



STATE OF HAWAII
 DEPARTMENT OF LAND AND NATURAL RESOURCES
 LAND DIVISION
 P.O. BOX 621
 HONOLULU, HAWAII 96809

AQUACULTURE DEVELOPMENT PROGRAM
 AQUATIC RESOURCES
 BOATING AND OCEAN RECREATION
 CONSERVATION AND RESOURCES ENFORCEMENT
 CONVEYANCES
 FORESTRY AND WILDLIFE
 HISTORIC PRESERVATION
 LAND DIVISION
 STATE PARKS
 WATER RESOURCE MANAGEMENT

RECEIVED

00 MAR 23 18:26

FILE NO.: CDUA KA-2967B

MAR 22 2000

OFFICE OF ENVIRONMENTAL QUALITY CONTROL

Ref.PB:EAH

MEMORANDUM

TO: Ms Genevieve Salmonson, Director
 Office of Environmental Quality Control

FROM: Dean Uchida, Administrator
 Land Division *[Signature]*

SUBJECT: Notice of Determination: Environmental Assessment (EA) for the Wilcox Single-Family Residence (TMK (3)8-3-5:7)

The Department of Land and Natural Resources, Land Division, has reviewed the comments received during the 30-day public comment period, which began on December 23, 2000 and the subject EA. We have determined that the subject project will not have significant environmental effects and hereby issue a Finding of no Significant Impact (FONSI) for the subject EA. Please publish this notice in the April 8, 2000 OEQC Environmental Notice.

We have enclosed a completed OEQC Publication Form, a completed OEQC Publication form on computer disk and four copies of the final EA. Please contact Eric Hill of our planning staff at 587-0383 if you have any questions.

471

APR 8 2000

FILE COPY

FINAL ENVIRONMENTAL ASSESSMENT

2000-04-08-141-*FEA-*

ALLEN C. WILCOX JR.

&

*BARBARA S. (WILCOX
SINGLE FAMILY RESIDENCE)*

*Kahaloa 2nd, South Kona District, Hawaii
TMK (3) 8-3-05:7*

Prepared by:
Alanui Enterprises
P.O. Box 390628
Kailua-Kona, Hawaii
96739

February 2000

RECEIVED
DIVISION OF
LAND MANAGEMENT
FEB 18 2 10 PM '00

TABLE OF CONTENTS

1.0	INTRODUCTION	
1.1	Applicant	page 1
1.2	Approving Agency	page 1
1.3	Anticipated Determination	page 1
1.4	Agencies Consulted	page 1
2.0	GENERAL DESCRIPTION OF PROPOSED ACTION.....	
2.1	Location and Ownership	page 2
2.2	Existing Uses	page 2
2.3	Project Description	page 7
	2.3.1 Nature of the Request	page 7
	2.3.2 Conceptual Design	page 7
	2.3.3 Landscaping	page 7
	2.3.4 Infrastructure	page 7
2.4	Timetable and Cost	pages 7 - 8
3.0	ENVIRONMENTAL SETTING, IMPACTS & MITIGATION MEASURES	
3.1	Physical Characteristics	pages 14 - 17
	3.1.1 Climate	page 14
	3.1.2 Topography and Soils	page 14
	3.1.3 Natural Hazards	page 15
	3.1.4 Flora and Fauna	page 15
	3.1.5 Historical and Archaeological Resources	page 15
	3.1.6 Coastal Resources	page 17
	3.1.7 Air Quality and Noise	page 17
	3.1.8 Scenic Resources	page 17
	3.1.9 Recreation Resources	page 17
3.2	Socioeconomic Characteristics	pages 17 - 18
	3.2.1 Shoreline Recreation and Public Access	page 17
	3.2.2 Employment	page 18
3.3	Public Facilities and Utilities	page 18
	3.3.1 Roads and Traffic	page 18
	3.3.2 Wastewater System	page 18
	3.3.3 Water System	page 18
	3.3.4 Electrical and Telephone	page 18
	3.3.5 Fire and Police Protection	page 18

TABLE OF CONTENTS

4.0 RELATIONSHIP TO LAND USE PLANS, POLICIES & CONTROLS
4.1 State Land Use Law page 19
4.2 Hawaii County General Plan page 19
4.3 Hawaii County Zoning Codes page 19
4.4 Special Management Area Permit pages 19 - 20
4.5 Other Permits and Approvals page 20

5.0 DETERMINATIONS WITH SUPPORTING FINDINGS & REASONS.....

6.0 REFERENCES

EXHIBITS

- A. Metes and Bounds Description
- B. County of Hawaii, Department of Water Services Water Commitment Agreement
- C. Kilo 'Aina Archaeology Reconnaissance Survey
- D. County of Hawaii, Planning Department, exemption from Special Management Area review
- E. Photographs of Parcel
- F. Draft EA comments and responses
- G. DOCARE field inspection report

LIST OF FIGURES

Figure 1	Location Map	page 3
Figure 2	Vicinity Map	page 4
Figure 3	Site Plan(existing)	page 5
Figure 4	Area Map	page 6
Figure 5	<i>Mauka</i> Elevation	page 9
Figure 6	<i>Makai</i> Elevation	page 10
Figure 7	Kona Elevation	page 11
Figure 8	Kau Elevation	page 12
Figure 9	Site Plan (proposed)	page 13
Figure 10	FIRM Map Community Panel 155166 1156C	page 16

1.0 INTRODUCTION

1.1 Applicant

The Applicants are Allen C. Wilcox Jr. and Barbara S. Wilcox. who propose to construct a single-family residence on the subject parcel of land.

1.2 Approving Agency

The subject parcel lies within the State Land Use Board's Conservation District, General Sub-zone and thus requires a Conservation District Use Permit as granted by the Board of Land and Natural Resources. There fore the Approving Agency will be the Department of Land and Natural Resources.

1.3 Anticipated Determination

A Finding Of No Significant Impact (FONSI) is anticipated for the proposed project.

1.4 Agencies Consulted

The following agencies, organizations and individuals were consulted in the process of preparing this environmental assessment:

- Federal
Natural Resources Conservation Service
- State
Department of Land and Natural Resources
Department of Health, Wastewater Branch
- County
Department of Public Works
Planning Department
Department of Water Supply
- Organizations/Individuals
Kamehameha Schools Bernice Pauahi Bishop Estate
Hawaiian Electric Light Company (HELCO)

2.0 GENERAL DESCRIPTION OF PROPOSED ACTION

2.1 Location and Ownership

The parcel is located approximately 600 feet *makai* of Puuhonua Road, which connects the village of Napoopoo and Honaunau, and 200 feet *mauka* of the coastline in South Kona, Island and County of Hawaii (see Figure 1). The village of Napoopoo is less than ¼ mile to the North. The parcel lies in the *ahupuaa* identified as Kahauloa 2nd, has the Tax Map Key number (3) 8-3-05:7 (see Figure 2) and is 0.43 acres in area. The lot abuts Keawaiki Road, a private, un-paved gravel road, along the western property line. The property is owned by Pacific Century Trust with Allen C. Wilcox Jr. and Barbara S. Wilcox as joint beneficiaries.(see Exhibit A).

2.2 Existing Uses

Project Site.

The subject parcel is currently vacant, the temporary shade cloth structure noted previously having been removed (see Exhibit G, DOCARE inspection report). A perimeter stone wall surrounds the parcel and varies in condition. An unpaved driveway enters the parcel at the west through an opening in the perimeter wall and dead ends in the Northeast corner of the lot. The lot is landscaped in a variety of fruit and shade trees and various ornamental plants and vegetation. (see Figure 3).

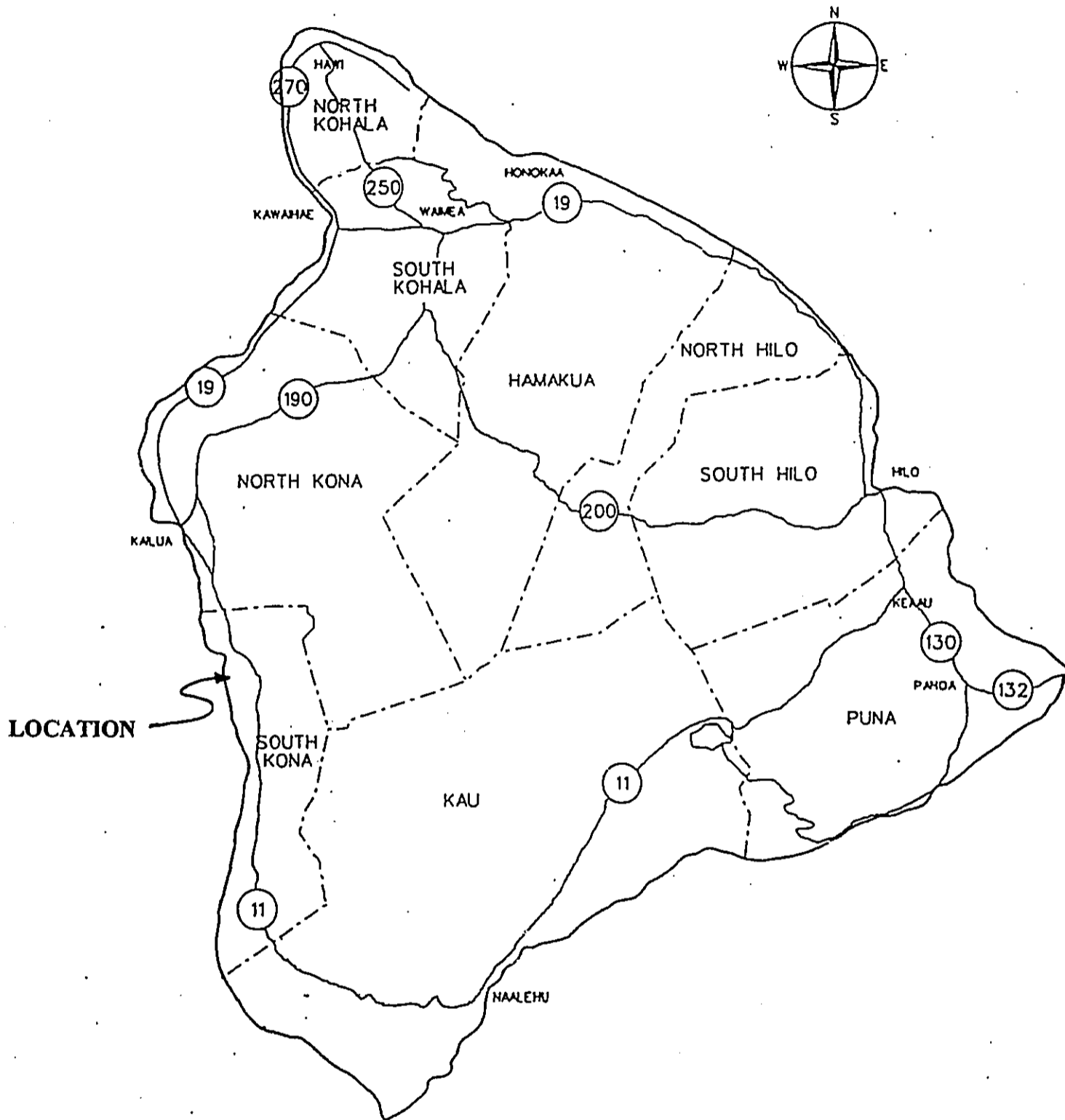
Surrounding Areas The surrounding uses are as follows:

- North: Two residential parcels, TMK (3) 8-3-05:10 and 12. Both parcels have been developed with single family residences and owned by the Applicants.
- South: A 24.55 acre parcel, TMK (3)8-3-05:1, which is vacant, unimproved a'a lava flow. This parcel is owned by Bishop Estate.
- East. A 0.79 acre parcel, TMK (3) 8-3-05:21, which is vacant and unimproved a'a lava flow. This parcel is owned by Bishop Estate.
- West. Approximately ½ of the parcel's western boundary borders parcel (3) 8-3-05:12 along this parcel's driveway entrance. The remaining half is bordered by Keawaiki Road, a private unpaved road constructed on parcel (3)8-3-05:1.

(See Figure 4)

