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STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
Office of Conservation and Coastal Lands
POST OFFICE BOX 621
HONOLULU, HAWAII 96809

File No. CDUA HA-3661

FEB 12 2013

MEMORANDUM

To: Gary Gill, Director
Office of Environmental Quality Control

From: Samuel J. Lemmo, Administrator
Office of Conservation and Coastal Lands

Subject: Draft Environmental Assessment (DEA) for Conservation District Use Application (CDUA) HA-3661 for a single family residence.

The Department of Land and Natural Resources has reviewed the draft EA for the subject project, and anticipates a Finding of No Significant Impact (FONSI) determination. Please publish notice of availability for this project in the February 23, 2013 issue of the *Environmental Notice*. We have enclosed two hard copies and one digital of the draft EA document, as well as the Conservation District Use Application, a Management Plan, and an Executive Summary. We will follow this with an electronic copy of the applicant's project summary and the OEQC Bulletin Publication Form.

Please contact Michael Cain of our Office of Conservation and Coastal Lands staff at 587-0048 should you have any questions.

Enclosures: *Draft EA, CDUA, OEQC Pub Form*

Disc: *Draft EA, CDUA, OEQC Pub Form, OCCL Determination Letter*

APPLICANT ACTIONS
SECTION 343-5(C), HRS
PUBLICATION FORM (JULY 2012 REVISION)

Project Name: Schattauer Single Family Residence
Island: Hawai'i
District: North Kona
TMK: (3) 7-9-006:014
Permits: Conservation District Use Permit

Approving Agency:

Office of Conservation and Coastal Lands, Department of Land and Natural Resources, PO Box 621, Honolulu, HI 96809. Contact: Michael Cain, 587-0048

Applicant:

Kainaliu Kahakai LLC, PO Box 2300, Kealakekua, HI 96750. Contact: George A. Schattauer, Jr., Member-Manager

Consultant:

Ali`i Architects, 75-5742 Kuakini Highway, Suite 205, Kailua Kona, 96740. Contact: Ali Ghalamfarsa, 329-8777

Status (check one only):

_**X**_DEA-AFNSI	Submit the approving agency notice of determination/transmittal on agency letterhead, a hard copy of DEA, a completed OEQC publication form, along with an electronic word processing summary and a PDF copy (you may send both summary and PDF to oeqchawaii@doh.hawaii.gov; a 30-day comment period ensues upon publication in the periodic bulletin.
__FEA-FONSI	Submit the approving agency notice of determination/transmittal on agency letterhead, a hard copy of the FEA, an OEQC publication form, along with an electronic word processing summary and a PDF copy (send both summary and PDF to oeqchawaii@doh.hawaii.gov; no comment period ensues upon publication in the periodic bulletin.
__FEA-EISPN	Submit the approving agency notice of determination/transmittal on agency letterhead, a hard copy of the FEA, an OEQC publication form, along with an electronic word processing summary and PDF copy (you may send both summary and PDF to oeqchawaii@doh.hawaii.gov; a 30-day consultation period ensues upon publication in the periodic bulletin.
__Act 172-12 EISPN	Submit the approving agency notice of determination on agency letterhead, an OEQC publication form, and an electronic word processing summary (you may send the summary to oeqchawaii@doh.hawaii.gov. NO environmental assessment is required and a 30-day consultation period upon publication in the periodic bulletin.
__DEIS	The applicant simultaneously transmits to both the OEQC and the approving agency, a hard copy of the DEIS, a completed OEQC publication form, a distribution list, along with an electronic word processing summary and PDF copy of the DEIS (you may send both the summary and PDF to oeqc@doh.hawaii.gov); a 45-day comment period ensues upon publication in the periodic bulletin.
__FEIS	The applicant simultaneously transmits to both the OEQC and the approving agency, a hard copy of the FEIS, a completed OEQC publication form, a distribution list, along with an electronic word processing summary and PDF copy of the FEIS (you may send both the summary and PDF to oeqc@doh.hawaii.gov); no comment period ensues upon publication in the periodic bulletin.
__ Section 11-200-23 Determination	The approving agency simultaneous transmits its determination of acceptance or nonacceptance (pursuant to Section 11-200-23, HAR) of the FEIS to both OEQC and the applicant. No comment period ensues upon publication in the periodic bulletin.
__Statutory hammer Acceptance	The approving agency simultaneously transmits its notice to both the applicant and the OEQC that it failed to timely make a determination on the acceptance or nonacceptance of the applicant's FEIS under Section 343-5(c), HRS, and that the applicant's FEIS is deemed accepted as a matter of law.
__Section 11-200-27 Determination	The approving agency simultaneously transmits its notice to both the applicant and the OEQC that it has reviewed (pursuant to Section 11-200-27, HAR) the previously accepted FEIS and determines that a supplemental EIS is not required. No EA is required and no comment period ensues upon publication in the periodic bulletin.
__Withdrawal (explain)	

Summary (Provide proposed action and purpose/need in less than 200 words. Please keep the summary brief and on this one page)**:**

The applicant proposes to build a one-story two-bedroom single family residence on a 2.35-acre coastal parcel. The total developed area of the residence will be 2448 square feet. The foundation will be a combination of post and concrete piers and shear footings. The finished height will be nineteen feet above grade.

The proposed residence will be set back 40 feet from the shoreline, and 33 feet mauka from an existing rock wall that runs parallel to the shore. Access will be via an unpaved driveway. No additional landscaping is proposed.

The soil is stony silt loam with underlying pāhoehoe lava. The slope ranges from six to twelve percent, with a maximum height of 14-feet above mean sea level. The vegetation is dominated by non-native grasses, kiawe, koa haole, tamarind, and coconut palms. An archaeological survey identified ten sites of interest: a well system, stone walls, a house platform, and pre-Contact papamū, poho, water basins, and petroglyphs. The applicant has proposed passive protection of these through the establishment of two preservation easements.

Traditional uses of the property include pole fishing, throw net fishing, `opihi gathering, and crabbing. The applicant states that they both support and participate in these activities.

DRAFT ENVIRONMENTAL ASSESSMENT

KAINALIU KAHAKAI LLC
GEORGE A. SCHATTAUER, JR.
Member-Manager

SINGLE FAMILY RESIDENCE

Honua`ino 1st, North Kona, Hawaii
TMK (3) 7-009-006:014

Prepared by:
Ali'i Architects, Inc.
75-5742 Kuakini Hwy., Suite 205
Kailua Kona, Hawaii
96740

December 2012

DRAFT ENVIRONMENTAL ASSESSMENT
KAINALIU KAHAKAI LLC SINGLE-FAMILY RESIDENCE
CONSERVATION DISTRICT AT HONUA`INO 1ST

TMK (3) 7-009-006:014
Honua`ino 1st, North Kona, County of Hawaii, State of Hawaii

APPLICANT:

Kainaliu Kahakai, LLC
George A. Schattauer, Jr., Member-Manager
79-7390 Mamalahoa Hwy.
P.O. Box 2300
Kealakekua, HI 96750

APPROVING AGENCY:

State of Hawaii
Department of Land and Natural Resources
Office of Conservation and Coastal Lands
1151 Punchbowl Street, Room 131
Honolulu, HI 96813

CONSULTANT:

Ali`i Architects, Inc.
75-5742 Kuakini Hwy. #205
Kailua Kona, HI 96740

CLASS OF ACTION:

Use of Land in Conservation District

This document is prepared pursuant to:
The Hawai`i Environmental Protection Act,
Chapter 343, Hawai`i Revised Statutes (HRS), and
Title 11, Chapter 200, Hawai`i Department of Health Administrative Rules

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SUMMARY OF PROJECT, ENVIRONMENT IMPACT AND MITIGATION MEASURES

Kainaliu Kahakai LLC (the applicant) seeks a Conservation District Use Permit (CDUP) to build a single-family residence and related improvements on a 2.35-acre lot located near the shoreline, but mauka of the Certified Shoreline, in Honua`ino 1st, North Kona. The residence would occupy a footprint of 2,448 square feet and would include a lanai and stairways on both the mauka and makai elevations. Other features include a driveway with parking area, septic system, and solar battery and generator shed.

Construction activities over about 4,000 square feet (less than 4% of the lot) would produce minor short-term impacts to noise, air quality, and scenery. Best Management Practices expected to be required as conditions of the Conservation District Use Permit would mitigate these. There will be no land clearing or mass grading as the house pad is situated in an open, fairly level area of the lot. The proposed design calls for a foundation consisting of concrete pillars and spread footings; therefore, the Applicant anticipates only minor excavation for footings. There will be only minimal impervious surfaces added. The footprint of the columns, concrete landings at staircases, and the concrete slab for solar accessory equipment (situated on an existing rocky area of the site) will create no adverse effect to the natural drainage of the site. The Applicant will ensure that its contractor performs all earthwork in conformance with applicable laws, regulations and standards. The project has been fully surveyed for threatened and endangered plants and none are present. Archaeological and cultural resources have been avoided through inventory, consultation, and site planning, which has situated the structure well away from any sites designated for preservation. In the unlikely event that additional undocumented archaeological resources, including shell, bones, midden deposits, or similar finds, are encountered during construction within the project site, work in the immediate area of the discovery will be halted and the State Historic Preservation Division will be contacted to determine the appropriate actions.

PART 1: PROJECT DESCRIPTION AND E.A. PROCESS

1.1 Project Description and Location

The Applicant (Kainaliu Kahakai LLC) seeks a Conservation District Use Permit (CDUP) to build a single-family residence and finish an existing gravel access drive on a 2.35-acre lot mauka of the shoreline, on the North Kona Coast of the Big Island of Hawai`i.

The parcel is located below Palika Ranch on the Old Kainaliu Beach Road running along the coastline in North Kona, Island and County of Hawaii (Figure 1). The parcel lies in the ahupua`a identified as Honua`ino 1st, has the Tax Map Key number (3) 7-9-006:014 (Figure 2) and is 2.35 acres more or less in area. The lot abuts Beach Road, a private unpaved gravel road, along the eastern property line. The property is owned by Kainaliu Kahakai LLC.

1.2 Existing Uses and Conditions

The subject parcel is currently vacant. A perimeter stone wall surrounds the parcel and varies in condition. An unpaved driveway enters the parcel at the east through an opening in the perimeter wall and a wooden gate. There is an existing small well with a shed in need of some repairing work to the roof and wood posts and rafters. The lot is in its natural state with trees, some coconut and kiawe. Photographs of the subject parcel with an accompanying directory map are attached as Exhibit "A".

