



STATE OF HAWAII  
DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

LAND USE COMMISSION

P.O. Box 2359  
Honolulu, Hawaii 96804-2359  
Telephone: 808-587-3822  
Fax: 808-587-3827

June 13, 2005

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

Dear Ms. Salmonson:

Subject: Final Environmental Assessment ("FEA")  
James W. McCully & Francine M. McCully  
State Land Use Boundary Amendment – Conservation to Agriculture  
TMK No: (3) 2-9-003: 013, 029 and 060; Wailea, South Hilo, Island of Hawaii

The Land Use Commission ("LUC") respectfully request the publication of the FEA for the subject project in the June 23, 2005 OEQC Environmental Notice.

We are filing the following as transmitted by Tsukazaki, Yeh & Moore:

1. OEQC Bulletin Publication Form
2. Project Summary Description
3. Two hard copies of the FEA
4. One disk containing a digital copy of the FEA
5. One disk containing digital copies of the Publication Form and Project Summary

Should you require clarification or further assistance in this matter, please contact Max Rogers of my staff at 587-3822.

Sincerely,

  
ANTHONY J. H. CHING  
Executive Officer

Enclosures

c: Michael W. Moore (w/o enclosures)  
Brian T. Nishimura (w/o enclosures)

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**FINAL ENVIRONMENTAL ASSESSMENT AND  
FINDING OF NO SIGNIFICANT IMPACT**

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**STATE LAND USE BOUNDARY AMMENDMENT  
CONSERVATION TO AGRICULTURE**

Wailea, South Hilo, Hawaii

May, 2005

Prepared For:

**JAMES WILLIAM McCULLY AND FRANCINE MORALES McCULLY**

**40 KAMEHAMEHA AVENUE  
HILO, HAWAII 96720**

Prepared By:

**BRIAN T. NISHIMURA, PLANNING CONSULTANT**

**101 Aupuni Street  
Suite 217  
Hilo, Hawaii 96720-4221**

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## **1. Introduction**

### **1.1 Purpose**

James William McCully and Francine Morales McCully are the owners of approximately 4.6 acres of land situated within the State Land Use Conservation District at Wailea, South Hilo, Hawaii, Tax Map Key No.s: (3) 2-9-3: 13, 29 and 60. The subject property consists of three existing lots of record and a contiguous segment of a former railroad right-of-way running along the mauka (western) boundary of all three parcels. The owners plan to consolidate and resubdivide the three existing lots with the former railroad right-of-way and will seek to amend the district boundary classification from the Conservation district to the Agricultural district. The purpose of this Environmental Assessment is to comply with the requirements of Chapter 343, Hawaii Revised Statutes (HRS) which are triggered by the proposed boundary amendment involving the Conservation District.

### **1.2 Identification of Applicant**

James William McCully and Francine Morales McCully are the owners of the subject property and are the petitioners for an amendment to the land use boundary from the Conservation district to the Agricultural district. The mailing address for the petitioners is 40 Kamehameha Avenue, Hilo, Hawaii 96720.

### **1.3 Identification of Approving Agency**

In accordance with Chapter 343, HRS, the State Land Use Commission is the appropriate accepting authority of the Environmental Assessment.

### **1.4 Technical Description**

The subject property is situated along the Hamakua Coast of the Island of Hawaii, approximately 14.7 miles north of the City of Hilo. (Please see the attached Figure 1- Location Map and Figure 2 - Tax Plat Map) Access to the property is provided by a 30' wide road and utility easement which runs a distance of approximately 360 feet east from the Hawaii Belt Road. The property is bounded on the makai (east) side by the edge of the high pali (ranging between 100 to 140 feet above sea level) which is characteristic of the Hamakua coastline. The pali and the land to the high water mark belong to the State of Hawaii. The center of Puahanui Stream serves as the northern boundary and TMK: (3) 2-9-03: 1 is situated to the south. The property is bounded on the west by four parcels, TMK: (3) 2-9-03: 48, 49, 50 and 51.

The subject property is currently vacant and was previously utilized for sugar cane cultivation. The property has remained fallow since July, 1992 and is currently maintained as a grassed lawn with scattered sections of landscape plantings. (Please see the attached Figure 3 and Figure 4 - photos of the property) The former railroad right-of-way and the area previously utilized for sugar production are gently sloping towards the eastern end of the property and are well suited for uses allowed within the agricultural district. The high shorefront pali and the steep gulch sloping down to Puahanui Stream renders these areas virtually inaccessible from the subject property and there is no evidence of any public access or use on the property.

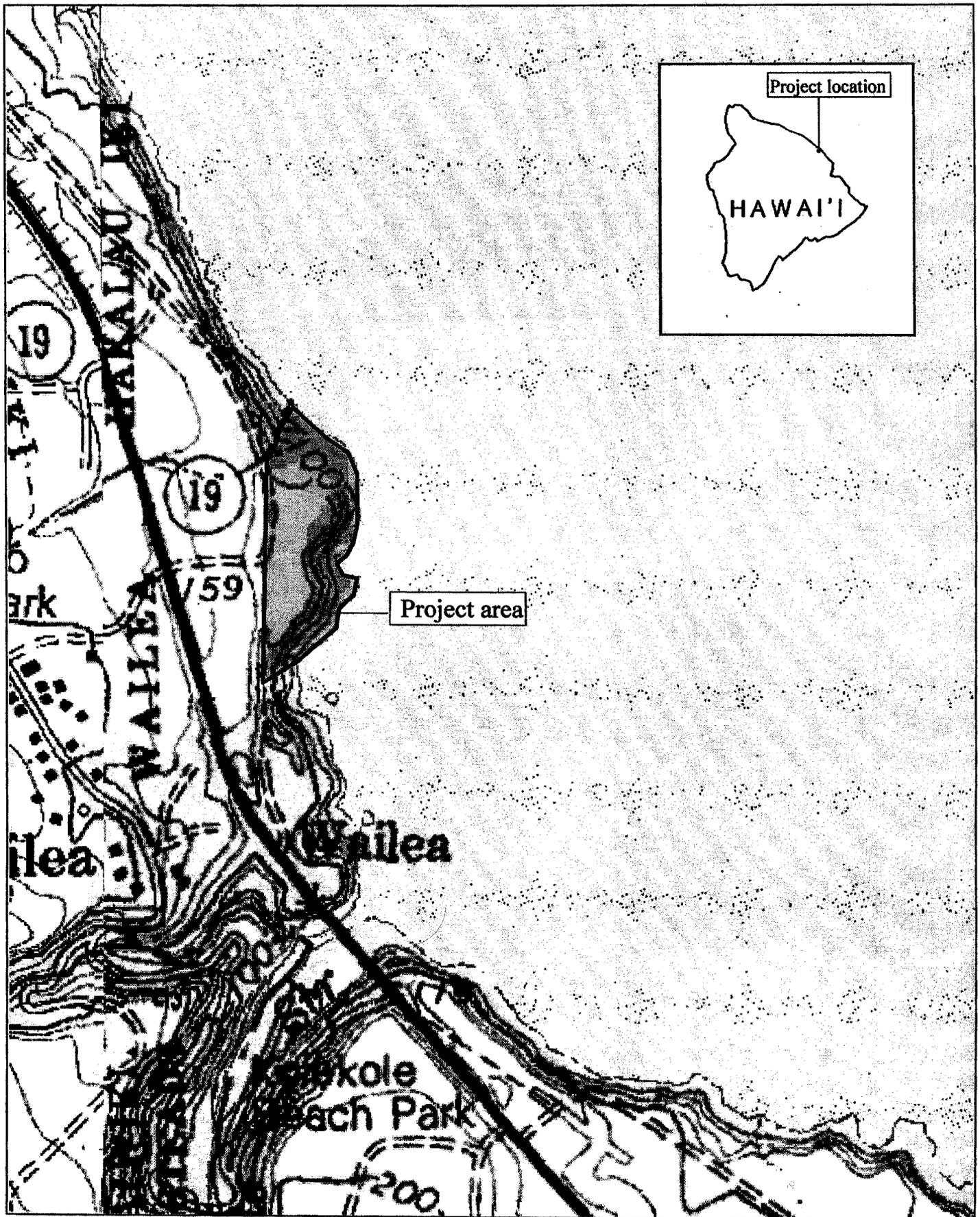


Figure 1. Project area location (portion of USGS 7.5 minute series Papaaloa and Papaikou quadrangles, HI).

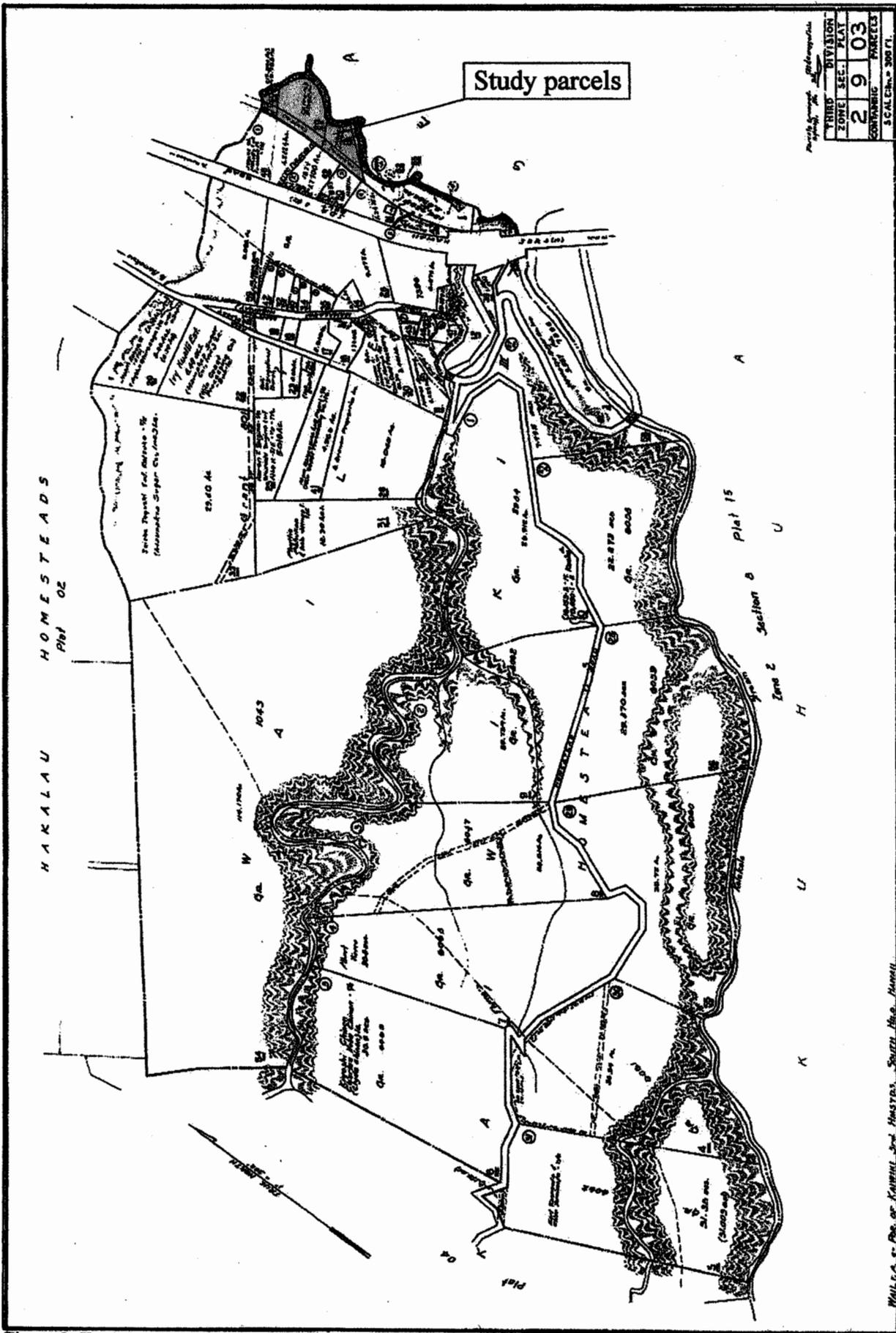


Figure 2. Tax Map Key 3-2-9-03 showing study parcels 13, 29, and 60.



Figure 3. Central portion of project area, view to the south.



Figure 4. Northern portion of project area, view to the east.

The Hawaii County Planning Department has determined that the three parcels and the contiguous right-of-way, consist of the following:

- a. Parcel 13 – 0.662 acre + 0.356 acre = 1.018 acres
- b. Parcel 29 – 2.192 acres + 0.637 acre = 2.829 acres
- c. Parcel 60 – 0.544 acre + 0.219 acre = 0.763 acres

The petitioners intend to consolidate and resubdivide the three existing lots with the former railroad right-of-way to provide a more useful configuration for the three parcels. (Please see attached Figure 5 - Proposed Consolidation and Resubdivision Map) Upon completion, the proposed consolidation and resubdivision will result in the following change for each parcel:

- a. Parcel 13 - 1.11 acres, an increase of .092 acre
- b. Parcel 29 – 1.12 acres, a decrease of 1.709 acres
- c. Parcel 60 – 2.37 acres, an increase of 1.607 acres

## **1.5 Project Background**

### **1.5.1 Project Concept**

The owners believe that the State Land Use Agricultural designation is appropriate in light of the historical use of the subject property for sugar cane production that spanned nearly a hundred years before being terminated by the closure of the Hilo Coast Processing Company. Moreover, the project area is similar to other properties in the immediate vicinity which are utilized for a variety of diversified agricultural activities including a certified orchid nursery, the propagation of foliage stock, cultivation of edible ginger and Chinese taro.

### **1.5.2 Land Use Designations**

The subject property is situated within the State Land Use Conservation District. (Please see attached Figure 6 – State Land Use Boundary Interpretation Map) The County General Plan Land Use Pattern Allocation Guide Map (LUPAG) designation for the subject area is Open while the Northeast Hawaii Community Development Plan recommendation for the area is also Open. (Please see attached Figure 7 – General Plan LUPAG Map) The County zoning designation for the property is Agricultural (A-20a). The project area is situated within the County's Special Management Area (SMA).

The Northeast Hawaii Community Development Plan and the County General Plan LUPAG Map Open designation reflect the State Land Use Conservation District designation for the project area. In addition, the Open designation reflects the County of Hawaii policy advocating that open space along the shoreline should be protected. The subject property is not visible from the Hawaii Belt Road and therefore, such policy is not anticipated to be adversely affected by the proposed boundary amendment.

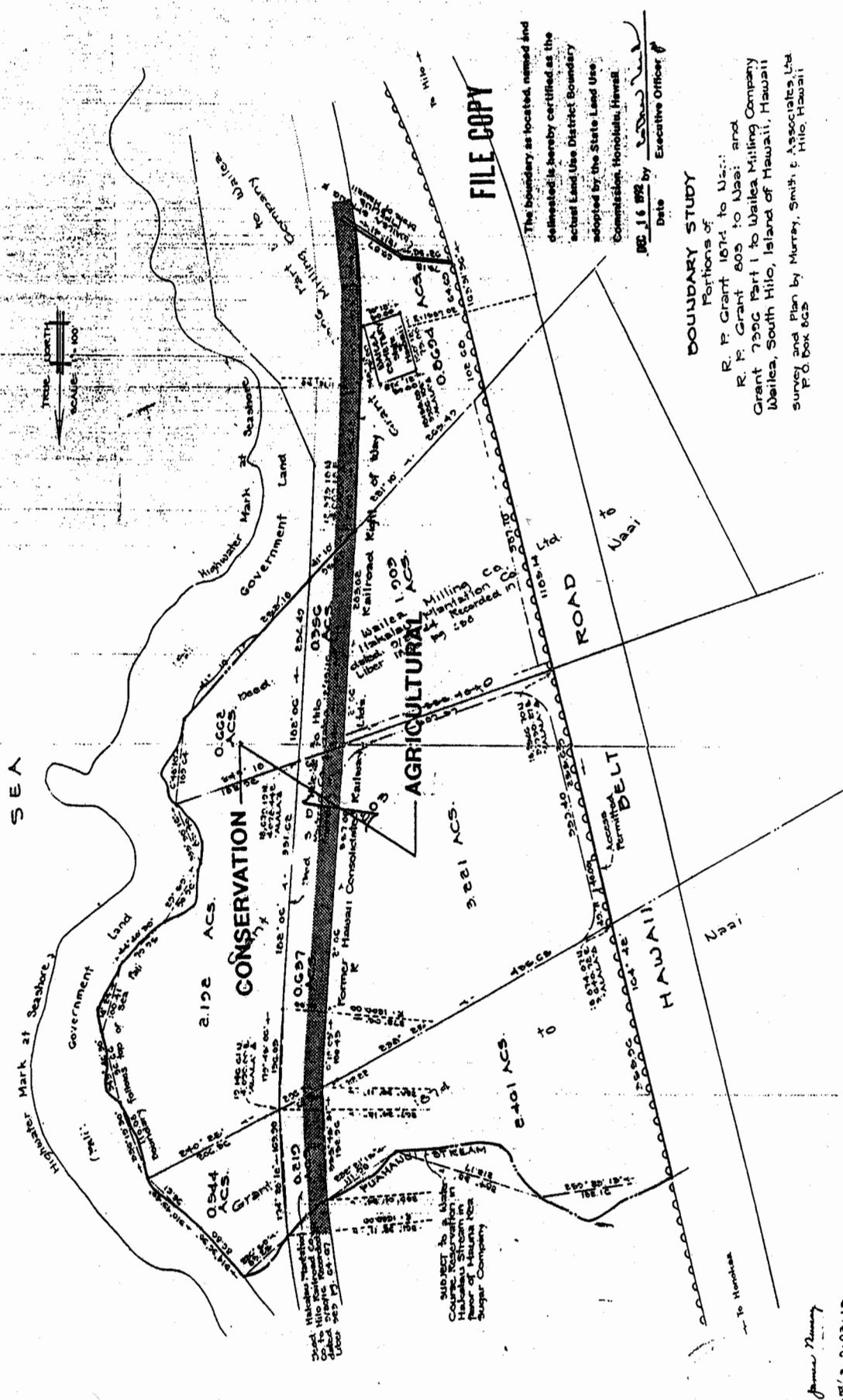


FILE COPY

Boundary

Interpretation No. 92 148 1

SEA



FILE COPY

The boundary as located, named and delineated is hereby certified as the actual land use District Boundary adopted by the State Land Use Commission, Honolulu, Hawaii

Date: 10/20/92 by [Signature] Executive Officer

BOUNDARY STUDY

Portions of  
 R. F. Grant 1874 to U.S.;  
 R. F. Grant 605 to U.S.; and  
 Grant 7200 Part I to Wailea Milling Company  
 Wailea, South Hilo, Island of Hawaii, Hawaii  
 survey and Plan by Murray, Smith & Associates, Ltd  
 P.O. Box 623  
 Hilo, Hawaii

*Donald James Murray*  
 TMK 501/2-0-03112  
 October 21, 1992

F 5000-A

Figure 6 - State Land Use  
 Boundary Interpretation Map  
 December 16, 1992

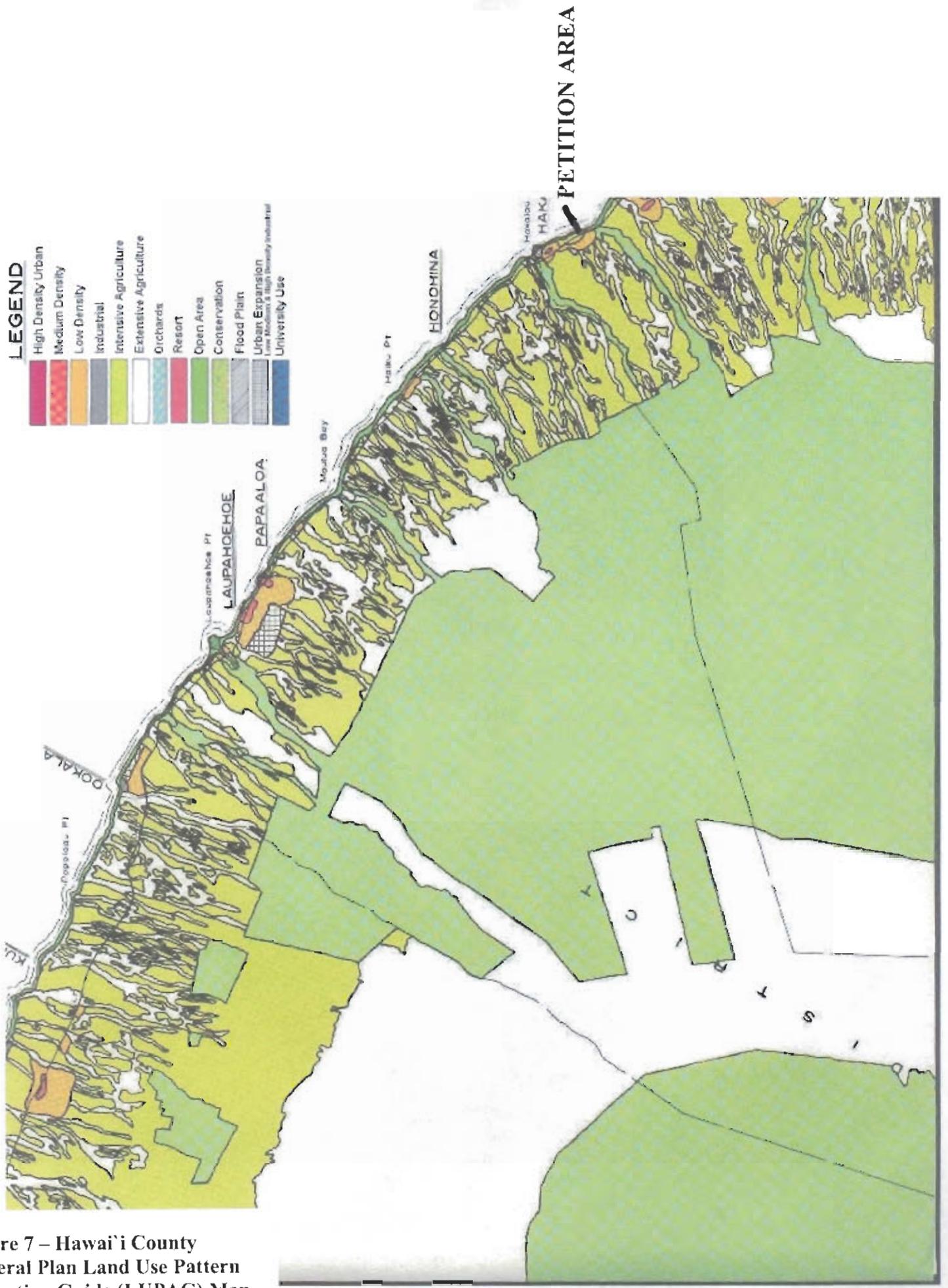


Figure 7 – Hawai'i County General Plan Land Use Pattern Allocation Guide (LUPAG) Map

