JOHN WAIHEE
GOVERNOR

STATE OF HAWAII
DEPARTMENT OF HUMAN SERVICES
HAWAII HOUSING AUTHORITY
P. O. BOX 17907
HONOLULU, HAWAII 96817

MITSUO SHITO
EXECUTIVE DIRECTOR

LEONARD PARESA, JR.
DEPUTY EXECUTIVE DIRECTOR

FAX: (808) 848-3313

IN REPLY REFER TO:

October 27, 1994

MEMORANDUM

To: Bruce S. Anderson, Interim Director
Office of Environmental Quality Control

From: Leonard Paresa Jr., Deputy Executive Director

Subject: NEGATIVE DECLARATION AND FINAL ENVIRONMENTAL ASSESSMENT, LOKAHI FEDERAL HOUSING PROJECT
TMK: 2-4-52:01
WAIAKEA, SOUTH HILO, HAWAII

The Hawaii Housing Authority has reviewed all comments received during the 30-day public comment period which began on June 23, 1994 and has determined that this project will not have significant environmental effects.

We are filing a negative declaration for this project. Please publish this notice in the November 8, 1994 OEQC Bulletin.

We have attached a completed OEQC Bulletin Publication Form and four copies of the Final Environmental Assessment for the above project.

If there are any questions, please have your staff contact Mr. Wayne Nakamoto, Project Coordinator, at 832-5920, or Mr. Gerald Park, Urban Planner, at 596-0018.

LEONARD PARESA, JR.
Deputy Executive Director

Attachments

cc: Gerald Park, Urban Planner

1994-11-08-HI-FEA-Lokahi Federal Housing Project

FINAL ENVIRONMENTAL ASSESSMENT

LOKAHI FEDERAL HOUSING PROJECT

Portion Waiakea, South Hilo, Hawaii

Prepared in Fulfillment of the
Requirements of Chapter 343, HRS and
Chapter 200, Title 11, Administrative Rules
Department of Health, State of Hawaii

Prepared for:

HAWAII HOUSING AUTHORITY
State of Hawaii
P.O. Box 17907
Honolulu, Hawaii 96817

Prepared By:

Alcon and Associates, Inc.

and

Gerald Park Urban Planner

October, 1994

SUMMARY INFORMATION

Project:	Lokahi Federal Housing Project
Applicant:	Hawaii Housing Authority P.O. Box 17907 Honolulu, Hawaii 96817
Determining Agency:	Hawaii Housing Authority
Location:	Portion Waiakea, South Hilo, Hawaii
Tax Map Key:	2-4-52: 01
Landowner:	State of Hawaii
Land Area: Area of Proposed Use:	3.182 Acres *2.0 + Acres*
Existing Use:	Vacant
State Land Use Designation:	Urban
General Plan:	[Medium] *Low* Density Urban
Existing Zoning:	RD-3.75
Contact Person:	Wayne Nakamoto Hawaii Housing Authority State of Hawaii P.O. Box 17907 Honolulu, Hawaii 96817 Phone: 832-5920

Note: Revisions to the Draft Environmental Assessment are italicized and printed in bold type. Deleted materials are enclosed by [ ].

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SECTION 1

DESCRIPTION OF THE PROPOSED PROJECT

The Hawaii Housing Authority, State of Hawaii and the Department of Housing and Urban Development, United State of America, propose to construct a rental housing project on lands located in the ahupua'a of Waiakea, South Hilo District, County, Island, and State of Hawaii (See Figure 1). The lands are identified by tax map as Third Division 2-4-52: 01 containing an area of 3.182 acres.

A. Purpose of the Project

The purpose of the project is to help alleviate a shortage of rental housing units in populated areas of Hawaii County in general and Hilo in particular. The federal government has made available monies to construct 44 rental housing units. The State of Hawaii, in cooperation with the federal government and assistance from the County of Hawaii, has elected to develop 24 units in West Hawaii and 20 units in East Hawaii. All 44 units will be built on vacant, State owned land.

B. Technical Characteristics

The proposed Lokahi Federal Housing Project consists of 20 dwelling units arranged in five (5) detached four-plex buildings (See Figure 2). Each four-plex building is two-floors in height and will be posted 2½ feet above grade, wood framed with plywood exterior siding, and topped by a pitched metal roof. Building height measured from finished grade to top of roof is approximately 27 feet. An Elevation Plan is shown in Figure 3.

All dwellings are 3 bedroom, 1½ bath units with a kitchen, living room, and dining area totaling 1,120 square feet of living area. Each unit also features a covered front entry and an outdoor porch at the rear of the unit. One unit has been reserved for the handicapped. Floor plans are shown in Figure 4.

Access will be taken from Pamala Place about 125 feet from its intersection with Puainako Street. Direct access to Puainako Street is restricted by a road setback requirement for the proposed widening of Puainako Street. In anticipation of the road widening program, all proposed improvements will be set back 125 LF from the south property line abutting Puainako Street. The land area in the street widening setback is approximately 1.02 acres which leaves a developable area of 2.16 acres (3.182-1.02 acres).

A 20-foot wide paved driveway will serve the entire subdivision. The driveway will be constructed to County of Hawaii standards. ***The Department of Housing and Urban Development has requested a continuous sidewalk be constructed around the perimeter of the parking area to provide access for the handicapped.***

Parking requirements are based on 1.25 stalls/unit. Although 25 parking stalls are required (1.25 stalls X 20 units), 28 stalls will be provided. [A one-stall, covered carport will be provided at the front of each unit.] Guest parking for 8 vehicles is planned in the center of the development.

A multi-purpose community center/laundry room will be constructed near the center of the development. The building has an area of approximately 1,000 square feet (36' X 28') with space allocated for a community room, manager's office, laundry room, toilets, and maintenance room. An uncovered but fenced tot lot (440 square feet) will be constructed on the north side of the building (See Figure 5).

On site run-off will be directed away from buildings and the terrain contoured to convey runoff into a series of drywells to be constructed at strategic locations throughout the property.

Electrical and communication systems will be placed underground within the road right-of-way.

Water service is adequate for the project. The Department of Water has authorized a preliminary water commitment for 10 units and an additional commitment for the remaining units will be requested.

Wastewater flow is estimated at approximately 12,000 gallons per day (200 gallons/bedroom/day X 60 bedrooms). There is no municipal wastewater collection system serving this section of Waiakea. Wastewater will be collected and disposed on-site using individual wastewater systems (septic tanks and leaching fields). At this time, it is estimated that ten individual wastewater systems are sufficient to accommodate the 20 dwelling units (2 dwellings/wastewater system) and two systems are adequate to accommodate the laundry. The Hawaii Housing Authority [will be requesting] ***has requested*** a variance to Title 11, Chapter 62, Hawaii Administrative Rules, to allow one individual wastewater system to service 6 bedrooms (2 dwelling units) rather than the allowed 5 bedrooms.

C. Economic Characteristics

Development costs are estimated at $2.0 million ($1994) and will be funded by the Department of Housing and Urban Development, United States of America. The State of Hawaii is providing land for the project.

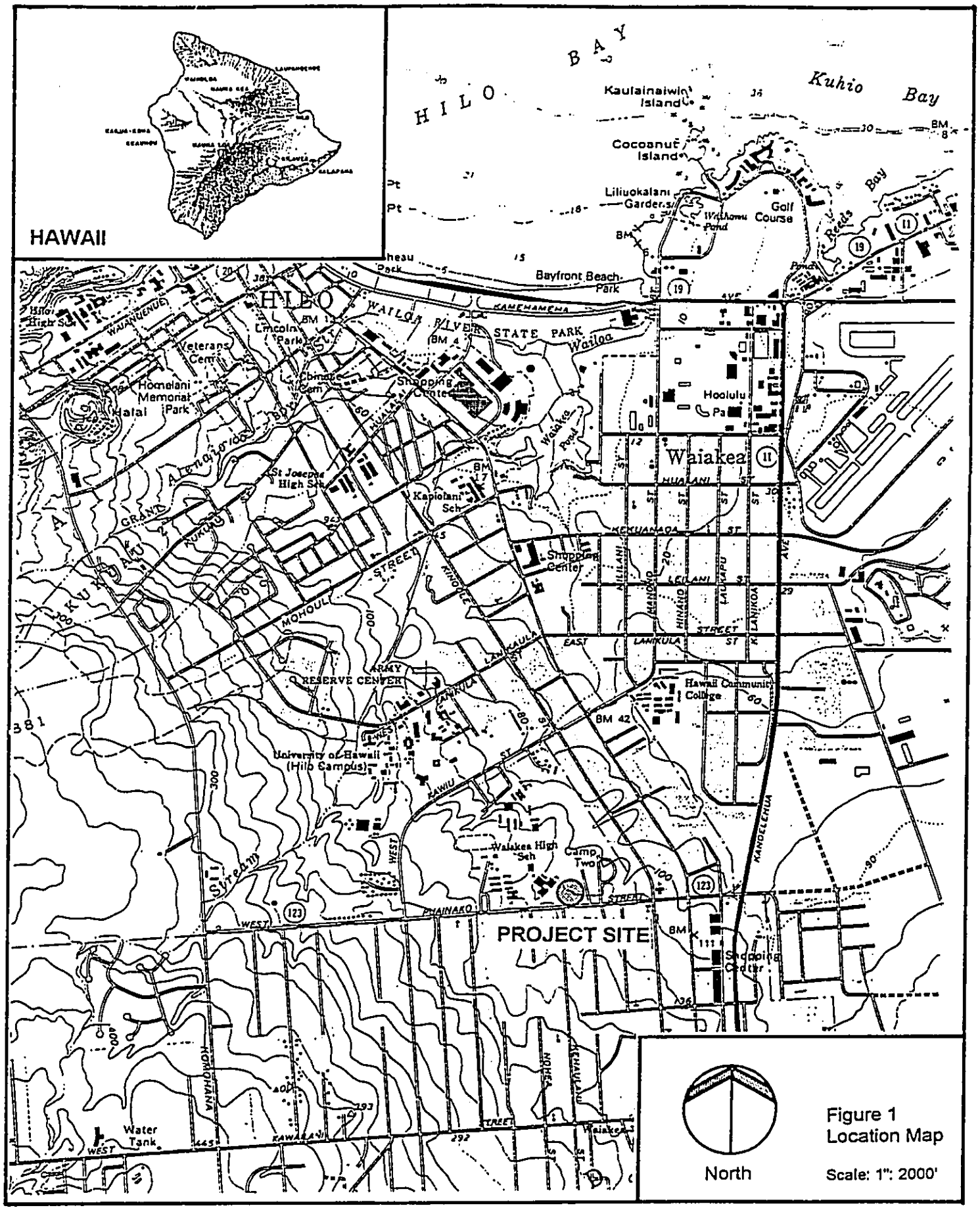
The project will be built in one increment with construction projected to commence in late 1994. Construction time is estimated at 15 months.

D. Social Characteristics

No residences or businesses will be displaced by the proposed project.

Rental opportunities in the Lokahi project will be open to all U.S. citizens. Rental rates for State offered public housing generally are based on approximately 30% of the qualifying household's monthly income. Statewide, monthly rentals for a 3-BDR unit in public housing projects average between $175-200 per month. It is anticipated that rental rates for the Lokahi project will fall into this range.

Currently, the Hilo office of the HHA has a list of 190 prospective households that have expressed interest in renting a unit in the proposed project.


