HERBERT T. MATAYOSHI
MAYOR

Office of the Mayor

November 29, 1982

Environmental Quality Commission
550 Halekauwila Street, Room 301
Honolulu, Hawaii 96813

Subject: Environmental Impact Statement
Honaunau Boat Launching Ramp - South Kona
Tax Map Key 8-4-13:14

We have reviewed the subject document and find that it adequately addresses the environmental concerns that the project's implementation would incur; we therefore accept the statements and findings.

HERBERT T. MATAYOSHI
MAYOR

Enclosure - EIS (2)

cc: Department of Parks & Recreation w/enc.
Planning Department w/enc.
Okahara, Shigeoka & Associates

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ENVIRONMENTAL IMPACT STATEMENT

HONAUNAU BOAT LAUNCHING RAMP
HONAUNAU, SOUTH KONA
ISLAND OF HAWAII
TMK: 8-4-13:14

Okahara / Shigeoka & Associates
ENGINEERING AND PLANNING CONSULTANTS

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REVISED
ENVIRONMENTAL IMPACT STATEMENT

HONAUNAU BOAT LAUNCHING RAMP

HONAUNAU, SOUTH KONA

ISLAND OF HAWAII

TMK: 8-4-13:14

PREPARED FOR:

COUNTY OF HAWAII

DEPARTMENT OF PARKS AND RECREATION

BY:

OKAHARA, SHIGEOKA & ASSOCIATES, INC.

200 KOHOLA STREET

HILO, HAWAII

NOVEMBER 22, 1982

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3) Letter from University of Hawaii at Manoa (Environmental Center) (October 22, 1982)

4) Letter from State Department of Health (October 22, 1982)

5) Letter from State DLNR (October 19,1982)

6) Letter from US Fish and Wildlite (October 18, 1982)

7) Letter from UH - Manoa (WRRC) (October 15, 1982)

8) Letter from County Research & Development (October 15,1982)

9) Letter from USDA SCS (October 14, 1982)

10) Letter from US Army Corps of Engineers (October 14, 1982)

11) Letter from US Air Force (October 13, 1982)

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SUMMARY

I. PROJECT DESCRIPTION

The County of Hawaii, Department of Parks and Recreation is proposing the construction of a single-lane boat launching ramp on the north side of Kapuwai Cove at the head of Honaunau Bay in the district of South Kona, Island of Hawaii. The proposed ramp will replace an existing but deteriorating boat ramp, and will be oriented from north-north-east to south abutting the existing ramp. Overall measurements of the proposed ramp are 153-feet long by 15-feet wide, covering an area of 2,295 square feet.

II. DESCRIPTION OF THE ENVIRONMENT

The construction site occupies a pahoehoe lava platform lying between -1.5 and +4.0 feet in elevation relative to the mean lower low water level (MLLW). To the west of the site is Honaunau Bay and several private residences, an alternative school known as HALE O' HO'OPONOPONO, and recreational buildings lie to the east across Kapuwai Cove. Pu'uhonua O Honaunau National Historical Park occupies lands abutting Kapuwai Cove to the south.

The climate of the Honaunau area is generally warm and arid. Annual rainfall averages approximately 40-inches, and the mean annual temperature is 75°F.

The tidal range at Honaunau Bay is small, and there is very little wave activity at the existing and proposed ramp sites inside Kapuwai Cove.

Hawaii Public Health Regulations designates the waters within Honaunau Bay as "Class AA." Analysis of water samples from Kapuwai Cove indicate potential pollution problems within the Cove.

A study of the marine resources of the proposed site within Kapuwai Cove described limited marine habitat of coral growth and a low density of small biota. In contrast, Honaunau Bay supports a high diversity and abundance of marine biota.

Terrestrial vegetation is generally sparse on the exposed coastal lava shelf surrounding Honaunau Bay and the project site. Both common and endangered species of terrestrial vertebrates, inhabit the Honaunau area.

The outstanding socio-economic features of the project area are Pu'uhonua O Honaunau Historical Park and the shoreline recreational activities of swimming, snorkeling, picnicking and boat launching.