Surrounding Areas: The surrounding uses are as follows:

North: One residential parcel, TMK (3) 7-9-006:013 have been developed with a single family residence.

South: One residential parcel, TMK (3) 7-9-006:015 have been developed with a single family residence.

East: A 4.7-acre parcel, TMK (3) 7-9-006:002, which is vacant and unimproved. Allen Wall 2010 Trust, Patricia Wall Trust and Patricia W. Wilson own the parcel. A 39.996 parcel, TMK (3) 7-9-006:003 and 004, which are vacant and unimproved. The parcels are owned by Palika Ranch Family Limited Partnership. A 12 acre parcel, TMK (3) 7-9-006:005, which are vacant and unimproved. The parcel is owned by Heirs of Agnes Smith, Agnes K.P. Smith. (Figure 9 – Area Map)

West: Sea

1.3 Proposed Use

The single-family residence proposed for the subject parcel is a two bedroom two bath dwelling. The residence will be painted in natural tones to blend with the surrounding area. The foundation for the structure is a combination of post and concrete pier and shear footings that will require the minimum of excavation. The structure will be elevated and the finish floor will be approximately 5 feet above existing grade, therefore maintaining the existing topography. A lanai faces seaward while the enclosed portion of the dwelling lies at the mauka portion. Area

under roof is 2,448 square feet of which 1,300 square feet is living area and 1,148 square feet is lanai. The top of the roof is well below the 25 feet above the lowest point of the natural ground adjacent to the structure.

The lot is currently in its natural environmental state with various trees, vines, and weeds. The applicant wishes to maintain the existing conditions as much as possible, removing invasive species of plant material, in order to preserve the beauty of the natural surrounding area. The applicant also proposed to repair and keep the small shed over the existing well.

Electricity, telephone and cable services are not available, therefore photovoltaic with backup generator, solar water, and propane are planned for the proposed dwelling. County water is currently available at the site and is provided via an above-grade pipeline through Palika Ranch. An Individual Wastewater System, per requirements of the State Department of Health, Wastewater Branch will be utilized to treat and dispose of sewage.

(Figures 3, 4, 5, 6 and 7).

1.4 Environmental Assessment Process

This Environmental Assessment (EA) process is being conducted in accordance with Chapter 343 of the Hawai`i Revised Statutes (HRS). This law, along with its implementing regulations, Title 11, Chapter 200, of the Hawai`i Administrative Rules (HAR), is the basis for the environmental impact assessment process in the State of Hawai`i. According to Chapter 343, an EA is prepared to determine impacts associated with an action, to develop mitigation measures for adverse impacts, and to determine impacts associated with an action, to develop mitigation measures for adverse impacts, and to determine whether any of the impacts are significant according to thirteen specific criteria. Part 4 of this document states the anticipated finding that no significant impacts are expected to occur, based on the preliminary findings for each criterion made by the consultant in consultation with the Hawai`i State Department of Land and Natural Resources (DLNR), the approving agency. If, after considering comments to the Draft EA, DLNR concludes that, as anticipated, no significant impacts would be expected to occur, then the agency will issue Finding of No Significant Impact (FONSI), and the action will be permitted to proceed. If the agency concludes that significant impacts are expected to occur as a result of the proposed action, then an Environmental Impact Statement (EIS) will be prepared.

1.5 Public Involvement and Agency Coordination

The following agencies, organizations and individuals were consulted during the Environmental Assessment Process:

Federal
- Natural Resources Conservation Service

State
- Department of Land and Natural Resources
- Department of Health, Wastewater Branch

County
Department of Public Works
Planning Department
Department of Water Supply

PART 2: ALTERNATIVES

2.1 Proposed Project

The proposed project and its location are described in Section 1.1 above and illustrated in Figures 1 through 8.

2.2 No Action

Under the No Action Alternative, the residence would not be built. The lot, which was part of a larger property legally subdivided for eventual residences, would remain unused. This EA considers the No Action Alternative as the baseline by which to compare environmental effects from the project. No other alternative uses for the property are desired by the Applicant, and thus none are addressed in this EA.

