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Deputy County Engineer



DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION
4444 Rice Street
Mo#ikeha Building, Suite 175
Lihue, Hawaii 96766

May 10, 2001

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

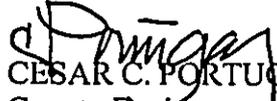
Attention: Ms. Genevieve Salmonson, Director

Subject: Finding of No Significant Impact (FONSI) for Lydgate Park Bike & Pedestrian Trail, Bridge/Comfort Station/Picnic Pavilions/Sports Fields/Camping/Parking, TMK 3:09-06-01 & 3:09-02-34, Wailua, Kauai, Hawaii

The Kauai County Department of Public Works has reviewed the comments received during the 30-day public comment period that began on March 8, 2001. The agency has determined that this project will not have significant environmental effects and has issued a FONSI. Please publish this notice in the June 8, 2001 QECC Environmental Notice.

We have enclosed a completed QECC Publication Form and four copies of the Final EA. Please call Douglas Haigh at 241-6650 should you have any questions.

Very truly yours,


CESAR C. PORTUGAL
County Engineer

DH
cc: DCE
Parks & Recreation
Planning Department

63

JUN -- 8 2001
FILE COPY

2001-06-08-KA-FEA-

**FINAL
ENVIRONMENTAL ASSESSMENT**

LYDGATE PARK

**BIKE & PEDESTRIAN PATH
BRIDGE/COMFORT STATION/PICNIC
SPORTS FIELDS/CAMPING/PARKING**

Owned by

**THE COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
LIHUE, KAUAI, HAWAII**

Prepared For

Kauai County of Public Works

May 7, 2001

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CHAPTER I

PROJECT SUMMARY

The Lydgate Park Path project involves the construction of an concrete 10' wide approximately 2.4 miles long bicycle and pedestrian path that will surround the park and link various areas within the park. The project also will include the construction of a community-built pedestrian bridge across a drainage swale, an ADA accessible community-built wooden overlook, picnic facilities, camping sites, a maintenance building to be sited at the sewage treatment building, the construction of a comfort station which will be built on the former foundation of the golf course clubhouse, three regulation size sports fields, and parking. This location for the comfort station is to avoid any new disturbance of the soil for the foundation, and minimize any other disturbance for associated utilities.

A. PROJECT NAME: Lydgate Park Bike Path Project

B. APPLICANT:

Kauai County Department of Public Works
4444 Rice Street, Suite 175
Lihue, Kauai, Hawaii 96766

C. APPROVING AGENCY: N/A

D. ANTICIPATED DETERMINATION:

It is anticipated that a finding of No Significant Impact (FONSI) will be made for this project. The bike path will be placed primarily in areas that have social paths or roads existing. All elements of the project will be constructed where there are no issues of slope for runoff, and where there are no endangered or threatened plants or animals. The comfort station will be placed in the exact location of the footprint of the golf course clubhouse, which has been torn down and the maintenance building will be constructed where there has been considerable construction and work at the sewage treatment facility located on site. The camping pads will not require excavation.

E. LIST OF CONTACTS

1. TAX MAP KEY

The Tax Map Key is 3-9-06:01 & 3-09-02:34

2. NAMES OF PROPERTY HOLDERS

County of Kauai (Executive Order transferring parcel 3-09-02:34 has been issued and is included in Chapter XII, Exhibits & Correspondence Section.

3. LAND USE CLASSIFICATIONS

a. STATE DESIGNATION

Designated as Conservation District and Urban District

b. COUNTY GENERAL

Designated as Conservation and Urban District

c. **DEVELOPMENT PLANS**

The Park was first developed as a State Park in 1923, named for Rev. John Mortimer Lydgate. The Kamalani Playground was built in 1993 after Hurricane Iniki. The bike path and comfort station have been part of the development plan since the mid 1990's.

d. **ZONING**

The Park is zoned as a Conservation and Urban District

4. **SPECIAL DESIGNATIONS**

a. **SPECIAL MANAGEMENT AREA**

Lydgate Park is located along the ocean and thereby has a designation of Special Management Area.

b. **SHORELINE SETBACK**

The shoreline setback is forty (40') feet.

CHAPTER II

PRE-ASSESSMENT CONSULTATION LIST

The following Community Groups, organizations and agencies have been consulted in order to prepare this Draft Environmental Assessment for the Lydgate Park Bike Path and Comfort Station:

| CONTACT | DATE |
|--|------------------------------------|
| <u>FEDERAL</u> | |
| Federal Highways Administration | June, 2000 February 14, 2000 |
| <u>STATE</u> | |
| Department of Land and Natural Resources | Sept. 14, 2000 |
| State Archeology | Sept. 14, 2000 Feb., 2000 |
| Hawaii Department of Transportation | Sept. 14, 2000 |
| DLNR, State Parks, Archeology | April, May, 2001 |
| OHA, Burial Council | Feb., May, 2001 |
| <u>COUNTY OF KAUAI</u> | |
| Department of Public Works | Sept. 14, 2000 Feb. 14-21, 2000 |
| Department of Parks | Sept. 14, 2000 |
| Department of Planning | Sept. 14, 2000 Sept. 15, 2000 |
| Historic Preservation Review Comm. | April, May, 2001 |
| <u>ORGANIZATIONS</u> | |
| Friends of Lydgate Park | Sept. 14, 2000 Feb. 15, 2000 |
| Keeper of the Heiau | April, May, 2001 |
| <u>PRIVATE CONSULTANTS</u> | |
| Cultural Surveys of Hawaii | Sept.-May 2000-1 |
| Kodani and Associates | Sept.- May 2000-1 |
| Ron Kikumoto, Holiday Inn | May, 2001 |

CHAPTER III

GENERAL DESCRIPTION OF PROPOSED ACTION

A. TECHNICAL CHARACTERISTICS

Lydgate Park was first developed in 1923, and in 1963, the State built two sheltered salt-water swimming pools. In the 1990's local residents and community groups began working with the County of Kauai to develop the south end of the property into campground facilities and a path. The state deeded the main park area at the north end of the park to the County of Kauai in 1991, Act #312 SLH 1991 Fee Simple Owner. The Right-of-Entry to the Campground area at the south end of the park is dated April 30, 1999.

B. ECONOMIC CHARACTERISTICS

The estimated project costs are:

| | |
|---|--------------------|
| *Bicycle/Pedestrian Pathway Design and Construction 2.35 miles of concrete asphalt 10' wide. 124,150 s. f. | \$1,082,502 |
| *Grade Change Rest Stop Platforms/Bridge: 1,000 s.f. of special structure to traverse dry creek bed | \$150,000 |
| *Landscape Rejuvenation Along Bike Route | \$55,000 |
| *Construction Management Fee 10% of Bridge Cost | \$15,000 |
| *Comfort Station & Maintenance Building Includes access Road, Parking and Design | \$450,000 |
| Parking Lot and Asphalt Roadway in Campground 1,600 l.f. by 18' wide, parking (2 areas) 36,300 s.f. | \$51,030 |
| Parking Signage - Historical Instructional & Directional | \$115,500 |
| Asphalt Parking on Both Sides of Nalu Road 54 spaces 10'x18', 9,720 s.f. | \$195,000 |
| Asphalt parking North End of Park 95 spaces, 10' x 18', 17,500 s.f. | \$44,000 |
| Asphalt parking North end of Sports Fields 122 spaces, 22,000 s.f. | \$60,000 |
| Picnic Pavilions 2 medium, 8 small | \$82,500 |
| Sports Fields (three) Clearing, grading, grassing, irrigation | \$233,900 |
| Landscape Screening for Sports Fields | \$71,500 |
| 50 Picnic Tables | \$60,000 |
| 30 Campsite Pads | \$94,000 |
| Parking Signage - Historical, Instructional, Directional | \$10,000 |
| Entrance Sign and Landscape | <u>\$38,500</u> |
| | \$2,808,432 |

- Indicates items funded by TEA grant.

C. SOCIAL CHARACTERISTICS

Lydgate Park is located on the eastern shore of Kauai along the coastline near the mouth of the Wailua River. Lydgate Park is situated near high use housing populations of Wailua and Kapa a and is the halfway point of the Island for residents from the north shore and the west side.

Heavy use by the resident's and visitors to Kauai, results in the park operating at near capacity. On weekends, the parking lots, picnic tables and the playground are full. In the past year, Lydgate Park had a total visitation of approximately 298,000 people. Records show that an average of 2,000 people a day come to the park on any given weekend throughout the year. Park usage at the present time is approximately 300,000 visitors a year. On weekdays, 80% of the users are visitors, and on weekends and holidays, 90% of the park users are local residents. The bike path plan is the product of over three years of community input and dialog leading to a consensus of opinion regarding the elements of the park, of which the bike path is one.

From the efforts of the Friends of Lydgate Park, a 12,000 s.f. playground was built in 1993, and reclaimed acres of parkland, planted and maintained hundreds of trees, built picnic tables and park benches, installed barbecues, showers, and drinking fountains.

This committee holds periodic community workdays and a large annual event. In addition, there are many individuals who volunteer on an on-going basis.

Improvements at Lydgate Park are a very significant economic development for Kauai and meet the important social need of quality recreational facilities for the people and visitors to Kauai. Kauai benefits economically when the infrastructure for visitors improves. The construction of the bike path and comfort station will improve the reputation of Kauai and it is anticipated that this will bring in more visitors and will, in turn, improve the economy.

D. ENVIRONMENTAL CHARACTERISTICS

The land parcel that is Lydgate Park consists of a total of fifty-two acres. The site is comprised of mostly sandy soil along the coastline with red dirt and lava boulders on the mauka side of the park.

An earlier archaeological reconnaissance of the property determined that there are no known visible archaeological sites on the property. There are two heiau's sites located just adjacent to the park on state land.

A botanical reconnaissance of the property determined there are three large well-established Ironwood (*Casuarina equisetifolia*) groves existing on the property. A large number of large coconut trees on the north end of the park and numerous shrubs and ground cover along the shoreline. At present, there are four large areas of Bermuda grass lawn. The U.S. Fish & Wildlife has certified there are no endangered or threatened plants or animals in Lydgate Park. The clearance letter is included in Chapter XII (C).

There is a county run sewer treatment plant located approximately in the upper center of the park. Efforts have been made in the past to screen it from view.

E. TIME FRAME

The design and engineering for the project will be completed by May/June 2001. The community built pedestrian bridge is scheduled for construction in October, 2001 and the bike path construction is scheduled to begin construction in Fall of 2001 and scheduled for completion in the Summer of 2002.

F. FUNDING AND SOURCE

County and Federal

This is a Transportation Enhancement Act project, referred to as "TEA" hereinafter. The Federal grant is for 80% of the funds and the County match is 20%.

CHAPTER IV

AFFECTED ENVIRONMENTAL CHARACTERISTICS

A. PROPERTY DESCRIPTION

Lydgate Park is a 60-acre park that is located along the ocean on Kauai. The land is relatively flat, rolling with views to the ocean from practically every location within the Park.

The north end of the park site has two salt-water swimming pools built, a coconut grove, pavilions and a playground.

The center of the park is a grassy linear area with trees and grass and in the center of the park are condominiums.

The south end of the park has been unused for organized recreation activity and is adjacent to the Wailea Golf Course.

B. GEOLOGICAL CHARACTERISTICS

1. TOPOGRAPHY

The site slopes gently from Nalu Road towards the shore. The site is generally flat from the north to the south end of the park. On the south end of the park the ground rises approximately 10'-12' near the proposed bike/pedestrian bridge crossing. This is the only area of the park where there are drainage issues.

2. CLIMATE

Climatic conditions in the area are known to have mean temperatures ranging from 70.3 degrees Fahrenheit in the winter to 78.4 degrees Fahrenheit in the summer. The relative humidity levels vary from 63% to 88%. The annual average rainfall is approximately 45 inches.

3. SOILS

Specific soils information is included in Chapter XII, C-H of this document. The site is comprised of silty clay loam. The loam is developed in material derived from basic igneous rock. Soil geology is stable and suitable for construction of the bike path, bridge and comfort station.

C. FLOOD HAZARD

The Federal Emergency Management Agency Flood Insurance Rate Map (FIRM) for Kauai County, Hawaii, is Community Panel 140 of 225 and Number 150002 0140 D

Portions of the property are in the 500 year flood zone (AE) and some is in the tsunami zone (VE).

D. FLORA & FAUNA

No rare or endangered plants or animals have been identified on the site.

E. SIGNIFICANT HABITATS

There are significant habitats for two plants located within or near Lydgate Park. There are three large well-established Ironwood (*Casuarina equisetifolia*) groves and a large grove of coconut trees on the north side of the Wailea River, north of the park, and numerous shrubs and groundcovers along the shoreline.

1. IMPACTS

The impacts of construction within the drip line of the Ironwood trees would be to compromise the health of the root systems of the trees.

The impacts of construction under the coconut trees would be minimal as the roots of the coconut are a tap root which grows largely straight down, with light feeder roots superficially under the top layer of the sandy soil in which the coconuts are growing.

The impacts of disturbing any of the shoreline vegetation would be to compromise the stability of the soil along the beachfront and would result in erosion.

2. MITIGATION MEASURES

We will avoid any construction within the drip lines of any Ironwood trees.

We will avoid construction near the trunks of the coconut trees.

We will avoid construction or disturbance of any of the shrubs and/or groundcovers along the shoreline.

F. HISTORICAL/ARCHEOLOGICAL/CULTURAL/NATIVE HAWAIIAN RIGHTS

Archeological reconnaissance of the property has determined that there are no known or visible archaeological sites on the property. There are two heiau located just adjacent to the park site on state land. The construction of the bike path would not require excavation and the comfort station is to be built on the footprint of the former golf course clubhouse, and will not require excavation into undisturbed deposits. There is an old sugar railroad bed on the north end of the project site and the path will be constructed on the old bed where possible. This will minimize any disturbance in those areas. A full description of the railroad and its use is in the Archeological Report in the Exhibits section of this report.

From meetings with the State Archeologist, for DNL, it was determined that another inventory level archeological study is not necessary, and that a monitoring program during construction would be sufficient.

The access rights of Native Hawaiians to the cultural assets located on the park, including, but not limited to access to traditional fishing locations, burial sites, flora and fauna will not

be infringed upon with the design and construction or use of the path project, and in fact, will be enhanced with this project. The Kauai/Ni'ihau Islands Burial Council has been informed regarding this project and will continue to be informed of any actions possibly impacting burials. Any signage and/or path construction in the immediate vicinity of the heiau will be carried out in consultation with State Parks and any Hawaiian organizations designated by them.

G. INFRASTRUCTURE & UTILITIES

The park site has two salt water swimming pools built in 1963, which largely account for the popularity of the Park. Also on the north end, adjacent to the park are two heiau's on state property. The park has the Kamalani Playground and open fields on the north end of the Park.

The center of the park is largely grass and a few trees, which were planted and maintained by the Friends of Lydgate Park. There are three operational bathhouse facilities, six small pavilions along the shoreline, one medium size pavilion and one large pavilion and two outdoor shower facilities. An open meadow adjacent to the large pavilion serves as an impromptu ball field. There are four comfort stations for the currently developed portions of the park. There are 136 paved parking spaces and 153 unpaved parking spaces in the park.

1. VEHICULAR ACCESS

Access into the park is off of Leho Drive and from there onto Nalu Road, and Nehe Road.

2. WATER

The County Water Department has supplied adequate water to the park.

3. WASTEWATER

The wastewater is piped to the Wailua Sewage Treatment Plant.

4. POWER & COMMUNICATIONS

There is electrical power telephone and cable TV in Nalu Road, Nehe Road and Leho Road rights of way, and the existing capacity is adequate to serve the project.

H. PUBLIC FACILITIES

1. SCHOOLS

There are no schools that are located near the Park site.

2. PARKS

The bike path that is the subject of this report is located within Lydgate Park.

3. POLICE & FIRE

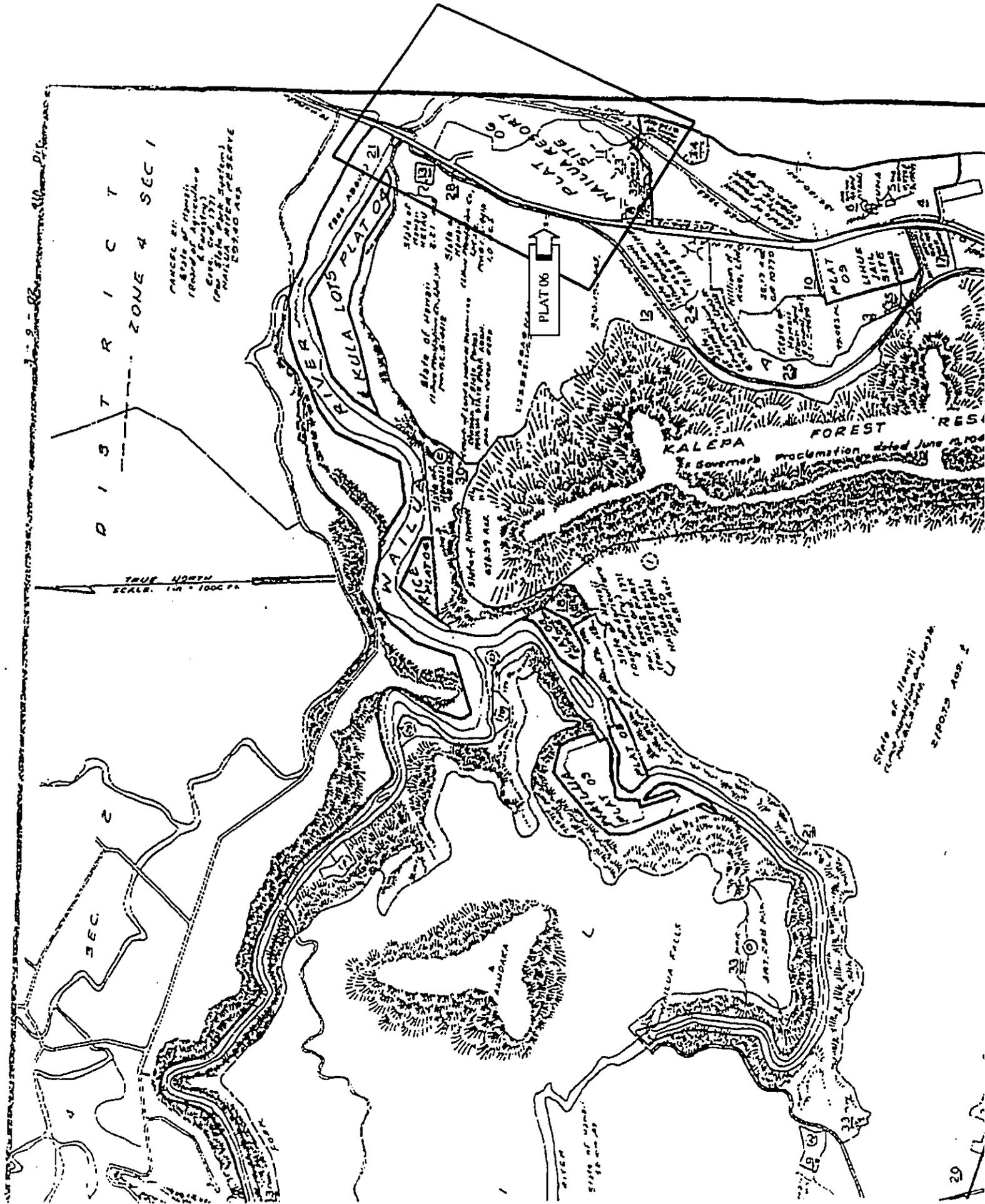
Services will be from either Lihue or Kapaa.

4. HOSPITAL & EMERGENCY SERVICES

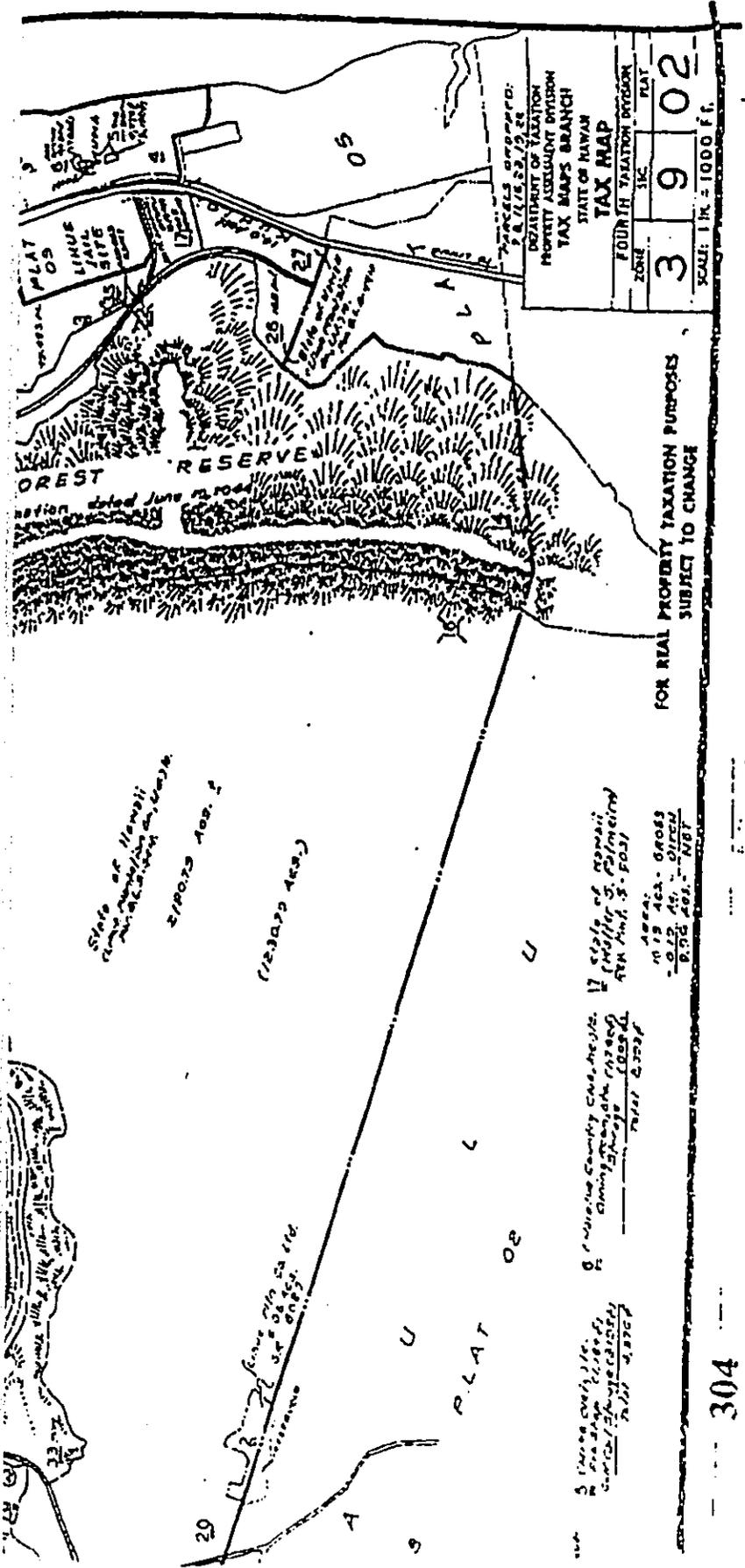
The nearest hospital and emergency service room is Wilcox Hospital in Lihue. The hospital is accessed from Kuhio Highway.