III. PROBABLE IMPACT OF THE PROPOSED ACTION ON THE ENVIRONMENT AND MITIGATION MEASURES PROPOSED

The relatively small size of the project area and the fact that finish elevation vary by one-two feet from existing elevations should serve to minimize possible adverse impacts of the structure on long-term natural coastal processes.

It is unlikely that at the proposed scale of submarine rock removal, construction related sedimentation or turbidity will pose severe adverse impacts on the waters beyond Kapuwai Cove. Some minor redistribution of

fresh water discharge into Kapuwai Cove may result from lava rock excavation and concrete capping of the ramp toe area.

Swimming and other recreational uses of Kapuwai Cove will be temporarily prohibited during the construction of the submarine portion of the ramp for the protection of public health and safety.

A substantial increase in boater use is not anticipated to result from construction of the new (replacement) boat ramp. Existing difficulties of navigating the channel into Honaunau Bay will not be improved by the proposed project and will continue to limit use of the new facility to small boats (under 20 feet in length) and experienced users.

During the construction phase, marine plants occupying the substrate to be covered, as well as fish and other organisms will be destroyed. Because of the low density of marine organisms withih the Cove, the actual numbers affected should be relatively small. A marine biologist will be retained by the applicant to monitor water quality and biological impact during the submarine excavation phase.

Neither endemic or endangered plant species, nor endemic or endangered Hawaiian vertebrate species will be significantly affected by boat ramp construction.

Archaeologist Paul H. Rosendahl found no significant archaeological features of potential research, interpretive or preservation value within the project area. The identification of the five small prehistoric cup features served as adequate recovery of data, and no further work is believed necessary or justified.

The proposed project should have little effect on the local, regional or island economy. There would probably be no major environmental impacts as a result of the construction of the boat launching ramp.

IV. ALTERNATIVE TO THE PROPOSED ACTION

A no-action alternative would result in continued boater use of the deteriorating ramp at Honaunau until such time as it is no longer functional.

V. THE RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES OF THE ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

The project will facilitate the continuation of the long-term use of the area as a boat launching site. Ramp construction will involve some short-term adverse impacts from excavation and other activities.

VI. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

Land, County funds, human labor and construction materials committed to this projct are not retrievable. Marine and terrestrial organisms and five archaeological features occupying the proposed boat launch ramp site will be irretrievably lost. Modifications to local topography will also be irreversible.

I. PROJECT DESCRIPTION

A. Project Location:

The County of Hawaii, Department of Parks and Recreation is proposing the construction of a boat launching ramp on the north side of Kapuwai Cove at the head of Honaunau Bay (parcel TMK: 8-4-13:14) in the District of South Kona, Island of Hawaii. The subject parcel is owned by the Bishop Estate and leased to the County of Hawaii. The site is located immediately to the north of Pu'uhonua O Honaunau National Historical Park (formerly City of Refuge). The proposed development is to be located within the County of Hawaii Special Management Area and the State Conservation District (Figure 1).

B. Boat Ramp Description

The proposed single-lane boat launching ramp is designed to accommodate trailer boats up to a length of 20 feet, which is the size limit of boats now using the existing but deteriorating boat ramp in Kapuwai Cove. The new ramp is designed as a replacement for the existing structure.

The proposed ramp will be oriented from north-north-east to south abutting the existing ramp at its intersection with the County roadway located approximately five (5) feet above mean lower low water (MLLW) as shown in Figure 2. The ramp will be overall 153 feet long by 15 feet wide, covering an area of 2, 295 square feet. The ramp will extend to a depth of 1.5 feet below MLLW.