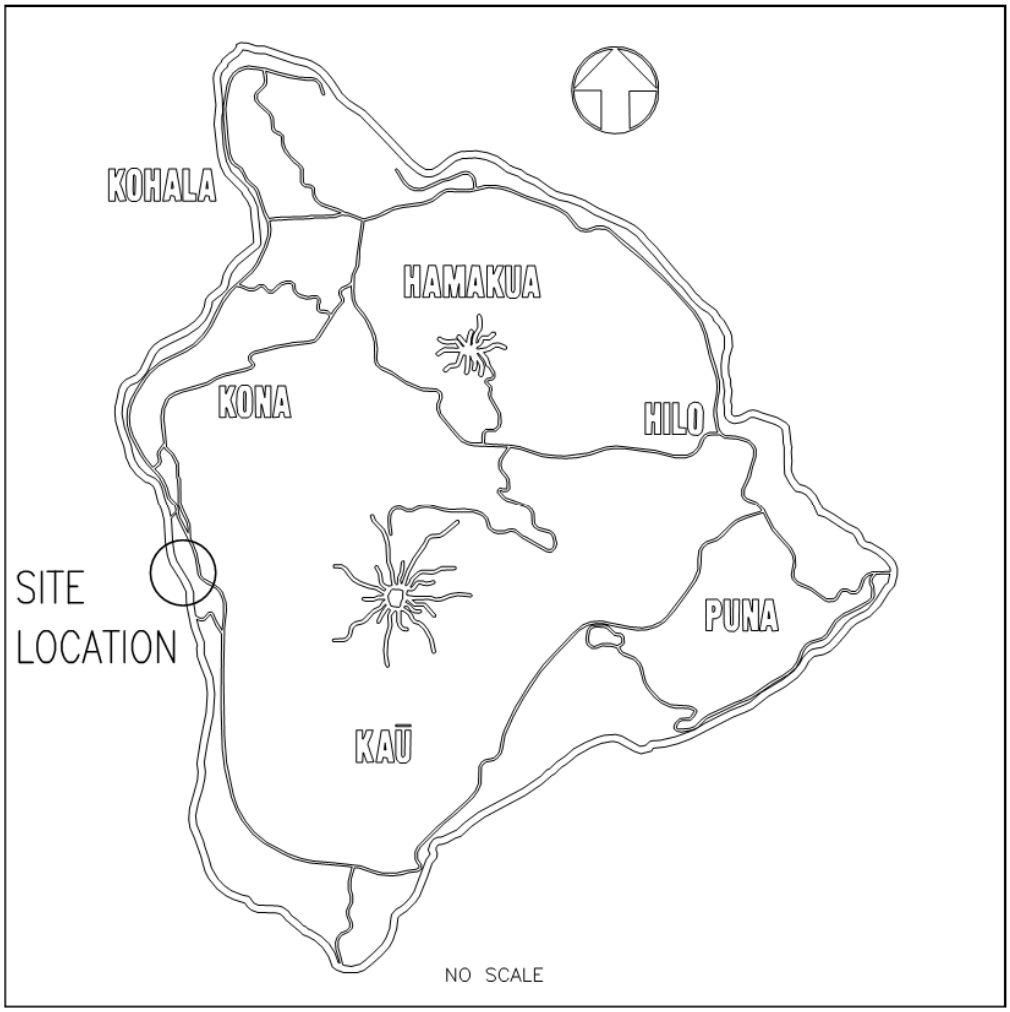


Figure 1
Location Map

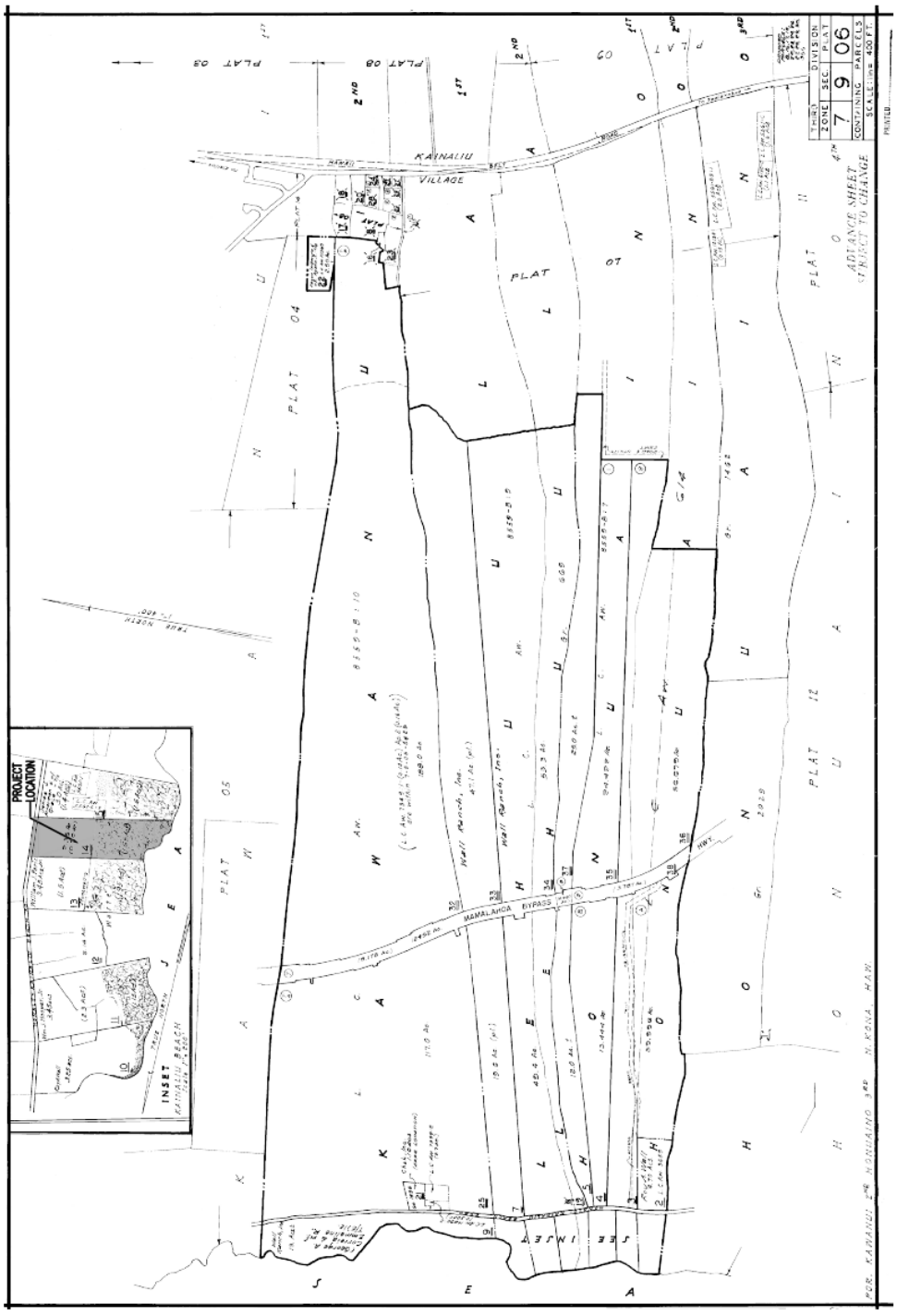


Figure 2
Vicinity Map

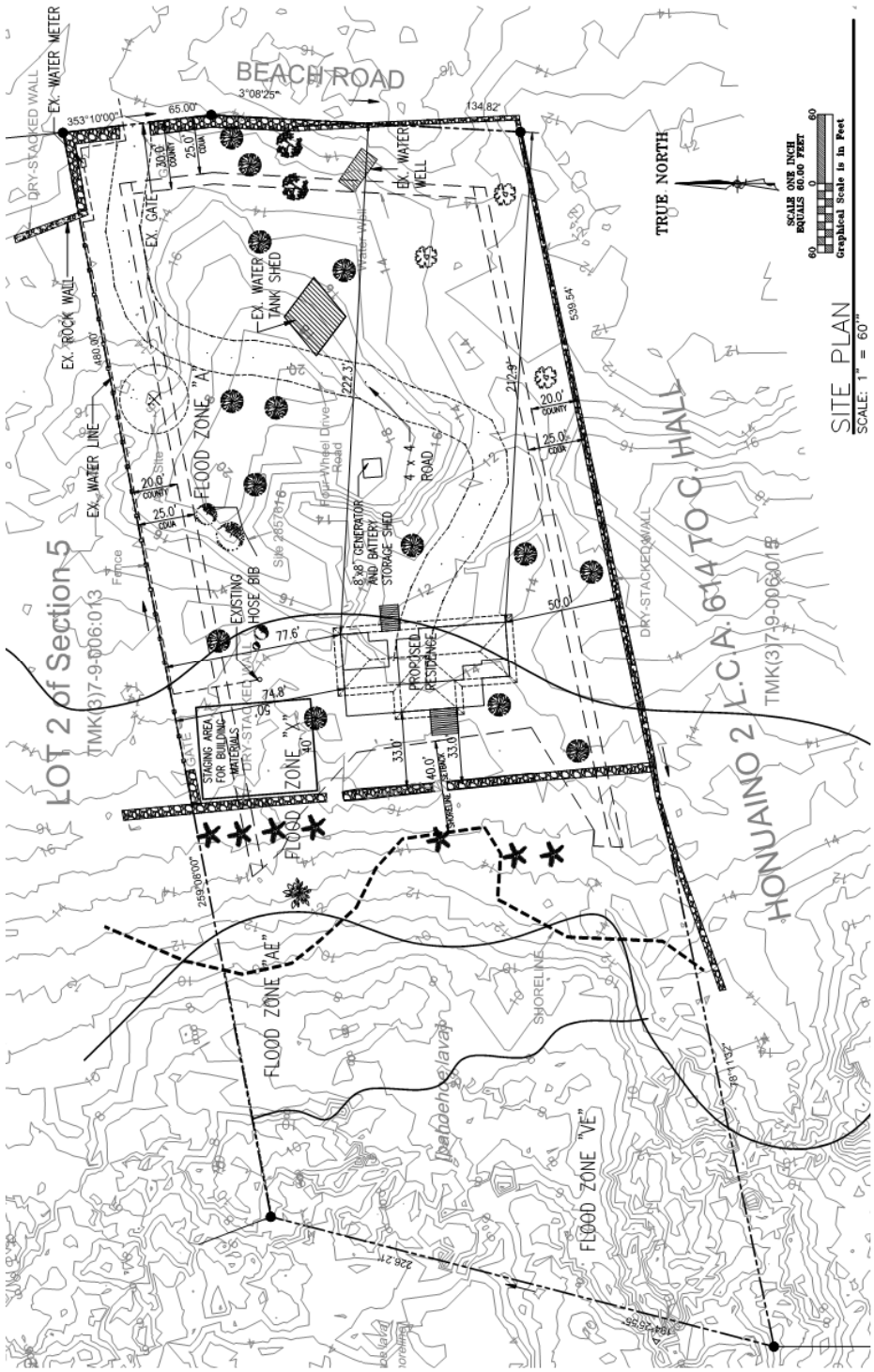


Figure 3 – Site Plan

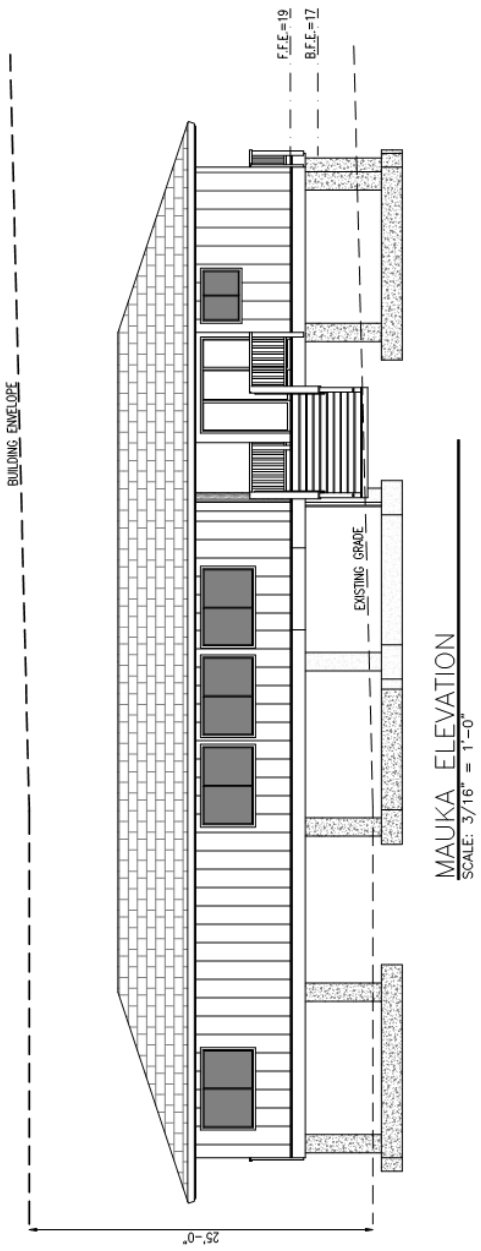


Figure 4 – Mauka Elevation

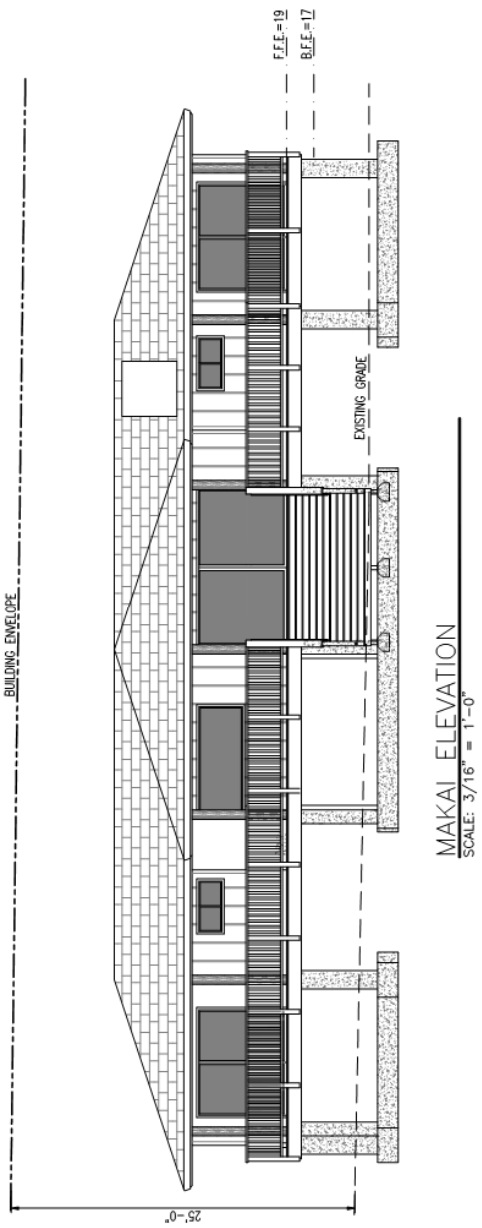


Figure 5 – Makai Elevation

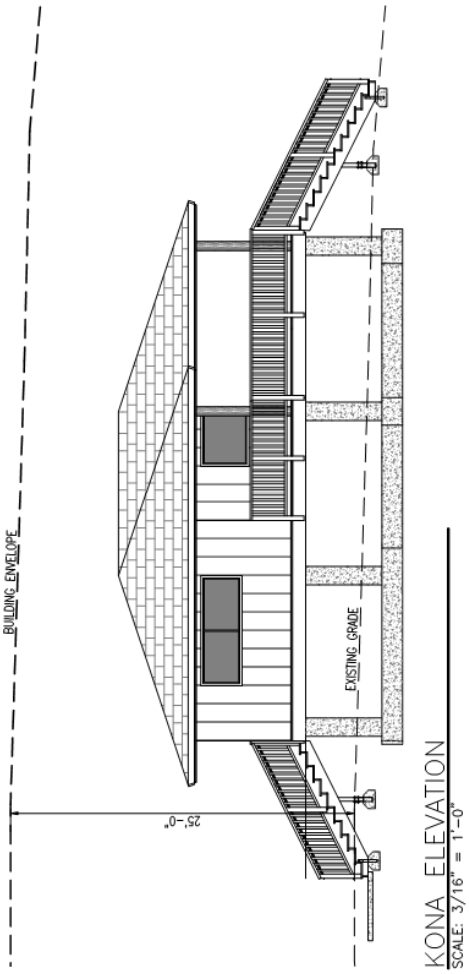


Figure 6 – Kona Elevation

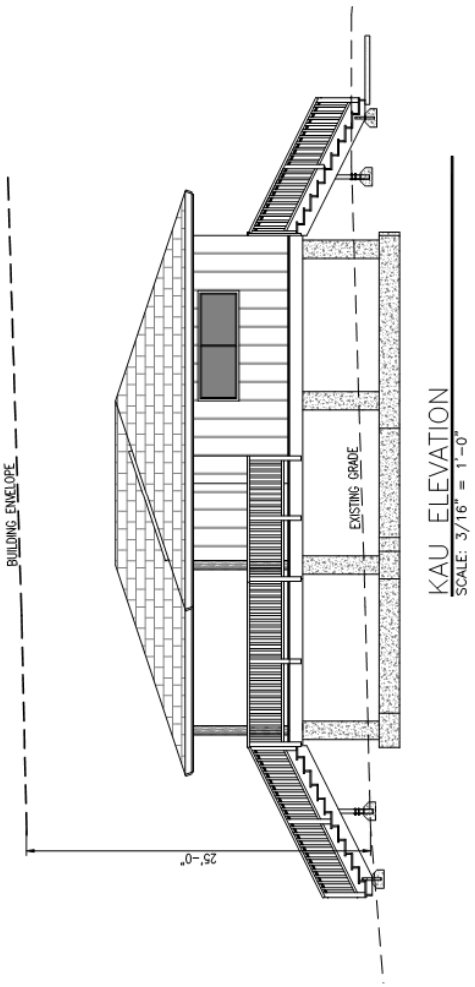


Figure 7 – Kau Elevation

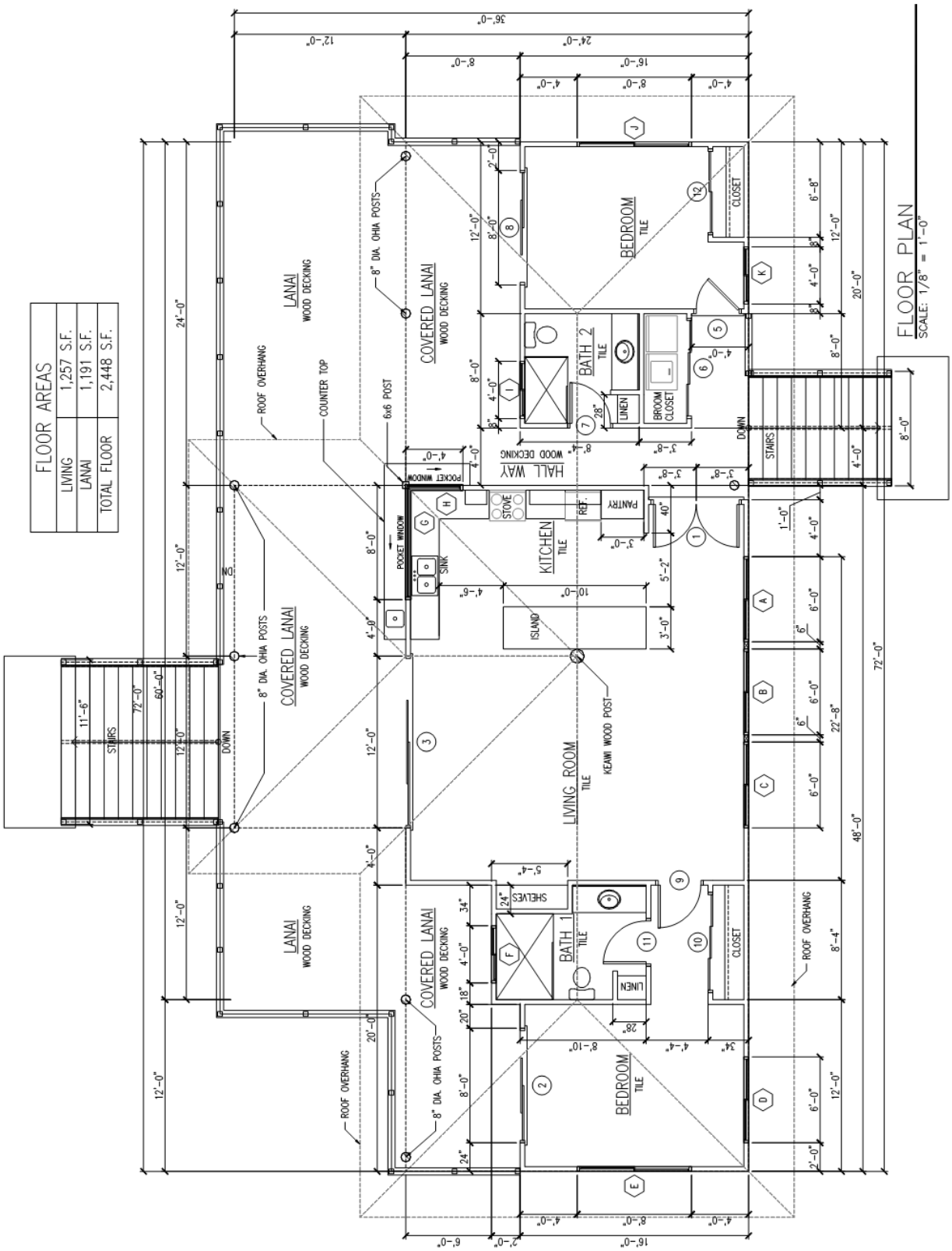
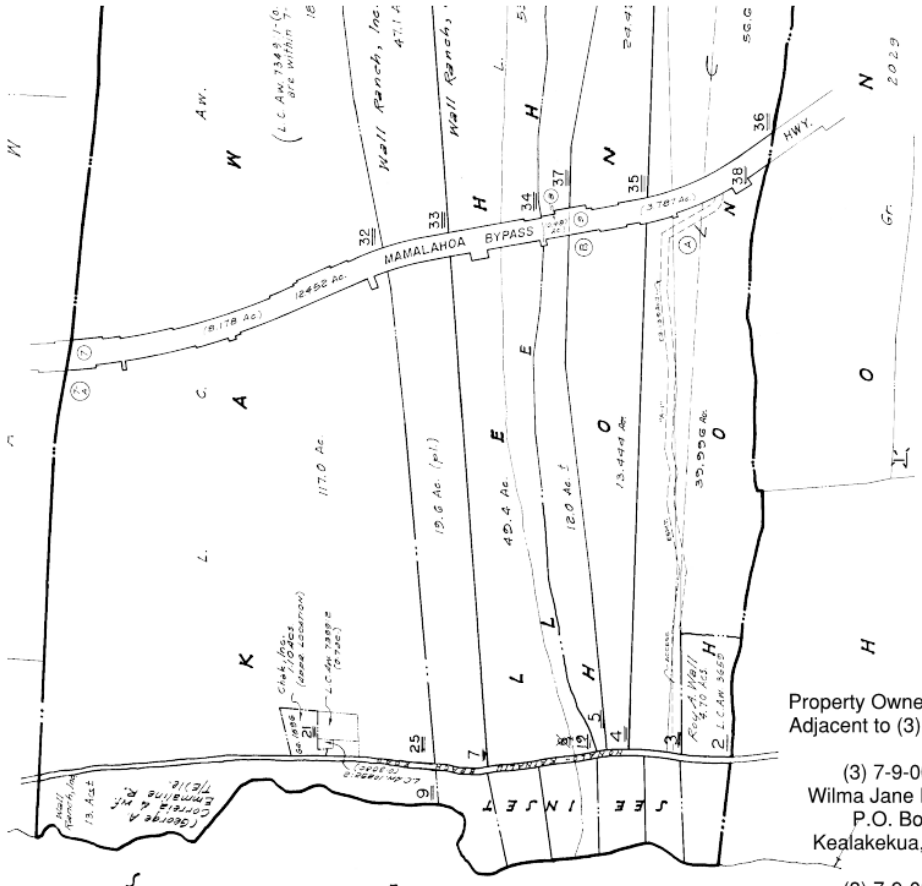


Figure 7a – Floor Plan



Property Owners of Parcels
Adjacent to (3) 7-9-006:014

(3) 7-9-006:013
Wilma Jane Paris Trust
P.O. Box 136
Kealakekua, HI 96750

(3) 7-9-006:015
Ackerman Ranch Inc.
P.O. Box 555
Kealakekua, HI 96750

Property Owners of Parcels
Adjacent to (3) 7-9-006:014

(3) 7-9-006:002
Allen Wall 2010 Trust
Patricia Wall Trust
Patricia W. Wilson
P.O. Box 187
Kealakekua, HI 96750

(3) 7-9-006:003
(3) 7-9-006:004
Palika Ranch Family
Limited Partnership
P.O. Box 229
Kealakekua, HI 96750

(3) 7-9-006:005
Heirs of Agnes Smith
Agnes K.P. Smith
346 Ilimalia Loop
Kailua, HI 96734

Figure 8 – Area Map

PART 3: ENVIRONMENTAL SETTING, IMPACTS AND MITIGATION

3.1 Physical Characteristics

3.1.1 Climate

Environmental Setting

The Kona district is located in leeward area of Hawaii. The Mauna Kea, Mauna Loa and Hualalai block the prevailing winds. The result is an alternating system of air circulation driven by differences in land and water temperatures. On warm days, this system produces light winds that blow offshore in the morning and early afternoon and onshore in the late afternoon and evenings.