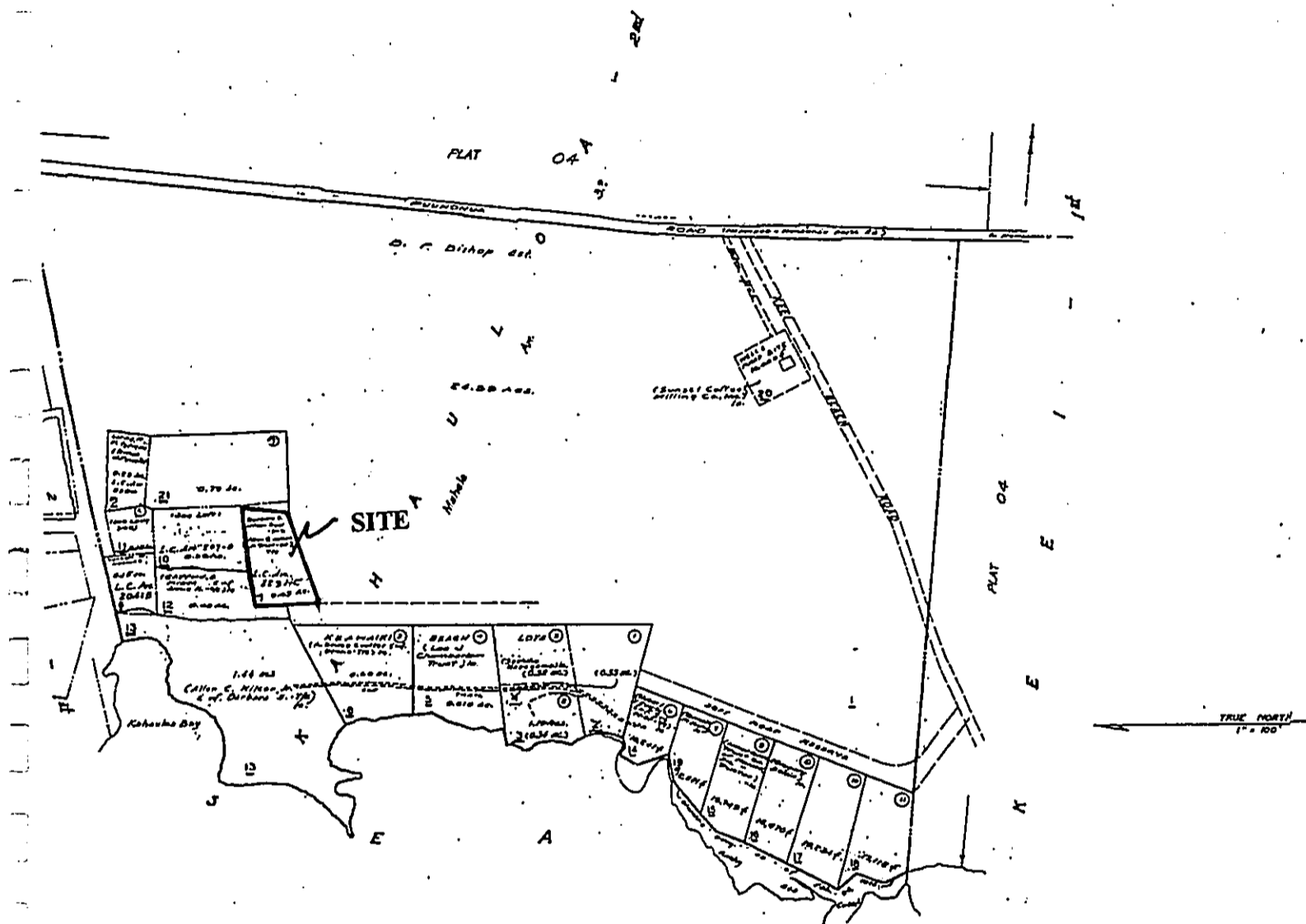
FINAL EA: ALLEN C. WILCOX JR. AND BARBARA S. WILCOX RESIDENCE

FIGURE 1: Location Map



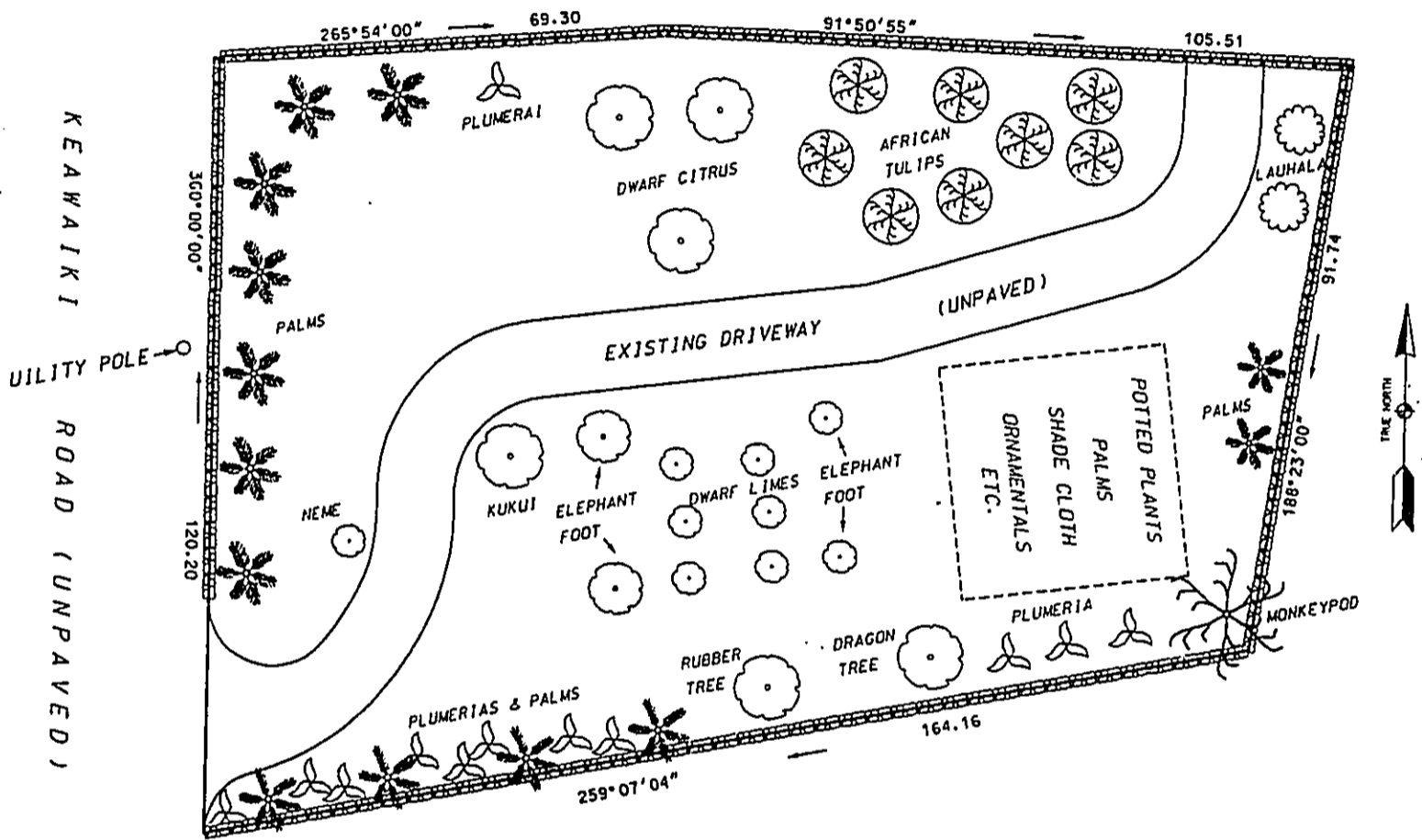
FINAL EA: ALLEN C. WILCOX JR. AND BARBARA S. WILCOX RESIDENCE

FIGURE 2: Vicinity Map



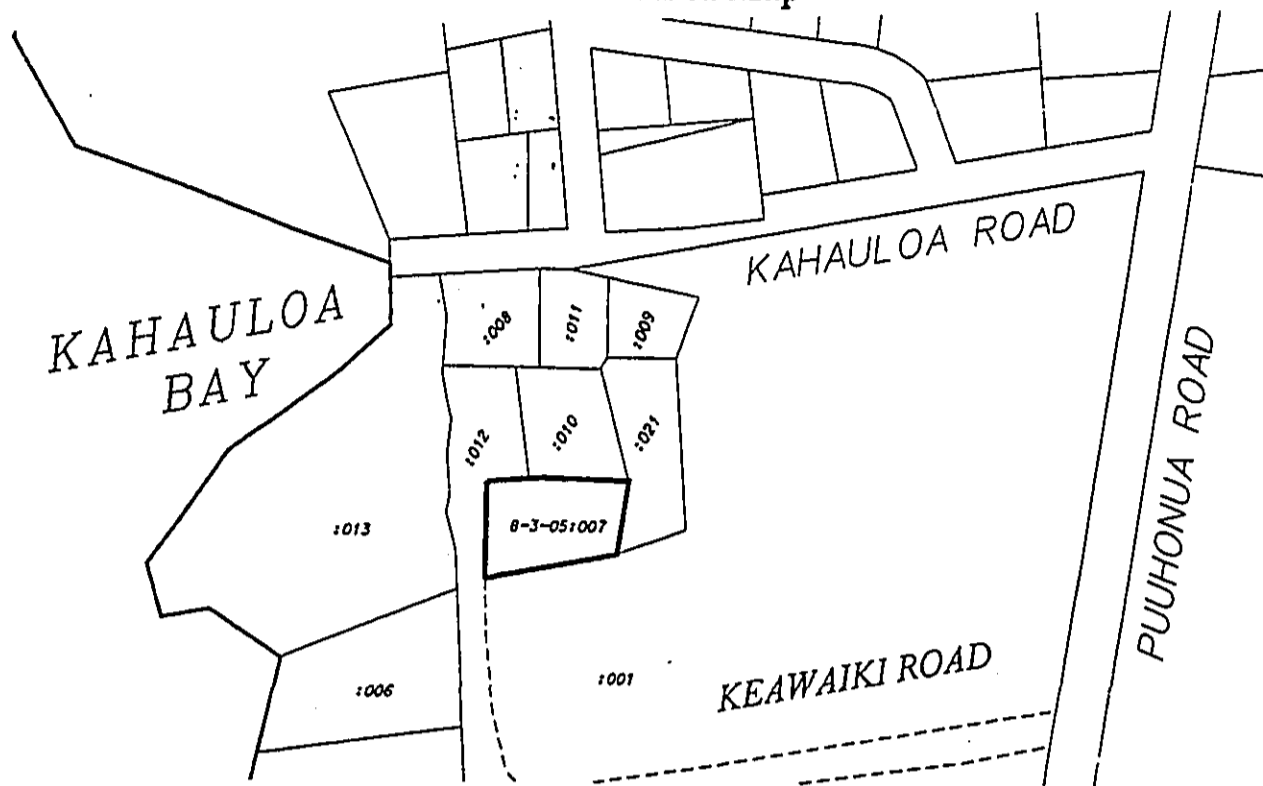
FINAL EA: ALLEN C. WILCOX JR. AND BARBARA S. WILCOX RESIDENCE

FIGURE 3: Site Plan (Existing)



FINAL EA: ALLEN C. WILCOX JR. AND BARBARA S. WILCOX RESIDENCE

FIGURE 4: Area Map



**Property Owners of Parcels
Adjacent to (3) 8-3-05:7**

- (3) 8-3-5:21 Bishop Estate
- (3) 8-3-5:1 P.O. Box 3466
Honolulu, HI 96801

- (3) 8-3-5:6 Alexander Wilson
26875 Nina Place
Los Altos Hills
CA 94022

- (3) 8-3-5:8 George L. Ching Trust
Gladys K.L. Ching Trust
1409 Ala Amoamo Street
Honolulu, HI 96819

- (3) 8-3-5:9 Estate of Lorna N.M. Ferreira
c/o Albert B. Ferreira
70 Hukulani Street
Hilo, HI 96720

- Vernon W. Morioka
95-138 Lewanuu Lane
Mililani Town, HI 96789

- (3) 8-3-5:10 Alex C. Wilcox Jr. Trust
- (3) 8-3-5:11 Barbara S. Wilcox Trust
- (3) 8-3-5:12 83-500 Keawaiki Road
- (3) 8-3-5:13 Captain Cook, HI 96704

FINAL EA: ALLEN C. WILCOX JR. AND BARBARA S. WILCOX RESIDENCE

2.3 Project Description

2.3.1 *Nature of the Request*

The Applicants seek approval to construct a one bedroom, one bath single family residence on the subject parcel of land.

2.3.2 *Conceptual Design*

The single-family residence proposed for the subject parcel is a one bedroom, one bath dwelling. The residence will be painted in natural tones to blend with the surrounding area. The foundation for the structure is a combination post to pier and shear footing that will require the minimum of excavation. A lanai faces seaward while the enclosed portion of the dwelling lies at the mauka portion. Area under roof is 1,888 square feet of which 1024 square feet is living area and 864 square feet is lanai. A small cupola sits atop along the roof ridge midway between the mauka and makai ends of the structure. The top of the cupola is 24 feet-6 inches above the lowest point of the natural ground adjacent to the structure. Water, electricity and telephone services are all readily available to the proposed dwelling. An Individual Wastewater System, as approved by the State Department of Health, Wastewater Branch will be utilized to treat and dispose of sewage (see Figures 5, 6, 7, 8 & 9).

2.3.2 *Landscaping*

The lot is currently landscaped with numerous fruit and shade trees such as palms, citrus, kukui, monkey pod and neme. Additionally various ornamental plants and vegetation such as lantana, lauhala and haole koa are also present (see Figure 3). The Applicant wishes to preserve the existing landscaping as much as possible, removing only what is absolutely necessary for the placement of the house (see Figure 9).

2.3.3 *Infrastructure*

Electricity, telephone and cable are available from the power pole located along the western property line of the parcel(see Figure 3). County water is available from Kahauloa Road to the north. The Applicant has secured a water commitment from the Hawaii County Department of Water Supply for the proposed dwelling (see Exhibit B).

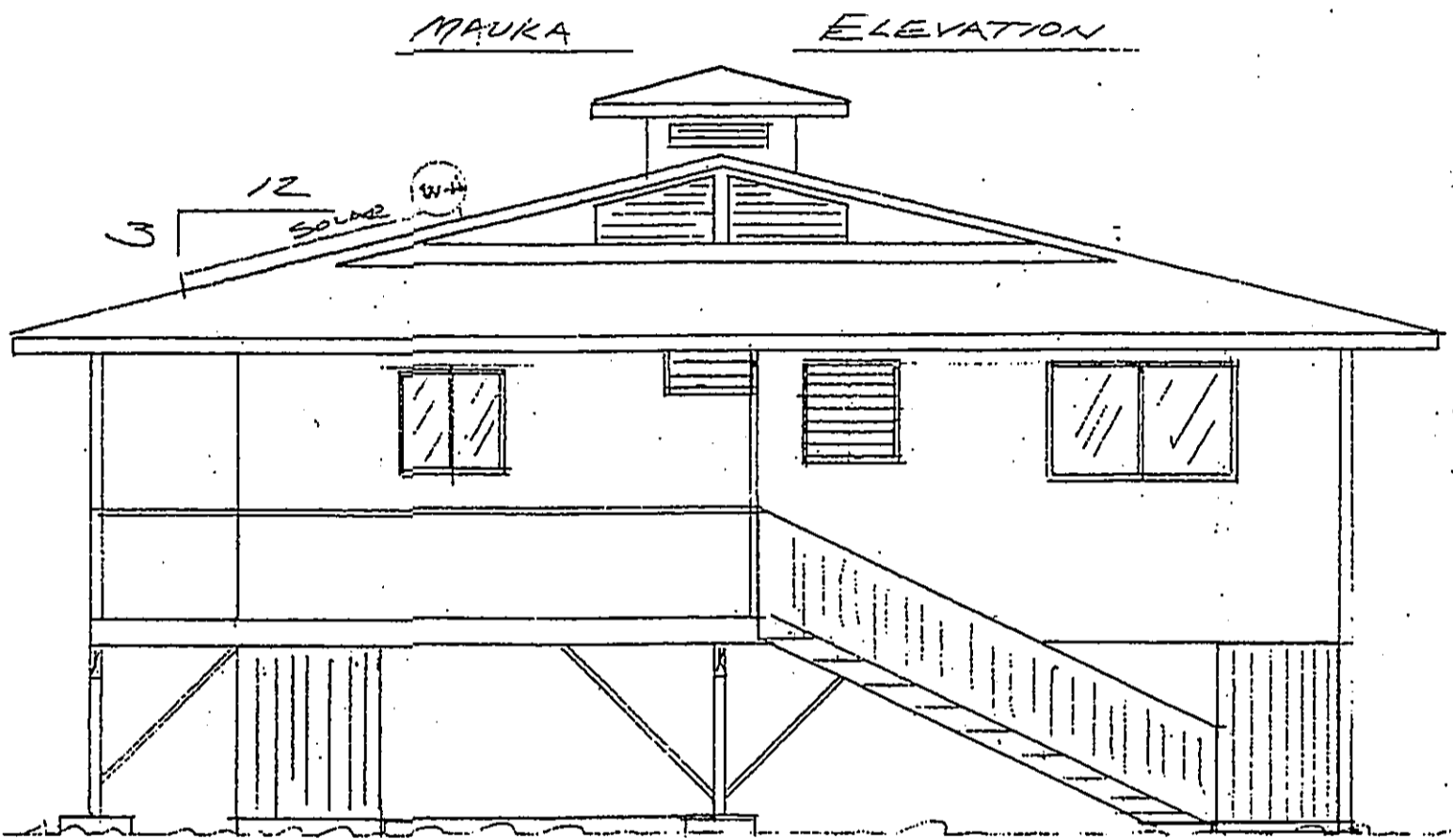
2.4 Timetable and Cost

Construction of the proposed dwelling would begin upon obtaining the Conservation District Use Permit requested by this application and Hawaii
FINAL EA: ALLEN C. WILCOX JR. AND BARBARA S. WILCOX RESIDENCE

County building permits. Construction is estimated to take 6 months to complete at an estimated cost of \$100,000.