HAWAII
HILO BAY
Kuhio Bay
Kaulainaiwi Island
Cocoanut Island
Liliuokalani Garden
Waiakea Pond
Golf Course
Reeds Bay
Bayfront Beach Park
HILO
WAILOA RIVER STATE PARK
Wailoa
Lincoln Park
Veterans Cem.
Hilo High Sch.
Hilo Shopping Center
Hoolulu Pa
Waiakea
Waiakea Pond
Hilo Memorial Park
Halai
St Joseph High Sch.
Kapiolani Sch.
Shopping Center
Hawaii Community College
ARMY RESERVE CENTER
University of Hawaii (Hilo Campus)
Waiakea High Sch.
Camp Two
PROJECT SITE
Water Tank
Shopping Center
GRAND
KUKUAU
STREET
MOHOULI
LANIKAULA
EAST
KEKUANAOA
HUALANI
KAWILI
PHAINAKO
WEST
KANOELEHUA
NOWELO
KAWAAAWA
Figure 1
Location Map
North
Scale: 1": 2000'

SECTION 2

DESCRIPTION OF THE AFFECTED ENVIRONMENT

A. Existing Use

The vacant property is covered by assorted trees, shrubs, and groundcover. The site and adjoining State lands which are also vacant were grubbed in 1992 for a topographic survey.

The project site is bordered by Waiakea Elementary School on the west, Puainako Street to the south, a portion of Camp 2 Residential Subdivision to the east, and Lokahi Public Housing Project to the north.

B. Topography

The site falls from south to north with a cross slope of about 3%. The high elevation of 118 feet above sea level parallels Puainako Street and falls to 100 feet along the north property line. Almost half the site lies between 3-9 feet below finish grade of portions of the adjoining Waiakea Elementary School driveway and parking lot.

C. Geology

[No soil have been taken to determine the composition of underlying soils and geological formations.] *A geotechnical exploration (Geolabs Hawaii, 1994) indicates that the site has a relatively thin soil cover underlain by clinkers and basalt formations. Surface soils are 1 to 5 feet in thickness and in some areas near surface silts have a high moisture content.*

D. Soils

According to the Soil Conservation Service (1972), project area soils are Keaukaha extremely rocky muck. The muck typically is about 8-10" thick and underlain by pahoehoe lava. The soil is rapidly permeable and does not pose an erosion hazard.

E. Flood Hazard and Drainage

The property is designated Zone X on County of Hawaii Flood Insurance Rate Maps. Zone X is defined "as areas determined to be outside 500 year flood plain" (Federal Emergency Management Agency, 1988).

F. Water Resources

There are no surface water resources on the property.

G. Mineral Resources

The project site contains no known mineral resources.

H. Flora

Although the subject property was graded for a topographical survey, it has been overgrown by vegetation which presumably is the same species that existed before grading. In general, the site exhibits a high plant density but low botanical diversity. Tall (100'+) African tulip (*Spathodea campanulata*), Christmas berry (*Schinus terebinthifolius*), macaranga (*Macaranga grandifolia*) [hau (*Hibiscus tiliaceus*)], cecropia (*Cecropia peltata*) trees dominate the landscape. Fruit bearing trees including guava (Psidium guajava), banana (Musa sp.), avocado (*Persea americana*), and papaya (Papaya sp.) grow just inside the north and west property boundaries suggesting they were planted by owners of adjoining lots. The understory consists of California grass (*Brachiaria mutica*), guinea grass (*Panicum maximum*), honohono grass (*Commelina diffusa*), monstera (*Monstera delicosa*), Hawaiian tree fern (*Cibodium splendens*), polka vine, ti (*Cordyline terminalis*), wedelia (*Wedelia trilobata*), syngonium (*Syngonium sp.*), several varieties of ginger, heliconia, ferns, and wayside weeds. All are common to the County of Hawaii and none are considered rare, threatened, or endangered.

Responding to the Draft Environmental Assessment, the Corps of Engineers (1994) offered the comment "based on the description of soils and vegetation, wetlands may be present on the project site. A wetland delineation should be performed and coordinated with our Operations Division to determine if jursidictional welands are present." As a precursor to a wetland delineation, a botanical survey was conducted to identify all plants on the premises. The botanical survey is found in Appendix B of this Assessment.

I. Fauna

Only the ubiquitous mongoose (*Herpestes auropunctatus*) was observed during a field survey. No birds, reptiles, or other mammals were observed roaming the site. Dogs and cats were seen (and heard) in the adjoining Camp 2 Subdivision.

J. Archaeology

No archaeological features were observed (Park, 93) and none have been recorded on the site (Historic Preservation Division, Department of Land and Natural Resources).

K. Land Use Controls

The property is designated Urban by the State Land Use Commission, general planned Low or Medium Density on the Hawaii County General Plan (1988), and zoned Double Family Residential (RD-3.75) by the County of Hawaii. A Zone Change from the Double Family Residential to Multi-Family zoning district may be required to implement the project.

The County of Hawaii Planning Department(1994) offered the following comments to clarify the relationship between the proposed uses and land use controls "1) The County General Plan Land Use Allocation Guide Map Designates the property to Low Density. 2) Under the present Zoning Designation of Double Family Residential (RD-3.75) only Duplexes or Single Family Dwellings are permitted. The proposed four plexes are not permitted. 3) Rezoning to a Multi-Family designation (TM) is not possible without a General Plan Amendment".

The property is not located in the County delineated Special Management Area or any special zoning or design districts.

L. Public Facilities

1. Access and Circulation

The project site adjoins Puainako Street a two lane, two-way road within a 40-foot right-of-way. Puainako Street is one of the major east-west collector roads in Hilo and the County of Hawaii proposes to expand its narrow right-of-way to 120 feet. The larger right-or-way will accommodate four lanes and a raised median.

2. Water

Although there is no water service to the subject property, service is available from either an 8" or 18" transmission mains along Puainako Street.

3. Wastewater

There is no municipal sewer in the area.

The Department of Health commented that the project site is above the Underground Injection Control (UIC) line and construction of injection wells for wastewater disposal will not be permitted.

4. Utilities

Power and telephone service to the site are available from overhead lines along Puainako Street or Pamala Place.

M. Public Services

1. Public Schools

Public schools in Hilo include two high schools (Hilo and Waiakea High), three intermediate schools, and eight elementary schools. In addition, Hilo is the home of the main University of Hawaii campus on the island of Hawaii.

Schools in the Waiakea district are organized into the Waiakea High complex which includes Waiakea High, Waiakea Intermediate, Waiakea Elementary, and Elementary Schools.

Waiakea Elementary School abuts the project site to the west.

2. Police Protection

Police protection is provided by the Hawaii County Police Department from the Hilo Public Safety Building on Kapiolani Street approximately 2 miles from the project site.

3. Fire Protection

Fire Department headquarters for Hilo and the County of Hawaii is located at the Central Station near the intersection of Kinoole and Ponahawai Streets. There are three substations within Hilo at Kaumana, Waiakea, and Kawailani. The Kawailani Station, about 1 mile to the south of the project site would provide first-in coverage, with back-up from the Waiakea and Central Stations.

SECTION 3

SUMMARY OF POTENTIAL ENVIRONMENTAL IMPACTS AND MEASURES TO MITIGATE ADVERSE EFFECTS

A. Assessment Process

The scope of the project was discussed with staff of the Hawaii Housing Authority, the consulting architect and engineer, and others comprising the consultant team. State and County agencies were consulted for information relative to their jurisdiction, expertise, and areas of concern. Time was spent in the field noting site conditions and conditions in the vicinity of the project site. From these discussions and field investigation, conditions and features which could be affected by or affect the project were identified. These influencing conditions are:

- *o* There are no rare, threatened, or endangered flora or fauna on the premises;
- *o* There are no archaeological features on the ground surface;
- *o* The property lies outside identified flood hazard areas;
- *o* *Wetlands may be present on the project site;*
- *o* The site and adjoining vacant parcels were mass graded in 1992; and
- *o* Water, power, and communication systems are available to service the development.

The County of Hawaii General Plan designates the property for [either] Low Density [or Medium Density] uses. The general plan designation should be clarified with the Planning Department. If the property is general planned Low Density, then it may be necessary to amend the County of Hawaii General Plan. This would delay the development schedule for the project.

B. Short-term Impacts

Previous grubbing and grading for a topographical survey altered the physical characteristics of the land and everything on it. Additional civil work is required to achieve design elevations for buildings, roadway gradients, wastewater disposal, and parking areas. Approximately 3,000 cubic yards of material will be excavated and redistributed to attempt to achieve a balance cut and fill. All civil work that could cause erosion and sedimentation will adhere to the erosion control standards of the County grading ordinance and a grading plan to be approved by the County of Hawaii, Department of Public Works.

Ambient air quality will be affected by combustion emissions and fugitive dust. Most construction equipment are diesel powered and emit exhaust emissions typically high in nitrogen dioxide and low in carbon monoxide. It is unlikely for State Department of Health air quality standard for nitrogen dioxide to be exceeded during construction. Carbon monoxide concentrations should be less than that generated by vehicular emissions on nearby streets.

Fugitive dust will be raised by site preparation activities but can be mitigated by applying accepted control practices such as limiting the amount of ground area to be exposed during grading, instituting a frequent watering program, or planting exposed areas with vegetation as soon as practical. Other control measures are stipulated in the County of Hawaii Grading Ordinance and State Department of Health Administrative Rules (Chapter 60, Air Pollution Control).

Additionally, Hilo's almost daily "liquid sunshine" should help in keeping the ground moist and aid in dust control. The Contractor will be responsible for keeping streets free of mud and debris.

Temporary and unavoidable construction noises will occur during the 15 month construction period. Sound levels in the range of 85-96 dB(A) will be generated by heavy equipment, trucks, and hand held power tools. Fluctuations in sound levels, frequency, and duration can be expected during different construction stages. Noise will be most pronounced during site preparation and foundation work, diminish as buildings are framed, and be somewhat attenuated by the buildings themselves during interior work. Noise sensitive locations near the site include adjoining residences and Waiakea Elementary School. Although construction noise cannot be eliminated entirely, construction work and hence noise will be limited to the hours between 7:00 am to 3:30 pm, Monday through Friday.

Should subsurface archaeological or cultural deposits be unearthed, work in the immediate area will cease and historic authorities notified for proper disposition of the finds

All vegetation will be grubbed except for specimen trees that may be retained or transplanted for landscaping the housing area. Existing vegetation are common species found throughout Hawaii County and the State of Hawaii.

The site botanical investigation noted the presence of obligate and facultative species that are indicative of wetlands. It has not been determined if wetlands are indeed present on the project site as the issue is being discussed with federal regulatory authorities. If wetlands are indeed present, applicant will implement measures to mitigate potential deleterious effects on the resource and will comply with applicable wetland planning and regulatory polices.

C. Long-term Impacts

When completed the project will add 20 rental units to the State public rental housing stock on the island of Hawaii. Currently there are 260 rental housing units available for families in Hilo and 164 units for the elderly.

In terms of numbers, a resident population of between 70-80 persons (3.5 persons per household) is projected. Generally, the larger 3-BDR units are intended to accommodate large households who require larger living areas. In Hilo, however, the demand for 2-BDR units exceeds the supply and conversely, the supply of 3-BDR units exceeds demand. Because there is a shortage of 2-BDR units, public rental agencies have been putting smaller households that qualify for rental housing into the larger 3-BDR units. Should this occur in the Lokahi housing project, the resident population could be less than projected with concomitant lessened demand on public infrastructure. In addition, smaller families should benefit from gaining more living space without significant increases in monthly rental payments.

The completed project should not detract from the residential character of the area. Although the residential structures may be different in appearance from nearby single-family dwellings, the project is a residential development and intended to promote a family type living environment. The site plan incorporates adequate spacing between buildings and provides ample open space which are typical of residential subdivisions. The five buildings are slightly higher than other dwellings in the neighborhood but does not exceed the allowable height limits for single-family and double family zoning districts.

The density of the project is less than that allowed by current County of Hawaii zoning. The design of the five residential structures (four-plexes) was determined in part by the size of the property which was reduced in area by the proposed widening of Puainako Street. Because of less land area, an alternative building design was necessary in order to plot a sufficient number of dwelling units on the property to make the project economically feasible yet not detract from a low-density type of residential environment.