### 1.5.3 Listing of Permits and Approvals

Federal	None
State of Hawaii	
Land Use Commission	Approval of Boundary Amendment
Department of Health	Approval of Individual Wastewater Systems
County of Hawaii	
Planning Department	Approval of Consolidation/Resubdivision Application; and
	Building Permit
Department of Public Works	Building Permit

### 1.6 Agency and Public Consultation

The following public and private organizations and individuals were consulted during the preparation of this environmental assessment:

United States Fish and Wildlife Services, Division of Ecological Services  
State of Hawaii, Department of Land and Natural Resources, Historic Preservation Division  
State of Hawaii, Dept. of Land and Natural Resources, Division of Forestry and Wildlife  
State of Hawaii, Department of Health  
State of Hawaii, Department of Transportation  
State of Hawaii, Office of Hawaiian Affairs  
State of Hawaii, Department of Hawaiian Home Lands  
State of Hawaii, Department of Education  
State of Hawaii, Department of Business, Economic Development & Tourism, Office of Planning  
County of Hawaii, Planning Department  
County of Hawaii, Department of Public Works  
County of Hawaii, Department of Environmental Management  
County of Hawaii, Department of Water Supply  
County of Hawaii, Police Department  
County of Hawaii, Fire Department

## **2. ENVIRONMENTAL SETTING**

### **2.1 Physical Environment**

#### **2.1.1 Geology and Hazards**

##### *Environmental Setting*

The project area is located on the lower eastern slopes of Mauna Kea and consists of the Hamakua volcanic series. These lava flows are chiefly basaltic with layers of Pahala ash. (Stems and Macdonald, 1946)

The Island of Hawaii is susceptible to four main types of natural hazards including tsunami, volcanism, seismic activity and hurricanes. Volcanic hazard as assessed by the United States Geological Survey is "8" on a scale of ascending risk 9 to 1. The zone "8" designation includes the lower slopes of Mauna Kea, most of which have not been affected by lava flows for the past 10,000 years. (Heliker 1990)

The Island of Hawaii is one of the most seismically active areas in the world and has experienced more than twenty large earthquakes (magnitude 6 or larger) over the past 166 years. (Wyss and Koyanagi, 1992) Magnitude 6 earthquakes can be expected to cause structural damage to non-reinforced buildings. The Building Code rating for the entire island of Hawaii is seismic Zone 4 which has the highest risk for seismic activity.

Two significant hurricanes have affected the Island of Hawaii over the past 50 years. Damage from hurricanes result from coastal wave/surge and high winds. The project site is not within a coastal hazard area for hurricanes or tsunami inundation. The hazards from hurricane winds are far more extensive and unpredictable than the water hazard. Winds may blow from variable directions and may be amplified by topographic conditions. (County of Hawaii, 2003)

Shoreline areas in Hawaii, particularly those on the northeast side exposed to the prevailing winds and heaviest wave attack, are subject to shoreline retreat. The rate of retreat in Hawaii has been estimated at an average rate of a couple of inches a year. (Macdonald and Abbott, 1977) Some locations may experience sudden and rapid retreat due to landslides which may be associated with sea cliff collapse.

##### *Potential Impacts and Mitigation Measures*

The proposed State Land Use Boundary amendment from Conservation to Agriculture will not expose the property owner(s) or the general public to any additional hazard risk that does not already exist for the entire Hamakua Coast. The property is not situated within a tsunami inundation or storm wave zone and the volcanic hazard risk is relatively low. The Hawaii County Building Code requires that all new structures be designed to resist forces to seismic Zone 4 standards. Additional building setbacks from the pali and the gulch may be considered to minimize the threat of shoreline retreat.

#### **2.1.2 Soils**

##### *Environmental Setting*

The soils of the project area are classified as Hilo silty clay loam with 0 to 10 percent slopes (HoC) by the U.S. Department of Agriculture Soil Conservation Service (SCS) Soil Survey. (U.S. Soil Conservation Service 1973) The Hilo soil series consists of well drained silty clay loams formed in a series of volcanic ash layers. The Agricultural Capability Subclass rating for this soil is IIIe, nonirrigated which includes soils having severe limitations that reduce the choice of plants and may require special conservation practices due to the risk of erosion.

Under the Agricultural Lands of Importance to the State of Hawaii (ALISH) classification system, there are four categories: prime, unique, other important agricultural lands and unrated. The subject property is designated prime agricultural lands under the ALISH system as are other similar property along the Hilo-Hamakua coast which were formerly utilized for sugar cane production. (Please see attached Figure 8 – Agricultural Lands of Importance to the State of Hawaii, ALISH Map)

The Land Study Bureau's overall master productivity rating of the subject area for agricultural use is class C or Fair. (Land Study Bureau, 1965) (Please see attached Figure 9 – Detailed Land Classification Island of Hawaii, Map No. 605) The Land Study Bureau report assigned land in the State into one of five master productivity ratings: A – Very good; B – Good; C – Fair; D – Poor; and E – Very poor.

#### *Potential Impacts and Mitigation Measures*

The soils of the project area are suitable for agricultural use but may be susceptible to erosion. As such, careful conservation practices will be employed when conducting any land disturbing activities on the property. In addition, all construction activities will comply with the applicable requirements of the Department of Public Works.

### **2.1.3 Climate**

#### *Environmental Setting*

Hawaii's climate is generally characterized as mild with uniform temperatures, moderate humidity, and two identifiable seasons. The "summer" season, between May and October is generally warmer and drier. The "winter" season, between October and April is cooler and wetter. The project area is situated along the "windward" side of the Island of Hawaii which is exposed to northeasterly trade winds that cause relatively high rainfall (approximately 150 inches annually). The average monthly minimum temperature in this area of the Hamakua Coast ranges from the low to high 60s (degrees Fahrenheit) while the average monthly maximum temperature ranges from the high 70s to the high 80s. (University of Hawaii Press, 1983)

#### *Potential Impacts*

The climatic conditions of the project area will not have a significant impact on the proposed project.

### **2.1.4 Hydrology and Drainage**

#### *Environmental Setting*

# Agricultural Lands of Importance to the State of Hawaii (ALISH)

State Department of Agriculture, Aquaculture, Forests, and Land Use, 1997

Scale: 1:100,000

- Prime Agricultural Lands
- Unique Agricultural Lands
- Other Agricultural Lands

**Legend:**  
 - Interstate  
 - State Road  
 - County Road  
 - Water  
 - Elevation Contour  
 - Boundary  
 - Municipality

This map was prepared in the Office of State Planning, in accordance with the provisions of the State Constitution, Article XVI, Section 5. It is intended to provide information to the public and is not to be used as a basis for any legal action.

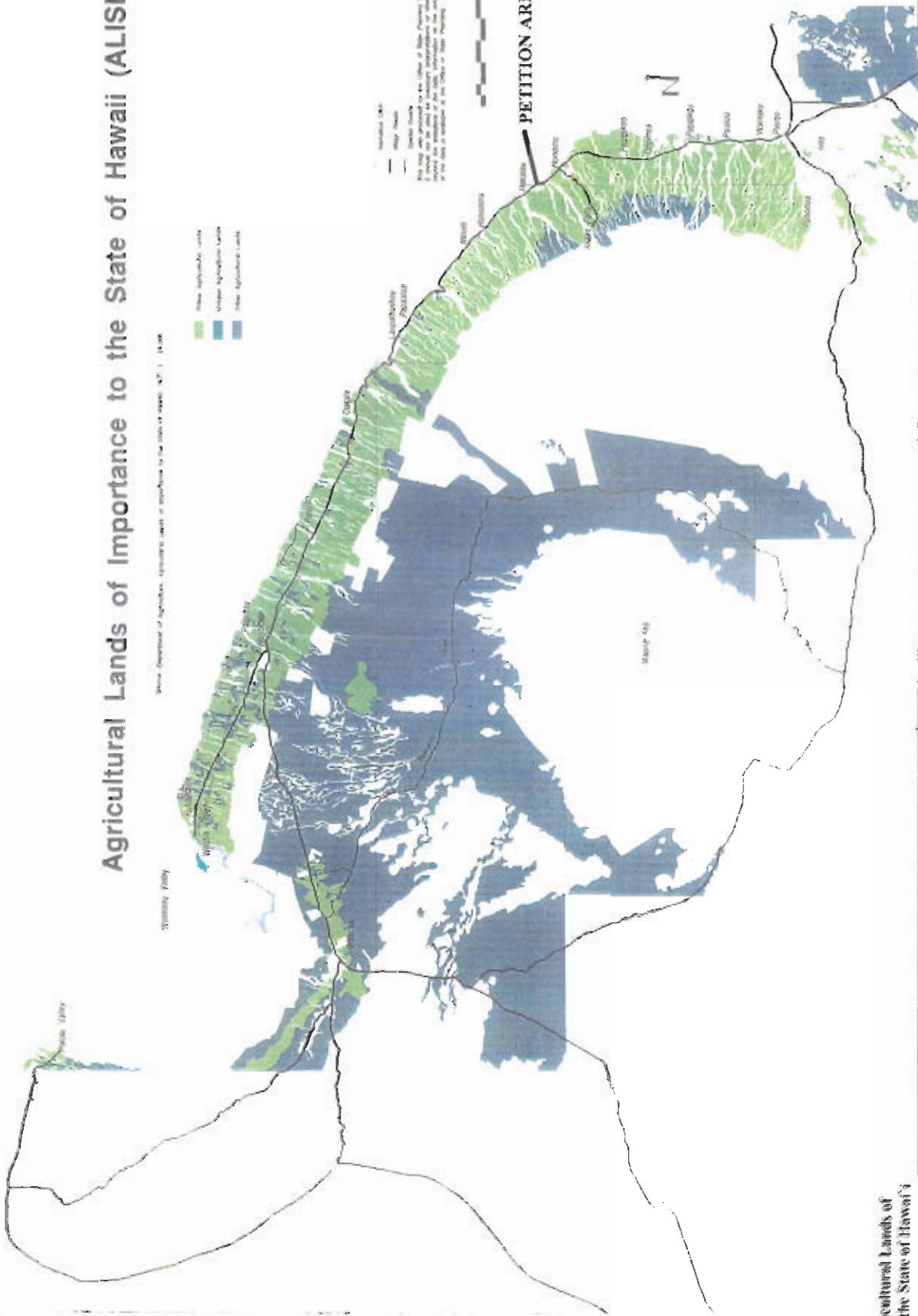
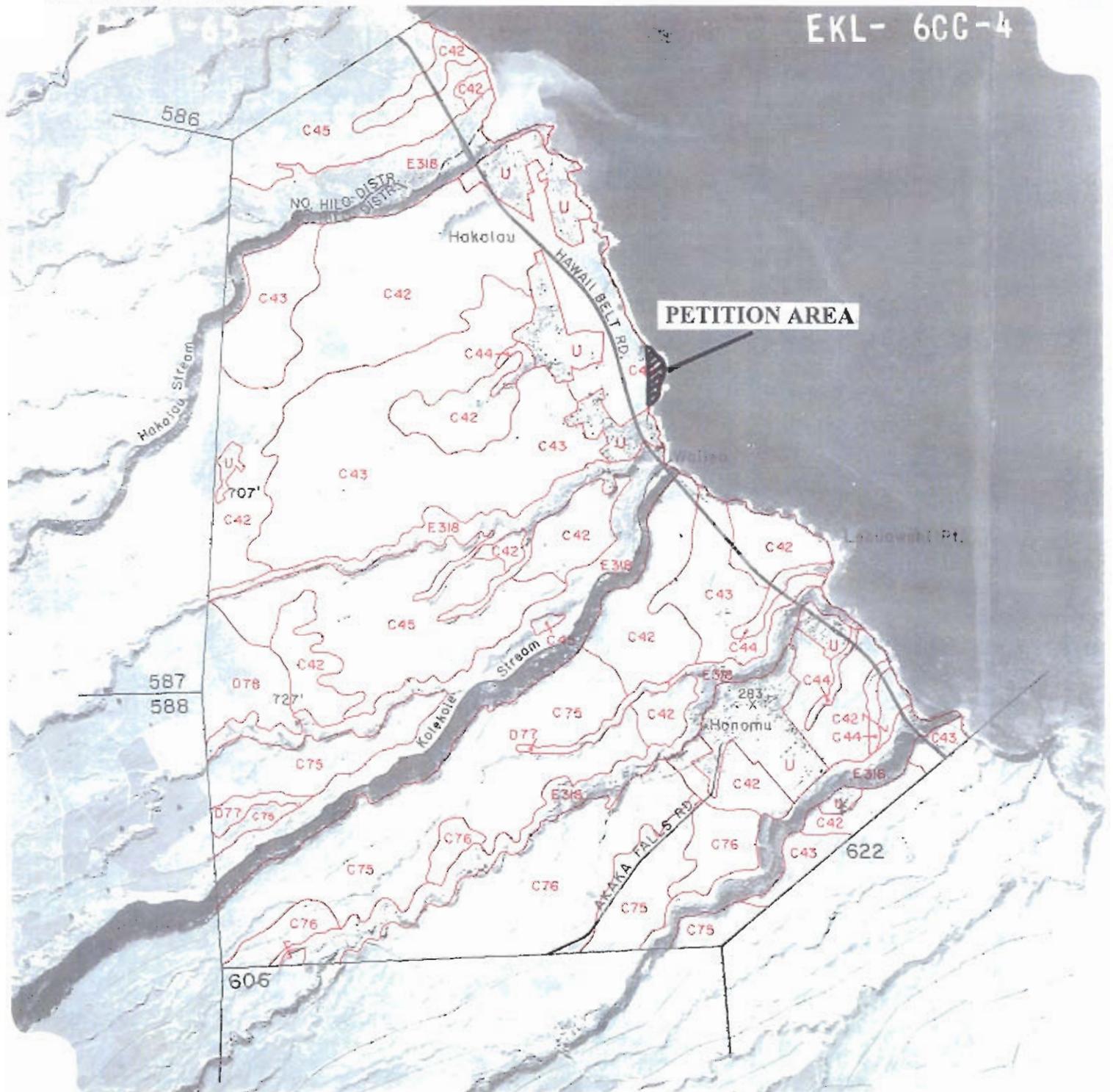


Figure 8 - Agricultural Lands of Importance to the State of Hawaii's (ALISH) Map

EKL- 6CG-4



Field mapped 1963-64

U.S.G.S. Quad Reference: Honoumuli

Approx Scale (1 in. =) 13,600 - Ground Elevation 6

Aerial Photographs: U.S. Dept. of Agric., A.S.C.S.

LAND STUDY BUREAU, University of Hawaii

Figure 9 - Detailed Land Classification - Island of Hawaii, Map No. 605

"I" if irrigated; see sections of red and rated by



The Island of Hawaii is generally characterized as having basal groundwater floating on salt water. The aquifer system underlying the project area has a sustainable yield of approximately 150 million gallons per day. (Hawaii Department of Water Supply, 1991)

According to the Flood Insurance Rate Map (FIRM) prepared by the Federal Emergency Management Agency dated September 16, 1988, the project area is situated within Flood Zone "X" (areas determined to be outside the 500 year flood plain). The center of Puahanui Stream serves as the northern boundary of the project area and is encumbered with a watercourse easement.

#### *Potential Impacts and Mitigation Measures*

The proposed project is not anticipated to have any significant adverse impact on hydrology and drainage. Any potential impacts may be mitigated by complying with State and County regulations which stipulate that increases in runoff due to development of the project site must be disposed of on-site and may not be directed toward adjacent properties.

### **2.1.5 Water Quality**

#### *Environmental Setting*

Puahanui Stream serves as the northern boundary of TMK (3) 2-9-03: 60 and the Pacific Ocean lies immediately below the high pali which serves as the eastern boundary of the subject property. Puahanui Stream appears to be an unnamed intermittent stream on U.S. Geological Survey Maps and was not included in the Hawaii Stream Assessment conducted from 1988-1990 which inventoried and assessed available information on Hawaii's streams in four resource categories: aquatic resources, riparian resources, cultural resources and recreational resources.

The coastal waters fronting the subject property are classified "A" by the State of Hawaii. These waters are to be protected for recreational purposes and aesthetic enjoyment.

#### *Potential Impacts*

The proposed project is not expected to have any direct impact on Puahanui Stream or marine waters inasmuch as any additional runoff generated will be disposed of on site.

### **2.1.6 Flora and Fauna**

#### *Environmental Setting*

The entire property, with the exception of the steep gulch leading to Puahanui Stream, has been extensively utilized for the growing of sugar cane for a period of approximately 100 years. The property has remained fallow since 1992 when the last sugar crop was harvested and has been maintained as a grassed lawn.

A botanical survey of the project site was conducted in June, 2004, by Evangeline J. Funk, Ph.D. Botanical Consultants. The botanical survey identified two vegetation types on the property which included the open mowed lawn and the stream bank vegetation. The open mowed lawn includes a mix of introduced grass. The seaward edge of the lawn area includes scattered planting of green hala trees and a variety of hala with green and yellow striped

leaves. The areas along the slopes of the pali were predominantly introduced ironwood trees. A variety of landscape plantings also found in the lawn area include several species of palm trees, some bamboos, some kukui trees, golden pothos and banana type plantings. The stream bank vegetation included large introduced trees such as African tulip, ironwood, coconut, and hala as well as banana, oak leaf fern and sword fern.

In conclusion, the botanical survey report states the following:

“Aside from the Kukui and hala trees, which may be early Polynesian introductions, the only native plants found on this site were some popolo berry bushes (*Solanum americanum* Mill). Otherwise, the vegetation of this site is all introduced plants and is found in many places in the Hawaiian Islands and will quickly regenerate if it is disturbed.”

“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.”

The complete botanical survey report for the project site is included as an addendum to this environmental assessment as Appendix B.

Although a faunal survey was not conducted, it is highly unlikely that any candidate, proposed, or listed threatened or endangered species would be found on the project site. This is due to the extensive agricultural use of the project site for sugar cane production for approximately 100 years. In addition, the State Department of Land and Natural Resources, Division of Forestry and Wildlife and the U.S. Department of Interior, Fish and Wildlife Service did not have any comments to offer regarding the proposed project.

### *Impacts*

Based on the extensive prior disturbance of the project site, it is highly unlikely that any candidate, proposed, or listed threatened or endangered species as set forth in the Endangered Species Act of 1973, as amended are present on the subject property. As such, the proposed project will not have any significant impact on any protected or native plant or animal species.

### **2.1.7 Air Quality**

#### *Environmental Setting*

The air quality of the subject area is affected by pollutants derived from the volcanic emissions from the ongoing Kilauea eruption. Other sources of air pollutants to a limited degree include vehicle exhaust emissions along the Hawaii Belt Road. In general, however, the ambient air quality of the project area meets all federal and state standards as evidenced by its designation as an "attainment" area by the State Department of Health, Clean Air Branch.

#### *Potential Impacts and Mitigation Measures*

Short term impacts may result from any construction activity involved with utilizing the subject parcels including dust and exhaust from machinery and vehicles. Ongoing

agricultural activity may generate similar long term impacts of dust and exhaust from machinery and vehicles. Given the temporary or intermittent nature of these activities, the potential impacts should be minimal. As such, the proposed action will not have a significant impact on the air quality of the surrounding area.