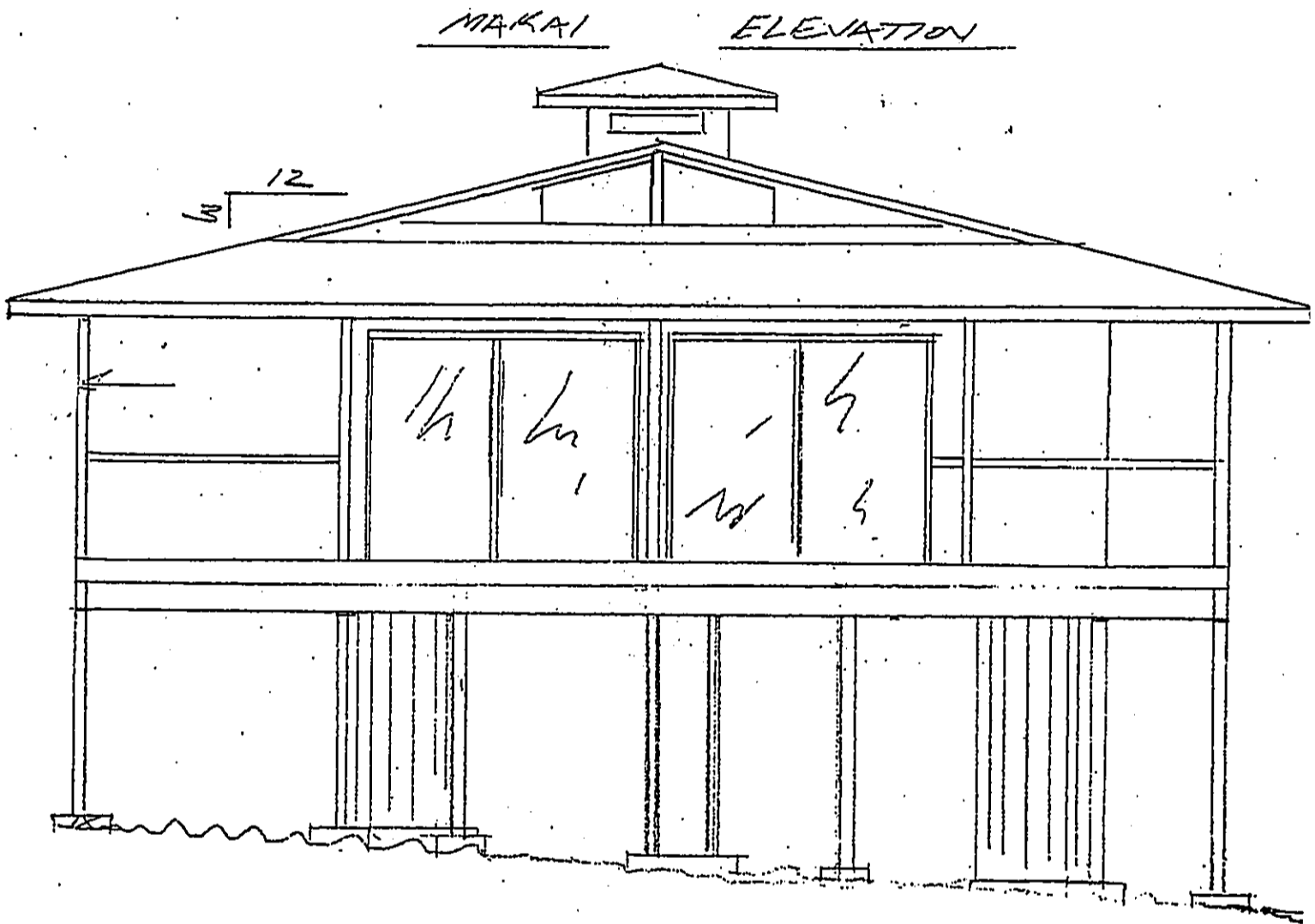
FINAL EA: ALLEN C. WILCOX JR. AND BARBARA S. WILCOX RESIDENCE

FIGURE 5: *Mauka* Elevation



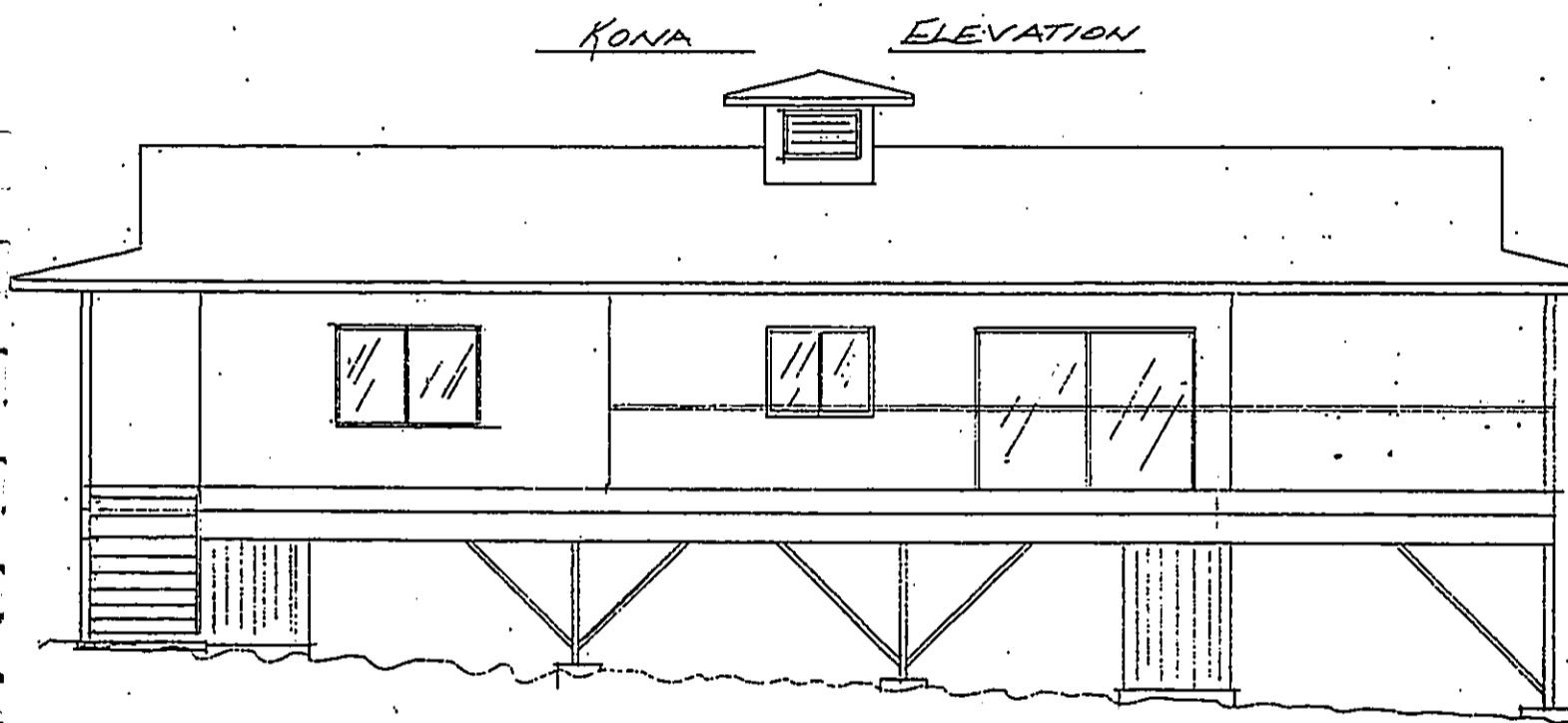
FINAL EA: ALLEN C. WILCOX JR. AND BARBARA S. WILCOX RESIDENCE

FIGURE 6: *Makai* Elevation



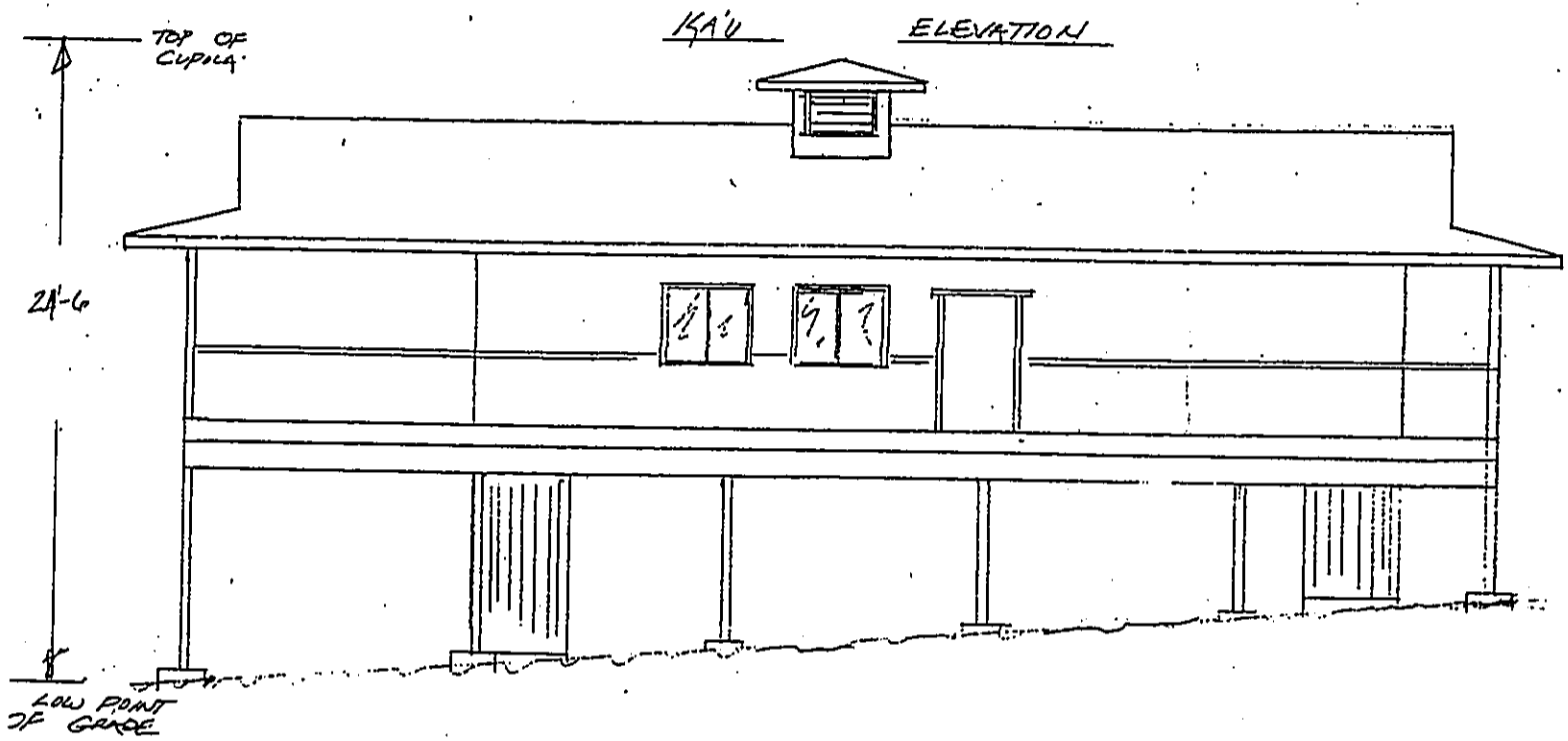
FINAL EA: ALLEN C. WILCOX JR. AND BARBARA S. WILCOX RESIDENCE

FIGURE 7: Kona Elevation



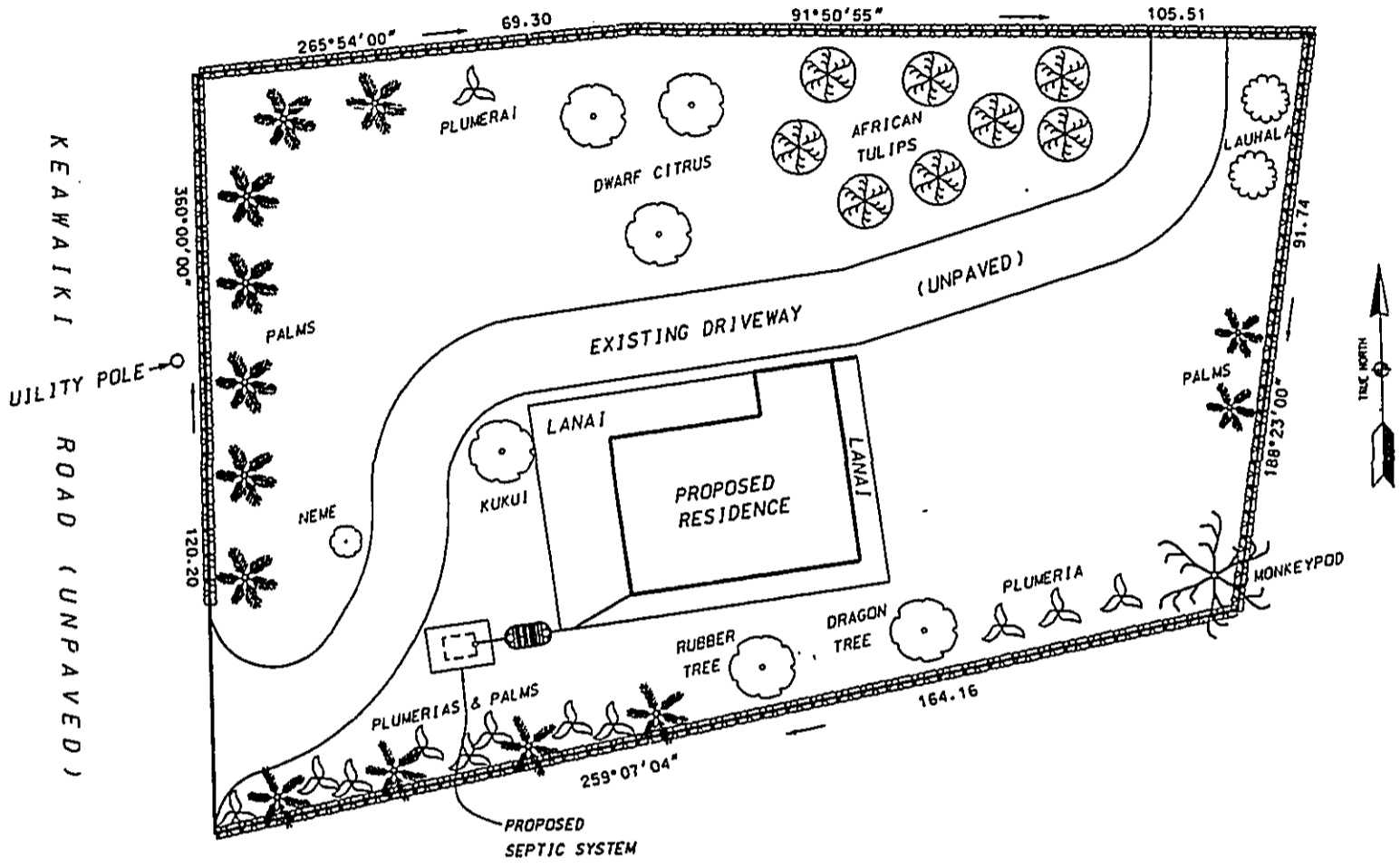
FINAL EA: ALLEN C. WILCOX JR. AND BARBARA S. WILCOX RESIDENCE

FIGURE 8: Kau Elevation



FINAL EA: ALLEN C. WILCOX JR. AND BARBARA S. WILCOX RESIDENCE

FIGURE 9: Site Plan (Proposed)



FINAL EA: ALLEN C. WILCOX JR. AND BARBARA S. WILCOX RESIDENCE

3.0 ENVIRONMENTAL SETTING, IMPACTS & MITIGATION MEASURES

3.1 Physical Characteristics

3.1.1 *Climate*

Situated in leeward Hawaii, South Kona is shielded from prevailing northwesterly tradewinds by the landmass of Mauna Kea, Mauna Loa and Hualalai. The result is an alternating system of air circulation driven by differences in land and water temperatures. Particularly on warm days, this system produces light winds that blow offshore in the morning and early afternoon and onshore in the late afternoon and evenings.¹

Kona has an annual rainfall range from 20" along the coast to 100" on the mountain slopes. Although climatic conditions have minimized the occurrence of orographic rainfall, Kona showers are frequent and heavy enough to produce a much higher mean rainfall in Kona than in other leeward areas in the State. Most of the precipitation in the district occurs in the summer months because the differences in land and water temperatures generate a moderate seabreeze circulation resulting in showers that are typically spotty in distribution and highly variable in duration and intensity. Kona is atypical in that it receives the majority of its annual precipitation in summer, from May through August.²

3.1.2 *Topography & Soils*

Parcel 7 sits at an elevation slightly above the surrounding terrain. The high point of the parcel is located approximately one quarter of the way makai from the mauka property line and maintains an approximate 25 foot elevation above Mean Sea Level to the mid-point of the parcel. The land then slopes regularly to the elevation of Keawaiki Road a fall of approximately 5 feet. The parcel also slopes to the north and south from the high point at a slightly steeper grade again losing approximately 5 feet of elevation.