The Kona coast is the only region in the islands where summer rainfall exceeds winter rainfall. Kona has an annual rainfall range from 20" along the coast to 100" on the mountain slopes. Kona showers are frequent and heavy enough to produce a much higher mean rainfall in Kona than in other leeward areas in the State. Most of the precipitation in the district occurs in the summer months because the differences in land and water temperatures generate a moderate sea breeze circulation resulting in showers that are typically spotty in distribution and highly variable in duration and intensity. Kona is atypical in that it receives the majority of its annual precipitation in summer, from May through August.

Impacts and Mitigation Measures

Climatic conditions impose no constraints on the proposed action.

3.1.2 Flood and Coastal Hazards.

Environmental Setting

Floodplain status for many areas of the Island of Hawai`i has been determined by the Federal Emergency Management Agency (FEMA), which produces the National Flood Insurance Program's Flood Insurance Rate Maps (FIRM). The map for the subject project area is 155166 0939C. (Figure 9) FEMA identifies the Base Flood Elevation for coastal flood zones as 13 feet in this area. The engineering report shows the BFE for this parcel to be at 16.35. The highest point of the subject property is at 20 feet above Mean Sea Level and slopes gradually to the Sea. The subject property is within four different flood zones. Starting at the ocean and proceeding mauka, they are "VE", "AE", "X", and "A". (See Figure 10 – Definitions of FEMA Floor Zone Designations). The Certified Shoreline Map is attached as Exhibit "B".