### **2.1.8 Noise**

#### *Environmental Setting*

Ambient noise levels at the project site are low to moderate and are typical for a rural residential area near the ocean. The primary noise generators in the area are the wind, ocean waves, vehicles on the Hawaii Belt Road and vehicles entering the property.

#### *Potential Impacts and Mitigation Measures*

Temporary noise impacts will occur from any construction activity involved with utilizing the subject property and is unavoidable. Ongoing agricultural activity may generate similar long term noise impacts from machinery and vehicles working the property. These activities will likely result in marginal increase in noise levels and will not have a significant impact on the ambient noise levels in the area.

### **2.1.9 Scenic Resources**

#### *Environmental Setting*

The predominant scenic views in the vicinity of the project area are of the Pacific Ocean, the high pali and the shoreline area. There are no views of the project area from the Hawaii Belt Road because the road is cut along an embankment in the vicinity of the property.

The subject property is situated between two sites, Kolekole Gulch and Hakalau Bay/Gulch, listed as examples of natural beauty in the Hawaii County General Plan. Hakalau Bay/Gulch is situated approximately 5,000 feet north of the subject property and Kolekole Gulch is situated approximately 1,200 feet south of the property.

#### *Potential Impacts*

The open space and scenic resources in the vicinity of the project area will not be adversely affected by the proposed State Land Use Boundary Amendment. The project area is not visible from the Hawaii Belt Road nor is it visible from Kolekole Gulch or Hakalau Bay/Gulch. As such, the project will have no impact on the sites listed as examples of natural beauty in the Hawaii County General Plan.

## **2.2 Social, Cultural and Economic Setting**

### **2.2.1 Socio-Economic Characteristics**

#### *Setting*

Hawaii County's population increased by more than 56,000 persons between 1980 and 2000. Between 1980 and 1990, Hawaii Island's population increased by 30.7 percent, and increased by 23.6 percent between 1990 and 2000. The April 1, 2000 population figure for Hawaii

County was 148,677 according to census figures compiled by the County of Hawaii, Department of Research and Development.

The South Hilo district had a population of 47,386 in 2000 which represented approximately 32 percent of the total population for Hawaii Island. The City of Hilo is the largest population center on the island with the main offices of the county government, branch offices of federal and state agencies located there. The island's major deep draft harbor and international airport are also located in Hilo. In addition to industrial, commercial and social service activities, the University of Hawaii at Hilo and Hawaii Community College and affiliated research programs play an important role in Hilo's economy.

Hilo and the rest of the east Hawaii communities are adjusting to the loss of the sugar industry in the mid 1990's. The continuation of agriculture in the district has required a major shift from large scale single commodity production to smaller scale, multi-commodity multi-market base. The shift to diversified agriculture is characterized by larger numbers of self-employed and smaller scale independent businesses. As this socio-economic transition continues, there is an increasing demand for smaller scale agricultural parcels.

#### *Potential Impacts*

The proposed State Land Use Boundary amendment from Conservation to Agriculture will help address a small portion of the demand for this use. This particular section of the South Hilo district is undergoing a socio-economic transition due to the recent loss of the sugar industry and the proposed project is directly addressing a portion of the demand being generated by this change.

### **2.2.2 Adjacent Land Uses**

#### *Existing Setting*

The areas immediately west (mauka) of the subject property are situated in the State Land Use Agricultural district. The areas immediately north, south, and east of the property are designated Conservation. . (Please see attached Figure 10 – State Land Use District Boundaries Map) The parcels immediately adjacent to the project area have the same general characteristics of the subject property. Of the five adjoining parcels, three are currently vacant and two have been developed with single family dwellings. An orchid nursery business has also been established on Parcel 48 along with a single family dwelling.

The adjoining communities of Hakalau and Honomu include a mixture of agriculture, residential and limited commercial uses. The majority of the residences in these communities are remnants of the former sugar plantation camps. A number of newer homes have been constructed on parcels formerly utilized for sugar production.

#### *Potential Impacts and Mitigation Measures*

The proposed State Land Use Boundary amendment from Conservation to Agriculture will be consistent with the character of the parcels within the immediate vicinity of the project area. The proposed boundary amendment will also be consistent with the character of the neighboring Hakalau and Honomu communities.

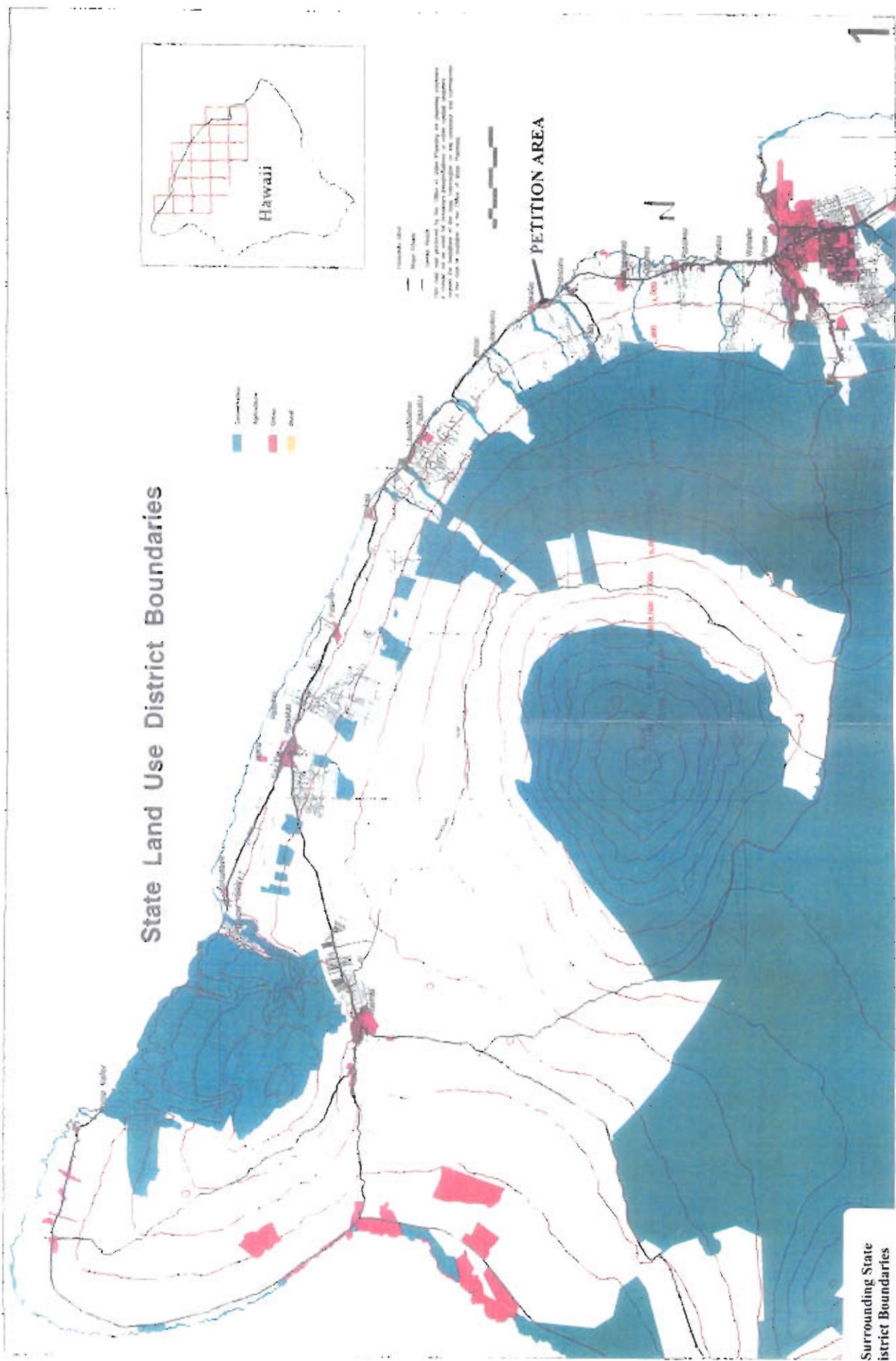


Figure 10 – Surrounding State Land Use District Boundaries Map

## **2.3 Public Facilities and Services**

### **2.3.1 Roads**

#### *Existing Setting*

Hawaii Belt Road (Highway 19) is a state highway providing the major route for cross-island transportation. The state highway is situated approximately 360 feet west of the subject property. A 30 foot wide access and utility easement provides access to all three of the subject parcels. The easement is currently improved with a 12-foot wide pavement from the state highway down to the edge of the former railroad right-of-way.

#### *Potential Impacts and Mitigation Measures*

The additional traffic generated by the proposed boundary amendment and consolidation and resubdivision action will be minimal. As such, no significant impact on traffic or the highway system is anticipated.

### **2.3.2 Water System**

#### *Existing Setting*

Water is available from an existing waterline constructed within the access and utility easement.

#### *Potential Impacts*

The proposed project will not have a significant adverse impact on the existing Department of Water Supply system serving the subject location.

### **2.3.3 Protective Services**

#### *Existing Setting*

The closest fire and police stations to the subject property are the district stations situated in the community of Laupahoehoe approximately 9 miles northwest of the project site. The project area, however, is situated within the service area of the main police and fire stations located approximately 19 miles away in Hilo.

#### *Potential Impacts*

The proposed project will not have a substantial impact on the existing service providers.

### **2.3.4 Schools**

#### *Existing Setting*

The project area is served by Kalaniana'ole School and Hilo High School. Kalaniana'ole School is located approximately 9 miles southeast and Hilo High School is located approximately 19 miles south of the project site.

#### *Potential Impacts*

The proposed project will not have a significant impact on the existing public school system. The State Department of Education has commented that, “The DOE only asks for a fair-share contribution from projects with 50 or more units. Therefore, the DOE will not be asking for a fair-share school condition.” The comment letter from the Department of Education is included in Appendix A.

### **2.3.5 Power and Communication Systems**

#### *Setting*

The project area is served by Hawaii Electric Light Company and Verizon Hawaii through underground utility lines installed for the proposed project.

#### *Potential Impacts*

The proposed action will not have any significant adverse impact on the power and communication systems serving the region.

### **2.3.6 Wastewater**

#### *Setting*

The project area is not within the service limits of the County wastewater disposal system. All wastewater generated will be disposed of through individual wastewater systems approved by the State Department of Health.

#### *Potential Impacts*

The proposed project will utilize individual wastewater systems in accordance with the requirements of the State Department of Health. As such, the proposed project will not have any significant adverse impact with regard to wastewater disposal.

### **2.3.7 Solid Waste**

#### *Setting*

There is no municipal collection system for solid waste in the County of Hawaii. The County provides a solid waste transfer station near Honomu, approximately 1 mile from the project site.

#### *Potential Impacts*

The proposed action will not have any significant adverse impact regarding solid waste.

## **2.4 Archaeology, Historic and Cultural Resources**

### *Setting*

An archaeological assessment of the project site was conducted by Rechtman Consulting, LLC in July, 2004. The project area was systematically and intensively examined and one site (SIHP Site 50-10-26-24212) was discovered which included two historic-period railroad features.

These features were identified as a possible railroad grade section and a railroad trestle abutment. In summarizing their findings, the archaeological consultant states the following:

“Systematic survey of three parcels (TMK 3-2-9-03: 13, 29 60) produced no evidence of traditional Hawaiian remains or evidence that the area was currently being accessed for the exercise of traditional and customary practices.

“One historic era site-SIHP Site 24212, was recorded. The site contains two features associated with the Hamakua Division of Hilo Railroad-Hawaii Consolidated Railway which were recorded in the northwestern portion of the project area. One is a possible section of railroad grade and the other is a railroad trestle abutment. The features were in active use by the railroad from 1911 to 1946. Their primary function was to facilitate the transport of raw sugar from the many mills along the Hilo and Hamakua Coasts to the harbor at Hilo Bay. In later years, they also served the secondary function of facilitating tourism.”

The archaeological consultant provided the following significance evaluation and treatment recommendations:

“Site 24212 is considered significant under Criteria D for the information it has yielded regarding early twentieth century sugar cane transportation infrastructure. As the current inventory survey project recorded Site 24212 in detail, however, no further work is recommended.

“In the unlikely event that archaeological resources are encountered during future development activities at TMK: 3-2-9-03: 13, 29, and 60, work in the immediate area of the discovery should be halted and DLNR-SHPD contacted as outlined in Hawaii Administrative Rules 13§13-275-12.”

By letter dated December 22, 2004, the Historic Preservation Division of the Department of Land and Natural Resources accepted and agreed with the archaeological consultant’s recommended treatment of Site 24212 and noted that the consultant’s report was adequate to meet the requirements of HAR §13-276. The report was accepted as final.

Rechtman Consulting, LLC also conducted a cultural assessment for the proposed project. Archival and documentary information was reviewed, including Mahele Land Awards and Grants and historic maps. This research did not reveal any documentation of any previous or ongoing traditional or customary practices. The area was historically known as Hilo-pali-Ku (Hilo of the upright cliffs) and there are a few accounts that indicate this area, which encompasses the sheer cliffs stretching along the Hamakua Coast from the Wailuku River to Waipi’o and beyond, once supported a large pre-contact Hawaiian population that subsisted on crops such as taro, sweet potato, banana, and coconut. Other agricultural resources such as ‘awa, bamboo and sugarcane were also cultivated on the kula lands that stretched from South Hilo to Hamakua. In the second half of the nineteenth century, the transportation difficulties that had delayed the large-scale commercial exploitation of the kula lands were overcome and sugarcane plantations replaced the subsistence agriculture and grazing as the dominant land use.

In order to identify cultural resources and potential traditional cultural practices associated with the project site and this portion of the Wailea ahupua’a, the consultant contacted Ululani Sherlock of the Office of Hawaiian Affairs (OHA) and Kepa Maly of Kumu Pono Associates in

June, 2004. Neither had any specific information relative to the project area. However, OHA suggested contacting the Laupahoehoe Hawaiian Civic Club. Lucille Chung and Walter Victor were contacted, and they, in turn, referred the consultant to Jack or Waichi Ouye, Yukio Takeya and Lorraine Mendoza, who were contacted in June and July, 2004.

The interviewees recalled that the railway used to run across the property until the Kolekole Bridge was destroyed by the tsunami of 1946. On the adjacent property to the south, there used to be a pig farm that was used by camp residents and a trail that accessed the shore. This trail allowed the residents and local fisherman access to the shoreline below the pali that bounds the property to the east. This trail was not located on the subject property nor did it cross the subject property.

The consultant summarized its findings regarding cultural resources as follows:

“None of the organizations or individuals that were contacted had any information relative to the existence of traditional cultural properties in the immediate vicinity of the Petition Area; nor did they provide any information indicating past or current use of the area for traditional and customary practices. It is unlikely that there are any traditional or customary practices occurring in the Petition Area as the lands were utilized for sugarcane cultivation and associated transportation for over 100 years. Any traditional Hawaiian features that may have been associated with former cultural practices that may have occurred in the Petition Area would have been destroyed by the sugarcane cultivation and related uses.”

A complete copy of the Archaeological Inventory Survey and Limited Cultural Assessment of TMKs: 3-2-9-03: 13, 29, and 60 is provided as an addendum to this environmental assessment as Appendix C. The comment letter from the State Historic Preservation Division dated December 22, 2004 and a supplemental letter from the consultant Rechtman Consulting, LLC dated January 24, 2005 are also included in Appendix C.

### *Potential Impacts*

There were no cultural or historic properties, other than Site 24212, identified in the project area. There were also no traditional or customary cultural practices found to be associated with the project area. The proposed project is therefore anticipated to have “no effect” on significant historic sites or traditional and customary cultural practices.

### **3. SUMMARY OF POTENTIAL ADVERSE ENVIRONMENTAL IMPACTS AND PROPOSED MITIGATION MEASURES**

#### **3.1 Short Term Impacts**

##### *Construction Activity*

*Impacts:* Short term impacts will result from any construction activity involved with utilizing the subject parcels including increased noise levels, dust and exhaust from machinery.

*Mitigation:* Given the temporary or intermittent nature of these activities, the potential impacts from any construction activity should be minimal.

#### **3.2 Long Term Impacts**

##### *Drainage:*

*Impacts:* County requirements stipulate that, all development generated runoff be disposed on site and cannot be directed toward any adjacent properties.

*Mitigation:* The owner(s) of the parcels will be required to obtain the necessary permits to comply with all drainage requirements.

##### *Agricultural Activity:*

*Impacts:* Ongoing agricultural activity may generate long term impacts of increased noise levels, dust and exhaust from machinery and vehicles.

*Mitigation:* Given the intermittent nature of these activities, the potential impacts from ongoing agricultural activity should be minimal.

## **4. ALTERNATIVES**

### **4.1 Alternative Actions Considered**

The no action alternative would keep the property within the State Land Use Conservation district. Agricultural activities and landscaping may be permitted with a departmental permit. Other uses such as aquaculture or a single family residence may be allowed with a board permit. However, the owners believe that the State Land Use Agricultural designation is more appropriate in light of the historical use of the subject property for sugar cane production that spanned nearly a hundred years before being terminated by the closure of the Hilo Coast Processing Company. Moreover, the project area is similar to other properties in the immediate vicinity which are utilized for a variety of diversified agricultural activities including the petitioner's own certified orchid nursery as well as the propagation of foliage stock, cultivation of edible ginger and Chinese taro. As such, the other alternatives of a boundary amendment to the Urban or Rural district were also deemed to be less appropriate.

## **5. DETERMINATION, FINDINGS AND REASONS FOR SUPPORTING DETERMINATION**

### **5.1 Significance Criteria**

According to the Department of Health Rules (11-200-12), an applicant or agency must determine whether an action may have a significant impact on the environment, including 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. In making the determination, the Rules establish "Significance Criteria" to be used as a basis for identifying whether significant environmental impact on the environment if it meets anyone of the following thirteen criteria.

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

The owners plan to consolidate and resubdivide the three existing lots with the former railroad right-of-way and will seek to amend the district boundary classification from the Conservation district to the Agricultural district. The subject property was previously utilized for sugar cane production for approximately 100 years and as such, the property does not contain any existing natural or cultural resources that will be destroyed or irrevocably lost by the proposed action.

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

The proposed boundary amendment from the Conservation district to the Agricultural district will allow the property to be utilized in a manner consistent with the historical use of the property for much of the previous 100 years. As such, the approval of a State Land Use boundary amendment from the Conservation district to the Agricultural district will not curtail the range of beneficial uses of the environment.

**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 Environmental Policies established in Chapter 344, HRS, and the National Environmental Policy Act.

**4. Substantially affects the economic or social welfare of the community or state.**

The proposed action will have a positive impact on the economic and social welfare of the community. Hilo and the rest of the east Hawaii communities are adjusting to the loss of the sugar industry in the mid 1990's. The continuation of agriculture in the district has required a major shift from large scale single commodity production to smaller scale, multi-commodity multi-market base. The shift to diversified agriculture is characterized by larger numbers of self-employed and smaller scale independent businesses. As this socio-economic transition continues, there is an increasing demand for smaller scale agricultural parcels. The proposed State Land Use Boundary amendment from the Conservation district to the Agricultural district will help address a small portion of the

demand for this use. This particular section of the South Hilo district is undergoing a socio-economic transition due to the recent loss of the sugar industry and the proposed project is directly addressing a portion of the demand being generated by this change.

**5. Substantially affects public health.**

The proposed action will not have any substantial impact on public health. Potential noise, air, water and drainage impacts will be minimal and will be addressed by complying with federal, state and County requirements.

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

The proposed action will not involve any increase in the number of existing lots and will not generate any substantial secondary impacts. Rather, the proposed action will support and sustain the socio-economic transition that is occurring in the region.

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

The proposed boundary amendment will not result in a substantial degradation of environmental quality. The proposed project will be consistent with the character of the adjoining parcels as well as the neighboring Hakalau and Honomu communities.

**8. Is individually limited but cumulatively has considerable effect on the environment, or involves a commitment for larger actions.**

The proposed action will not involve any increase in the number of existing lots and will not generate any substantial secondary impacts. As such, the approval of the proposed project does not involve a commitment for larger actions and will not induce other actions having a cumulative effect on the environment.

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

The project site has been extensively disturbed by earthmoving equipment and does not have any candidate, proposed, or listed threatened or endangered species on the property. As such, the proposed action will not have any substantial adverse effect on any rare~threatened or endangered species or its habitat.

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

Short term impacts will result from the proposed action including increased noise levels, dust and exhaust from machinery involved in any construction on the property. Ongoing agricultural activity may generate similar long term impacts of increased noise levels, dust and exhaust from machinery and vehicles. Given the temporary or intermittent nature of these activities, the potential impacts from any construction or agricultural activity should be minimal.

