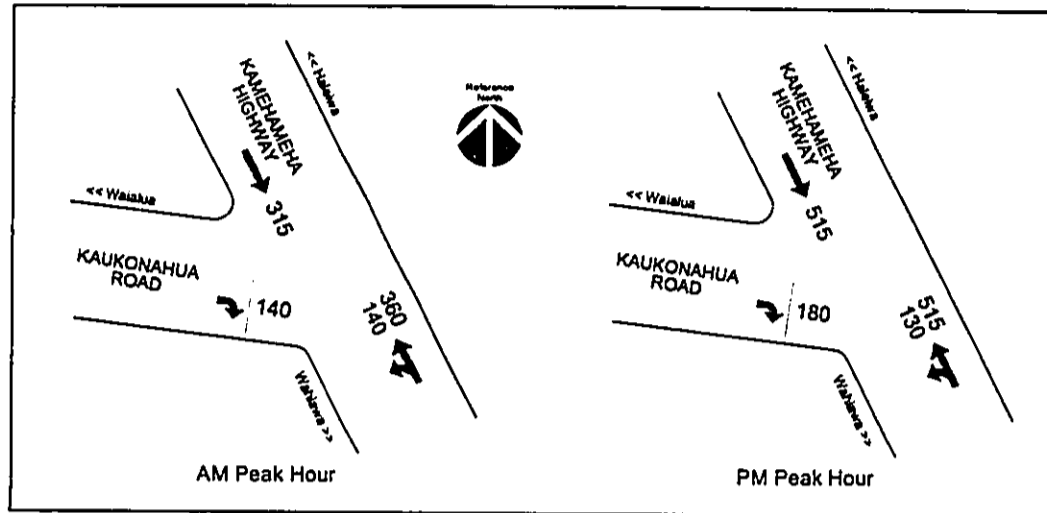


Figure 15 - Future (2010) Baseline Traffic at Kamehameha Highway and Kaukonahua Road

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

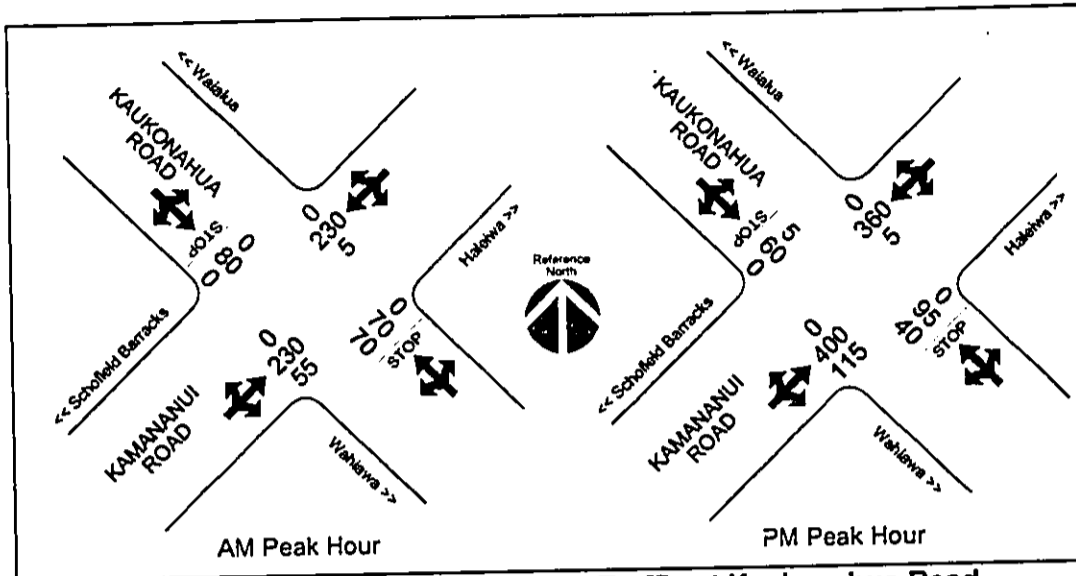


Figure 16 – Future (2010) Baseline Traffic at Kaukonahua Road and Kamananui Road

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

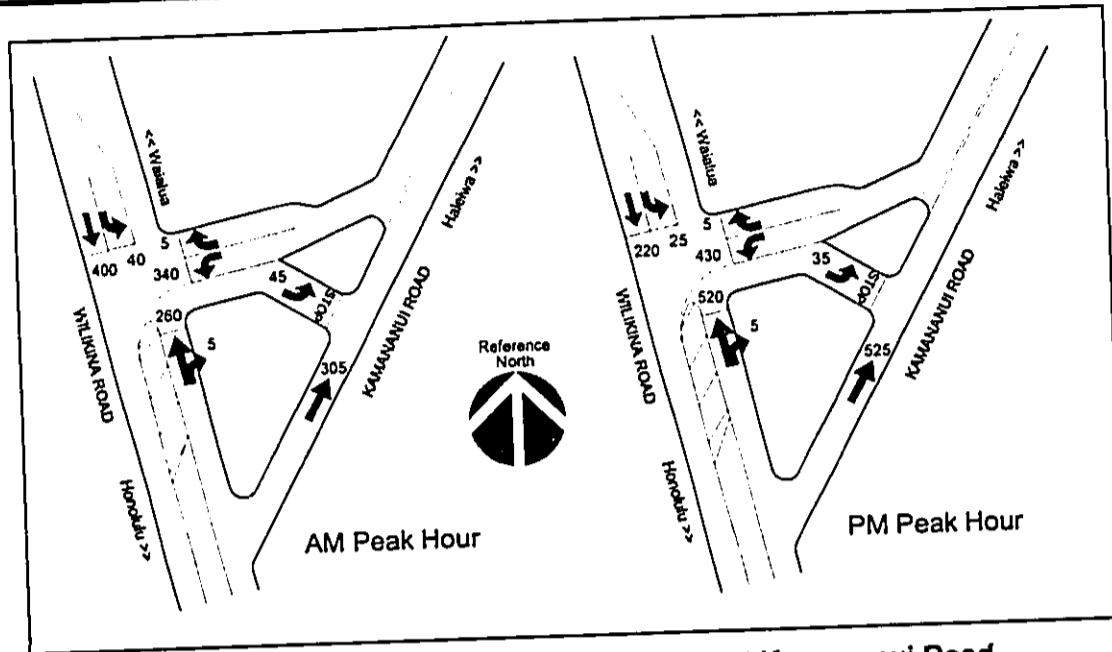


Figure 17 – Future (2010) Baseline Traffic at Kamananui Road and Wilikina Drive

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
Overall signalized intersection	0.58	18.4	B	0.70	26.2	C
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, 7th 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, 7th 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-Wilikina	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 - Wilikina 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.

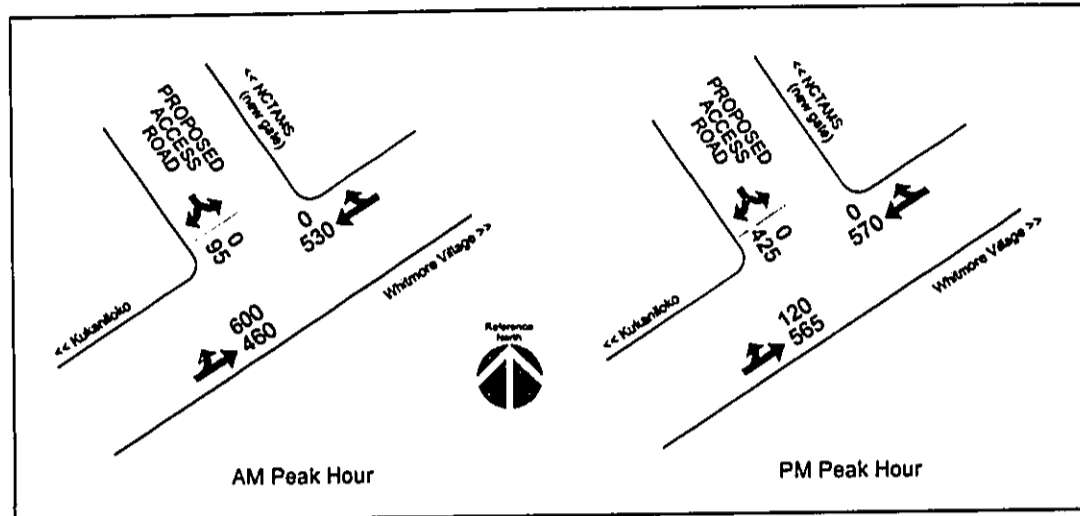


Figure 18 – Future (2010) with HRSOC Traffic
 at Proposed HRSOC Access Road and Whitmore Avenue

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).

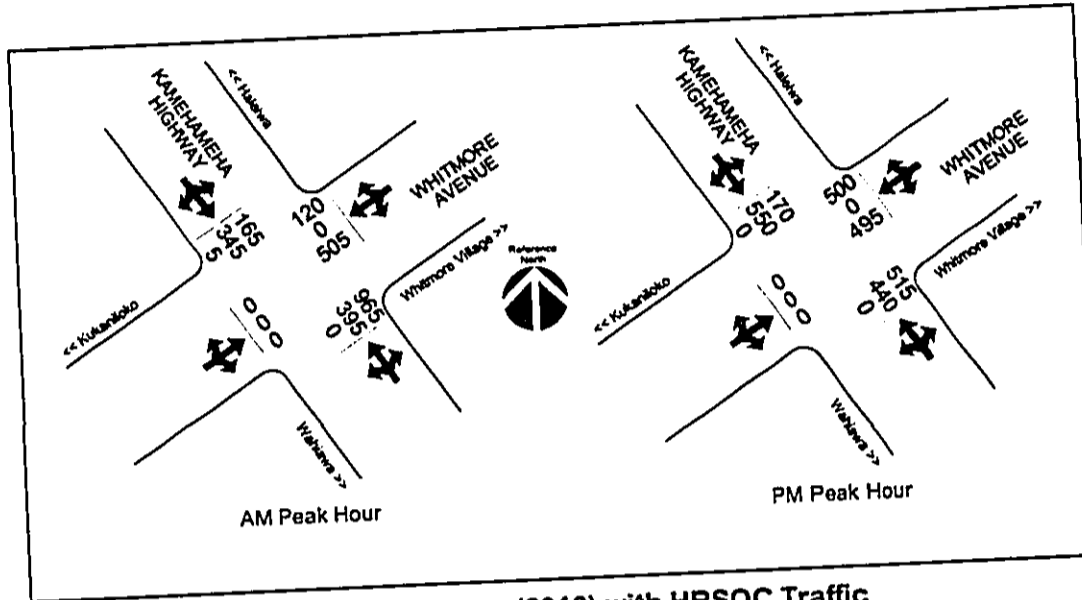


Figure 19 – Future (2010) with HRSOC Traffic at Whitmore Avenue and Kamehameha Highway

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
AM Peak Hour		0.78	30.2	C	0.84	33.7	C
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
PM Peak Hour		0.80	31.4	C	0.85	36.8	D
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				LT = left turn			
ADPV = average delay per vehicle, seconds				TH = through movement			
LOS = level of service				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.