The project is anticipated to contribute 18 vehicles per hour during the morning peak hour (both directions) and a maximum of 24 vehicles per hour during the afternoon peak hour (both directions). In short, the project is expected to have minimal impact on traffic conditions.

With increased traffic expected with the widening of Puainako Street in the vicinity of Pamala Place and Lokahi Street, worsened conditions can be expected for left turn movements in and out of Pamala Place and Lokahi Street during morning and afternoon peak hours.

On-site runoff will be directed away from the various structures and into a series of drywells to be strategically located on the completed site. The drywells will be constructed in accordance with Chapter 23, Title 11, Administrative Rules, State Department of Health.

Water consumption is estimated at 14,400 gallons per day (600 gallons/unit) and can be supplied from either existing 8 or 18-inch water lines in Puainako Street. On and off-site water system improvements will be designed and installed per Department of Water Supply standards.

Wastewater will be collected and treated using on-site septic tanks and leaching fields. Construction and operation of the treatment system with comply with State Department of Health regulations and conditions made a part of applicant's variance request.

The Department of Education (1994) estimates that 20 rental housing units will have the following enrollment impact on the area schools:

Schools	*Grades*	*Projected Students*
Waiakea Elementary	*K-6*	*10*
Waiakea Intermediate	*7-8*	*2*
Waiakea High	*9-12*	*4*

In addition, all three schools are operating at or beyond their capacities and report a shortage of classrooms. The Department of Education (DOE) cannot assure the availability of classrooms to accommodate the students from this development. A legal

opinion by the Attorney General (1994) indicates however that school age children attend *the school of the district in which they reside.*

Power and communication services both are available and adequate to accommodate the project. Development plans will be submitted to the appropriate utility company for review and coordination during the project design process. Utility lines located in the project area will be flagged (or identified) to minimize breakage during construction.

The project should not adversely affect existing protective services. The project site is located within existing coverage or response areas for police and fire services. In the long-term, residential expansion in the South Hilo district will necessitate changes in manpower requirements and coverage areas. Population growth also may require capital investment in new facilities (e.g. fire station) and equipment to maintain adequate coverage and response times. The cost of providing for existing and future protective services is borne by the County of Hawaii.

SECTION 4

ALTERNATIVES TO THE PROPOSED ACTION

A. No Action

A no action alternative precludes all impacts---short and long-term, beneficial and adverse---described in this assessment. This alternative maintains the status quo of the site as unimproved land.

B. Alternative Site Plans

Site planning alternatives are constrained principally by the L-shaped configuration of the lot resulting from the 125-foot street widening setback along Puainako Street. The need to provide an access driveway, sufficient parking area, and adequate space for septic tanks and a leaching field (or fields) only adds to the physical constraint. One alternative plan placed four structures along one side of the vertical axis of the lot opposite one structure and the community center. This alternative was dismissed because it created an inefficient residential land use pattern and reduced spacing between the four buildings.

SECTION 5

AGENCIES AND ORGANIZATIONS CONSULTED IN THE PREPARATION OF THE ENVIRONMENTAL ASSESSMENT

*Notice of the Draft Environmental Assessment for the Lokahi Federal Housing Project was published in the Office of Environmental Quality Control (OEQC) Bulletin of June 23, 1994. The Draft Environmental Assessment was distributed to the agencies and organizations listed below for review. Publication in the OEQC Bulletin initiated a 30-day public comment period which ended on July 23, 1994. An asterik * identifies agencies and organizations that submitted written comments within the comment period. Comment letters and responses are found in Appendix C.*

Federal

*U.S. Army Corps of Engineers
Department of Housing and Urban Development

State

*Department of Education
*Department of Health
*Department of Land and Natural Resources
*Department of Transportation
*Office of State Planning
Office of Environmental Quality Control

County of Hawaii

*Department of Planning
Department of Public Works
**Department of Water Supply*
Office of Housing and Community Development
*Fire Department
*Police Department

Organizations

Hawaii Electric Light Company
GTE Hawaiian Telephone Company

SECTION 6

DETERMINATION OF SIGNIFICANCE

Chapter 200 (Environmental Impact Statement Rules) of Title 11, Administrative Rules of the State Department of Health, establishes criteria for determining whether an action may have significant effects on the environment (11-200-12). The relationship of the proposed project to these criteria is discussed below.

1) *Involves an irrevocable commitment to loss or destruction of any natural or cultural resource;*

   There are no significant cultural resources on the premises. The 3+ acre property was previously mass graded and there are indications that several residential dwellings at one time were present on the site.

2) *Curtails the range of beneficial uses of the environment;*

   Vacant, idle land will be committed to a use supportive of Federal, State, and County rental housing policies. The dwellings to be constructed will help to alleviate a rental housing shortage in East Hawaii for low income households.

3) *Conflicts with the state's long-term environmental policies or goals and guidelines as expressed in chapter 344, Hawaii Revised Statutes, and any revisions thereof and amendments thereto, court decisions or executive orders;*

   The project does not conflict with long-term environmental policies, goals, and guidelines of the State of Hawaii.

4) *Substantially affects the economic or social welfare of the community or State;*

   The project will not substantially affect the economic or social welfare of the State. On the other hand, by making available safe, affordable, housing, the project is expected to contribute to the individual and collective well being of its resident population.

5) *Substantially affects public health;*

   Public health will not be substantially affected during and after construction. Applicant will comply with all public health regulations and conditions made a part of all plans and permits required for residential and accessory structures and uses.

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

   Most of the projected 70-80 residents residents are expected to be drawn primarily from the island of Hawaii. Increases in water consumption, wastewater discharge, and power usage are inevitable consequences of development. The Department of Education has

commented that existing public schools in the area are at capacity and the DOE cannot assure the availability of classrooms for students from the development.

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

The environmental quality of the site and the surrounding environment will not be degraded. The site is overgrown with vegetation although it was cleared several years ago for a topographical survey.

Wetlands may be present on the site and this will be ascertained in cooperation with the U.S. Army Corps of Engineers.

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

The project does not involve a commitment for larger actions.

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

No rare, threatened or endangered flora or fauna are found on the premises.

10) *Detrimentally affects air or water quality or ambient noise levels; or*

Ambient air quality will be affected during construction by fugitive dust and combustion emissions but can be controlled by measures stipulated in this Assessment. Construction noise will be pronounced during site preparation work but should diminish once the buildings are erected. All construction activities will comply with air quality and noise noise regulations of the State Department of Health.

There are no drinking water sources within .25 mile of the property to be affected by the wastewater disposal system.

11) *Affects an environmentally sensitive area such as a flood plain, tsunami zone, erosion prone area, geologically hazardous land, estuary, fresh water, or coastal waters.*

The project is not located in an environmentally sensitive area. The presence of certain botanical species and soil types suggest there may be wetlands on the premises. If the wetlands are to be filled, applicant will comply with all Federal and State regulatory requirements.

Based on the above criteria, the Lokahi Federal Housing Project will not result in significant adverse environmental impacts and an Environmental Impact Statement should not be required.

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APPENDIX A

TRAFFIC ASSESSMENT-LOKAHI PUBLIC HOUSING

Julian Ng, Incorporated
Engineering Consulting Services
P.O. Box 816 Kaneohe, Hawaii 96744-0816 (808) 236-4325

January 14, 1994

Mr. Dean Alcon
Wm. Dean Alcon & Associates, Inc.
905 Umi Street, Suite 101
Honolulu, Hawaii 96819

Subject: Traffic Assessment - Lokahi Public Housing
TMK 2-4-52: 01
Waiakea, Hilo, Hawaii

Dear Dean:

The potential traffic impact of the proposed 24-unit Lokahi Public Housing project is minimal. However, due to an existing crest in the vertical alignment of Puainako Street near Pamala Street east of the site, the design of the site access to Puainako Street should include provisions to improve sight distances for exiting as well as entering traffic. This improvement may include the elimination or flattening of the crest on Puainako Street and grade adjustments on Pamala Street.

The traffic assessment that follows assumes that the vertical alignment of Puainako Street is improved and adequate sight distance to the east is provided, and all movements are permitted at the site access. While no peak period traffic counts were done specifically for this evaluation, recent counts and projections made by others were used in the traffic evaluation. The estimates of project traffic and capacity analyses which were done are reported herein.

The capacity analyses were done using procedures described in the *Highway Capacity Manual*. The potential delay for each controlled movement at unsignalized intersections is described by a Level of Service (LOS) determined from the difference between the calculated capacity for that movement and the volume wishing to make the movement. Levels of Service include "A" describing little or no delay, "B" for short delays, "C" for average delays, "D" for long delays, and "E" for very long delays; LOS F describes situations where the volume exceeds the calculated capacity for a specified movement. An acceptable condition for urban situations is LOS D.

For signalized intersections, conditions described as "under" capacity, "near" capacity, or "over" capacity were determined using the total of the conflicting movements at the intersection. Desirable "under" capacity conditions occur when the total is 1,200 vehicles per hour or less. Undesirable "near" capacity conditions occur when the total is between 1,201 and 1,400 vehicles per hour. For totals exceeding 1,400 vehicles per hour, conditions are "over" capacity and would be unacceptable.

Existing Conditions

The project site is located north of Puainako Street in the Waiakea area of Hilo, between Kinoole Street and Kawili Street. Nearby local streets, such as Pamala Street and Lokahi Street, are stop-controlled at their southbound approaches to Puainako Street. Puainako Street is a major east-west collector in Hilo and presently has only two lanes; the County of Hawaii has recently completed an environmental impact

statement for the widening of Puainako Street in the vicinity of the proposed project to a four-lane divided roadway with a raised median. The nearest signalized intersection is at Puainako and Kinoole Streets, where a two-phase signal controls four single-lane approaches; all turns are permitted from each approach.

A traffic count taken by the State Highways Division at Puainako Street west of Kinoole Street on June 24-25, 1992 (Wednesday-Thursday) totaled 8,650 vehicles in a 24-hour period. Volumes counted in the morning peak hour (7:15-8:15 a.m.) were 332 vehicles per hour (vph) eastbound and 258 vph westbound. Afternoon peak hour (4:15-5:15 p.m.) volumes were 321 vph eastbound and 407 vph westbound. These counts, however, do not reflect conditions with schools in regular session.

Field counts taken as part of a traffic study for the Puainako Street widening project show higher volumes (447 vph eastbound and 546 vph westbound in the morning peak hour; 320 vph eastbound and 481 vph westbound in the afternoon peak hour). Traffic conditions on Puainako Street have been described as "congested." The *Draft Environmental Impact Statement for the Puainako Street Extension and Widening* project (pages 29-30) states:

> Both Waiakea Elementary and Waiakea Intermediate Schools are located on Puainako Street between Kinoole Street and Kawili Street. Traffic congestion associated with the school start (7:00 to 8:00 a.m.) and close (2:00 to 3:00 p.m.) is a daily occurrence, as vehicles carrying students enter and exit the school complex. Because school start coincides with the morning work commute, particularly bad congestion occurs in the morning. Traffic circulation can also be poor between 4:00 and 6:00 p.m. because of returning commuters. ... During the a.m. peak hour, between 7:00 and 8:00 a.m., the ... left turn movements from the exit driveways of Waiakea Elementary and Intermediate Schools both operate at LOS "E". ... The p.m. peak hour generally occurs between 4:15 and 5:15 p.m. The intersections of Puainako Street with Kanoelehua Avenue and Kinoole Street operate at near capacity condition.

Future Conditions without the Project

Traffic volumes in Hilo are expected to increase. Daily volume on Puainako Street between Kinoole and Komohana Streets is projected to increase to 11,100 vehicles per day by year 2010 without improvements to the street network and to 19,500 vehicles per day with improvements (Source: *Island of Hawaii Long Range Highway Plan Final Report*, 1991). Assuming that the 1992 average daily traffic is 9,000 vehicles per day, the annual growth rate (compounded) would be 1.2% per year for without-improvement conditions.