B. TAX MAP

PLAT 02 WITH PLAT 06 OUTLINED



State of Hawaii
Kulepa Forest Reserve
219029 Ass. 2



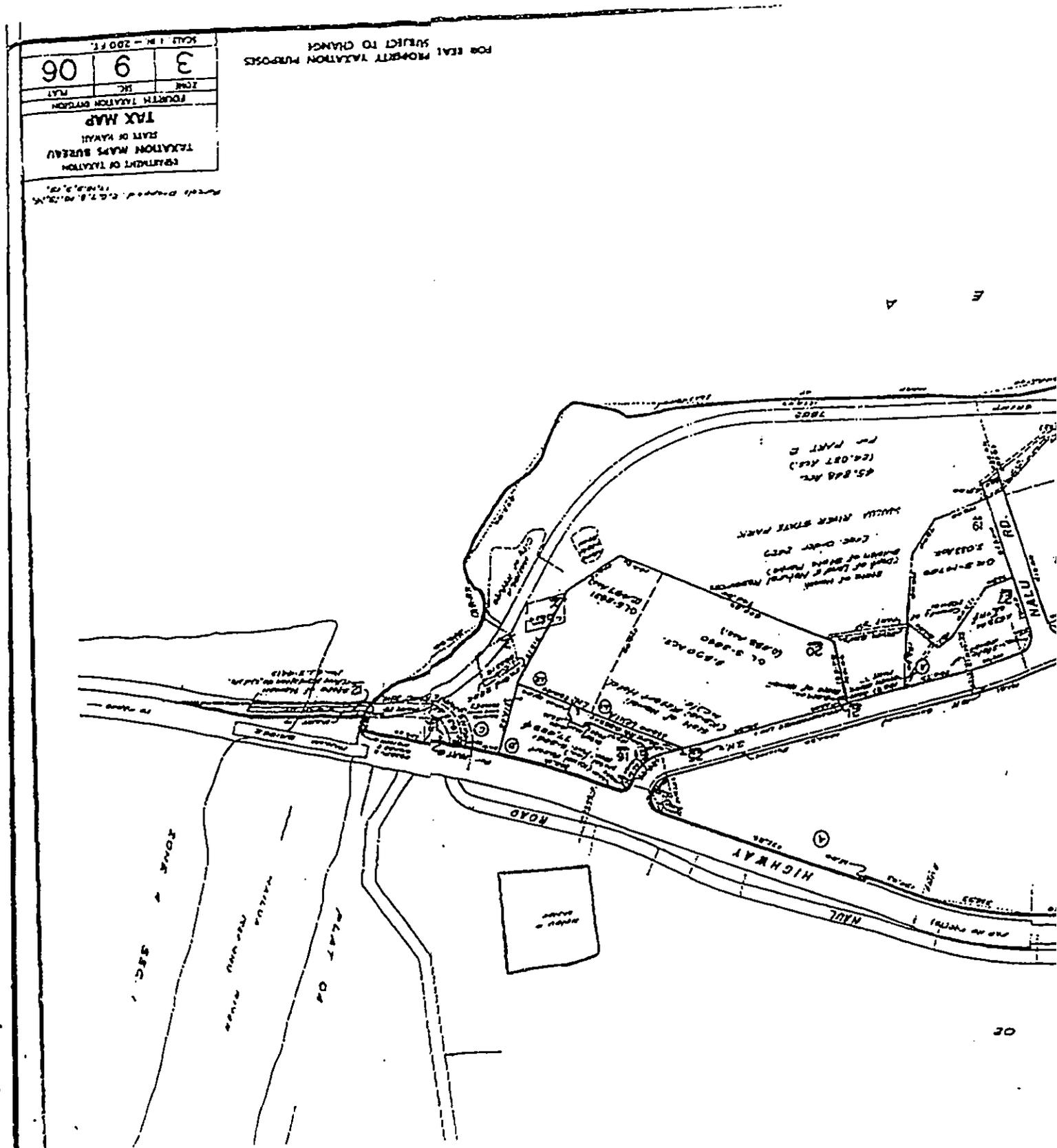
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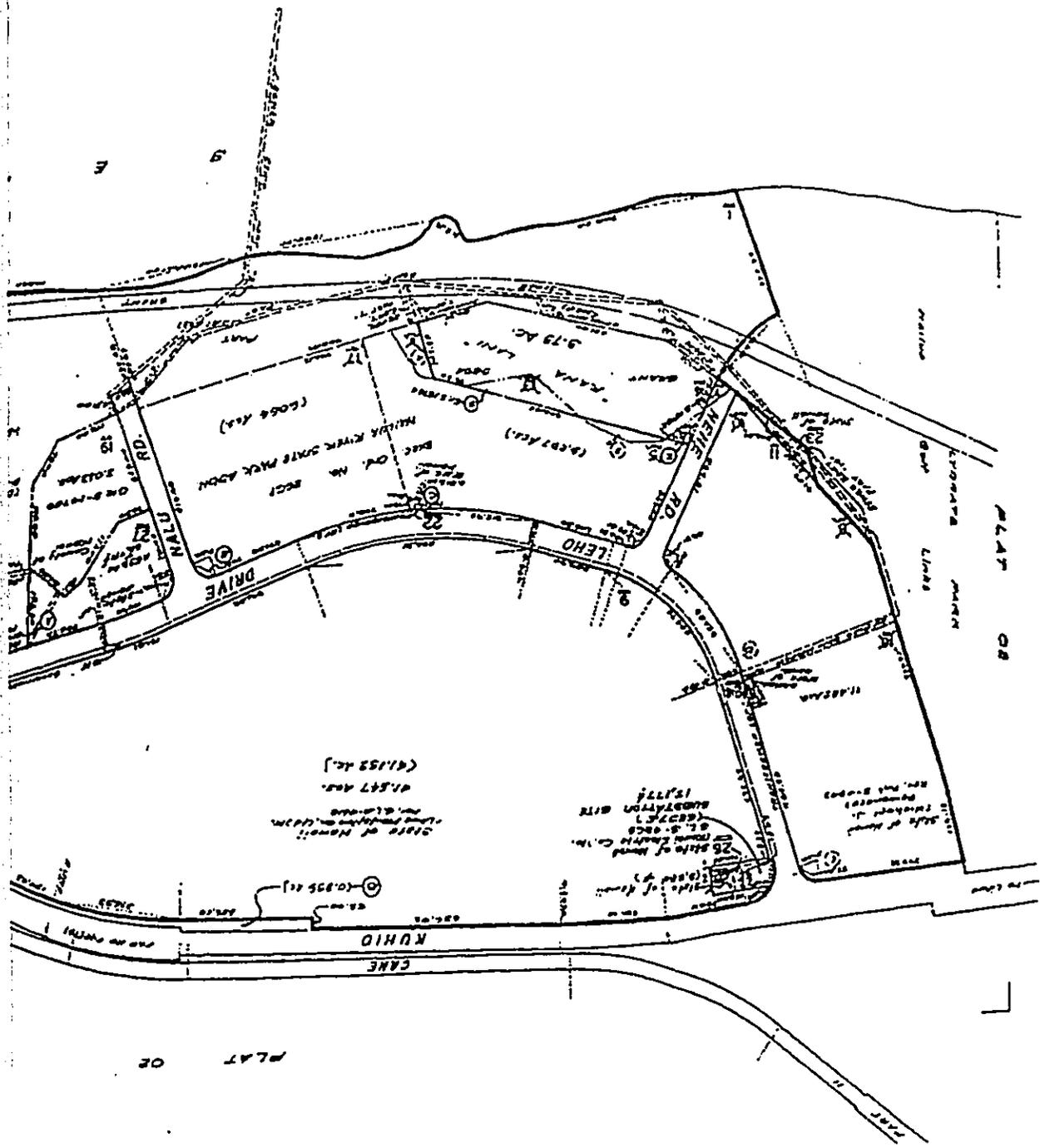
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SUBJECT TO CHANGE

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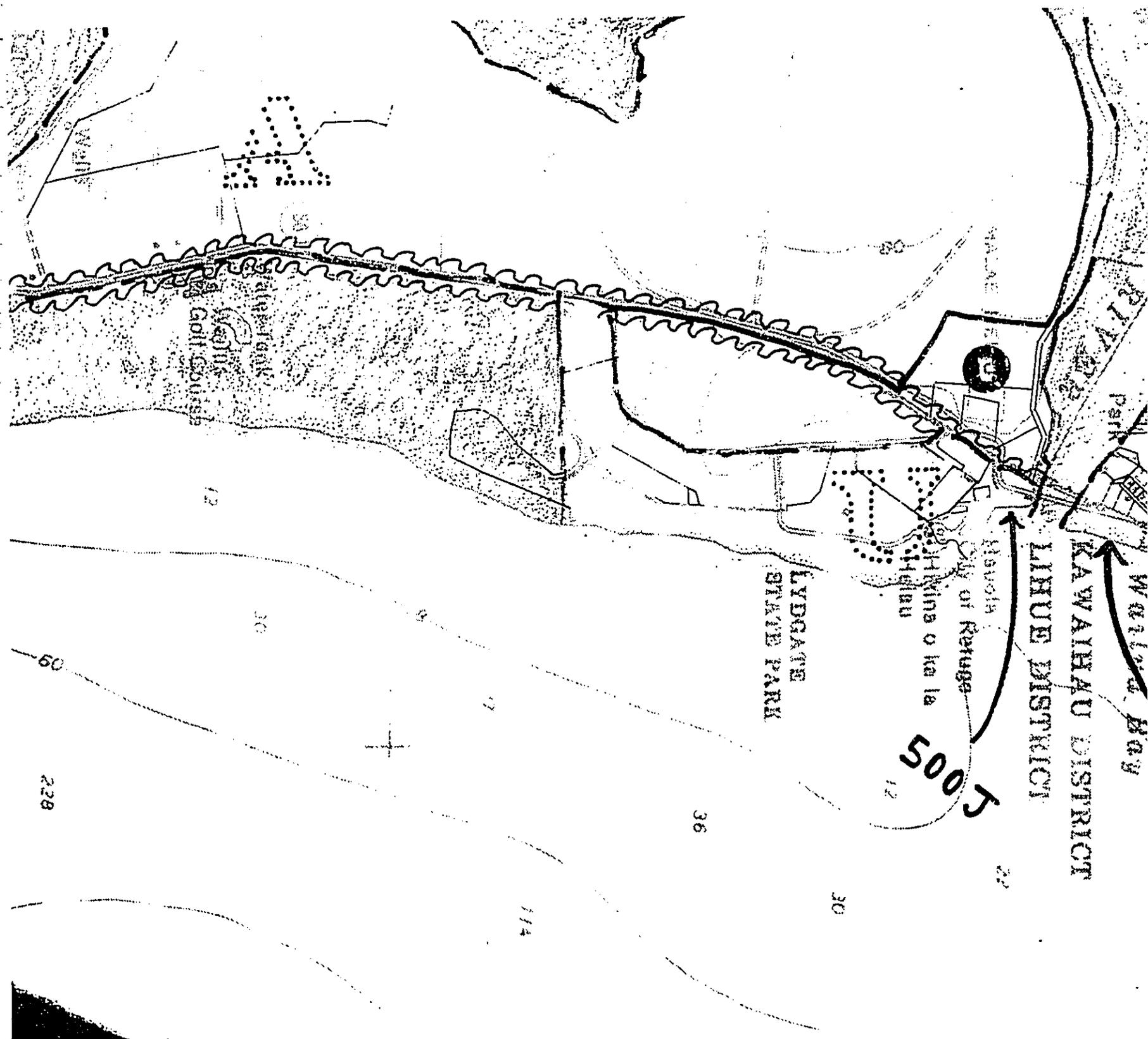
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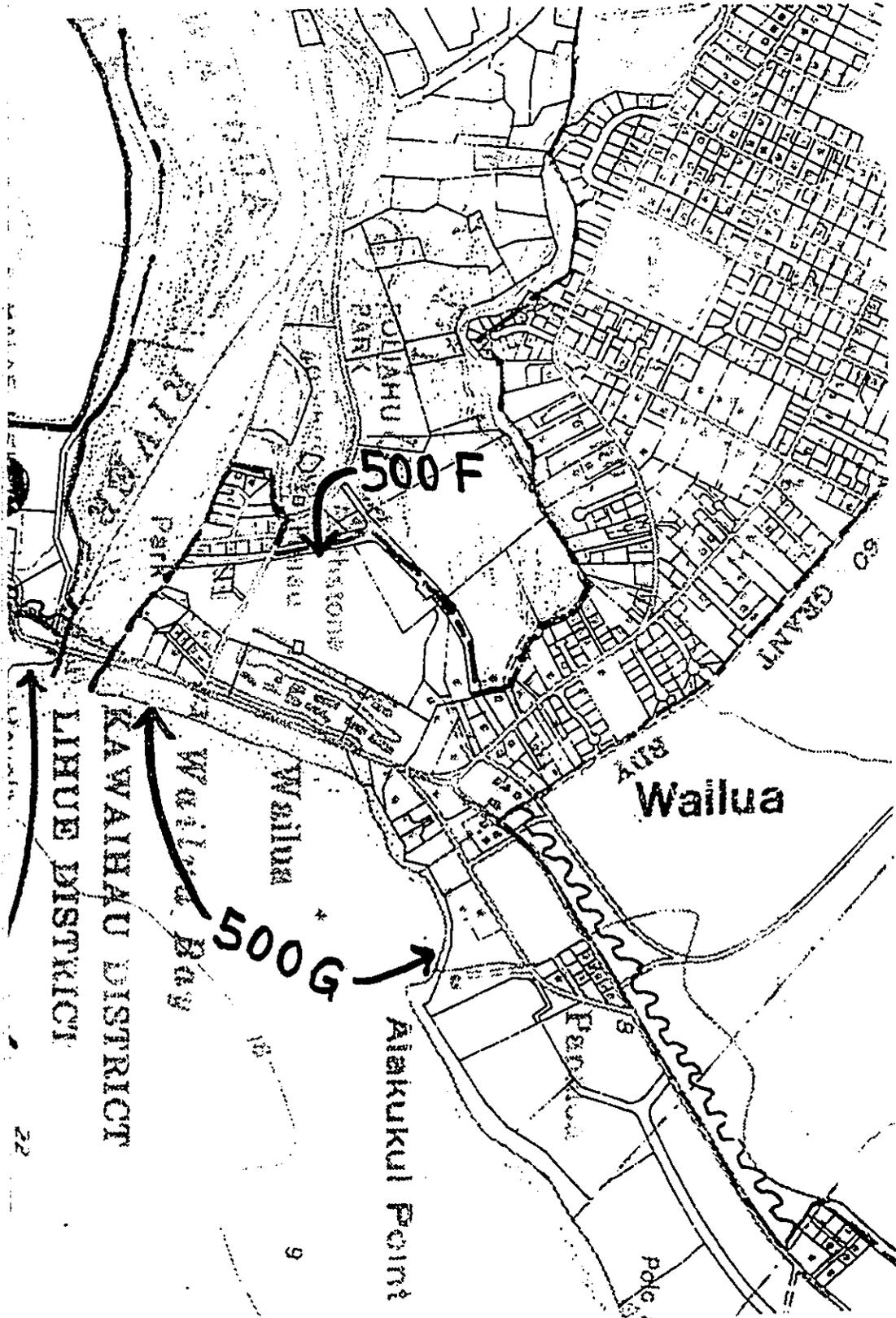
TAX MAP, PLAT 06



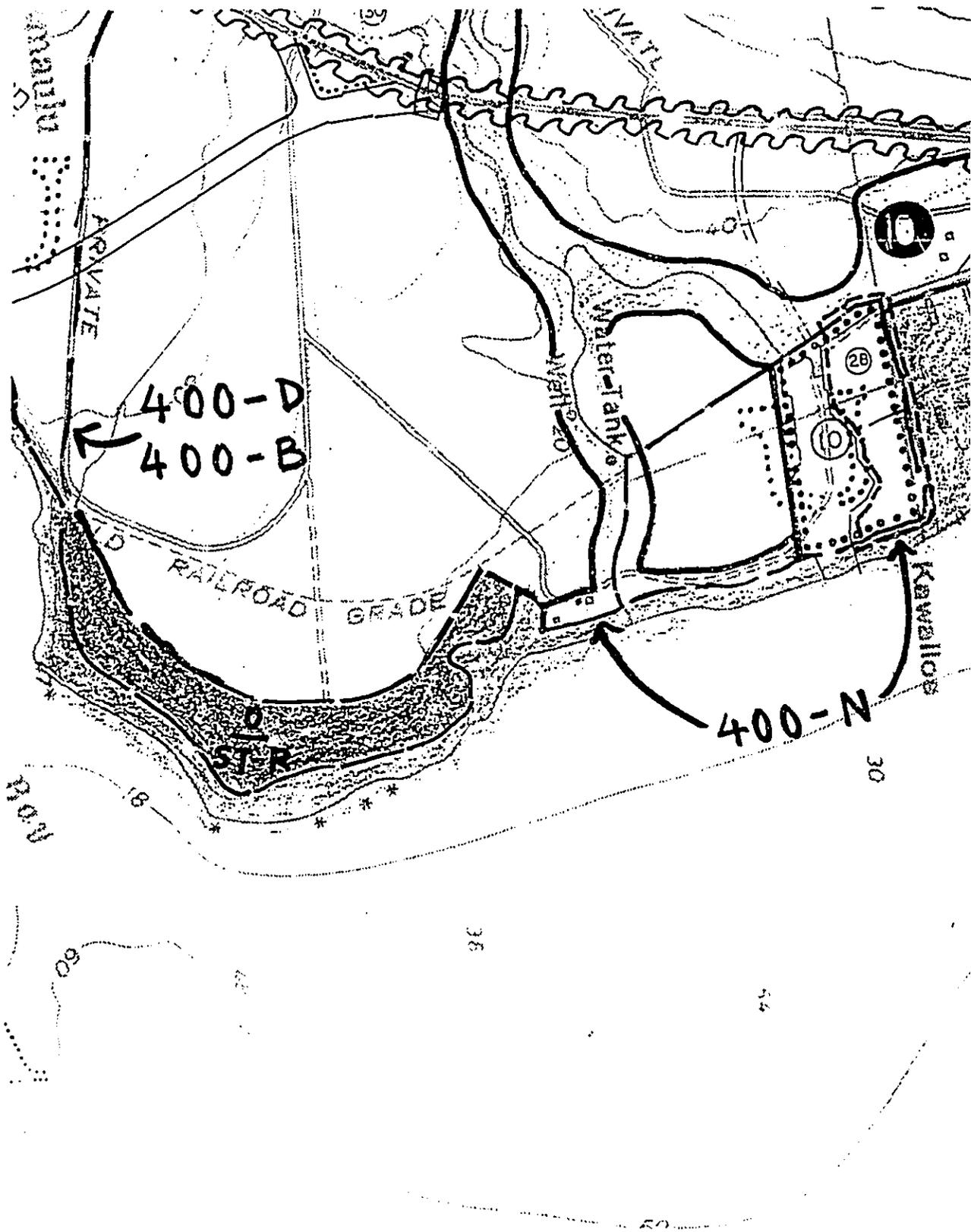


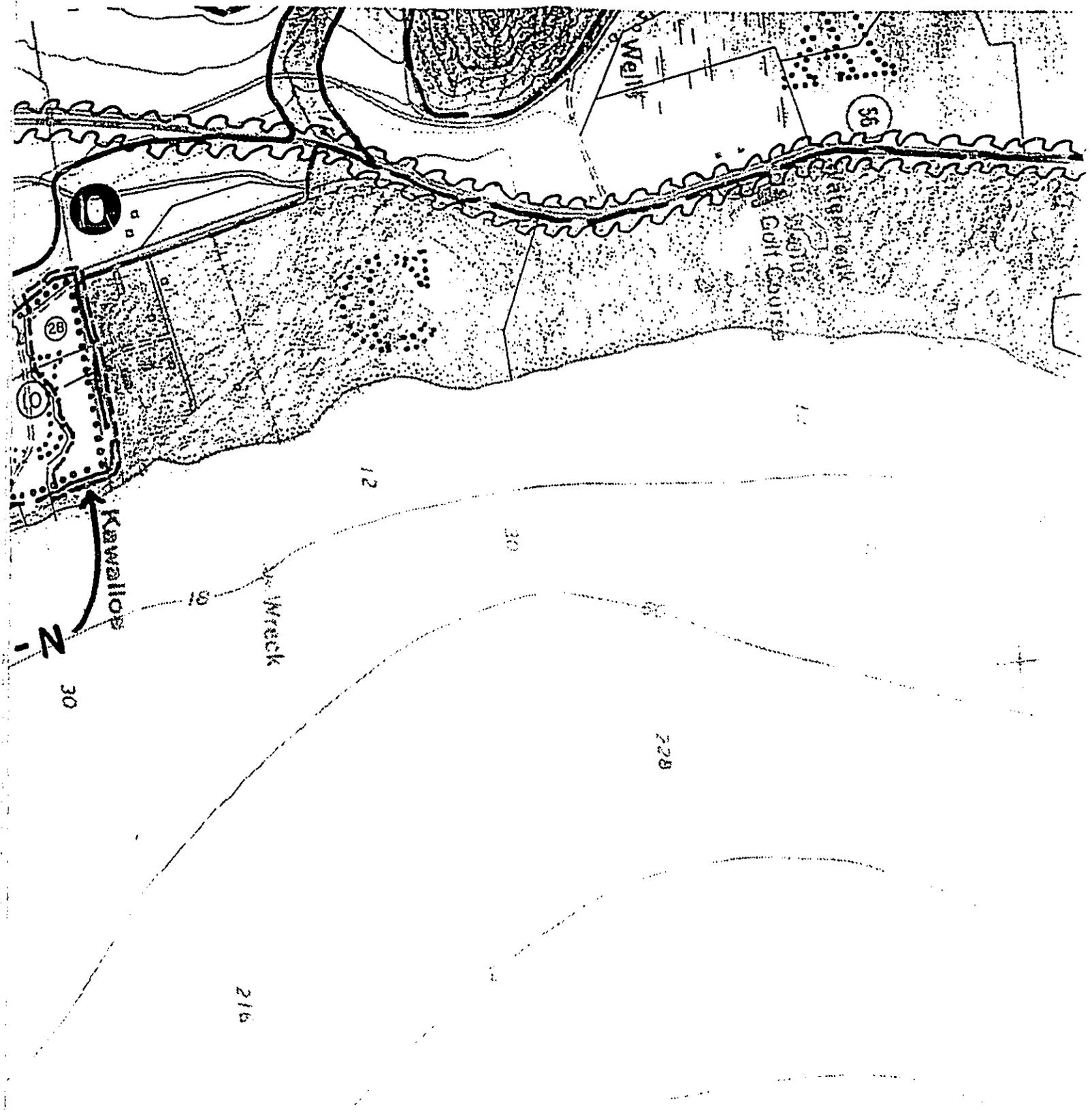
C. ZONING MAP





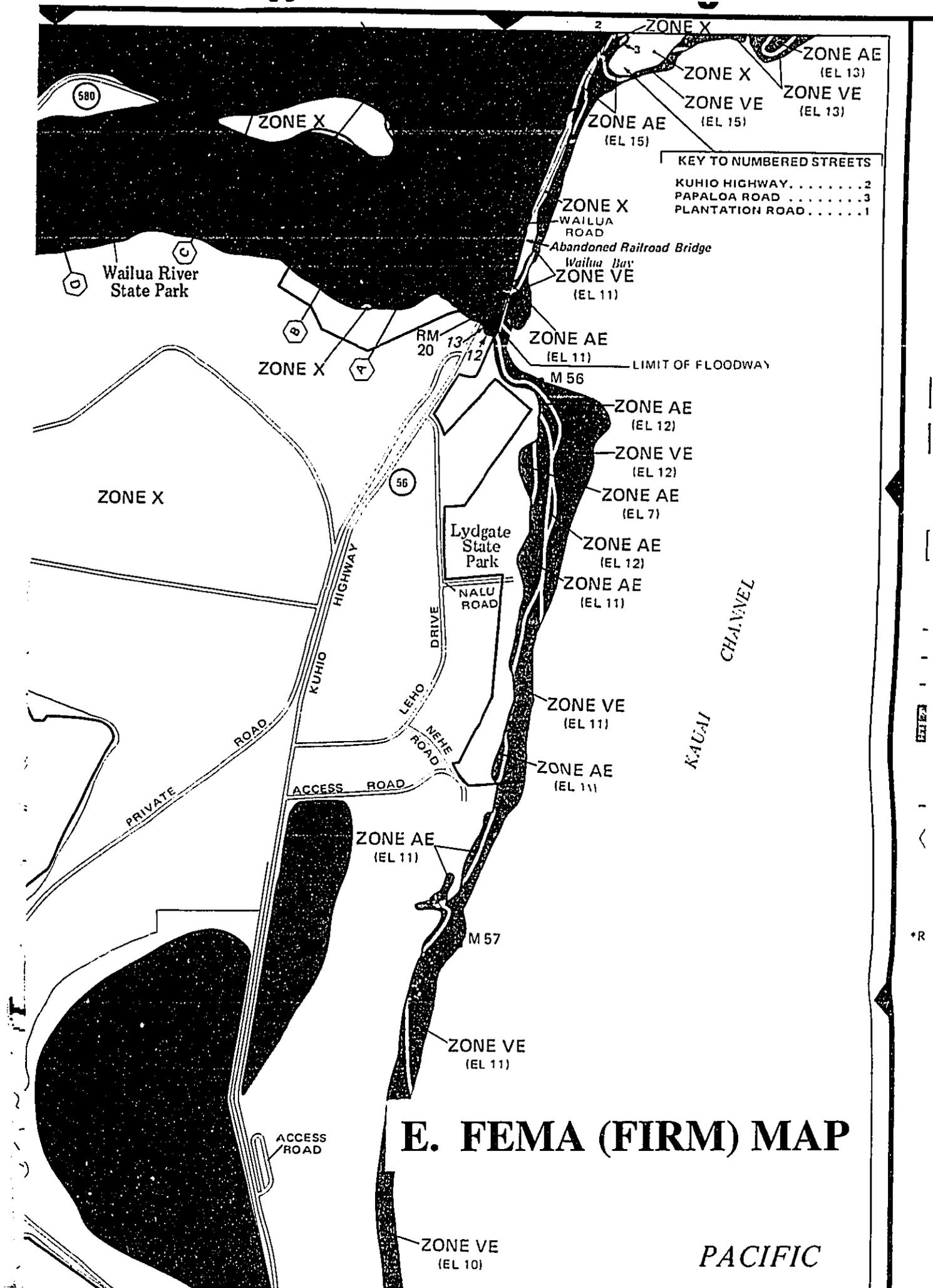
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D.- USGS AND AERIAL MAPS COMBINED