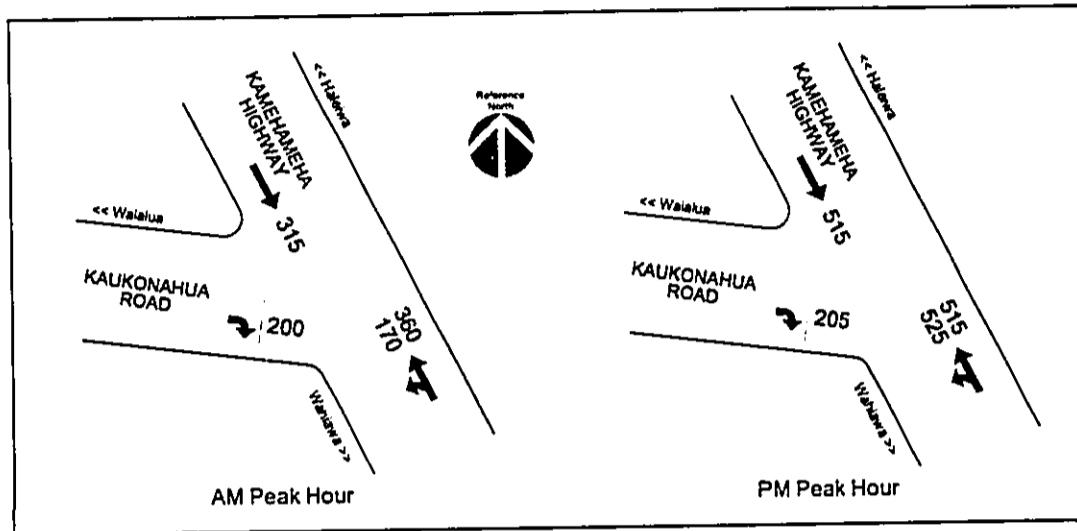


Figure 20 – Future (2010) with HRSOC Traffic at Kamehameha Highway and Kaukonahua Road

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
AM Peak Hour						
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
PM Peak Hour						
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.

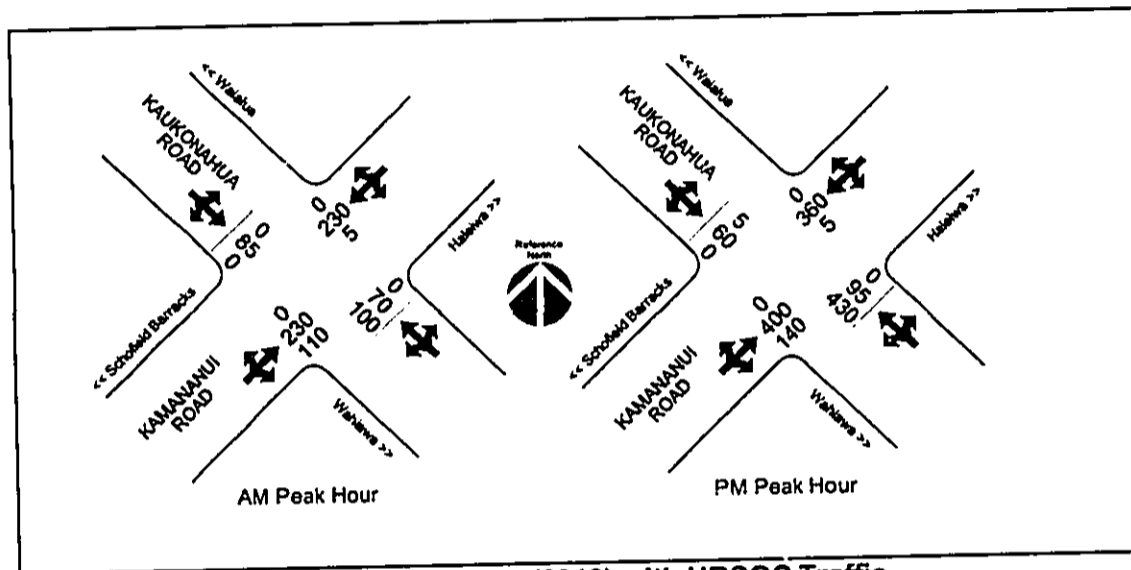


Figure 21 – Future (2010) with HRSOC Traffic at Kaukonahua Road and Kamananui Road

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
AM Peak Hour	---	---	---	0.40	18.3	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
PM Peak Hour	---	---	---	0.89	34.8	C
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.

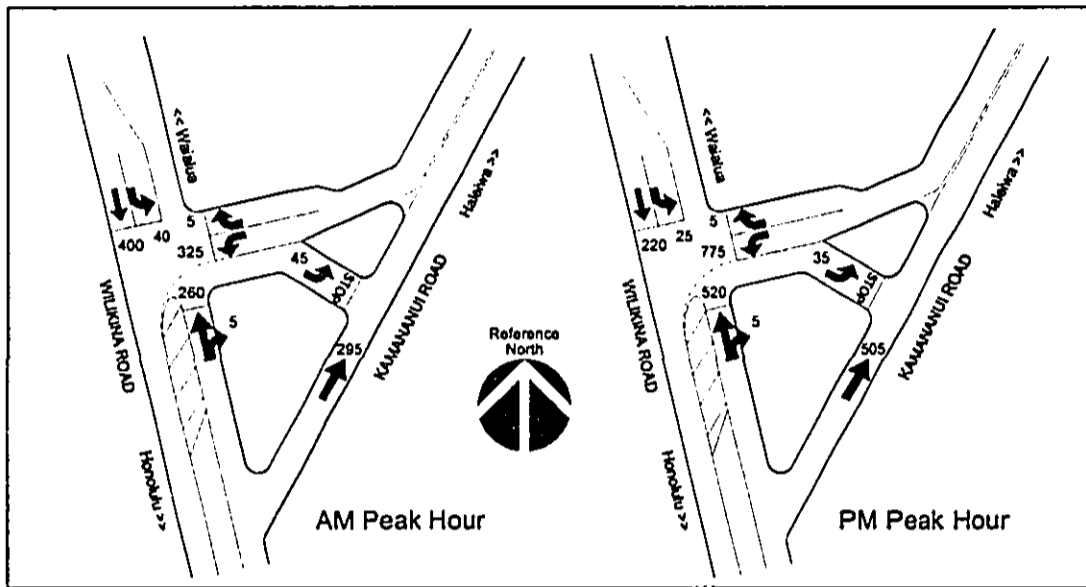


Figure 22 – Future (2010) with HRSOC Traffic
at Kamananui Road and Wilikina Drive

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
AM Peak Hour	0.58	18.4	B	0.55	21.9	C
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
PM Peak Hour	0.70	26.2	C	0.93	46.9	D
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 HRSOC 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 m²) 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 residence³. 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.

³ 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 m²). 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 m²), 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 2nd Brigade, 25th 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 Hawaii'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 NAVFACENGCOM⁴ 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.

⁴ 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 Irrecoverable 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, HAWAII REVISIED 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/Waiialua 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

7.0 REFERENCES

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8.0 LIST OF PREPARERS

NAVFAC EFD PACIFIC

Environmental Planning Division

Director	Melvin Kaku, P.E. B.S. Civil Engineering
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

1831 Annie - 8/10/04
Audrey - 8/15
1837 Annie - Eric

DEPARTMENT OF THE NAVY
COMMANDEER
NAVAL FACILITIES ENGINEERING
540 TELECOMMUNICATIONS CENTER
PEARL HARBOR HI 96844-1111

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12 AUG 2004

1 No. 7001 1940 0006 1626 4597

Department of Land and Natural Resources
State Historic Preservation Division
Zachry Building
601 Ka'ohala Boulevard, Room 555
Honolulu, HI 96807

Dear Mr. Young:

Pursuant to Section 105 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 (TNG 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 Kukanihilo 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 Kukanihilo 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 Kukanihilo 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.

Sincerely,

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

Enclosures:

- 1. Project Area, Detail
- 2. 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, Hawaii (June 2004)
- 3. Historical Overview and Traditional History

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



DEPARTMENT OF THE NAVY
 COMMANDER
 NAVY REGION HAWAII
 830 TECHNOLOGIA ST STE 112
 PEARL ANDERSON HI 9683181

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 31 AUG 2004 00458

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Certified Mail No. 7001 1940 0006 1626 6610

Mr. Peter Young
 Chairperson and State Historic Preservation Officer
 Department of Land and Natural Resources
 State Historic Preservation Division
 Kakuhihewa Building
 601 Kamohiia 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), Mahiwa. 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 (CDAA). This letter provides additional information about this structure.

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

The CLASSIC BULBSEYE station in Wahiawa is similar, if not identical, to other stations established worldwide. It consists of the AN/FRD-10 CDAA, 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 CDAA. The CDAA 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 BULBSEYE Intercept operators exists in Building 294 today.

For structures that are less than 50 years old, we have determined that the CDAA and Building 294 have no exceptional importance to meet the National Register eligibility criteria. Similar CLASSIC BULBSEYE 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 CDAA 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. Anne Griffin, Supervisory Archaeologist, Naval Facilities Engineering Command, Pacific at 808-472-1392, or via e-mail at anne.griffin@navy.mil.

Sincerely,

Hayes Dennis

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

Enclosure: CDAA photo

Copy to: David Scott, Historic Hawaii Foundation

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
HISTORIC PRESERVATION DIVISION



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
HISTORIC PRESERVATION DIVISION
KAPOLUWA, HAWAII 96741-5055
801 KAPOLUWA BOULEVARD
KAPOLUWA, HAWAII 96741

NOV - 1 2004

LOG NO: 2004 2885
DOC NO: 0410ST03
Architecture

G.P. Jennings
LTJG, CEC, USNR
Historic Preservation Program Coordinator
Commander Navy Region Hawaii
N484 Facilities
850 Technological Street, Suite 110
Pearl Harbor, Hawaii 96860-5102

Dear Lt. Jennings:

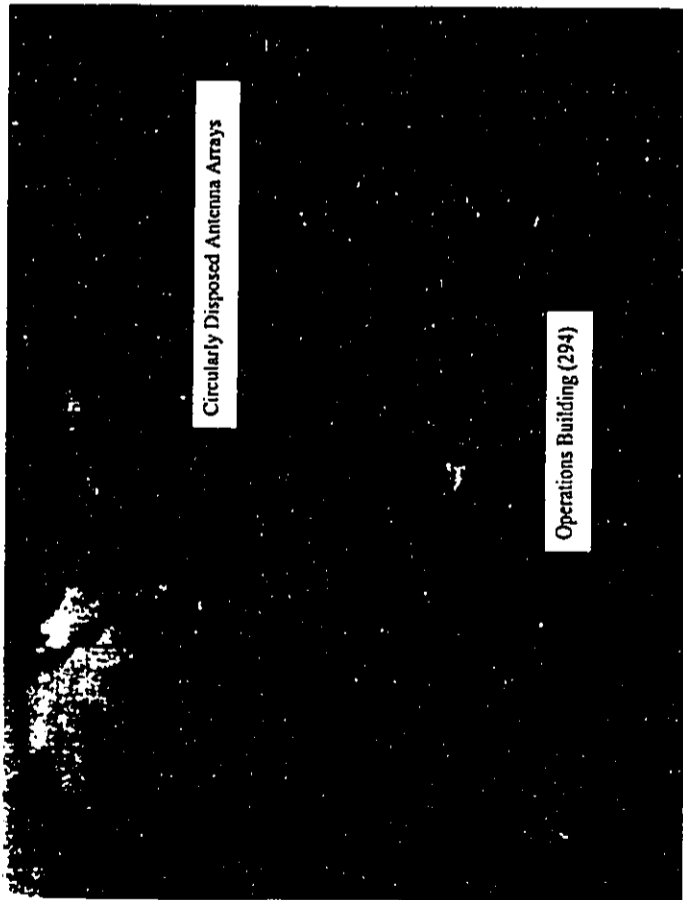
SUBJECT: Section 106 (NHPA) Review Additional Information to August 12, 2004
Section 106 (NHPA) Consultation Letter Proposed Demolition of the
Existing Circularly Disposed Antenna Arrays (CDAA) Hawaii Regional
Security Operations Center (HRSOC) Naval Computer and
Telecommunications Area Master Station (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 Disposed 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 1983 as part of the world wide Classic Butteye (now Fleigholst) 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 localizes voice and message traffic transmitted on short-wave channels. The Classic Butteye station is similar to other worldwide stations which consists of the ANFRD-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 Butteye 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



CDAA AND OPERATIONS BUILDING, VIEW WEST

ENCLOSURE (1)

to the classified nature of the operations. Building 204 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 a submission 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 Tesaki at 692-8032.