**11. Affects 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, freshwater, or coastal waters.**

The project site is not situated in an environmentally sensitive area such as a flood plain, tsunami zone, beach, geologically hazardous land, estuary, freshwater, or coastal waters. Shoreline areas in Hawaii, particularly those on the northeast side exposed to the prevailing winds and heaviest wave attack, are subject to shoreline retreat. The rate of retreat in Hawaii has been estimated at an average rate of a couple of inches a year. (Macdonald and Abbott, 1977) Some locations may experience sudden and rapid retreat due to landslides which may be associated with sea cliff collapse. Additional building setbacks from the pali and the gulch may be considered to minimize the threat of shoreline retreat.

**12. Substantially affects scenic vistas and view planes identified in county or state plans or studies.**

The open space and scenic resources in the vicinity of the project area will not be adversely affected by the proposed action. The project area is not visible from the Hawaii Belt Road and the project will have no impact on the natural beauty of Kolekole Gulch and Hakalau Bay/Gulch which are identified as examples of natural beauty in the Hawaii County General Plan.

**13. Requires substantial energy consumption.**

The proposed project will not require substantial energy consumption,

**5.2 Findings**

Based on the foregoing information presented, it is determined that the proposed consolidation/resubdivision and State Land Use Boundary amendment from the Conservation district to the Agricultural district will not have a significant effect. As such, a determination of a Finding of No Significant Impact for the proposed action is appropriate.

**5.3 Reasons Supporting Determination**

The nature and scale of the proposed action is such that no significant environmental effects are anticipated. Potential impacts, if any, can be mitigated through compliance with all governmental requirements including those of the State Department of Health and the County Department of Public Works.

## REFERENCES

County of Hawaii, Interim Plan, *Hazard Mitigation Plan, Natural Hazards*, October, 2003

Hawaii Department of Water Supply, *Hawaii County Water Use and Development Plan*, December, 1991

Hawaii Island Economic Development Board (HIEDB), *Hilo-Hamakua Economic Development Plan*, March, 1994

Heliker, C. 1990. *Volcano and Seismic Hazards on the Island of Hawaii*. Washington: GPO

Land Study Bureau. 1965. *Detailed Land Classification – Island of Hawaii*. University of Hawaii. Honolulu

Office of State Planning. 1994. *Waipio to Hilo – A Resource and Interim Planning Document*. Honolulu

University of Hawaii Department of Geography. 1983. *Atlas of Hawaii*. University of Hawaii Press, Honolulu.

U.S. Soil Conservation Service. 1973. *Soil Survey of the Island of Hawaii, State of Hawaii*. Washington: U.S.D. A.

Stearns, H.T. and Macdonald G.A. 1946. *Geology and Ground-Water Resources of the Island of Hawaii*. Bulletin 9, Hawaii Division of Hydrography. Advertiser Publishing Co., Ltd. Honolulu.

**APPENDIX A – COMMENTS MADE DURING THE PRE-ASSESSMENT  
CONSULTATION PERIOD**

1. State of Hawaii, Department of Land and Natural Resources, Division of Forestry and Wildlife, May 20, 2004.
2. State of Hawaii, Department of Health, District Environmental Health Program Chief, May 26, 2004.
3. State of Hawaii, Department of Transportation, Director of Transportation, June 29, 2004.
4. State of Hawaii, Department of Hawaiian Home Lands, June 3, 2004.
5. State of Hawaii, Office of Hawaiian Affairs, May 27, 2004.
6. State of Hawaii, Department of Education, June 14, 2004
7. State of Hawaii, Department of Land and Natural Resources, Office of Conservation and Coastal Lands, June 15, 2004
8. State of Hawaii, Department of Business, Economic Development & Tourism, Office of Planning, June 24, 2004.
9. County of Hawaii, Department of Public Works, Engineering Division, June 18, 2004
10. County of Hawaii, Department of Environmental Management, June 22, 2004.
11. County of Hawaii, Fire Department, May 25, 2004.
12. County of Hawaii, Planning Department, June 14, 2004.

LINDA LINGLE  
GOVERNOR OF HAWAII



**STATE OF HAWAII**

**DEPARTMENT OF LAND AND NATURAL RESOURCES**

**DIVISION OF FORESTRY AND WILDLIFE**

1151 PUNCHBOWL STREET

HONOLULU, HAWAII 96813

May 20, 2004

PETER T. YOUNG  
CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES

DAN DAVIDSON  
DEPUTY DIRECTOR FOR LAND

YVONNE Y. IZU  
DEPUTY DIRECTOR FOR  
THE COMMISSION ON  
WATER RESOURCE MANAGEMENT

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

Mr. Brian T. Nishimura  
Planning Consultant  
101 Aupuni St. Suite 217  
Hilo, Hawaii 96720-4221

Dear Mr. Nishimura:

Subject: Pre-Environmental Assessment Consultation, Mr. And Mrs. James W. McCully,  
Consolidation and Resubdivision of Existing Parcels TMK: (3) 2-9-3: 13 Wailea, South  
Hilo, Island of Hawaii.

We appreciate the opportunity to comment on your subject request. DOFAW does not  
have comments to offer on your proposal and we will not need further consultation on this  
project.

Sincerely yours,

Michael G. Buck  
Administrator

LINDA LINGLE  
GOVERNOR



CHIYOME L. FUKINO, M.D.  
DIRECTOR OF HEALTH

**STATE OF HAWAII**  
**DEPARTMENT OF HEALTH**  
P.O. BOX 916  
HILO, HAWAII 96721-0916

May 26, 2004

Mr. Brian T. Nishimura  
Planning Consultant  
101 Aupuni Street, Suite 217  
Hilo, HI 96720-4221

Subject: Pre-Environmental Assessment Consultation  
Mr. and Mrs. James W. McCully  
Consolidation and Resubdivision of Existing Parcels  
Wailea, South Hilo, Island of Hawaii  
Tax Map Key: (3) 2-9-3:13

The Health Department found no environmental health concerns with regulatory implications in the submittals.

Sincerely,

Aaron A. Ueno  
District Environmental Health Program Chief  
Hawaii District

WORD:EA-McCully.my

LINDA LINGLE  
GOVERNOR



STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
869 PUNCHBOWL STREET  
HONOLULU, HAWAII 96813-5097

RODNEY K. HARAGA  
DIRECTOR

Deputy Directors  
BRUCE Y. MATSUI  
LINDEN H. JOESTING  
BRIAN H. SEKIGUCHI

IN REPLY REFER TO:

STP 8.1214

June 29, 2004

Mr. Brian T. Nishimura  
Planning Consultant  
101 Aupuni Street, Suite 217  
Hilo, Hawaii 96720-4221

Dear Mr. Nishimura:

Subject: Mr. & Mrs. James McCully Subdivision  
Pre-Environmental Assessment Consultation  
TMK: (3) 2-9-3: 13 Wailea, South Hilo, Island of Hawaii

Thank you for the advance notice of the subject proposed consolidation and resubdivision of the affected land in the conservation land use district. We have the following comments at this time:

1. Only one access to and from Hawaii Belt Road will be permitted.
2. We understand that the project being proposed by the applicant may involve a CDUA permit or a land use district/zoning change. Whichever action is taken, an environmental assessment must be prepared. The applicant should include in the environmental assessment an assessment of the traffic impacts attributable to the project and any required mitigation measures, and improvements required at the project's access to our roadway.
3. The applicant will be required to submit plans for construction work on the property, including the access driveway and intersection, for our review and approval.

We appreciate the opportunity to provide our comments.

Very truly yours,

A handwritten signature in black ink, appearing to read "Rodney K. Haraga".

for RODNEY K. HARAGA  
Director of Transportation

c: Christopher J. Yuen, Hawaii Department of Planning  
Land Division, Department of Land and Natural Resources

LINDA LINGLE  
GOVERNOR  
STATE OF HAWAII



STATE OF HAWAII  
DEPARTMENT OF HAWAIIAN HOME LANDS  
P.O. BOX 1879  
HONOLULU, HAWAII 96805

MICAH A. KANE  
CHAIRMAN  
HAWAIIAN HOMES COMMISSION  
BEN HENDERSON  
DEPUTY TO THE CHAIRMAN  
KAULANA H. PARK  
HHL EXECUTIVE ASSISTANT

June 3, 2004

Mr. Brian T. Nishimura  
Planning Consultant  
101 Aupuni Street, Suite 217  
Hilo, Hawaii 96720-4221

Dear Mr. Nishimura:

Subject: Pre-Environmental Assessment Consultation  
Mr. and Mrs. James W. McCully  
Consolidation and Resubdivision of Existing Parcels  
Tax Map Key (3) 2-9-03: 13 Wailea, S. Hilo, Hawaii

Based on the description in your letter of May 20, 2004,  
the Department of Hawaiian Home Lands has no comments, and has  
no need for further consultation on the proposed project.

Aloha and Mahalo,

*for*  
*Danell Gaydon*  
Micah A. Kane, Chairman  
Hawaiian Homes Commission



**STATE OF HAWAII**  
**OFFICE OF HAWAIIAN AFFAIRS**  
711 KAPI'OLANI BOULEVARD, SUITE 500  
HONOLULU, HAWAII 96813

HRD04-1414

May 27, 2004

Brian T. Nishimura, Planning Consultant  
101 Aupuni Street, Suite 217  
Hilo, HI 96720-4221

**Subject: Pre-Assessment Consultation, Mr. and Mrs. James W. McCully,  
Consolidation and Resubdivision of Existing Parcels, Wailea, South Hilo,  
HI, TMK: (3) 2-9-03: Parcel 13**

Dear Mr. Nishimura:

Thank for your letter dated May 20, 2004 regarding the pre-assessment consultation regarding Mr. and Mrs. James W. McCully's proposed consolidation and resubdivision of existing parcels located at Wailea, South Hilo, HI, TMK: (3) 2-9-03: Parcel 13. Your letter requests that the Office of Hawaiian Affairs (OHA) review and comment on the proposed project.

The consultation letter notes that the subject property (4.6 acres) is located "14.7 miles north of the City of Hilo and includes a segment of a former right-of-way as well as three existing lots of record." The pre-assessment consultation letter notes that a Draft Environmental Assessment (EA) will be prepared for the proposed project, and will "require the approval of a Conservation District Use Application (CDUA) from the Department of Land and Natural Resources or a State Land Use Amendment from the Land Use Commission to change the land use designation from Conservation to Agricultural or Rural."

OHA looks forward to your Draft EA for the proposed project, which should clarify the project scope and define the project footprint more clearly. In accordance with HRS 6E-42 and 43 and their protections for prehistoric and burial sites, the Draft EA should include an archaeological inventory survey. Additionally, pursuant to Chapter 343, Hawai'i Revised Statutes (HRS) and HAR §11-200-10, Contents of an environmental assessment, "the proposing agency or approving agency shall prepare any draft or final environmental assessment of each proposed action and determine whether the anticipated

effects constitute a significant effect in the context of chapter 343, HRS, and §11-200-12", the project developers should consult with individuals with expertise on Hawaiian issues in the project area and Island of Hawai'i in general.

A cultural impact statement (CIS), as required by Act 50, Session Laws of 2000 (amending Section 343-2, HRS) should be prepared for the Draft EA. It should identify and describe the cultural resources located within the potentially affected area; assess the impact on these practices; examine alternatives to the proposed action; and propose mitigation measures. As noted above, the CIS should also include consultations with Native Hawaiian practitioners by the developers.

If you have questions or concerns please contact Matthew Myers, Policy Advocate at 594-1945 or [matthewm@oha.org](mailto:matthewm@oha.org).

'O wau iho nō,

A handwritten signature in black ink, appearing to read 'Clyde W. Nāmu'o', written in a cursive style.

Clyde W. Nāmu'o  
Administrator



STATE OF HAWAII  
DEPARTMENT OF EDUCATION  
P.O. BOX 2360  
HONOLULU, HAWAII 96804

OFFICE OF THE SUPERINTENDENT

June 14, 2004

Mr. Brian T. Nishimura, Planning Consultant  
101 Aupuni Street, Room 217  
Hilo, Hawaii 96720-4221

Dear Mr. Nishimura:

Subject: Pre-Environmental Assessment Consultation for  
the McCully Consolidation and Re-subdivision  
Wailea, South Hilo, Island of Hawaii TMK: 2-9-3: 13

The Department of Education (DOE) has reviewed your request for comment on the consolidation and reconfiguration of three different lots including a railroad right-of-way. The total area is 4.6 acres. The proposal is to reconfigure the three lots. The expected density is no more than one single-family house per lot.

The DOE only asks for a fair-share contribution from projects with 50 or more units. Therefore, the DOE will not be asking for a fair-share school condition.

Should you have any questions, please call Rae M. Loui, Assistant Superintendent of the Office of Business Services, at 586-3444 or Heidi Meeker of the Facilities and Support Services Branch at 733-4862.

Very truly yours,

A handwritten signature in cursive script that reads "Patricia Hamamoto".

Patricia Hamamoto  
Superintendent

PH:jmb

c: R. Loui, OBS

LINDA LINGLE  
GOVERNOR OF HAWAII



**STATE OF HAWAII**  
**DEPARTMENT OF LAND AND NATURAL RESOURCES**  
**OFFICE OF CONSERVATION AND COASTAL LANDS**

POST OFFICE BOX 621  
HONOLULU, HAWAII 96809

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

DAN DAVIDSON  
DEPUTY DIRECTOR - LAND

YVONNE Y. IZU  
DEPUTY DIRECTOR - WATER

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

REF:OCCL:DH

Correspondence: HA-04-156

JUN 15 2004

Brian Nishimura  
101 Aupuni Street, Suite 217  
Hilo, Hawaii 96720-4221

Dear Mr. Nishimura,

**SUBJECT:** Proposed Consolidation and Re-subdivision of Subject Parcel, Located at Hakalau, South Hilo, Island of Hawaii, Tax Map Key: (3) 2-9-003: Parcel 13 (1.018 acres), Parcel 29 (2.829 acres), and Parcel 60 (0.763 acres)

The Department is in receipt of your attachments and letter, dated May 20, 2004, regarding your request to consolidate and re-subdivide three (3) subject parcels (identified as Tax Map Key (TMK): (3) 2-9-003:013, 29, 60), which is located in the State Land Use Conservation District, Resource subzone.

According to your information, you note that your client, James McCully, is proposing to consolidate and re-subdivide three (3) lots into three (3) lots, within the Conservation District, situated along the shoreline in Hakalau, South Hilo, Island of Hawaii, of the Conservation District on the subject parcel.

You note that the proposed reconsolidation and subdivision plan will not increase the density of the lots within the Conservation District, but will improve lot configuration. You are seeking the Department's concurrence that the proposed consolidation and re-subdivision of the subject parcel is allowed under the rules and regulations of the Conservation District.

Departmental notes information received from the Hawaii County, Planning Department indicate that currently subject parcel TMK: (3) 2-9-003 - Parcel 13 (1.018 acres), Parcel 29 (2.829 acres), and Parcel 60 (0.763 acres) are three separate legal lots of record. The Department notes consolidation and subdivision is an identified land use under Hawaii Administrative Rules (HAR), Chapter 13-5, Section 13-5-22, identified land uses in the Protective subzone, P-11, SUBDIVISION OR CONSOLIDATION OF PROPERTY; C-1 notes "consolidation and resubdivision into an equal number of lots that does not result in increased density;" and C-2 notes, "consolidation of property into an lesser number of legal lots of record currently existing and approved, which furthers the objective of the subzone. Consolidation followed by re-subdivision shall constitute a

subdivision." This is a Departmental Permit. When submitting your CDUA, please also include information regarding the history of the three legal lots of record.

Should you have any questions regarding this letter please call Dawn Hegger of the Office of Conservation and Coastal Lands at 587-0380.

Aloha

A handwritten signature in black ink, appearing to read "Samuel J. Lemmo". The signature is written in a cursive style with a large initial "S".

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

cc: Hawaii Land Agent  
County of Hawaii  
Planning Department



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

LINDA LINGLE  
GOVERNOR  
THEODORE E. LIU  
DIRECTOR  
STEVE BRETSCHNEIDER  
DEPUTY DIRECTOR  
MARY LOU KOBAYASHI  
ADMINISTRATOR  
OFFICE OF PLANNING

**OFFICE OF PLANNING**

235 South Beretania Street, 6th Floor, Honolulu, Hawaii 96813  
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

Telephone: (808) 587-2846  
Fax: (808) 587-2824

Ref. No. P-10506

June 24, 2004

Mr. Brian Nishimura  
Planning Consultant  
101 Aupuni Street, Suite 217  
Hilo, Hawaii 96813

Dear Mr. Nishimura:

Subject: Pre-Environmental Assessment Consultation  
Mr. and Mrs. James W. McCully  
Consolidation and Resubdivision of Existing Parcels  
TMK: (3) 2-9-3: 13  
Wailea, South Hilo, Hawaii

Thank you for your letter dated May 26, 2004, requesting our comments on a proposal to consolidate and resubdivide three existing lots with a former railroad right-of-way within the State Conservation District.

It is our understanding that your client is contemplating a State land use boundary amendment to the Agricultural or Rural District.

The natural resources in the area should be documented as well as existing uses along the coast. The proposed use of the three resubdivided lots should also be disclosed to allow meaningful comments.

Should you have any questions, please call the Land Use Division at 587-2842.

Sincerely,

Mary Lou Kobayashi  
Administrator  
Office of Planning

c: Anthony Ching, LUC  
Peter Young, DLNR

Harry Kim  
Mayor



Bruce C. McClure  
Director

Ronald K. Takahashi  
Deputy Director

**County of Hawaii**  
**DEPARTMENT OF PUBLIC WORKS**

Aupuni Center  
101 Pauahi Street, Suite 7 · Hilo, Hawaii 96720-4224  
(808) 961-8321 · Fax (808) 961-8630

June 18, 2004

Brian T. Nishimura, Planning Consultant  
101 Aupuni Street, Suite 217  
Hilo, Hawaii 96720-4221

**SUBJECT: PRE-ENVIRONMENTAL ASSESSMENT CONSULTATION**

Owners: Mr. & Mrs. James W. McCully  
Consolidation and Resubdivision of Existing Parcels  
Location: Wailea, South Hilo, Hawaii  
TMK: 2-9-03: 013, 029, & 060

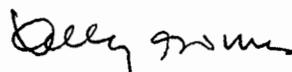
We have reviewed the subject assessment forwarded by your letter dated May 20, 2004 and have the following comments.

The subject parcels are in an area that is not mapped by the Federal Emergency Management Agency (FEMA) and is designated as "minimal tsunami inundation."

The proposed consolidation and resubdivision shall comply with Chapter 23 of the Hawaii County Code.

Further notification or consultation on the proposed project will not be necessary.

Questions may be referred to Mr. Kelly Gomes of the Engineering Division at 961-8327.

  
for GALEN M. KUBA, Division Chief  
Engineering Division

KG

Harry Kim  
Mayor



Barbara Bell  
Director

Nelson Ho  
Deputy Director

**County of Hawaii**  
**DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**  
25 Aupuni Street, Room 210 • Hilo, Hawaii 96720-4252  
(808) 961-8083 • Fax (808) 961-8086

June 22, 2004

Mr. Brian T. Nishimura  
Planning Consultant  
101 Aupuni Street, Suite 217  
Hilo, HI 96720-42212

Re: Pre-Environmental Assessment Consultation  
Mr. and Mrs. James W. McCully  
Consolidation and Resubdivision of Existing Parcels  
TMK: 2-9-3:13 Wailea, South Hilo

We have reviewed your letter of May 20, 2004 and have no comments to offer.

Thank you for the opportunity to review the Pre-Environmental Assessment.

Barbara Bell  
DIRECTOR

cc: SWD, WWD

5683

Harry Kim  
Mayor



Darryl J. Oliveira  
Fire Chief

Desmond K. Wery  
Deputy Fire Chief

## County of Hawai'i

### FIRE DEPARTMENT

25 Aupuni Street • Suite 103 • Hilo, Hawai'i 96720  
(808) 961-8297 • Fax (808) 961-8296

May 25, 2004

Mr. Brian T. Nishimura  
Planning Consultant  
101 Aupuni Street, Suite 217  
Hilo, HI 96720-4221

Dear Mr. Nishimura:

RE: PRE-ENVIRONMENTAL ASSESSMENT CONSULTATION  
MR. AND MRS. JAMES W. MC CULLY  
CONSOLIDATION AND RESUBDIVISION OF EXISTING PARCELS  
TAX MAP KEY (3) 2-9-3: 13 WAILEA, SOUTH HILO, ISLAND OF HAWAII

Fire apparatus access roads shall be in accordance with UFC Section 10.207:

#### "Fire Apparatus Access Roads

"Sec. 10.207. (a) **General.** Fire apparatus access roads shall be provided and maintained in accordance with the provisions of this section.

"(b) **Where Required.** Fire apparatus access roads shall be required for every building hereafter constructed when any portion of an exterior wall of the first story is located more than 150 feet from fire department vehicle access as measured by an unobstructed route around the exterior of the building.

"**EXCEPTIONS:** 1. When buildings are completely protected with an approved automatic fire sprinkler system, the provisions of this section may be modified.