E. FEMA (FIRM) MAP

PACIFIC

CHAPTER VI

SUMMARY OF MAJOR IMPACTS

- A. SHORT TERM IMPACTS
1. NOISE
There will be some noise associated with the path and comfort station construction, however, it will not be of such issue as to disturb the activities of the park users, and will be limited only to the duration of construction.
 2. AIR
The amount of air contamination resulting from path and comfort station construction will be minimal as excavation is not required for either.
 3. ENERGY/MINERAL RESOURCES
The resources required for construction will not be excessive and will be required only for the course of the construction of the project.
 4. CONSTRUCTION/UTILITIES
The impacts of the construction of the project will be restricted to the construction of the path, comfort station, maintenance building, picnic facilities, sports fields, parking, community-built bridge and overlook, and all other amenities listed as part of this project and associated utilities. The utilities required for the comfort station are in place as they were needed for the operation of the building that was formerly in the location of the comfort station.
 5. TRAFFIC
There will be no disruption to existing traffic patterns for the construction of the project.
 6. EMPLOYMENT
The construction of the project will be a positive impact on the economy of Kauai as there will be needed the required number of laborers and supervisors for construction.
- B. LONG TERM IMPACTS
1. LAND USE CHANGES
The long-term impacts of the land use changes are positive. The material of the path will help compact the soil and protect against future tsunamis or hurricanes. Currently, the south end of the park does not have infrastructure to encourage day users to this area of the park, and with the construction of the path, this will improve the park itself, and encourage families and path users.
 2. COMMUNITY COHESION
There has been considerable influence from the community to get the playground, the pavilions, the restrooms, comfort stations, and all other features that currently exist at Lydgate built. There were approximately 7,000 volunteers who helped make the

Kamalani playground a reality, and the Friends of Lydgate expect a similar, if not better community response from the construction of the pedestrian bridge. This project will help bring the community together as precedent has proven.

3. **RELOCATION POTENTIAL**
There are no other locations for moving the project. The bike path, however, will connect Lydgate to the existing Bikeway system, and will construct a key segment of the Nawiliwili to Anahola Bike Path proposed in the State of Hawaii Master Plan, "Bike Plan Hawaii".
4. **CHURCHES & INSTITUTIONS**
There are no churches or institutions located in the vicinity of the Park to be affected.
5. **CONTROVERSY POTENTIAL**
There is so much community support for this project, there is minimal concern, if any for controversy for this project.
6. **ECONOMIC**
There are no negative long-term impacts resulting from the bike path project.
7. **SECTION 4(f)**
As the project is built in an existing park, there is a Section 4(f) consideration, but as the project enhances the existing park, there is no long-term negative impact. The 4 (f) approval is included in Chapter XII (B).
8. **HISTORIC SITES**
The construction and use of the path and comfort station facilities and all other features of this project will have no negative impact on any historic resources.
9. **ARCHEOLOGICAL SITES**
There are no known archeological sites on the property.
10. **WETLANDS**
There are no wetlands on the project site.
11. **WATER QUALITY**
The project will not affect water quality.
12. **WILD/SCENIC RIVERS**
There are no wild or scenic rivers on the project site.
13. **FARMLANDS**
There are no farmlands on the project site.

14. **ENDANGERED/THREATENED SPECIES**
There are no listed endangered or threatened species of plants or animals on the project site.
15. **FLOODPLAINS**
The path will be built with construction techniques and materials that are floodable. The comfort station and maintenance building will have all fastening members made of stainless steel and weather resistant wood. The trail will be built of concrete.
16. **TRAFFIC**
There are no long-term impacts to traffic
17. **VISUAL**
The visual impacts are positive as there will be landscaping treatments along the bike path.

CHAPTER VII

MITIGATION MEASURES

In the short term, during construction, measures will be taken to minimize impacts such as increased traffic, noise, air pollution, and dust. Measures will include specific construction hours to minimize noise, and plans to reduce the impacts of the construction traffic. All construction and related activities will comply with applicable federal, state, and county regulations. Any artifacts or bodies found during construction will be dealt with in the manner approved in the Mitigation and Monitoring Plan.

The Kauai economy will be favorably impacted during construction with labor related jobs, and in the long-term, in addition to offering a recreational asset, the bike path will provide facilities for pedestrians and bicycles, connect the Lydgate area and its unique scenic assets to the existing bikeway, and provide access to existing public facilities.

CHAPTER VIII

ALTERNATIVES TO THE PROPOSED ACTION

A. NO ACTION ALTERNATIVE

The No Action alternative involves no changes in the site. The path project has been identified in the Lydgate Park Master Plan as one of the most important aspects of the park. Further, the project has been awarded Transportation Enhancement Act funds for the construction of the project, and there is high anticipation for the amenities of the path and comfort station.

If the path does not get built, there will be the entire south end of Lydgate Park that will become further run down, and more and more, visitors to the park will be hesitant to use this end of the property.

B. ALTERNATIVE DEVELOPMENT OPTIONS

At present, there are no other development uses for the property.

C. COMMUNITY INPUT

Lydgate Park has enjoyed tremendous community input, consensus and support since the 1980's when the Kamalani Playground Committee evolved into the Friends of Kamalani and Lydgate Park and has continued to organize the community for various projects at Lydgate Park.

As Lydgate Park lies in the middle of a dedicated bicycle/pedestrian path proposed to run seventeen miles from Nawiliwili Harbor to Anahola Beach Park, the community input asked for an opportunity to individuals and families for cycling, walking, or jogging in a safe place that is ADA accessible. The bike path project is an outgrowth of this input, and not that the path project idea was developed and presented to the community. This project is the product of the community expresses needs and vision.

CHAPTER IX

EXPECTED DETERMINATION

A. FINDINGS/ SIGNIFICANCE CRITERIA and REASONS

According to the Department of Health Rules (11-200-12), an applicant or agency must determine whether an action may have a significant impact on the environment, including all phases of the project, its expected consequences, both primary and secondary, its cumulative impact with other projects, and its short and long term effects. In making the determination, the Rules establish "Significance Criteria" to be used as a basis for identifying whether significant impact environmental impact will occur. According to the Rules, an action shall be determined to have a significant impact on the environment if it meets any one of the following criteria:

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

The proposed project will not cause any irrevocable loss of natural or cultural resources. The site has been used socially for park use since it was dedicated as a park in 1923. View corridors from inside the park to the ocean will not be impacted with the construction of the path, and the comfort station will be located on the mauka side of the park.

As previously noted, no significant archaeological or historical sites are visible on the site. Should any archaeologically significant artifacts, bones, or other indicators of previous on-site activity be uncovered during the construction phase, their treatment will be conducted in strict compliance with the requirements of the Department of Land and Natural Resources and the approved Mitigation Plan.

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

The site is within a park that is dedicated to active and passive recreation. Currently, there is no restriction or direction given to people who walk, run or jog within the park and through its various habitats. With the construction of the path, the park users will use the path and thereby protect the environment from encroachment.

3. *Conflicts with the State's long term environmental policies and guidelines as expressed in Chapter 344 HRS; and any revisions thereof and amendments thereto, court decisions, or executive orders;*

The proposed path project will be constructed in a manner which is consistent with the Environmental Policies established in Chapter 344, HRS, and the National Environmental Policy Act (NEPA).

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

The proposed project will provide a significant and positive impact on the Kauai community in the short term with employment opportunities, and in the long term with enhanced and improved recreational opportunities.

5. *Substantially affects public health;*

During construction, there will be minor impacts to air quality and noise levels. After completion of the construction work, these will be insignificant or undetectable. The positive aspects of the proposed project in the areas of economic and social benefits of the community are greater than the "No Action" alternative.

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

Impacts on public facilities will not be an issue. It is expected that the path project will bring more people to Lydgate Park, but it is not expected that the path project will bring an increase in population to live in Kauai.

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

The path project will not degrade the environment either by its construction or by its use.

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

The Lydgate Park Bike Path will make the park usable and will be sited away from environmentally sensitive areas, and does not commit resources or energy for a larger action.

9. *Substantially affects are rare, threatened or endangered species or it's habitat;*

No endangered plant or animal species are located on or around the project site.

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

There are no air quality or noise issues surrounding this project.

All measures will be taken during construction to protect from runoff.

11. *Affects or is likely to suffer damage by being located in an environmentally sensitive area, such as a flood plain, tsunami zone, beach, erosion prone areas, geologically hazardous land, estuary, freshwater or coastal areas;*

Even though Lydgate Park is located on the oceanfront, the restoration of the disturbed area during construction of the path will be accomplished using plant establishment techniques that enhance soil stabilization. Further, the path, bridge and all other features of this park will be sited out of the tsunami velocity zones (VE), there will be no walls used or fill in the VE zones. There are parts of the path which may be located in the floodplain (AE zone).

The ADA accessible Overlook will be built in the VE zone, and will require a County Variance to the 40' setback.

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

The park site is essentially flat, therefore, there will be no obstructions to the view plane.

13. *Requires substantial energy consumption;*

The construction of the path and comfort station will not require substantial consumption of energy or resources, neither will the use of either.

CHAPTER X
PERMITS, VARIANCES, APPROVALS

The following permits will be required to complete the proposed project:

1. Final Environmental Assessment Approval
3. Section 106 Clearance
4. List "D" Categorical Exclusion
5. NEPA Section 4 (f)
6. State CDUA Permit
7. County SMA Permit
8. County Zoning
9. Shoreline Setback Variance Permit
10. Right of Way Easements
11. Building Permit for Comfort Station and Maintenance Building
12. Submittal to Hawaii Disability & Communication Board, for approval

CHAPTER XI

REFERENCES

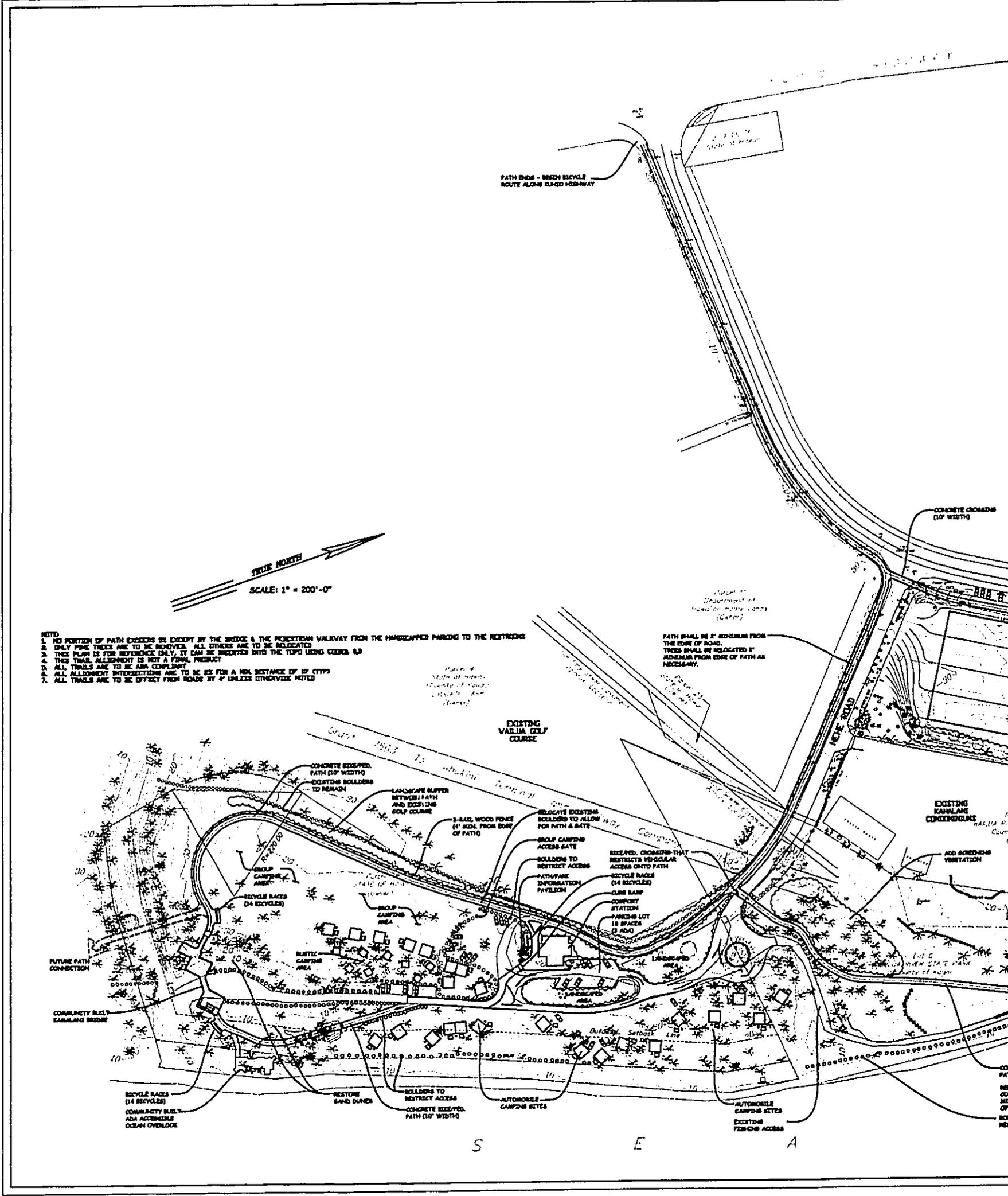
Federal Emergency Management Agency: FIRM Flood Insurance Rate Maps, Kauai County, Hawaii, Panel, dated September 30, 1995.

United States Department of Agriculture, Soil Conservation Service, Soil Survey of Islands of Kauai, Oahu, Molokai, and Lanai, State of Hawaii, August 1972.

The Environmental Guidebook, prepared by the Office of Environmental Quality Control, State of Hawaii, October 1997.

The Lydgate Park Master Plan Report, dated, June 1999.

CHAPTER XII
EXHIBITS and CORRESPONDENCE



- NOTES**
1. NO PORTION OF PATH EXCEEDS 82 EXCEPT BY THE BRIDGE & THE PEDESTRIAN WALKWAY FROM THE HANDICAPPED PARKING TO THE RESTROOMS
 2. ONLY PINE TREES ARE TO BE REMOVED. ALL OTHERS ARE TO BE RELOCATED
 3. THIS PLAN IS FOR REFERENCE ONLY. IT CAN BE INSERTED INTO THE TOPS USING CHECKS 1, 2
 4. THIS TRAIL ALIGNMENT IS NOT A FINAL PRODUCT
 5. ALL TRAILS ARE TO BE ADA COMPLIANT
 6. ALL ALIGNMENT INTERSECTIONS ARE TO BE 25' FOR A MIN. DISTANCE OF 10' (TYP)
 7. ALL TRAILS ARE TO BE OFFSET FROM ROADS BY 4' UNLESS OTHERWISE NOTED

PATH SHALL BE 2' MINIMUM FROM THE EDGE OF ROAD. TREES SHALL BE RELOCATED IF MINIMUM FROM EDGE OF PATH AS NECESSARY.

S E A







United States Department of the Interior

FISH AND WILDLIFE SERVICE
Pacific Islands Ecoregion
300 Ala Moana Boulevard, Room 3-122
Box 50088
Honolulu, Hawaii 96850

In Reply Refer To: MSR

Pat V. Phung, P.E.
U.S. Dept. of Transportation
Federal Highway Administration
Hawaii Division
Box 50206
300 Ala Moana Blvd., Rm. 3-306
Honolulu, HI 96850

MAR 21 2001

RECEIVED

MAR 22 2001

HAWAII DIVISION

Re: Informal Consultation under Section 7 of the Endangered Species Act for the proposed Lydgate Park Bike Trail and Comfort Station Project, Kapa'a, Kauai.

Dear Mr. Phung:

The U.S. Fish and Wildlife Service (Service) has received your February 26, 2001, letter requesting our concurrence under section 7 of the Endangered Species Act of 1973, as amended (Act), that the proposed Lydgate Park Bike Trail and Comfort Station Project, is not likely to adversely affect endangered or threatened species. The Service offers the following comments for your consideration.

According to the information provided in your letter, the Federal Highway Administration (FHA) and the County of Kauai, propose to implement a park and comfort station construction project on the Island of Kauai. The proposed project involves the construction of a ten-foot wide bike and pedestrian path. The project length is approximately two miles long. The project also includes the construction of a comfort station, campsite areas, landscaping, and signing.

Based upon information provided in your letter and in the project description, information contained in our files, including maps prepared by the Hawaii Heritage Program, and the Service's National Wetlands Inventory Program and our own knowledge of Hawaiian cave ecosystems and wetlands, we concur with your determination that the proposed project is not likely to adversely affect endangered, threatened, or proposed species or critical habitat in the Hawaiian Islands. Based on this determination, we believe the requirements of section 7 of the

ESA have been satisfied. However, FHA's obligations under section 7 of the ESA must be reconsidered if (1) new information reveals impacts of this identified action that may affect a listed species or critical habitat in a manner that was not previously considered, (2) this action is subsequently modified in a manner not previously considered in this assessment, or (3) a new species is listed or critical habitat determined that may be affected by the identified action.

We appreciate your concern for endangered species and the opportunity to comment on the proposed project. If you have any questions regarding these comments, please contact Fish and Wildlife Biologist, Mike Richardson, by telephone at (808) 541-3441 or by facsimile transmission at (808) 541-3470.

Sincerely,

for Donald Palanski
Paul Henson
Field Supervisor
Ecological Services

ARCHAEOLOGICAL ASSESSMENT OF
A CORRIDOR FOR A PROPOSED BIKE PATH IN
LYDGATE STATE PARK,
WAILUA AHUPUA`A, PUNA DISTRICT,
ISLAND OF KAUAI
(TMK: 3-0-06)

by

David W. Shideler, A.B.D., M.S, M.A.
Victoria S. Creed, Ph.D.
and
Hallett H. Hammatt, Ph.D.

Prepared for

MDG & Associates Inc.

Cultural Surveys Hawaii
January 2001

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I. INTRODUCTION

A. Project Area Description

Wailua River State Park is on the south side of the mouth of the Wailua River in the Wailua River State Park, Wailua, Puna District, Island of Kauai (TMK: 3-9-06) (Figures 1 & 2). It is bounded by the Wailua River on the north, the ocean on the east, the Kauai Resort Development and Kūhiō Highway on the west, and by the Lydgate Area of Wailua River State Park (a recreational beach area) on the south.

The Wailua River State Park is a part of the Wailua Complex of *Heiau* National Historical Landmark District (Site 50-30-08-502). The project area of Wailua River State Park contains the Hikinaakala *Heiau* and Hauola Puuhōnua (a place of refuge) both Site 50-30-08-105), a berm portion of the Lihue Plantation Railroad Embankment (Site 50-30-08-823)

Project Background

Cultural Surveys Hawai'i, Inc. (CSH) was contacted by MDG & Associates Inc. in November 2000 to provide an Archaeological Inventory Survey for a proposed bikeway within The Wailua River State Park.

The historical background and previous archaeological research for this inventory survey was undertaken in November 2000. The research work consists primarily of a in-depth examination of historical documents, Land Commission Awards, historic maps, with specific purpose of identifying traditional Hawaiian and subsequently historic land use patterns. The review of existing archaeological and historical information allows us to reconstruct traditional land use activities in the project area

The fieldwork visit to the site was undertaken on September 14, 2000 by one of the authors of this report (David W. Shideler) along with Ms. Nancy McMahon of State Historic Preservation Division.