The Soil Survey of Island of Hawaii, State of Hawaii as published by the United States Department of Agriculture, Soil Conservation Service identifies the soil type in the area as Aa lava flow. Except where cultivation has occurred, this land type is usually barren ground, rough and broken and difficult to traverse.

¹ Towill, R. M. Corporation. Drainage Master Plan for the County of Hawaii, 1971.

² State of Hawaii, Department of Land and Natural Resources. An Inventory of Basic Water Resources Data: Island of Hawaii. Report R34, 1970.

3.1.3 *Natural Hazards*

Flood and Coastal Hazards. The Flood Insurance Rate Map (FIRM), Community Panel 155166 1156C, as published by the Federal Emergency Management Agency (FEMA), identifies the Base Flood Elevation for coastal flood zones as 15 feet in this area. The entire parcel sits above this elevation and is therefore not within the flood zone as identified by FEMA (see Figure 10).

Volcanic and Earthquake Hazard. The site is located in an area designated by the United States Geological Survey (USGS) as Lava Flow Hazard Zone 3, on a scale of ascending risk 9 to 1. The County Building Code classifies the entire island of Hawaii in Earthquake Zone 4 and addresses the relative seismic hazards by maintaining certain structural requirements.³ All Building Code requirements for construction within Earthquake Zone 4 will be met.

3.1.4 *Flora/Fauna*

The lot is currently landscaped with numerous fruit and shade trees such as palms, citrus, kukui, monkey pod and neme. Additionally various ornamental plants and vegetation such as lantana, lauhala and haole koa are also present (see Figure 3). There are no rare or endangered species on the site. The Applicant wishes to preserve the existing landscaping as much as possible, removing only what is absolutely necessary for the placement of the house (see Figure 9).

3.1.5 *Historic, Archaeological & Cultural Resources*

Historic and Archaeological Resources. The site is within the Kealahou Bay Archaeological and Historic District which is listed in the National Register of Historic Places. An archaeological reconnaissance survey was performed in April of 1989 on parcel 7 and the adjacent parcel 10 and found no sites of historical or cultural interest on the parcel (see Exhibit C).

Cultural Resources. . No known significant cultural uses or activities, are known to pre-exist the current use.

³ Hawaii County Code, Chapter 5 - Building.

FIGURE 10 Flood Insurance Rate Map
Community Panel 155166 1156C

LEGEND

SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100-YEAR FLOOD

- ZONE A** No base flood elevations determined.
- ZONE AE** Base flood elevations determined.
- ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined.
- ZONE AO** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- ZONE A99** To be protected from 100-year flood by Federal flood protection system under construction; no base elevations determined.
- ZONE V** Coastal flood with velocity hazard (wave action); no base flood elevations determined.
- ZONE VE** Coastal flood with velocity hazard (wave action); base flood elevations determined.

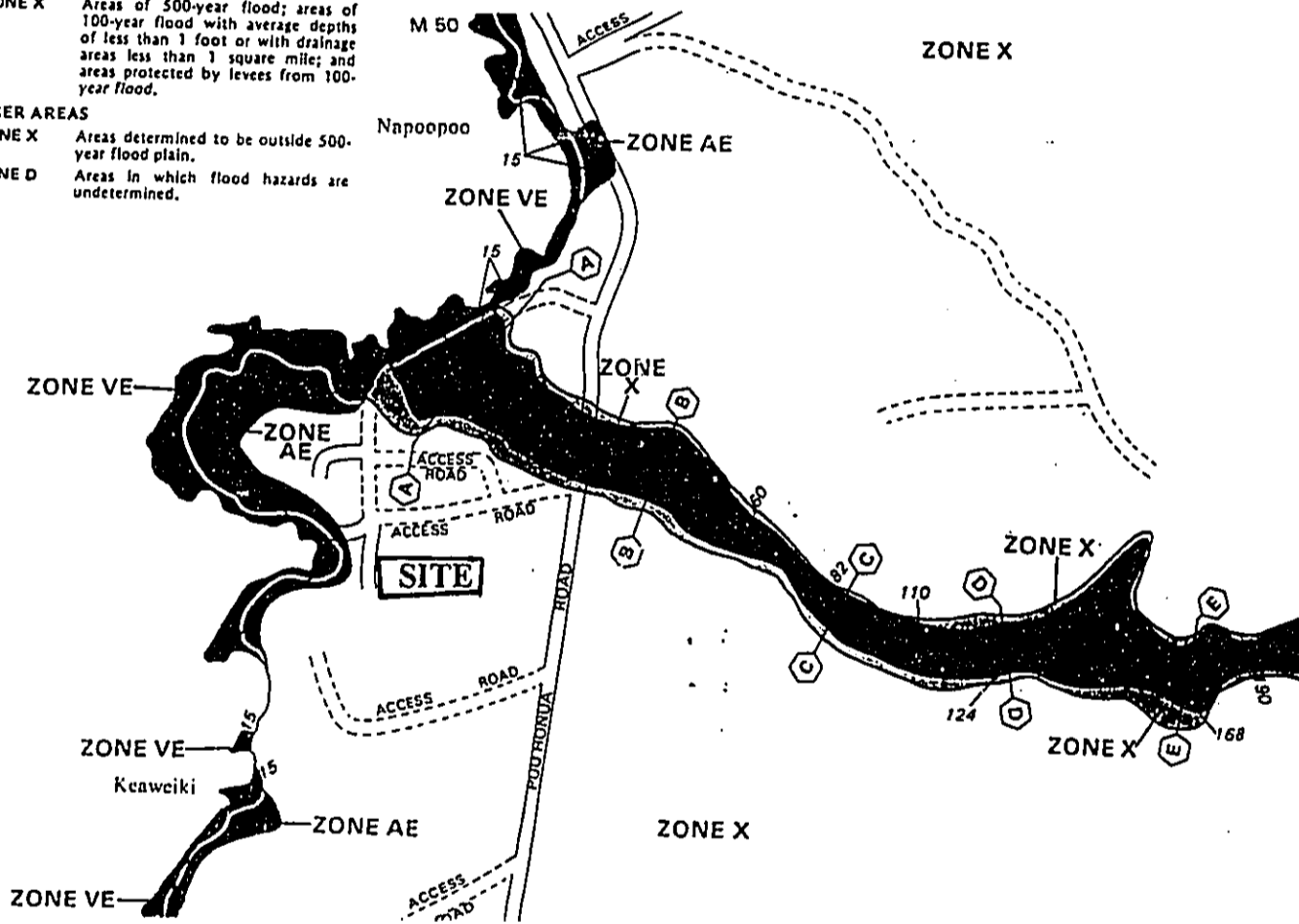
FLOODWAY AREAS IN ZONE AE

OTHER FLOOD AREAS

- ZONE X** Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 100-year flood.

OTHER AREAS

- ZONE X** Areas determined to be outside 500-year flood plain.
- ZONE D** Areas in which flood hazards are undetermined.



FINAL EA: ALLEN C. WILCOX JR. AND BARBARA S. WILCOX RESIDENCE

3.1.6 Coastal Resources

The subject parcel is not an oceanfront parcel and therefore the construction of the proposed single family residence will have no impact on either coastal access or use of coastal lands.

3.1.7 Air Quality & Noise

A temporary noise impact will exist throughout the construction phase of the project. State Air Quality Standards under Hawaii Administrative Rules Title 11, Chapter 60, and Department of Health Community Noise Control Rules will be complied with.^{4 5}

3.1.8 Scenic Resources

The project site is not listed in the Hawaii County General Plan as an example of a site or view plane of significant natural beauty.⁶ The planned single family residence will be painted to blend in with the surrounding area. There are a number of residences in the immediate area therefore the proposed dwelling will be compatible with the overall appearance of the neighborhood. No adverse impact on neighboring residence's views is expected as a result of this project.

3.1.9 Recreation Resources

The subject parcel is not an oceanfront parcel and therefore the construction of the proposed single family residence will have no impact on either coastal access or use of coastal lands. No adverse impact on recreational use of the shoreline is expected as a result of this project.

3.2 Socioeconomic Characteristics

3.2.1 Shoreline Recreation and Public Access

The subject parcel is not an oceanfront parcel and therefore the construction of the proposed single family residence will have no impact on either coastal access or use of coastal lands. No adverse impact on recreational use of the shoreline is expected as a result of this project.

⁴ Hawaii Administrative Rules Title 11, Chapter 60 (State of Hawaii Air Quality Standards).

⁵ Department of Health Noise Control Rules.

⁶ Hawaii County General Plan, November 1989 pages 36 - 37.

3.2.2 Employment

Short term employment is anticipated for building contractors during the period of construction of the proposed single family dwelling.

3.3 Public Facilities and Utilities

3.3.1 Roads and Traffic

The project site fronts the northern terminus of Keawaiki Road, a private, unpaved roadway. Access to the proposed dwelling will be via Keawaiki Road. Alternative access to the property is from the makai terminus of Kahauloa Road and over parcel 10, also owned by the Applicants. No adverse impact to area roads or traffic is anticipated as a result of this project.

3.3.2 Wastewater System

The subject parcel of land lies in a Critical Wastewater Zone as determined and administered by the State of Hawaii, Department of Health, Wastewater Branch. An Individual Wastewater System designed in accordance with Chapter 11-62 HAR, Wastewater Regulations and approved by the Wastewater Branch will be specified for the proposed residence.

3.3.3 Water System

County water is available at the makai end of Kahauloa Road to the north. The Applicant has secured a water commitment from the Hawaii County Department of Water Supply for the proposed dwelling (see Exhibit B).

3.3.4 Electrical and Telephone

Electricity, telephone and cable are available from the power pole located along the western property line of the parcel (see Figure 3).

3.3.5 Fire and Police Protection

The proposed single family residence will be able to be adequately served by the existing fire and police protection services.

4.0 RELATIONSHIP TO LAND USE PLANS, POLICIES & CONTROLS

FINAL EA: ALLEN C. WILCOX JR. AND BARBARA S. WILCOX RESIDENCE

4.1 State Land Use Law

Hawaii was the first state in the U.S.A. to adopt a State Land Use Law, now the apex of the system for implementing the State Plan. The original Land Use Law (Act 187, 1961) and subsequent amendments (Hawaii Revised Statutes Chapter 205) classify all lands in the state into four use districts; agriculture, conservation, rural, and urban. The State Land Use Law establishes a State Land Use Commission, appointed by the governor, to review petitions for changes in district boundaries submitted by landowners or public agencies.

The subject parcel lies within the State Land Use Board's Conservation District, General Sub-zone and thus the proposed single family residence requires a Conservation District Use Permit as granted by the Board of Land and Natural Resources. The objective of the General subzone is to designate open space where specific conservation uses may not be defined, but where urban use would be premature. The proposed project, an owner occupied single family residence, is an allowable land use in the General subzone per section 13 -5- 25. The dwelling will be designed according to standards set forth in Exhibit 4, Single Family Residential Standards, September 6, 1994 of Chapter 13-5 Hawaii Revised Statutes.

4.2 Hawaii County General Plan

Coordination of the State Plan at the county level is through the County General and Development Plans. The Hawaii County General Plan addresses environmental and economical elements in the context of goals and policies for the long-range comprehensive physical development of the county. The General Plan Land Use Pattern Allocation Guide (LUPAG) Map designation for the site is Low Density.

4.3 Hawaii County Zoning

Specific land use designations and permissible uses are further defined in county zoning codes through land use ordinances and rules. The site has a Hawaii County Zoning designation of Open.

4.4 Coastal Zone Management & Special Management Area Permit

The Special Management Area (SMA) Use Permit is the most direct means through which the objectives and policies of the Hawaii Coastal Zone Management (CZM) Act program are implemented.⁷ The objectives of the

⁷ State of Hawaii, Hawaii CZM Law, an Assessment in Response to Act 126, January 1984.

CZM rules and policies are to preserve, protect and, where possible, to restore the natural resources of the island's coastal zone areas.

The subject property is located within the County's Special Management Area (SMA). The Applicants have filed an SMA Assessment with the Hawaii County Planning Department and received written notice that the proposed single family residence is exempt from further SMA review (see Exhibit D).

4.5 Other Permits & Approvals

The following are Federal, State and Hawaii County permits and approvals most likely to be required by the project:

Federal

No Federal permits are anticipated to be required for the project.

State

The proposed single family residence requires a Conservation District Use Permit as granted by the Board of Land and Natural Resources .

The Individual Wastewater System (IWS) will require approval by the Hawaii State Department of Health, Wastewater Branch.

County

- Building Department - Building Permit

5.0 DETERMINATION WITH SUPPORTING FINDINGS & REASONS

Pursuant to the significance criteria set forth by the Environmental Council through Hawaii Administrative Rules, Sections 11-200-12, the proposed project is not expected to cause significant impacts to the environment. Per the discussion below, the determination is to issue a Finding of No Significant Impact.

The proposed project will not involve an irrevocable commitment to loss or destruction to any natural or cultural resources. The project site is not identified as an essential habitat of any plant or animal species. The proposed project will not impact sites of historical or cultural significance. The proposed expansion will not reduce the size of any beach nor restrict public access to tidal and submerged lands.

FINAL EA: ALLEN C. WILCOX JR. AND BARBARA S. WILCOX RESIDENCE

The proposed project will not curtail the range of beneficial uses of the environment. The proposed single family residence will not significantly impact the beneficial uses of the environment in the surrounding area. The subject parcel is not an oceanfront parcel and therefore the construction of the proposed single family residence will have no impact on either coastal access or use of coastal lands. The surrounding area is residential also and the proposed dwelling will conform to the land use established in the immediate area.

The proposed project will not conflict with the State's long term environmental policies, goals or guidelines. The project conforms with the State's policy by providing minimal impact development in Conservation lands.

The proposed project will not substantially affect the economic or social welfare, or public health of the community or State.. A short term economic benefit will be provided to building contractors during the construction phase of the project. The proposed dwelling will be served by an Individual Wastewater System designed in accordance with Chapter 11-62 HAR, Wastewater Regulations and approved by the Wastewater Branch of the State Department of Health.

The proposed project will not involve substantial secondary impacts, such as population changes or effects on public facilities.. The proposed residence is a one bedroom, one bath dwelling and occupancy will not substantially impact population density in the project area. The proposed dwelling is adequately serviced by existing public facilities.