Additionally, in September 2011 Witcher Engineering LLP prepared an Engineer's Report, Base Flood Elevations and special Hazard Area Determination for Kainaliu Drainageway for the subject property. The Report which identifies existing hydrologic conditions and analysis is attached as Exhibit "C".

Hawaii is a hurricane-prone region and wind-borne debris, per IBC and ASCE-7 Based on NOAA land cover data 2002 and land satellite images, this property falls within Wind Exposure Category Zone "C", see Exhibit "G". The effective wind speed based on 105 mph for this area is 90 mph, see Exhibit "H".

Impacts and Mitigation Measures

County code requires that Base Flood Elevations (BFE) be established for "A" zones so that the finish floor will be above the 100-year water surface. In the case of this project, as mentioned in engineering report the BFE is at 16.35, and the proposed residence will have a finished floor elevation of 19 feet, keeping bottom of all the structural members above 16.35 feet elevation. The high tide elevation at shoreline is about 14 feet, keeping it well below the bottom of the proposed structure.

The proposed structure may be subject to wind and hurricane impacts. The proposed structure is designed to meet all current IBC codes in this regard.

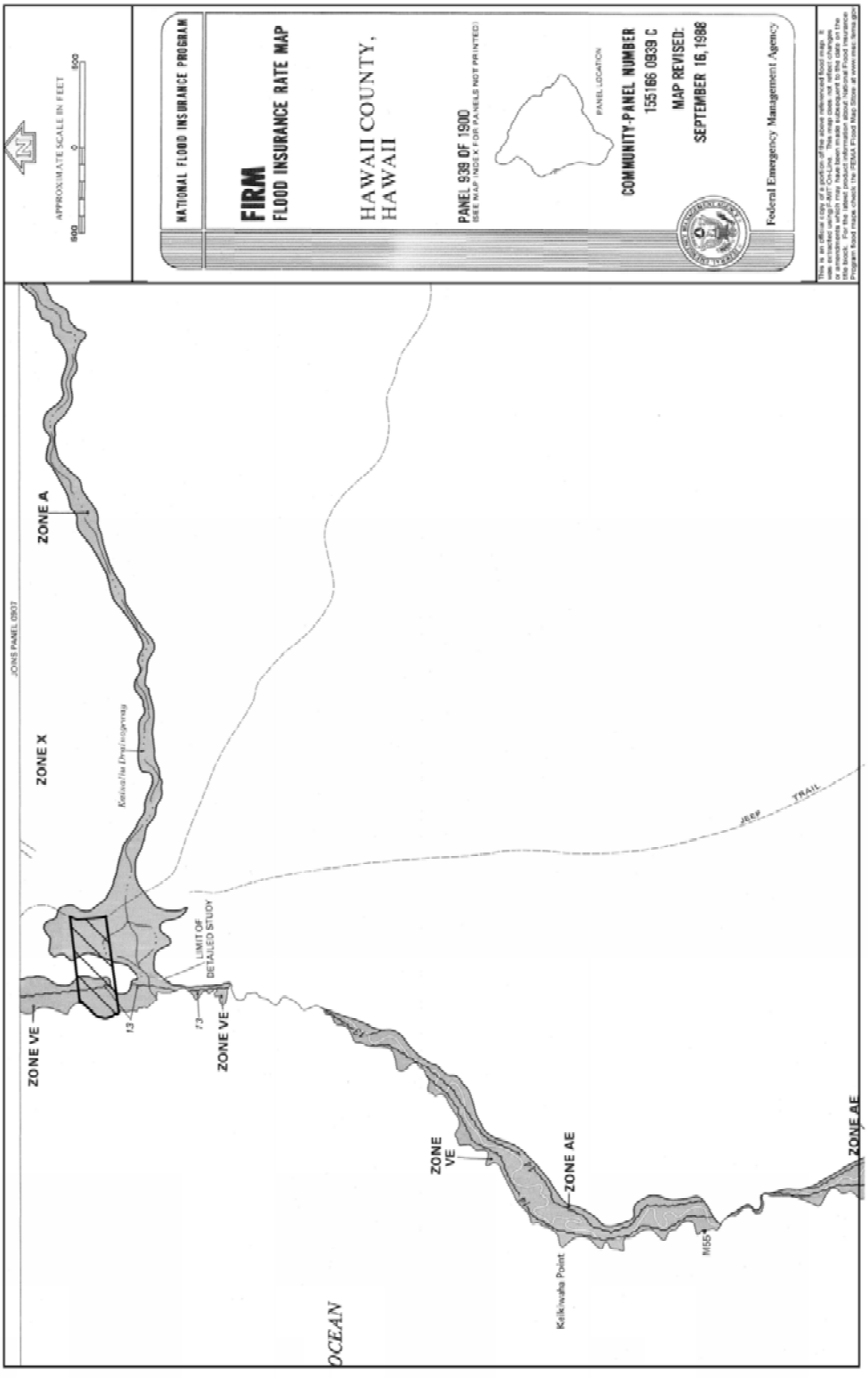


Figure 9 – FIRM Map

FEMA Map Service Center

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Log on

Home > FEMA%20Flood%20Zone%20Designations

Definitions of FEMA Flood Zone Designations

Flood zones are geographic areas that the FEMA has defined according to varying levels of flood risk. These zones are depicted on a community's Flood Insurance Rate Map (FIRM) or Flood Hazard Boundary Map. Each zone reflects the severity or type of flooding in the area.

Moderate to Low Risk Areas

In communities that participate in the NFIP, flood insurance is available to all property owners and renters in these zones:

ZONE	DESCRIPTION
B and X (shaded)	Area of moderate flood hazard, usually the area between the limits of the 100-year and 500-year floods. Are also used to designate base floodplains of lesser hazards, such as areas protected by levees from 100-year flood, or shallow flooding areas with average depths of less than one foot or drainage areas less than 1 square mile.
C and X (unshaded)	Area of minimal flood hazard, usually depicted on FIRMs as above the 500-year flood level.

High Risk Areas

In communities that participate in the NFIP, mandatory flood insurance purchase requirements apply to all of these zones:

ZONE	DESCRIPTION
A	Areas with a 1% annual chance of flooding and a 26% chance of flooding over the life of a 30-year mortgage. Because detailed analyses are not performed for such areas; no depths or base flood elevations are shown within these zones.
AE	The base floodplain where base flood elevations are provided. AE Zones are now used on new format FIRMs instead of A1-A30 Zones.
A1-30	These are known as numbered A Zones (e.g., A7 or A14). This is the base floodplain where the FIRM shows a BFE (old format).
AH	Areas with a 1% annual chance of shallow flooding, usually in the form of a pond, with an average depth ranging from 1 to 3 feet. These areas have a 26% chance of flooding over the life of a 30-year mortgage. Base flood elevations derived from detailed analyses are shown at selected intervals within these zones.
AO	River or stream flood hazard areas, and areas with a 1% or greater chance of shallow flooding each year, usually in the form of sheet flow, with an average depth ranging from 1 to 3 feet. These areas have a 26% chance of flooding over the life of a 30-year mortgage. Average flood depths derived from detailed analyses are shown within these zones.
AR	Areas with a temporarily increased flood risk due to the building or restoration of a flood control system (such as a levee or a dam). Mandatory flood insurance purchase requirements will apply, but rates will not exceed the rates for unnumbered A zones if the structure is built or restored in compliance with Zone AR floodplain management regulations.
A99	Areas with a 1% annual chance of flooding that will be protected by a Federal flood control system where construction has reached specified legal requirements. No depths or base flood elevations are shown within these zones.

Figure 10 – FEMA Flood Zone Designation

High Risk - Coastal Areas

In communities that participate in the NFIP, mandatory flood insurance purchase requirements apply to all of these zones:

ZONE	DESCRIPTION
V	Coastal areas with a 1% or greater chance of flooding and an additional hazard associated with storm waves. These areas have a 26% chance of flooding over the life of a 30-year mortgage. No base flood elevations are shown within these zones.
VE, V1 - 30	Coastal areas with a 1% or greater chance of flooding and an additional hazard associated with storm waves. These areas have a 26% chance of flooding over the life of a 30-year mortgage. Base flood elevations derived from detailed analyses are shown at selected intervals within these zones.

Undetermined Risk Areas

ZONE	DESCRIPTION
D	Areas with possible but undetermined flood hazards. No flood hazard analysis has been conducted. Flood insurance rates are commensurate with the uncertainty of the flood risk.

Figure 10 – FEMA Flood Zone Designation (page 2)

3.1.3 Geology, Soils and Geologic Hazards

Environmental Setting

With four active volcanoes (Kilauea, Lo`ihi, Mauna Loa, and Hualalai), the entire island of Hawai`i is subject to geologic hazards. The United States Geological Survey (USGS) has developed Lava Flow Hazard Zone Maps. These maps were first prepared in 1974 by Donal Mullineaux and Donald Peterson of the USGC and were revised in 1987. The current map divides the island into zones that are ranked from 1 through 9 based on the probability of coverage by lava flows. Hazard zones from lava flows are based chiefly on the location and frequency of both historic and prehistoric eruptions. "Historic eruptions" include those for which there are written records, beginning the early 1800's, and those that are known from the oral traditions of Hawaiians. Knowledge of prehistoric eruptions is based on geologic mapping and dating of the old flows of each volcano. The hazard zones also take into account the larger topographic features of the volcanoes that will affect the distribution of lava flows.

The project site is located in an area designated by the United States Geological Survey (USGS) as Lava Flow Hazard Zone 3. Zone 3 areas are gradationally less hazardous than Zone 2 because of their greater distances from recently active vents, or because the topography makes it less likely that flows will cover these areas.

In terms of seismic risk, the entire Island of Hawai`i is rated Zone 4 Seismic Hazard (Uniform Building Code, 1997 Edition, Figure 16-2). Zone 4 areas are at risk from major earthquake damage, especially to structures that are poorly designed or built. The project site does not appear to be subject to subsidence, landslides, or other forms of mass wasting.