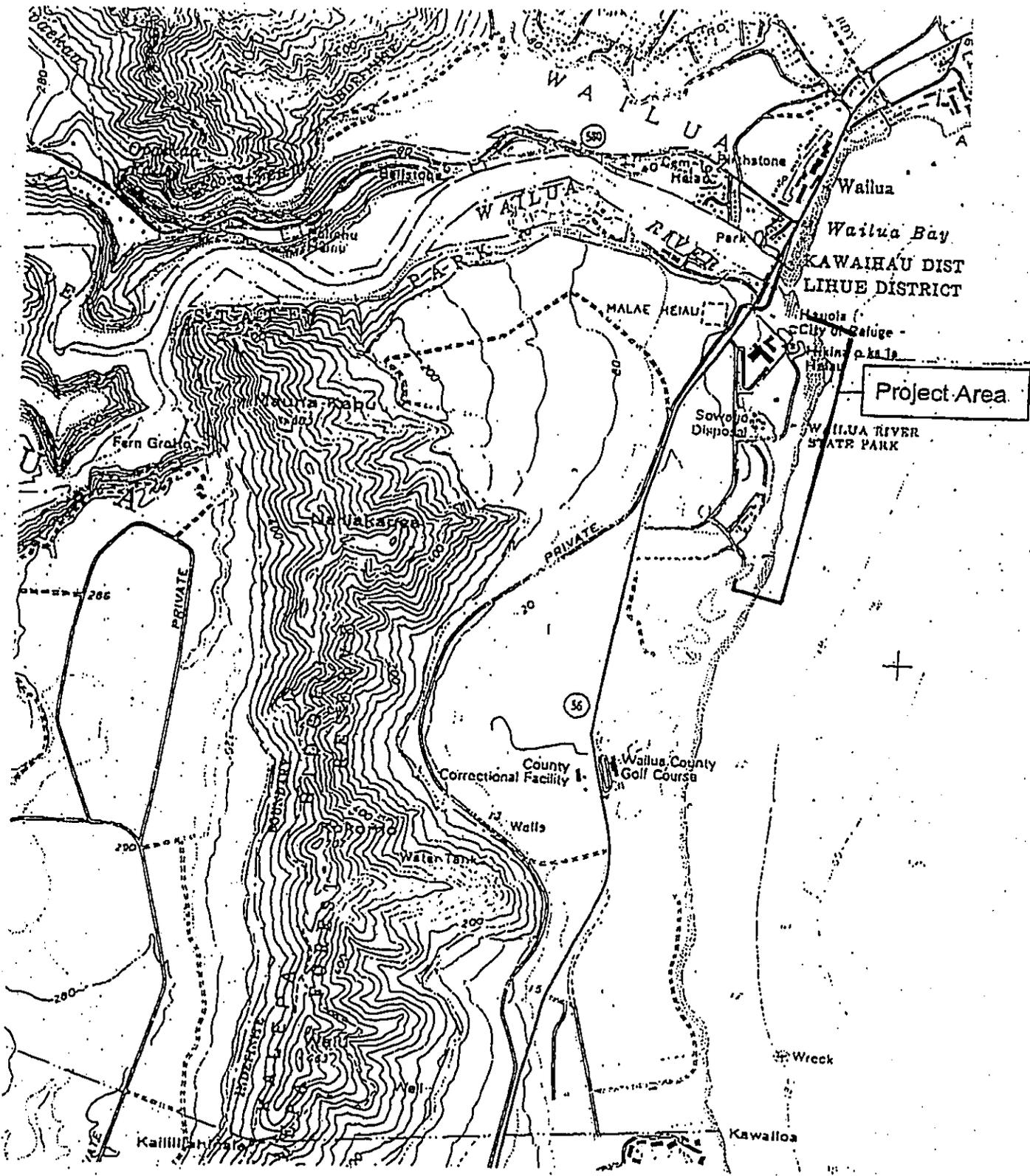
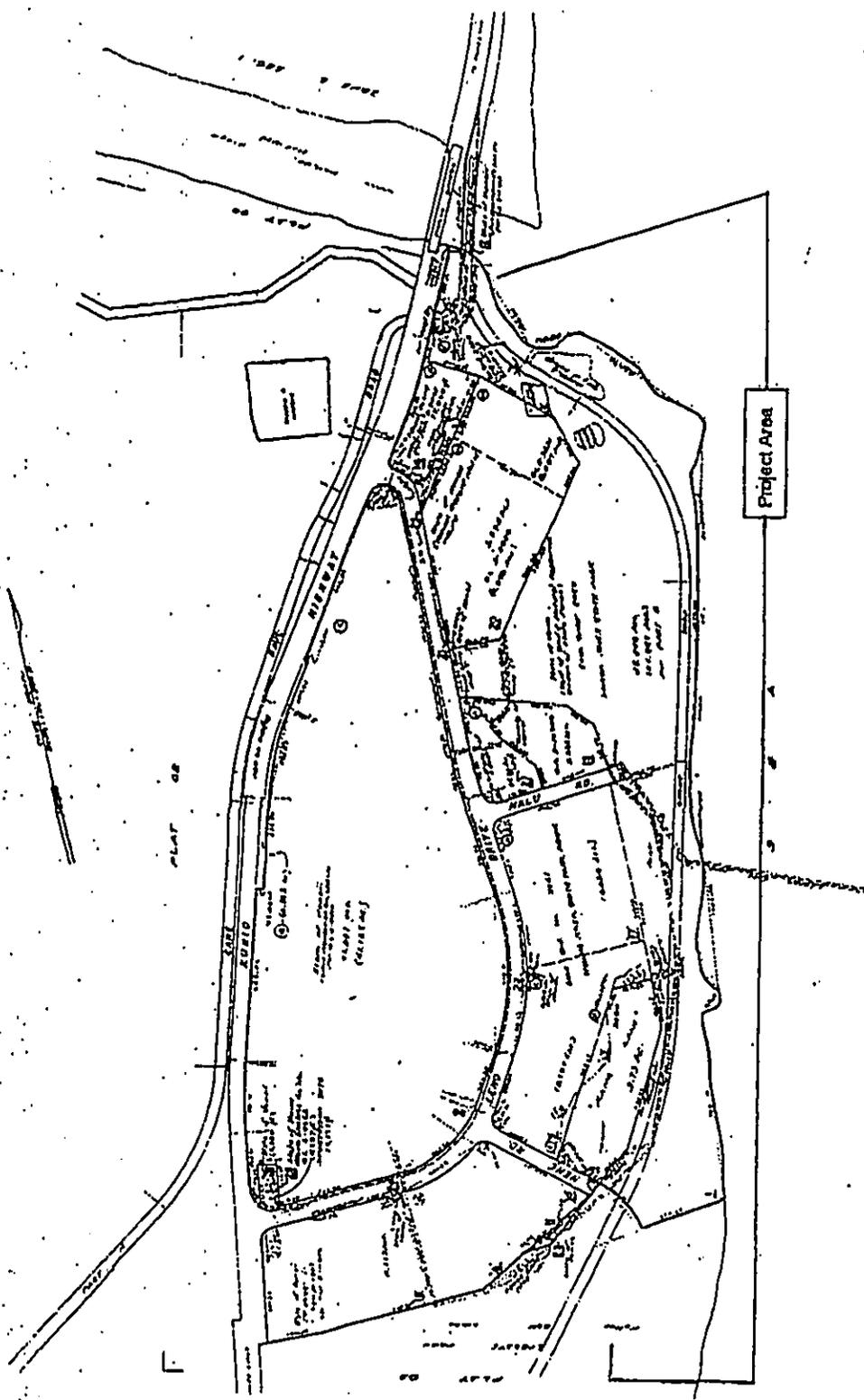


Figure 1 Portion of U.S.G.S. 1996 map of Kapaa HI, Showing Project Area



| | |
|--------------------|----------|
| NUMBER OF LOTS | 3 |
| PERCENTAGE OF LOTS | 9 |
| TAX MAP | 06 |
| DATE | 3/9/06 |
| SCALE | AS SHOWN |

FOR THE PROJECT (SEE THE SUBJECT IN COLUMN)

Figure 2 Tax Map 3.9.06, showing Lydgate Park, Wailua, Kauai

Natural Setting of Wailua

Wailua *ahupua`a*, located on the eastern side of the island of Kaua`i, is exposed to the prevailing northeast tradewinds and thus experiences 40 to 50 inches of rainfall annually at the seashore. This increases to 75 to 100 inches in more inland (western) localities. The Wailua River and its tributaries comprise the major drainage system for the central area of the Līhu`e basin. The Līhu`e basin is bounded by the Haupū mountains to the south, Wai`ale`ale to the west and the Makaleha mountains to the north. Sea level changes in recent geologic time on this side of Kaua`i have submerged the eastern edge of the Līhu`e basin, resulting in the deposition of alluvium, beach and dune sand, and lagoonal clays and marls along the seaward (eastern) side of the Kalepa-Nōnou Ridge through which the Wailua River flows.

The *ahupua`a* of Wailua is situated in the old *moku* (or district) of Puna, but today is located in two separate judicial districts. North of the Wailua River it is in the district of Kawaihau and south of the river it is in Līhu`e District. This project area is in the present-day Līhu`e District. Wailua is the largest *ahupua`a* in both district systems, stretching from the shoreline to its *mauka* extent at Wai`ale`ale (elev. 5080 ft.), and encompassing most of the small streams and tributaries which flow into the Wailua River - the largest and singularly navigable river in the State (Handy and Handy 1972:425). Wailua *ahupua`a* contains 20,255 Acres, 2,800 in Wailua Makai, and 17,455 in Wailua Mauka (Boundary Boundaries Record, Kauai Vol. 1: 37). Lydgate Park is on the shoreline on the south side of the Wailua River mouth.

Cultural History of Wailua

Archaeological and ethnographic evidence reinforce one another and indicate that Wailua was the religious and political center of Kaua`i during ancient times. There were more *heiau* in Wailua than in other *ahupua`a* on Kaua`i (See Bennett 1931). The lower portion of the river valley, *makai* of Nonou ridge line to the north and Mauna Kapu to the south, was known as Wailuanuiho`āno (Wailuanuiaho`āno) or alternately Wailuanuilani. It was an area so sacred that it was *kapu* to *maka`āinana* or commoners. Only the *ali`i*, their *kahuna* and retainers could reside or visit here (Dickey 1916). There have been at least seven major *heiau* recorded in this relatively small area of the *ahupua`a* (Ching 1968:28). This complex of *heiau* was declared a National Historic Landmark in 1962 ((Site 50-30-08-102) and Hikinaakala and Hauola Puuhōnua declared (Site 50-30-08-105). The project area contains one of these *heiau*, Hikinaakala.

A survey of traditional mythological literature shows Wailua prominently associated with some of the most famous legendary and historical figures including Maui, Kāwelo, Pikoikaala, Laieikawai, Mo`ikeha, La`amaikahiki and Kaililauokekoa (Dickey 1916; Abraham Fornander 1916-19; Kalākaua 1888; William H. Rice 1923). These associations suggest a very antiquated and continuous occupation of the area. Martha Yent suggests that because of the traditional connection of several Wailua *heiau* with Mo`ikeha as well as the mythical *menehune*, the religious complex there may have been constructed circa A.D. 1200 (1989:1).

A famous O`ahu chief, Mo`ikeha (dates ca. A.D. 1340-1360 by the 20 years per generation count), according to tradition, sailed off to Kahiki and on his returns settles in Wailua, Kauai, where the Puna family of chiefs welcome him. Upon the death of Puna Mo`ikeha becomes the *Alii nui* of Kauai and remained there" (Fornander II 1879:53-54). There is a chant associated with Mo`ikeha's favorite son, Kila (by the Kaua`i chiefess Ho`oipoikamalani) who also travelled to Kahiki. Kila is sent to seek a new chief and at each place he stops along the way he is asked who he is and what has become of Mo`ikeha. He answers that Moikeha is alive and "Dwelling at ease on Kauai where the sun rises and sets; where the surf of Makaiwa curves and bends; by the changing blossoms of the kukui of Puna; by the broad waters of Wailua, he will live on Kauai and die on Kauai" (Beckwith 1989:355-356).

Also pointing to the great antiquity and importance of the settlement at Wailua is that the area is, in recorded traditions, the site of many "firsts." Dickey records claims that the first *kalo* and *uala* on Kaua`i were said to be planted by Mo`ikeha here (Dickey 1916:24). Mo`ikeha's *hānai* son La`amaikahiki, brought the first temple drum to the islands and placed it at the *heiau* of Holoholoku at Wailua (Fornander 1878-85:II,62). Here also were introduced the first *hau* trees on Kaua`i at Hihikalahau along the river below Poliahu *heiau*, and the first coconut tree in the islands at Molohua, just north of the river mouth (Dickey 1916:16,24,30).

Early Period After European Contact

Few Westerners visited Wailua in the years just after Cook's arrival, hence detailed descriptions of the area are scarce. Most of the voyagers during the late eighteenth and early nineteenth centuries landed at Waimea, on the southwestern side of the island, a location that would eventually overshadow Wailua in its royal importance because of the opportunities there to associate and trade with these foreigners (Lydgate 1920:192).

However, in 1793, Wailua was still the "capital" of Kaua`i and Capt. George Vancouver, who had already visited the island several times under Capt. James Cook and later on his own, knew this fact well and tried to land there in March. Although conditions prevented him from anchoring, Vancouver observed the area from off shore and gave this description:

This part seemed to be very well watered, as three other rapid small streams were observed to flow into the sea within the limits above mentioned. This portion of Attougi, the most fertile and pleasant district of the island, is the principal residence of the King, or, in his absence, of the superior chief, who generally takes up his abode in an extensive village, about a league to the southward of the north-east point of the island. Here Enemo the regent, with the young prince Tamooerrie, were now living...(Vancouver 1798:221-222).

Missionary Hiram Bingham passed through Wailua twice in 1824 and visited the birth place of King Kaumuali'i (the *pōhaku ho'ohānau*), a *hōlua* slide and the lower falls on the south fork of the river, but left no clues as to the size or extent of the settlement there (Bingham 1847:220, 231).

In October 1840 members of the U.S. Exploring Expedition came to Wailua and recorded his explorations up the Wailua River and comments on Debora's compound, where Coconut Plantation Hotel complex still stands (out of business since the Hurricane Iniki).

Debora Kapule, the former wife of Kaua'i sovereign Kaumuali'i, took up residence in Wailua shortly after the rebellion of 1824 in which Kaumuali'i's son George led a revolt which was put down by forces loyal to Kamehameha II. Debora, who remained loyal to Kamehameha, was granted her lands north of the Wailua River by Ka'ahumanu, *kuhina nui* or regent of the islands.

By 1840 the economic center of Kaua'i had shifted from Wailua to Waimea as shown by the numbers of claims in, as well as historical accounts concerning both areas.

The *Māhele* Period

The *ali'i* who enjoyed and benefitted from their contact with westerners, spent more time in Waimea - the preferred anchorage for visiting ships, than in Wailua by 1848. The complex of *heiau* at Wailua lost their great significance after the abolishment of the *kapu* system. By the mid-1800s only a small population, decimated also in part by disease, existed in the Wailua River Valley within a mile from the sea and they would be displaced within decades by imported farmers and crops.

At the time of the *Māhele* and *Kuleana* claims (1847-17848) fifty-one parcels totaling approximately 75 acres were awarded to twenty-seven individual claimants in Wailua. By this time many other areas, particularly in and near Waimea had many more claims made, showing the greater centers of population had moved away from Wailua with the new economy. All of the Wailua parcels are within approximately a mile of the shore, of which four were claimed south of the Wailua River, at the beach. All of the many *kalo* parcels were located on the north side of the Wailua River.

On south side of the river (in or near the present Lydgate Park), three Land Commission Awards (LCAs 3403:2, 3555:2, and 3567:2, attest to the existence of house sites along the shore (waihona.com). Many other house sites were on the north side of the river near the shore or just slightly inland (Figure 3, portion of Lydgate map).

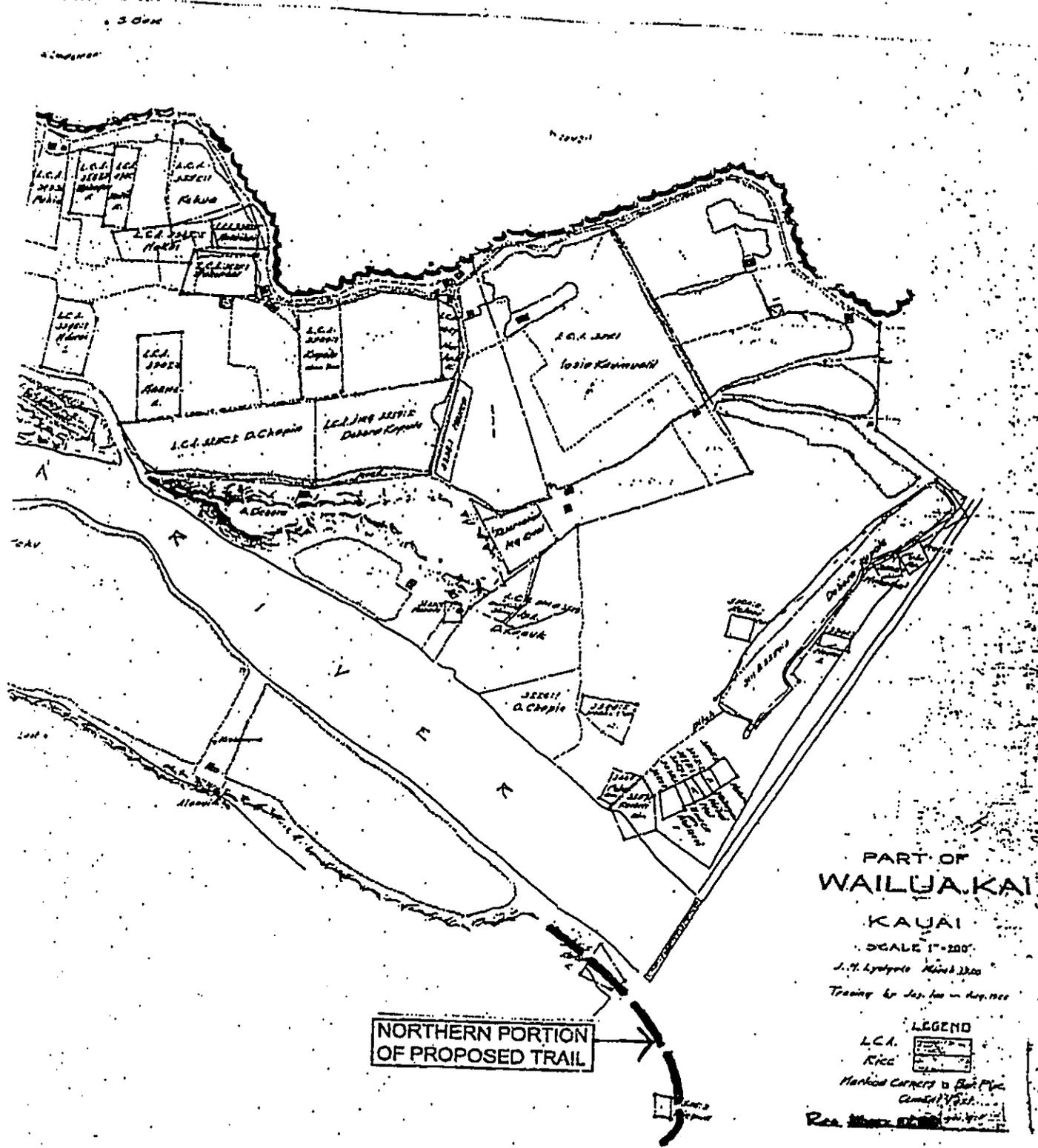


Figure 3 Portion of J.M. Lydgate 1920 Map (R.M. 2699) of Part of Wailua Kai, Showing LCAs at Wailua River Mouth Immediately Northeast of Project Area

Land Commission Awards (LCA) 3403:2 and 3555:2 were immediately west/southwest of Hauola Puuhōnu. LCA 3403:2, House lot) was obliterated by the building of the parking lot. Remnants of the other house lot belonging to Kiaipali appear to still exist.

Latter Half of 19th Century-Early 20th Century

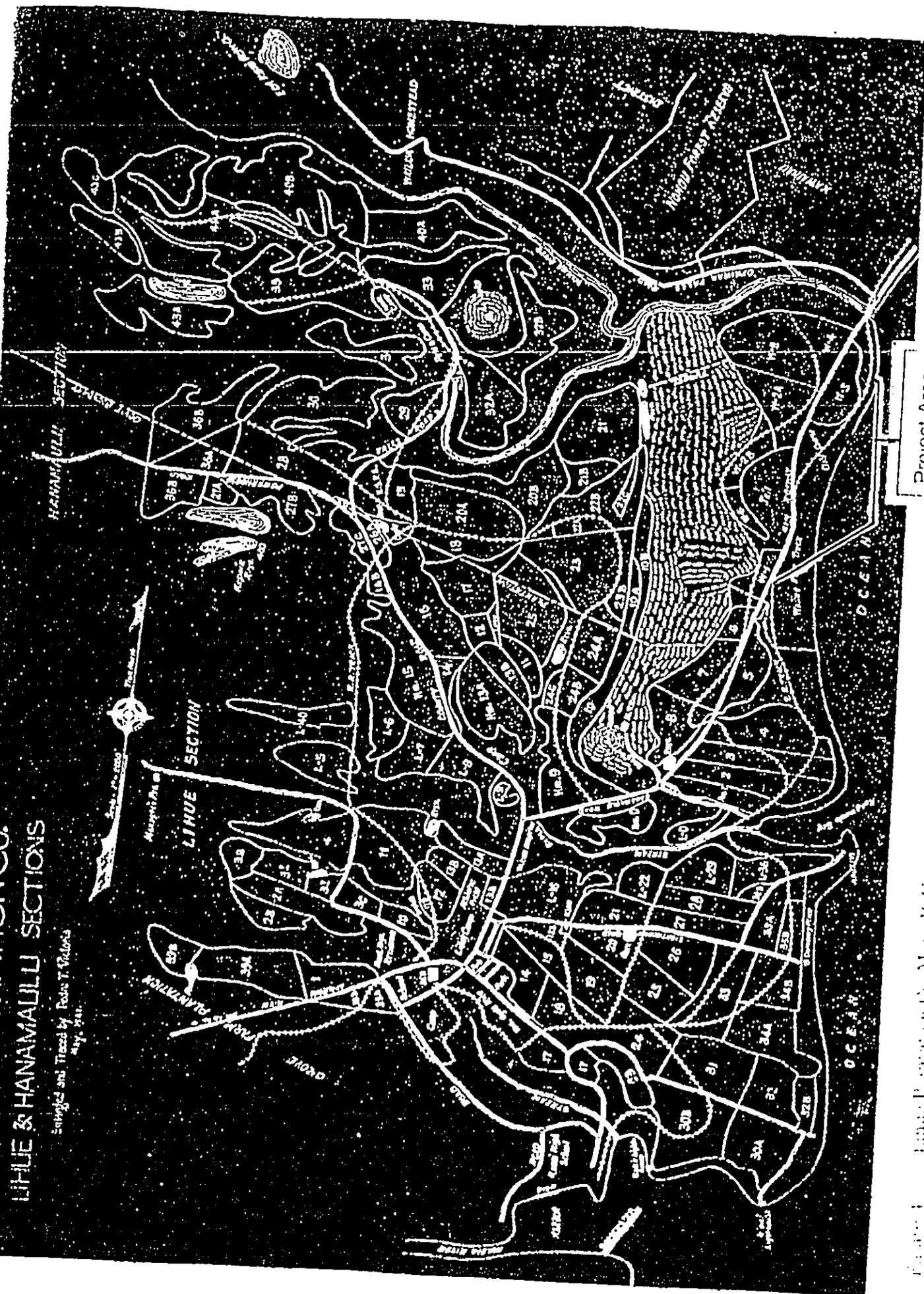
In the project area are the remains of the sugar railroad berm. The area south of the Wailua River all the way to Nāwiliwili was put into sugar cane as part of the Lihue Plantation Company (Figure 4). The plantation was begun in 1849 as the Henry A. Pierce & Company. The railroad was laid and the first sugar moved by rail on January 7, 1892. By 1921 The Lihue Plantation Co. was reputed to have the most modern and extensive railroad system in the islands. The conversion from railroad to truck hauling began only in 1957 and was completed by 1959. The 1959 annual report noted "With the completion of the harvesting season this year (October 10, 1959) hauling cane over our railroad system comes to an end. We are the last plantation in the Island to give up the railroad and move to truck hauling. This marks the end of an era." (Condé and Best 1973: 165-169)

With the sugar plantation, came the immigrants to work on the plantation. Stanley B. Porteus (1962) mentions 2,000 Polynesians, mostly Gilbert Islanders brought in for plantation work. Porteus says those who died in Hawaii "were buried in the sand dunes alongside what is now the golf course, near Kapa`a (i.e. Wailua Golf Course).