Traffic volumes at the intersection of Puainako Street and Kinoole Street, projected to 1995 without the proposed project, are shown in the attached sketch. At this signalized intersection, under capacity conditions were found for the a.m. peak hour with near capacity conditions in the p.m. peak hour. The findings of near capacity conditions are unchanged from those of existing (1992) conditions reported in the Draft EIS for the Puainako Street Extension and Widening project.

Future Conditions with the Proposed Project

The project is estimated to generate an additional traffic demand of 18 vehicles per hour (vph) in the a.m. peak hour and 24 vph in the p.m. peak hour, as shown below:

Trip Generation	a.m. peak hour	p.m. peak hour
trip rate per unit *	0.74	1.01
% into site *	26%	65%
For 24 units:		
volume in	5 vph	16 vph
volume out	13 vph	8 vph

* trip rates from Institute of Transportation Engineers, *Trip Generation* (5th Edition) for single-family dwelling units

This traffic was distributed onto Puainako Street assuming that 42% would go to or come from the west and 58% the east. Turns at the Kinoole Street intersection were based on the 1992 count proportions. The project traffic was added to the traffic estimated for 1995 without the proposed project. The attached sketch also shows the future with project traffic estimates.

For the future condition with the traffic due to the proposed project, the analyses show similar results as the future without project case at the signalized intersection. Assuming the same volume on Puainako Street fronting the site as on the west leg of the signalized intersection at Kinoole Street, movements at the site access would have acceptable levels of service. However, if traffic increases as expected with the widening of Puainako Street, conditions for left turn movements out of the site would worsen, becoming LOS E. The elimination of left turns at minor streets is an alternative being considered as part of the widening project.

The findings of the capacity analyses are summarized below:

	existing (1992)	1995 without project	1995 with project	2010 with widening
Puainako Street at Kinoole Street [Condition / Sum of Critical Movements]				
a.m. peak hour	under 1,021	under 1,056	under 1,073	under 1,147
p.m. peak hour	near 1,265	near 1,310	near 1,325	under 1,200
Site Access to Puainako Street [Level of Service (Reserve Capacity)]				
Left turn into site (a.m.)	--	--	A (575)	B (329)
Shared lane out of site (a.m.)	--	--	C (201)	E (60)
Left turn into site (p.m.)	--	--	A (613)	B (382)
Shared lane out of site (p.m.)	--	--	C (293)	D (105)

Need for Further Traffic Analysis

The maximum volume of vehicles generated by the proposed project, estimated to be 24 vehicles per hour in the afternoon peak hour (total of in and out movements), is significantly less than the general criterion of "100 *added* vehicle trips in the peak direction" in the peak hour to determine the "Need for Study" that is suggested by the Institute of Transportation Engineers (*Traffic Access and Impact Studies for Site Development*, Table 2-1).

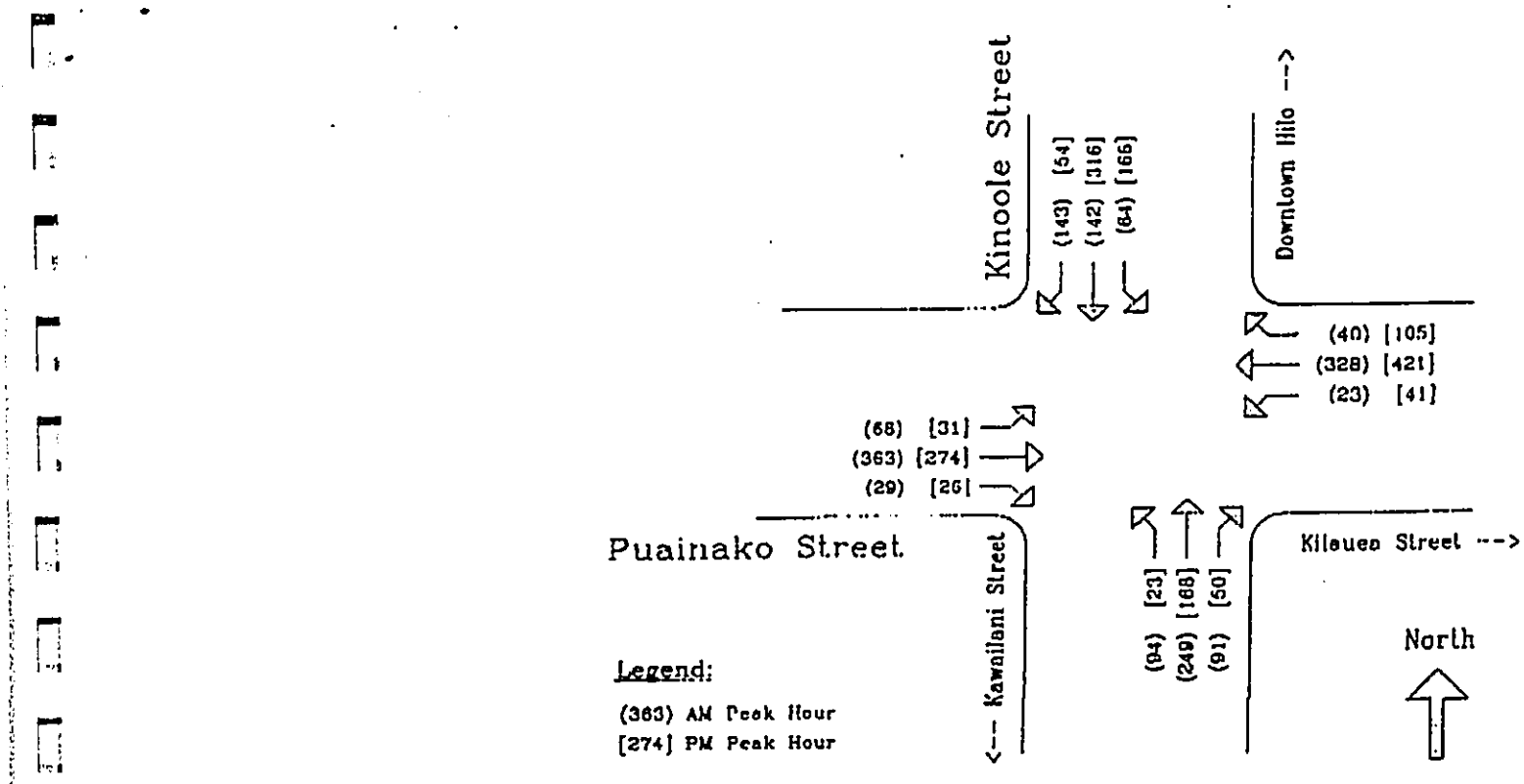
Additional traffic analyses should not be necessary since the project traffic would be only a small portion of the expected growth in traffic volumes in the area. Should there be any questions, please contact me at phone/fax 236-4325.

Very truly yours,

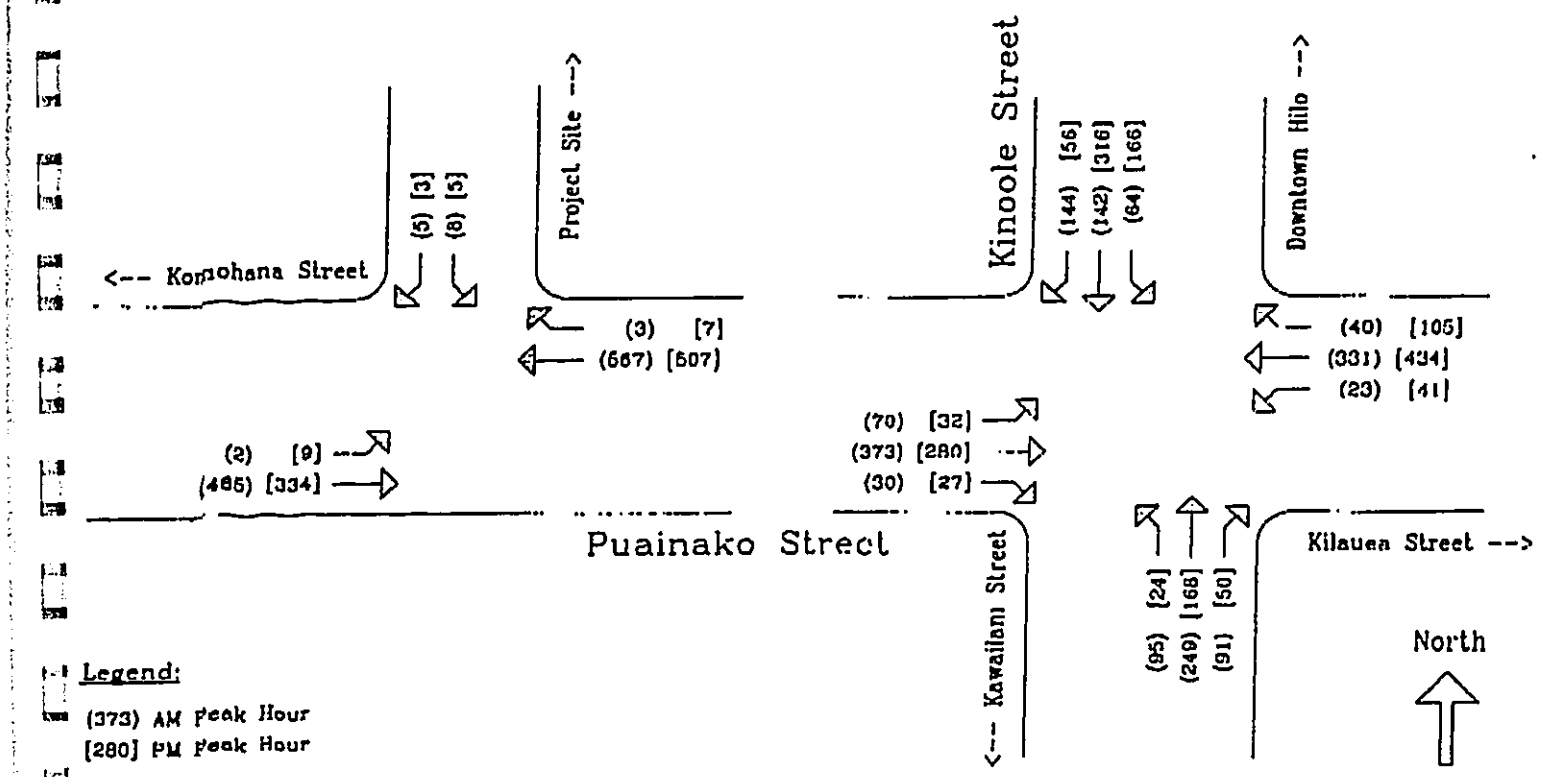
JULIAN NG, INC.

Julian Ng, P.E.
President

Attachment (sketches showing traffic volumes)



1995 Without Proposed Project



1995 With The Proposed Project

APPENDIX B

LOKAHI FEDERAL HOUSING PROJECT

SITE BOTANICAL INVESTIGATION

AECOS No. 793

LOKAHI FEDERAL HOUSING PROJECT
SITE BOTANICAL INVESTIGATION

TMK: 2-4-52: 1

Prepared For:

Gerald Park, Urban Planner
1245 Young Street, Suite 201
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Prepared By:

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(808) 254-5884

August 1994

INTRODUCTION

This report describes the flora found on a 3.182 acre parcel located off West Puainako Street in Waiakea, South Hilo, Hawaii (Figure 1). This property (exclusive of a 125-foot setback area along the Puainako Street frontage) is proposed for development by the Hawaii Housing Authority as the Lokahi Federal Housing Project. The site was surveyed on July 30, 1994 by *AECOS*, Inc. to settle questions raised by the Corps of Engineers (by letter dated July 13, 1994) concerning possible designation of all or part of the property as a wetland as defined in 40 CFR 230.41, resulting in permitting requirements under Section 404 of the Clean Water Act. Responding to the project draft Environmental Assessment (Gerald Park Urban Planner, 1994), the Department of the Army offered the following comment:

> a. Based on the description of soils and vegetation, wetlands may be present on the project site. A wetland delineation should be performed and coordinated with our Operations Division to determine if jurisdictional wetlands are present and if a DA permit will be required for the work. Please contact them at 438-9258 for further information and refer to file number PO94-077.