The U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS) has conducted soil surveys for portions of the Island of Hawai`i. The NRCS has identified the soil in the subject area as consisting of Punaluu-Lava flows complex, 10 to 20 percent slopes, and Waiaha medial silt loan, 2 to 10 percent slopes. A Soil Resource Report with Map Unit Setting, Properties and Qualities, and Component Legend is attached as Exhibit "D".

Impacts and Mitigation Measures

Generally speaking, the geologic conditions impose no constraints on the proposed action, as much of the Island of Hawai`i faces similar volcanic and seismic hazards.

All Building Code requirements for construction within Earthquake Zone 4 will be met.

3.1.4 Flora/Fauna

Environmental Setting: Flora

Natural vegetation in the project area is dominated by Kiawe, with some Koa Haole, Opiuma, Coconut trees, and various sedges and coastal herbs.

Kiawe is a species of mesquite tree. It is a spreading bush or moderately sized tree, bearing spines, spikes of greenish-yellow flowers, and long pods filled with small brown seeds. The Kiawe was first planted in Hawaii in 1828; today it is a ubiquitous shade tree and invasive weed in the Hawaiian Islands.

Koa Haole may take the form of either a shrubby bush or a tree that can occasionally grow to 60 feet. It forms dense shady thickets and stands of individuals with globular white flower heads about one inch in diameter. It produces large bunches of long, thin seed pods that each contain a single row of small seeds. A native of the American tropics, it was introduced to the island's lowland and mesic forests by humans in the early nineteenth century. Though originally grown as a source of cattle fodder and as a shade tree on coffee plantations, it has turned out to be an aggressive pest species in the islands. While Koa Haole is acknowledged to be an aggressive weed species, its widespread use as cattle fodder has, until recently, prevented the State government from instituting any control or eradication programs.

Opiuma trees are common in the shoreline areas in this region of South Kona, and are sometimes called Manila tamarinds, although they are from tropical America. It is a thorny tree that can become weedy. In Hawai`i it has a reputation as a pest in grass pastures, but normally only when fields have been left nitrogen-starved. It is a tree with many uses – food (sweet pods), firewood, honey, fodder, soap oil, tannin, hedges and shade.

Although the Kiawe, Koa Haole, and Opiuma trees may be referred to as weeds, the stately Coconut has for thousands of years, been used by Pacific Islanders has a primary course of food and medicine. More than just a sustainable food crop, every part of the coconut tree is useful including the roots, trunks, leaves, husks, fiber, fruit, water, sap, oil, milk and meat. The coconut tree is a member of the palm family, and the term "coconut" generally refers to the fruit it produces. When Portuguese explorers first found this fruit growing on tropical islands throughout the Indian Ocean, they named it "coquo" (coco), meaning "small animal", because the eyes and mount on the brown outer shell reminded them of the grinning face of a monkey. Coconut trees are found growing near coastal water all along the leeward side of the Island of Hawai`i, and are included in the flora inventory of the subject property.

Environmental Setting: Fauna

Birds typically expected to be seen in this area, some of which have been observed during site visits, include Common Myna, Northern Cardinal, Spotted Dove, and House Finch. There is a flock of Parrots which occasionally fly by, that are descended from pet parrots escaped into the wild. No native birds have been identified, and it unlikely that any native forest birds would be expected to use the project site due to its low elevation, and lack of adequate forest resources. Shorebirds such as the Pacific Golden Plover, Wandering Tattler, and Ruddy Turnstone may be observed on the pahoehoe lava at the seaward edge of the property, feeding on shoreline resources. They would be unlikely to make much use of the property itself, which offers no habitat for them. All three are common migratory visitors, arriving in the islands in August and leaving for artic breeding and nesting grounds in April/May.

Mammals in the project area are all introduced species, including feral cats, small Indian mongoose, and various species of rats. None are of conservation concern and all are detrimental to native flora and fauna.

Impacts and Mitigation Measures

Because of the minor nature of the project and the lack of sensitive ecosystems, and threatened or endangered plant species, construction and use of the single-family residence are unlikely to cause any adverse biological impacts. The Applicant wishes to preserve the existing landscaping as much as possible, while at the same time providing control over potential spread of invasive species.

3.1.5 Water Quality

Environmental Setting

The property is bounded by the ocean on the west side. No water features such as streams, or springs are found on or near the property. There is evidence of a well and water storage and delivery system that was constructed during the late 1940s and early 1950s, which is described in detail as SIHP Site 22397 in the Rechtman Consulting Archaeological Inventory Survey attached as Appendix 1. The water this system produced was used for both cattle and residential purposes. Currently, potable water is piped to the area from a mauka water source, and the well is no longer functional, but anchialine water is still present within.

Impacts and Mitigation Measures

The proposed improvements are more than 100 feet away from the shoreline and set well away from the old well site. There will be only minimal excavation required for foundation footings, and the septic system (240sqft). No mass grading will be necessary.

As part of construction, the Applicant will require that the construction contractor implement the following practices:

The total amount of land disturbance will be minimized. The construction contractor will be limited to the delineated construction work areas within the lot.
The contractor will not allow any sediment to leave the site, particularly towards the ocean.
Construction activities with the potential to produce polluted runoff will not be allowed.
Cleared areas will be replanted or otherwise stabilized as soon as possible.

Upon completion, the residence will be similar to others in the area and is not expected to contribute to sedimentation, erosion, or pollution of coastal waters.

3.1.6 Air Quality, Noise, and Scenic Resources

Environmental Setting

Air quality in the area is relatively good, due to its rural nature and minimal degree of human activity, although vog quite often covers the Kona coast with a dense and almost constant haze of vog. "Vog (volcanic smog) is a visible haze comprised of gas and an aerosol of tiny particles and acidic droplets, created when sulfur dioxide and other gases emitted from Kilauea Volcano chemically interact with sunlight and atmospheric oxygen, moisture and dust. Along the Kona coast on the west side of Hawai`i Island and in other areas far from the volcano, vog is dominated by an aerosol of sulfuric acid and other sulfate compounds." (Hawaii Volcano Observatory)

Noise on the project site is low, and is derived from natural sources (such as surf and wind) due to the very rural nature of the area.

The area shares the rustic, dryland, scenic beauty of the Kona coastline.

Impacts and Mitigation Measures

The project would not affect air quality or noise levels in any substantial ways. Brief and minor adverse effects could occur during construction, however there are virtually no sensitive noise receptors in the vicinity, and given the small scale of the project, noise mitigation will likely not be necessary.

Although the addition of a structure may be considered to detract at some level from the scenic landscape, the proposed residence is an integrative design and will be painted to blend in with the natural environment of the surrounding area. There are a few residences in the immediate area and the proposed dwelling will be compatible with the overall appearance of the neighborhood. The proposed residence will not materially degrade the scenery of the project area.

3.1.7 Hazardous Substances, Toxic Waste, and Hazardous Conditions

Environmental Setting

Based upon onsite inspection and the Applicant's ownership history, it appears the site contains no hazardous or toxic substances and exhibits no other hazardous conditions.

Impacts and Mitigation Measures

To ensure minimization of any possibility for spills of hazardous materials during construction, the Applicant proposes the following conditions:

Unused materials and excess fill will be removed and disposed of at an authorized waste disposal site. The contractor will be encouraged to recycle or donate for reuse excess material, as appropriate.
During construction, emergency spill treatment, storage, and disposal of any hazardous materials will be explicitly required to meet all State and County requirements, and the contractor will be asked to adhere to good housekeeping practices for all appropriate substances.

- Onsite storage of the minimum practical quantity of hazardous materials necessary to complete the job;
- Fuel storage and use will be conducted to prevent leaks, spills, or fires;
- Products will be kept in their original containers unless non-resealable, and the original labels and safety data will be retained, and disposal of surplus will follow manufacturer's recommendation and adhere to all regulations;
- Manufacturers' instructions for proper use and disposal will be strictly adhered to;
- Regular inspection by contractor to ensure proper use and disposal;
- Onsite vehicles and machinery will be monitored for leaks and receive regular maintenance to minimize leakage;
- Construction materials, petroleum products, waste, and debris will be prevented from blowing, falling, flowing, washing or leaching into the ocean;
- All spills will be cleaned up immediately after discovery, using proper materials that will also be properly disposed of, and regardless of size, spills or toxic or hazardous materials will be reported to the appropriate government agency;
- Should spills occur, the spill prevention plan will be adjusted to include measures to prevent spills from re-occurring and for modified cleanup procedures.

3.2 Socioeconomic and Cultural

3.2.1 Land Use, Designations, and Controls

Existing Environment

The property is bordered by the shoreline to the west, by Old Kainaliu Beach Road to the east, and by private property to the north and south.

The State Land Use District for the property, and adjacent properties is Conservation. Its subzone is Resource, for which, according the Hawai`i Administrative Rules (HAR) §13-5-15, a single-family residence is an identified use.

The property site is within the Special Management Area. Single-family residences may be determined to be an exempt action under the County's Special Management Area (SMA)

guidelines. The County of Hawai`i Planning Department requires preparation of an SMA Assessment Application, in which SMA issues will be expressly discussed and dealt with.

The proposed project is consistent with the regulations and policies of the Conservation District and the Special Management Area, as discussed in Section 3.6.2 and 3.6.3 hereof.

3.2.2 Socioeconomic Characteristics and Recreation

Existing Environment

The project site is a privately owned parcel situated in the Kainaliu Beach Lots subdivision, located within the ahupua`a of Honua`ino on the western shore of the Island of Hawai`i and lies within what has been termed the Kona Field System. This area of dryland agricultural fields extends north from Ho`okena Ahupua`a south to Kau Ahupua`a and east from the coastline to the forested slopes of Hualalai.

The beginning of the Kona Field System is marked by the development of formal walled agricultural fields, and later during what is known as the Territorial Period (1900 to 1959), associated with agriculture and ranching pursuits. The subject project area and much of the adjacent lands continue to be utilized for cattle ranching purposes. It was during the early part of this Period that the ranches subdivided out the Kainaliu Beach Lots (including the subject project site) for private residential purposes. Further discussion of the Kona Field System may be reviewed in the Archaeological Inventory Survey prepared by Rechtman Consulting and attached as Appendix 1.

The families of the surrounding ranches have historically built and maintained beach houses for their private use and occasional gathering of Ohana after a day's work or weekend get-together for beach activities.

Impacts and Mitigation Measures

No adverse socioeconomic impacts are expected to result from the project. The project will have a very small positive economic impact for the County of Hawai`i. The residence and associated improvements will not adversely affect recreation, as access along the coast will undergo no changes or restrictions.