"2. When access roadways cannot be installed due to topography, waterways, nonnegotiable grades or other similar conditions, the chief may require additional fire protection as specified in Section 10.301 (b).

"3. When there are not more than two Group R, Division 3 or Group M occupancies, the requirements of this section may be modified, provided, in the opinion of the chief, fire-fighting or rescue operations would not be impaired.



"More than one fire apparatus road may be required when it is determined by the chief that access by a single road may be impaired by vehicle congestion, condition of terrain, climatic conditions or other factors that could limit access.

"For high-piled combustible storage, see Section 81.109.

"(c) **Width.** The unobstructed width of a fire apparatus access road shall meet the requirements of the appropriate county jurisdiction.

"(d) **Vertical Clearance.** Fire apparatus access roads shall have an unobstructed vertical clearance of not less than 13 feet 6 inches.

**"EXCEPTION:** Upon approval vertical clearance may be reduced, provided such reduction does not impair access by fire apparatus and approved signs are installed and maintained indicating the established vertical clearance.

"(e) **Permissible Modifications.** Vertical clearances or widths required by this section may be increased when, in the opinion of the chief, vertical clearances or widths are not adequate to provide fire apparatus access.

"(f) **Surface.** Fire apparatus access roads shall be designed and maintained to support the imposed loads of fire apparatus and shall be provided with a surface so as to provide all-weather driving capabilities." (20 tons)

"(g) **Turning Radius.** The turning radius of a fire apparatus access road shall be as approved by the chief." (45 feet)

"(h) **Turnarounds.** All dead-end fire apparatus access roads in excess of 150 feet in length shall be provided with approved provisions for the turning around of fire apparatus.

"(i) **Bridges.** When a bridge is required to be used as access under this section, it shall be constructed and maintained in accordance with the applicable sections of the Building Code and using designed live loading sufficient to carry the imposed loads of fire apparatus.

"(j) **Grade.** The gradient for a fire apparatus access road shall not exceed the maximum approved by the chief." (15%)

"(k) **Obstruction.** The required width of any fire apparatus access road shall not be obstructed in any manner, including parking of vehicles. Minimum required widths and clearances established under this section shall be maintained at all times.

"(l) **Signs.** When required by the fire chief, approved signs or other approved notices shall be provided and maintained for fire apparatus access roads to identify such roads and prohibit the obstruction thereof or both."

Mr. Brian T. Nishimura  
Page 3  
May 25, 2004

Water supply shall be in accordance with UFC Section 10.301:

"(c) **Water Supply.** An approved water supply capable of supplying required fire flow for fire protection shall be provided to all premises upon which buildings or portions of buildings are hereafter constructed, in accordance with the respective county water requirements. There shall be provided, when required by the chief, on-site fire hydrants and mains capable of supplying the required fire flow.

"Water supply may consist of reservoirs, pressure tanks, elevated tanks, water mains or other fixed systems capable of providing the required fire flow.

"The location, number and type of fire hydrants connected to a water supply capable of delivering the required fire flow shall be protected as set forth by the respective county water requirements. All hydrants shall be accessible to the fire department apparatus by roadways meeting the requirements of Section 10.207."

Sincerely,

  
DARRYL OLIVEIRA  
Fire Chief

NA:lk

Harry Kim  
Mayor



Christopher J. Yuen  
Director

Roy R. Takemoto  
Deputy Director

## County of Hawai'i

### PLANNING DEPARTMENT

101 Pauahi Street, Suite 3 • Hilo, Hawaii 96720-3043  
(808) 961-8288 • Fax (808) 961-8742

June 14, 2004

Mr. Brian Nishimura  
Planning Consultant  
101 Aupuni Street, Suite 217  
Hilo, HI 96720

Dear Mr. Nishimura:

**SUBJECT: Pre-Environmental Assessment Consultation**  
**Applicant: Mr. & Mrs. James W. McCully**  
**Project: Consolidation and Resubdivision of Existing Parcels and the Railroad Right-of-Ways**  
**Tax Map Key: 2-9-3:13, 29 and 60**

This is to acknowledge receipt of your May 20, 2004 letter requesting our comments on the consolidation and resubdivision of three existing lots with the former railroad right-of-ways. The proposed consolidation and resubdivision will not increase the density of the property and will improve lot configuration for future use.

Although your letter referenced only Parcel 13, tax map key numbers were assigned to two other lots which were determined to be pre-existing lots of record by our Department. Therefore, the tax map key number should be revised to include Parcels 29 and 60.

In reference to your request for comments, we have the following to offer:

1. The total area (parcel and the contiguous railroad right-of-way) consists of:
  - a. Parcel 13 - 0.662 acre + 0.356 acre = 1.018 acres
  - b. Parcel 29 - 2.192 acres + 0.637 acre = 2.829 acres
  - c. Parcel 60 - 0.544 acre + 0.219 acre = 0.763 acre

*Hawai'i County is an equal opportunity provider and employer.*

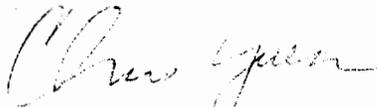
Mr. Brian Nishimura  
Planning Consultant  
Page 2  
June 14, 2004

2. The General Plan Land Use Pattern Allocation Guide Map (LUPAG) designation for the subject area is Open.
3. According to Boundary Interpretation No. 92 48, the area mauka of the railroad right-of ways is designated Agricultural. The railroad right-of-ways and area makai is designated Conservation.
4. County zoning for these areas is Agricultural (A-20a).
5. All three parcels and the railroad right-of-ways are located within the County's Special Management Area (SMA). A Special Management Area Use Permit Assessment Application for the proposed consolidation and resubdivision is required to be submitted for our review. For your information, however, Planning Commission Rule 9-4(10)(b)(xiii) states that "development" does not include *"Subdivision of a parcel of land into four or fewer parcels when no associated construction activities are proposed, provided that any such land which is so subdivided shall not thereafter qualify for this exception with respect to any subsequent subdivision of any of the resulting parcels."*

Please provide a copy of the draft Environmental Assessment for our review and file.

If you have questions, please feel free to contact Esther Imamura or Larry Brown at 961-8288.

Sincerely,



CHRISTOPHER J. YUEN  
Planning Director

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**APPENDIX B**  
**BOTANICAL SURVEY**

**BOTANICAL SURVEY REPORT FOR THE MCCULLY PROJECT SITE**

**WAILEA, HAWAII**

**FOR**

**BRIAN T. NISHIMURA  
NISHIMURA PLANNING  
101 AUPUNI STREET, SUITE 217  
HILO, HAWAII 96720**

**BY**

**EVANGELINE J. FUNK, PH.D.  
BOTANICAL CONSULTANTS  
HONOLULU, HAWAII 96815**

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## INTRODUCTION AND METHODS

The McCully Project Site is located on the eastern coast of the Island of Hawaii approximately seventeen miles north of the City of Hilo in the Wailea, Hawaii. On June 10, 2004 a botanical survey of this four and one tenth acre site, was carried out by a two-person team. The walk through method of data collection was used and all parts of the site were surveyed. The results of the survey are presented below.

## RESULTS

Two vegetation types are discernable on this property. By far the largest of which is Open Mowed Lawn. This broad rolling area is vegetated by a mix of introduced grasses such as Hilo grass (*Paspalum conjugatum* Bergius), California grass (*Brachiaria mutica* (Frossk.) Stapf, beach wiregrass (*Eleusine indica* (L.) Gaertn., yellow foxtail (*Setaria gracilis* Kunth) and Digitaria sp. In the un-mowed fringe of the lawn area can be found two types of white Thunbergia (*Thunbergia fragrans* Roxb.) and Bengal trumpet (*Thunbergia grandiflora* Roxb.), wood rose vine (*Merremia tuberosa* (L.) Rendle), sugar cane (*Saccharum officinarum* L.), various sedges including Nut grass (*Cyperus rotundus* L.), Kili'o'pu (*Kyllinga brevifolia* Rottb.), and *Kyllinga nemoralis* (Dandy ex Hutchinson & Dalziel). There is also Honohono (*Commelina diffusa* N. L. Burm.), some vegetative ginger, Niruri (*Phyllanthus debilis* Klein & Willd.), and *Polygala paniculata* L.

The seaward or eastern edge of the Open Mowed Lawn area is marked by a scattered planting of green hala trees (*Pandanus tectorius* S. Parkinson ex Z) and a variety of hala trees with green and yellow striped leaves (*P. veitchii* Hort {Neal page 53}. Beyond the hala trees are mostly introduced ironwood trees (*Casuarina equisetifolia* L.).

A variety of landscape plantings are also found in the Open Mowed Lawn area. These include several species of palm trees, some bamboos, some Kukui trees, golden pothos and banana type plantings.

The second vegetation type found on the site was Stream Bank Vegetation. Puahanui Stream forms the northern boundary of the McCully Project Site. The banks of Puahanui Stream are very steep and the predominant vegetation is large, introduced trees such as African tulip (*Spathodea campanulata* P. Beauv.), ironwood, coconut (*Cocos nucifera* L.), Hala trees, some banana trees golden pothos (*Epipremnum pinnatum* (L.) Engl.), oak leaf fern (*Dryopteris dentata* (Forsk.) C. Chr.) and Sword fern (*Nephrolepis exaltata* (L.) Schott. are common.

## CONCLUSIONS

Aside from the Kukui and hala trees, which may be early Polynesian introductions, the only native plants found on this site were some popolo berry bushes (*Solanum americanum* Mill). Otherwise, the vegetation of this site is all introduced plants and is found in many places in the Hawaiian Islands and will quickly regenerate if it is disturbed.

## 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.

## BIBLIOGRAPHY

Haselwood, E. L. and G. G. Motter. (eds.) 1976. Handbook of Hawaiian Weeds. Lyon Arboretum Association.

Neal, M. C. 1965. In Gardens of Hawaii. Bishop Museum Special Publication #65. Bis. Mus. Press.

Wagner, W. L., D. R. Herbst, & S. H. Sohmer. 1990. Manual of the Flowering Plants of Hawaii. Bishop Museum Special Publication #83. Univ. Of Hawaii Press. Vols 1 & 2.

## SPECIES LIST OF THE PLANTS FOUND ON THE PROPOSED MCCULLY PROJECT SITE, WAILEA, HAWAII

The plant list presented here is a combination of the results of our survey conducted in June, 2004 and an earlier survey conducted in 1993 by Bobby Camara.

The plant families in the species list have been alphabetically arranged within three groups, Ferns and Fern Allies, 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 presented here is the result of our survey conducted in June, 2004 and an earlier survey conducted in 1993 by Bobby Camara. It reflects the vegetative composition of the flora during a single season. Minor changes to 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
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### FERNS AND FERN ALLIES

#### POLYPODIACEAE - Common Fern Family

* <i>Dryopteris dentata</i> (Forssk.) C. Chr.	Oak leaf fern	Uncommon
* <i>Nephrolepis exaltata</i> (L.) Schott.	Sword fern	Locally abundant

### MONOCOTYLEDONS

#### AGAVACEAE – Agave Family

<i>Cordyline fruticosa</i> (L.) A. Chev.	Ti	Occasional
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#### ARACEAE – Aroid Family

* <i>Epipremnum pinnatum</i> (L.) Engle.	Golden pothos	Uncommon
* <i>Xanthosoma roseum</i> Schott.	Xanthosoma	Occasional

#### ARECACEAE - Palm Family

* <i>Archontophoenix alexandrae</i> H.A. Wendl.&Drude	King palm	Locally abundant
* <i>Cocos nucifera</i> L.	Coconut palm	Uncommon
* <i>Phoenix</i> sp.	Phoenix palm	Locally abundant
* <i>Pritchardia</i> sp.	Fan palm	Locally abundant

#### COMMELINACEAE - Spiderwort Family

* <i>Commelina diffusa</i> N. L. Burm.	Honohono	Locally abundant
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#### CYPERACEAE - Sedge Family

* <i>Cyperus rotundus</i> L.	Nut grass	Occasional
* <i>Kyllinga brevifolia</i> Rottb.	Kili'opu	Locally abundant
* <i>Kyllinga nemoralis</i> Dandy ex Hutchinson & dalziei		Locally abundant

#### MUSACEAE – Banana Family

* <i>Musa x paradisiaca</i> L.	Banana	Common
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#### PANDANACEAE – Pandanus Family

<i>Pandanus tectorius</i> S. Parkinson ex Z	Hala	Common
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Scientific Name	Common Name	Abundance
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POACEAE - Grass Family

* <i>Bambusa</i> sp.	Dwarf bamboo	Locally abundant
* <i>Bambusa vulgaris</i> var. <i>aureo-variegata</i> Hort.	Golden bamboo	Locally abundant
* <i>Brachiaria mutica</i> (Forssk.) Stapf.	California grass	Common
* <i>Eleusine indica</i> (L.) Gaertn.	Wiregrass	Locally abundant
* <i>Digitaria ciliaris</i> (Retz.) Koeler	Henry's crabgrass	Common
* <i>Paspalum conjugatum</i> Bergius	Hilo grass	Locally abundant
* <i>Saccharum officinarum</i> L.	Sugar	Occasional

ZINGIBERACEAE – Ginger Family

* <i>Hedychium flavescens</i> Ker-Gawel..	Yellow ginger	Occasional
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DICOTYLEDONES

ACANTHACEAE – Acanthus Family

* <i>Hemigraphis alternata</i> (N. L. Burm.)	Metal-leaf	Occasional
* <i>Justicia betonica</i> L.	White shrimp plant.	Occasional
* <i>Thunbergia fragrans</i> Roxb.	White thunbergia	Occasional
* <i>Thunbergia grandiflora</i> Roxb.	Bengal trumpet	Occasional

APIACEAE – parsley Family

* <i>Centella asiatica</i> (L.) Urb.	Fir-leafed celery	Locally abundant
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ARALIACEAE – Ginseng Family

* <i>Schefflera actinophylla</i> (Endl.) Harms	Octopus tree	Uncommon
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ASTERACEAE – Sunflower Family

* <i>Ageratum conyzoides</i> L.	Maile hohono	Occasional
* <i>Emilia fosbergii</i> Nicolson	Pualele	Occasional
* <i>Coryza canadensis</i> (L.) Cronq.	Horseweed	Uncommon
* <i>Pluchea symphytifolia</i> (Mill.) Gillis	Sourbush	Uncommon

BEGONIACEAE – Begonia Family

* <i>Begonia</i> sp.		
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<u>Scientific Name</u>	<u>Common Name</u>	<u>Abundance</u>
<b>BIGNONIACEAE – Bignonia Family</b>		
* <i>Spathodea campanulata</i> P. Beauv.	African tulip tree	Occasional
<b>CARICACEAE – Papaya Family</b>		
* <i>Carica papaya</i> L.	Papaya	Occasional
<b>CASUARINACEAE – She-oak Family</b>		
* <i>Casuarina equisetifolia</i> L.	Ironwood	Common
<b>CONVOLVULACEAE – Morning glory Family</b>		
* <i>Ipomoea alba</i> L.	Moon flower	Occasional
* <i>Merremia tuberosa</i> (L.) Rendle	Wood rose	Uncommon
<b>EUPHORBIACEAE – Spurge Family</b>		
* <i>Aleurites moluccana</i> (L.) Willd	Kukui	Locally abundant
* <i>Chamaesyce hirta</i> (L.) Millsp.	Hairy spurge	Occasional
* <i>Phyllanthus debilis</i> Klein ex Willd.	Niruri	Occasional
<b>FABACEAE – Bean Family</b>		
* <i>Chamaecrista nictitans</i> (L.) Moench	Partridge pea	Occasional
* <i>Crotalaria incana</i> L.	Fuzzy rattlepod	Occasional
* <i>Crotalaria</i> sp.		Occasional
* <i>Desmodium triflorum</i> (L.) DC		Occasional
* <i>Indigofera suffruticosa</i> Mill.	Indigo	Occasional
* <i>Mimosa pudica</i> L.	Sensitive plant	Occasional
<b>GOODENIACE – Goodenia – Family</b>		
<i>Scaevola sericea</i> Vahl.	Naupaka kuhakai	Occasional
<b>LAURACEAE – Laurel Family</b>		
* <i>Persea americana</i> Mill.	Avocado	Uncommon
<b>MALVACEAE – Mallow Family</b>		
* <i>Malvaviscus penduliflorus</i> DC	Turk's cap	Uncommon

<u>Scientific Name</u>	<u>Common Name</u>	<u>Abundance</u>
<b>MORACEAE – Fig Family</b>		
* <i>Ficus microcarpa</i> L. fil.	Chinese banyan	Occasional
<b>MYRSINACEAE –Myrsine Family</b>		
* <i>Ardisia crenata</i> Sims	Hilo holly	Occasional
<b>MYRTACEAE – Myrtle Family</b>		
* <i>Eucalyptus robusta</i> Sm.	Swamp mahogany	Occasional
* <i>Psidium guajava</i> L.	Common guava	Uncommon
<b>OXALIDACEAE – Wood sorrel Family</b>		
<i>Oxalis corniculata</i> L.	Yellow wood sorrel	Locally abundant
* <i>Oxalis corymbosa</i> DC	Pink wood sorrel	Uncommon
<b>PASSIFLORACEAE – Passion Flower Family</b>		
* <i>Passiflora edulis</i> Sims	Passion fruit	Uncommon
<b>POLYGALACEAE – Milkwort Family</b>		
* <i>Polygala paniculata</i> L.		Uncommon
<b>ROSACEAE - Rose Family</b>		
* <i>Rubus rosifolius</i> Sm.	Thimbleberry	Occasional
<b>RUBIACEAE – Coffee Family</b>		
<i>Morinda citrifolia</i> L.	Noni	Uncommon
<b>SCROPHULARIACEAE – Figwort Family</b>		
* <i>Lindernia crustacea</i> (L.) F.v. Muell.		Locally abundant
<b>SOLANACEAE – Nightshade Family</b>		
<i>Solanum americanum</i> Mill.	popolo	Occasional



**APPENDIX C**  
**ARCHAEOLOGICAL AND LIMITED CULTURAL ASSESSMENT**

Archaeological Inventory Survey and  
Limited Cultural Assessment of TMKs:  
3-2-9-03:13, 29, and 60

Wailea Ahupua'a  
South Hilo District  
Island of Hawai'i



PREPARED BY:

Michael Desilets, M.A.  
Amy Kasberg, B.A.  
and  
Robert B. Rechtman, Ph.D.

PREPARED FOR:

Mike Shewmaker  
McCully Works, Inc.  
40 Kamehameha Ave.  
Hilo, HI 96720

August 2004

---

**RECHTMAN CONSULTING, LLC**

HC 1 Box 4149 Kea'au, Hawai'i 96749  
phone: (808) 966-7636 toll-free fax: (800)406-2665  
e-mail: bob@rechtmanconsulting.com  
ARCHAEOLOGICAL, CULTURAL, AND HISTORICAL STUDIES

Archaeological Inventory Survey and  
Limited Cultural Assessment of  
TMK: 3-2-9-03:13, 29, and 60

Wailea Ahupua'a  
South Hilo District  
Island of Hawai'i

**RC**  
RECHTMAN CONSULTING

## EXECUTIVE SUMMARY

At the request of Mike Shewmaker, on behalf of McCully Works, Inc., Rechtman Consulting, LLC conducted an archaeological inventory survey and limited cultural assessment of three land parcels (TMK 3-2-9-03: 13, 29, 60) in Wailea *ahupua'a*, South Hilo District, Island of Hawai'i. The project area begins approximately 112 feet east (*makai*) of Hawaii Belt Road in Wailea and extend to the shoreline cliffs. The parcels incorporate a former railroad corridor along their western side. The project area is located squarely in what was traditionally known as *Hilo-pali-Kū* or 'Hilo of the upright cliffs.' The name is apt for such a treacherous coastline; sheer cliffs run from the Wailuku River to Waipi'o and beyond, broken only by a string of relatively narrow gulches pouring down from the slopes of Mauna Kea. Historic maps indicate that a railroad right-of-way once crossed the western portion of the project area. A search of the records on file with DLNR-SHPD revealed that the project area had not been previously surveyed for archaeological sites. Amy Kasberg, B.A., Michael Desilets, M.A., and Robert Rechtman, Ph.D. conducted fieldwork for the current project on May 17, 2004. Project area boundaries were clearly identifiable in the field, and the entire area was systematically and intensively examined using parallel north to south trending transects. Visibility was excellent across most of the project area. On site, SIHP Site 50-10-26-24212, was recorded during the field survey. This site includes two Historic Period railroad features: a railway grade section and a trestle abutment. Site 24212 is considered significant under Criteria D for the information it has yielded regarding early twentieth century sugar cane transportation infrastructure; however, as the current inventory survey project recorded Site 24212 in detail, no further work is recommended.