LOCATION MAP

Figure I

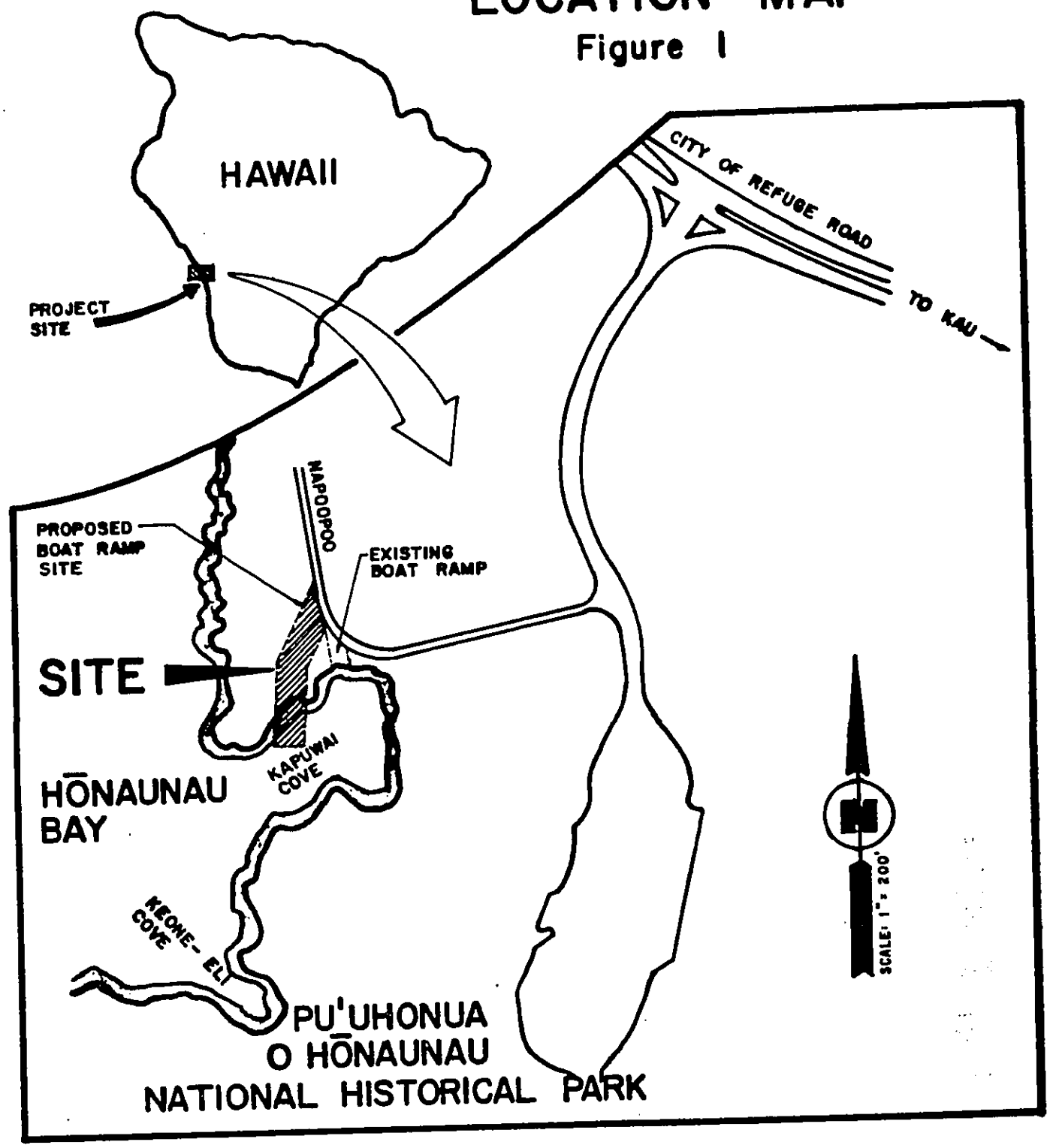
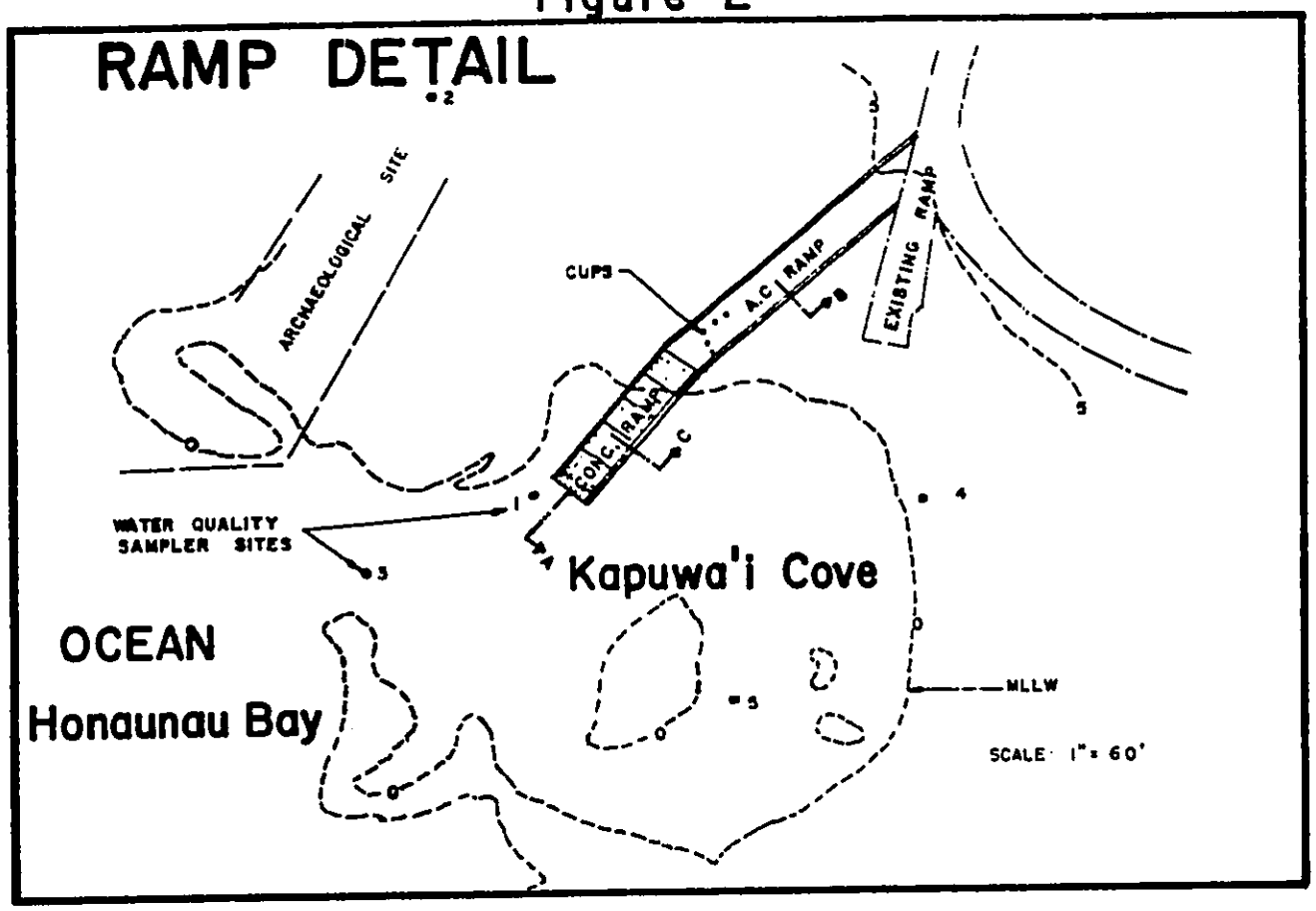