The proposed project will not involve a substantial degradation of environmental quality. The proposed dwelling has been designed to have minimal impact on the surrounding environment. Foundations for the dwelling will require the least amount of excavation and the residence will be finished in natural tones to blend with the surrounding area. Existing landscaping will be disturbed as little as possible.

The proposed project will not have cumulative environmental impacts or involve a commitment for larger actions. The full extent of the proposed development has been discussed within this Environmental Assessment.

The proposed project will not substantially affect any rare, threatened or endangered species of flora or fauna or it's habitat. The project site has not been identified as a habitat for any rare threatened or endangered species of flora or fauna.

The proposed project will not detrimentally affect air or water quality or ambient noise levels. During construction Best Management Practices will be followed to limit the impact on air and water quality and all Department of Health regulations regarding air and water quality as well as noise emissions will be complied with. All Hawaii County ordinances regarding noise levels will be observed.

The proposed project is not likely to suffer damage by being located in an environmentally sensitive area such as a flood plain, tsunami zone, beach, erosion prone area, geologically hazardous land, estuary, fresh water or coastal waters. The proposed single family dwelling lies outside flood plains as identified by the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map for the immediate area. The subject parcel is not oceanfront and is not subject to erosion nor is the parcel located on geologically hazardous land.

The proposed project does not substantially affect scenic vista and view planes identified in county or state plans or studies. The project site does not lie within scenic vista and view planes identified in the Hawaii County General Plan.

The proposed project does not require substantial energy consumption. All Hawaii County Building Code requirements as to energy conservation will met. The project will be adequately serviced by existing utilities.

The proposed land use is consistent with the purpose of the Conservation District. The Land Board's policy allows conditional use residences in the Conservation District. The dwelling will be designed according to standards set forth in Exhibit 4, Single Family Residential Standards, September 6, 1994 of Chapter 13-5 Hawaii Revised Statutes.

The proposed land use is consistent with the objectives of the subzone of the land on which the use will occur. The objective of the General subzone is to designate open space where specific conservation uses may not be defined, but where urban use would be premature. The proposed project, an owner occupied single family residence, does not constitute urban use and is an allowable land use in the General subzone per section 13 -5- 25. The dwelling will be designed according to standards set forth in Exhibit 4, Single Family Residential Standards, September 6, 1994 of Chapter 13-5 Hawaii Revised Statutes.

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

Recreational Resources

The subject parcel is not an oceanfront parcel and therefore the proposed residential use will not impede public access to or along the shoreline. The proposed dwelling will utilize an Individual Wastewater Treatment System as approved by the Hawaii State Department of Health, Wastewater Branch and will not impact the coastal water quality for recreational uses.

Historic Resources

Based on a reconnaissance survey of the subject parcel there are no known surface or subsurface archaeological resources. The method of construction will minimize the potential for disturbance of unknown subsurface remains.

Scenic and Open Space Resources

The subject parcel lies outside any area determined to be a significant scenic resource. The proposed dwelling will be painted in natural earth tones and will blend in with the surrounding vegetation. The surrounding area is residential also and the proposed dwelling will conform to the land use established in the immediate area

Coastal Ecosystems

The subject parcel is not an oceanfront parcel and therefore the proposed residential use will not impact the coastal shoreline ecosystem. The proposed dwelling will utilize an Individual Wastewater Treatment System as approved by the Hawaii State Department of Health, Wastewater Branch and will not impact the coastal water quality.

Economic Uses

The economic objectives and policies provide for appropriate coastal-dependent development in suitable locations. The surrounding area is residential also and the proposed dwelling will conform to the land use established in the immediate area

Coastal Hazards

The subject parcel lies mauka of the coastal flood hazard zone and is not subject to flooding or impact from coastal hazards

The proposed land use will not cause substantial adverse impact to existing natural resources within the surrounding area, community or region. The proposed single family dwelling will have minimal impact on the natural resources of the surrounding area. The residence will be constructed in such a manner as to minimize the excavation necessary for foundations. The residence adequately serviced by existing utilities and will be of a style and color to blend with the existing community.

The proposed land use, including buildings, structures and facilities, shall be compatible with the locality and surrounding area, appropriate to the physical conditions and capabilities of the specific parcel or parcels. The proposed residence will be of a style and color compatible with the appearance of the existing residences in the immediate area. The total area under roof, 1,888 square feet, is a small portion of the 0.43 acre parcel and is well within the capabilities of the parcel.

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

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

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

6.0 REFERENCES

Federal Emergency Management Agency, Flood Insurance Rate Map, Community Panel Number 155166 1156C, September 1988.

Hawaii County. The General Plan Hawaii County, as Adopted by Ordinance 89-142, November 1989.

Hawaii County Building Code:

Chapter 5 - Building;

Chapter 25 - Zoning as Adopted by Ordinance 96 160;

Chapter 27 - Flood Control.

Hawaii Revised Statutes 205A.

FINAL EA: ALLEN C. WILCOX JR. AND BARBARA S. WILCOX RESIDENCE

State of Hawaii, Department of Land and Natural Resources. An Inventory of Basic Water Resources Data: Island of Hawaii. Report R34, 1970.

State of Hawaii, Office of State Planning. The Hawaii State Plan, Chapter 226, Hawaii Revised Statutes, 1988.

Hawaii Administrative Rules Chapter 11-46 (DOH noise control rules)

Towill, R.M. Corporation. Drainage Master Plan for the County of Hawaii, 1971.

U.S. Department of Agriculture, Natural Resource Conservation Service. Soil Survey of Island of Hawaii, State of Hawaii - Update. 1998 unpublished data, photo # 8-60 series GS-VEEC.

EXHIBIT A
METES & BOUNDS DESCRIPTION

23266 482

EXHIBIT A

All of that certain parcel of land (being portions of the land(s) described in and covered by Royal Patent #056, Land Commission Award 8231-C to I and Royal Patent 4513, Mahele Award 32 to Kanele) situate, lying and being at Kahauloa 2, District of South Kona, Island and County of Hawaii, State of Hawaii, and thus bounded and described:

Beginning at a pipe in concrete at the southeast corner of this parcel of land, the same being the southwest of Lot A-1, the coordinates of said point of beginning referred to Government Survey Triangulation Station "LAE O KANONI" being 13,592.7 feet north and 1,176.1 feet west, and running thence by azimuths measured clockwise from true South:

- | | | | | |
|----|------|-----|-------|---|
| 1. | 70° | 16' | 173.0 | feet along stonewall along the remainder of R. P. 4513, M. A. 32 to Kanele to a pipe in concrete; |
| 2. | 174° | 56' | 120.2 | feet along stonewall along the remainder of R. P. 4513, M. A. 32 to Kanele and along Lot B to a pipe in concrete; |
| 3. | 256° | 24' | 69.3 | feet along stonewall along Lot B to a pipe in concrete; |
| 4. | 265° | 54' | 119.0 | feet along stonewall along L. C. Aw. 207-B, Ap. 2 to Kuheana to a pipe in concrete; |
| 5. | 8° | 23' | 86.9 | feet along stonewall along Lot A-1 to the point of beginning and containing an area of 0.43 acre, more or less. |

23266 483

BEING THE PREMISES DESCRIBED IN QUITCLAIM DEED

GRANTOR ALLEN C. WILCOX, JR. and BARBARA S. WILCOX,
husband and wife

GRANTEE : HAWAIIAN TRUST COMPANY, LTD., a Hawaii
corporation, as Trustee under that certain
Trust Agreement dated October 23, 1985, Land
Trust Number 89591, recorded in the Bureau of
Conveyances of the State of Hawaii in Liber
19063 at Page 576

DATED : January 7, 1986
RECORDED : Liber 19452 Page 686

SUBJECT, HOWEVER, to the following:

1. Terms, conditions and provisions contained in that certain Trust Agreement dated October 23, 1985, Land Trust Number 89591, recorded in the Bureau of Conveyances of the State of Hawaii in Liber 19063 at Page 576.
2. The land described herein appears to be without a recorded easement to the nearest government road.

EXHIBIT B
COUNTY OF HAWAII,
DEPARTMENT OF WATER SERVICES
WATER COMMITMENT AGREEMENT

Tap to install 1" type A 5/2 and 3/8 inch 1362

DEPARTMENT OF WATER SUPPLY - COUNTY OF HAWAII

APPLICATION FOR WATER SERVICE

920-
Service No.

LOCATION Kahala Rd, Napoona Sewer: S - B -
TAX MAP KEY 8-3-005-007 LOT NO. 70% SSN 557-28-4961

The undersigned hereby applies to the Department of Water Supply of the County of Hawaii for water service and/or meter at the above location, pending approval, and in consideration of the installation of such service and meter, agrees to pay all charges incurred upon such location for such water service and to abide by all rules, regulations and provisions prescribed by said Commission relating to water service, and or rates.

Date of Application 10/6/99 Phone No. 328-9118 Applicant's name E. Wilcox, Allen
Usage Code 1 System Code - Rate Area II Owner's name Esperanza, David
Purpose Res. Amortized Cost - By Authorized Agent Esperanza, David
Temporary Deposit \$ - No. PE # 198716 Send bill as follows:
Facilities Charges \$ 543.00 Inst Chg. 1,200.00 Name Wilcox, Allen
Work Order No. - Address 83-500 Kawakui Rd.
Meter No. - Size - Capt. Cook, HI 96704
Reading when - Date -
Elevation Agreement - Backflow Preventer - Applicant's signature [Signature] Date 10/6/1999
Credit Deposit - Receiving Clerk [Signature]
Date service started not of record "LIMITED TO 600 GALLONS PER DAY"

DESCRIPTION	AMOUNT
CASH [] MO []	
CHECK # <u>5760</u>	
OFFICE MAIL []	
TERRITORY	<u>1,200.00</u>
FLAT RATE	
SHIPPING	
LABOR & MATERIAL	<u>543.00</u>
FACILITIES	
RESERVE CHARGES	
METER	
SERVICES	
CREDIT DEPOSIT	
PENALTY	
METER RATE	
RECEIVED FROM	
PAGE NO.	
FROM	
TO	
AMOUNT	
TOTAL	<u>1,743.00</u>

DEPARTMENT OF WATER SUPPLY
OFFICIAL RECEIPT
COUNTY OF HAWAII
APPROVING AUTHORITY
DATE 10/6/99
TO Wilcox, Allen
FROM 83-500 Kawakui Rd
DATE 10/6/99
AMOUNT 1,743.00



198716
98

EXHIBIT C
KILO'AINA ARCHAEOLOGY
RECONNAISSANCE SURVEY

KILO 'AINA

RRI BOX 581 • CAPTAIN COOK, HAWAII 96704 • (808) 328-2569

75-5336 La'aulu Road
Holualoa, HI 96725

15 April, 1989

Allen C. Wilcox, Jr.
RR 1, Box 176A
Captain Cook, HI 96704

CDUA- WILCOX ATTACHMENT D ARCHAEOLOGY SURVEY SEE PAGE 2.

Sir:

Re: CDU Permit
TMK 3-8-3-05:10

Per your request, I have examined the subject parcel for features of historic interest.

The parcel constitutes Land Commission Award 207-B, Royal Patent 8346 to Kuheana, a houselot containing 0.36 acre situated in the land of Kahauloa 2, South Kona. The ahupua'a was awarded to its konohiki, Kanele, and has since devolved to the estate of Bernice Pauahi Bishop.

The parcel is within the Kealakekua Bay Archaeological and Historic District (HRHP 10-47-7000), which is listed in the National Register of Historic Places, and also within the "Kona Field System" which has been found eligible for listing in the National Register. It is situated near the shore on soil classified by the Soil Conservation Service as "Lava flows, aa" which characteristically contains no lava tubes. The United States Geological Survey has recently estimated this flow from Mauna Loa to be from 100 to 750 years old.

As evidenced by the Land Commission Award, the parcel was occupied at the time of Mahele of 1848. It was also occupied until recently by a frame house with concrete masonry walkway and steps on the north side. Fragments of broken concrete were noted in other areas. The parcel is generally surfaced with crushed aa mixed with iliili and a few coral pebbles. Several fragments of weathered cowry shell were seen, along with broken glass and rusted iron. There are numerous outcroppings of bedrock which suggest there is little depth to the loose material on the surface.

The entire parcel has been extensively disturbed by the removal of the former dwelling together with the accumulated debris of twentieth century life, ranging from abandoned automobiles to boats. There has also been extensive planting of fruit and ornamental trees over a period of years. The gravelly matrix is unlikely to have

Mr. Allen C. Wilcox, page two

15 April, 1989

preserved artifacts of any age, nor are there any monumental remains of archaeological interest on the parcel.

As you have noted, the adjoining lot to the south can be described in much the same terms: extensively disturbed by previous occupants and by recent clearing and landscaping. That parcel, TMK 3-8-3-05:7, is also an old pa hale or house lot, identified as Land Commission Award 8231-C, Royal Patent 8056 to I, containing 0.30 acre (SK) however, there is no indication of an historic structure having occupied the site recently.

In summary, I find no significant archaeological resources on either parcel which will be adversely affected by the proposed construction. Indeed, by continuing the long tradition of residential use of these lots, you will be adding to the store of treasure for future archaeologists and historians.

If I can be of further assistance, please call. My invoice is enclosed.

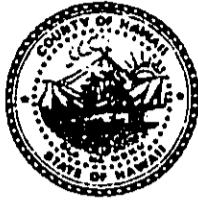
Very truly yours,

Lloyd J. Soehren
Lloyd J. Soehren
Consulting archaeologist

Encl.

EXHIBIT D
COUNTY OF HAWAII
PLANNING DEPARTMENT
EXEMPTION FROM SPECIAL MANAGEMENT AREA
REVIEW

Stephen K. Yamashiro
Mayor



Virginia Goldstein
Director

Russell Kokubun
Deputy Director

County of Hawaii

PLANNING DEPARTMENT

25 Aupuni Street, Room 109 • Hilo, Hawaii 96720-4252
(808) 961-8288 • Fax (808) 961-8742

March 24, 1999

Mr. David Esperanza
83-500 Keawaiki Road
Captain Cook, Hawaii 96704

Dear Mr. Esperanza:

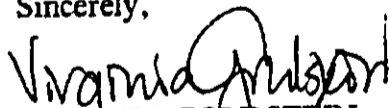
Special Management Area (SMA) Use Permit Assessment
Application No. 99-10
Applicant: Mr. and Mrs. Allen C. Wilcox, Jr.
Request: Single Family Residence
Tax Map Key: 8-3-005:007
Kahauloa 2, South Kona, Hawaii

We have completed our review of your SMA Use Permit Assessment Application for the proposed single family residence located within subject property and have determined that your proposal is exempt from the definition of "development" established by Planning Commission Rule No. 9-4 (10) (B) (I), development does not include the "Construction of a single-family residence that is not part of a larger development". While the proposed single family residence is exempt from further SMA review, it will be subject to all other applicable state and county regulations.

You may proceed to apply for a building permit for the proposed single family residence with Department of Public Works, Building Division, after approval from all other State Agencies.

Should you have any questions, please feel welcome to contact Royden Yamasato of our Kona office at 327-3510.