Sincerely,
Peter T. Young
State Historic Preservation Officer

ST:jen



DEPARTMENT OF THE NAVY
COMMANDER
NAVY REGION HAWAII
150 TONGAREWA ST STE 119
PEARL HARBOR HI 96860-3101

5750
Ser 21664/00619
16 NOV 2004

CERTIFIED MAIL NO. 7001 1940 0006 1626 0298

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

Dear Mr. Young:

Thank you for your letter dated November 1, 2004 (LOG NO: 2004.2985; DOC NO: 04105103) 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), Mahiava, Oahu, Hawaii, TRK: (117-1-002:007 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)(1), 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

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, Mahiava, Oahu, Hawaii TRK: 7-1-002:007 Portion



DEPARTMENT OF THE NAVY

COMMANDER
NAVY REGION HAWAII
841 TICONDEROGA ST STE 119
PEARL HARBOR HI 96314-1119

5750
Ser N464/00009
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
Kakuhiwa Building
601 Kamohila Boulevard, Room 555
Kepoiei, 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 W-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
1515 TOWER ROAD, STE 118
PEARL HARBOR HI 96351-5101

1831 Annie - Eric
1833 Annie - Eric
5750 Ser 1466/ 00427
12 AUG 2004

5750 Ser 1466/ 00427
12 AUG 2004

Certified Mail No. 7001 1940 0006 1676 6603

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

Dear Mr. Mamu'o:

Pursuant to Section 106 of the National Historic Preservation Act, we are consulting your office regarding the proposed construction of a new Regional Security Operations Center (RSOC). 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 Kawahae 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 Kukanihiko 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 Kukanihiko 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 Kukanihiko 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, Hawaii (June 2004)
 4. Historical Overview and Traditional History

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

67:00 18:45:40

REC: 20



DEPARTMENT OF THE NAVY
 COMMANDER
 NAVY REGION HAWAII
 3411 KOWALEWICZ ST STE 119
 PEARL HARBOR HI 96805-1181

CERTIFIED MAIL NO. 7002 3150 0003 9288 5300

Mr. Peter Young
 Chairperson & State Historic Preservation Officer
 Department of Land & Natural Resources
 State Historic Preservation Division
 Kakuhihewa Building
 601 Kamohila 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:04105103) 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.

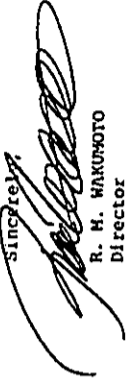
The findings of the additional archaeological survey for the road corridor realignment are presented in the enclosed addendum report. This report is the second addendum to the original archaeological survey report submitted to your office on November 16, 2004. The first addendum addressed scope changes 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.

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 Ser N45/11165
 09 JUN 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. WAKIMOTO
 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
850 WILSON BOULEVARD, SUITE 1119
PEARL HARBOR, HI 96849-5111

5750.2E 09166
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. K. 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

5750.2E 09166
Ser N45/

09 JUN 2005



DEPARTMENT OF THE NAVY
 COMMANDER
 NAVAL REGION HAWAII
 291 WASHINGTON STREET #10
 PEARL HARBOR HI 96349-1001

5750.2E 001167
 Ser N45/
 09 JUN 2005

CERTIFIED MAIL NO. 7002 3150 0003 9288 5324

Ms. Malani 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.

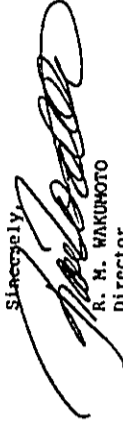
The findings of the additional archaeological survey for the road corridor realignment and other infrastructure additions not covered in the original report are presented in the enclosed addendum reports.

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.

5750.2E 001167
 Ser N45/
 09 JUN 2005

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
 NAVAL REGIONAL HAWAII
 814 TICONDEROGA DRIVE 119
 PEARL HARBOR HI 96319

5750.2E 09 JUN 2005
 Ser N45/ 09 JUN 2005

CERTIFIED MAIL NO. 7002 3150 0003 9288 5294

Mr. Tom Lenchanko
 Waha Olole 'Aha Kukanihoko, 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 (THK: (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.

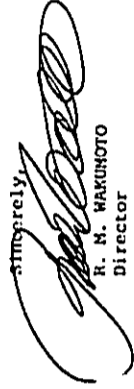
The findings of the additional archaeological survey for the road corridor realignment are presented in the enclosed addendum report. This report is the second addendum to the original archaeological survey report. The first addendum addressed scope changes to the originally proposed access road corridor, 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.

5750.2E 09 JUN 2005
 Ser N45/ 09 JUN 2005

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. N. WAKUNOTO
 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

APPENDIX B
Chapter 343, HRS Pre-Assessment Consultation Letters



DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND, PACIFIC
258 MAKALAPA DR., STE. 116
PEARL HARBOR, HAWAII 96860-3114

5090P_1F0B
Ser EV31/21(1)20
09 NOV 2004

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 Kuria 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.

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

Regulatory Branch
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
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State of Hawaii
Department of Health
Environmental Planning Office
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Honolulu, HI 96801

Mr. John Nakagawa
Coastal Zone Management
State of Hawaii, DBEDT
P. O. Box 2359
Honolulu, HI 96804

(cont. on page 3)

5090P-JF0B
Ser EV31/21/20

5090P-JF0B
Ser EV31/21/20

Distribution:
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City and County of Honolulu
Department of Design and Construction
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Mr. Frank Doyle, Director
City and County of Honolulu
Department of Environmental Services
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Kapolei, HI 96707

Mr. Keoki Miyamoto, Acting Director
City and County of Honolulu
Department of Transportation Services
650 South King Street, 3rd Floor
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Mr. Eric Crispin, Director
City and County of Honolulu
Department of Planning and Permitting
650 South King Street, 7th Floor
Honolulu, HI 96813

Mr. Clifford Jamile
Manager/Chief Engineer
Board of Water Supply
630 South Beretania Street
Honolulu HI 96813

Fire Chief
Honolulu Fire Department
3375 Koapaka Street, Suite H425
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Chief of Police
Honolulu Police Department
801 South Beretania Street
Honolulu, HI 96813

(cont. on page 5)

Distribution:
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Office of Environmental Quality Control
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Ms. Mary Lou Kobayashi, Administrator
State of Hawaii, DBEDT
Office of Planning
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Honolulu, HI 96804

Mr. Peter Young, Chairperson
State of Hawaii
Department of Land and Natural Resources
P. O. Box 621
Honolulu, HI 96809

Ms. Holly McEldowney, Acting Administrator
State of Hawaii, Dept of Land and Natural Resources
Historic Preservation Division
601 Kamohiia Blvd., Room 555
Kapolei, HI 96707

Ms. Sandra Lee Kunimoto, Chairperson
State of Hawaii
Department of Agriculture
1428 South King Street
Honolulu, HI 96814

Mr. Micah Kane, Chairman
State of Hawaii
Department of Hawaiian Home Lands
P. O. Box 1879
Honolulu, HI 96805

Mr. Gordon Lum, Executive Director
Oahu Metropolitan Planning Organization
Ocean View Center
707 Richards Street, Suite 200
Honolulu, HI 96813

(cont. on page 4)

5050P.JF0B
Sor EV31/2U20

Distribution:
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Honolulu, HI 96813

Hawaiian Electric Company
P. O. Box 2750
Honolulu, HI 96740

Mr. Carleton Ching
Director of Community and Government Relations
Casile and Cooke Homes Hawaii, Inc.
95-1091 Alinamaku Drive
Miliama, HI 96789

Ms. Dorothy Tom, Real Estate Officer
George Gaibrath 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
Wahiawa, HI 96786

Mr. Jim Tollefson
President and CEO
Chamber of Commerce of Hawaii
1132 Bishop Street, Suite 402
Honolulu, HI 96813

Hawaii Building and Construction Trades
Council AFL-CIO
560 N. Nimitz Highway, Suite 215A
Honolulu, HI 96817

Mr. Daniel Nakasone
Wahiawa Community and Business Association
410 Kilani Avenue, Suite 204A
Wahiawa, HI 96786

(cont. on page 6)

5

5050P.JF0B
Sor EV31/2U20

Distribution:
Mr. Tom Lenchaniko
President
Ike Aina Native Hawaiian Land Trust
P. O. Box 4192
Honolulu, HI 96812

Ms. Lurline Lee
Hawaiian Civic Club Wahiawa
931 Peach Street
Wahiawa, HI 96786-2019

Mr. Tom Lenchaniko
Friends of Kukanikoko
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
P. O. Box 860601
Wahiawa, HI 96786

Ms. Lori Shimabukuro
Malama O Wahiawa
102 F. Kileia Place
Wahiawa, HI 96786

(cont. on page 7)

6

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Distribution:
Ms. Alena Pule, President
Whitmore Community Association
P. O. Box 860121
Wahiawa, HI 96786

Mr. Vaelet Tyrell
President
Poamoho Camp Community Association
729 Nui Avenue
Wahiawa, HI 96786

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



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

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 Ser EV31/ 2195
 10 DEC 2004

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, EY31AUP
 238 Makalapa Drive, Suite 100
 Pearl Harbor, HI 96860-3134

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.

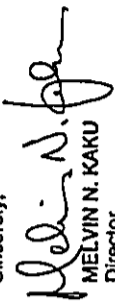
If you have any questions, please contact Ms. Audrey Uyema Pak at (808) 472-1448 or by E-Mail at Audrey.Uyemapak@navy.mil.

Dear Ms. Pak:


The Environmental Protection Agency (EPA) has reviewed the pre-assessment consultation to prepare an environmental assessment (EA) for the Hawaii Regional Security Operations Center, Waiahua, Oahu, Hawaii. 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,


 MELVIN N. KAKU
 Director
 Environmental Planning Division

Sincerely,


 Karen Vitulano
 Federal Activities Office
 Cross Media Division



DEPARTMENT OF THE ARMY
U. S. ARMY ENGINEER DISTRICT, HONOLULU
FT. SHAWNEE, HAWAII 96860-3400

REPLY TO
ATTENTION OF

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 Wainabe 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

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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.

Sincerely,

HELVIN N. KAKU
Director
Environmental Planning Division

LINDA LINGLE
CONFERENCE
11/19/04



STATE OF HAWAII
DEPARTMENT OF HAWAIIAN HOME LANDS

P.O. BOX 1879
HONOLULU, HAWAII 96805
December 1, 2004

Ms. Audrey Uyema Pak, EV31AUP
Naval Facilities Engineering Command, Pacific
258 Makalepa 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.