3.2.3 Historic, Archaeological and Cultural Resources

The Archaeological Inventory Survey by Rechtman Consulting referenced above includes discussion of the property's history and the identification of a number of archaeological sites, and as stated previously, is attached as Appendix 1. It is summarized below.

Historic and Cultural Background.

The site lies within what has been termed the Kona Field System. A large portion of the field system is designated in the Hawai`i State Inventory of Historic Places (SIHP) as Site 50-10-37-6601 and has been determined eligible for inclusion in the National Register of Historic Places. The basic characteristics of this agricultural/residential system have been confirmed and elaborated on by ethno historical investigations (Kelly 1983) and summarized by Cordy (1995). The construct is based on the Hawaiian terms for the major vegetation zones, which are used to define and segregate space within the region's ahupua`a. These zones are bands roughly parallel to the coast that mark changes in elevation and rainfall. The subject parcel is located at the shore in the *kula* zone.

The *kula* zone is the area from sea level to 600 feet elevation. Annual rainfall in the *kula* is 75 to 125 centimeters. This lower elevation zone is traditionally associated with habitation and the cultivation of sweet potatoes, paper mulberry, and gourds. Informal agricultural features, such as clearing mounts, planning mounts, planting depressions, modified outcrops, and planting terraces, are common throughout the agricultural portion of the *kula*, but they are commonly concentrated along the shoreline (Cordy 1981). The more mauka portion of this zone was primarily used for agricultural purposes and mainly temporary habitations and an occasional permanent habitation (Borthwick et al. 1997; Rosendahl and Rosendahl 1986).

During the Precontact period permanent habitation and subsistence activity was initially focused on the windward side of the island. During that time it is likely that windward residents traveled to the leeward Kona coast for resource extraction purposes, but later permanent habitation was beginning in Kona and was concentrated along the shoreline and lowland slopes.

The Historic period begins with Captain Cook's arrival in the islands (A.D. 1778) and ends with King Kamehameha's death and the abandonment of the traditional *kapu* system in 1819. Early historical accounts emphasize that modern day Kailua Town was a significant political seat and population center at this time. Further discussion of this period is provided in Rechtman's Survey report (Appendix 1).

The period A.D. 1920-1847 was a time of social change in Hawai`i. Some of the work of the commoners shifted from subsistence agriculture to production of foods and goods they could trade to the early Western visitors. Missionaries began arriving to Hawai'i in the 1820's.

The ever-growing population of Westerners forced religious, socioeconomic and demographic changes that promoted the establishment of a Euro-American style of land ownership, and the Great *Mahele* became the vehicle for determining ownership of native lands.

During the *Mahele* all lands were placed in one of the three categories: Crown Lands, Government Lands, and *Konohiki* Lands.

As a result of the *Mahele*, Honua`ino Ahupua`a was awarded in its entirety as a *konohiki* award to W. C. Lunalilo, who in 1873 became the sixth Hawaiian monarch. His reign was short, lasting only 13 months, and he was succeeded in 1874 by King Kalakaua. There appear to have been five *kuleana* claims made in Honua`ino 1st. Of these, Kanakaole (LCAw. 7901) claimed one *apana* as a "house lot claim which is *Makai* in the *ahupua`a* of Honuaino 1." (Native Register

v.8.512). It is possible that Kanakaole's coastal house is the platform identified as SIHP Site 28576 (see discussion below and Appendix 1).

Following the *Mahele*, a program was initiated to sell parcels of land to interested residents. The parcels of land sold in the grants were quite large, ranging in size from approximately ten acres to many hundreds of acres. When the sales were agreed upon, Royal Patents were issued and recorded.

Much of the area surrounding the subject property was acquired by grant and later private purchase. William Johnson came to own much of the general project area and beyond. Johnson was the progenitor to many of the Kona ranching families, and his lands were eventually divided among several descendants into separate adjoining ranches. The subject project area was part of the ranch lands of W. J. Paris.

The Applicant, Kainaliu Kahakai LLC, is comprised of members of the descendants of W. J. Paris. The two elders of the family, William "Billy" Johnson Hawawakaleoonamanuonakkanahele Paris Jr. (born 1922), and his sister, Margaret Kalikolamaikapaliokaukini Paris-Schattauer (born 1927), are descended from Hawaiian families that have lived in Kona since the days of Kamehameha I. Their Anglo relatives (Paris and Johnson) have lived in Kona since 1850-1852, and their families have been a significant element in the history of land use within South Kona having played an important role in recording and preserving the history of this district.

Archaeological Investigations and Resources.

In 2010, Rechtman Consulting conducted an archaeological inventory survey of the project site (Revised September 2011). The full Archaeological Inventory Survey prepared can be reviewed for detail, and is attached as Appendix 1.

In summary, as a result of the inventory survey ten archaeological sites were identified. Of these, a portion of one site had been previously described by Mills and Irani (2000) as SIHP Site 22397. This site is a mid-twentieth century well and associated water storage and delivery system. The other sites recorded during Rechtman's survey include two historic walls (SIHP Sites 28574 and 28577); a late Precontact/early Historic house platform (SIHP Site 28576); and six sites where the bedrock has been modified creating either *poho* (SIHP Site 28582), *papamu* (SIHP Sites 28575, 28579, and 28581), *papamu* and basins (SIHP Site 28578) and *papamu* and a petroglyph (SIHP Site 28580).

All of the sites documented during Rechtman's survey retain sufficient integrity and are assessed as significant under Criterion D for the information they have yielded or for potential additional information that could be collected relative to changing land use patterns from late Precontact times to the middle twentieth century.

Four of these sites have been identified as requiring "No further work" as they have been successfully documented.

The remaining six of the ten sites identified have been recommended for preservation. All of these are situated such that they can be avoided during any proposed development of the property.

Impacts and Mitigation for Archaeological Resources

Rechtman Consulting, subsequent to its preparation of the Archaeological Survey, prepared a Preservation Plan. A complete copy of the draft Preservation Plan is attached as Appendix 2. The Applicant will fully comply with the proposed preservation plan, and the actions anticipated may be summarized as follows:

Preservation in place for all six sites, achieved through avoidance and protection. For the long-term preservation of the sites, two preservation easements will be established on the property. The larger of these will comprise the entire shoreward portion of the parcel delineated on the *mauka* side by a reconstructed stone wall. This preservation area will contain SIHP Sites 28578, 28579, 28580, and 28581. No development activity will be permitted within this preservation easement (although nothing is intended to curtail continued use of the shoreline area for recreational and subsistence activities). The second preservation easement will encompass SIHP Sites 28575 and 28578 and the intervening area along with a buffer zone of 15 feet around its perimeter. No ground-altering activity will be permitted within this preservation easement, which will be left in its existing natural state. Any future necessary maintenance activities (vegetation clearing and/or removal) within this preservation easement will be conducted using hand tools.

No stabilization or maintenance activities will be undertaken, nor will the sites be identified by signage. The sites will be left in their current existing conditions.

A legal document describing the locations of the six sites within the subject parcel along with the Preservation Plan will be recorded with the Bureau of Conveyances.

Prior to the commencement of development activities on the subject parcel, an awareness briefing will be presented to all members of the construction team informing them of the locations and inviolability of the preservation easements. Orange construction fencing will be placed along the permanent preservation buffer at Site 28575 and 28576. This protective fence will stay in place until construction activities have been completed. The already reconstructed rock wall will serve to protect the shoreline preservation easement containing Sites 28578, 28579, 28580, and 28581.

Other Cultural Resources and Practices

The investigations of the property did not reveal any cultural resources or practices aside from the traditional Historic findings. Although fishing and gathering occur on the shoreline, this area is makai of the proposed residential structure.

3.3 Public Facilities and Utilities

3.3.1 Roads and Access

Existing Environment, Impacts and Mitigation Measures

Access to the project site is from the Ali`i Drive extension through Hokulia subdivision, down a private road traversing Greenwell, Ackerman, and Wall ranch land, to the existing Old Kainaliu Beach Road, an unimproved, narrow, mostly unpaved gravel, private road. The lot also has a recorded roadway easement to it from Hokuli'a bypass road, which is an unpaved ranch road that winds down through Palika Ranch's TMK 3-7-9-006-003. No adverse impact to area roads or traffic is anticipated as a result of this project.

3.3.2 Public Utilities and Facilities

Existing Environment, Impacts and Mitigation Measures

Wastewater System. The subject parcel of land lies in a Critical Wastewater Zone with no exceptions as determined and administered by the State of Hawaii, Department of Health, and Wastewater Branch. An Individual Wastewater System designed in accordance with Chapter 11-62 HAR, Wastewater Regulations and approved by the Wastewater Branch will be specified for the proposed residence. The proposed IWS Site Plan prepared by Witcher Engineering LLP is attached as Exhibit "E".

Water System. County water is available through Palika Ranch via an existing water line and a sub-meter located at the project boundary along the access road.

Electrical and Telephone. Electricity will be provided via a solar photovoltaic system, with batteries and backup generator. A solar hot water system with on-demand propane water heater as backup is planned. LP gas will be utilized for kitchen and laundry appliances.

Fire and Police Protection. The Applicant acknowledges and understand that the lot, along with others in this area, is remote from emergency services.

The addition of one single-family home will have no measurable adverse impact to or additional demand on public facilities such as schools, police or fire services, or recreational areas.

3.4 Secondary and Cumulative Impacts

Due to its small scale, the proposed project would not produce any major secondary impacts, such as population changes or effects on public facilities.

3.5 Required Permits and Approvals

County of Hawai`i:

Special Management Area Permit or Exemption

Plan Approval, and Building Permits

State of Hawai`i:

Conservation District Use Permit

3.6 Consistency With Government Plans and Policies

3.6.1 Hawai`i County General Plan

The General Plan for the County of Hawai`i is a document expressing the broad goals and policies for the long-range development of the Island of Hawai`i. The plan was adopted by ordinance in 1989, revised in 2005, and amended in 2007. The General Plan's Land Use Allocation Guide Map designates the subject parcel as Open. The General Plan is organized into thirteen elements with policies, objectives, standards, and principles for each. Following are pertinent sections followed by a discussion of this project conforms to those elements.

Economic Goals

(a) Provide residents with opportunities to improve their quality of life through economic development that enhances the County's natural and social environments.
(b) Economic development improvement shall be in balance with the physical, social, and cultural environments of the Island of Hawai`i.
(c) Provide an economic environment that allows new, expanded, or improved economic opportunities that are compatible with the County's cultural, natural, and social environment.