Sincerely,

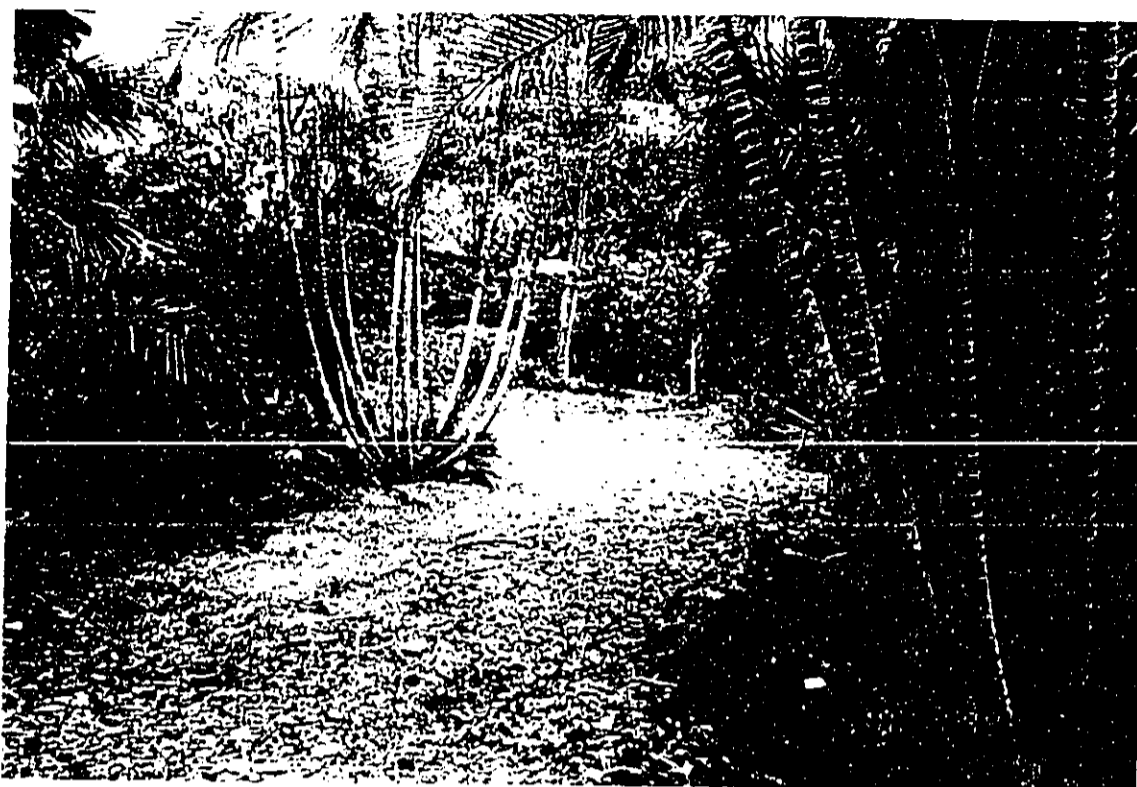

VIRGINIA GOLDSTEIN
Planning Director

EMM:rld

a:\83005010\smaexemp.bsl

xc: West Hawaii Planning Office
SMA section

EXHIBIT E
PHOTOGRAPHS OF PARCEL



**EXHIBIT E-1
EXISTING UNPAVED DRIVEWAY
PARCEL (3) 8-3-05:7**



**EXHIBIT E-2
TEMPORARY SHADE CLOTH STRUCTURE
PARCEL (3) 8-3-05:7**



EXHIBIT E-3
VIEW OF ADJACENT PARCEL (3) 8-3-05:1
LOOKING SOUTHEAST FROM
PARCEL (3) 8-3-05:7



EXHIBIT E-4
EXISTING KEAWAIKI ROAD ENTRANCE
PARCEL (3) 8-3-05:7

EXHIBIT F
DRAFT EA COMMENTS & RESPONSES

BENJAMIN J. CAYetano
GOVERNOR OF HAWAII



BRUCE S. ANDERSON, Ph.D., M.P.H.
DIRECTOR OF HEALTH


STATE OF HAWAII
DEPARTMENT OF HEALTH
P.O. BOX 3378
HONOLULU, HAWAII 96801

In reply, please refer to
this.

December 17, 1999

99-253/epo

TO: Dean Y. Uchida, Administrator
Land Division
Department of Land and Natural Resources

FROM: Gary Gill 
Deputy Director for Environmental Health

SUBJECT: CONSERVATION DISTRICT USE APPLICATION

Applicant: Mr. Allen Wilcox
File No.: HA-2967B
Request: Single Family Residence
Location: Captain Cook, Hawaii
TMK: 8-3-05: 7

DEC 29 10 45 AM '99
RECEIVED
STATE OF HAWAII
DEPARTMENT OF HEALTH
OFFICE OF THE DIRECTOR

Thank you for allowing us to review and comment on the subject request. We have the following comments to offer:

Wastewater

Because the parcel of land lies in a Critical Wastewater Disposal Area, no cesspools will be allowed. A treatment, individual wastewater system, such as a septic system with an appropriate disposal mechanism, is acceptable to the Department of Health (DOH). However, the septic system plans must be submitted to and approved by the Wastewater Branch in Honolulu prior to any construction.

If further information is needed, please contact the Planning/Design Section of the Wastewater Branch at 586-4294.

c: WWB

ALANUI ENTERPRISES
P.O. BOX 390628
KAILUA-KONA, HI
96739
PHONE: (808)329-6225
FAX: (808)329-7144

February 10, 2000

Mr. Gary Gill
Deputy Director for Environmental Health
State of Hawaii, Department of Health
P.O. Box 3378
Honolulu, HI
96801

SUBJECT: Response to Comments
Draft Environmental Assessment
Wilcox Single Family Residence
South Kona District, Hawaii County
TMK (3) 8-3-05:7

Dear Mr. Gill:

Thank you for the comments received within your 12/17/99 correspondence. The Applicants will install a septic tank and absorption bed type system to service the proposed dwelling. Plans for this system will be submitted to the Wastewater Branch of the Department of Health in Honolulu for approval prior to construction of the system.

Thank you for your consideration in this matter.

Sincerely
Alanui Enterprises


Ted Baldau

CC: Department of Land and Natural Resources

BENJAMIN J. CAYTANO
GOVERNOR OF HAWAII



TIMOTHY E. JOHNS, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

DEPUTIES
JANET E. KAWILO
LANEL NISHIOKA

Post-It® Fax Note	7671	Date	1/21/00	# of pages	2
To	Ted Paldan	From	Lawson		
Co./Dept.		Co.			
Phone #		Phone #	587-0705		
Fax #	329-1144	Fax #			

/All

JRAL RESOURCES

DIVISION
om 655
870
'07

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
CONSERVATION AND RESOURCES
ENFORCEMENT
CONVEYANCES
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
LAND
STATE PARKS
WATER RESOURCE MANAGEMENT

January 11, 2000

MEMORANDUM

LOG NO: 24662 ✓
DOC NO: 0001PM03

TO: Dean Uchida, Administrator
Land Division

FROM: Don Hibbard, Administrator
State Historic Preservation Division *[Signature]*

SUBJECT: Conservation District Use Application (HA-2967B) for a Single Family
Residence at Captain Cook, Hawaii
Kahauloa, South Kona, Hawaii Island
TMK: 8-3-05:07

The application contains a 1989 letter report on an archaeological reconnaissance survey of TMK: 8-3-05:10 and general remarks on the subject parcel (TMK: 8-3-05:7), which is a house lot identified in the Land Commission Awards. According to this report, the subject parcel has been "extensively disturbed by previous occupants and by recent clearing and landscaping." In addition to the landscaping, the current application notes that there is an existing driveway. The degree of land alteration suggests the low probability of significant historic sites, including subsurface deposits, inside the stone walls that enclose this property. The walls are clearly historic and should, if possible, be preserved. If the landowner is willing to preserve these historic walls, we believe that construction of the proposed single family will have "no adverse effect" on significant historic sites. If the walls cannot be preserved, then the landowner will need to prepare a mitigation plan for our review and approval.

PM:jk

ALANUI ENTERPRISES
P.O. BOX 390628
KAILUA-KONA, HI
96739
PHONE: (808)329-6225
FAX: (808)329-7144

February 10, 2000

Mr. Don Hibbard, Administrator
State of Hawaii, Department of Land and Natural Resources
State Historic Preservation Division
601 Kamokila Boulevard,
Kapolei, HI
96707

SUBJECT: Response to Comments
Draft Environmental Assessment
Wilcox Single Family Residence
South Kona District, Hawaii County
TMK (3) 8-3-05:7

Dear Mr. Hibbard

Thank you for the comments received within your 1/11/00 correspondence. The Applicants intend to preserve the stone walls enclosing the subject property.

Thank you for your consideration in this matter.

Sincerely
Alanui Enterprises


Ted Baldau

CC: Department of Land and Natural Resources

Stephen K. Yamashiro
Mayor



Virginia Goldstein
Director

Russell Kokubun
Deputy Director

Post-it* Fax Note	7671	Date	1/31/00	# of pages	2
To	Ted	From	Union		
Co./Dopl.		Co.	DM2		
Phone #	329 4025	Phone #	587 0385		
Fax #	329 7144	Fax #	587 0465		

Hawaii

PARTMENT
Hilo, Hawaii 96720-4252
(808) 961-9742

REC'D
COUNTY OF HAWAII
PLANNING DEPARTMENT

December 21, 1999

Mr. Dean Y. Uchida
Land Division
Department of Land and Natural Resources
P.O. Box 621
Honolulu, HI 96809

Dear Mr. Uchida:

Conservation District Use Permit Application No. HA-2967B
Request: To Allow the Construction of a Single Family Dwelling
TMK: 8-3-05; 7; Kahauloa, South Kona, Hawaii

Thank you for your letter dated December 1, 1999, requesting our comments regarding the above-referenced application.

We have reviewed the application and accompanying environmental assessment and have no objections to the issuance of a Conservation District Use Permit to allow the construction of a single family dwelling and its related improvements on the subject property in the manner as represented within the CDUA No. HA-2967B.

We appreciate being given the opportunity to comment on the CDUA. Please feel free to contact Daryn Arai of this office should you have any questions.

Sincerely,

VIRGINIA GOLDSTEIN
Planning Director

DSA:gp
F:\wp60\dsa\1999\Uchida\DU1.doc

ALANUI ENTERPRISES
P.O. BOX 390628
KAILUA-KONA, HI
96739
PHONE: (808)329-6225
FAX: (808)329-7144

February 10, 2000

Ms. Virginia Goldstein, Director
County of Hawaii Planning Department
25 Aupuni Street
Hilo, Hawaii
96720

SUBJECT: Response to Comments
Draft Environmental Assessment
Wilcox Single Family Residence
South Kona District, Hawaii County
TMK (3) 8-3-05:7

Dear Ms. Goldstein:

Thank you for the comments received within your 12/21/99 correspondence. Your consideration in this matter is greatly appreciated.

Sincerely
Alanui Enterprises


Ted Baldau

CC: Department of Land and Natural Resources

PHONE (808) 594-1888

FAX (808) 594-1885



RECEIVED
DEPARTMENT OF
LAND AND NATURAL RESOURCES

DEC 15 9 39 AM '99

HAL-290

Post-It® Fax Note	7671	Date	1/14/00	# of pages	1
To	Paul	From	Lumen		
Co./Dept.		Co.	DNR		
Phone #		Phone #			
Fax #	329 7144	Fax #			

F HAWAII
VAIIAN AFFAIRS
JLEVAR, SUITE 500
HAWAII 96813

December 8, 1999

Mr. Dean Uchida, Administrator
Land Division
Department of Land and Natural Resources
P.O. Box 621
Honolulu, Hawaii 96809

(PA #339)

Subject: Conservation District Use Application (CDUA) and
Draft Environmental Assessment (DEA)
For a Single Family Residence at
Captain Cook, Hawaii (TMK: 8-03-05:07)

Dear Mr. Uchida,

Thank you for the opportunity to comment on the above referenced CDUA and DEA. The CDUA indicates that the applicants propose to construct a single-family residence on the subject parcel of land.

According to the DEA, there are no rare or endangered flora/fauna on the proposed project site. In addition, the archaeological reconnaissance survey indicated no historic or archaeological features on the parcel. However, the State Historic Preservation Division should be contacted if any human burials, artifacts, or other cultural remains or deposits are encountered on the project site.

If you have any questions, please contact Mark A. Mararagan, Policy Analyst-Government Regulations at 594-1945.

Sincerely,

Colin C. Kipson, Jr.
Deputy Administrator

cc: OHA Board of Trustees
Kona CRS

ALANUI ENTERPRISES
P.O. BOX 390628
KAILUA-KONA, HI
96739
PHONE: (808)329-6225
FAX: (808)329-7144

February 10, 2000

Mr. Colin Kippen
Deputy Administrator
State of Hawaii
Office of Hawaiian Affairs
711 Kapiolani Boulevard, Suite 500
Honolulu, Hawaii
96813


SUBJECT: Response to Comments
Draft Environmental Assessment
Wilcox Single Family Residence
South Kona District, Hawaii County
TMK (3) 8-3-05:7

Dear Mr. Kippen:

Thank you for the comments contained within your 12/08/99 correspondence. If any human burials, artifacts or other cultural remains or deposits are encountered on the project site, work will be suspended immediately and the State Historic Preservation Division of the Department of Land and Natural Resources will be contacted.

Thank you for your consideration in this matter.

Sincerely,
ALANUI ENTERPRISES


Ted Baldau

CC: Department of Land and Natural Resources

BENJAMIN J. CAYETANO
GOVERNOR



GENEVIEVE SALMONSON
DIRECTOR

STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY CONTROL

236 SOUTH BERETANIA STREET
SUITE 702
HONOLULU, HAWAII 96813
TELEPHONE (808) 586-4185
FACSIMILE (808) 586-4186

January 7, 2000

Dean Uchida, Administrator
Department of Land and Natural Resources
P.O. Box 621
Honolulu, Hawaii 96809

Attention: Lauren Tanaka

Dear Mr. Uchida:

Subject: Draft Environmental Assessment (EA) for Wilcox Single Family
Residence, South Kona, TMK: 8-3-5:7

Dear Mr. Uchida:

In order to reduce bulk and conserve paper, we recommend printing on both sides of the pages in the final document. In addition we have the following comments:

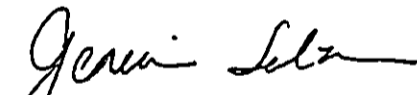
1. Historic and archeological resources: The archeological report appended to the draft EA is now ten years old and surveyed primarily for the adjacent parcel of land. In addition, the subject parcel lies in the Kealahou Bay Archeological and Historic District. Contact the State Historic Preservation Division of DLNR about the presence of possible resources or remains, allowing them sufficient time to review the draft EA and submit comments.
2. Flood hazard: The draft EA states that the parcel "lies outside flood plains," yet the drawings of the house show that it will be elevated. The FIRM map in the draft EA does not show the project location, nor does it include a legend indicating what the lettered notations stand for. In the final EA include these items on the map so that the FIRM zoning for this parcel is clear. What measures will be taken to mitigate any flood or storm hazards.

Dean Uchida
January 7, 2000
Page 2

3. Special Management Area (SMA): The subject parcel, TMK 8-3-5:7, is in the SMA, although the proposed home construction is exempt from SMA requirements. This parcel is adjacent to parcels 10 and 11, both owned by the Wilcoxes and each containing a single-family home. If a new single-family home is constructed on parcel 7, the Wilcoxes will then own 3 single family homes on 3 adjacent parcels of land. Which of the 3 homes will be the primary residence? Will the others be used for commercial purposes? If so, will SMA regulations then apply to this application?
4. Construction impacts: How much excavation will be required for this structure, and how will runoff be prevented from entering coastal waters?
5. Sustainable Building Design: Please consider applying sustainable building techniques presented in the enclosed "Guidelines for Sustainable Building Design in Hawaii." In the final EA include a description of any of the techniques you will implement.
6. Table of contents: In the final EA please add page numbers to the table of contents.