Our survey and report constitute a field assessment of site conditions and wetland indicators on the property and not an attempt to delineate any wetlands if present. A geotechnical exploration of the site (Geolabs-Hawaii, 1994) was reviewed.

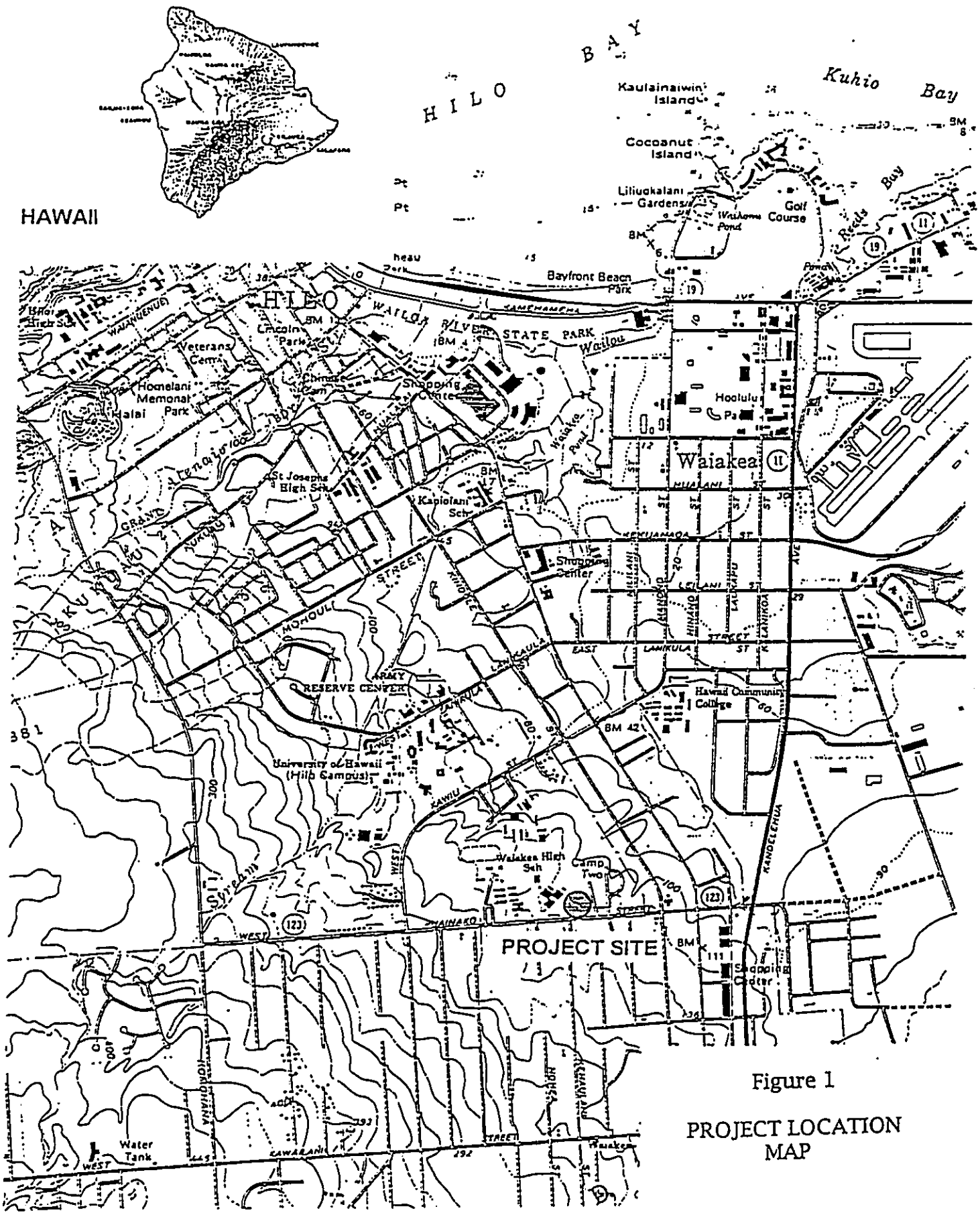

Figure 1

PROJECT LOCATION MAP

METHODS

A walk through survey of the entire site was conducted on the afternoon of July 30, 1994 by two biologists (Eric Guinther & David Miranda) combining extensive experience and knowledge in aquatic environments and plant identification in the Hawaiian Islands. Field notes were made on field paper and on a surveyor's topographic map of the property. Plant specimens were collected as necessary to confirm field identifications. Flowering plant names and status (introduced or native) follow Wagner, Herbst, and Sohmer (1990).

SITE DESCRIPTION

This part of Waiakea, located several blocks west of Kanoelehua Highway and Kilauea Street at the 100 to 120 feet elevation, is formerly part of Waiakea Camp Subdivision. Median annual rainfall in this area is on the order of 130 to 150 inches (3300 - 3800 mm) (Taliaferro, 1959). The natural plant community in this area would probably be a lowland wet forest type; however the site is within a developed residential district of Hilo. The site shows remnants of the alien wet forest common to much of the Puna District in disturbed areas, an assemblage dominated by melochia (*Melochia umbellata*) along with gunpowder tree (*Trema orientalis*), moho (*Heliocarpus popayanensis*), guarumo (*Cecropia obtusifolia*), and strawberry guava (*Psidium cattleianum*) (see Gagne and Cuddihy, in Wagner, Herbst, and Sohmers, 1990).

The subject property is an L-shaped parcel with 359 feet of frontage on Puainako Street and a width of 154 feet across the back bordering an older (1962) State of Hawaii, Lokahi Housing Project. The property is 600 feet deep along the west boundary in common with Waiakea Elementary School. Almost 180 feet of the east boundary fronts on Pamala Street, the remainder (426 feet) borders private houselots that themselves front on Pamala Street.

The land slopes to the north and to the east, from Puainako Street towards the back of the lot and the houselots along Pamala Street. A low embankment of fill material separates the parcel from the entry road and parking lot of Waiakea Elementary which is slightly higher than the subject parcel along their common boundary. A concrete drainage structure of small dimensions intercepts some runoff from the property and shunts the flow around the west side of the older, existing Lokahi Housing Project. Other low areas roughly resembling ditches occur along the east side of the parcel, although these depressions do not seem to be organized into a drainage channel. Surface contours reflect the underlying topography of the pahoehoe flows and do not form any basins on the property other than small depressions.

The soil series is Keaukaha extremely rocky muck (rKFD). These soils are well-drained, thin organic soils overlying pahoehoe lava bedrock (Sato, et al., 1973). The soil type is classified as a Dysic, isohyperthermic Lithic Tropofolist (Histosol). That is, a soil which is highly organic, acidic, in contact with the undrlying rock in a warm, generally well-drained setting. The following description of Keaukaha soil from the Soil Conservation Service (Sato, et al., 1973) contains the important features of the classification terminology and appears applicable to the Lokahi Federal Housing site:

> — This soil is near the city of Hilo. It is undulating to rolling and follows the topography of the underlying pahoehoe lava. Rock outcrops occupy about 25 percent of the area.
> In a representative profile the surface layer is very dark brown muck about 8 inches thick. It is underlain by pahoehoe lava bedrock. This soil is strongly acid.
> .....
> The soil above the lava is rapidly permeable. The pahoehoe lava is very slowly permeable, but water moves rapidly through the cracks. Runoff is medium, and the erosion hazard is slight. In places roots are matted over the pahoehoe lava or extend a few feet into the cracks.

The subsurface conditions were described as follows by Geolabs-Hawaii (1994) which drilled six deep borings to about 20 feet below ground surface and 6 shallow borings for percolation testing:

> In general our exploration encountered a surficial layer of stiff to very stiff silty soils (ash) with gravels and cobbles, ranging from about 1 to 5 feet in thickness. In Boring No. P-3, about 2 feet of volcanic ash material was encountered near the existing ground surface.....[p. 6]
> Below the surficial layer, clinker layers (1 to 19 feet thick) consisting of cobbles and gravels were encountered. Medium hard basalt rock was generally encountered below the clinkers.....Boring No. 6 encountered about 4 feet of basalt rock above the clinker layer. [p. 6].
> Groundwater was not encountered....[p. 6].
> In general, the in situ moisture contents of the near-surface soils (ash) appear to be relatively low with the exception of Boring No. P-3. [p. 8].
> [T]he calculated percolation rates for clinker formation range from 5.56×10^{-3} [0.00556] to 0.1 minutes/inch....[p. 18].

The dark coloration of wetland soils can be attributed to accumulated organic matter and/or metallic sulfides. In the case of soils on this site, the high ash content and accumulated organics probably account for the dark brown to gray color of surface soils as described by Geolabs-Hawaii.

We noted that the site has been grubbed in the recent past, creating an area cleared of trees and larger shrubs in a loop mostly 40 to 60 feet broad extending up and down the long leg of the parcel. This clearing may have been related to the geological survey conducted in April 1994 (Geolabs-Hawaii, 1994). The grubbed areas are now covered in grasses (Poaceae) and a variety of (mostly low growing) sedges (Cyperaceae). Thus, larger shrub and tree growth is confined to scattered specimen trees in the front of the property, margin areas of variable width (but generally only about 40 feet wide on the north and west and 60 to nearly 100 feet wide on the east), and a central area. The soil in the grubbed areas is particularly shallow, and exposures of broken pahoehoe are

common. The taller vegetative growth along the west (adjacent to the parking lot at Waiakea Elementary) and in the central sections consists mostly of young trees, suggesting that only the vegetation along north and east sides of the deep leg of the property, and the scattered specimen trees, have a long history of being undisturbed.

Much of the growth in the "undisturbed" areas consists of large fruit trees, including mango (*Mangifera indica*), lychee (*Litchi chinensis*), mountain apple (*Syzygium malaccense*), and rose apple (*S. jambos*). Trees in the central patch and along the west boundary are dominated by *Melochia umbellifera* and gunpowder tree (*Trema orientalis*). A number of large, old African tulip trees (*Spathodea campanulata*) are present. Much of the property shows evidence of ornamental plantings, and one or more residences are suspected to have been once present on the site.

At least one area of standing water was found. The overall size was under 30 ft^2, and the pool seemed to be formed in tire ruts resulting from a drill rig that had worked on the site. Sedges, California grass (*Brachiaria mutica*), Hilo grass (*Paspalum conjugatum*), and primrose willow (*Ludwigia octavalvis*) grow around this pool. Depth of water was under 4 inches. Dragonfly naiads were observed in the pool, and adult *Pantala flavescens* (Odonata) were observed flying across this area.

The results of the vegetation survey are summarized in Table 1, a listing of the plant species identified from the property and their relative abundances at this location. Figure 2 shows the identification of trees indicated on the surveyor' map of existing site conditions.