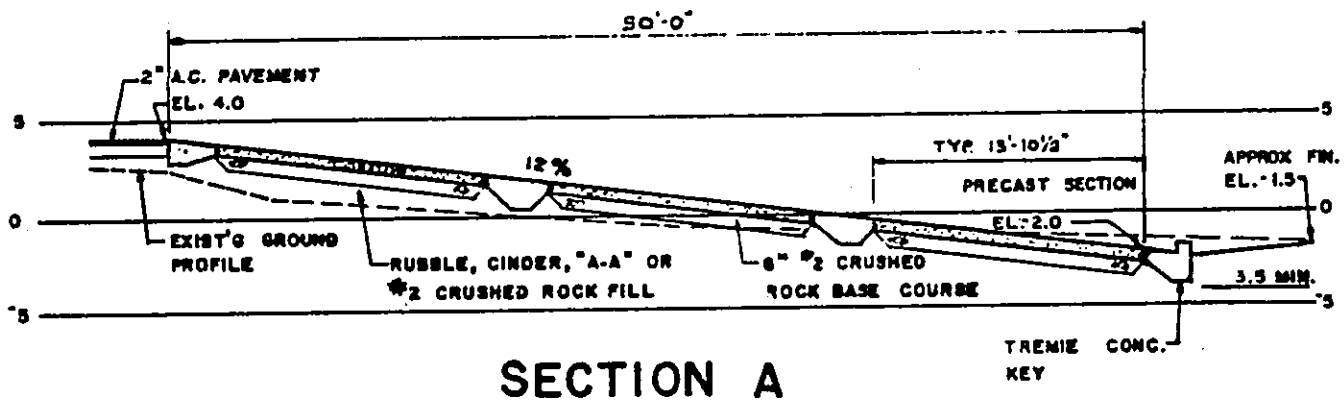
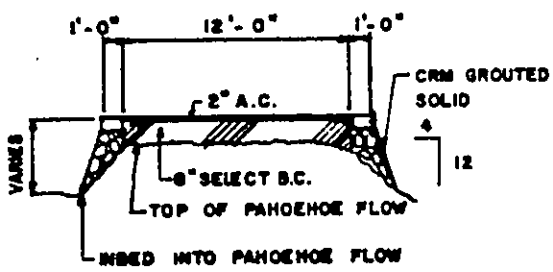