Micah A. Kane
Micah A. Kane, Chairman
Hawaiian Homes Commission



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

5090P.1F0B 21:33
Ser EV31/ 21:33
0 9 DEC 2004

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.

Sincerely,

Melvin N. Kaky
MELVIN N. KAKY
Director

Environmental Planning Division

Uyema Pak, Audrey K CIV NAVFAC PAC

From: Herman Tuiolosoga [htuiolosoga@eha.health.state.hi.us]
Sent: Wednesday, December 15, 2004 9:16 AM
To: Uyema Pak, Audrey K CIV NAVFAC PAC
Subject: Re: HRSOC EA Preconsultation



Attachment
Information.

Standard Comment
Appendix.doc

Hope the attachment gets to you this time.

.....
Herman Tuiolosoga
Environmental Planning Office
(808) 586-4377

The following section of this message contains a file attachment prepared for transmission using the Internet MIME message format. If you are using Pegasus Mail, or any other MIME-compliant system, you should be able to save it or view it from within your mailer. If you cannot, please ask your system administrator for assistance.

----- File information -----
File: Standard Comment Appendix.doc
Date: 20 Oct 2004, 17:03
Size: 65024 bytes
Type: MS-word

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/info.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'.

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 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 Tuitolosega at 586-4337.

"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/indy-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 DOI 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



DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND, PACIFIC
341 MAKALAPA DR. STE. 110
PEARL HARBOR, HAWAII 96831-3134

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21 DEC 2004

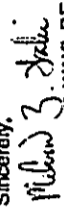
Mr. Herman Tuikosega
State of Hawaii
Department of Health
Environmental Planning Office
P. O. Box 3378
Honolulu, HI 96801

Dear Mr. Tuikosega:

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.

Sincerely,

MELVIN Z. WAKI, P.E.
Business Line Manager
Environmental

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 Hawaii's 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 Hawaii (Version 6) in order to address certain groundwater protection concerns, as well as other environmental concerns

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 7TH FLOOR • HONOLULU, HAWAII 96813
PHONE: (808) 527-4114 • FAX: (808) 527-8743
DEPT WEB SITE: www.honolulu.gov • CITY WEB SITE: www.honolulu.gov



ERIC CRISPIN, AIA
SALICIOUS
BARBARA KUM STANTON
DEPUTY DIRECTOR
2004/ELOG-2588 (RY)



DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND, PACIFIC
231 MAKALAPA DR., STE. 100
PEARL HARBOR, HAWAII 96831-1124

5090P JF0B
Ser EV31/22443
22 DEC 2004

Mr. Eric Crispin, Director
Department of Planning and Permitting
City and County of Honolulu
650 South King Street, 7th Floor
Honolulu, HI 96813

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. 340541

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.

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) 527-4517 • FAX: (808) 527-4750 • INTERNET: www.ctd.hawaii.gov



11/11/04 5:00 PM

GEORGE "KEOKI" MIYAMOTO
DIRECTOR

ROBERT S. UYEMPA
DIRECTOR

December 3, 2004

TP11/04-83501R



DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND, PACIFIC
318 MAKALAPA DRIVE, STE. 100
PEARL HARBOR, HAWAII 96831-3114

5090P-1F0B
Ser EV317 2197
0 9 DEC 2004

Mr. George "Keoki" Miyamoto, Director
Department of Transportation Services
City and County of Honolulu
650 South King Street, 3rd Floor
Honolulu, HI 96813

Dear Mr. Miyamoto:

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

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.

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) 528-3111
<http://www.honolulu.gov>



JEREMY HARRIS
MAYOR

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 96850-3134

Dear Ms. Uyema Pak:

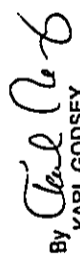
We have reviewed the Hawaii Regional Security Operations Center Fact Sheet regarding the proposed facility at the Naval Computer and Telecommunications Area Master Station, Pacific, in Wahiawa.

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 Sodotani 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
341 MAKALAPA DR., STE. 100
PEARL HARBOR, HAWAII 96850-3134

5090P.1F0B
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

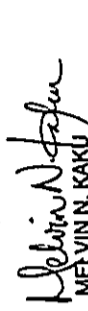
Dear Mr. Correa:

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.uvemapak@navy.mil.

Sincerely,


MEEVIN N. KAKU
Director
Environmental Planning Division

FIRE DEPARTMENT
CITY AND COUNTY OF HONOLULU
3375 KONAULAP DRIVE SUITE 100 HONOLULU HAWAII 96819-1845
TELEPHONE (808) 931-7161 FAX (808) 931-7150 INTERNET www.honolulu.gov



JEREMY HARRIS
Sergeant



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

5090P-1E0B
Ser EV31/ 22253
21 DEC 2004

Mr. Attilio K. Leonard, Fire Chief
Fire Department
City and County of Honolulu
3375 Koaapaka Street, Suite H425
Honolulu, HI 96819-1869

Dear Mr. Leonard:

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:hh

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.

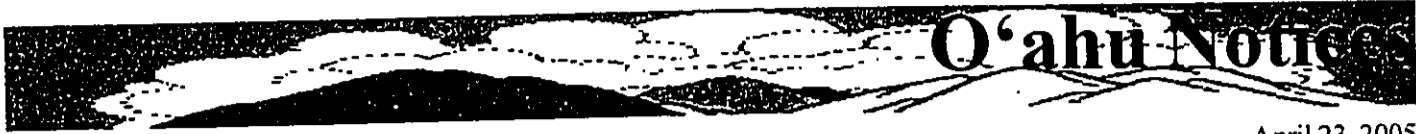
If you have any questions, please contact Ms. Audrey Uyema Pak at (808) 472-1448 or by E-Mail at Audrey.uyemapak@navy.mil.

Sincerely,

MELVIN Z. WAKO, 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.

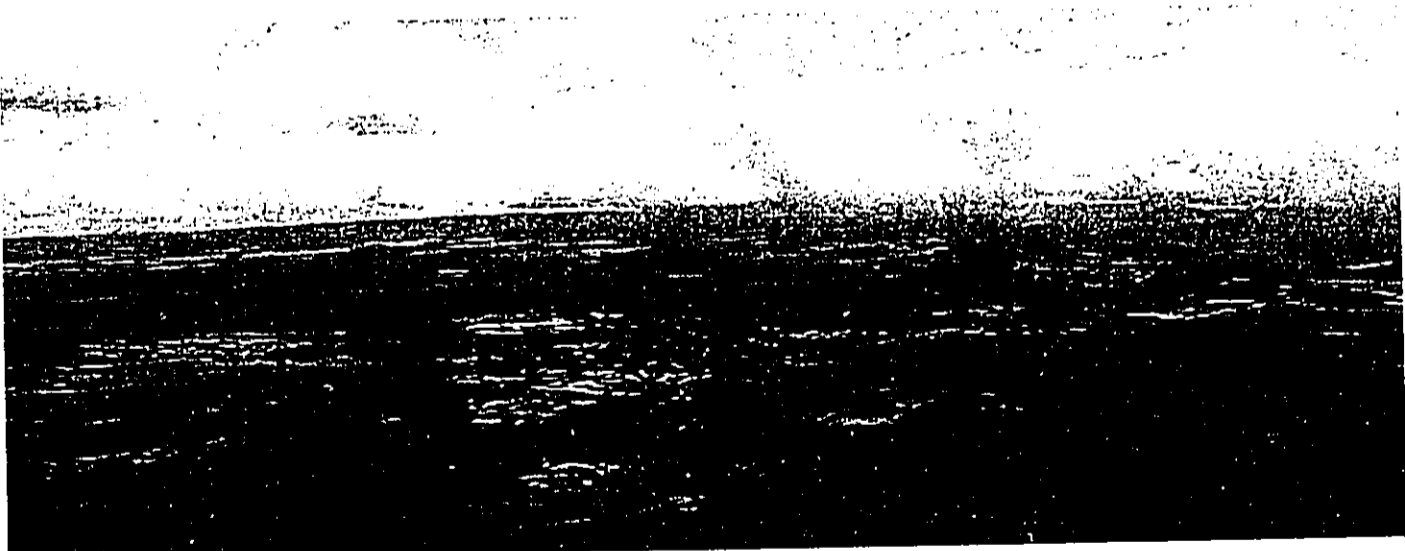
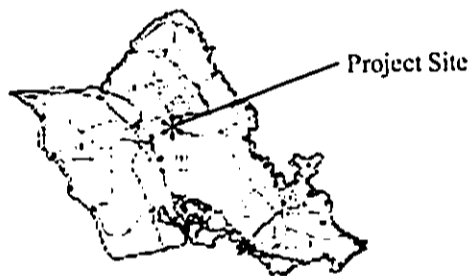
Permits Required: NEPA, NHPA, Section 106, NPDES, Disposal & Air Quality Permits, Stream Channel Alteration Permit, Construction, Sewer & Water Connection Approvals, Subdivision, Engineering & Construction Permits

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.



LEONARD L. FURUKI, M.D.
DIRECTOR OF HEALTH



STATE OF HAWAII
DEPARTMENT OF HEALTH
PO BOX 1378
HONOLULU, HAWAII 96813-1378

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, BMS 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,

WILLIAM WONG, P.E., CHIEF
Safe Drinking Water Branch
Environmental Management Division

SY:slm



DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND, PACIFIC
328 MAGALLANES DR., STE. 106
PEARL HARBOR, HAWAII 96814

5090P-1F0B
Ser EV311032
29 JUL 2005

Mr. William Wong, Chief
State of Hawaii
Department of Health
Safe Drinking Water Branch
Environmental Management Division
P.O. Box 3378
Honolulu, HI 96801-3378

Dear Mr. Wong:

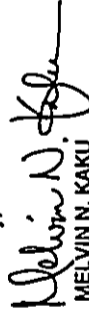
Subj: HAWAII REGIONAL SECURITY OPERATIONS CENTER DRAFT
ENVIRONMENTAL ASSESSMENT, WAHIAWA, O'AHU, HAWAII

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 Wahiawa 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

5090P-1F0B
Ser EV311032
29 JUL 2005

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. Corlyn Olson Orr, Project Planner
Heiber Hastorf & 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 808-536-1146
FACSIMILE 808-536-1148
E-MAIL EQC@STATE.HI.GOV

GENEVEVE SALMONSON
DIRECTOR



DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND, PACIFIC
350 MAGALAPA DR., STE. 716
PEARL HARBOR, HAWAII 96831-3134

5090P-1FOB
Ser EV31/1010
27 JUL 2005

Ms. Genevieve Salmonson
Office of Environmental Quality Control
State of Hawaii
235 South Beretania Street, Suite 702
Honolulu, Hawaii 96813

May 16, 2005

Mr. Rodney K. Haraga, Director
State Department of Transportation
869 Punchbowl Street
Honolulu, Hawaii 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
HIF

Dear Ms. Salmonson:

Subj: HAWAII REGIONAL SECURITY OPERATIONS CENTER DRAFT ENVIRONMENTAL ASSESSMENT, WAHIAWA, 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* 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 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.

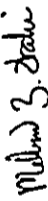
c. Lands surrounding the proposed access road are currently designated for agricultural use according to both State and county land use classifications. Any urban or residential use not permitted by the existing land use classifications would require the appropriate State and county land use approvals 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

5090P.1F08
Ser EV31010
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 Hawaii

Department of Transportation
601 Kamokila Boulevard, Room 602
Honolulu, HI 96707

Ms. Corlynn 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 Bertram Street, 4th Floor, Honolulu, Hawaii 96813
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

LINDA LINDSEY
DIRECTOR
THEODORE E. LIU
DIRECTOR
MARK K. ANDERSON
ASSISTANT DIRECTOR
LAURA H. THIELER
OFFICE OF PLANNING

Telephone (808) 587-2848
Fax: (808) 587-2824

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.