TABLE 1. JULY 1994 CHECKLIST OF PLANTS
FOUND ON PARCEL (TMK) 2-4-52: 1,
WAIAKEA, HILO, HAWAI'I

	Species	Common name	Status	Abundance
	FERNS			
	POLYPODIACEAE			
	Nephrolepis biserrata	sword fern		Occasional
	Polypodium lineare Thunb.	pleopeltis fern		Occasional
	Polypodium sp.	haresfoot polypody		Uncommon
	Pteris ensiformis			Occasional
	MONOCOTYLEDONES			
	AGAVACEAE			
	Cordyline fruticosa (L.) A. Chev.	ornamental ti	orn.	Uncommon
	ARACEAE			
FACW	*Alocasia ?macrorrhiza* (L.) Schott	ornamental 'ape	orn.	Uncommon
	Caladium sp.	caladium	orn.	Uncommon
	Epipremnum pinnatum (L.) Engl.	taro vine, pothos	nat.	Uncommon
	Philodendron cf. *micans* (Klotzsch) C. Koch	heart vine	orn.	Occasional
	Philodendron sp.	early philodendron hybrid	orn.	Uncommon
	ARECACEAE			
	Archontophoenix alexandrae (F. v. Muell.) H. A. Wendl. & Drude	king palm	nat.	Uncommon
	Cocos nucifera L.	coconut palm, *niu*	pol.	Uncommon
	CARICACEAE			
	Carica papaya L.	pawpaw	nat.	Occasional
	COMMELINACEAE			
FACW	*Commelina diffusa* N. L. Burm.	*honohono*	nat.	Common
	CYPERACEAE			
FACW	*Cyperus alternifolius* L.	umbrella sedge	nat.	Uncommon
	Cyperus gracilis R. Br.	McCoy grass	nat.	Uncommon
	Cyperus rotundus L.	nut grass	nat.	Abundant
	Cyperus sp.			Uncommon
FACW	*Fimbristylis* sp.			Uncommon
	Kyllinga brevifolia Rottb.	*kili'o'opu*	nat.	Common
	HELICONIACEAE			
	Heliconia humilis (Aubl.) Jacq.	psittacorum heliconia	orn.	Common
	MUSACEAE			
	Musa x *paradisiaca* L.	banana	pol.	Occasional

	Species	Common name	Status	Abundance
	POACEAE (GRAMINEAE)			
FACW	*Brachiaria mutica* (Forssk.) Stapf	California grass	nat.	Abundant
OBL	*Coix lachryma-jobi* L.	Job's tears, *pu'ohe'ohe*	nat.	Occasional
FACU	*Oplismenus hirtellus* (L.) P. Beauv.	basketgrass	nat.	Occasional
FAC	*Paspalum conjugatum* Bergius	Hilo grass	nat.	Common
	Paspalum fimbriatum Kunth	Panama paspalum	nat.	Occasional
FACU	*Pennisetum purpureum* Schumach.	napier grass	nat.	Abundant
	Setaria gracilis Kunth	yellow foxtail	nat.	Uncommon
	Setaria palmifolia (J. König) Stapf	palmgrass	nat.	Abundant
	ZINGIBERACEAE			
	Alpinia speciosa (Wendl.) K. Schum.	shell ginger	orn.	Uncommon
FAC	*Hedychium flavescens* N. Carey ex Roscoe	yellow ginger	nat.	Occasional
	DICOTYLEDONES			
	ACANTHACEAE			
	Thunbergia fragrans Roxb.	white thunbergia	nat.	Common
	ANACARDIACEAE			
	Mangifera indica L.	mango	nat.	Uncommon
	APOCYNACEAE			
	Allamanda cathartica L.	*lani-ali'i*	orn.	Uncommon
	ASTERACEAE (COMPOSITAE)			
FACU	*Ageratum conyzoides* L.	*maile hohono*	nat.	Occasional
FACW	*Pluchia symphytifolia* (Mill.) Gillis	sourbush	nat.	Occasional
FACU	*Wedelia trilobata* (L.) Hitchc.	wedelia	nat.	Common
	Youngia japonica (L.) DC	Oriental hawksbeard	nat.	Uncommon
	uniden.	weed	nat.	Uncommon
	BALSAMINACEAE			
	Impatiens wallerana J. D. Hook	impatiens	nat.	Occasional
	BIGNONIACEAE			
	Spathodea campanulata P. Beauv.	African tulip tree	nat..	Abundant
	CAMPANULACEAE			
	Hippobroma longiflora (L.) G. Don	Star-of-Bethlehem	nat.	Uncommon
	CECROPIACEAE			
	Cecropia obtusifolia Bertol.	guarumo	nat.	Uncommon
	CONVOLVULACEAE			
	Ipomoea sp.	vine		Uncommon
	Merremia tuberosa (L.) Rendle	wood rose	nat.	Occasional

	Species	Common name	Status	Abundance
	EUPHORBIACEAE			
	Chamaesyce hirta (L.) Millsp.	garden spurge	nat.	Occasional
	Macaranga mappa (L.) Müll. Arg.	bingabing	nat.	Occasional
	Phyllanthus ?debilis Klein ex Willd.	niruri	nat.	Uncommon
	Ricinus communis L.	castor bean, *pa'aila*	nat.	Uncommon
	FABACEAE			
	Chamaecrista nictitans (L.) Moench.	partridge pea	nat.	Uncommon
	Desmodium incanum DC	Spanish clover	nat.	Uncommon
	Indigofera suffruticosa Mill.	indigo	nat.	Occasional
	Leucaena leucocephala (Lam.) deWit	*koa haole*	nat.	Uncommon
FACU	*Mimosa pudica* L.	sensitive plant	nat.	Common
	uniden., sm. yellow pea flowr.	vine		Uncommon
	LAURACEAE			
	Persea americana Mill.	avocado	nat.	Uncommon
	MALVACEAE			
TFAC	*Hibiscus furcellatus* Desr.	*'akiohala*	ind.	Occasional
	Malvastrum coromandelianum (L.) Garcke	false mallow	nat.	Uncommon
	MELASTOMATACEAE			
	Dissotis rotundifolia (Sm.) Triana	creeping melastome	nat.	Occasional
	MYRTACEAE			
FACU	*Psidium guajava* L.	common guava	nat.	Occasional
	Syzygium jambos (L.) Alston	rose apple	nat.	Uncommon
	Syzygium malaccense (L.) Merr. & Perry	mountain apple	pol.	Uncommon
	ONAGRACEAE			
OBL	*Ludwigia octavalvis* (Jacq.) Raven	primrose willow	pol.?	Occasional
	PASSIFLORACEAE			
	Passiflora edulis Sims	passion fruit	nat.	Uncommon
	RUBIACEAE			
	Coffea arabica L.	coffee bean	nat.	Uncommon
	Paederia scandens (Lour.) Merr.	*maile pilau*	nat.	Abundant
	SAPINDACEAE			
	Litchi chinensis Sonn.	lychee	nat.	Uncommon
	SOLANACEAE			
	Solanum americanum Mill.	*popolo*	ind.?	Uncommon
	STERCULACEAE			
	Melochia umbellata (Houtt.) Stapf		nat.	Abundant
	ULMACEAE			
	Trema orientalis (L.) Blume	gunpowder tree	nat.	Abundant

KEY
Wetland status (after ACOE, 1987 and Reed, 1988) OBL - Obligate wetland species - found in wetlands 99% of the time. FACW - Plant species that may be found in wetlands approximately 67 to 99% of the time. FAC Plant as likely to be found in wetlands as outside of wetlands. FACU A plant sometimes found in wetlands, but more likely to be found in non-wetlands. not indicated - Upland plants normally not found in wetlands.
Status = distributional status end. = endemic; native to Hawaii and found naturally no where else. ind. = indigenous; native to Hawaii, but not unique to the Hawaiian Islands. nat. = naturalized, exotic, plant introduced to the Hawaiian Islands since the arrival of Cook Expedition, and well-established outside of cultivation. orn. = exotic, ornamental; plant not naturalized (not well-established outside of cultivation). pol. = polynesian introduction.
Abundance = abundance ratings are for this site (TMK 2-4-52: 1) only. Uncommon - a plant found less than five times; Occasional - a plant that was found between five and ten times; Common - a plant considered an important part of the vegetation Abundant - plants found in large numbers, dominant or locally dominant.

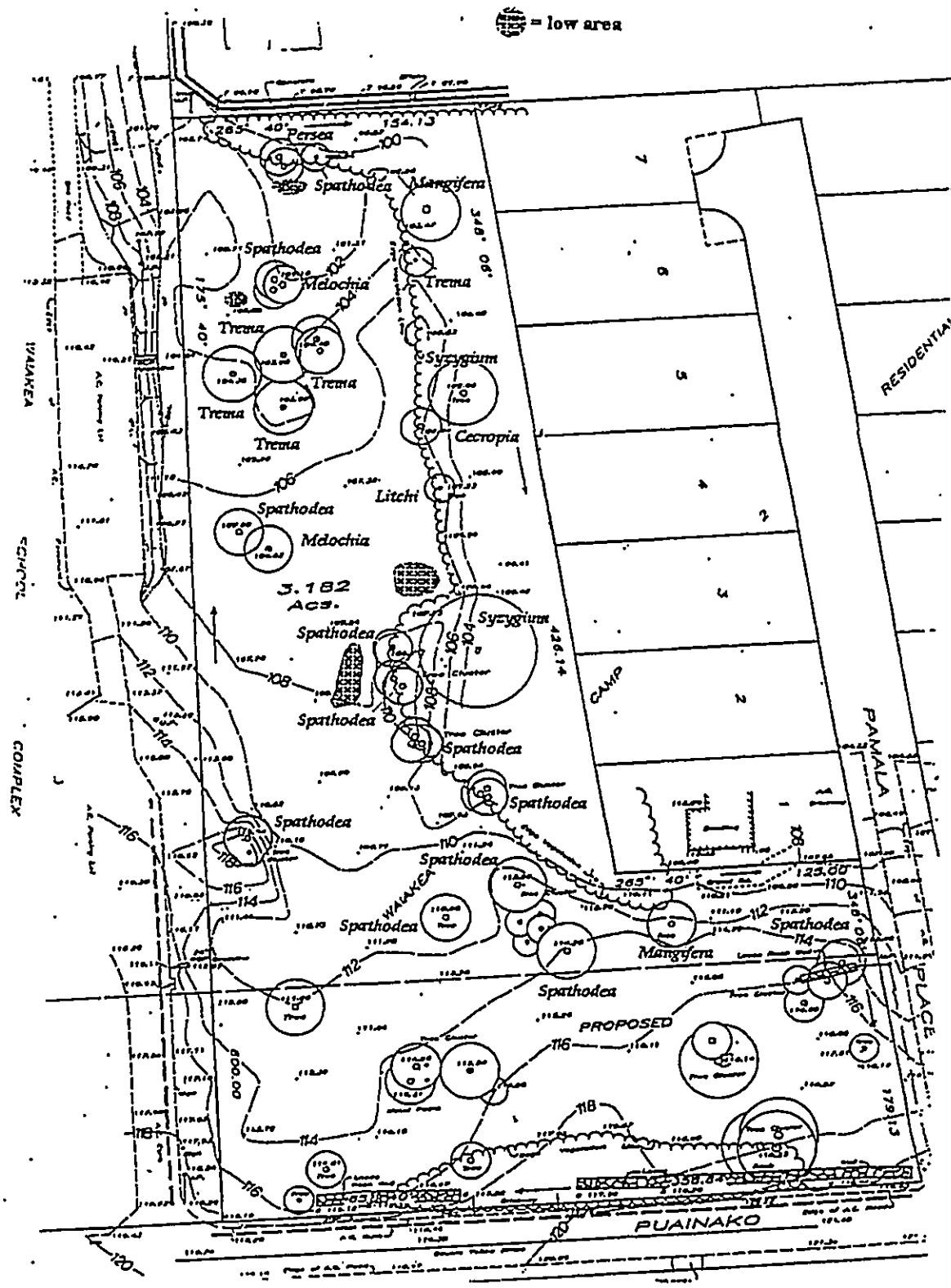

Figure 2. Surveyors map of parcel with larger trees identified and low, wet areas marked.

DISCUSSION

The number of wetland indicator plants at this site is relatively high (marked with OBL or FACW in Table 1), although all but primrose willow (*Ludwigia octavalvis*) and Job's tears (*Coix lachryma-jobi*) are facultative wetland species. Facultative species are species which commonly occur in wetlands, but also may be found (and sometimes are more abundant) outside of wetlands. As pointed out by Elliott and Hall (1977) "....further investigation into soil and water conditions is often necessary when facultatives are observed in the field, since they are not restricted to wet areas." Given the initial concern that a wetland may be present on this property, the following points are significant:

1) Wetlands are defined by Federal regulations (40 CFR 230.3, 40 CFR 230.41) as "areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions." Included are swamps, marshes, and bogs (see also ACOE, 1987).