The fieldwork produced no evidence of traditional Hawaiian artifacts or features. Also, there is no evidence that the area is currently being accessed for the exercise of traditional and customary practices associated with any traditional cultural properties or resources. As part of the current study, the Office of Hawaiian Affairs and other organizations and individuals were contacted in an effort to obtain information about any potential traditional cultural properties and associated practices that might be present or have occurred in this portion of Wailea Ahupua'a. None of the organizations/individuals contacted had any information relative to the existence of traditional cultural properties in the immediate vicinity of the current project area; nor did they provide any information indicating past or current use of the area for traditional and customary practices.

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# INTRODUCTION

At the request of Mike Shewmaker, on behalf of McCully Works, Inc., Rechtman Consulting, LLC conducted an archaeological inventory survey and limited cultural assessment of three land parcels (TMK 3-2-9-03: 13, 29, 60) in Wailea *ahupua'a*, South Hilo District, Island of Hawai'i (Figures 1 and 2). The purpose of this study is to document the presence of any historic properties (including traditional cultural properties and associated practices) that might exist within the 4.5-acre project area and assess the significance of any such resources. This report is intended to fulfill the requirements of the County of Hawai'i Planning Department and the Department of Land and Natural Resources-State Historic Preservation Division (DLNR-SHPD) with respect to permit approval for a proposed State land use boundary amendment.

In the Hawai'i Administrative Rules (HAR 13§13-275-2) that would govern the regulatory activities of the State Historic Preservation Division, a definition of historic property is provided.

“Historic property” means any building, structure, object, district, area, or site, including *heiau* and underwater site, which is over 50 years old.

This definition should not be confused with the definition of Historic Property contained in the Federal legislation and its implementing regulation (Section 106 of the National Historic Preservation Act and 36 CFR 800, respectively), where Historic Property is defined as a resource “listed or eligible for listing in the National Register of Historic Places.” The difference being that in the state-used definition ALL buildings, structures, objects, districts, areas, or sites older than fifty years are historic properties and need to be assessed as such. In the Federally used definition, ONLY those buildings, structures, objects, districts, areas, or sites that are determined to be significant are considered Historic Properties.

The criteria for the evaluation of significance contained in the Hawai'i Administrative Rules generally follows that which was promulgated by the Federal government, with the addition of Significance Criterion E, which is not contained in the Federal evaluation criteria. To be significant the resource must possess integrity of location, design, setting, materials, workmanship, feeling, and association and meet one or more of the following criteria:

- A Be associated with events that have made an important contribution to the broad patterns of our history;
- B Be associated with the lives of persons important in our past;
- C Embody the distinctive characteristics of a type, period, or method of construction; represent the work of a master; or possess high artistic value;
- D Have yielded, or is likely to yield, information important for research on prehistory or history;
- E Have an important value to the native Hawaiian people or to another ethnic group of the state due to associations with cultural practices once carried out, or still carried out, at the property or due to associations with traditional beliefs, events or oral accounts—these associations being important to the group's history and cultural identity.



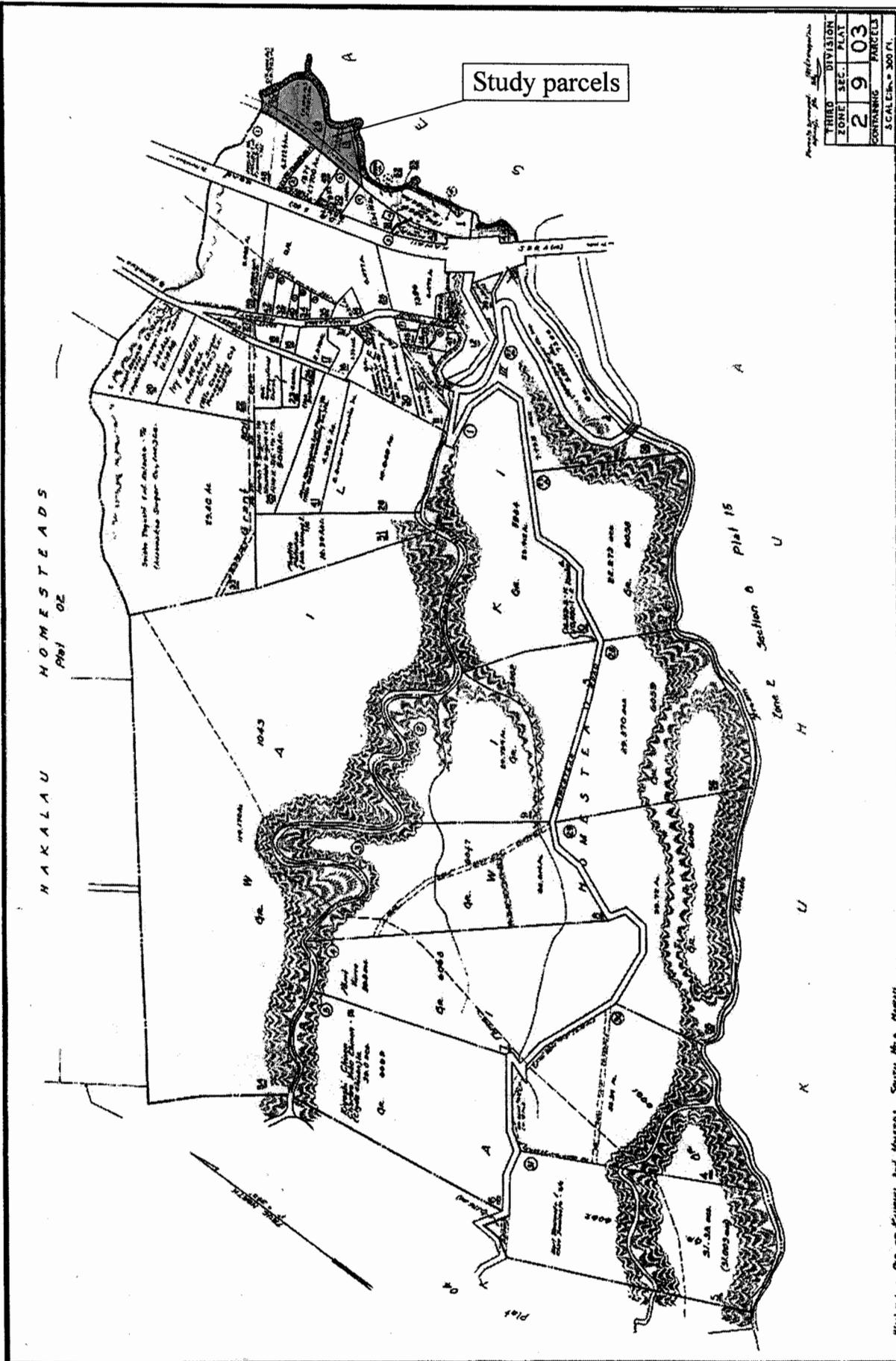


Figure 2. Tax Map Key 3-2-9-03 showing study parcels 13, 29, and 60.

A working definition of Traditional Cultural Property is as follows:

“Traditional cultural property” means any historic property associated with the traditional practices and beliefs of an ethnic community or members of that community for more than fifty years. These traditions shall be founded in an ethnic community’s history and contribute to maintaining the ethnic community’s cultural identity. Traditional associations are those demonstrating a continuity of practice or belief until present or those documented in historical source materials, or both.

The origin of the concept of Traditional Cultural Property is found in National Register Bulletin 38 published by the U.S. Department of Interior-National Park Service. “Traditional” as it is used, implies a time depth of at least 50 years, and a generalized mode of transmission of information from one generation to the next, either orally or by act. “Cultural” refers to the beliefs, practices, life-ways, and social institutions of a given community. The use of the term “Property” defines this category of resource as an identifiable place. Traditional Cultural Properties are not intangible, they must have some kind of boundary; and are subject to the same kind of evaluation as any other historic resource, with one very important exception. By definition, the significance of Traditional Cultural Properties should be determined by the community that values them.

## PROJECT AREA DESCRIPTION

The project area consists of three adjoining parcels (TMK 3-2-9-03: 13, 29, and 60) that begin approximately 112 feet east (*maka'i*) of Hawaii Belt Road in Wailea and extend to the shoreline cliffs. The parcels incorporate a former railroad corridor along their western side (see Figure 2). The nearest major drainage is Kolekole Gulch, which is only a few hundred meters to the south. A smaller stream named Ka’ahakini is also nearby and ultimately feeds into Kolekole Gulch near its mouth. An even smaller, unnamed gulch is just north of Ka’ahakini and forms the northern boundary of the project area. Shoreline cliffs form the southern and eastern boundaries. Elevation within the project area ranges from 100 to 140 feet above sea level.

The project area is predominantly a mowed and highly maintained grass lawn with various landscaped vegetation along its perimeter (Figures 3, 4, and 5). Vegetation includes African tulip (*Spathodea campanulata* Beauv.), sword fern (*Nephrolepis multiflora*), maidenhair fern (*Adiantum raddianum*), ironwood (*Casuarina equisetifolia*), guava (*Psidium guajava*), hala (*Pandanus odoratissimus*), autograph tree (*Clusia rosea*), banana (*Musa spp.*), papaya (*Carica papaya L.*), liliko’i (*Passiflora spp.*), ti (*Cordyline fruticosa (L.) A. Chev.*), blue gum eucalyptus (*Eucalyptus globus*), ‘ape (*Alocasia macrorrhiza*, *Xanthosoma robustum*), bamboo (*Bambus vulgaris var. aureo-variegata Hort.*) and various types of ginger (Zingiberaceae), palms (Palmae) and grasses (Poaceae). The project area was sectioned off into thirds by two stands of vegetation that ran roughly east to west. The northern stand consists of bamboo and the southern of palms.

Terrain in the project area is smooth and slopes down to the east. A terrace is present in places along the western portion, and appears to be associated with past (prior to the current land owner) landfilling and slope altering activities. Soils within the project area are classified as ‘Hilo silty clay loam, 0 to 10 percent slopes’ (Sato et al. 1973:17). This soil type falls within the Hilo Series, which is described as “well-drained silty clay loams,”

These soils formed in a series of volcanic ash layers that give them a banded appearance. They are gently sloping to steep soils on uplands at an elevation ranging from near sea level to 800 feet. They receive from 120 to 180 inches of rainfall annually, and their mean annual soil temperature is between 72° and 74° F. The natural vegetation consists of hilograss, californiagrass, guava, ohia, and tree fern. (Sato et al. 1973:17)



Figure 3. Central portion of project area, view to the south.



Figure 4. Northern portion of project area, view to the east.



Figure 5. Southern portion of project area, view to the east/southeast

## BACKGROUND

This section of the report presents several classes of background information relevant to the project area and its surrounding region. Current understanding of traditional Hawaiian land-use is outlined along with an explanation of Historic Period modifications and exploitation. A historical overview of the Hilo Railroad-Hawaii Consolidated Railway is also presented. Prior archaeological studies conducted in and around the project area are then reviewed, followed by a discussion of relevant Land Commission Awards and Grants. The background information is then used in the following section to develop a set of expectations for the current survey.

### *Hilo-pali-Kū*

The project area is located squarely in what was traditionally known as *Hilo-pali-Kū* or 'Hilo of the upright cliffs.' The name is apt for such a treacherous coastline. Sheer cliffs run from the Wailuku River to Waipi'o and beyond, broken only by a string of relatively narrow gulches pouring down from the slopes of Mauna Kea. Although travel along this coast was once difficult, the broad plateaus, or *kula*, between the gulches are very fertile as are the lush bottom-lands of the larger gulches. These areas once supported a large pre-contact Hawaiian population subsisting on crops such as taro, sweet potato, banana, and coconut. Other crops such as 'awa, bamboo, and sugar cane were also cultivated on the *kula* lands. According to Handy and Handy (1972:537), much of the *kula* land along the nearby and comparable Hāmākua Coast was forested with *kukui*. This may have been the case for South Hilo as well. Early accounts provide some information on the South Hilokula landscape in the early 1800s:

The light and fertile soil is formed by decomposing lava, with a considerable portion of vegetable mould. The whole is covered with luxuriant vegetation, and the greater part of it formed into plantations, where plantains, bananas, sugar-cane, taro, potatoes and melons, come to the greatest perfection. Groves of cocoa-nut and bread-fruit trees are seen in every direction, loaded with fruit, or clothed with luxuriant foliage. (Ellis in Handy and Handy 1972:539)

For North Hilo, which contains an identical environment:

The face of the country by which we sailed, was fertile and beautiful, and the population throughout considerable. The numerous plantations on the tops or sides of the deep ravines, or vallies, by which they were frequently interspersed, with the meandering streams running down them into the sea, presented altogether a most agreeable prospect. (Ellis in Handy and Handy 1972:539)

Accounts of Hāmākua to the north also speak of organized agriculture and habitation in the *kula* lands:

The land we passed in the forenoon rose in a steep bank from the water side and from thence the country stretched back with an easy acclivity for about four or five miles, and was laid out into little fields, apparently well cultivated and interspersed with the habitations of the natives. Beyond this the country became rugged and woody, forming mountains of great elevations. (Menzies in Handy and Handy 1972:537)

The lowland portion of South Hilo was clearly a region thriving with traditional Hawaiian habitation and cultivation. Like most other parts of Hawai'i, introduced diseases and global economic forces would have a devastating impact on traditional life-ways in the early to mid-1800s. Due to its rugged coastline and many deep gulches, however, transportation difficulties were severe in South Hilo, North Hilo, and Hāmākua. This served to delay large-scale commercial exploitation of the *kula* lands. In the second half of the nineteenth century these problems were overcome and sugar cane plantations replaced subsistence agriculture and grazing as the dominant land use.

Within a few years of the 1876 Treaty of Reciprocity a number of new plantations were in production. According to Best (1978:123), the new plantations commonly extended some two to three miles inland from the coast. Elevations ranged from 250 feet above sea level along the shoreline bluffs to 2,000 feet above sea level at their western (*mauka*) limits. Ocean frontage could range from two to six miles. Railroads operating on steam and animal power were built on some plantations by 1887. Other plantations utilized flumes or cable railways to transport cane from the fields to the coastal mills. The redoubtable Claus Spreckles owned much of this acreage including both Hakalau and Wailea Plantations. By 1911, both these plantations were served by the newly built Hāmākua Division of the Hilo Railroad. Sugar production in the area weathered the partial destruction of the Hakalau Mill by a *tsunami* in 1946 and operations continued into the late twentieth century.

Throughout their productive existence, the Wailea and Hakalau plantations employed large numbers of immigrants and their Hawai'i-born offspring. This labor force was housed in camps situated at various elevations within the plantations. Two camps, known collectively as the Wailea Camps, were located to the south and west of the current project area (Figure 6). The camp to the south of the project area housed workers employed at the Wailea Mill and was known as Wailea Japanese Camp (Maly 1994:A-18). One marked gravesite is present there and is under the jurisdiction of the State of Hawaii.

To the west of the project area was Spanish Camp. This site is now occupied by a greenhouse and residential structure. Interestingly, Spanish Camp abuts the unnamed Gulch that bounds the project area to the north. The region west (*mauka*) of Spanish Camp is reported to contain an area where Hawaiian families had graves (Maly 1994:A-18). Although most graves from the camps were probably disinterred (particularly the Japanese), interviews with former residents conducted by Kepā Maly suggest that some may still be present (Maly 1994:A18).

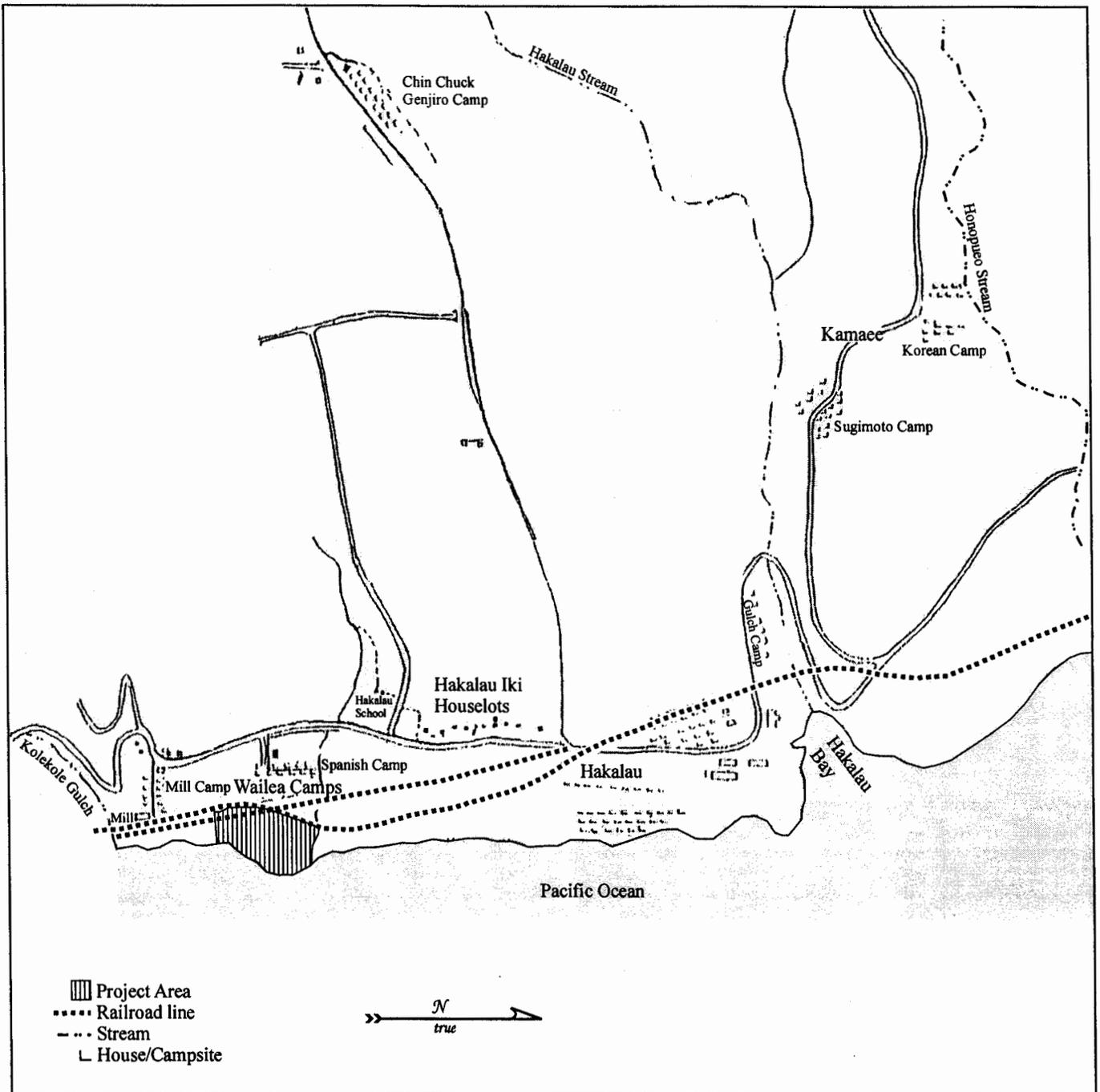


Figure 6. Project area showing camps near Hakalau. Adapted from a detail of the 1940 Hakalau Plantation Company Domestic Water Supplies Map (Courtesy of James McCully).

## Railroads

Historic maps indicate that a railroad right-of-way once crossed the western portion of the project area; therefore, we briefly review the history of railroads in South Hilo, North Hilo, and Hāmākua Districts.

The story of railroads in Hawai'i is a study in the ebb and flow of economic forces and governmental policy. With the 1875 ratification of the Treaty of Reciprocity between the United States of America and the Hawaiian Kingdom, economic conditions were ripe for the development of many large-scale commercial enterprises in the islands. Among the products which could be exported to the United States free of tariff under the treaty were

muscovado, brown, and all other unrefined sugar, meaning hereby the grade of sugar heretofore commonly imported from the Hawaiian Islands, and now known in the markets of San Francisco and Portland a "Sandwich Island Sugar;" syrups of sugar-cane, melado, and molasses (Article I, Treaty Of Reciprocity between the United States and the Hawaiian Kingdom, 1875).

These words would prove to have a profound impact on the economy, landscape, and ethnic composition of the Hawaiian Islands. Until this time, sugar was produced on a relatively small scale using labor-intensive methods of cultivation, harvesting, and transportation (Conde 1971:11). Crops and product were still transported by beast and cart. Now that Hawaiian sugar had free access to the American market, the cane plantations were poised to expand and modernize their operations. Railroad construction was one of the most important elements of governmental and private sector planning in this regard.

On the Island of Hawai'i, the first major line to be constructed was in North Kohala District. Operated as the Hawaiian Railroad Company, the narrow-gauge line ran some 20 miles connecting Māhukona Harbor with Honoipu Landing, Kohala Landing, and six sugar cane plantations (Conde 1971). The Hawaiian Railroad Company was the brainchild of one Samuel Gardner Wilder (1831-1888), already the owner of an inter-island steamship company and Minister of the Interior of the Hawaiian Islands. Wilder's railroad operated continuously, with occasional changes in ownership and name, until truck hauling took over transportation in 1945. The North Kohala line, however, was envisioned as only the first step toward a much larger system connecting the cane fields of Kohala, Hāmākua, and Hilo Districts with Hilo Harbor, the only protected deep-water port on the island. Although Wilder didn't live to see it happen, rail lines eventually connected Hilo with plantations as far north as Pa'auilo and with sugar, logging, and tourism operations in Puna District (Clark et al. 2001).