May 9, 2005

Ms. Audrey Uyema Pak
Planner in Charge, EV/31
Environmental Planning Division
Naval Facilities Engineering Command, Pacific
258 Makalapa Drive, Suite 100
Pearl Harbor, Hawaii 96860-3134

Ref No P-10919

Sincerely,

Laura H. Thielen
Director

Enclosures

- c: U.S. Army Corps of Engineers, Regulatory Branch
- U.S. Environmental Protection Agency
- U.S. Fish and Wildlife 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 Haster & Fee, Planners, Attn: Corlyn Olson Orr, 733 Bishop Street, Suite 2590, Honolulu, HI 96813

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
214 MAKALAPA, DR., STE. 100
PEARL HARBOR, HAWAII 96831-3134

5090E-1F0B
Ser EV311001
27 JUL 2005

Ms. Laura H. Thielon, Director
Office of Planning
Department of Business, Economic Development & Tourism
State of Hawaii
P.O. Box 2359
Honolulu, HI 96804

Dear Ms. Thielon:

Subj: HAWAII REGIONAL SECURITY OPERATIONS CENTER DRAFT
ENVIRONMENTAL ASSESSMENT, WAHIAWA, 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

MELVIN Z. WAKI
Business Line Manager
Environmental

Copy to:
Ms. Genavieve 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

Copy to:
Ms. Corlyn Olson Orr, Project Planner
Helber Hasler & Fee, Planners
733 Bishop Street, Suite 2590
Honolulu, HI 96813

5090P-1F0B
Ser EV311001
27 JUL 2005

LAND USE
CONTROL OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION
POST OFFICE BOX 621
HONOLULU, HAWAII 96809



ERIC T. YADDA
COMMISSIONER
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCES MANAGEMENT

May 11, 2005
USADONSECURITYOAHU.RCH

Naval Facilities Engineering Command, Pacific
Audrey Uyema Pak, Planner in Charge (EV31)
258 Makalapa Drive, Suite 100
Pearl Harbor, Hawaii 96860-3134

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

Enclosed please find a copy of the Engineering Division comment.
Based on the attached responses, the Department of Land and Natural Resources has no other comment to offer on the subject matter.

If you have any questions, please contact Nicholas A. Vaccaro of the Land Division Support Services Branch at 587-0384.

Very truly yours,

Harry M. Yadda
HARRY M. YADDA
Acting Administrator

C: 0D10

LAND USE
CONTROL OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION
POST OFFICE BOX 621
HONOLULU, HAWAII 96809



ERIC T. YADDA
COMMISSIONER
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCES MANAGEMENT

April 29, 2005

LD-NAV
USADONSECURITYOAHU.CMT

Suspend 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. Yadda, 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 suspend 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 suspend date, we will assume there are no comments.

() We have no comments.

Comments attached.

Division: *Engineering*

Signed: *Eric T. Yadda*

Date: *5/5/05*

Name: ERIC T. YADDA, CHIEF ENGINEER

05 MAY 03 PM 04:34 DL THE ERIN

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) 587-0767.

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 Sui 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 Ender at (808) 377-3530 (Kona) of the County of Hawaii, Department of Public Works.
- () Mr. Francis Cerizzo at (808) 270-7771 of the County of Maui, Department of Planning.
- () Mr. Mario Anunzio 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.

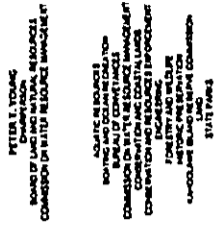
Additional Comments:

Other:

Should you have any questions, please call Mr. Andrew Monden of the Planning Branch at 587-0229.

Signed: *Eric T. Hiron*
ERIC T. HIRON, CHIEF ENGINEER

Date: 5/5/05



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION
POST OFFICE BOX 671
HONOLULU, HAWAII 96809

April 29, 2005

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

SUBJECT: Consultation for the Hawaii Regional Security Operations Center
Draft Environmental Assessment, Mahiawa, 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
 354 MANALAPAN DR., STE. 116
 PEARL HARBOR, HAWAII 96813-1114

5090P.1F0B
 Ser EV311.000
 27 JUL 2005

5090P.1F0B
 Ser EV311.000
 27 JUL 2005

Copy to:
 Ms. Corilyn Olson Orr, Project Planner
 Helber Haslett & Foe, Planners
 733 Bishop Street, Suite 2590
 Honolulu, HI 96813

Mr. Harry M. Yada, Acting Administrator
 Land Division
 Department of Land and Natural Resources
 State of Hawaii
 P.O. Box 621
 Honolulu, Hawaii 96809

Dear Mr. Yada:

Subj: HAWAII REGIONAL SECURITY OPERATIONS CENTER DRAFT
 ENVIRONMENTAL ASSESSMENT, WAHIAWA, OAHU, 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 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

DEPARTMENT OF DESIGN AND CONSTRUCTION
CITY AND COUNTY OF HONOLULU

850 SOUTH KING STREET, 11TH FLOOR
HONOLULU, HAWAII 96813
Phone: (808) 832-4354 Fax: (808) 832-4587
Web site: www.honolulu.gov



LUKE HANAKULANI
MAYOR

WAYNE M. HASHIRO, P.E.
DIRECTOR
ELIUDIE C. LEE, P.E.
DEPUTY DIRECTOR
WWW.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.1F0B
Sgt EV31A002
27 JUL 2005

Mr. Wayne M. Hashiro, P.E.
Department of Design and Construction
City and County of Honolulu
650 South King Street, 11th 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_1F08
Ser EV310002
27 JUL 2005

Copy to:
Ms. Carlyn Olson Orr, Project Planner
Heiber Hastert & Fee, Planners
733 Bishop Street, Suite 2590
Honolulu, HI 96813

DEPARTMENT OF ENVIRONMENTAL SERVICES
CITY AND COUNTY OF HONOLULU
1020 ULUOHIA STREET, SUITE 200, KAPOLEI, HI 96707
TELEPHONE (808) 992-6190 FAX (808) 992-6113 WEBSITE: <http://www.cc.honolulu.gov>

MURRAY HANSEN
Mayor



ERIC S. TAKAMURA, Ph.D., P.E.
Director

KENNETHA SHIMAZU
Deputy Director

PRO 05-014

May 23, 2005

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, Waiawa, 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 Waialeale 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 water.
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,

Eric S. Takamura, Ph.D.
Director

cc: Office of Environmental Quality Control
State of Hawaii Dept. of Transportation
Heber Huntert & Fee, Planners



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, Suite 306
Kapolei, HI 96707

Dear Dr. Takamura:

Subj: HAWAII REGIONAL SECURITY OPERATIONS CENTER DRAFT
ENVIRONMENTAL ASSESSMENT, WAIIAWA, 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:

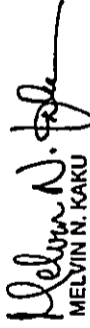
- a. Section 3.8.1 of the Final EA has been revised to address State water quality designations of Poamoho and Waialeale Streams, Kaiaka Bay and Pearl Harbor. The discussion describes the water bodies listed on the Final 2004 List of Impaired Waters in Hawaii and the pollutants of concern documented 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

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Ser EY31A035
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 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. Corryn 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
150 SOUTH KING STREET, 3RD FLOOR • HONOLULU, HAWAII 96813
TELEPHONE: (808) 525-6219 • FAX: (808) 522-8720 • INTERNET: [WWW.HONOLULU.GOV](http://www.honolulu.gov)



EDWARD Y. HIRATA
DIRECTOR

TP4/05-102110R
TPS/05-103709R

May 26, 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: 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 Kaula Road (Page 3-15) and the intersection of Kaula Road and Kaula 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 Kaula Road intersection identified on Page 4-23 should be included in the final EA.

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,

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



DEPARTMENT OF THE NAVY
 NAVAL FACILITIES ENGINEERING COMMAND, PACIFIC
 241 MAHALAUA DR., STE. 100
 PEARL HARBOR, HAWAII 96813-3124

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, WAHIAWA, 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 Kaulanahua 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

MELVIN Z. WAKI
 Business Line Manager
 Environmental

5090P.1F0B
 Ser EV31/1005
 27 JUL 2005

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. Corilyn Olson Orr, Project Planner
 Heiber Hasler & Fee, Planners
 733 Bishop Street, Suite 2590
 Honolulu, HI 96813

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 7TH FLOOR • HONOLULU, HAWAII 96813
PHONE: (808) 531-4477 FAX: (808) 531-8743
OFF. WEB SITE: WWW.CCS&P.DEP • CITY WEB SITE: WWW.CC.HI



WUFI HANSELMAN
MAYOR

HERNANDEZ, PAOY
DIRECTOR
DAVID K. TAVOKE
DEPUTY DIRECTOR

015W11063 (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 (ENS) 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 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
{18936}

cc: The Office of Environmental Quality Control
State of Hawaii Department of Transportation
Heber Hastert & Fec, Planners



DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND, PACIFIC
314 MAGALLAN DR., STE. 110
PEARL HARBOR, HAWAII 96814

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Set EV311.004
27 JUL 2005

Mr. Dennis M. Nishimura
Wastewater Branch
Department of Planning and Permitting
City and County of Honolulu
650 South King Street, 7th Floor
Honolulu, Hawaii 96813

Dear Mr. Nishimura:

**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 (HRSOC) Draft Environmental Assessment (EA). We have considered your comments and offer the following responses:

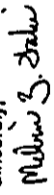
- a. We acknowledge that the City and County wastewater system will be able to accommodate the additional wastewater flows upon completion of the HRSOC facilities Section 4.6.1 of the Draft EA includes the following statement, "The City and County of Honolulu, Department of Environmental Services has 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 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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Seq EY31A.004
27 JUL 2003

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. Corlynn 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

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:

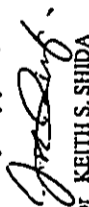
Subject: Your Letter of April 21, 2005 on the Draft Environmental Assessment for
Hawaii Regional Security Operations Center (HRSOC), Wahiawa

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



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

5090P.1F08
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, Hawaii 96843

Dear Mr. Shida:

Subj: **HAWAII REGIONAL SECURITY OPERATIONS CENTER DRAFT
ENVIRONMENTAL ASSESSMENT, WAHIAWA, OAHU, HAWAII**

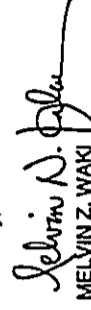
Thank you for your letter dated May 17, 2005 regarding the Hawaii Regional Security
Operations Center Draft Environmental Assessment (EA). We have considered your
comments and offer the following responses:

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

5090P-1F0B
Ser EV31034
29 JUL 2005

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 Kamoakila Boulevard, Room 602
Honolulu, HI 96707

Ms. Corlyn Olson Orr, Project Planner
Helber Hastert & Fee, Planners
733 Bishop Street, Suite 2590
Honolulu, HI 96813

CITY AND COUNTY OF HONOLULU
FIRE DEPARTMENT
215 KUMUMASSI STREET, SUITE 401 • HONOLULU, HAWAII 96815-1043
TELEPHONE: (808) 521-7781 • FAX: (808) 521-7750 • INTERNET: www.honolulu.gov



ATTILIO K. LEONARDI
Fire Chief
HONOLULU FIRE DEPARTMENT

May 18, 2005

Ms. Audrey Uyema Pak, Planner in Charge (EV31)
Department of the Navy
Naval Facilities Engineering Command, Pacific
Environmental Planning Division
238 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:hh

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.