2) The Lokahi Federal Housing Project is located in Waiakea, a part of Hilo. Waiakea is a high rainfall area, even at low elevations. Rainfall is relatively evenly distributed throughout the year, with median values for most months exceeding 10 inches (254 mm)(Taliaferro, 1959).

3) The site is a large, residential lot, previously disturbed. The lot receives some drainage from adjacent lots, and drains downslope to other adjacent lots. The site is not part of an obvious gully system, focused drainage, intermittent stream, or large depression in which water might accumulate.

4) Although hydric soils as mapped by SCS are not indicated for the project site, small pockets of dark, organic-rich soils are present which superficially resemble hydric soils. Site soils are high in ash content (Geolabs-Hawaii, 1994), contributing to the dark coloration.

5) Both facultative and two obligate wetland plants (although Elliot and Hall, 1977 list Job's tears as a facultative wetland plant) occur on the property. Both the better indicators among the facultative species (FACW and Job's tears) and the obligate wetland species occur as widely scattered individual plants, not as monospecific clumps or clusters or other associations that would indicate a distinct wetland area.

Only facultative species are common on the property, and only California grass (*Brachiaria mutica*) is abundant.

6) Reference to hau (*Hibiscus tiliaceus*) on the property (Gerald Park Urban Planner, 1994) appears to be an erroneous identification. No hau was found on the property in July 1994.

7) A small body of water was present in July. This area of saturated soil measured about 30 ft^2 in area and harbored an aquatic animal (dragonfly naiads) and some wetland vegetation. The soil was dark. The pool occupied a depression within tire ruts left from a large vehicle and could be regarded as a man-induced wetland, although the action did not involve any change in site hydrology. Given the regularity of rainfall in this area, this depression and possibly others on the property may contain water for long periods of time. However, given the small size of the pool, it is suspected that even this feature does not represent permanent standing water.

These points lead us to conclude that the site does not fit the definition of a wetland and does not harbor aquatic fauna or flora constituting a wetland resource or having wetland values. The primary reason that this site is not a wetland despite the presence of several wetland indicator plants and a small amount of standing water is due to the physical characteristics of the site which would not support the formation of a permanent body of water or a saturated soil wetland (i.e., a wetland hydrology is not present). The subsurface soil layer of basalt clinker (Sato, et al., 1973; Geolabs-Hawaii, 1994) is highly permeable. No source of water, other than direct rainfall, is evident on the site. No ground water was encountered in six borings to 20 feet below the ground surface in April 1994 (Geolabs-Hawaii, 1994).

REFERENCES

ACOE. 1987. Corps of Engineers Wetlands Delineation Manual. Department of the Army, Waterways Experiment Station, Corps of Engineers, Vicksburg, Mississippi. Wetlands Research Program, Tech. Rept. Y-87-1. 100 p. plus appendices.

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Reed, P. B. 1988. National list of plant species that occur in wetlands; Hawaii (Region H). U.S. Dept. Interior, Fish & wildlife Service, Research & Development, Washington, D.C. Biological Report 88 (26.13).

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Taliaferro, W. J. 1959. Rainfall in the Hawaiian Islands. State of Hawaii, Hawaii Water Authority. 394 p.

Wagner, W. L., D. R. Herbst, and S. H. Sohmer. 1990. Manual of the Flowering Plants of Hawaii. Bishop Museum Special Publication 83. Vol. 1 and 2. University of Hawaii Press/Bishop Museum Press, Honolulu. 1853 p.

APPENDIX C

COMMENT LETTERS AND RESPONSES

Stephen K. Yamashiro
Mayor

RECEIVED
6/25/94

Virginia Goldstein
Director

Norman Olesen
Deputy Director

County of Hawaii

PLANNING DEPARTMENT

25 Aupuni Street, Room 109 • Hilo, Hawaii 96720-4252
(808) 961-8288 • Fax (808) 961-9615

June 20, 1994

Mr. Gerald Park
Gerald Park Urban Planner
1245 Young Street, Suite 201
Honolulu, HI 96814

Dear Mr. Park:

- Environmental Assessment
  Lokahi Federal Housing Project
  Waiakea, South Hilo, Hawaii
  Tax Map Key: 2-4-52: 01

We have reviewed the subject document and have the following comments to offer:

1. The County General Plan Land Use Allocation Guide Map Designates the property to Low Density.

2. Under the present Zoning Designation of Double Family Residential (RD-3.75) only Duplexes or Single Family Dwellings are permitted. The proposed four plexes are not permitted.

3. Rezoning to a Multi-Family Designation (TM) is not possible without a General Plan Amendment.

Sincerely,

VIRGINIA GOLDSTEIN
Planning Director

MO:boa
4170D

October 25, 1994

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

Dear Ms. Goldstein:

Subject: Lokahi Federal Housing Project
Waiakea, South Hilo, Hawaii

Thank you for reviewing and commenting on the Environmental Assessment prepared for the subject project. In response to your comments we offer the following:

1. We will revise the statement "general planned Low or Medium Density on the Hawaii County General Plan" to read "general planned Low Density on the County General Plan Land Use Pattern Allocation Guide Map".

2. No response required.

3. We will include a statement in the Assessment to indicate that a general plan amendment is required prior to rezoning the property for Multi-Family use.

Should you have any questions about the project, please contant Mr. Wayne Nakamoto of the Hawaii Housing Authority at 832-5920 or myself at 596-0018.

Sincerely,

GERALD PARK URBAN PLANNER

Gerald Park

xc: W. Nakamoto, HHA

GERALD PARK urban planner
1245 young street suite 201 honolulu hi 96814 tel. (808) 596-0018 urban planning

Stephen K. Yamashiro
Mayor

RECEIVED
6/30/94

Nelson M. Tsuji
Fire Chief

County of Hawaii
FIRE DEPARTMENT

466 Kinoole Street • Hilo, Hawaii 96720-3983
(808) 961-8297 • Fax (808) 961-6920

June 28, 1994

Mr. Gerald Park, Urban Planner
1245 Young Street, Suite 201
Honolulu, HI 96814

Dear Mr. Park:

Subject: Lokahi Federal Housing Project
- Waiakea, South Hilo, Hawaii

The Fire Department's requirements as stated in the Fire Code are:

"INSTALLATION AND MAINTENANCE OF FIRE-PROTECTION, LIFE-SAFETY SYSTEMS AND APPLIANCES

"Installation

"Sec. 10.301. "(c) Water Supply. An approved water supply capable of supplying required fire flow for fire protection shall be provided to all premises upon which buildings or portions of buildings are hereafter constructed, in accordance with the respective county water requirements. There shall be provided, when required by the chief, on-site fire hydrants and mains capable of supplying the required fire flow.

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

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

"(d) Fire Hydrant Markers. When required by the chief, hydrant locations shall be identified by the installation of reflective markers.

"(e) Timing of Installation. When fire protection facilities are to be installed by the developer, such facilities including all surface access roads shall be installed and made serviceable prior to and during the time of construction. When alternate methods of protection, as approved by the chief, are provided, the above may be modified or waived."

NELSON M. TSUJI
Fire Chief

NMT/mo

Stephen K. Yamashiro
Mayor

RECEIVED 7/7/94

Victor V. Vierra
Chief of Police

Francis C. DeMorales
Deputy Chief of Police

County of Hawaii
POLICE DEPARTMENT
349 Kapiolani Street • Hilo, Hawaii 96720-3998
(808) 935-3311 • Fax (808) 961-2702

July 1, 1994

Mr. Gerald Park
Urban Planner
1245 Young Street, Suite 201
Honolulu, Hawaii 96814

Dear Mr. Park:

SUBJECT: LOKAHI FEDERAL HOUSING PROJECT
WAIAKEA, SOUTH HILO, HAWAII

We have concerns of the impact of the project on peak traffic at the adjacent intersections.

Thank you for the opportunity to provide input.

Sincerely,

VICTOR V. VIERRA
CHIEF OF POLICE

EO:GWT/sk

cc: South Hilo Patrol Division

October 25, 1994

Wayne Cravalho, Chief of Police
County of Hawaii
Police Department
349 Kapiolani Street
Hilo, Hawaii 96720-3998

Dear Chief Cravalho:

Subject: Lokahi Federal Housing Project
Waiakea, South Hilo, Hawaii

Thank you for reviewing the Draft Environmental Assessment prepared for the subject project. A traffic study has been completed and the results have been forwarded to the Hawaii Housing Authority for consideration. A copy is enclosed for your perusal.

Should you have any questions, please contact Mr. Wayne Nakamoto of the Hawaii Housing Authority at 832-5920 or myself at 596-0018.

Sincerely,

GERALD PARK URBAN PLANNER

Gerald Park

Enclosure

xc: W. Nakamoto, HHA

GERALD PARK urban planner
1245
young street
suite 201
honolulu hi 96814
tel (808)
596 0018
urban planning

DEPARTMENT OF WATER SUPPLY • COUNTY OF HAWAII
25 AUPUNI STREET • HILO, HAWAII 96720
TELEPHONE (808) 969-1421 • FAX (808) 969-6996

RECEIVED 7/7/94

June 27, 1994

Mr. Gerald Park
Gerald Park Urban Planner
1245 Young Street, Suite 201
Honolulu, HI 96814

LOKAHI FEDERAL HOUSING PROJECT
20 UNITS
TAX MAP KEY 2-4-52:1

We have reviewed the draft environmental assessment for the subject project.

Water for the project is available from an existing 8-inch waterline along Puainako Street. Water service will be subject to the Department's requirements of its prevailing Rules and Regulations.

Requirements include a facilities charge of $34,500.00. The facilities charge rates, which are subject to change, are $300.00 for the first unit and $1,800.00 for each additional unit. A unit represents 600 gallons per day for one-single family dwelling unit.

Construction plans and water demand calculations, prepared by a registered engineer and in accordance with the Department's "Water System Standards", for the installation of service laterals for meters for domestic use and for fire protection purposes must be submitted for review and approval. The Fire Department and Building Division of the Public Works Department should be contacted for fire protection requirements.

H. William Sewake
Manager

QA

copy - Hawaii Housing Authority
- Office of Housing and Community Development

... Water brings progress...

JOHN WAIHEE
GOVERNOR

HERMAN M. AIZAWA, Ph.D.
SUPERINTENDENT

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

OFFICE OF THE SUPERINTENDENT

RECEIVED 7/8/94

June 30, 1994

Mr. Gerald Park, Urban Planner
1245 Young Street, Suite 201
Honolulu, Hawaii 96814

Dear Mr. Park:

SUBJECT: Draft Environmental Assessment
Lokahi Federal Housing Project
Waiakea, South Hilo, Hawaii

We have reviewed the subject assessment and have determined that the proposed 20 rental housing units will have the following enrollment impact on the area schools:

Schools	Grades	Projected Students
Waiakea Elementary	K-6	10
Waiakea Intermediate	7-8	2
Waiakea High	9-12	4

All three schools are operating at or beyond their capacities and report a shortage of classrooms. The Department of Education (DOE) cannot assure the availability of classrooms to accommodate the students from this development.

Should there be any questions, please call the Facilities Branch at 737-4743.

Sincerely,

Herman M. Aizawa, Ph.D.
Superintendent

HMA:hy

cc: A. Suga, OBS
P. Bergin, HIDO

October 25, 1994

Herman M. Aizawa, Ph.D.
Superintendent
State of Hawaii
Department of Education
P.O. Box 2360
Honolulu, Hawaii 96804

Dear Dr. Aizawa:

Subject: Lokahi Federal Housing Project
Waiakea, South Hilo, Hawaii

Thank you for reviewing the Environmental Assessment for the subject project and providing us information about enrollment impacts and student capacity at the affected schools.