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

Sincerely,


GENEVIEVE SALMONSON
Director

Enc.

c: Allen & Barbara Wilcox
Ted Baldau

ALANUI ENTERPRISES
P.O. BOX 390628
KAILUA-KONA, HI
96739
PHONE: (808)329-6225
FAX: (808)329-7144

February 9, 2000

Genevieve Salmonson, Director
State of Hawaii,
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, HI
96813

SUBJECT: Response to Comments, Draft Environmental Assessment, (EA)
Wilcox Single Family Residence, South Kona, TMK (3) 8-3-05:7

Dear Ms. Salmonson:

Thank you for the comments contained within your 1/7/00 correspondence. The response to these comments are as follows:

1. Historic and archaeological resources: The State Historic Preservation Division of the Department of Land and Natural Resources (DLNR) has reviewed the Draft EA for the proposed project. The recommendation of this agency was to preserve the rock walls found along the perimeter boundary of the parcel. The land owner intends to follow this recommendation.
2. Flood Hazard: The elevation of the subject parcel lies above flood plain elevations as identified on the FIRM map for the area. The FIRM map, shown as Figure 10 in the Draft EA has been revised to show the project location and a legend has been provided for the lettered notations. The proposed residence is elevated in order to achieve a level platform on sloping terrain with the minimum amount of ground disturbance as well as to provide the occupants with as unobstructed view as possible and still meet roof height guidelines for construction within the conservation zone. Flood and storm hazards are mitigated by locating the proposed residence on the highest elevation ground existing in the immediate area.
3. Special Management Area (SMA): The Wilcoxes have no intention of using any structures owned by them for commercial purposes. The proposed residence will be occupied solely by Allen and Barbara Wilcox or used by immediate family members when visiting. It is the intention of the Applicants to occupy the residence during

Ms. Genevieve Salmonson
February 9, 2000
Page 2

periods of extreme high surf or threat of tsunami that would place the surrounding dwellings, located on much lower ground, at risk.

4. Construction Impacts: Minimal excavation will be required for the construction of the residence. The only excavation anticipated for the project will be for the foundation which is a combination post to pier and shear footing requiring no deep or extensive excavation and the septic system. To prevent runoff into coastal waters, excavated material will not be stockpiled on site and will be removed in a timely manner. The parcel is not an oceanfront parcel and no direct path to the ocean exists due to the developed nature of the surrounding parcels.
5. Sustainable Building Design Please see the attached "Guidelines for Sustainable Building Design in Hawaii". All sustainable building techniques that will be incorporated into the construction of the proposed residence are indicated by check mark.
6. Table of contents: Page numbers will be added to the Final EA table of contents.

Thank you for your time and consideration in this matter. If you have any questions or require additional information, please feel free to call my office.

Sincerely,
Alanui Enterprises,



Ted Baldau

CC: Department of Land and Natural Resources

Guidelines for Sustainable Building Design in Hawai'i

A planner's checklist

(Adopted by the Environmental Council on October 13, 1999)

Introduction

Hawai'i law calls for efforts to conserve natural resources, promote efficient use of water and energy and encourage recycling of waste products. Planning a project from the very beginning to include sustainable design concepts can be a critical step toward meeting these goals.

The purpose of the state's environmental review law (HRS Ch. 343) is to encourage a full, accurate and complete analysis of proposed actions, promote public participation and support enlightened decision making by public officials. The Office of Environmental Quality Control offers the following guidelines for preparers of environmental reviews under the authority of HRS 343 to assist agencies and applicants in meeting these goals.

These guidelines do not constitute rules or law. They have been refined by staff and peer review to provide a checklist of items that will help the design team create projects that will have a minimal impact on Hawai'i's environment and make wise use of our natural resources. In a word, projects that are *sustainable*.

A sustainable building is built to minimize energy use, expense, waste, and impact on the environment. It seeks to improve the region's sustainability by meeting the needs of Hawai'i's residents and visitors today without compromising the needs of future generations. Compared to conventional projects, a resource-efficient building project will:

- I. Use less energy for operation and maintenance
- II. Contain less *embodied* energy (e.g. locally produced building products often contain less *embodied* energy than imported products because they require less energy-consuming transportation.)
- III. Protect the environment by preserving/conserving water and other natural resources and by minimizing impact on the site and ecosystems
- IV. Minimize health risks to those who construct, maintain, and occupy the building
- V. Minimize construction waste
- VI. Recycle and reuse generated construction wastes

- VII. Use resource-efficient building materials (e.g. materials with recycled content and low embodied energy, and materials that are recyclable, renewable, environmentally benign, non-toxic, low VOC (Volatile Organic Compound) emitting, durable, and that give high life cycle value for the cost.)
- VIII. Provide the highest quality product practical at competitive (affordable) first and life cycle costs.

In order to avoid excessive overlapping of items, the checklist is designed to be read in totality, not just as individual sections. This checklist tries to address a range of project types, large scale as well as small scale. Please use items that are appropriate to the type and scale of the project.

Although this list will help promote careful and sensitive planning, mere compliance with this checklist does not confirm sustainability. Compliance with and knowledge of current building codes by users of this checklist is also required.

TABLE OF CONTENTS

I.	Pre Design	Page 3
II.	Site Selection, and Site Design	Page 3
III.	Building Design	Page 4
IV.	Energy Use	Page 5
V.	Water Use	Page 7
VI.	Landscape and Irrigation	Page 7
VII.	Building Materials and Solid Waste Management	Page 8
VIII.	Indoor Air Quality	Page 10
IX.	Commissioning & Construction Project Close-out	Page 10
X.	Occupancy and Operation	Page 11
XI.	Resources	Page 12

I. Pre Design

- ___ 1. Hold programming team meeting with client representative, Project Manager, planning consultant, architectural consultant, civil engineer, mechanical, electrical, plumbing (MEP) engineer, structural engineer, landscape architect, interior designer, sustainability consultant and other consultants as required by the project. Identify project and sustainability goals. Client representatives and consultants need to work together to ensure that project and environmental goals are met.
- ___ 2. Develop sustainable guideline goals to insert into outline specifications as part of the Schematic Design documents. Select goals from the following sections that are appropriate for the project.
- ___ 3. Use Cost-Benefit Method for economic analysis of the sustainability measures chosen. (Cost-Benefit Method is a method of evaluating project choices and investments by comparing the present and life cycle value of expected benefits to the present and life cycle value of expected costs.)
- ___ 4. Include "Commissioning" in the project budget and schedule. (Building "Commissioning" is the process of ensuring that systems are designed, installed, functionally tested, and capable of being operated and maintained in accordance with specifications that meet the owner's needs, and recognize the owner's financial and operational capacity. It improves the performance of the building systems, resulting in energy efficiency and conservation, improved air quality and lower operation costs. *Refer to Section IX.*)

II. Site Selection & Site Design

A. Site Selection

- ✓ 1. Analyze and assess site characteristics such as vegetation, topography, geology, climate, natural access, solar orientation patterns, water and drainage, and existing utility and transportation infrastructure to determine the appropriate use of the site.
- ✓ 2. Whenever possible, select a site in a neighborhood where the project can have a positive social, economic and/or environmental impact.
- ✓ 3. Select a site with short connections to existing municipal infrastructure (sewer lines, water, waste water treatment plant, roads, gas, electricity, telephone, data communication lines and services). Select a site close to mass transportation, bicycle routes and pedestrian access.

B. Site Preparation and Design

- ___ 1. Prepare a thorough existing conditions topographic site plan depicting topography, natural and built features, vegetation, location of site utilities and include solar information,

- rainfall data and direction of prevailing winds. Preserve existing resources and natural features to enhance the design and add aesthetic, economic and practical value. Design to minimize the environmental impact of the development on vegetation and topography.
2. Site building(s) to take advantage of natural features and maximize their beneficial effects. Provide for solar access, daylighting and natural cooling. Design ways to integrate the building(s) with the site that maximizes and preserves positive site characteristics, enhances human comfort, safety and health, and achieves operational efficiencies.
 3. Locate building(s) to encourage bicycle and pedestrian access and pedestrian oriented uses. Provide bicycle and pedestrian paths, bicycle racks, etc. Racks should be visible and accessible to promote and encourage bicycle commuting.
 4. Retain existing topsoil and maintain soil health by clearing only the areas reserved for the construction of streets, driveways, parking areas, and building foundations. Replant exposed soil areas as soon as possible. Reuse excavated soils for fill and cut vegetation for mulch.
 5. Grade slopes to a ratio of less than 2 : 1 (run to rise). Balance cut and fill to eliminate hauling. Check grading frequently to prevent accidental over excavation.
 6. Minimize the disruption of site drainage patterns. Provide erosion and dust controls, positive site drainage, and siltation basins as required to protect the site during and after construction, especially, in the event of a major storm.
 7. Minimize the area required for the building footprint. Consolidate utility and infrastructure in common corridors to minimize site degradation, and cost, improve efficiency, and reduce impermeable surfaces.
 8. For termite protection, use non toxic alternatives to pesticides and herbicides, such as Borate treated lumber, Basaltic Termite Barrier, stainless steel termite barrier mesh, and termite resistant materials.

III. Building Design

1. Consider adaptive re-use of existing structures instead of demolishing and/or constructing a new building. Consult the State Historic Preservation Officer for possible existing historic sites that may meet the project needs.
2. Plan for high flexibility while designing building shell and interior spaces to accommodate changing needs of the occupants, and thereby extend the life span of the building.
3. Design for re-use and/or disassembly. (For recyclable and reusable building products, see Section VII).
4. Design space for recycling and waste diversion opportunities during occupancy.
5. Provide facilities for bicycle and pedestrian commuters (showers, lockers, bike racks, etc.) in commercial areas and other suitable locations.
6. Plan for a comfortable and healthy work environment. Include inviting outdoor spaces, wherever possible. (*Refer to Section VIII.*)

A. Lighting

1. Design for at least 15% lower interior lighting power allowance than the Energy Code.
2. Select lamps and ballasts with the highest efficiency, compatible with the desired level of illumination and color rendering specifications. Examples that combine improved color rendering with efficient energy use include compact fluorescents and T8 fluorescents that use tri-phosphor gases.
3. Select lighting fixtures which maximize system efficacy and which have heat removal capabilities
4. Reduce light absorption on surfaces by selecting colors and finishes that provide high reflectance values without glare.
5. Use task lighting with low ambient light levels.
6. Maximize daylighting through the use of vertical fenestration, light shelves, skylights, clerestories, building form and orientation as well as through translucent or transparent interior partitions. Coordinate daylighting with electrical lighting for maximum electrical efficiency.
7. Incorporate daylighting controls and/or motion activated light controls in low or intermittent use areas.
8. Avoid light spillage in exterior lighting by using directional fixtures.
9. Minimize light overlap in exterior lighting schemes.
10. Use lumen maintenance procedures and controls.

B. Mechanical Systems

1. Design to comply with the Energy Code and to exceed its efficiency requirements.
2. Use "Smart Building" monitor/control systems when appropriate.
3. Utilize thermal storage for reduction of peak energy usage.
4. Use Variable air volume systems to save fan power.
5. Use variable speed drives on pumping systems and fans for cooling towers and air handlers.
6. Use air-cooled refrigeration equipment or use cooling towers designed to reduce drift.
7. Specify premium efficiency motors.
8. Reduce the need for mechanical ventilation by reducing sources of indoor air pollution. Use high efficiency air filters and ultraviolet lamps in air handling units. Provide for regular maintenance of filtration systems. Use ASHRAE standards as minimum.
9. Locate fresh air intakes away from polluted or overheated areas. Locate on roof where possible. Separate air intake from air exhausts by at least 40 ft.
10. Use separate HVAC systems to serve areas that operate on widely differing schedules and/or design conditions.
11. Use shut off or set back controls on HVAC system when areas are not occupied.
12. Use condenser heat, waste heat or solar energy. (Contact local utility companies for information on the utility-sponsored Commercial and Industrial Energy Efficiency

- 7. Provide an Integrated Pest Management approach. The use of products such as Termi-mesh, Basaltic Termite Barrier and the Sentricon "bait" system can provide long term protection from termite damage and reduce environmental pollution.
- 8. Design a building that is energy efficient and resource efficient. (See Sections IV, V, VII.) Determine building operation by-products such as heat gain and build up, waste/gray-water and energy consumption, and plan to minimize them or find alternate uses for them.
- 9. For natural cooling, use
 - a. Reflective or light colored roofing, radiant barrier and/or insulation, roof vents
 - b. Light colored paving (concrete) and building surfaces
 - c. Tree Planting to shade buildings and paved areas
 - d. Building orientation and design that captures trade winds and/or provides for convective cooling of interior spaces when there is no wind.

IV. Energy Use

- 1. Obtain a copy of the State of Hawai'i Model Energy Code (available through the Hawai'i State Energy Division, at Tel. 587-3811). Exceed its requirements. (Contact local utility companies for information on tax credits and utility-sponsored programs offering rebates and incentives to businesses for installing qualifying energy efficient technologies.)
- 2. Use site sensitive orientation to :
 - a. Minimize cooling loads through site shading and carefully planned east-west orientation.
 - b. Incorporate natural ventilation by channeling trade winds.
 - c. Maximize daylighting.
- 3. Design south, east and west shading devices to minimize solar heat gain.
- 4. Use spectrally selective tints or spectrally selective low-e glazing with a Solar Heat Gain Coefficient (SHGC) of 0.4 or less.
- 5. Minimize effects of thermal bridging in walls, roofs and window systems.
- 6. Maximize efficiencies for lighting, Heating, Ventilation, Air Conditioning (HVAC) systems and other equipment. Use insulation and/or radiant barriers, natural ventilation, ceiling fans and shading to avoid the use of air conditioning whenever appropriate.
- 7. Eliminate hot water in restrooms when possible.
- 8. Provide tenant sub-metering to encourage utility use accountability.
- 9. Use renewable energy. Use solar water heaters and consider the use of photovoltaics and Building Integrated Photovoltaics (BIPV).
- 10. Use available energy resources such as waste heat recovery, when feasible.

- e. Mulches: Use mulches to minimize evaporation, reduce weed growth and retard erosion.

Contact the local Board of Water Supply for additional information on xeriscaping such as efficient irrigation, soil improvements, mulching, lists of low water-demand plants, tours of xeriscaped facilities, and xeriscape classes.

- 2. Protect existing beneficial site features and save trees to prevent erosion. Establish and carefully mark tree protection areas well before construction.
- 3. Limit staging areas and prevent unnecessary grading of the site to protect existing, especially native, vegetation.
- 4. Use top soil from the graded areas, stockpiled on the site and protected with a silt fence to reduce the need for imported top soil.
- 5. Irrigate with non-potable water or reclaimed water when feasible. Collect rainwater from the roof for irrigation.
- 6. Sub-meter the irrigation system to reduce water consumption and consequently water and sewer fees. Contact the local county agency to obtain irrigation sub-metering requirements and procedures. Locate irrigation controls within sight of the irrigated areas to verify that the system is operating properly.
- 7. Use pervious paving instead of concrete or asphalt paving. Use natural and man-made berms, hills and swales to control water runoff.
- 8. Avoid the use of solvents that contain or leach out pollutants that can contaminate the water resources and runoff. Contact the State of Hawai'i Clean Water Branch at 586-4309 to determine whether a NPDES (National Pollutant Discharge Elimination System) permit is required.
- 9. Use Integrated Pest Management (IPM) techniques. IPM involves a carefully managed use of biological and chemical pest control tactics. It emphasizes minimizing the use of pesticides and maximizing the use of natural process
- 10. Use trees and bushes that are felled at the building site (i.e. mulch, fence posts). Leave grass trimmings on the lawn to reduce green waste and enhance the natural health of lawns.
- 11. Use recycled content, decay and weather resistant landscape materials such as plastic lumber for planters, benches and decks.