Figure 2

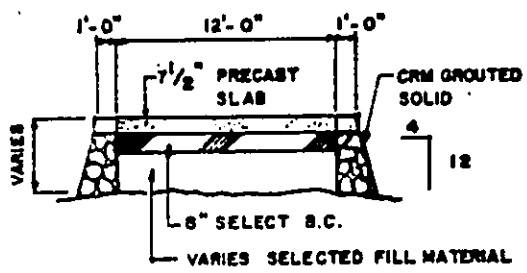




SECTION A



SECTION B



SECTION C

The ramp structure will be composed of two main sections:

1. A 12-foot wide asphalt concrete approach lane approximately 100 feet in length will provide access from the existing roadway across the open pahoehoe lava shelf.

2. Seaward of this access will lie a 53 foot long ramp descending into Kapuwai Cove and comprised of five 10 x 12 foot precast concrete slabs and an anchor toe.

The entire ramp structure will be set into a base of rubble and crushed rock fill material on top of the pahoehoe lava substrate. The ramp side slopes will be constructed of solid grouted a'a lava rock material (Figure 2).

For approximately four-fifths of its entire length, the access lane and ramp (with fill material) will be laid directly on top of the existing lava substrate and therefore no grading will be required for this segment of the project. In construction of the terminal portion of the ramp and anchor toe, grading of the lava shelf will be required to achieve finished elevations of 0-2 feet below existing elevations. Approximately 10 cubic yards of material will be removed by excavation using pneumatic hammers and bulldozing. This excavated rock material together with an additional 70 cubic yards of imported crushed rock will be used as fill material under the entire ramp structure.

Apart from the topographic alterations discussed above at the ramp site, no other alterations are proposed either for Kapuwai Cove or the entrance channel into Honaunau Bay.

C. Background to the Proposal

According to the draft Statewide Boat Launching Facilities Master Plan (1971), Kona boating interests began a push for improved boat launching facilities in the district in the early 1970's. Formal petitions were sent to the State requesting the construction of ramps at Honaunau and Ho'okena Bays and improvements to the facilities at Kealakekua and Keauhou Bays.

The Master Plan indicated that the problems encountered by users of Honaunau boat ramp were related mainly to the hazardous shallow and rocky channel at the entrance to the bay from Kapuwai Cove. Boaters recommended clearing of rocks as well as some dredging to develop a wider and deeper channel. The Master Plan included a recommendation that the ramp at Honaunau Bay be retained for restricted use by boats up to 18-20 feet long and that an additional ramp be constructed at another location.

In 1981, Gray, Rhee and Associates, Inc., consulting engineers, conducted a site study for a boat launching ramp in South Kona. This study was commissioned by the Harbors Division, State Department of Transportation. The consultants evaluated seven sites between Kealakekua Bay and Ho'okena as possible site locations for a double lane boat launching ramp. The sites considered were Napo'opo'o Landing, Manini Beach, Kahauloa Bay, Ke'lei Beach, Honaunau Springboard area, Honaunau existing ramp and Ho'okena.