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

5090P.1F0B
Scr EV31/1033
29 JUL 2005

Mr. Attilio K. Leonard, Fire Chief
Fire Department
City and County of Honolulu
3375 Koapaka Street, Suite H425
Honolulu, Hawaii 96819

Dear Chief Leonard:

Subj: HAWAII REGIONAL SECURITY OPERATIONS CENTER DRAFT
ENVIRONMENTAL ASSESSMENT, WAHIAWA, OAHU, 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,

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 EV31033
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>



MUSE HANNEMAN
MAYOR

OUR REFERENCE BS-KP

May 2, 2005

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 529-3544.

Sincerely,

BOISSE P. CORREA
Chief of Police

By *MHC Kenneth Simmons*
KARL GODSEY
Assistant Chief of Police
Support Services Bureau

cc: Ms. Genevieve Salmonson, OEOC
Mr. Alvin Takeshita, DOT
Ms. Coflyn Olson Orr, Helber Hasler
and Fee Planners, Inc.



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

5090P.1FOB
Sgt EV31A106
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, WAHIAWA, OAHU, 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
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

Scanned and Printed with Aloha

5090P.1F08
Ser EV31A.006
27 JUL 2005

Copy to:
Ms. Corlyn Olson Orr, Project Planner
Heiber Hastert & Fee, Planners
733 Bishop Street, Suite 2590
Honolulu, HI 96813



DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND, PACIFIC
311 MUKULAPA DR., STE. 100
PEARL HARBOR, HAWAII 96841-3114

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Ser EV311007
27 JUL 2005

Hawaiian Telcom

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,

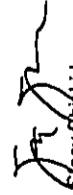
Subject: CONSULTATION FOR THE HAWAII REGIONAL SECURITY OPERATIONS CENTER DRAFT ENVIRONMENTAL ASSESSMENT, WAHIAWA, OAHU, HAWAII

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
Coryn 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:

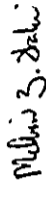
Subj: HAWAII REGIONAL SECURITY OPERATIONS CENTER DRAFT ENVIRONMENTAL ASSESSMENT, WAHIAWA, OAHU, HAWAII

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 telecommunication facilities, including the need to augment existing telecommunication 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 Hawaii, DBEDT
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, HI 96813

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Ser EV31/1007
27 JUL 2005

Mr. Alvin Takeshita, Engineering Program Manager
State of Hawaii
Department of Transportation
601 Kamokila Boulevard, Room 602
Honolulu, HI 96707

Ms. Cortyn Olson Orr, Project Planner
Heiber Hastert & Foe, Planners
733 Bishop Street, Suite 2590
Honolulu, HI 96813

Castle & Cooke
Homes Hawaii, Inc.

1000 Kalia Road, Suite 1000, 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.

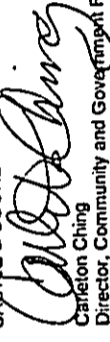
Finally, we are concerned about the extent of the electromagnetic radiation and electromagnetic interference that will be generated from your facility, and the impacts it may have on the existing Whitmore Village community, new residential developments and existing operations at Dole Food Company.

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 Kamohala 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: Corlynn Olsen Orr, Project Planner



DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND, PACIFIC
338 MANALAPA DR., STE. 100
PEARL HARBOR, HAWAII 96844-3134

5090P.1F0B
Ser EV31/1031
29 JUL 2005

Mr. Carleton Ching, Director
Community and Government Relations
Castile & Cooke Homes Hawaii, Inc.
P.O. Box 898900
Mililani, Hawaii 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 Poamoho 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 Castile and Cooke and George Galbraith Trust Estate.

This new alignment passes around Castile & 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 Castile & 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 Castile & Cooke's property before the acquisition minus the estimated market value of Castile & 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.

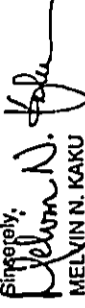
If residential development of Castile & Cooke's property is certain, the Navy is prepared to meet with Castile & Cooke and/or the potential developer at a future date to discuss the possible location of easements to accommodate access to Castile & Cooke's property.

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 Castile & Cooke lands. There are no identified hazards from EMR or concerns for EMI associated with the existing Kunita 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_1F08
Ser EV31/1031
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 Karmokila 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 Hii. 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 Doile 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 Security. Talking with the Filipino community we had a proposal that the road should be connected to the traffic light at Kamananui, Kaukanahua 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 road 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 village and will not cause congested traffic at Whitmore Avenue to Kamehameha Highway. Traffic will then be distributed to Kamananui to Kaukanahua 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

Dolores C. Cabanit



DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND, PACIFIC
210 MARINA DRIVE, STE. 100
PEARL HARBOR, HAWAII 96364-3114

5090P-1F08
Ser EV31/1029
29 JUL 2005

5090P-1F08
Ser EV31/1029
29 JUL 2005

Ms. Dolores Cabanit, President
Whitmore Filipino Community Association
1016 Ahe-Ahe Avenue
Wahiawa, Hawaii 96786

Dear Ms. Cabanit:

Subj HAWAII REGIONAL SECURITY OPERATIONS CENTER DRAFT
ENVIRONMENTAL ASSESSMENT, WAHIAWA, 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 Kani Park) remains unchanged, intersecting with Whitmore Avenue west of Kani 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, Kamanui Road and Kaukonahua Road was previously considered and presented to the Wahiawa 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 Kamanui 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-Kamanui intersection, then turn right to Kamanui 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 Kamanui 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 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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29 JUL 2005

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.

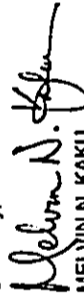
All the proposed traffic improvements mentioned above would help to minimize traffic impact from the project.

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 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. Corlyn Olson Orr, Project Planner
Helbar Hasfert & Fee, Planners
733 Bishop Street, Suite 2590
Honolulu, HI 96813



DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND, PACIFIC
214 MANALAPANA DR., STE. 116
PEARL HARBOR, HAWAII 96314

5090P-1F0B
Ser EV31/1003
27 JUL 2005

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.

It happen to be one of the home owners that
will be closest (approx. 250ft) to the new
access road. The access road 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 Kala Kea.
Periodic speed bumps would also be good to
slow the speeding and to protect the kids that
play back in these fields.

Diane Gilmore
Signature
5-18-05
Date

Ms. Diane Gilmore
1002 Uluwale Street
Wahiawa, Hawaii 96786

Dear Ms. Gilmore:

Subj: HAWAII REGIONAL SECURITY OPERATIONS CENTER DRAFT
ENVIRONMENTAL ASSESSMENT, WAHIAWA, OAHU, 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 Casile 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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Ser EV31/ 1003
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

MELVIN Z. WAKI
Business Line Manager
Environmental

Encl:
(1) Revised Road Alignment Map

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. Corlyn Olson Orr, Project Planner
Helber Hasten & Fee, Planners
733 Bishop Street, Suite 2590
Honolulu, HI 96813

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Set EV31/ 1003
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 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. Cortyn Olson Orr, Project Planner
Heiber Hastert & Fee, Planners
733 Bishop Street, Suite 2590
Honolulu, HI 96813



DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND, PACE #
314 MAAKALAPA DR., STE. 100
PEARL HARBOR, HAWAII 96314

5090E.1FOB
Ser EV31028
29 JUL 2005

PUBLIC COMMENTS

Draft Environmental Assessment
For Hawaii Regional Security Operations Center, Wahiawa, Oahu, Hawaii

Name: EVILYN SANTIAGO
Address: 1163 IOMEA PL. WAIHAWA, 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.

SEVERE 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 QUALITY OF LIFE IT WILL OPEN UP
JOBS - GREAT FOR US BUT THE PLANNING IS NOT 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. I DON'T LIKE HEARING
THE CARS GOING UP AND DOWN OR DON'T NEED TO
WORKY YOU CAUSE TRAFFIC IS NOTHING THERE BUT BUSH
AND EVERYBODY TALKS AND HAVE THEIR LIVES STRUCK AND
SOMEONE FIND ANOTHER ROUTE FOR THIS ROAD - DON'T
WANT IT IN MY BACK YARD
TRAFFIC TRAFFIC TRAFFIC COMING BOTH WAYS
FROM KAHU INTO WHITMORE AVENUE. IF A BRIDGE
NEEDS TO BE BUILT BUILD IT DON'T RUIN THE
LIFESTYLE OF OUR SMALL COMMUNITY
FOR A PLACE THAT THERE WILL BE APARTMENTS AND
HAD TO WE GET IN OR OUT I DON'T THINK THE WHOLE
COMMUNITY KNOWS WHATS BEING PROPOSED - SEND PLOK
TO ALL THE HOMES IF NOT HAVE THE KIDS THAT ATTEND
THE MAND PARENTS TO BRING IT HOME TO THEIR
PARENTS OR RELATIVES - THE COMMUNITY NEEDS TO KNOW
THAT ANOTHER MEETING LIKE THE FIRST NOT EVERYONE
KNOW ABOUT THE FIRST ONE - INPUT WILL BE GREATLY APPRECIATED

Evilyn Santiago
Signature

6/18/2005
Date

Ms. Evelyn Santiago
1162 Iomea Place
Wahiawa, Hawaii 96786

Dear Ms. Santiago.

Subj: HAWAII REGIONAL SECURITY OPERATIONS CENTER DRAFT
ENVIRONMENTAL ASSESSMENT, WAHIAWA, OAHU, 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 Casile 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 Ukanihiko 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

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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 Hawaii's Department of Transportation (DOT).

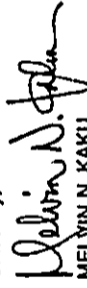
The traffic study have been reviewed and accepted by the DOT. A hard copy of the traffic study is available to the public upon request.

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, Medina's Kitchen, Whitmore Community Center, Helemano Elementary School, Dole Food Company Field Office, and the Dole Wahiawa 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 Wahiawa 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

2

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29 JUL 2005

Encl:
(1) Revised Road Alignment Map

Copy to (w/o encl):
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. Corryn Olson Orr, Project Planner
Helber Hasler & Fee, Planners
733 Bishop Street, Suite 2590
Honolulu, HI 96813

3

April 29, 2005

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 Kukanihiko 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 pac '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 Kukanihiko, 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 Kukanihiko, Kahunana, Koa Mana and 'Ike 'Aina... and the protocol of the Database 'Aha Kukanihiko, 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 IRS and Chapter 13-300 HJAR regarding the cultural sensitivity to the area of concern, Kukanihiko, 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

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 Kukanihiko. The significant and important role of 'Aha Kukanihiko, 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 Kukanihiko, Kahunana, Koa Mana and 'Ike 'Aina...

ua mau ke ea o ka 'aina i ka pono...

Tom Lenchanko *Mama J. Lenchanko*
waha o lelo 'Aha Kukanihiko, Kahunana, Koa Mana and 'Ike 'Aina...
kahu ko laila Kukanihiko

Alika Silva
Kahu Kula'iwi, Koa Mana, Kupukaa'ina, Wai'anae 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
741 MAHALAUA DR., STE. 100
PEARL HARBOR, HAWAII 96863-1114

5090P.1F08
Ser EV3/ 821
9 JUN 2005

Mr. Tom Lenchanko
Waha olelo 'Aha Kukanihiko, Kahunana,
Koa Mana and 'iko '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 Kukanihiko 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 Kukanihiko site as the only archaeological site and place of traditional cultural importance.