VII. Building Materials & Solid Waste Management

A. Material Selection and Design

- 1. Use durable products.
- 2. Specify and use natural products or products with low embodied energy and/or high recycled content. Products with recycled content include steel, concrete with glass,

- Programs which offer incentives to businesses for installing qualifying energy efficient technologies.)
- 13. Evaluate plug-in loads for energy efficiency and power saving features.
 - 14. Improve comfort and save energy by reducing the relative humidity by waste reheat, heat pipes or solar heat.
 - 15. Minimize heat gain from equipment and appliances by using:
 - a. Environmental Protection Agency (EPA) Energy Star rated appliances.
 - b. Hoods and exhaust fans to remove heat from concentrated sources.
 - c. High performance water heating that exceeds the Energy Code requirements.
 - 16. Specify HVAC system "commissioning" period to reduce occupant exposure to Indoor Air Quality (IAQ) contaminants and to maximize system efficiency.

V. Water Use

A. Building Water

- 1. Install water conserving, low flow fixtures as required by the Uniform Plumbing Code.
- 2. If practical, eliminate hot water in restrooms.
- 3. Use self closing faucets (infrared sensors or spring loaded faucets) for lavatories and sinks.

B. Landscaping and Irrigation (See Section VI.)

VI. Landscape and Irrigation

- 1. Incorporate water efficient landscaping (xeriscaping) using the following principles:
 - a. Planning, Efficient irrigation: Create watering zones for different conditions. Separate vegetation types by watering requirements. Install moisture sensors to prevent operation of the irrigation system in the rain or if the soil has adequate moisture. Use appropriate sprinkler heads.
 - b. Soil analysis/improvement: Use (locally made) soil amendments and compost for plant nourishment, improved water absorption and holding capacity.
 - c. Appropriate plant selection: Use drought tolerant and/or slow growing hardy grasses, native and indigenous plants, shrubs, ground covers, trees, appropriate for local conditions, to minimize the need for irrigation.
 - d. Practical turf areas: Turf only in areas where it provides functional benefits.

Group, that offers an alternative to landfill disposal of usable materials, and facilitates no-cost trades. See web site, www.himex.org.

10. Use suppliers that re-use or recycle packaging material whenever possible.

VIII. Indoor Air Quality

1. Design an HVAC system with adequate supply of outdoor air, good ventilation rates, even air distribution, sufficient exhaust ventilation and appropriate air cleaners.
2. Develop and specify Indoor Air Quality (IAQ) requirements during design and contract document phases of the project. Monitor compliance in order to minimize or contain IAQ contaminant sources during construction, renovation and remodeling.
3. Notify occupants of any type of construction, renovation and remodeling and the effects on IAQ.
4. Inspect existing buildings to determine if asbestos and lead paint are present and arrange for removal or abatement as needed.
5. Supply workers with, and ensure the use of VOC (Volatile Organic Compounds)-safe masks where required.
6. Ensure that HVAC systems are installed, operated and maintained in a manner consistent with their design. Use UV lamps in Air Handling Units to eliminate mold and mildew growth. An improperly functioning HVAC system can harbor biological contaminants such as viruses, bacteria, molds, fungi and pollen, and can cause Sick Building Syndrome (SBS).
7. Install separate exhaust fans in rooms where air polluting office equipment is used, and exhaust directly to the exterior of the building, at sufficient distance from the air intake vents.
8. Place bird guards over air intakes to prevent pollution of shafts and HVAC ducts.
9. Control indoor air pollution by selecting products and finishes that are low or non-toxic and low VOC emitting. Common sources of indoor chemical contaminants are adhesives, carpeting, upholstery, manufactured wood products, copy machines, pesticides and cleaning agents.
10. Schedule finish application work to minimize absorption of VOCs into surrounding materials e.g. allow sufficient time for paint and clear finishes to dry before installing carpet and upholstered furniture. Increase ventilation rates during periods of increased pollution.
11. Allow a flush-out period after construction, renovation, remodeling or pesticide application to minimize occupant exposure to chemicals and contaminants.

- drywall, carpet, etc. Use ground recycled concrete, graded glass cullet or asphalt as base or fill material.
- 3. Specify low toxic or non-toxic materials whenever possible, such as low VOC (Volatile Organic Compounds) paints, sealers and adhesives and low or formaldehyde-free materials. Do not use products with CFCs (Chloro-fluoro-carbons).
 - 4. Use locally produced products such as plastic lumber, insulation, hydro-mulch, glass tiles, compost.
 - 5. Use advanced framing systems that reduce waste, two stud corners, engineered structural products and prefabricated panel systems.
 - 6. Use materials which require limited or no application of finishing or surface preparation. (i.e. finished concrete floor surface, glass block and glazing materials, concrete block masonry, etc.).
 - 7. Use re-milled salvaged lumber where appropriate and as available. Avoid the use of old growth timber.
 - 8. Use sustainably harvested timber.
 - 9. Commit to a material selection program that emphasizes efficient and environmentally sensitive use of building materials, and that uses locally available building materials. (A list of Earth friendly products and materials is available through the Green House Hawai'i Project. Call Clean Hawai'i Center, Tel. 587-3802 for the list.)

B. Solid Waste Management, Recycling and Diversion Plan

- 1. Prepare a job-site recycling plan and post it at the job-site office.
- 2. Conduct pre-construction waste minimization and recycling training for employees and sub-contractors.
- 3. Use a central area for all cutting.
- 4. Establish a dedicated waste separation/diversion area. Include Waste/Compost/Recycling collection areas and systems for use during construction process and during the operational life cycle of the building.
- 5. Separate and divert all unused or waste cardboard, ferrous scrap, construction materials and fixtures for recycling and/or forwarding to a salvage exchange facility. Information on "Minimizing C&D (construction and demolition) waste in Hawai'i" is available through Department of Health, Office of Solid Waste Management, Tel. 586-4240.
- 6. Use all green waste, untreated wood and clean drywall on site as soil amendments or divert to offsite recycling facilities.
- 7. Use concrete and asphalt rubble on-site or forward the material for offsite recycling.
- 8. Carefully manage and control waste solvents, paints, sealants, and their used containers. Separate these materials from C&D (construction and demolition) waste and store and dispose them of them carefully.
- 9. Donate unused paint, solvents, sealants to non-profit organizations or list on HIMEX (Hawai'i Materials Exchange). HIMEX is a free service operated by Maui Recycling

IX. Commissioning & Construction Project Closeout

- 1. Appoint a Commissioning Authority to develop and implement a commissioning plan and a preventative maintenance plan. Project Manager's responsibilities must include coordination of commissioning activities during project closeout.
- 2. Commissioning team should successfully demonstrate all systems and perform operator training before final acceptance.
- 3. Provide flush-out period to remove air borne contaminants from the building and systems.
- 4. Provide as-built drawings and documentation for all systems. Provide data on equipment maintenance and their control strategies as well as maintenance and cleaning instructions for finish materials.

X. Occupancy and Operation

A. General Objectives

- 1. Develop a User's Manual for building occupants that emphasizes the need for Owner/Management commitment to efficient sustainable operations.
- 2. Management's responsibilities must include ensuring that sustainability policies are carried out.

B. Energy

- 1. Purchase EPA rated, Energy Star, energy-efficient office equipment, appliances, computers, and copiers. (Energy Star is a program sponsored by U.S. Dep. Of Energy. Use of these products will contribute to reduced energy costs for buildings and reduce air pollution.)
- 2. Institute an employee education program about the efficient use of building systems and appliances, occupants impact on and responsibility for water use, energy use, waste generation, waste recycling programs, etc.
- 3. Re-commission systems and update performance documentation periodically per recommendations of the Commissioning Authority, or whenever modifications are made to the systems.

C. Water

- 1. Start the watering cycle in the early morning in order to minimize evaporation.
- 2. Manage the chemical treatment of cooling tower water to reduce water consumption.

D. Air

- 1. Provide incentives which encourage building occupants to use alternatives to and to reduce the use of single occupancy vehicles.

- 2. Provide a location map of services within walking distance of the place of employment (child care, restaurants, gyms, shopping).
- 3. Periodically monitor or check for indoor pollutants in building.
- 4. Provide an IAQ plan for tenants, staff and management that establishes policies and documentation procedures for controlling and reporting indoor air pollution. This helps tenants and staff understand their responsibility to protect the air quality of the facility.

E. Materials and Products

- 1. Purchase business products with recycled content such as paper, toners, etc.
- 2. Purchase Furniture made with sustainably harvested wood, or with recycled and recycled content materials, which will not off gas VOC's.
- 3. Remodeling and painting should comply with or improve on original sustainable design intent.
- 4. Use low VOC, non-toxic, phosphate and chlorine free, biodegradable cleaning products.

F. Solid Waste

- 1. Collect recyclable business waste such as paper, cardboard boxes, and soda cans.
- 2. Avoid single use items such as paper or Styrofoam cups and plates, and plastic utensils.

XI. Resources

Financing: Energy Efficiency in Buildings. U.S. Department of Energy, DOE/EE-0152, May, 1998 (Call Tel. 1-800-DOE-EREC or visit local office)

Building Commissioning: The Key to Quality Assurance. U.S. Department of Energy, DOE/EE-0153, May, 1998 (Call Tel. 1-800-DOE-EREC or visit local office)

Guide to Resource-Efficient Building in Hawaii. University of Hawai'i at Manoa, School of Architecture and Energy, Resources and Technology Division, Department of Business, Economic Development and Tourism, October 1998. (Call Tel. 587-3804 for publication)

Hawaii Model Energy Code. Energy, Resources and Technology Division, Department of Business, Economic Development and Tourism, November 1997 (Call Tel. 587-3810 for publication)

Photovoltaics in the Built Environment: A Design Guide for Architects and Engineers. NREL Publications, DOE/GO #10097-436, September 1997 (Call Tel. 1-800-DOE-EREC or visit local office)

Building Integrated Photovoltaics: A Case Study. NREL Publications #TP-472-7574, March 1995 (Call Tel. 1-800-DOE-EREC or visit local office)

Solar Electric Applications: An overview of Today's Applications. NREL Publications, DOE/GO #10097-357, Revised February, 1997 (Call Tel. 1-800-DOE-EREC or visit local office)

Green Lights: An Enlightened Approach to Energy Efficiency and Pollution Prevention. U.S. Environmental Protection Agency, Pacific Island Contact Office (Call Tel. 541-2710 for publication.)

Healthy Lawn, Healthy Environment. U.S. Environmental Protection Agency, Pacific Island Contact Office. (Call Tel. 541-2710 for this and related publications)

How to Plant a Native Hawaiian Garden. Office of Environmental Quality Control (OEQC), Department of Health, State of Hawai'i (Call Tel. 586-4185 for publication)

Buy Recycled in Hawai'i. Clean Hawai'i Center, Energy, Resources and Technology Division, Department of Business, Economic Development and Tourism, November 1997. (Call Tel. 587-3802 for publication)

Hawai'i Recycling Industry Guide and other recycling and reuse related fact sheets. Clean Hawai'i Center, Energy, Resources and Technology Division, Department of Business, Economic Development and Tourism, July 1999. (Call Tel. 587-3802 for publication)

Minimizing Construction and Demolition Waste. Office of Solid Waste Management, Department of Health and Clean Hawai'i Center, Energy, Resources and Technology Division, Department of Business, Economic Development and Tourism, February 1998. (Call Tel. 586-4240 for publication)

Contractor's Waste Management Guide and Construction and demolition Waste Management Facilities Directory. Clean Hawai'i Center, Energy, Resources and Technology Division, Department of Business, Economic Development and Tourism, 1999. (Call Tel. 587-3802 for publication)

Waste Management and Action: Construction Industry. Department of Health, Solid and Hazardous Waste Branch (Call Tel. 586-7496 for publication)

Business Guide For reducing Solid Waste. U.S. Environmental Protection Agency, Pacific Island Contact Office, Tel. 541-2710 (Call for publication.)

The Inside Story: A Guide to Indoor Air Quality. U.S. Environmental Protection Agency, Pacific Island Contact Office, Tel. 541-2710 (Call for this and related publications.) Additional information is available from the American Lung Association, Hawai'i, Tel. 537-5966

Selecting Healthier Flooring Materials. American Lung Association and Clean Hawai'i Center, February 1999. (Call Tel. 537-5966 x307)

Office Paper Recycling: An Implementation Manual. U.S. Environmental Protection Agency, Pacific Island Contact Office, Tel. 541-2710 (Call for publication.)

Acknowledgments

OEQC and the Environmental Council would like to thank Allison Beale, Gary Gill, Nick H. Huddleston, Gail Suzuki-Jones, Purnima McCutcheon, Virginia B. MacDonald, Steve Meder, Ramona Mullahey, Thomas P. Papandrew, Victor Olgay, Howard Tanaka, and Howard Wiig for their assistance with this project.

EXHIBIT G
DOCARE FIELD INSPECTION REPORT

Dean UCHIDA
State Land Administrator
IN CD
Honolulu, HI 96740

12-01-99

IIA-00-570
LAND USE:

Page 1 of 1 Pages

FIELD INSPECTION:

01-05-00, 1600 Hrs., writer contacted David ESPERANZA, Caretaker of the Wilcox's estate at Kahauloa Bay, Napoopoo-S. Kona, HI. Writer and ESPERANZA toured the estate and inspected the parcel in question.

According to ESPERANZA, Alan and Barbara WILCOX are rather old individuals, that requires his constant care and attention. He also deals with a lot of their personal businesses. Further, that about a year ago, (Mr.) WILCOX decided that it was necessary for them to relocate their present living quarters, to avoid the waves of the high tide, and selected the parcel in question to build on. WILCOX requested through the CDUA application to construct a single family dwelling on TMK: (3) 8-3-05:07, which will be built by a licensed contractor.

Upon inspecting the parcel, it was very noticeable that there was once a constructed portable green house, with a lot of common and hybrid native plants which appeared that the WILCOX'S had introduced to this area.

After completing the tour of the property writer noticed that there were no evidence of construction present and according to ESPERANZA the plans have been approved and construction will be commencing

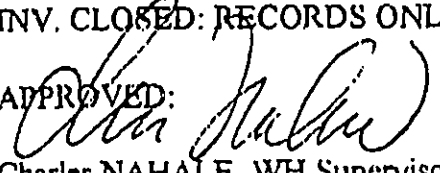
CONCLUSION:

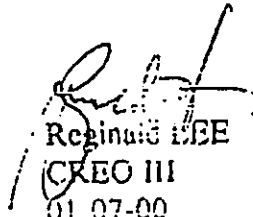
At the present time, the site visit/field inspection has been completed, with no evidence of any type of construction present and according to ESPERANZA plans are completed and construction will soon begin, however, prior to commencement he will contact the proper agencies.

Being that the requested inspection and the DOCARE form-18 has been completed. Writer recommends that this report be closed as a matter of Records Only.

INV. CLOSED: RECORDS ONLY

APPROVED:


Charles NAHALE, WH Supervisor


Regina EEE #122
CREG III WII
01 07-00 1700