To put the fields into cane cultivation, rocks had to be cleared from the land. By 1931 when Bennett records Hikinaakala *Heiau*, he noted that "much of the stone has been removed, reducing the walls to bare outlines, and obliterating the pavement entirely."

LIHUE PLANTATION Co.
LIHUE & HANAMAILI SECTIONS

Enlarged and Traced by Peter T. Victoria
 May, 1941.



Project Area

Figure 1. Lihue Plantation Co. Map, 1941, enlarged 200% with a shaded track
 of the proposed road. (Carter & Bass, 1999)

II. PREVIOUS ARCHAEOLOGY

Introduction

The Hikinaakala *Heiau* and Hauola Puuhōnua have been investigated various times since they were first noted in Thrum (1907). The following table lists the investigator(s), the type of archaeological investigation and comments about the investigation or site information.

Table 1: Previous Archaeological Work at Wailua River State Park

| Author(s) | Archaeological work | Comments |
|---|---|---|
| Thrum, Thomas 1907 | listing of <i>heiau</i> | Malae & Hikinaakalā <i>Heiau</i> /Pu`uhōnua o Hauola |
| Bennett, Wendell C. 1931 | reconnaissance survey of <i>heiau</i> and place of refuge. | Hikinaakalā <i>Heiau</i> /Pu`uhōnua o Hauola (Site 50-30-08-105) and Sand dune burial (Site 50-30-08-103, and mauka of the highway Malae <i>Heiau</i> (50-30-08-104), both now part of The Wailua Complex of <i>Heiau</i> National Historical Landmark District (site 50-30-08-502) on both sides of the highway and both sides of the river. |
| Soehren, Lloyd, 1967 | field check | relocated sites |
| Walton, Beth, and Charles Spilker, 1974 | Assessment and sub-surface testing of Lydgate State Park Pavilion | testing did not located any sub-surface materials |
| Cox, David W. | Burial Recovery project | 13 burials located |
| Kikuchi, William K. 1984 | mapping of petroglyphs | Kaua'i Community College Anthropology Club (AOK) survey of petroglyphs. Bulldozer damage noted from clearing mouth of river; 36 figures, more possibly in river |
| Yent, Martha, 1987 | corings for new comfort station | no subsurface cultural deposits located on sand dune |

| Author(s) | Archaeological work | Comments |
|--|--|--|
| Yent, Martha, 1989 | mapping & testing of Site 50-30-08-105 in 1986 | 2 periods of occupation, one historic, earlier period may/may not be associated with heiau building as no subsurface features associated with heiau were located. Yent's testing of LCA house site area noted modern disturbance destroyed any traditional materials that might have been there. |
| Folk and Hammatt 1992 | Assessment for Fiber Optic Cable | informants described burials in the golf course area. |
| Kawachi, Carol, 1993 | survey of river mouth (4-1-04:01) | discovered unreported submerged petroglyph |
| Beardsley, Felicia Rounds, 1994 | Sub-surface testing for sewer line south of the project area | findings limited to changing landscape formations |
| Folk, William H. and Hallett H. Hammatt 1995 | monitoring fiberoptic cable conduits | found remains of seven individuals from disturbed, possibly secondary deposits |
| Kawachi, Carol | monitoring | |
| Hammatt, et al. 1997 | inventory survey for Kūhiō Highway widening | 1 new site found north of river, 50-30-08-756, a terrace |
| Scientific Consultants Services, in progress | monitoring of irrigation project | monitoring, note area of Bennet's sand dune burial, (Site 50-30-08-103) |
| | | |

The first archaeological work is done by Thomas Thrum (1907) in the Hawaiian *Almanac and Annual* with a listing of the Kauai heiau; and Wendell C. Bennett (1931) conducted the first comprehensive survey of Kauai island archaeological sites. Bennett noted 5 large heiau at Wailua; Sites 104, 105, 106, 107, and 108 at the mouth of the Wailua River and sand dune burials (Bennett 1933:35) of which only Sites 103 and 104 and 105 are on the south side of the Wailua River, which since the advent of historic preservation in Hawai'i has been known as The Wailua Complex of Heiau National Historical Landmark District (site 50-30-08-502) and lies on both sides of the highway and both sides of the Wailua river.

Wailua *ahupua`a* history began to be addressed early in the 20th century by persons such as Lyle A. Dickey (1916) and John M. Lydgate (1916) with the Hawaiian Historical Society; Henry D. Sloggett et al. (1934) with the Kauai Historical Society, and Mary Salisbury (1936) of the *Honolulu Star Bulletin* wrote about Wailua sites and the kings.

Bennett situates Hikinaakala (site 105) in the context of other pu`uhonua and other Kaua`i sites:

The following sites, all associated with heiaus, are described as "places of refuge" (*puuhonua*): (1) Hikinaakala in Waimea (p. 152), regarding which Thrum (53, p. 39) says, "Some report it as a place of refuge, while others assert that the crossing of the river to Makaweli was the only *puuhonua* of this section of ancient Kauai." (It is interesting to note that a *puuhonua* could possibly be a river crossing.). (2) Keonekapu in Waimea (p. 152) referred to by Kamakau as a place of refuge. (3) Hikinaakala (Site 105) referred to by Dickey (16, pp. 91-2.) as a place of refuge called Hauola. (4) *Puwouwou* (Site 125) considered by native informants as a place of refuge. (5) Hauola (Site 16) Hoesa, referred to indirectly by Rice (46, p. 46.): "Later, Ola sent the Menehune to build a heiau at the mouth of the Wailua River, which was to be called Hauola, after the famous city of refuge of his father at Kekaha." (6) Kihawahine heiau and *puuhonua* on Niihau (p. 153). (7) Alexander (1, p. 45) refers to Waimea and Wailua as sites of *puuhonua*.

The information about the workings of a place of refuge is very slight. The ever present heiau suggests that the enforcement of the protection was one of the functions of the priests.

Hikinaakala (Site 105) and Kihawahine on Niihau (p. 153) are *puuhonuas* similar in plan: long, narrow, walled enclosures. Hikinaakala at Waimea (p. 152) is also of this type but the method of construction of its walls is not known as the whole building is now destroyed.

Hauola (Site 16) is a different type of structure, and may not be a city of refuge. Two of the six structures classed as *puuhonuas* are destroyed without record. It is not possible to draw conclusions from the remaining four, but it is interesting that three--one at Wailua on the east, one at Waimea on the southwest, and one on Niihau--are all exceptionally long and narrow walled enclosures, and that at least two have walls that consist of parallel rows of slabs on edge, the intervening space being filled with rubble. Furthermore two have the same name, Hikinaakala, and the three are located on the beach parallel to the shore line. It is the nearest to a type that Kauai and Niihau offer (Bennett 1931:49).

In 1967 Lloyd Soehren did a field check of the Wailua sites (Soehren 1967) and in 1968 Francis Ching did a major study of Wailua and recorded no less than 55 sites in lower Wailua including agricultural terraces and irrigation systems extending into the lower sections of the river's north and south forks, but most of these do not appear to have state site numbers. Carol Kawachi (1993) has a clear map (her Figure 14) and a coordinated

index (pps 23-24) of the 1967 Soehren and 1968 Ching sites.

Other studies can be found dealing with the sites in more mauka areas of Wailua and with other sites within The Wailua Complex of *Heiau* National Historical Landmark District (site 50-30-08-502) lying on both sides of the highway and both sides of the river. However, the sites within the park project area are limited to the Hikinaakalā *Heiau*/Pu`uhōnua o Hauola, the remnants of the Lihue Plantation railroad berm.

Hikinaakalā *Heiau*/Pu`uhōnua o Hauola (site 50-30-08-105)

Hikinaakalā *Heiau*/Pu`uhōnua o Hauola (site 50-30-08-105) (See Figure 7) is situated on the southern side of the mouth of the Wailua River. Hikinaakalā is said to be on the south side, while Hau`ola, the place of refuge where a *kapu*-breaker could enter and escape punishment, occupied the north end. Oral tradition attributes the construction of the *heiau* to the chief Wailuanuiaho`āno, while Hau`ola is said to have been built by *menehune* at the direction of the legendary Waimea chief Ola who gave it the same name as the place of refuge constructed by his father near Kekaha (Dickey 1916:15; Rice 1923:45; BPBM 1885). Dickey also noted that

inside the walls were houses for the priests and for refugees. There is also a Pohaku Piko here. In the southern part is the *heiau*, Hikina a ka la, a long, narrow *heiau*, containing graves of a family that desecrated it by cultivating within its walls. It is reported that on the nights of Kane the sound of drum and ukeke, played by spirits, may still be heard at Hauola (Dickey 1915:15).

The complex (site 105) was first recorded and mapped by Thrum (1907). By the time Bennett (1931) surveyed Wailua, many of the stones had been removed from the *heiau*. In the early 1960s, the construction of a parking lot and comfort station further intruded on the site or complex. Hikinaakalā/Hauola was remapped by Kikuchi (1974) and again by Yent (1989), who also conducted some subsurface testing. In 1989 Yent also monitored the removal of the comfort station from the *heiau*.

Paemahuowailua Petroglyphs

Associated with the Hikinaakaā *heiau* and the Hauola place of refuge are the Paemahuowailua petroglyphs (site 50-30-08-105A) or the *paeki`i*, along the shoreline at the mouth of the Wailua River. The petroglyphs are sometimes visible above the tide line depending on the tide and the shifting sands at the mouth of the Wailua River.

Kikuchi mentions various manuscripts dealing with the Paemahuowailua petroglyphs (Kikuchi 1984), such as those of Margaret Ellis and Jacob Fried (1949) to be found at the Anthropology Department at Kaua`i Community College, one by J.H. Boyd held by the author, and one by Moses Manu in the Bishop Museum Library.

Kikuchi summarizes the Manu version (1899) of the aetiological legend (one of origins) of the stones.

Kapo and her party left Ni`ihau for Kaua`i and came upon a surfing competition at Wailua. Here Kapo and her sisters were invited by some of the men to ride on the famous surf of Wailua called *maka`iw*. Accepting, they rode the first wave in paris with the men. On the second wave, using their supernatural powers, they left the men behind while they rod to shore and awaited the third wave. The third wave, which was described as a mountain of water rather than normal surf, plummeted the men and forced them beneath the wave to their death. There they were changed into stone at the mouth of the Wailua River. Since then, these bounders are known as the rows of images, or *pae ki`i*, and can still be seen when wave and river action removes the sand cover (Kikuchi 1984:3).

The Judge Dickey version of the origin of these boulders (1917) came about as Maui and his brothers, after many trials, were drawing all the islands together with the help of the great fish Luehu. Maui, against the interdiction of his mother, and telling his brothers not to look behind them on pain of death, scooped up a bailing dish floating at the mouth of the Wailua River, which turned into their beautiful sister, Hina-ke ka`a. However, the brothers did turn around to look when they heard the crowds cheering them and the beautiful woman. Luehu broke away from their hook - the islands failed to come together and the brothers were turned into the stones along the south side of the Wailua River. Kikuchi points out that the Dickey version of the story is "an ingenious combination of of well known Maui themes to which the end result was the punishment of his brothers who turned into boulders at Waillua" (Kikuchi 1974:[6]).

Kikuchi further notes that the Wailua petroglyph site was first surveyed and photographed in 1949 by Ms. Rebecca Banks, a teacher at Kapa`a High School. Kaua`i Community College Anthropology Club surveyed it in 1973. Thirty-five petroglyph figures were recorded at that time of two basic types; spiral and human outline. He felt there may well be other stones as yet unrecorded in the area.

Barrère Pukui and Kelly (1980) recorded information from Keahi Luahine, whose relative, Kai`akea, was the caretaker or *kahu* of the row of wooden images, *ka pae ki`i*, which once stood on the grounds of Hau`ola. Kikuchi could find no direct evidence of where the images stood, but notes there are three terraces at Hikina a ka la temple and thinks it likely that the wooden images stood facing the petroglyph boulders and that each wooden image probably represented the men who were turned to stone. Kikuchi also notes that it possible that the boulders were famous and later men carved their figures on them (Kikuchi 1973:[15]).

Georgia Lee and Edward Stasack indicate in their new book that these petroglyphs are the only known ones associated with a *hula* and carved wooden images

The legends relate to the boulders themselves, but the dance refers to both petroglyphs and carved wooden images that formerly stood nearby. One of the legends describes Kapo, the half-sister of Pele, who caused men to be pounded to death by the surf and then changed their bodies into boulders to

remind people of her powers. The other describes the rocks as being the eight brothers of Māui who looked back to see the beauty of Hina-ke-kaa and were turned into stones at the mouth of the Wailua River (Lee and Stasack 1999:152)

In an earlier publication, Stasack concluded that the petroglyphs functioned in relation to the sacredness of the *heiau* (Cox and Stasack 1970: 60-61) (Figure 5).

Carol Kawachi's 1993 study of the Wailua River Mouth did uncover a previously unrecorded petroglyph, as predicted by Kikuchi (1973). Kawachi's petroglyph was on a boulder with bulldozer scars and she concluded that the boulder may have been under water and that bulldozing in the river mouth may have brought it ashore. She concludes, like Kikuchi that there may be other petroglyphs under water in this area. Kawachi's boulder petroglyph appears not to have a state site number. She states that while culturally significant material is not likely to be found near the river mouth:

... all evidence of previous residents have not been totally destroyed. Remains of agricultural terraces and *`auwai*, *heiau*, petroglyphs, fishponds, old bridges, and rail lines still remain (Kawachi 1993:30).

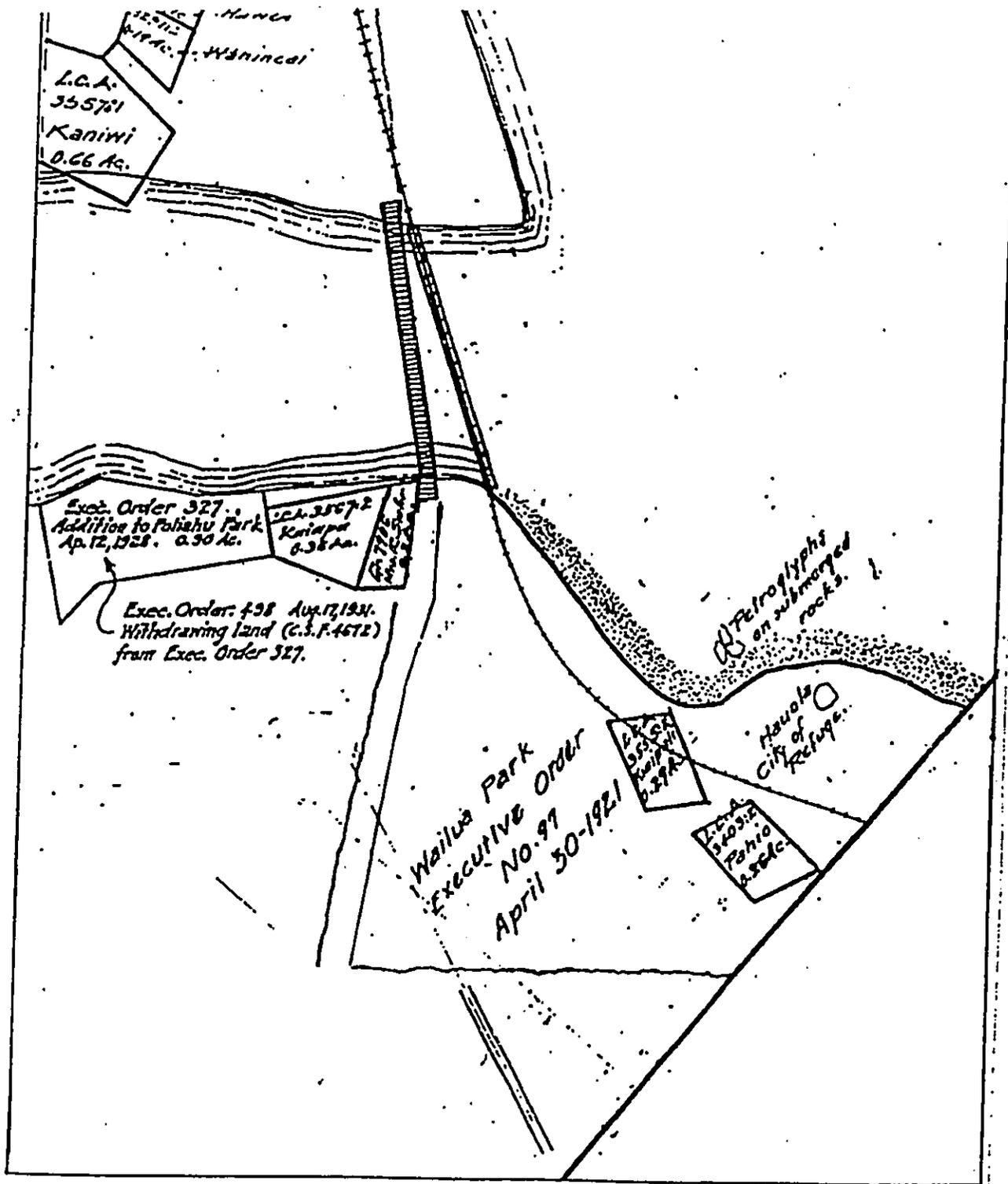


Figure 5 Portion of HTS Plat 3048, November 1923, from Kawachi (1993:10)

Burials

Along the south bank of the Wailua River, near the mouth of the river on both sides of the highway, there is sand dune which Land Commission claims show as house lots and archaeological work associated with burials. While the previous road work in this area has probably destroyed most remnants of this kind these dunes could contain isolated burials. The cliff edge on the southern bank is old decomposed lava and would not be expected to contain any findings of archaeological significance.

By the time of Bennett's survey, the Wailua Golf Course had already been established (in 1927) over much of the dune. Burials have been encountered within the golf course grounds over the ensuing years during various excavation activities. David W. Cox, in his 1977 report on the discovery of thirteen human burials during laying of pipelines through the golf course, describes the extent of the sand dune that lies under the golf course landscape:

Along the shores of Wailua Bay, the area of beach dunes extends from very near the river mouth to the south. The dunes are seen only at the shore in the northern section near the present Lydgate Park area. About 1,200 m. (3/4 mile) from the river, the dunes extend further inshore...The inshore or high dunes extend for approximately the next 1,300 m. (4/5 mile), to the area just to the north of the existing golf clubhouse. In this section the dune, though somewhat modified by installation of the golf course, extends inland to within meters of the main Lihu'e-Kapa'a, Kūhiō Highway. This is a distance of some 400 m. (1,312 ft.) from the beach. It is in this area of inshore dunes where the burials were located.

To the south of the present clubhouse considerable levelling has occurred and the remaining dunes again are confined mainly to the near shore area for some 2.2 km. (1.43 miles) more toward Hanamā'ulu (Cox 1977:3).

Other archaeological studies are primarily concerned with the modern development in Wailua. During the laying of pipelines through the northern portion of the Wailua Golf Course (Cox 1977) thirteen burials and scattered remains were recovered; these are site numbers 50-30-08-542 through 50-30-08-546. Toyo Shirai (retired golf course supervisor) and Abraham Koga (the current course supervisor) were interviewed in connection with the *Archaeological Assessment of the Proposed Fiber Optic Cable Landing for Wailua, Kaua'i* (Folk and Hammatt 1992). Both of the informants talked about burials in that project area. While doing the Assessment, some golfers who claimed to be veterans also thought they remembered a bivouac camp at the southeast end of the golf course near Nukolii flats and a shooting range near the present club house. No documentation could be found to substantiate these claims specifically. While shell casings were found in some of the trenching during the assessment, and may have come from a rifle range, it may also be that they were the result of isolated training missions along the beach area. The bulk of the project work for the Fiber Optic Cable documents cultural remains that generally include objects, buried stratigraphic layers, and human burials which were associated with areas to be impacted by land development. In 1993 Cultural Surveys did an inventory with subsurface testing for the Proposed Fiber Optic Cable landing but located no burials, however during the monitoring of the cable laying a burial (site 50-30-08-1980) was located *makai* of Tee 1 and the parking lot and was left in place. Other disarticulated human bones

from seven individuals, previously disturbed, were recovered from the same area by screening. These remains were reburied in the same area.

Another project in the Wailua Golf Course area was the sewerline project literature review and archaeological assessment for the Kauai Community Correctional Center (Erkelens and Welch 1993). The authors note the old Ahukini Railroad tracks (Lihue Plantation Co. along the same route as the proposed force main line; a 1923 map of the wetland area behind KCCC and pondfields along the river in rice production but no information specifically for their project area. The authors also give the general caution that sand dune areas were favored by Hawaiians for the interment of burials and there is great likelihood of encountering interments in these sand dunes (Erkelens and Welch 1993:3).

In 1994, Felicia Beardsley conducted the archaeological subsurface testing at Kauai Community Correctional Center and at Wailua Golf Course for the placement of a sewerline. This work of 39 trenches uncovered a single burial, a "dearth of cultural materials" (Beardsley 1994:91) but she lays out a clear picture of the changing landscape of the area. The project sewerline corridor spanned five different land forms, a "shift from a baseline of dunes, wetlands, lava flow, and alluvium to the current arrangement of land forms" (Beardsley, 1994.: 96).

In 1997 Martha Yent, archaeologist for State Parks, prepared a Burial Treatment Plan and Archaeological Monitoring Plan for the Wailua Automobile Recycling Facility (TMK: 3-9-05: portion 1) just south of the Wailua Golf Course.

In progress is a report on the monitoring for the new irrigation system at the Wailua Golf Course (SCS). The burials in that project area are

Burials

Burials are also an archaeological consideration in the project area. Burials in sand deposits extending inland from the coast was a traditional Hawaiian mortuary practice. These burials have been encountered along coastal sections of all the major islands of Hawai'i. Wendell C. Bennett, after his pioneering effort during the 1920s at a comprehensive record of the archaeology of Kaua'i, offered a cautionary statement that remains valid today: "Burials may be found in almost any sand dune on the island of Kauai" (Bennett 1931:26).

Bennett recorded six sites in the Wailua dunes south of the Wailua River, where concentrations of burials had been observed including:

Site 103. Dune burials. In the sand dunes that run along the shore half way between Hanamaulu and Wailua River are many burials. (*Ibid.*:125)

Bennett's unparticularized description of the site's location suggests that, according to his informants, the "many burials" were dispersed throughout the dune.

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Of particular note are the changes precipitated by the introduction and expansion of agricultural activity, as well as the development of KCCC, WGC, and Kaha Lani during this century. These changes include the gradual disappearance and contraction of a marsh or wetlands, stabilization and alteration of the dune land, rapid sedimentation associated with the preparation, burning and plowing of agricultural (sugarcane) fields, and the development of humic sediments where once shifting dune sands predominated (*Op. cit.*:100).

Thus, the earlier and narrower sand bar along the shoreline has grown wider and stabilized as the land was put to use on the margins of previous wetlands or marshlands and on the sandy areas. Since the dunes extend to Kūhiō Highway, these sand dune sections of the highway are of special concern to the present study.