We recognize the cultural significance of Kukanihiko, 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 Kukanihiko 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 Kukanihiko 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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Traffic improvements along Kamehameha Highway would not disrupt traffic to and from the Kukanihiko site. Best management practices would be implemented to ensure that visitors to Kukanihiko 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.

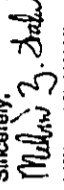
We fully understand your concerns regarding ground disturbing activities and are fully aware of our responsibilities under the Native American Graves Protection and Repatriation Act and Section 106 of the National Historic Preservation Act regarding discoveries of cultural items during construction work. 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. WAKU
Business Line Manager
Environmental

5090E.1F0B
Ser EV3821
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 Haslett & 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 W'ALA*
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 road of
concerns from 'Aha Kukanihiko, Kahunana, Koa Mana and 'Ike 'Aina...

It is our position to reserve the right to comment on all undertakings which concern
ka pae 'aina Hawaii nei, Hawaii Ioa...

- 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
waha olelo 'Aha Kukanihiko, Kahunana, Koa Mana and 'Ike 'Aina...
kahu ko laila Kukanihiko

Alike Silva
Kahu Kulaiwi, Koa Mana, Kupukaaia, Waianae Moku

Corilyn Olson Orr

From: Smv520@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, Hok/WAIMEAH/HIDOE@notes.k12.hi.us; vicky@hawaii.rr.com; uslo225@msn.com; wnb26@verizon.net; popstamatah@hawaii.rr.com; napu4u@yahoo.com; kaim@ohia.org; KEONAHALE/WIA@aol.com; kamao_q@yahoo.com; ikai38@hotmail.com; BHelemano@aol.com; Glen_Kia/KAMAILI/HIDOE@notes.k12.hi.us; eklores@verizon.net; daniel_au@lelehuahidoe@notes.k12.hi.us; kalimapa@hotmail.com; leimate2@yahoo.com; usha_@verizon.net; manulani@hawaii.edu; kaimi@lava.net; ortiz008@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 Kukaniloko.

The consulting party is the 'Aha Kukaniloko [the families of lineal descent]. When it comes to representation from the 'Aha Kukaniloko, 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 decisions 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 Kukaniloko, Kahunana, Koa Mana and 'Ike 'Aina...
 kahu ko laila Kukaniloko
 349-9949

Alika Poe Silva
 Kahu Kulaiwi, Koa Mana, Kupukaaaina, Waianae Moku

8/2/2005

Admiral William J. Fallon, USN
 Commander, US Pacific Command
 850 Ticonderoga Street, Suite 110
 Pearl Harbor, Hawaii 96860-5101

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 Kukaniloko, Kahunana, Koa Mana and 'Ike 'Aina... and the protocol of Database 'Aha Kukaniloko, 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 olelo 'Aha Kukaniloko, Kahunana, Koa Mana and 'Ike 'Aina...
 kahu ko laila Kukaniloko

Alika Poe Silva, Kahu Kulaiwi, Koa Mana, Kupukaaaina, Waianae Moku

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
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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 Lenehan

waha o bo 'Aha Kukanihoko, Kahurana, Koa Mana and 'Ike 'Aina...
kahu ko laila Kukanihoko

Alika Poe Silva, Kahu Kula'wi, Koa Mana, Kipukeaina, Waianae Moku

PUBLIC COMMENT

Draft Environmental Assessment
For Hawaii Regional Security Operations Center, Wahiawa, O'ahu, Hawaii

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 IHSOC 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 WND?

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.

Disservationation of information

I strongly recommend that the U.S. Navy set up a website for the public to obtain information on the IHSOC 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

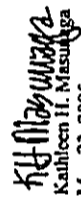
As the IHSOC project moves along, it would be helpful for the public to have a hotline to call, or someone to email questions and concerns. During the construction phase, the Whitmore Village residents should have contact information in the event that the noise, dust and possibly odor levels become unbearable.

Roundabouts

I lived in Italy for a few years and returned to Hawaii in 2001. Our family spent last Christmas there. Between 2001 and 2003, 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 IHSOC Project.


Kathleen H. Masunaga
May 23, 2005
Wnb26@verizon.net



DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND, PACIFIC
314 MAHALAPA DR., STE. 150
PEARL HARBOR, HAWAII 96860-3154

5090P.1F0B
Ser EV31/1020
29 JUL 2005

5090P.1F0B
Ser EV31/1020
29 JUL 2005

Ms. Kathleen H. Masunaga
1842 Glen Avenue
Wahiawa, Hawaii 96786

Dear Ms. Masunaga:

Subj HAWAII REGIONAL SECURITY OPERATIONS CENTER DRAFT ENVIRONMENTAL ASSESSMENT, WAHIAWA, OAHU, 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 Wahiawa 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 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.

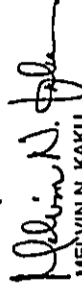
b. Location of the Access Road by Whitmore Village

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

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 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. Corlym Olson Orr, Project Planner
Helber Hastorf & Fee, Planners
733 Bishop Street, Suite 2590
Honolulu, HI 96813

4

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 Wahiaiwā 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.

3

Received 4/29/05



DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND, PACIFIC
214 MAKALAPA DR., STE. 100
PEARL HARBOR, HAWAII 96813-1114

PUBLIC COMMENTS

Draft Environmental Assessment
For Hawaii Regional Security Operations Center, Wahiawa, Oahu, Hawaii

5090P.1F0B
Ser EY31/ 587
3 - MAY 2005

To: Distribution

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

Name: Cynthia Edon
Address: 349 Cecil Mauck 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 Assessment
Thank you
Hellems, Edon, my well like me also.
1001 Iki Iki Ave.
Wahiawa, HI 96786

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 (EY31)
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: Heiber Hastert & Fee, Planners
Address: 733 Bishop Street, Suite 2590, Honolulu, HI 96813
Contact: Coryn Olson Orr, Project Planner
Phone: (808) 545-2055

Signature _____ Date _____

6090P.1F08
Ser EY31/ 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 Lerchanko
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
338 MAKALAPA DR., STE. 106
PEARL HARBOR, HAWAII 96314

5090.A5
Set EV12/ 2148
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
MELVIN Z. WAKI, P.E.
Business Line Manager
Environmental



DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND, PACIFIC
338 MAKALAPA DR., STE. 106
PEARL HARBOR, HAWAII 96314

5090.A5_
Set ENV161A.377
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 Messrs. C. Jamille, 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 videoconferencing 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
MELVIN Z. WAKI, P.E.
Head
Environmental Engineering Department

BOARD OF WATER SUPPLY
 CITY AND COUNTY OF HONOLULU
 633 SOUTH BERETANIA STREET
 HONOLULU, HI 96843



January 11, 2005

013 40
 LEVI
 614

MULTI-MEDIA GROUP
 EDIE EGRETT, JR., Chairman
 CHARLES L. HARRIS, Vice Chairman
 HERBERT S. KALANOA, III
 DARWIN H. LEONG

ROBERT K. MARACA, Executive Director
 LARRY J. LEONARD, Esq., General Counsel
 CLIFFORD S. JAMIE, Manager and Chief Engineer
 DONNA FAY K. ACCOSMO, 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.

Water for Life
 Ka Waia Eia

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
BILLING CHARGE There is a billing charge each time a bill is prepared effective as follows:	\$3.70	\$3.70	\$3.70	\$3.70	\$3.70
QUANTITY CHARGE In addition to the billing charge, there is a charge for all water drawn for each 1,000 gallons effective as follows:					
SINGLE FAMILY RESIDENTIAL (Monthly Per Unit)					
Block 1 (0-1000) First 10,000 or any part thereof	\$1.77	\$1.77	\$2.00	\$2.17	\$2.47
Block 2 (1000-1500) First 10,000 or any part thereof	\$2.12	\$2.12	\$2.40	\$2.60	\$2.96
Block 3 (1500-2000) Over 10,000	\$3.18	\$3.18	\$3.60	\$3.91	\$4.48
MULTIFAMILY RESIDENTIAL (Monthly Per Unit)					
Block 1 (0-1000) First 10,000 or any part thereof	\$1.77	\$1.77	\$2.00	\$2.17	\$2.47
Block 2 (1000-1500) First 10,000 or any part thereof	\$2.12	\$2.12	\$2.40	\$2.60	\$2.96
Block 3 (1500-2000) Over 10,000	\$3.18	\$3.18	\$3.60	\$3.91	\$4.48
NON-RESIDENTIAL All Usage	\$1.98	\$1.98	\$2.24	\$2.43	\$2.77
AGRICULTURAL (18 month Per Account)					
Block 1 (0-1000) First 10,000 or any part thereof	\$1.77	\$1.77	\$2.00	\$2.17	\$2.47
Block 2 (1000-1500) First 10,000 or any part thereof	\$2.12	\$2.12	\$2.40	\$2.60	\$2.96
Block 3 (1500-2000) Over 10,000	\$3.18	\$3.18	\$3.60	\$3.91	\$4.48
NON-RESIDENTIAL All Usage	\$0.99	\$0.99	\$1.12	\$1.22	\$1.39

* In areas Agricultural County charges, a service meter shall be installed upon application each time a bill is due to the Board of Water Supply and the applicant shall pay the cost of the meter and the cost of the water service connection. Each approved application shall include a check for the amount of the bill for the remainder of the fiscal year, until they receive the actual bill. The applicant shall pay the amount of the bill for the remainder of the fiscal year.

** The proposed Quantity Charge effective from July 1, 1993 shall not apply to existing or subsequently installed irrigation quantity charge systems.

STANDBY CHARGE: A Standby Charge of \$1,970 per month for each million gallons per day (mgd) demand requirement shall apply to plants under construction for interconnection service. Such service shall be provided only for emergency or interconnection service and shall be subject to the provisions of the Standby Charge and Chief Engineer's approval. Interconnection service shall be charged at the quantity rate of \$1.48 for each thousand gallons of production. The Standby Charge shall be assessed on the basis of the quantity of water drawn for interconnection service.

ON SITE CONSTRUCTION LABOR: Construction labor shall be assessed on the basis of the quantity of water drawn for interconnection service. The rate shall be \$15.00 per hour for each worker on site. The rate shall be \$15.00 per hour for each worker on site. The rate shall be \$15.00 per hour for each worker on site.