Discussion: The proposed project is in balance with the natural, cultural and social environment of the County, would create temporary construction jobs for local residents, and would indirectly boost the economy through construction industry purchases from local suppliers. A multiplier effect takes place when these employees spend their income for food, housing, and other living expenses in the retail section of the economy. Such activities are in keeping with the overall economic development of the County.

Environmental Quality Goals

(a) Define the most desirable use of land within the County that achieves an ecological balance providing residents and visitors the quality of life and an environment in which the natural resources of the island are visible and sustainable.
(b) Maintain and, if feasible, improve the existing environmental quality of the island.
(c) Control pollution.

Environmental Quality Policies

(a) Pollution shall be prevented, abated, and controlled at levels that will protect and preserve the public health and well being, through the enforcement of appropriate Federal, State and County standards.

(b) Incorporate environmental quality controls either as standards in appropriate ordinances or as conditions of approval.
(c) Federal and State environmental regulations shall be adhered to.

Discussion: The proposed project would not have any substantial adverse effect on the environment and would not diminish the valuable natural resources of the region. The residence and associated improvements will be compatible with the existing rural single-family homes and recreational uses in the area. Pertinent environmental regulations will be followed, including those for mitigation of water quality impacts during construction.

Historic Sites Goals

(a) Protect, restore, and enhance the sites, buildings, and objects of significant historical and cultural importance to Hawai`i.
(b) Appropriate access to significant historic sites, buildings, and objects of public interest should be made available.

Historic Sites Policies

(a) Agencies and organizations, either public or private, pursuing knowledge about historic sites should keep the public apprised of projects.
(b) Amend appropriate ordinances to incorporate the stewardship and protection of historic sites, buildings and objects.
(c) Require both public and private developers of land to provide historical and archaeological surveys and cultural assessments, where appropriate, prior to the clearing or development of land when there are indications that the land under consideration has historical significance.
(d) Public access to significant historic sites and objects shall be acquired, where appropriate.

Discussion: The archaeological survey and follow-up studies have properly documented historical and/or culturally sensitive resources, and a preservation plan has been adopted to mitigate impacts to these historic sites and provide fuller protection to the Hawaiian cultural heritage they represent.

Natural Beauty Goals

(a) Protect, preserve and enhance the quality of areas endowed with natural beauty, including the quality of coastal scenic resources.
(b) Protect scenic vistas and view planes from becoming obstructed.
(c) Maximize opportunities for present and future generations to appreciate and enjoy natural and scenic beauty.

Natural Beauty Policies

(a) Increase public pedestrian access opportunities to scenic places and vistas.
(b) Develop and establish view plane regulations to preserve and enhance views of scenic or prominent landscapes from specific locations, and coastal aesthetic values.

Discussion: The proposed improvements are minor and consistent with traditional uses of the land and will not cause scenic impacts or impede access.

Natural Resources and Shoreline Goals

(a) Protect and conserve the natural resources from undue exploitation, encroachment and damage.
(b) Provide opportunities for recreational, economic, and educational needs without despoiling or endangering natural resources.
(c) Protect and promote the prudent use of Hawai`i's unique, fragile, and significant environmental and natural resources.
(d) Protect rare or endangered species and habitats native to Hawai`i.
(e) Protect and effectively manage Hawai`i's open space, watersheds, shoreline, and natural areas.
(f) Ensure that alterations to existing land forms, vegetation, and construction of structures cause minimum adverse effect to water resources, and scenic and recreational amenities and minimum danger of floods, landslides, erosion, siltation, or failure to the event of earthquake.

Natural Resources and Shorelines Policies

(a) Require users of natural resources to conduct their act5ivities in a manner that avoids or minimized adverse effects on the environment.
(b) Maintain the shoreline for recreational, cultural, educational, and /or scientific uses in a manner that is protective of resources and is of the maximum benefit to the general public.
(c) Protect the shoreline from the encroachment of m an-made improvement and structures.
(d) Encourage public and private agencies to manage the natural resources in a manner that avoids or minimizes adverse effects on the environment and depletion of energy and natural resources to the fullest extent.
(e) Encourage the use of native plants for screening and landscaping.
(f) Ensure public access is provided to the shoreline, public trials and hunting areas, including free public parking where appropriate.
(g) Ensure that activities authorized or funded by the County do not damage important natural resources.

Discussion: More than 30% of the subject property (the entire shoreline portion, delineated by a reconstructed dry-stack rock wall) has been designated as an archaeological easement. The proposed residence is set back 33 feet from the rock wall, at an elevation of about 12-14 feet above sea level, and would not affect shoreline resources or be damaged by waves or tides. In the Coastal Erosion Study for Kainaliu Kahakai Property prepared (after site investigation) by Geohazards Consultants International, Inc. (Appendix 3), J. P. Lockwood, Ph.D. states "The Certified Shoreline as staked out on the Property is well above the highest tide and normal wave level, although beach sand deposits indicate waves to reach this area during winter storms. The March, 2011 tsunami waves apparently washed over this Certified Shoreline, but did not cause any damage to the dry-stacked stone wall located above 15 feet mauka of this line."

3.6.2 Special Management Area

The proposed land use complies with provisions and guidelines contained in Chapter 205A Hawai`i Revised Statutes (HRS), entitled Coastal Zone Management. Single-family residences may be determined to be an exempt action under the County's Special Management Area (SMA) guidelines. The proposed use would be consistent with Chapter 205A because it would not affect public access to recreational areas, historic resources, scenic and open space resources, coastal ecosystems, economic uses, or coastal hazards.

The proposed improvements are not likely to result in any substantial adverse impact on the surrounding environment. The house site is set back from the shoreline and will not restrict any shorelines uses such as hiking, fishing, or water sports. Lateral pedestrian use of the shoreline area will not be impacted and there will be no effect on the public's access to or enjoyment of this shoreline area. View planes toward the project site will not be adversely impacted in any substantial way. It is not expected that the project will result in any impact on the biological or economic aspects of the coastal ecosystem. The project is not situated over any major natural drainage system or water feature that would flow into the nearby coastal system. The property contains common, introduced plants. No floodplains are present in the area. Flood Insurance Rate Maps (FIRM) delineates the areas of the property in which construction would occur as Zone "X" and "A". In terms of beach protection, construction is set back from the shoreline and would not affect any beaches nor adversely affect public use and recreation of the shoreline in this area. No impacts on marine resources are likely to occur. Historic sites and cultural uses have been properly assessed.

The Planning Director has been asked to make the determination that the proposed development of a single-family home is not considered a "development" under Special Management Area Rules and Regulations of the County of Hawai`i, Section 9-4 (10) (B).

3.6.3 Conservation District

The property is in the State land Use Conservation District, Resource subzone. Any proposed use must undergo an examination for its consistency with the goals and rules of this district and subzone. The Applicant has concurrently prepared a Conservation District Use Application (CDUS), to which this EA is an Appendix. The CDUA includes a detailed evaluation of the consistency of the project with the criteria of the Conservation District permit process. Briefly, The following individual consistency criteria should be noted:

1. The proposed land use is consistent with the purpose of the Conservation District;

The development of a single-family residence is in conformance with the purpose of the Conservation District. The proposed use of the subject property for a single-family residence is an identified use within the Conservation District, requiring a Board Permit for such use. A commitment by the Applicant to conscientious management of the project site will conserve, protect, and preserve the natural features of the subject property. The proposed use will not impact the lateral public access or the public's ability to utilize the coastal resources that front this property. Additionally due to the careful and limited nature of the proposed development, there will be no significant impacts to the natural or cultural resources of the area.

2. The proposed land use is consistent with the objectives of the subzone of the land on which the use will occur;

The objective of the Resource subzone "…is to develop, with proper management, areas to ensure sustained use of the natural resources of those areas." This identified use, which conforms to the design standards in HAR §13-4-41, will ensure the sustained use of the natural resources in the project area by mitigating potential impacts as outlined in this document. Single –family residences are an identified use in the Resource subzone under HAR §13-5-24, R-8.

3. The proposed land use complies with provisions and guidelines contained in Chapter 205A, Hawaii Revised Statutes (HRS), entitled "Coastal Zone Management, "where applicable;

The proposed land use complies with provisions and guidelines contained in Chapter 205A, Hawa`i Revised Statutes (HRS), as discussed above in Section 3.6.2.

4. The proposed land use will not cause substantial adverse impact to existing natural resources within the surrounding area, community or region;

Because of the relatively minor nature of the project and the lack of native terrestrial ecosystems and threatened or endangered plant species, construction and use of the property for a single-family residence is not likely to cause adverse biological impacts. The Applicant is planning to maintain the existing, natural landscape of the property, which will minimize the visual impact of the structure as seen from adjacent public areas. Additionally, the construction of the proposed residence will allow for the management and maintenance of the property. No effect on any coastal ecosystem will occur because no activities are contemplated for the seaward portion of the property. The proposed action will have no impact on the public's current access to or use of the shoreline area fronting the property.

5. The proposed land use, including building, structures and facilities, shall be compatible with the locality and surrounding areas, appropriate to the physical conditions and capabilities of the specific parcel;

The proposed use is consistent with single-family residence use on Conservation land. The home will have a low-key design of an elevated one story with 2,448 square feet. This identified use, which confirms to the design standards in HRS §13-5-41, will ensure the sustained use of the natural resources in the project area by mitigating potential impacts. The use will not adversely affect the surrounding properties or affect how these properties are utilized.

6. The existing physical and environmental aspects of the land, such as natural beauty and open space characteristics, will be preserved or improved upon, whichever is applicable;

The proposed use of the subject property for a single-family residence and commitment to management of the site will help conserve, protect and preserve the natural features of the area.

7. Subdivision of land will not be utilized to increase the intensity of land uses in the Conservation District;

The proposed action does not involve or depend upon subdivision and will not lead to any increase in density of use beyond the requested single-family residence.

8. The proposed land use will not be materially detrimental to the public health, safety and welfare;

The general area is already in use for recreation and 'beach-house' residences of the landowners of the area and the proposed single-family residence will not be detrimental to the public health, safety, or welfare.

PART 4 (RESERVED): DETERMINATION, FINDINGS AND REASONS

4.1 Determination

(RESERVED)

4.2 Findings and Supporting Reasons

(RESERVED)