### The Hilo Railroad Company

In 1898, Benjamin F. Dillingham planned a large sugar mill at 'Ōla'a (now Kea'au) with its produce to be transported to Hilo via a railroad he would also construct—the Hilo Railroad. A 50 year charter for the Hilo Railroad Company was granted by the Republic of Hawaii in 1899. Under the charter, the Hilo Railroad Company was authorized to construct rail lines anywhere on the Island of Hawai'i. Furthermore, government land was offered free of charge for the purposes of right-of-way, yards, or station areas (Best 1978:125). Following construction trends in the United States, Dillingham was determined to build both his internal Olaa Sugar Company tracks and the common carrier running to Hilo to standard gauge (4 ft ½ in). This was to be the first and only standard gauge railroad in Hawai'i.

Initial construction began in 1899 and by 1900 the grade had reached 'Ōla'a. By 1901 the Olaa Sugar Company tracks had been finished with production scheduled to begin in 1902. Other tracks were constructed in the following years as tourism to Kīlauea and harvesting of mahogany, *koa*, and 'ōhi'a above of Pāhoa became viable enterprises (see Clark et al. 2001:5-10).

In 1908 Hilo Railroad's trunkline was expanded with construction of the Hamakua Division (Figure 7). The impetus for this new line was a stipulation in a Rivers and Harbors bill recently passed by the United States Congress. In exchange for construction of a breakwater in Hilo Bay, the Hilo Railroad was required to build a new wharf, a one-mile rail extension from Waiākea, and a 50 mile rail extension north to Honoka'a Mill (the Hamakua Division). The extension to Honoka'a would finally connect the sugar mills of South Hilo, North Hilo, and Hāmākua with Hilo's protected harbor.



In 1920 the company attempted to capture a larger piece of the growing tourist business with its *Scenic Express*. It had long offered service to Glenwood for tourists visiting Kilauea, but motorbuses now dominated this route. The Hāmākua coast, by contrast, was not easily accessible by automobile. Hawaii Consolidated Railway was therefore able to run passenger coaches profitably along the Hamakua Division with stops at scenic points.

The rise of the automobile, however, was a harbinger for the railroads. Passenger business declined precipitously in the early decades of the twentieth century. In 1920, 607,220 passengers were carried. In 1930 the number dropped to 77,894 and in 1936 to 16,681 (Best 1978:145-146). At this point, the remaining passenger cars were converted to other uses. The little passenger traffic which remained was hauled on custom-built railbuses. Passenger service saw a significant spike in the early 1940s due to war-time gas rationing and the presence of large numbers of servicemen. In 1943 passenger totals had rebounded to 103,635.

The automobile was also taking a toll on the railroad's industrial customers. As roads were improved and gasoline prices dropped, simple economics favored trucking over trains. The trend was clear at the time and is even more so from an historical perspective. Ironically, just as rail transportation was in the throes of decline, Hawaii Consolidated Railway was by 1945 almost out of debt for the first time since its inception. The great *tsunami* of 1946, however, would soon seal its fate.

### End of the Railroad

On April 1, 1946 a *tsunami* triggered by an earthquake in the Aleutians slammed into Hawai'i's north shore. The Hawaii Consolidated Railway had received a fatal blow. Track along the waterfront was entirely washed out and the Hilo Station was a wreck. An entire span of the Wailuku Bridge was torn out and washed upriver. In the north, the center span of the Kolekole Bridge was destroyed (Figure 8). Water in Kolekole and Hakalau Gulches reached 37 feet (Klein et al. 1985:10). In addition to the outright destruction, the *tsunami* also damaged the foundations, bracing members, and struts of bridges in its path (e.g. Hakalau Bridge (Klein et al. 1985:10)). Needless to say, the Hamakua Division was out of business and total costs for repairs were estimated at \$500,000.

Hawaii Consolidated put the question of rebuilding to a vote. Shippers were asked to decide the matter, and with the exception of Theo. H. Davies Ltd., they voted to ship by truck. The Hamakua Division would not be repaired.



Figure 8. View of Kolekole Bridge after 1946 *tsunami*, center support washed out. (Pacific Tsunami Museum Archives-Henrietta Carvalho Collection).

With the Hamakua Division officially defunct, Hawaii Consolidated Railway offered its right-of-way, bridges, and tunnels to the territorial division of highways and Hawai'i County supervisors. In a bold act of short-sightedness, both agencies refused. Un-phased, Hawaii Consolidated liquidated its assets on December 26, 1946. The entire railroad was sold to Gilmore Steel & Supply Co. of San Francisco for a mere \$81,000. Most of the bridges were dismantled and the rails were pulled up along the length of the Hamakua Division. Together with the remaining rolling stock, they were shipped to California as scrap metal. In the midst of the disassembly, the Division of Highways belatedly decided that Route 19 needed to be relocated and improved. It purchased the remaining bridges, plus some that were awaiting shipment in Hilo, for \$302,723.53. Steel from the dismantled railroad bridges was used to widen the standing bridges for their new roles as highways. Five of the former Hamakua Division bridges remain in use today.

In Hilo, the damaged docks and track were repaired and rail service was continued to Olaa Sugar under lease from Gilmore Steel & Supply Co. Product was transported by train from Olaa Sugar until December of 1948, at which time the line was permanently closed. All remaining assets were sold to The Independent Ironworks of Oakland for scrap.

## Previous Archaeology

Among the earliest archaeological work to be done in East Hawai'i was that of the early twentieth century *heiau* researchers Thrum and Stokes (Thrum 1908, Stokes and Dye 1991). Neither investigator was able to identify *heiau* in the project area nor in the larger region between Honomū and Hakalau. In the early 1930s, A.E. Hudson, working under the aegis of the Bishop Museum, also conducted archaeological investigations in East Hawai'i (Hudson 1932). He found little in the region surrounding the project area, although he did note the presence of a .25 mile square area of taro terraces in the upper part of Hakalau Gulch (Hudson quoted in Maly 1994:A-15).

A search of archaeological reports filed with SHPD-DLNR was conducted as part of the background research for this project. No archaeological reports within the project area or in the surrounding land parcels were registered. In fact, no archaeological research has been reported for TMK 3-2-9-003 or TMK 3-2-8-015. As part of an environmental assessment for seismic retrofitting of Kolekole Bridge, however, an archaeological survey was performed at the base of Kolekole Gulch (Hammatt and Colin 1998). The project area consisted of "the slopes of Kolekole Gulch under and surrounding the Kolekole Bridge and approximately 100.0 feet of the slopes *mauka* and *makai* of the bridge" (Hammatt and Colin 1998:i). Square footings from the pre-1946 Kolekole Bridge were noted outside the project area and a cylindrical cement footing was observed in the middle of Kolekole Stream. No other cultural remains were observed.

One archaeological project (Walker and Rosendahl 1994a, 1994b) was completed in TMK 3-2-9-002, 004. This project involved the survey of some 595 acres between Hawaii Belt Road and the 1,500 foot elevation mark. The parcels were located on the northern side of Hakalau Gulch. Low-level aerial (helicopter) survey was conducted on some uncultivated portions of the area. Other uncultivated areas were inspected using "variable-coverage (partial to 100%) variable-intensity ground survey" (Walker and Rosendahl 1994b: 2). Walker and Rosendahl report that the project area had been extensively modified in historic times for sugar cane cultivation. For this reason, no archaeological sites or "significant cultural materials of any kind" were found (Walker and Rosendahl 1994b:2) (Walker and Rosendahl 1994b:2).

## Māhele Land Awards and Grants

A review of historic documents associated with the project parcels indicates that no Land Commission Awards are present in or near the project area. However, the northern and central portions of the project area were originally granted to one Na'ai in 1852 and 1855 (Grants 803 and 1874 respectively). The southernmost parcel within the project area was previously owned by Wailea Milling Company, Ltd. Historic maps also indicate that Hakalau Plantation Company and S. B. Hele'la deeded portions of a former railroad right-of-way along the western project area boundary to Hilo Railroad Company in 1910.

## PROJECT EXPECTATIONS

Based on the background information summarized above, a set of archaeological expectations for the project area can be formulated. Historical data indicate that the general area was part of the heavily exploited traditional Hawaiian *kula* lands. For the last 100 years, however, the area has been utilized for sugar cane cultivation and associated transportation and employee housing infrastructure. It is likely that these historic era modifications have largely destroyed any traditional Hawaiian features once present in the project area. The extreme coastal fringe and the small gulch to the north may have been unaffected by these disturbances. The gulch, however, is very steep-sided and descends directly to a rocky streambed. It is a very unsuitable place for traditional Hawaiian cultivation or habitation.

Perhaps the most important disturbance to the project area was the construction of the Hamakua Division of the Hilo Railroad. This construction effort probably involved significant landscape modification to the western and central portions of the project area. Once the railroad was built, the project area was effectively cut off from the western (*mauka*) lands. The project area probably received little impact then until the railroad was scrapped in 1946. More recently, the current landowner claims to have significantly modified the project area landscape. This was accomplished primarily by filling in the western and central regions, but also included the planting of a variety of shrubs and trees.

It is expected that remains associated with historic sugar cane cultivation, transportation, and employee housing will be the most likely finds in the project area. These remains may be concentrated in the western and central portions of the area. Traditional Hawaiian agricultural and habitation features are unlikely to have survived historic disturbance. If present, they may include stone-constructed mounds, platforms, *heiau*, or walls. These would likely be found in the lesser-impacted eastern portion of the project area.

## FIELDWORK RESULTS

Amy Kasberg, B.A. and Michael Desilets, M.A. conducted fieldwork for this project on May 17, 2004, under the supervision of Robert Rechtman, Ph.D. Project area boundaries were clearly identifiable in the field. The entire area was systematically and intensively examined using parallel north to south trending transects at 15 meter spacing. Visibility was very good across most of the project area, with dense vegetation present only along the eastern cliff-line.

Systematic survey of the subject parcels produced one site—SIHP Site 50-10-26-24212. The site includes two Historic Period railroad features (Features 1 and 2). These include a possible railroad grade section and a railroad trestle abutment. They were both recorded in the northwestern part of the project area (Figure 9). These features are described in detail below.

The survey produced no evidence of traditional Hawaiian artifacts or features. Also, there is no evidence that the area is currently being accessed for the exercise of traditional and customary practices associated with any traditional cultural properties or resources.

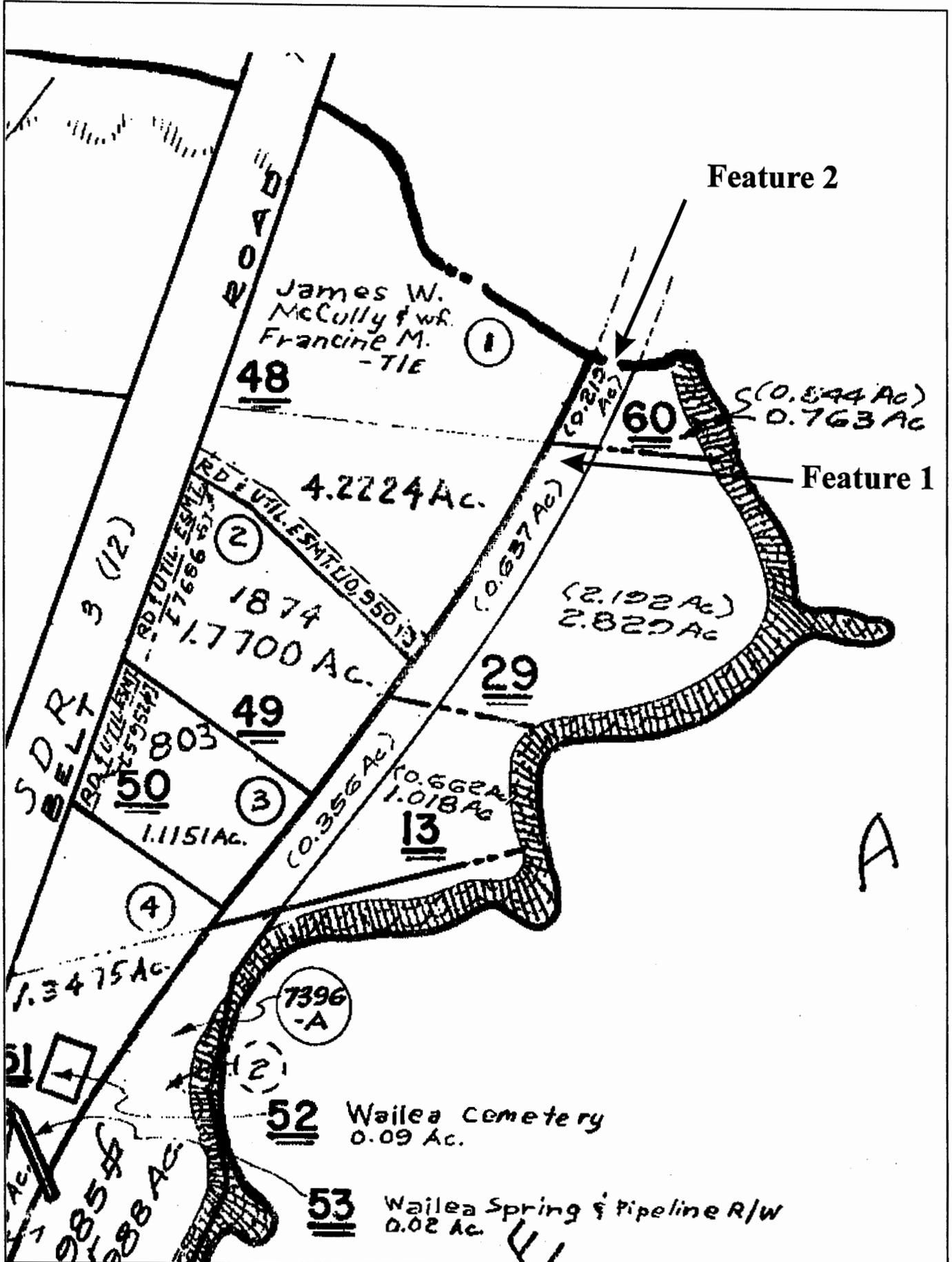


Figure 9. Detail of Tax Map Key 3-2-9-03 showing feature locations.

## SIHP Site 21212 Feature 1

Feature 1 is a possible remnant of the former Hilo Railroad-Hawaii Consolidated Railway railroad grade (Figure 10). It is located in the northern portion of the project area (see Figure 9). The section measures 10.0 to 15.0 meters in length (north-south) and approximately 4.0 meters in width. Feature 1 is in an area that has been extensively landscaped and filled in modern times, so it is doubtful whether this possible railroad grade is in its original state. Tax Map Keys and U.S. Geologic Survey maps, however, do show the rail corridor as being in this location. No surface remains were observed on Feature 1 or in the surrounding area.



Figure 10. SIHP Site 24212 Feature 1, possible railroad grade, view to the south.

## SIHP Site 24212 Feature 2

Feature 2 is a stone and concrete railroad abutment (Figures 11, 12, 13, and 14). This feature is located at the northern boundary of the project area (see Figure 9). It is situated near the bottom of a deep, unnamed gulch that leads to the ocean. The main body of the abutment is semi-circular in cross-section and runs east to west, parallel with the gulch. It is composed of cemented *pāhoehoe* cobbles and boulders and measures 16.6 meters long (east-west) by 1.9 meters wide (north-south) and stands 180 centimeters high. At its western extremity, the feature exhibits a raised section measuring 2.9 meters long (north-south) by 0.6 meters wide (east-west) and stands 170 centimeters high (see Figure 13). The raised portion is composed of stacked and faced, medium-sized, square-cut *pāhoehoe* cobbles. Concrete is present between the stones. The top of this segment slopes to the east at an approximately 45° angle.

A tire and two pieces of unidentified rusted metal were recorded to the immediate south of Feature 1, nestled between the feature and the southern gulch slope.

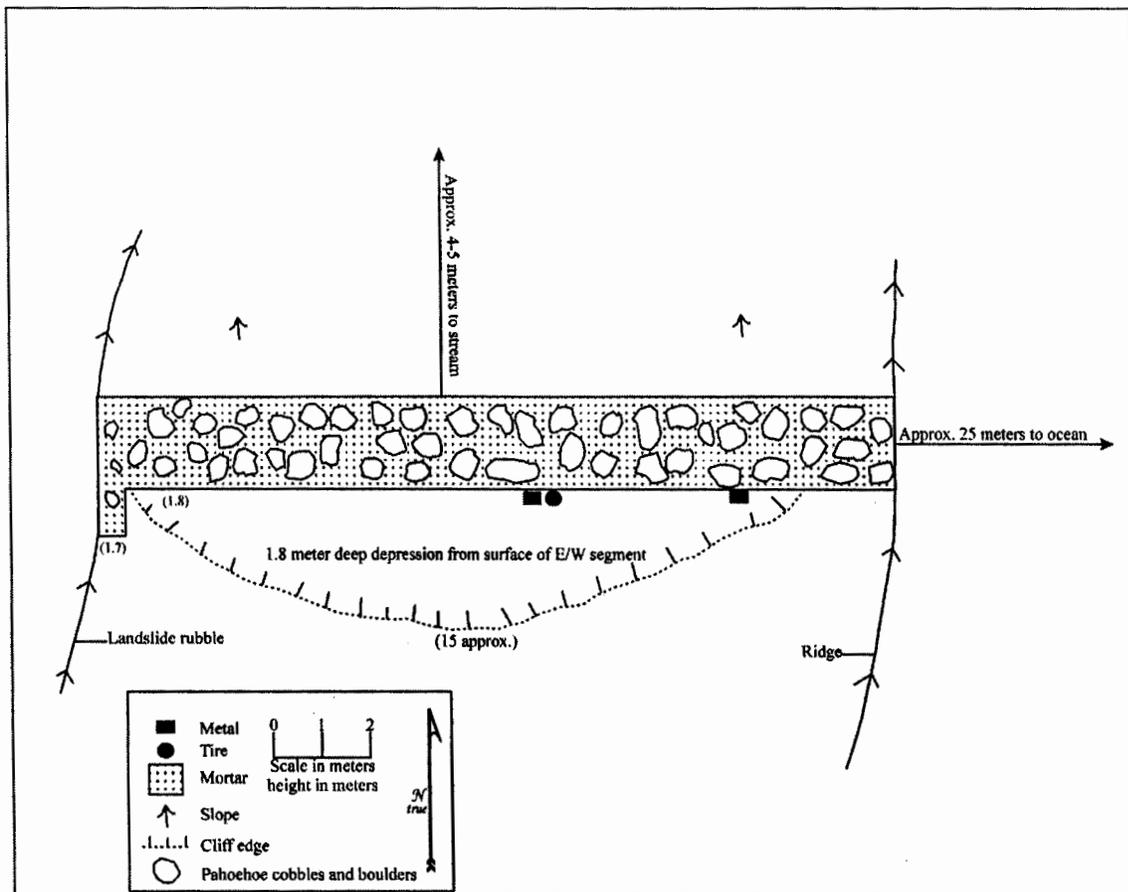


Figure 11. Plan view of SIHP Site 24212 Feature 2.



Figure 12. SIHP Site 24212 Feature 2, trellis abutment, view from above.



Figure 13. SIHP Site 24212 Feature 2, trestle abutment, view to the west.



Figure 14. SIHP Site 24212 Feature 2, trestle abutment, view to the east.

## SIHP Site 24212 Discussion

From the background research, we know that the Hāmākua Division of the Hilo Railroad-Hawaii Consolidated Railway ran through the western portion of the project area, entering from a parcel to the south and exiting across a minor gulch to the north. A terrace (Feature 1) on the western slope of the project area is situated in the approximate location of the railroad grade. It is therefore very likely that this terrace is a remnant of the historic Hāmākua Division. Alternatively, it is possible that past land use associated with sugarcane cultivation by prior owners may have resulted in modified portions of the property in this vicinity. At present, it is not clear whether those earlier actions have entirely obscured the original Hāmākua Division grade.

Another railroad related feature was identified in the gulch that bounds the project area to the north. Feature 2 is in the approximate position at which the railroad crosses this small, unnamed gulch. It is interpreted as a possible trestle abutment. The original trestle, due to its elevation, likely survived the *tsumani* of 1946. Flood levels at Kolekole Gulch to the south and Hakalau Gulch to the north reached 37 feet above sea level (Klein et al. 1985:10). Given that this gulch is smaller and narrower, the water level likely reached an even higher elevation. Even if the surge water reached as high as the abutment, however, its force at this point would be greatly reduced. In this regard, it is important to note that the two trestles (Wailuku and Kolekole) along the Hāmākua Division that sustained the greatest damage from the *tsumani* were based at or very near sea level (Figure 15). It seems unlikely that the *tsumani* of 1946 destroyed the subject trestle, as it is situated some 50 feet or more above sea level.