POWER COST ADJUSTMENT: The County Charge may be increased or decreased for each \$100,000 or fraction thereof when electric power cost to the Board of Water Supply exceeds the following:

DATE	ELECTRIC POWER COST
July 1, 1993	\$4,871,500
July 1, 1994	\$4,444,200
July 1, 1995	\$4,184,800
July 1, 1996	\$3,718,800
July 1, 1997	\$3,211,100
July 1, 1998	\$2,833,700

INTERCONNECTION REGULATORY COMPLIANCE FEE COST ADJUSTMENT: The County Charge may be increased or decreased for each \$100,000 or fraction thereof when the cost of interconnection regulatory compliance exceeds the following:

Part I - Water Rate Schedule



DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND, PACIFIC
2811 HANULUFA DR., STE. 106
PEARL HARBOR, HAWAII 96314

5090.AS.
Ser EV31 184
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 WAIHAWA, TMK: 7-1-002:007 WHITMORE AVENUE

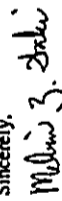
Our letter of December 7, 2004 requested a confirmation of the Board of Water Supply's (BWS) commitment to allow a backup emergency connection at Whitmore Village to support the Naval Computer and Telecommunications Area Master Station, Pacific (NCTAMS PAC). Your letter of January 11, 2005 provided a 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, P.E.
Business Line Manager
Environmental

Blind copy to:
EV31 (AUP)



DEPARTMENT OF THE NAVY
PACIFIC DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
740 MAKALAPA DR., STE. 199
PEARL HARBOR, HI 96831-3114

5090.A2
Ser ENV181/1317

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

MELVIN Z. WAKI, P.E.
Head
Environmental Engineering Department

DEPARTMENT OF ENVIRONMENTAL SERVICES
CITY AND COUNTY OF HONOLULU
1000 ULUOHA STREET, SUITE 308, KAPOLEI, HI 96707
TELEPHONE: (808) 632-6155 FAX: (808) 632-5113 WEBSITE: <http://www.dee.honolulu.hi.us>



JEREMY HUGHES
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
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

app
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,

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



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
338 WASHINGTON DRIVE, STE. 100
PEARL HARBOR, HAWAII 96831-3134

5090P.1F0B
Ser EV31/805
1 JUL 2005

Ms. Laura H. Thielon, Director
Office of Planning
Department of Business,
Economic Development & Tourism
State of Hawaii
P.O. Box 2359
Honolulu, HI 96804

Dear Ms. Thielon:

Subj: THE HAWAII REGIONAL SECURITY OPERATIONS CENTER DRAFT
ENVIRONMENTAL ASSESSMENT (EA), WAHIAWA, 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, Wahiawa, 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.

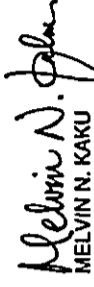
The purpose of the project is to provide adequate operational facilities that meet HRSOC's unique mission requirements and improve operational efficiency and fiscal effectiveness of national security operations in the Pacific area. The project is needed to replace existing operational and administrative 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.

5090P.1E0B
Ser EV31/805
1 JUL 2005

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.

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 Hastart & Fee, Planners
733 Bishop Street, Suite 2590
Honolulu, HI 96813

**HAWAII CZM PROGRAM
FEDERAL CONSISTENCY ASSESSMENT FOR THE PROPOSED
Department of Navy
Hawaii Regional Security Operations Center¹
Wahiawa, O'ahu, Hawaii**

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.

¹ 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), Wahiawa. The military installation is in an upland location, more than 7 miles from the nearest coastline at Waialae 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 Keiki Kani Park, a County neighborhood park.
4. There are no perennial streams within the HRSOC project site. The main tributary of Peamoho 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 Peamoho 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:

	Yes	No
1. Is the project site within a historic/cultural district?	X	
2. Is the project site listed on or nominated to the Hawaii or National register of historic places?	X	
3. Does the project site include undeveloped land which has not been surveyed by an archaeologist?	X	
4. Has a site survey revealed any information on historic or archaeological resources?	X	
5. Is the project site within or near a Hawaiian fishpond or historic settlement area?	X	

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 Hawaii 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 such 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:

	Yes	No
1. Does the project site abut a scenic landmark?		X
2. Does the proposed action involve the construction of a multi-story structure or structures?	X	
3. Is the project site adjacent to undeveloped parcels?	X	
4. Does the proposed action involve the construction of structures visible between the nearest coastal roadway and the shoreline?		X
5. Will the proposed action involve construction in or on waters seaward of the shoreline? On or near a beach?		X

Discussion:

HRSOC would have no impact on views to or from Oahu coastlines or coastal roads. The Central Oahu Sustainable Communities Plan (COSCP) identifies "views of the Waianae and Koolau Mountains from Kuria 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 Kuria 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 Koolau 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?		<u>X</u>
2. Is the project site within the Shoreline Setback Area (20 to 40 feet inland of the shoreline)?		<u>X</u>
3. Will the proposed action require some form of effluent discharge into a body of water?	<u>X</u>	
4. Will the proposed action require earthwork beyond clearing and grubbing?	<u>X</u>	
5. Will the proposed action include the construction of special waste treatment facilities, such as injection wells, discharge pipes, or cesspools?		<u>X</u>
6. Is an intermittent or perennial stream located on or near the project site?	<u>X</u>	
7. Does the project site provide habitat for endangered species of plants, birds, or mammals?		<u>X</u>
8. Is any such habitat located nearby?	<u>X</u>	
9. Is there a wetland on the project site?		<u>X</u>
10. Is the project site situated in or abutting a Natural Area Reserve?		<u>X</u>
11. Is the project site situated in or abutting a Marine Life Conservation District?		<u>X</u>
12. Is the project site situated in or abutting an estuary?		<u>X</u>

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 Waialua Wastewater Treatment Plant 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:

- | | Yes | No |
|---|-----|----|
| 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 tsunami, 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
Federal		
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 ¹
State of Hawaii		
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, Hawaii 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
City and County of Honolulu		
Sewer Capacity and Wastewater System Facility Approval	Department of Planning and Permitting	Pending
Construction Plan Approval	Board of Water Supply	Pending
Engineering and Construction Permits	Department of Planning and Permitting	Pending
Construction Plan Approval	Department of Planning and Permitting	Pending
Street Usage Permit	Department of Transportation Services	Pending
¹ "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 Nuiopua) published articles on HRSOC.
- 4 The Draft Environmental Assessment was distributed for public review and comment in April 2005.

**HAWAII CZM PROGRAM
FEDERAL CONSISTENCY CERTIFICATION FORM**

Project/Activity Title or Description: Hawaii Regional Security Operations Center at the Naval Computer and Telecommunications Area Master Station Pacific, Waihewa Island; Oahu Tax Map Key: 7-1-001:005 (por.); 006 (por.); 007 (por.); 008 (por.); 011 (por.); and 026 (por.); 7-1-002: 004 (por.); 007 (por.); 030 (por.); 031 (por.); and 032 (por.)
 Estimated Start Date: January 2007

APPLICANT AND AGENT INFORMATION

1. Naval Facilities Engineering Command, Pacific Name of Applicant
 258 Meaulaue Drive, Suite 100 Pearl Harbor, Hawaii 96860-3124 Address
 ATTN: Ms. Corina Chano, Environmental Planning Division City/State of Hawaii
 (808) 472-1448 Daytime Phone
 (808) 474-5419 Fax Number
 corina.chano@navfac.nm.navy.mil E-mail Address

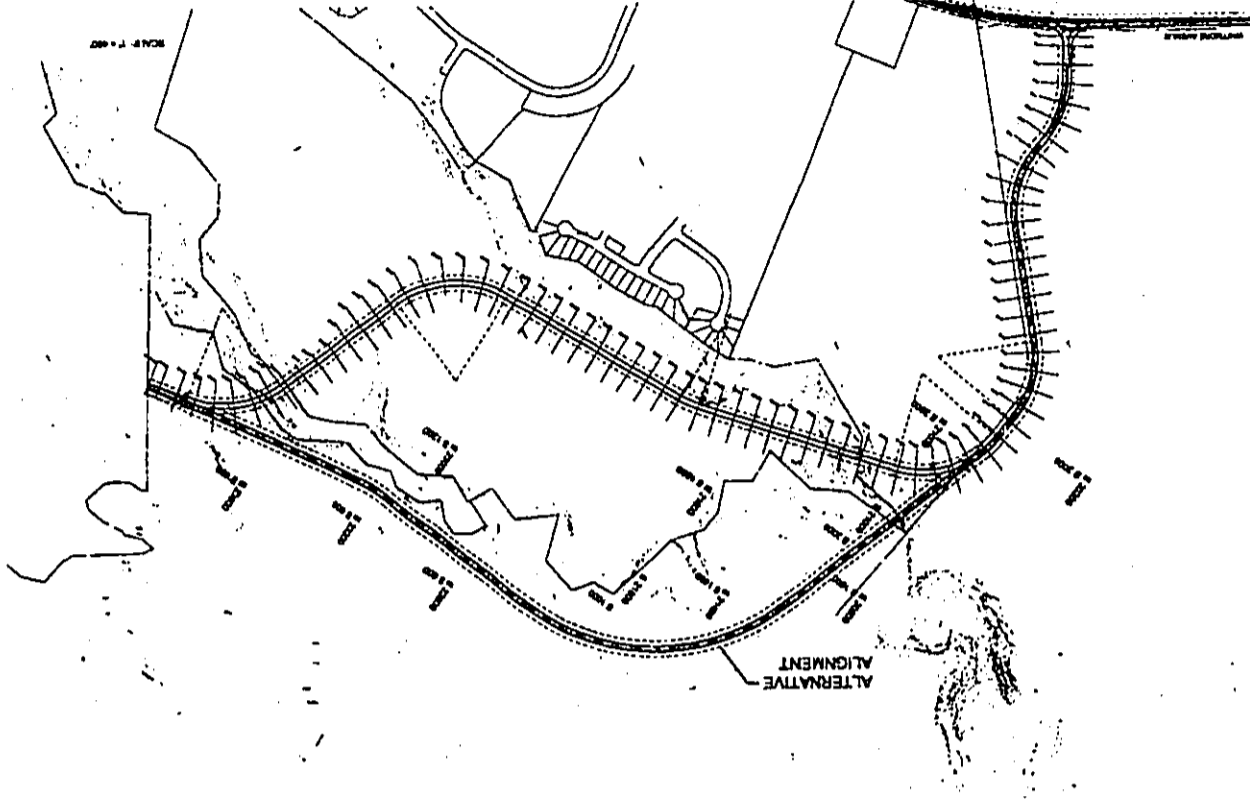
2. Harbor, Haslerl & Fee, Planners Agent
 733 Bishop Street, Suite 2590 Honolulu, Hawaii 96813 City/State of Hawaii
 ATTN: Mr. Corbin Orr, Project Planner
 (808) 545-2055 Daytime Phone
 (808) 545-2050 Fax Number
 corbinorr@hawaii.com E-mail Address

TYPE OF APPLICATION (Check one (1) only)

- I. Federal Activity
 The proposed activity is consistent with and will be conducted in a manner consistent to the maximum extent practicable with the Hawaii Coastal Zone Management Program.
 Signature: Melvin N. Gfeller Date: July 1, 2005
(Applicant or responsible party)
- II. Permit or License – Please sign below.
- III. OCS Plan/Permit – Please sign below.
- IV. Grants & Assistance – Please sign below.

The proposed activity complies with the Hawaii's Coastal Zone Management Program and will be conducted in a manner consistent with such a program.

Signature _____ Date _____
(Applicant or responsible party)



Enclosure (3)



**DEPARTMENT OF BUSINESS,
ECONOMIC DEVELOPMENT & TOURISM**

OFFICE OF PLANNING

235 South Beretania Street, 8th Floor, Honolulu, Hawaii 96813
Mailing Address: P.O. Box 2356, Honolulu, Hawaii 96804

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Fax (808) 581-3824

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.

Mr. Melvin N. Kaku
Page 2
August 2, 2005

- 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. Thielson
Director

cc: Ms. Corlyn Orr, Helber Hastert & Fee
U.S. Army Corps of Engineers, Regulatory Branch
Dr. Wendy Wiluse, 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

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 resources¹:

- 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.

¹ 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 organizations² 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.

² 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.