Another area of sand deposits abutting and extending *mauka* of the Kūhiō Highway where burials have been recorded lies farther north in Wailua *ahupua`a*. In 1973 traditional Hawaiian burials were exposed in the sand deposit beneath the Coco Palms Hotel during excavation for a new wing of the hotel. The hotel is located north of Wailua River and just *mauka* of the Kūhiō Highway. The burials were reported by Dr. William Kikuchi. The excavated pit measured "6-10 feet deep, 93 feet wide (east-west orientation), and 221 feet long (north-south orientation)" (Kikuchi 1973:4). Thirty-four burials and a large Helmet shell artifact were disturbed by the excavation and were

ceremoniously reburied on the grounds of the Coco Palms Hotel near a large boulder on which a bronze plaque now stands. This location is also the site of the first reburials at the time of the construction of the Coco Palms Hotel. The Helmet shell was buried at another site fronting the burial site of the human remains. It was wrapped in fishnet and lowered down into its new pit. Both ceremonies were accompanied by prayer and a chant in Hawaiian by a minister of Hawaiian ancestry (Kikuchi 1973:5).

Scientific Consultants did a monitoring project for irrigation installation in Lydgate Park, but outside the present project area. They encountered some of Bennett's Site 103,

described by him as "Dune burials. In the sand dunes that run along the shore half way between Hanamaulu and Wailua River are many burials" (Bennett 1931: 125).

Another Cultural Site

A Hole in the ground is explained in a Dickey story:

hastening to Koloa to get fish for his chief from Nomilu Pond and on reaching the Wailua river leaped across. The footprint marks the spot [north side of river] from which he jumped. A hole *makai* of the Hikinaakals *heiau* was made where he landed (Dickey 1917: 20).

Another place of note tied to the present project area is Kaluawehe or the "King's Highway" which began in the surf off Hauola and followed a course to the uplands approximately in line with the present-day Kuamo`o Road.

Summary of Wailua Settlement Pattern and Discussion

To the south of the project area, the area along the southern boundary in the *ahupua`a* of Wailua up to the south side of the Wailua river was probably minor in the total scheme of land use in traditional times and no Land Commission claims are mentioned outside of the immediate area along side the river. The dunes were probably used primarily for human interment, and the seaside for temporary or seasonal fishing camps.

The Wailua River, along both shores, however, was the most important high-status area on Kauai in pre-Contact times. This area was the Royal Center where the high chiefs and chiefesses carried on their business when they were not traveling about the island(s), and where they entertained visitors. Today we see a small portion of this royal center when we look at the remnants of five of the *heiau* (where official decision making were carried out), the Hauola Pu`uhonua (place of refuge), the birthstones, the royal coconut grove, the bellstone and the royal fish ponds. We have no visible surface remnants of the chiefly homes, the supporting *lo`i* and *kula* lands, the places of recreation, the burial place called Mahunapuoni (just *makai* of Kapule's fishponds), the fish traps and canoe landings, but the fraction of what used to be that is still there, gives us some of its essence.

The Wailua Complex of *Heiau*, on both sides of the River, was the focus of political and religious activity. Among the seven *heiau* of Wailua, the Malae *Heiau* (at the river mouth on the south side) and Poliahu *Heiau* (on the north side of the river inland atop Poliahu Ridge) were two large companion *heiau*. The *makai* section of the *ahupua`a* near the river mouth was the focus of daily life for the royal families. Some house sites were south of the river on the dunes (*makai* of the present highway), but the majority of house sites were on the north side of the river just *mauka* of the highway between the Coco Palms Resort and the river. A burial area is associated with these house lots on the dune and archaeological work shows there are still present remains of the habitation layer and the burials. A portion of Kapule's fishponds, just behind the sand berm, still exists on the grounds of the Coco Palms Resort. The choicest house area, according to the *Māhele* documents, is probably the area in and around the Royal Coconut Grove, where Debora Kapule (3111), Oliva Chapin (3226), Naakaakai (3368) and Kupalu, wife of Kaniwi (3568)

had their homes. These homes were close to the River, the Kalaeokamanu (Holoholoku) *heiau*, the birthstones (where elaborate birthing ceremonies of royalty would take place), and the coconut grove.

Inland, along the floodplain, are remnants of the many *lo'i* parcels and other house sites as well. There is archaeological evidence that agricultural use of the land stretched far *mauka* along the Wailua River and its tributaries, and supported a relatively large population at an earlier time. Archival records mention other resources, including bananas, wood for canoes and housing, candlenuts for lights, as coming from farther inland. Archaeological research shows adz materials for tools also inland.

III. FINDINGS

The proposed project primarily involves the creation of a trail system running just back from the coast, from Hauola (City of Refuge) south for approximately two kilometers and then looping back north following along the margins of existing roads. The vicinity of Hauola is of particular concern because of its great cultural significance. Most of the northern portion of the proposed route follows a former, slightly built-up, railroad right-of-way. The impact of trail construction in this area should be negligible. As the trail proceeds south it crosses an extensive area of deep sand deposits seaward of the golf course. There is the potential for traditional Hawaiian burials and cultural deposits in this area but the nature of the trail construction, with impacts typically restricted to the top 30 cm, suggests that impacts are likely to be minimal. Leveling for the foundations of camping areas is understood to be accomplished by importation of fill which should again have minimal subsurface impacts.

Of greater historic preservation concern is the need to excavate for the foundations of a proposed bridge and for various small pavilion structures (covering benches, picnic tables, etc) These would require relatively small excavations (in area) but these would go deep and could potentially encounter significant cultural deposits and/or burials.

In some cases the proposed trail alignment may ascend relatively steep sand dunes and another concern arises whether significant cutting of the dune will be necessary to achieve a gradient meeting Americans with Disability Act (ADA) standards.

During the field visit the construction of a comfort station on the site of a former comfort station was suggested in the central portion of the trail route. This would seem to be a good choice for siting to avoid impacts to cultural deposits as the area has been quite disturbed previously. It is however assumed that any such comfort station would involve excavation for utility lines (water, sewer, electric, telephone) which might traverse 90 meters (300 linear feet) of sandy soils with potentially significant cultural deposits and/or burials. Excavation for utility lines supplying the comfort station were perceived as the most significant subsurface impact of the proposed project.

IV. SIGNIFICANCE AND RECOMMENDED TREATMENT

The proposed trail project runs close to portions of the "Wailua Complex of *Heiau*" declared a national historic landmark (12/29/62), placed on the Hawai'i Register of Historic Places (6/3/81) and filed for inclusion in the National Register of Historic Places (8/23/1988). The proposed trail system lies near Hikinaakalā *Heiau*, Hauola (Place of Refuge), Ka Pae Ki'i Mahu (petroglyphs) and Malae *Heiau*. Furthermore part of the trail system lies near the Wailua Golf Course known for its numerous shallow sand burials both native Hawaiian and those of Gilbertese plantation workers. Given the clear import and cultural sensitivity of these sites, it was important to have the State Historic Preservation Division Kaua'i Island archaeologist, Ms. Nancy McMahan, on-site to discuss significance and recommendations. It was understood that her remarks were tentative and non-binding.

There was a consensus that while the impacts of the trail construction per se, were likely to be minimal, that a program of mitigation was still appropriate. There was a consensus that the development of portions of the trail (alignments, signage) within the Wailua River State Park should be made in consultation with State Parks and appropriate Hawaiian organizations. There was a consensus that placing the trail on the former railroad bed, where appropriate, would minimize adverse impact to cultural deposits. There was a consensus that large portions of the proposed route, particularly through inland areas along road beds or through former cane fields of long cultivation, were unlikely to encounter significant cultural resources. There was however also a consensus that the extensive sand deposits in the southern portion of the project area had a significant likelihood of containing cultural deposits and/or burials.

The merits of mitigation through a subsurface archaeological inventory survey vs. an archaeological monitoring program were discussed. It was agreed that in most portions of the project area subsurface testing would probably find no cultural deposits. There was a consensus that, given the kilometers long nature of the project area, that subsurface inventory testing would have to be extensive to be meaningful and even then probably would not provide sufficient confidence to avoid the need for a subsequent monitoring program. There was a consensus that significant direct impacts of the project would be highly localized (for foundations and possibly utility trenches) with impacts of the trail construction being minimal (30 cm or less deep) for most of the route.

Cultural Surveys Hawai'i, Inc. recommended mitigation through a monitoring program with a monitoring plan, a combination of on-site and on-call monitoring, and monitoring report to be carried out in close consultation with the State Historic Preservation Division and the Kaua'i/Ni'ihau Islands Burial Council.

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PHOTO APPENDIX

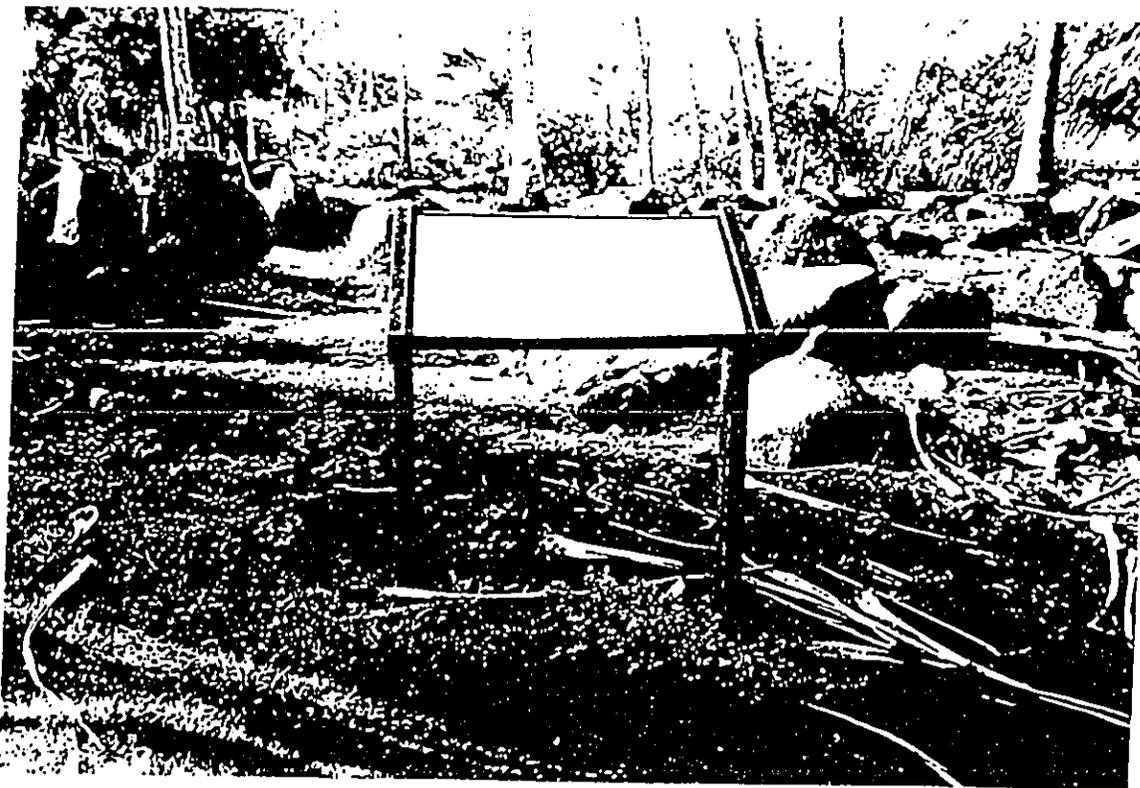


Figure 6 View of Pu'uhonua o Hauola and Signage

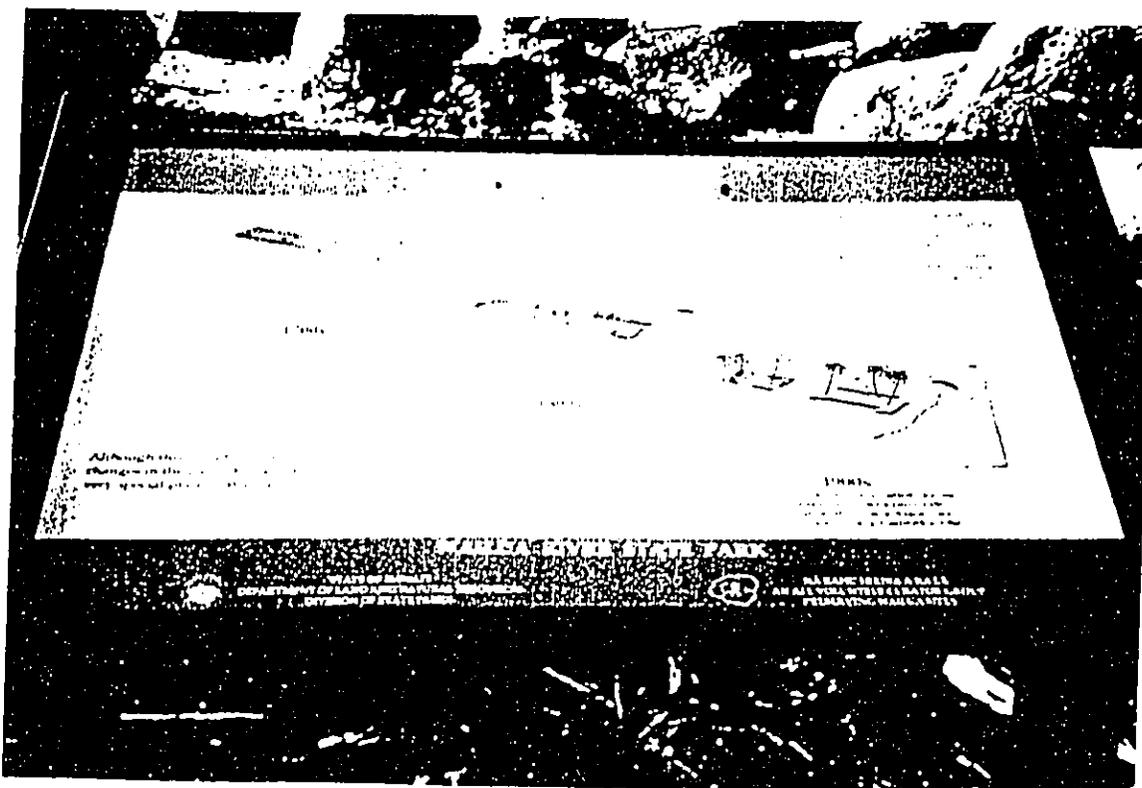


Figure 7 Close up of informational signage

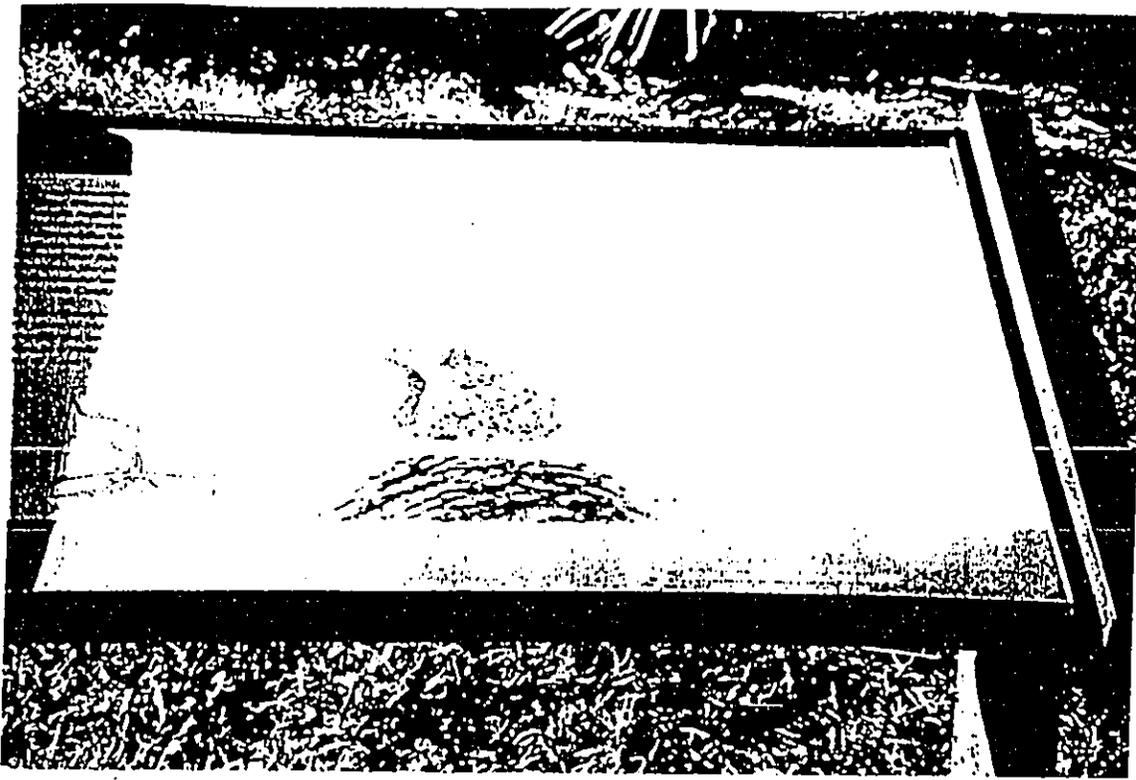


Figure 8 Existing Interpretive Signage at Washita River State Park



Figure 9 Existing Interpretive Signage at Washita River State Park

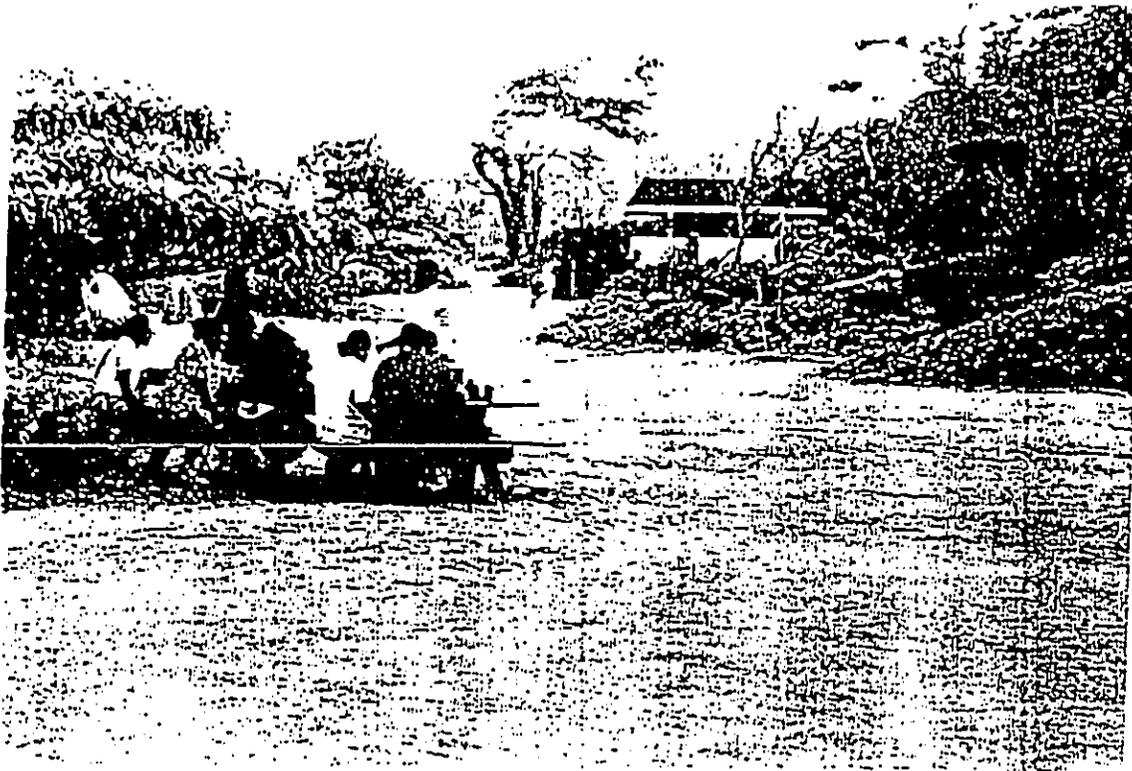


Figure 10 Central Portion of Proposed Trail Corridor Following Old Railroad Alignment



Figure 11 Central Portion of Proposed Trail Corridor Following Old Railroad Alignment



Figure 12 Portion of Trail Where a Pedestrian Bridge is Proposed (Crossing between Far Side to Near Side in Photo)



Figure 13 View of Trail Where a Pedestrian Bridge is Proposed (Right of Section in Photo)

BENJAMIN J. CATETANO
GOVERNOR OF HAWAII



GILBERT S. COLOMA-ADARAN, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

DEPUTIES
JANET E. KAWELO
LINNEL NISHIOKA

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

HISTORIC PRESERVATION DIVISION
Kakuhikawa Building, Room 555
601 Kamokila Boulevard
Kapolei, Hawaii 96707

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

April 18, 2001

Mr. David Shideler
Cultur27133al Surveys Hawaii
733 N. Kalaheo Avenue
Kailua, Hawaii 96734

LOG NO: 27133 ✓
DOC NO: 0103NM10

Dear Mr. Shideler:

**SUBJECT: Historic Preservation Review – Corridor for a Proposed
Bike Path in Lydgate Park
Wailua Ahupua'a, Puna District, Island Of Kaua'i**

This letter reviews the archaeological assessment for this proposed project which was submitted February 21, 2001 (Creed et al: 2001: Archaeological Assessment of a Corridor for a Proposed Bike Path ... Cultural Surveys Hawaii ms.).

We would point out a couple of comments. The title page has the tax map key as 3-0-06, but the correct tax map should be 3-9-06. The parcels should be listed to make the area of potential impact clear, since this is a federally funded project. Also, the title page lists the park as Lydgate State Park, but this is a county park, the land having been exchanged with the County of Kauai. Only the known historic sites on the Kilauea side of the park are in the Wailua State Parks. The State property boundary starts at the end of the parking lot pavement. Also, for your information, the archaeological monitoring report by SCS on the Wailua Golf Course burials is in our SHPD office – either in the library or awaiting entry into the library.

We agree with your determination that there is a National Historic Landmark [Wailua Complex of Heiau] which is both on the State and National Registers of Historic Places which will be effected by this project and that it is possible that burials and subsurface habitation deposits are in the sandy lands to the south within the project area.

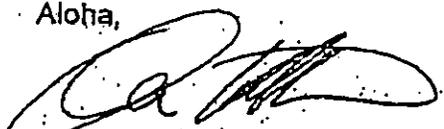
The proposed trail on page 7 shows the northern portion of the trail going right through State Parks' property. State Parks will need to approve this. They should be consulted immediately on the trail construction proposal. If the trail is to go through the National Historic Landmark, then the U.S. Department of Interior also needs to be contacted for comments – their Honolulu Office handles reviews of projects affecting Landmarks. If you obtain State Parks' and the Interior Department's approval and work out mitigation measures with them, then we can review the specific mitigation proposals for that area.

2

We do agree that in the southern sandy lands archaeological monitoring can best identify any historic sites that might be impacted, and can then ensure proper treatment. It does appear as if impacts of the project will be relatively minor in this area. A monitoring plan would have to be submitted to our office for review and approval. This monitoring plan should include a contingency plan for handling any burials that might be found, with that plan approved by the Kauai Island Burial Council.

If you have any further questions, please contact Nancy McMahon of our office at 742-7033.