A more likely scenario is that the trestle was removed either during initial deconstruction of the line by Gilmore Steel & Supply Co., or else later by the Division of Highways. The tire and metal remains may have been thrown over the bank from above or transported down the gulch any time in the last 100 years. It is even possible that they are discarded material from Spanish Camp, which was located only a few hundred feet upstream. In any case, they retain little integrity and have no clear association with the former railroad or camp.

## CONSULTATION

As part of the current study, the Office of Hawaiian Affairs (Ululani Sherlock) and Kepā Maly (Kumu Pono Associates) were contacted in an effort to obtain information about any potential traditional cultural properties and associated practices that might be present or have occurred in this portion of Wailea Ahupua‘a. Neither had any specific information relative to this project area, however, the Office of Hawaiian Affairs suggested we contact the Laupāhoehoe Hawaiian Civic Club. To that end, we contacted Lucille Chung and Walter Victor, who in turn recommended that we contact Jack or Waichi Ouye, Yukio Takaya, or Lorraine Mendoza. Lorraine in turn suggested contacting Kiyoshi Kubo and Masaichi Chinen. Interviewees remembered that the railway ran across the property until the 1946 *tsumani* destroyed the Kolekole Bridge. On the adjacent property to the Hilo side of the study area there was a pig farm in the gulch used by camp residents and a trail that accessed the shore. Fisherman used this trail and there was good fishing immediately shoreward of the study area.

None of the organizations/individuals contacted had any information relative to the existence of traditional cultural properties in the immediate vicinity of the current project area; nor did they provide any information indicating past or current use of the area for traditional and customary practices.

## CONCLUSIONS

Systematic survey of three parcels (TMK 3-2-9-03: 13, 29, 60) produced no evidence of traditional Hawaiian remains or evidence that the area was currently being accessed for the exercise of traditional and customary practices.

One historic era site—SIHP Site 24212, was recorded. The site contains two features associated with the Hamakua Division of Hilo Railroad-Hawaii Consolidated Railway and were recorded in the northwestern portion of the project area. One is a possible section of railroad grade and the other is a railroad trestle abutment. The features were in active use by the railroad from 1911 to 1946. Their primary function was to facilitate the transport of raw sugar from the many mills along the Hilo and Hāmākua Coasts to the harbor at Hilo Bay. In later years, they also served the secondary function of facilitating tourism.



## **SIGNIFICANCE EVALUATION AND TREATMENT RECOMMENDATIONS**

The above-described archaeological site is assessed for its significance based on criteria established and promoted by DLNR-SHPD and contained in the Hawai'i Administrative Rules 13§13-284-6. This significance evaluation should be considered as preliminary until DLNR-SHPD provides concurrence. For a resource to be considered significant it must possess integrity of location, design, setting, materials, workmanship, feeling, and association and meet one or more of the following criteria:

- A Be associated with events that have made an important contribution to the broad patterns of our history;
- B Be associated with the lives of persons important in our past;
- C Embody the distinctive characteristics of a type, period, or method of construction; represent the work of a master; or possess high artistic value;
- D Have yielded, or is likely to yield, information important for research on prehistory or history;
- E Have an important traditional cultural value to the native Hawaiian people or to another ethnic group of the state due to associations with traditional cultural practices once carried out, or still carried out, at the property or due to associations with traditional beliefs, events or oral accounts—these associations being important to the group's history and cultural identity.

Site 24212 is considered significant under Criteria D for the information it has yielded regarding early twentieth century sugar cane transportation infrastructure. As the current inventory survey project recorded Site 24212 in detail, however, no further work is recommended.

In the unlikely event that archaeological resources are encountered during future development activities at TMK 3-2-9-03: 13, 29, and 60, work in the immediate area of the discovery should be halted and DLNR-SHPD contacted as outlined in Hawaii Administrative Rules 13§13-275-12.

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LINDA LINGLE  
GOVERNOR OF HAWAII



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



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

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

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

December 22, 2004

Robert Rechtman, Ph.D.  
Rechtman Consulting Inc.  
HC 1 Box 4149  
Kea'au, Hawaii 96749

LOG NO: 2004.3657  
DOC NO: 0412MM09

Dear Dr. Rechtman:

**SUBJECT: Chapter 6E-42 Historic Preservation Review, Replacement Pages for:  
"Archaeological Inventory Survey and Limited Cultural Assessment  
of TMK 3-2-9-03:13, 29, 60" (RC 0247)  
Ahupua'a of Wailea, South Hilo, Hawaii Island  
TMK: (3) 2-9-003:013, 029, 060**

Thank you for submitting the above mentioned revised report for our review, which we received on September 3, 2004. The report was originally submitted as an Archaeological and Cultural Assessment, however, since a historic property was identified during the survey (Site No. 50-10-26-24212), the report needed to be submitted as an Inventory Survey, subject to review under Hawaii Administrative Rules (HAR) §13-276.

Site 24212 consists of portions of a possible railroad grade section and trestle abutment, and is assessed as significant under Criterion D for the information it has yielded regarding early twentieth century sugar cane transportation. No further work is recommended for the 4.5-acre project area.

We agree with your assessment and recommended treatment. We consider the report to be adequate to meet the requirements of HAR §13-276 and accept it as final. If you have any questions about this review, please contact MaryAnne Maigret in our Hawaii Island office at (808) 327-3690 or Dr. Sara Collins at (808) 692-8026

Aloha,

Melanie A. Chinen, Administrator  
State Historic Preservation Division

MM:jen

c: Christopher J. Yuen, Director, Hawaii PIng, 101 Pauahi St, Ste 3, Hilo, HI 96720-3043

## RECHTMAN CONSULTING, LLC

HC 1 Box 4149 Kea'au, Hawai'i 96749-9710  
phone: (808) 966-7636 fax: (808) 443-0065  
e-mail: bob@rechtmanconsulting.com  
ARCHAEOLOGICAL, CULTURAL, AND HISTORICAL STUDIES

January 24, 2005

RC-0247

Brian T. Nishimura  
Planning Consultant  
101 Aupuni Street, Ste. 217  
Hilo, Hawaii 96720

Dear Mr. Nishimura:

Subject: James McCully  
Petition for District Boundary Amendment  
TMK: (3) 2-9-003: 013, 029 & 060  
Wailea, South Hilo District, Island of Hawaii

This letter serves to advise you of the approval status of the *Archaeological Inventory Survey and Limited Cultural Assessment of TMKs: 3-2-9-03:13, 29, and 60; Wailea Ahupua'a, South Hilo District, Island of Hawai'i*, and also to provide you with additional information concerning the cultural assessment aspect of the study.

### Background

The report was initially submitted to the State Department of Land and Natural Resources - Historic Preservation Division ("DLNR-SHPD") on July 16, 2004 under the title *Archaeological and Limited Cultural Assessment of TMK: 3-2-9-03:13, 29, and 60; Wailea Ahupua'a, South Hilo District, Island of Hawai'i*. It was acknowledged by letter dated August 27, 2004.

This letter states that the information presented, which was intended to satisfy the requirements of the County of Hawai'i Planning Department and DLNR-SHPD with respect to permit approval for a proposed State land use district boundary amendment, "is generally adequate for predicting the kinds of historic properties that might be found during the survey" and that the "background information and previous archaeological research is likewise sufficient." The letter also states that "[a]dditionally, the presence of traditional Hawaiian remains or evidence that the area was currently being accessed for the exercise of traditional and customary practices was found to be negative."

Due to the presence of one historical site (SIHP Site 50-10-26-24212, a possible railroad grade station and a railroad trestle abutment), the report had to be revised and resubmitted as an Archaeological Inventory Survey (and not an Assessment).

The report was revised to reflect the requested changes and resubmitted to DLNR-SHPD on September 3, 2004. It was acknowledged by letter dated December 22, 2004. The letter states that DLNR-SHPD considers "the report to be adequate to meet the requirements of HAR §13-276 and accept it as final".

## Cultural Assessment

In relation to the archival and documentary research that was conducted for the Archaeological Inventory Survey, archival and documentary information was reviewed for the preparation of the Cultural Assessment as well. This research did not reveal any documentation of any previous or ongoing traditional and customary practices. The area was historically known as *Hilo-pali-Kū* (Hilo of the upright cliffs) and there are a few accounts that indicate that this area, which encompasses the sheer cliffs stretching along the Hāmākua Coast from the Wailuku River to Waipi'o and beyond, once supported a large Precontact Hawaiian population that subsisted on crops such as taro, sweet potato, banana, and coconut. Other agricultural resources such as *awa*, bamboo, and sugarcane were also cultivated on the *kula* lands that stretched from South Hilo to Hāmākua. In the second half of the nineteenth century, the transportation difficulties that had delayed the large-scale commercial exploitation of the *kula* lands were overcome and sugarcane plantations replaced subsistence agriculture and grazing as the dominant land use.

In an effort to identify cultural resources associated with the Petition Area, contact was made with Ululani Sherlock of the Office of Hawaiian Affairs (OHA) and Kepā Maly of Kumu Pono Associates in June of 2004. They were contacted in an effort to obtain information about any potential traditional cultural properties and associated practices that might be present or have occurred in this portion of the Wailea Ahupua`a. Neither contact had any specific information regarding this Petition Area. However, OHA suggested that the Laupāhoehoe Hawaiian Civic Club be contacted as they might have additional information. Lucille Chung and Walter Victor were contacted and they, in turn, suggested that Jack or Waichi Ouye, Yukio Takaya and Lorraine Mendoza be contacted. Lorraine Mendoza recommended that Kiyoshi Kubo and Masaichi Chinen be contacted. All calls were made between June and July, 2004.

Interviewees recalled that the railway used to run across the property until the Kolekole Bridge was destroyed by the *tsunami* of 1946. On the adjacent property to the south (Hilo-side), there used to be a pig farm that was used by camp residents and a trail that accessed the shore. This trail allowed the residents and local fishermen to access the shoreline below the *pali* that bounds the property to the east. This trail was not located on the subject property nor did it cross the subject property.

None of the organizations or individuals that were contacted had any information relative to the existence of traditional cultural properties in the immediate vicinity of the Petition Area; nor did they provide any information indicating past or current use of the area for traditional and customary practices. It is unlikely that there are any traditional and customary practices occurring in the Petition Area as the lands were utilized for sugarcane cultivation and associated transportation for over 100 years. Any traditional Hawaiian features that may have been associated with former cultural practices that may have occurred in the Petition Area would have been destroyed by the sugarcane cultivation and related uses.

Please do not hesitate to contact me should you have any additional questions.

Sincerely,



Robert Rechtman, Ph.D.  
Principal Archaeologist

**APPENDIX D – COMMENTS AND RESPONSES PROVIDED DURING THE  
30-DAY PUBLIC COMMENT PERIOD**

1. State of Hawaii, Department of Transportation, Director of Transportation, April 18, 2005 and April 22, 2005.  
Response: Brian T. Nishimura, Planning Consultant, May 13, 2005.
2. County of Hawaii, Department of Water Supply, Manager, April 12, 2005.  
Response: Brian T. Nishimura, Planning Consultant, May 13, 2005.

LINDA LINGLE  
GOVERNOR



RODNEY K. HARAGA  
DIRECTOR  
  
Deputy Directors  
BRUCE Y. MATSUI  
BARRY FUKUNAGA  
BRENNON T. MORIOKA  
BRIAN H. SEIGUCHI

2005 APR 28 AM 11 04

PLANNING DEPARTMENT  
COUNTY OF HAWAII

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
869 PUNCHBOWL STREET  
HONOLULU, HAWAII 96813-5097

IN REPLY REFER TO:

STP 8.1698

April 18, 2005

Mr. Christopher J. Yuen  
Director  
Planning Department  
County of Hawaii  
101 Pauahi Street, Suite 3  
Hilo, Hawaii 96720-3043

Dear Mr. Yuen:

Subject: James W. and Francine M. McCully  
State Land Use District Boundary Amendment, SLU 05-002  
LUC Docket No. A05-757  
TMK: (3) 2-9-03: 13, 29 & 60

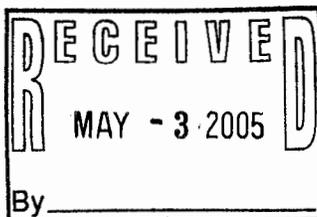
Only one access to and from Hawaii Belt Road (Route 19) will be permitted and the petitioner will need to comply with the requirements and conditions as determined by our Highways Division regarding the submittal of plans for the development of the affected property, including the access driveway and connection. It is recommended that the petitioner consult with our Hawaii District Office of our Highways Division regarding on-site conditions and the construction plans submittal requirements.

We appreciate the opportunity to provide our comments.

Very truly yours,

RODNEY K. HARAGA  
Director of Transportation

c: Laura Thielen, Office of Planning, DBEDT



Post-it® Fax Note	7671	Date	5/3/05	# of pages	2
To	Ben T.	From	Sarah		
Co./Dept.		Co.	Planning		
Phone #		Phone #			
Fax #	769-1531	Fax #			

McCully SM - A05-757

069781

LINDA LINGLE  
GOVERNOR



RODNEY K. HARAGA  
DIRECTOR

Deputy Director  
BRUCE Y. MATSUI  
BARRY FUKUNAGA  
BRENNON T. MORIOKA  
BRIAN H. SEKIGUCHI

IN REPLY REFER TO:

STP 8.1699

2005 APR 28 08 11 04

PLANNING DEPARTMENT  
COUNTY OF HAWAII

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
869 PUNCHBOWL STREET  
HONOLULU, HAWAII 96813-5097

April 22, 2005

TO: THE HONORABLE LAURA THIELEN, DIRECTOR  
OFFICE OF PLANNING  
DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT AND  
TOURISM

FROM: RODNEY K. HARAGA *Rodney Haraga*  
DIRECTOR OF TRANSPORTATION

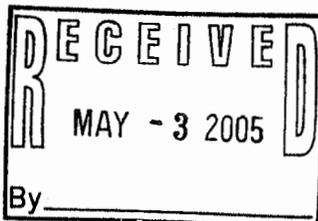
SUBJECT: JAMES W. AND FRANCINE M. MCCULLY  
STATE LAND USE DISTRICT BOUNDARY AMENDMENT, SLU 05-002  
LUC DOCKET NO. A05-757  
TMK: (3) 2-9-03: 13, 29 & 60

In response to your request for our review of the subject petition, we are providing the following comments:

Only one access to and from Hawaii Belt Road (Route 19) will be permitted and the petitioner will need to comply with the requirements and conditions as determined by our Highways Division regarding the submittal of plans for the development of the affected property, including the access driveway and connection. It is recommended that the petitioner consult with our Hawaii District Office of our Highways Division regarding on-site conditions and the construction plans submittal requirements.

We appreciate the opportunity to provide our comments.

c: Christopher J. Yuen, Hawaii Department of Planning



069780

**BRIAN T. NISHIMURA, PLANNING CONSULTANT**

101 Aupuni Street, Suite 217

Hilo, Hawaii 96720-4221

Phone: (808) 935-7692 Fax: (808) 935-6126 E-mail: [btnishi@verizon.net](mailto:btnishi@verizon.net)

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May 13, 2005

Mr. Rodney K. Haraga, Director  
State of Hawai'i  
Department of Transportation  
869 Punchbowl Street  
Honolulu, Hawai'i 96813-5097

Subject: James W. and Francine M. McCully  
State Land Use District Boundary Amendment, SLU 05-002  
LUC Docket No. A05-757  
TMK: (3) 2-9-03: 13, 29 & 60

Dear Mr. Haraga:

This is in response to your comments to Mr. Christopher J. Yuen, Hawaii County Planning Director and Ms. Laura Thielen, Director, Department of Business, Economic Development and Tourism, regarding the subject petition. Please be advised that the subject petition will not require a new access from the Hawaii Belt Road (Route 19). The existing access has been in use for many years and will not be altered by the proposed project.

Thank you for taking the time to comment on the proposed project.

Sincerely,



Brian T. Nishimura, Planning Consultant

c: Christopher J. Yuen, Director, Hawaii County Planning Dept. and Laura Thielen, Director  
State Office of Planning



**DEPARTMENT OF WATER SUPPLY • COUNTY OF HAWAII**

345 KEKŪANAŌ'A STREET, SUITE 20 • HILO, HAWAII 96720

TELEPHONE (808) 961-8050 • FAX (808) 961-8657

April 12, 2005

**TO:** Mr. Christopher J. Yuen, Planning Director  
Planning Department

**FROM:** Milton D. Pavao, Manager

**SUBJECT: STATE LAND USE BOUNDARY AMENDMENT APPLICATION (SLU 05-002)  
REQUEST: CONSERVATION TO URBAN  
APPLICANT – JAMES W. AND FRANCINE M. MCCULLY  
TAX MAP KEYS 2-9-003:013, 029, AND 060**

We have reviewed the subject application for the proposed State Land Use Boundary Amendment and have the following comments.

The Department's nearest waterline is a 6-inch waterline along Old Mamalahoa Highway, on the opposite side of Hawai'i Belt Road. Please be informed that service laterals for each of the three aforementioned parcels has been installed so each parcel may have a 5/8-inch meter servicing it. Each service is limited to a daily maximum of 600 gallons.

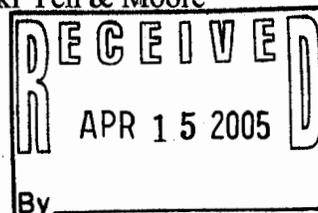
Should there be any questions, please call Ms. Shari Komata of our Water Resources and Planning Branch at 961-8070, extension 1.

Sincerely yours,

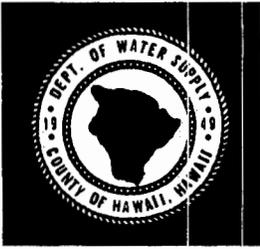
Milton D. Pavao, P.E.  
Manager

SHK:sco

copy - Mr. R. Ben Tsukazaki, Esq., and Mr. Michael W. Moore, Esq., Tsukazaki Yeh & Moore



... *Water brings progress...*



**DEPARTMENT OF WATER SUPPLY • COUNTY OF HAWAII**

345 KĒKŪANAŌ'A STREET, SUITE 20 • HILO, HAWAII 96720

TELEPHONE (808) 961-8050 • FAX (808) 961-8657

April 12, 2005

Ms. Mary Lou Kobayashi, Administrator  
State of Hawai'i  
Department of Business, Economic Development & Tourism  
Office of Planning  
P.O. Box 2359  
Honolulu, HI 96804

**PETITION FOR AMENDMENT TO THE STATE LAND USE DISTRICT BOUNDARIES  
PETITION: A05-757/JAMES AND FRANCINE MCCULLY  
REQUEST: CONSERVATION TO AGRICULTURAL DISTRICT  
TAX MAP KEY 2-9-003:013, 029, AND 060**

We have reviewed the subject Petition for Amendment to the State Land Use District Boundaries.

The Department's nearest waterline is a 6-inch waterline along Old Mamalahoa Highway, on the opposite side of Hawai'i Belt Road. Please be informed that service laterals for each of the three aforementioned parcels has been installed so each parcel may have a 5/8-inch meter servicing it. Each service is limited to a daily maximum of 600 gallons.

Should there be any questions, please contact Ms. Shari Komata of our Water Resources and Planning Branch at 961-8070, extension 252.

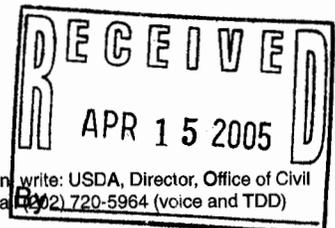
Sincerely yours,

Milton D. Pavao, P.E.  
Manager

SHK:sco

copy - ✓ Mr. R. Ben Tsukazaki, Esq., and Mr. Michael W. Moore, Esq., Tsukazaki Yeh & Moore

... *Water brings progress...*



**BRIAN T. NISHIMURA, PLANNING CONSULTANT**

101 Aupuni Street, Suite 217

Hilo, Hawaii 96720-4221

Phone: (808) 935-7692 Fax: (808) 935-6126 E-mail: btnishi@verizon.net

---

May 13, 2005

Mr. Milton D. Pavao, Manager  
County of Hawaii  
Department of Water Supply  
345 Kekuanaoa Street, Suite 20  
Hilo, Hawaii 96720

Subject: James W. and Francine M. McCully  
State Land Use District Boundary Amendment, SLU 05-002  
LUC Docket No. A05-757  
TMK: (3) 2-9-03: 13, 29 & 60

Dear Mr. Pavao:

This is in response to your comments to Mr. Christopher J. Yuen, Hawaii County Planning Director and Ms. Mary Lou Kobayashi, Administrator, Office of Planning, regarding the subject petition. Thank you for verifying that service laterals for each of the three parcels have been installed and may utilize a 5/8 inch meter to service them. The applicant understands that each service is limited to a daily maximum of 600 gallons.

Thank you for taking the time to comment on the proposed project.

Sincerely,



Brian T. Nishimura, Planning Consultant

c: Christopher J. Yuen, Director, Hawaii County Planning Department and Mary Lou Kobayashi, Administrator, State Office of Planning