We have forwarded your comments to the Hawaii Housing Authority for consideration. They will keep the Department of Education apprised of the status of the project.

Should you have any questions, please contact Mr. Wayne Nakamoto of the Hawaii Housing Authority at 832-5920 or myself at 596-0018.

Sincerely,

GERALD PARK URBAN PLANNER

Gerald Park

xc: W. Nakamoto, HHA

GERALD PARK, urban planner
1245
young street
suite 201
honolulu, hi 96814
tel. (808)
596-0018
urban planning

JOHN WAIHEE
GOVERNOR

STATE OF HAWAII
DEPARTMENT OF THE ATTORNEY GENERAL
REGULATORY DIVISION
465 SOUTH KING STREET, ROOM 200
HONOLULU, HAWAII 96813-2913
(808) 587-3050
FAX (808) 587-3077

ROBERT A. MARKS
ATTORNEY GENERAL

RUTH I. TSUJIMURA
FIRST DEPUTY ATTORNEY GENERAL

August 12, 1994

Mr. Mitsuo Shito
Executive Director
Hawaii Housing Authority
1002 North School Street
Honolulu, Hawaii 96817

Dear Mr. Shito:

Re: Lokahi Federal Public Housing Project in Hilo, Hawaii

This is in response to a request by your Project Coordinator, Wayne Nakamoto, that we provide you with an opinion regarding your Lokahi Federal Public Housing Project in Hilo, Hawaii. Mr. Nakamoto asked whether the Department of Education, State of Hawaii, would be required to enroll and educate any and all children residing at your Lokahi Project in their district school.

We answer in the affirmative. Section 298-17, Hawaii Revised Statutes, provides that the Department may designate school districts, which shall include all localities. This the Department has done. Thus, there is a district school designated for children of your Lokahi Project. Furthermore, chapter 298 mandates that all persons of school age "attend the school of the district in which they reside." Section 298-18, Haw. Rev. Stat. Hence, the children residing at your Lokahi Project are required to attend the school of the district designated for their locality. This mandate is imposed upon both the children and the Department.

If there is anything further, please feel free to let us know.

Very truly yours,

Carolee H. Aoki
Deputy Attorney General

JOHN WAIHEE
GOVERNOR OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

P. O. BOX 621
HONOLULU, HAWAII 96809

KEITH W. AHUE, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DEPUTIES
JOHN P. KEPPELER II
DONA L. HANAIKE

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

REF:OCEA:DKP

FILE NO.: 94-702
DOC. ID.: 4673

JUL 15 1994

RECEIVED 7/18/94

Mr. Gerald Park, Urban Planner
1245 Young Street, Suite 201
Honolulu, HI 96814

Dear Mr. Park:

SUBJECT: Draft Environmental Assessment (DEA): Lokahi Federal Housing Project, Waiakea, South Hilo, Hawaii; TMK: 2-4-52: 1

We have reviewed the DEA information for the subject project transmitted by your letter dated June 13, 1994, and have the following comments:

Division of Land Management

The Division of Land Management (DLM) comments that they have reviewed the DEA for the Lokahi Federal Housing Project and have no objections. The proposed project does not impact any Department of Land and Natural Resources' projects within the Waiakea, South Hilo, Hawaii area.

At its meeting of February 12, 1993, under agenda Item F-3, (copy attached), the Board of Land and Natural Resources approved and recommended to the Governor of Hawaii the issuance of an executive order setting aside State-owned public trust "ceded" lands at Waiakea, South Hilo, Hawaii to the Department of Human Services for its Hawaii Housing Authority (HHA) for the development of low-income public housing rental project.

The Board's action includes Parcels 16, 17, 18, and 19. DLM suggests inspection, review, and addition of these parcels within the final environmental assessment. Also, the terms, conditions, and recommendations set within the February 12, 1993 Board action must be adhered.

Historic Preservation Division

The Historic Preservation Division (HPD) comments that the location of the proposed housing development, a vacant lot, was grubbed in 1992. It thus seems doubtful that there are any historic sites present on this parcel. HPD believes that the proposed action will have "no effect" on historic sites.

We have no other comments to offer at this time. Thank you for the opportunity to comment on this matter.

Please feel free to call Steve Tagawa at our Office of conservation and Environmental Affairs, at 587-0377, should you have any questions.

Very truly yours,

Keith W. Ahue

KEITH W. AHUE

Attachment(s)

DEPARTMENT OF THE ARMY
U. S. ARMY ENGINEER DISTRICT, HONOLULU
FT. SHAFTER, HAWAII 96858-5440

REPLY TO ATTENTION OF

July 13, 1994

RECEIVED 7/14/94

Planning Division

Mr. Gerald Park
Urban Planner
1245 Young Street, Suite 201
Honolulu, Hawaii 96814

Dear Mr. Park:

Thank you for the opportunity to review and comment on the Draft Environmental Assessment for the Lokahi Federal Housing Project, Waiakea, South Hilo, Hawaii. The following comments are provided pursuant to Corps of Engineers authorities to disseminate flood hazard information under the Flood Control Act of 1960 and to issue Department of the Army (DA) permits under the Clean Water Act; the Rivers and Harbors Act of 1899; and the Marine Protection, Research and Sanctuaries Act.

a. Based on the description of soils and vegetation, wetlands may be present on the project site. A wetland delineation should be performed and coordinated with our Operations Division to determine if jurisdictional wetlands are present and if a DA permit will be required for the work. Please contact them at 438-9258 for further information and refer to file number PO94-077.

b. The flood hazard information provided on page 8 of the environmental assessment is correct.

Sincerely,

Ray H. Jyo, P.E.
Director of Engineering

October 21, 1994

Mike Lee, Chief
Regulatory Branch
Department of the Army
U.S. Army Engineer District
Building T-1
Fort Shafter, Hawaii 96858-5440

Dear Mr. Lee:

Subject: Lokahi Federal Housing Project
File No: PO94-077

We are submitting a Site Botanical Investigation for review by your department. The survey is a precursor to a wetland delineation which may be required to determine if jurisdictional wetlands are present on the site of the subject project.

We and our consultant, AECOS Inc., are available to discuss the contents of the report or any questions you or your staff may have. Please feel free to contact Rick Guinther at 254-5884 or myself at 596-0018.

Sincerely,

GERALD PARK URBAN PLANNER

Gerald Park

Enclosure

xc: W. Nakamoto, Hawaii Housing Authority
D. Alcon, Alcon & Associates
R. Guinther, AECOS, Inc.

GERALD PARK urban planner
1245
young street
suite 201
honolulu, hi 96814
tel. (808)
596-0018
urban planning

JOHN WAIHEE
GOVERNOR OF HAWAII

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

PETER A. SYBINSKY PH.D
DIRECTOR OF HEALTH

RECEIVED
7/28/94

IN REPLY, PLEASE REFER TO:

July 21, 1994

94-127/epo

Mr. Gerald Park
Urban Planner
1245 Young Street, Suite 201
Honolulu, Hawaii 96814

Dear Mr. Park:

Subject: Draft Environmental Assessment
Lokahi Federal Housing Project
Waiakea, South Hilo, Hawaii
TMK: 2-4-52:01

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

Solid Waste

This project is proposed as a joint venture by the Hawaii Housing Authority of the State of Hawaii, and the federal Department of Housing and Urban Development. The Environmental Assessment (EA) should address the solid waste impacts of the construction and occupation of 44 additional housing units in Hawaii County. Since Hawaii County is striving to achieve the waste reduction goals established in Chapter 342G, Hawaii Revised Statutes, and the EA should include a commitment to waste minimization efforts in design and construction in order to minimize the amount of solid waste generated at the project.

We also suggest that secondary resources (recycled materials) be incorporated into the design whenever possible. Locally produced compost is a valuable soil amendment for landscaping purposes, and crushed glass in asphalt for paving is mandated for all State and County funded projects (Act 213-92).

Drinking Water

1. The project site is above the Underground Injection Control (UIC) line. Therefore, construction of new sewage injection wells is not permissible, according to Chapter 11-23, "Underground Injection Control".

2. According to our records, there are no drinking water source wells located within 1/4 mile from the project site.

3. The location of the septic tanks and the sewage effluent disposal areas (leach fields) should be depicted on the proposed site plan.

4. Collection of subsurface geologic data within the project site may be necessary for evaluation purposes.

5. Regarding drainage drywells, the owner is required to obtain a UIC permit to authorize the construction and the operation of the drywell.

For more information on the UIC permitting process, please contact the Safe Drinking Water Branch's UIC Program at 586-4258.

Wastewater

The Wastewater Branch will need to review and approve the septic tanks/leach fields, so it would be in the developer's best interest to provide specific guidelines to the Wastewater Branch during the design of the system.

For more information on this matter, please call the Wastewater Branch at 586-4294.

Sincerely,

PETER A. SYBINSKY, PH.D.
Director of Health

c: Office of Solid Waste Management
Safe Drinking Water (UIC)
Wastewater Branch

October 25, 1994

Peter A. Sybinsky, Ph.D., Director
Department of Health
State of Hawaii
P.O. Box 3378
Honolulu, Hawaii 96801

Dear Dr. Sybinsky:

Subject: Lokahi Federal Housing Project (94-127/epo)
Waiakea, South Hilo, Hawaii

Thank you for offering comments on the Draft Environmental Assessment for the subject project. Our responses are numbered to coincide with your remarks.

Solid Waste

Applicant will work with the site contractor to provide a waste recovery system for construction materials.

Drinking Water

3. The location of the leach fields has not been determined. A Location Map will be submitted along with completed construction drawings to the Wastewater Branch for review and approval.

4. A geotechnical exploration of the site has been completed.

Wastewater

The Wastewater Branch is reviewing a variance request for the proposed wastewater treatment system.

Thank you for participating in the environmental assessment process.

Sincerely,

GERALD PARK URBAN PLANNER

Gerald Park

xc: W. Nakamoto, Hawaii Housing Authority

GERALD PARK urban planner

JOHN WAIHEE
GOVERNOR

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

RECEIVED 7/28/94

REX D. JOHNSON
DIRECTOR

DEPUTY DIRECTORS
KAHAHI HOLT
GLENN M. OKIMOTO
JOYCE T. OMINE
CALVIN M. TSUDA

IN REPLY REFER TO:
STP8.6207

July 25, 1994

Mr. Gerald Park
Gerald Park Urban Planner
1245 Young Street, Suite 201
Honolulu, Hawaii 96814

Dear Mr. Park:

Subject: Draft Environmental Assessment
Lokahi Federal Housing Project
Waiakea, South Hilo, Hawaii
TMK: 2-4-52: 01

The proposed Lokahi Federal Housing Project will not have a significant impact on our transportation facilities.

We appreciate the opportunity to provide comments.

Sincerely,

Glenn M Okimoto

Rex D. Johnson
Director of Transportation

OFFICE OF STATE PLANNING
Office of the Governor
MAILING ADDRESS: P.O. BOX 3540, HONOLULU, HAWAII 96811-3540
STREET ADDRESS: 250 SOUTH HOTEL STREET, 4TH FLOOR
TELEPHONE: (808)547-7846, 587-2800
FAX: Director's Office 587-2848
Planning Division 587-2824

RECEIVED 8/1/94

Ref. No. C-753

July 27, 1994

Mr. Gerald Park
1245 Young Street
Suite 201
Honolulu, Hawaii 96814

Dear Mr. Park:

Subject: Lokahi Federal Housing Project, Waiakea, South Hilo, Hawaii, TMK: 2-4-52: 01

We have reviewed the proposal for 20 rental housing units for the elderly. The project is within the Urban District and is zoned RD-3.75. We have no comments at this time.

Thank you for the opportunity to comment on this proposal. If you have any questions, please contact the Land Use Division at 587-2886.

Sincerely,

Mary Lou Kobayashi for

Harold S. Masumoto
Director