Aloha,



DON HIBBARD, Administrator
State Historic Preservation Division

NM:amk

c. Michael Belles
Dee Crowell, County of Kauai



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION
P.O. BOX 621
HONOLULU, HAWAII 96809
April 16, 2001

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

File Number KA-155RSSMAPS

LOG1310/ REF: LD-NAV

Mr. Ronald Casuga LPLS
Kodani & Associates, Inc.
3145 Akahi Street
Lihue, Kauai, Hawaii 96766

Dear Mr. Casuga:

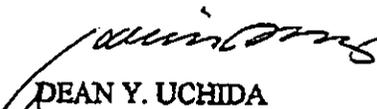
Subject: Shoreline Certification Request: File Number KA-155
Owner: County of Kauai
Island: Kauai - District: Wailua - Tax Map Key: 4th/3-9-02: 34
Property Description: Portion of Lygate Park

This letter informs you that the above shoreline survey maps have been certified. Please be aware that in the past these maps were withheld until the end of the 20-day appeal period. The Department of the Attorney General recently advised us that, while perhaps well intentioned, withholding the maps had the effect of imposing an automatic stay on the release of the maps and was not consistent with the intent of the public records law or with the shoreline certification rules.

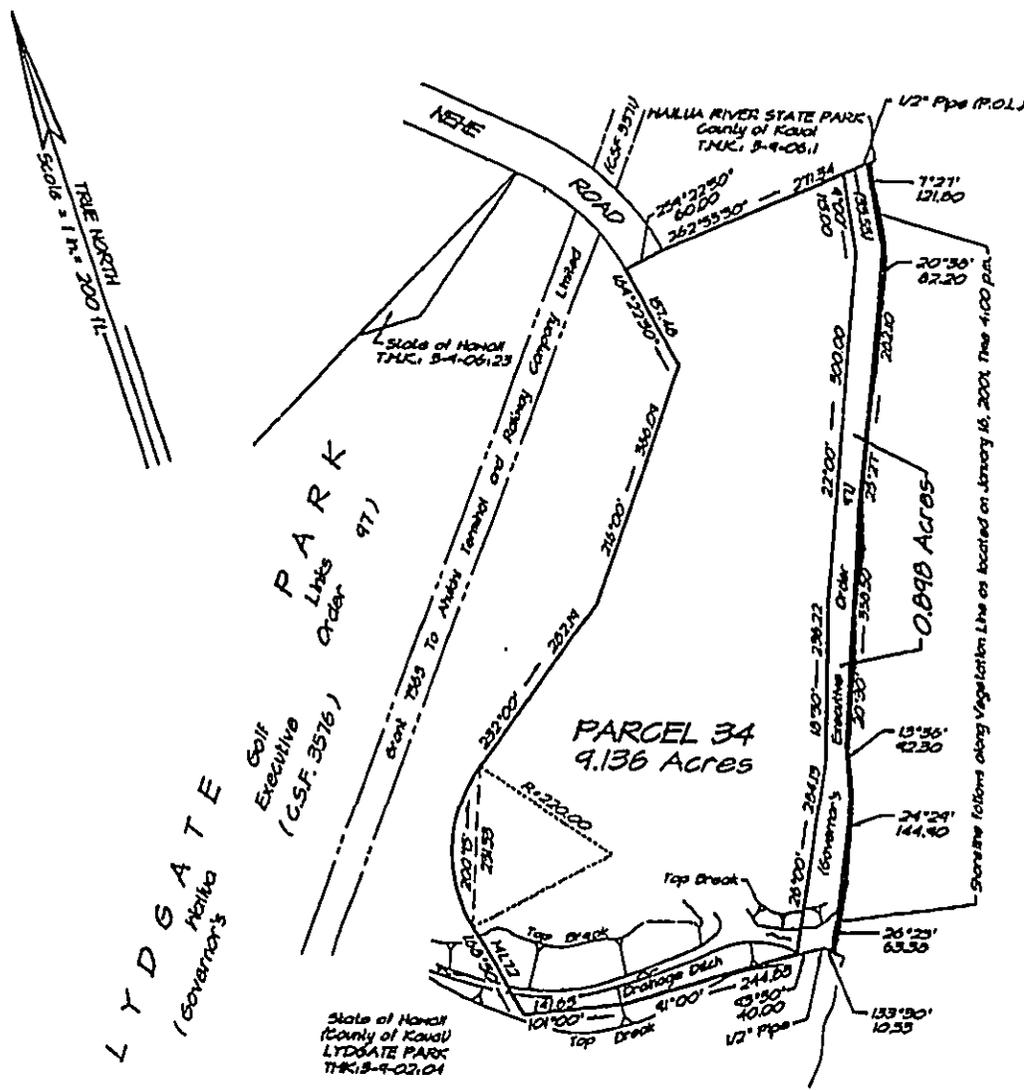
Therefore, please find enclosed for your records five (5) certified shoreline survey maps. However, please be advised that pursuant to Section 13-222-26, Hawaii Administrative Rules, this certification is subject to appeal which may possibly include a contested case hearing. Public notice of this shoreline certification is scheduled for publication in the April 23, 2001 Environmental Notice.

You will be notified whether an appeal or request for a contested case hearing to the shoreline certification has been filed during the appeal period, which ends on May 13, 2001. If no appeal has been filed during the 20-day period, then the certification is final. If, however, an appeal is filed, then the certification would be subject to the resolution of the contested case hearing process. Should you have any questions on this matter, please feel free to contact Nicholas A. Vaccaro (808) 587-0438.

Very truly yours,

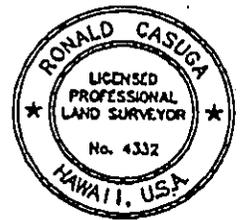

DEAN Y. UCHIDA
Administrator

c: District Land Branch (w/attach)
Survey Division (w/attach)
County of Kauai Department of Planning and Permitting
County of Kauai Building Department



O C C E A N

NOTE:
 1. Owners of adjoining Lands are from records filed at the Real Property Mapping Branch.



THIS WORK WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION

Ronald Casuga
 LICENSED PROFESSIONAL LAND SURVEYOR
 CERTIFICATE NUMBER 4332
 March 19, 2001

The shoreline as located and certified and delineated in red is hereby confirmed as being the actual shoreline as of APR 9 2001

Janet Kakuwa
 Chairman, Board of Land and Natural Resources

SHORELINE CERTIFICATION
 PARCEL 34
 Governor's Executive Order 2436
 (C. S. F. 15769)
 At Wallua, Lihue, Kauai, Hawaii

Owner, State of Hawaii
 Board of Land and Natural Resources
 P. O. Box 621
 Honolulu, Hawaii 96809

Tax Map Key: (4) B-9-02,34.

KODANI AND ASSOCIATES, INC.
 5143 Akahi Street
 Lihue, Kauai, Hawaii

10" x 15" = 1.04 Sq. Ft.

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) 586-4186
FACSIMILE (808) 586-4186

March 29, 2001

Cesar Portugal
Kauai Department of Public Works
4444 Rice Street
Lihue HI 96766

Attn: Douglas Haigh

Subject: Draft Environmental Assessment (EA) for Lydgate Park Bike Trail

Dear Mr. Portugal:

We have the following comments to offer:

1. Two-sided pages: In order to reduce bulk and save on paper, please consider printing on both sides of the pages in the final document.
2. Park uses: The draft EA mentions the existence of both condominiums and a sewage treatment plant in the middle of Lydgate Park, and the Proposed Bike Trail Layout Plan shows a Holiday Inn at the north end of the park. This is quite unusual. In the final EA can you explain how this came to be?
3. Coastal hazards: The bike trail will be in FIRM Zones D and VE. On the FIRM map in Chapter V, indicate what the designations D and VE stand for. The trail may be subject to tsunami hazards or wave runup during heavy storms. What measures will you take to protect the project elements from these hazards? Number 15, *Floodplains*, of Chapter VI notes that the materials used will be "floodable." Please define this term in the final EA.
4. Historic preservation review: Documentation from the Historic Preservation Division of DLNR giving the determination of the project resources' historic significance and any corresponding mitigation measures needs to appear in the final EA.
5. Paving; landscaping: HRS 103D-407 requires the use of recycled glass in paving materials whenever possible, and HRS 103D-408 requires the use of native Hawaiian flora whenever and wherever possible. Enclosed are copies of the referenced chapter and sections of the statute.

6. Figures and Appendices:

a. Proposed Bike Trail Layout Plan

This figure requires a reference from the text. At a logical point in the narrative for the reader to peruse this figure, please include a reference to it.

This figure also needs a legend. Three sports fields, a maintenance building and Kamalani Playground are all represented by dotted lines. As such they appear to be new elements of the project. Where will the new parking areas be? They are not indicated on the map. At the north end the heiau and the City of Refuge are also represented by dotted lines. These are surely existing features. In the final EA amend the plan to distinguish proposed elements from existing elements and include a legend describing the two.

b. Maps: Following the *Zoning Map* in chapter V are three maps without titles. In the final EA include their titles. At a logical point in the narrative for the reader to peruse these figures, please include references to them.

c. Lydgate Park Master Plan Report: This report is reproduced as an appendix beginning on page 33. It is reproduced again following page 55. In the final EA you can eliminate one of these reproductions, which will also reduce the bulk of the document.

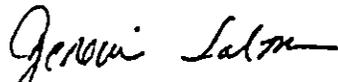
7. Funding: A footnote in Chapter III, section B lists "TEA grant" as a source of funding. In the final EA indicate what TEA stands for.

8. Lighting: Will the park be open after dark? If so, then exterior lights will be required. Consult US Fish and Wildlife Service on proper height and shielding of lights to prevent disorientation of overflying birds. Such disorientation results in bird mortality from bird strikes and crashes.

9. Specifications of proposed elements: In the final EA include specifications of the new elements, such as the restrooms, maintenance building, playfields, bleachers, and so on. Also include renderings of them, either drawings or photos of similar facilities located elsewhere.

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

Sincerely,


GENEVIEVE SALMONSON
Director

Enc.

c: Sara Edi Grimes, MDG, Inc.

§§103D-407 Construction projects, roadway materials; recycled glass content requirements. (a) When purchasing roadway materials or other high-value, end-use applications for public projects, state agencies shall, and county agencies may, purchase materials with minimum recycled glass content meeting specifications adopted by the policy board which, at a minimum, shall provide for:

(1) A minimum recycled glass content of ten per cent crushed aggregate in treated or untreated basecourse in paving materials that shall not reduce the quality standards for highway and road construction; and

(2) The use of one hundred per cent aggregate in nonstructural capital improvement applications.

(b) All highway and road construction and improvement projects funded by the State or a county or roadways that are to be accepted by the State or a county as public roads shall utilize a minimum of ten per cent crushed glass aggregate as specified by the department of transportation in all basecourse (treated or untreated) and subbase when the glass is available to the quarry or contractor at a price no greater than that of the equivalent aggregate.

(c) All state and county construction projects calling for nonstructural backfill shall utilize one hundred per cent crushed glass when available at a cost equal to or lower than the equivalent aggregate.

(d) As used in this section:

"Basecourse" means the layer or layers of specified material or selected material of a designed thickness to support a surface course.

"Environmental management special fund" means the fund established by section 342G-63.

"Nonstructural backfill" means use as fill in areas not subject to structural loading, including but not limited to utility line bedding, drainage backfill behind retaining walls, drainage line backfill in leachfields or french drains, and similar uses. [L 1994, c 201, §§3; am L 1997, c 92, §§2; am L 1998, c 11, §§7]

[§§103D-408] Indigenous and Polynesian introduced plants; use in public landscaping. (a) Wherever and whenever feasible, all plans, designs, and specifications for new or renovated landscaping of any building, complex of buildings, facility, complex of facilities, or housing developed by the State with public moneys shall incorporate indigenous land plant species as defined in section 195D-2, and plant species brought to Hawaii by Polynesians before European contact, such as the kukui, noni, and coconut; provided that:

(1) Suitable cultivated plants can be made available for this purpose without jeopardizing wild plants in their natural habitat; and

(2) Wherever and whenever possible, indigenous plants shall be used for landscaping on the island or islands on which the species originated.

(b) Each plant or group of plants used pursuant to subsection (a) shall be clearly identified with signs for the edification of the general public. [L 1999, c 149, pt of §2]



Ms. Genevieve Salmonson
Director
Office of Environmental and Quality Control
235 South Beretaina Street, Suite 702
Honolulu, HI 96813

RE: RESPONSE TO DRAFT EA COMMENTS FOR LYDGATE PARK BIKE TRAIL

CC: Mr. Doug Haigh, County of Kauai, Public Works
Mr. Cesar Portugal, County of Kauai, Public Works

Dear Ms. Salmonson,

Below are the responses to each of your comments on the Draft Environmental Assessment for Lydgate Park Bike Trail and Amenities. Thank you for your time and helpful comments to assist us in designing and building the best trail and amenities for Kauai. The OEQC comments are in bold, and the responses are plain.

Two-sided pages: In order to reduce bulk and save on paper, please consider printing on both sides of the pages in the final document.

RESPONSE: The Final EA has been printed on both sides of the final document.

Park uses: The draft EA mentions the existence of both condominiums and a sewage treatment plant in the middle of Lydgate Park, and the Proposed Bike Trail Layout Plan shows a Holiday Inn at the north end of the park. This is quite unusual. In the final EA can you explain how this came to be?

RESPONSE: The County of Kauai, Public Works Department does not know how the State of Hawaii allowed this mix of uses to all be built in Lydgate Park. This was done many years ago.

Coastal hazards: The bike trail will be in FIRM Zones D and VE. On the FIRM map in Chapter V, indicate what the designations D and VE stand for. The trail may be subject to tsunami hazards or wave runup during heavy storms. What measures will you take to protect the project elements from these hazards? Number 15, *Floodplains*, of Chapter VI notes that the materials used will be "floodable." Please define this term in the final EA.

RESPONSE: The trail will be built both in the VE and AE zones. These zones refer to VE, the Tsunami Zone, and AE, the Floodplain. The County Regulations require a Setback Variance for any structures planned for construction in the (VE) Tsunami Zone. As the plan calls for the



construction of a community-built handicapped accessible wooden Overlook along the beachfront, a variance has been applied for. There are no other structures planned in the VE zone.

The construction material for paving which is considered "floodable" is concrete, therefore the trail will be built of concrete, rather than asphalt, which is now considered a hazardous material, or gravel, which would be washed away and require replacement after a storm.

The bridge and overlook will be built of 100 % weatherproof wood members, and all connections will be stainless steel. The area along the trail will be restored with vegetation as soon as construction is complete.

Historic preservation review: Documentation from the Historic Preservation Division of DLNR giving the determination of the project resources' historic significance and any corresponding mitigation measures needs to appear in the final EA.

RESPONSE: A copy of the DLNR Archeological Assessment Comment Letter is included with the Final EA in Chapter XII, Exhibits and Correspondence.

On May 8, 2001 at 10:00 am, there will be held an Archeological Design Workshop. Attending will be representatives from DLNR State Parks Department, Archeology Interpretive Division, the County of Kauai Archeologist, the Keeper of the Heiau, Kauai Historic Preservation Society, the Architect for the Comfort Station and Maintenance Building, Office of Hawaiian Affairs: Burial Council, Federal Highways, Friends of Lydgate Park, Kamalani 2001, County of Kauai Historic Preservation Review Commission, and County of Kauai Public Works.

Ms. Nancy McMahon, the County of Kauai Archeologist, Ms. Martha Yent, the DLNR State Parks Archeology Interpretive Programs Director, and LaFrance Kapaka, of Office Of Hawaiian Affairs: Burial Council have all agreed to work with MDG, Inc. to write the Mitigation Plan together, and this will be part of the workshop on May 8.

Paving; landscaping: HRS 103D-407 requires the use of recycled glass in paving materials whenever possible, and HRS 103D-408 requires the use of native Hawaiian flora whenever and wherever possible. Enclosed are copies of the referenced chapter and sections of the statute.

RESPONSE: All HRS laws and requirements will be complied with for all phases of this project.



Figures and Appendices:

a. Proposed Bike Trail Layout Plan

This figure requires a reference from the text. At a logical point in the narrative for the reader to peruse this figure, please include a reference to it.

RESPONSE: The Schematic Plan which is included in the Final EA is referenced in the Final EA, and locates all elements of the project.

This figure also needs a legend. Three sports fields, a maintenance building and Kamalani Playground are all represented by dotted lines. As such they appear to be new elements of the project. Where will the new parking areas be? They are not indicated on the map. At the north end the heiau and the City of Refuge are also represented by dotted lines. These are surely existing features. In the final EA amend the plan to distinguish proposed elements from existing elements and include a legend describing the two.

RESPONSE: The Schematic Bike Trail Plan correctly identifies all proposed elements and shows clearly which elements are existing.

b. Maps: Following the *Zoning Map* in chapter V are three maps without titles. In the final EA include their titles.

RESPONSE: All maps will be titled in the Final EA.

c. Lydgate Park Master Plan Report: This report is reproduced as an appendix beginning on page 33. It is reproduced again following page 55. In the final EA you can eliminate one of these reproductions, which will also reduce the bulk of the document.

RESPONSE: The Final EA will have only one copy of the LP Master plan.

Funding: A footnote in Chapter III, section B lists "TEA grant" as a source of funding. In the final EA indicate what TEA stands for.

RESPONSE: TEA is an acronym for Transportation Enhancement Act of the Federal Highways Administration. The project is funded with a combination of TEA funds which represents 80% of the cost of the project, and County funds which represent a 20% match.



Lighting: Will the park be open after dark? If so, then exterior lights will be required. Consult US Fish and Wildlife Service on proper height and shielding of lights to prevent disorientation of overflying birds. Such disorientation results in bird mortality from bird strikes and crashes.

RESPONSE: This is a design issue and will be dealt with in the development of the design of the project, and the design team will work closely with U.S. Fish & Wildlife for recommendations.

Specifications of proposed elements: In the final EA include specifications of the new elements, such as the restrooms, maintenance building, playfields, bleachers, and so on. Also include renderings of them, either drawings or photos of similar facilities located elsewhere.

RESPONSE: In the Final EA, we have given general descriptions of all elements of the trail and amenities, to include the trail, sports fields, comfort station, maintenance building, camp sites, Community-Built bridge, and the Community-Built overlook. We have included drawings which give the sizes of floor plans, stories of buildings, sizes of sports fields, and parking and the locations of all elements. As there are no bleachers, there is no information on them as they are not part of the plan.

Thank you for your consideration of our response to your comments of the Draft EA for Lydgate Park and our submittal of the Final EA to the County of Kauai, Public Works Department.

Sincerely yours,

A handwritten signature in black ink that reads "Sara Edi Grimes".

Sara Edi Grimes, MDG, Inc.



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

DIAN K. MINAII
DIRECTOR
DEPUTY DIRECTORS
GLENN M. OKIMOTO
JADINE Y. URASAKI

IN REPLY REFER TO:

HWY-PS
2.2560

APR 27 2001

Mr. Doug Haigh
Department of Public Works
County of Kauai
4444 Rice Street
Lihue, Hawaii 96766

Dear Mr. Haigh:

Subject: Draft Environmental Assessment (EA) for Lydgate Park Bike & Pedestrian Trail (Bridge/Comfort Station/Picnic Sports Fields/Camping/Parking)

Thank you for providing the above Draft EA for our review. We have the following comments:

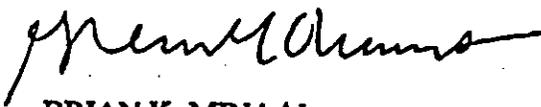
1. Provided that you obtain written documentation that the State Historic Preservation Officer concurs with measures proposed to mitigate impacts to burials and historic sites, we believe that this project may be processed as a categorical exclusion under the National Environmental Policy Act.
2. We are studying the feasibility of widening and realigning parts of Kuhio Highway. Please coordinate with our Highways Division about connection and future extension of the bike and pedestrian trail along the highway. All plans for work within the State highway right-of-way must be submitted to our Highways Division for review and approval.
3. As originally proposed for evaluation and prioritization in August 1998, the Lydgate Park Bike/Pedestrian Path was limited to a 2-mile multi-use path to provide access from Kuhio Highway to existing public facilities and historic sites. Under our adopted procedures for Transportation Enhancement (TE) projects, project managers have discretion to make minor changes to STIP TE projects, provided that such changes are eligible for TE funds and do not increase project scope or cost by more than 10%. Benches, bike racks, and landscaping along the bike/pedestrian path clearly qualify for TE funds. However, given the project history and scope, it is not appropriate to use TE funds for park comfort stations and parking lots because they are not "... an integral part of a larger qualifying activity."

Mr. Doug Haigh
Page 2

HWY-PS 2.2560

If you have any questions, please contact Ronald Tsuzuki, Head Planning Engineer, Highways Division, at (808) 587-1830.

Very truly yours,



BRIAN K. MTNAAI
Director of Transportation

Enclosures



May 26, 2001

Mr. Brian K. Minaai
Director of Transportation
State of Hawaii
Department of Transportation
869 Punchbowl Street
Honolulu, HI 96813-5097

Dear Mr. Minaai,

Thank you very much for taking the time to review the Draft Environmental Assessment prepared for the Lydgate Park Bike Path in Kauai. Upon review of your comment letter, we would like to take this opportunity to respond to the issues and concerns addressed in your comment letter.

ITEM 1 – COORDINATION WITH THE SHPO

We are at the present, preparing the Monitoring and Mitigation Plan for this project in coordination with Ms. Martha Yent, the Director of Interpretive Programs for State Parks Archeology Division, LaFrance Kapaka-Arboleda of the Kauai/Nihau Burial Council, David Helela, Keeper of the Heiau, and Nancy McMahon, Kauai State Archeologist. We understand that this must receive approval from the State Historic Preservation Office and the Burial Council. We fully expect this project to qualify for a Catex.

ITEM 2 – COORDINATION WITH HIGHWAYS DIVISION OF DOT

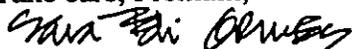
We have submitted the preliminary plans for the Bike Path to the Highways Division and have received comments on May 9, 2001 from Mr. Stephen Morikawa, P.E., Acting District Engineer. This comment letter did not reference plans to widen Kuhio Highway, and are included with the response letter. He did indicate that we must obtain a "Permit to Perform Work on State Highway". We will coordinate more with the DOT to better understand if and where widening of Kuhio Highway intersects with the proposed location for the path.

ITEM 3

We understand that the TE funds will not assume the costs associated with the parking lots and comfort stations included in the Master Plan and Schematic Plan.

Thank you for giving us the contact name of Mr. Ronald Tsuzaki, Head Planning Engineer to better understand the future plans of the DOT.

Take care, I remain,


Sara Edi Grimes

State of Hawaii
Highways Division
3060 Eiwa Street, Room 205
Lihue, Kauai, Hawaii 96766
Phone: (808) 274-3111 Fax: (808) 274-3116

MEMORANDUM

HWY-K 4.010518

Date: May 09, 2001

To: Mr. Doug Haigh
Building Division
Dept. Of Public Works
County of Kauai

From: Stephen Morikawa, P.E. 
Acting District Engineer

Subject: Lydgate Park Bike and Pedestrian Path

Review of the preliminary plans for the subject project has been completed and our comments are noted below.

1. SHEET LAYOUT PLAN
 - a. Plan Sheet Layout for the Kuhio Highway/South Leho Dr. intersection should be corrected to read: SHEET "D", instead of SHEET "G".
2. PLAN SHEET "G":
 - a. All of the existing highway signs located along the Kuhio Highway frontage between Leho Drive (North) and the road leading to the Old Wailua Plantation Bridge should be verified in the field. In order for the bike path to have the necessary clearances, it appears that some of the existing highway destination signs may have to be relocated. Also, a new destination sign was recently installed in this area. The new sign is not reflected on the plans.

If sign relocations are necessary, the plans shall include all necessary references and details for the sign relocation work.

Highway signs that need to be relocated shall not interfere with the existing sidewalk that runs alongside Kuhio Highway between Leho Dr. (North) and the road leading to the Old Wailua Plantation Bridge.
3. GENERAL COMMENTS:
 - a. Proposed bike path shall not interfere with existing power/telephone pole guy wire/anchors. All, necessary utility relocation work, if required, shall be included as part of this project.
4. Additional comments are noted on the enclosed set of plans.

05/11/01 FRI 08:05 [TX/RX NO 9950]

Mr. Doug Haigh
Page 2
May 9, 2001

HWY-K 4.010517

5. Prior to commencing work within the State Highway, the Contractor shall obtain a "Permit to Perform Work on State Highway" from the Kauai District Office.

If you have any questions, please call Steve Morikawa at 274-3118.

SM:cs
Encl.

cc: HWY-DD (w/o encl.)
Attn: Holly Yuen

Kodani & Associates, Inc. (w/o encl.)
Attn: Mr. Stanford Iwamoto

05/11/01 FRI 08:05 [TX/RX NO 9950]

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII



OLBERT S. COLDMA-AGARAN, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

DEPUTIES
JANET E. KAWELO
LINNEL NISHIOKA

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

HISTORIC PRESERVATION DIVISION
Kekuhihewa Building, Room 555
601 Kamehameha Boulevard
Kapolei, Hawaii 96707

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

LOG NO: 27223 ✓
DOC NO: 0103NM24

May 14, 2001

Mr. Doug Haigh
Department of Public Works
County of Kauai
4444 Rice St.
Lihue, Hawaii 96766

Dear Mr. Haigh:

SUBJECT: Historic Preservation Review – Draft EA Corridor for a Proposed Bike Path In Lydgate Park, Wailua Ahupua'a, Puna District, Kaua'i

Thank you for your submittal. We have previously reviewed this project in a direct response to Cultural Surveys Hawaii on their archaeological assessment (April 18, 2001 Hibbard to Shideler Log: 27133; Doc: 0103NM10).

We would point out a couple of comments. The title page for the Archaeological Assessment has the tax map key as 3-0-06. The correct tax map should be 3-9-06. The parcels should be listed, since this a federally funded project. Also, the title page lists the park as Lydgate State Park, but this is a county park, the land having been exchanged with the County of Kauai. Only the known historic sites on the Kilauea side of the park are in the Wailua State Parks. The State property boundary starts at the end of the parking lot pavement. Also, for your information, findings from an archaeological monitoring report on the Wailua Golf Course gives a better idea of burial patterns in this part of the project area, and we suggest it be reviewed by the archaeological consulting firm.

We agree with the determination that there is a National Historic Landmark (Wailua Complex of Heiau, which is both on the State and National Registers of Historic Places) which will be effected by this project, and that it is possible that burials and subsurface habitation deposits are in the sandy lands to the south within the project area.

The proposed trail on page 7 shows the northern portion of the trail going right through State Parks' property. State Parks will need to approve this. They should be consulted immediately on the trail construction proposal. If the trail is to go through the National Historic Landmark, then the U.S. Department of the Interior also needs to be contacted for comments – their Honolulu Office handles reviews of projects affecting Landmarks. If State Parks' and the Interior Department's approval is obtain and mitigation measures are worked out with them, then we can review the specific mitigation proposals for that area.

We do agree that in the southern sandy lands archaeological monitoring can best identify any historic sites that might be impacted, and can then ensure proper treatment. It does appear as if impacts of the project will be relatively minor in this area. A monitoring plan would have to be submitted to our

D. Haigh

2

office for review and approval. This monitoring plan should include a contingency plan for handling any burials that might be found, with that plan approved by the Kauai Island Burial Council.

If you have any further questions, please contact Nancy McMahon of our office at 742-7033.

Aloha,



**DON HIBBARD, Administrator
State Historic Preservation Division**

**c. KIBC
Dee Crowell, County of Kauai**



May 26, 2001

Mr. Don Hibbard, Administrator
State Historic Preservation Division
State of Hawaii
Department of Land and Natural Resources
Historic Preservation Division
Kakuhihawa Building, Room 555
601 Kamokila Boulevard
Kapolei, HI 96707

Dear Mr. Hibbard,

Thank you so much for your time reviewing the Draft Environmental Assessment and the Archeological Assessment for the Lydgate Park Bike Path in Kauai.

We have read your comments and will make sure that the Final EA has the corrected TMK. Further, we have studied the burial patterns of the Wailua Golf Course, and have projected the lines of burials as relates to our project site.

As a result, we anticipate burials along these lines, and the Monitoring Plan will require that on-site archeological monitoring will occur when construction occurs in these areas.

The Monitoring Plan will be submitted to your office and Burial Council for approval.

Thank you for your time and consideration,

A handwritten signature in black ink, appearing to read "Sara Edi Grimes". The signature is written in a cursive, flowing style.

Sara Edi Grimes



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

APR 27 2001

April 27, 2001

Mr. Doug Haigh
Department of Public Works
County of Kaua'i
4444 Rice Street
Lihue, HI 96766

Subject: Lydgate Park Bike Trail
Draft Environmental Assessment (DEA)
TMK: 3-906:01 and 3-09-02-34, East Kaua'i, Hawaii

Dear Mr. Haigh:

Thank you for the opportunity to comment on the above referenced project. The Office of Hawaiian Affairs offers the following comments.

Historical and Cultural Sites

According to the DEA, there are two heiau located just adjacent to the park site. Every effort should be made to prevent any adverse affects to these native Hawaiian historical sites. In addition, there remains the possibility of encountering traditional Hawaiian burials and cultural deposits, because the proposed project encompasses the coastline. Burials in sand deposits that extended inland from the coast were a traditional Hawaiian burial practice.

The Office of Hawaiian Affairs (OHA) urges that a mitigation program be developed in consultation with the SHPD and the Kaua'i and Ni'ihau Islands Burial Council. The mitigation program should include monitoring while ground-disturbing activities are performed in the proposed project area.

In addition, we suggest contacting OHA's Kaua'i Community Resource Coordinator, Ms. LaFrance Kapaka -Arboleda to obtain information from a Hawaiian individual or organization knowledgeable of the proposed project area.

Mr. Doug Haigh, Department of Public Works
County of Kaua'i
April 27, 2001
Page Two

Cultural Impacts

As stated in Section I of Act 50, 2000 Session Laws, Hawai'i, "There is a need to clarify that the preparation of environmental assessments or environmental impact statements should identify and address effects on Hawai'i's culture and traditional and customary rights." In addition, it also states: "Article IX and XIII of the state constitution, other state laws, and the courts of the state impose on government agencies a duty to promote and protect cultural beliefs, practices, and resources of native Hawaiians as well as other ethnic groups.

Moreover, past failure to require native Hawaiian cultural impact assessments has resulted in the loss and destruction of many important cultural resources and has interfered with the exercise of native Hawaiian Culture. Due consideration of the effects of human activities on native Hawaiian culture and the exercise thereof is necessary to ensure continued existence, development, and exercise of native Hawaiian culture."

OHA requests that the DEA address any adverse impacts on native Hawaiian culture, Pursuant to Act 50, Session Laws, Hawai'i that may occur as a result of the proposed project.

Section 106 Consultation

Because the proposed project involves federal funding, OHA is a required consultant pursuant to Section 106 of the National Historic Preservation Act.

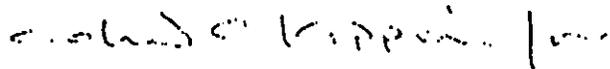
Ceded Lands

According to the Department of Land and Natural Resources State Lands Index, TMK: 3-09-02-34 is classified as ceded lands. OHA has repeatedly opposed any sale, transfer, or exchange of all ceded lands. OHA has a fiduciary responsibility to ensure that the ceded land trust is not abridged in any way. There are ongoing legal issues regarding ceded lands that have not been resolved. Until such time when determinations are made to these long-standing issues, OHA will remain opposed to the sale, transfer, or exchange of ceded lands.

-----v-----v-----v-----v-----v-----v-----v-----v-----
Mr. Doug Haigh, Department of Public Works
County of Kaua'i
April 27, 2001
Page Three

If you have any questions, please contact Mark A. Mararagan, policy analyst at 594-1756, or e-mail him at mmararagan@oha.org.

Sincerely,



Colin C. Kippen, Jr.
Deputy Administrator

cc: Board of Trustees
Kaua'i CAC

05/11/01 FRI 03:46 [TX/RX NO 9949]



May 26, 2001

Mr. Colin Kippen, Jr.
Deputy Administrator
Office of Hawaiian Affairs
711 Kapi'Olani Boulevard
Honolulu, HI 96813

Dear Mr. Kippen,

Thank you very much for taking the time to review the Draft Environmental Assessment prepared for Lydgate Park Bike Path in Kauai. Upon review of your comment letter, we would like to take this opportunity to respond to the issues and concerns addressed in your comment letter.

Historical and Cultural Sites

WAILUA COMPLEX OF HEIAU

We are aware of the Wailua Complex of Heiau at the extreme north end of Lydgate Park, and have consulted with Martha Yent, State Parks Archeological Interpretive Division, Mrs. LaFrance Kapaka-Arboleda, of the Kauai/Nihau Burial Council, Mr. David Helela, Keeper of the Heiau, and Pua Aiu, of Office of Hawaiian Affairs, Native Hawaiian Cultural Rights, Rick Tsuchiya and Randy Wichman of the County Historic Preservation Commission, Mr. Wayne Sousa, State Parks, Mr. John Lydgate, President of the Kauai Historic Preservation Society, and Ms. Nancy McMahan, the Kauai State Archeologist.

We understand the sensitive and cultural issues concerning the trail project accessing the Heiau/Hauola/Kuleana area. We also have heard something about some of the mistakes that have been made in this area. It is our plan at this time to maintain a 100' buffer as recommended by Martha Yent around the entire area. We are indicating on our schematic and 80% drawings the path alignment in front of the Holiday Inn cabana's to connect to Leho Drive. There will be indications of an optional trail alignment beside the Heiau and around the Kuleana. The community will determine which is the final alignment. It is our understanding that as the Complex is considered sacred and is on the National Register of Historic Places, that at this time, the path alignment will most likely be constructed outside the 100' buffer.

BURIALS

We are working with Ms. Kapaka-Arboleda, Ms. Nancy McMahan, and Ms. Martha Yent to prepare the Mitigation Plan, which satisfies the monitoring, and mitigation needs which is anticipated for the path construction. Further, the design of the camping sites has been such as to minimize disturbance to potential burial sites. We have followed all recommendations from Burial Council such as crushed coral camp pads which do not require excavation to construct, also barbeque grills at each site to discourage digging of fire pits.



CULTURAL IMPACTS

We are working with Ms. Pua Aiu of Office of Hawaiian Affairs to ensure that the design and construction of this Path project and all amenities associated do not restrict access to or destroy Native Hawaiian Cultural resources.

SECTION 106

We have been working diligently with all entities, agencies and individuals to ensure consensus and understanding of all issues and points of view and concerns. We have consulted with Ms. LaFrance Kapaka-Arboleda and Ms. Pua Aiu as well as all the individuals listed in paragraph one of this letter. If these are not the individuals that satisfy the requirement of OHA consultant involvement pursuant to Section 106 of the National Historic Preservation Act, we would appreciate your informing us who else should be consulted.

CEDED LANDS

We have been made aware of the fact that portion of this project are ceded lands, and are equally concerned about the sensitive nature of this as relates to the construction and use of this park and path project.

As the designers of this project, it is our hope that a peaceful resolution can be found for this issue, and that the fact that the park will not involve an activity, which is considered commercial, will ease the concern you have for the fiduciary responsibility of the land trust.

Thank you for your time, and hopefully this response letter has addressed your concerns. If you have any questions, or need clarification of any issues described herein, please feel free to contact me, Sara Edi Grimes at 303-571-5787 or email at sara@mdgdenver.com, or Doug Haigh, Department of Public Works, at 808-241-6650.

Take care, I remain,

A handwritten signature in black ink, appearing to read "Sara Edi Grimes". The signature is written in a cursive, somewhat stylized script.

Sara Edi Grimes

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
33 SOUTH KING STREET, 6TH FLOOR
HONOLULU, HAWAII 96813

SEP 24 1996

MICHAEL D. WILSON, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DEPUTY
GILBERT COLOMA-AGARAN

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

REF:HP-AMK

Dear Interested Person:

Subject: New Administrative Rules, Title 13, Sub-Title 13, Chapter 300, "Rules of Practice and Procedure Relating to Burial Sites and Human Remains"

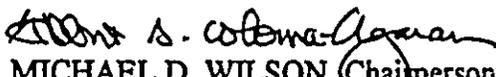
On September 13, 1996, at its regularly scheduled meeting, the Board of Land and Natural Resources adopted the attached Chapter 13-300, "Rules of Practice and Procedure Relating to Burial Sites and Human Remains."

The Honorable Governor Benjamin J. Cayetano signed the rules on September 17, 1996 and on September 18, 1996, the rules were filed with the Office of the Lieutenant Governor. The effective date of these rules is September 28, 1996.

If you have any questions regarding these rules, please contact either Edward Halealoha Ayau, Esq. or Kai Markell, Esq. of the State Historic Preservation Division Burial Sites Program at 587-0047.

Thank you very much.

Aloha,


for MICHAEL D. WILSON, Chairperson and
State Historic Preservation Officer

BK:amk



May 26, 2001

Mr. Michael D. Wilson
Chairperson & State Historic Preservation Officer
State of Hawaii
Department of Land & Natural Resources
State Historic Preservation Division
33 South King Street, 6th Floor
Honolulu, HI 96813

Dear Mr. Wilson,

Thank you for forwarding us the copy of the New Administrative Rules, Title 13, Sub-Title 13, Chapter 300, "Rules of Practice and Procedure Relating to Burial Sites and Human Remains".

The Monitoring and Mitigation Plan which is being prepared at this time with the assistance of Ms. Martha Yent, of State Parks, Archeological Interpretation Division, Ms. Nancy McMahan, Kauai State Archeology, and Ms. LaFrance Kapaka-Arboleda of OHA Burial Council. We will contact both individuals, Mr. Edward Halealoha Ayua, Esq., and Kai Markell, Esq. Of the State Historic Preservation Division Burial Sites Program for further coordination.

It is our understanding that the final monitoring plan will be subject to approval by the Department of Land and Natural Resources and the Kauai Burial Council. If there are other individuals, agencies or organizations which must review and approve the final mitigation plan, please contact me, Sara Edi Grimes, 303-571-5787 or email at sara@mdgdenver.com or Doug Haigh, Kauai County Department of Public Works at 808-241-6650, and we will do so.

Take care, I remain,

A handwritten signature in black ink that reads "Sara Edi Grimes". The signature is written in a cursive, slightly slanted style.

Sara Edi Grimes

DJW 1-1
(8/86)

COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
MEMORANDUM

TO: Doug Haigh, Building Superintendent
FROM: Chief, Division of Wastewater Management
DATE: March 9, 2001
SUBJECT: Draft Environmental Assessment, Lydgate Park

Thank you for providing us the opportunity to review the subject E.A. The Wastewater Management Division has no comments to provide at this time.

If you have any questions, please contact me at ext. 610. Thank you.


MEL MATSUMURA



May 26, 2001

Mr. Mel Matsumura
Chief, Division of Wastewater Management
County of Kauai
Department of Public Works
4444 Rice Street
Lihue, Kauai, HI 96766

Dear Mr. Matsumura,

We would like to take this opportunity to thank you for your review of the Draft Environmental Assessment for the Lydgate Park Bike Path.

Even though you have no comments at this time, feel free to contact me, Sara Edi Grimes at 303-571-5787 or email me at sara@mdgdenver.com or Dough Haigh at 241-6650 if you have any questions.

Take care, I remain,

A handwritten signature in black ink that reads "Sara Edi Grimes". The signature is written in a cursive, somewhat stylized script.

Sara Edi Grimes

Sara Edl Grimes

From: NANMCMAHON@aol.com
Sent: Thursday, March 22, 2001 12:03 PM
To: sara@mcgdenver.com
Subject: Re: Lydgate Park Historical/Archeological Issues

Only comment to add is that I did speak to Ross Cordy my boss about the training of Hawaiian cultural monitors and we could work something out here with an oversight archaeologist.

3/23/2001



May 26, 2001

Ms. Nancy McMahon
Archeologist
Kauai County
5532 Tapa Street
Koloa, Kauai, HI 96756

Dear Nancy,

I would like to take this opportunity to thank you for all the time you have dedicated to helping us with the design of Lydgate Park Bike Path. Especially your review of the Draft Environmental Assessment.

It is very exciting to see a community so behind a project, and it will be wonderful to see LaFrance's student monitoring program go from an idea into a situation where the at-risk kids are educated about the heritage of Kauai and actually participate.

I appreciate your effort and time on behalf of this project. It will make this the best it could possibly be.

Take care, I remain,

A handwritten signature in black ink, appearing to read "Sara Edi Grimes".

Sara Edi Grimes

COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
4444 RICE STREET
LIIHUE, KAUAI, HI 96766

MEMORANDUM

TO: Dough Haigh

FROM: Ken Kitabayashi, Chief of Engineering *KK*

DATE: March 14, 2001

SUBJECT: DRAFT Environmental Assessment for Lydgate Park Bike &
Pedestrian Trail
PW 3.056

We reviewed the subject draft environmental assessment. We offer the following comments on the bike and pedestrian trail:

A. Bike and Pedestrian Trail

1. Page 22, item 15, Floodplains: mentions that the comfort station will be built out of the flood plain but does not mention the maintenance building. We believe the maintenance building is susceptible to flooding and needs to comply with the County's Flood Plain Management Ordinance for building in flood prone areas.
2. There may be problems associated with the sharing of a 10 feet wide bike path by pedestrians and bicycles. The problem could become more acute especially with high volumes of bicyclist and pedestrians since there are not enough width to develop separate paths for the bikers and walkers. We believe there should be security lighting of the pedestrian path.
3. The pedestrian path needs to comply with American Disability Act.

Thank you for this opportunity to review the subject draft environmental assessment.

wk



May 26, 2001

Mr. Ken Kitabayashi
Chief of Engineering
County of Kauai
Department of Public Works
4444 Rice Street
Lihue, Kauai HI 96766

Dear Mr. Kitabayashi,

Thank you very much for taking the time to review the Draft Environmental Assessment prepared for the Lydgate Park Bike Path. Upon review of your comment letter, we would like to take this opportunity to respond to the issues and concerns addressed in your comment letter.

BIKE AND PEDESTRIAN TRAIL

ITEM 1 – BUILDING IN THE FLOODPLAIN

All structures built as a part of the Lydgate Park Bike Path will comply with the County's Flood Plain Management Ordinance.

ITEM 2 – TRAIL SAFETY

The current AASHTO (American Association of State Highway Transportation Organizations) recommendations for bike paths is 12' wide and it would be our preference if we could build this trail that width, however, when this TEA grant application was made, 10' wide was the standard. We share your concern for trail user safety, however, it has been our experience in designing, building and using trails for the last 17 years, that signage to instruct about trail courtesy and safety is helpful. The vast majority of bike paths in America are 8'-10'. Further, in ecological and culturally sensitive areas, such as is the case with this project, it is reasonable to build the lower AASHTO recommendation width trail.

As for the issue of lighting the trail, there are no plans at this time to light the trail, however conduit will be installed from the proposed comfort station to the bridge and overlook area for future electrical if the County desires this at some point in the future. There have been concerns from U.S. Fish and Wildlife if the trail is lighted that it will displace wildlife that uses the water edge at night.

ITEM 3 – ADA COMPLIANCE

We have met on site with Christina Pilkington, ADA Coordinator for the Office of the Mayor, County of Kauai, and Mr. Stan Yates, Program Specialist for the Disability and



Communication Access Board with the Department of Health to discuss all ADA (Americans with Disabilities Act) to share all issues and concerns about this issue. All areas and features of this project will be accessible.

Thank you for your time, and if you have further questions or need more clarification, feel free to contact me, Sara Edi Grimes at 303-571-5787 or email me at sara@mdgdenver.com or Doug Haigh at 241-6650.

Take care, I remain,

A handwritten signature in cursive script that reads "Sara Edi Grimes".

Sara Edi Grimes

OFFICE OF THE CHIEF OF POLICE
Kauai County Police Department
3060 Umi Street, Lihue, HI 96766
Phone: 241-6715 Fax: 241-6774



MEMORANDUM

TO: Mr. Doug Halg
Building Division, DPW

FR: Chief George Freitas

DATE: March 12, 2001

RE: Lydgate Park Bike Trail.

As I understand the material I have reviewed, the proposal would be to create a 2.4 mile bike trail running from the Wallua River south bound. My questions are directed toward issues of safety and emergency access. Will there be a passageway for patrol vehicles to provide routine patrol along this 2.4 mile trail? Since this project will encourage increased use in the area, a method of access to provide some means of proactive enforcement is necessary.


GEORGE FREITAS, Chief of Police



May 26, 2001

Chief George Freitas
Office of the Chief of Police
Kauai County Police Department
3060 UMI Street
Lihue, Kauai, HI 96766

Thank you very much for taking the time to review the Draft Environmental Assessment prepared for the Lydgate Park Bike Path. Upon review of your comment letter, we would like to take this opportunity to respond to the issues and concerns addressed in your comment letter.

EMERGENCY ACCESS

All entrances to the trail will have lock down removable bollards so the police, emergency, maintenance or other authorized agencies will have a key and entrance to the trail at any time.

All areas of the trail and park facilities will be accessible to emergency vehicles.

Thank you for your time, and if you have further questions or need more clarification, feel free to contact me, Sara Edi Grimes at 303-571-5787 or email me at sara@mdgdenver.com or Doug Haigh at 241-6650.

Take care, I remain,

A handwritten signature in black ink that reads "Sara Edi Grimes".

Sara Edi Grimes

DEPARTMENT OF WATER

County of Kauai

"Water has no Substitute - Conserve It!"

March 22, 2001

Mr. Doug Haigh
Department of Public Works
County of Kauai
Lihue, HI 96766

Dear Mr. Haigh:

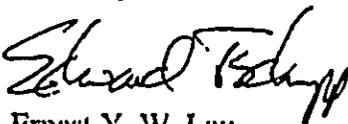
Subject: Draft Environmental Assessment for the Lydgate Park Bike Trail

In reply to MDG Inc.'s March 6, 2001 transmittal for the February 26, 2001 draft E.A.
the Department's comments are as follows:

We have no objections to this draft environmental assessment.

If you have any questions, please contact Keith Aoki of my staff at 245-5418.

Sincerely,


for Ernest Y. W. Lau
Manager & Chief Engineer

LAWI
D:\aoki\m\parks\lydgate bike trail

— 4398 Pua Loke Street, Lihue, Kauai, Hawaii or P. O. Box 1706, Lihue, HI 96766-5706 —
Phone No. (808) 245-5400 — Administration FAX No. (808) 246-8628 — Engineering/Fiscal/Shop FAX No. (808) 245-5813

03/29/01 THU 05:50 [TX/RX NO 9813]



May 26, 2001

Mr. Ernest Y. W. Lau
Manager & Chief Engineer
Department of Water
County of Kauai
4398 Pua Loke Street
Lihue, Kauai, HI 96766-5706

Dear Mr. Lau,

We would like to take this opportunity to thank you for your review of the Draft Environmental Assessment for the Lydgate Park Bike Path.

Even though you have no comments at this time, feel free to contact me, Sara Edi Grimes at 303-571-5787 or email me at sara@mdgdenver.com or Dough Haigh at 241-6650 if you have any questions.

Take care, I remain,

A handwritten signature in black ink, appearing to read "Sara Edi Grimes". The signature is written in a cursive, flowing style.

Sara Edi Grimes