Gray, Rhee and Associates, Inc. reported that each site was studied for physical characteristics consisting of oceanography, marine biology, archaeology and land flora and fauna. In addition, public opinion was also solicited from such groups as Kona Mauka Trollers, Kona Iki Trollers, Kona Hawaiian Civic Club, Kona Conservation Group, National Park Service, State

Department of Land and Natural Resources, and other interested parties.

Gray, Rhee and Associates, Inc. concluded:

"The boaters' first choice for a ramp is in Honaunau Bay because the access road from the mauka area to Honaunau provides good access, and a ramp in Honaunau is the best from an oceanographic standpoint."

The consultants therefore recommended:

1) No further work to be done on the South Kona boat launching ramp project at this time.

2) The subject of a location for a standard double-lane ramp in South Kona be further addressed by the State Boating Task Force which is responsible for reviewing the boating needs of the entire State.

3) The community pursue the possibility of a ramp on Bishop Estate property between Napo'opo'o and Honaunau. The State could reopen the project if a site were made available.

4) The County of Hawaii be encouraged to make minimal improvements to the exsiting Honaunau ramp, or in lieu thereof, build a new small, single ramp in deeper water just seaward of the hazardous "S" curve at the entrance to the Bay, off the existing ramp at Honaunau Bay. The new ramp could be in accordance with discussions that were held between the National Park Service and the local fishermen."

The present proposal represents a modified adoption of recommendation No. 4, in that a new single land ramp is proposed for construction adjacent to the existing deteriorating Honaunau ramp. The proposed ramp, however, will still enter into Kapuwai Cove, but in deeper water, and require that boats continue to negotiate the channel from Kapuwai into Honaunau Bay. <u>No modifications</u> are proposed for the existing channel.

D. <u>Historical Significance of the Project Location</u>

The historical significance of the area to be occupied by the boat ramp cannot be adequately evaluated without reference to adjacent parcels and to some extent, that of the region as a whole. Of chief importance is the way in which aboriginal Hawaiians used the land and sea resources.

Early Hawaiian ruling chiefs on the Kona coast selected Honaunau as a favored residence. Honaunau Bay was also a heavily used fishing site. Today relics of fishing use of the area exists in the form of man-made concavities in the pahoehoe bedrock submerged below water or at the shoreline. These features were made with traditional tools by prehistoric Hawaiians for use as mortars and cups for pounding seaweed, salt and chum (for fish bait); and sockets for holding religious images and sticks defining the boundaries of forbidden areas (Stokes, 1957: 199-207).

Apple and MacDonald (1966) explained that as a consequence of subsidence (approximately 1 foot/100 years) of the land relative to sea level, many of these cultural archaeological features are now submerged, obliterated or are threatened with such fate.

Perhaps more important than the economic uses at Honaunau Bay is the fact that the area around the Bay was of major cultural significance in prehistoric Hawaii. Apple and MacDonald (1966) have enumerated the many cultural practices from which Honaunau derives its uniqueness in the aboriginal culture and history. The establishment of a Pu'uhonua O Honaunau National Park is an attempt by contemporary society to interpret and illustrate the meaning of the place in the traditional Hawaiian context.

II. DESCRIPTION OF THE ENVIRONMENT

A. General Site Conditions and Surrounding Land Uses

The proposed project area lies in Kapuwai Cove at the head of Honaunau Bay. The boat ramp proposed for construction will replace an older ramp immediately to the east. The construction site occupies a pahoehoe lava platform lying between -1.5 and +4.0 feet in elevation relative to the mean lower low water level (MLLW). To the west of the project site is the open water of Honaunau Bay, an alternative school (Hale O' HO'OPONUPONO), private residences, and recreational buildings, are located to the east behind Kapuwai Cove. Pu'uhonua O Honaunau National Historical Park lies to the south, across Kapuwai Cove.

The climate of the Honaunau area is generally warm and arid. Annual rainfall averages approximately 40-inches (distinct summer maximum) and the mean annual temperature is 75° F (State of Hawaii, 1970). The lands surrounding Honaunau Bay are composed of youthful, largely unweathered basaltic lava flows derived from prehistoric summit and flank eruptions of Mauna Loa. No well developed soils are present in the area (U.S. Soil Conservation Service, 1973).

B. The Marine Environment

The comprehensive study: Ecology of Honaunau Bay (Doty, 1969) includes a detailed survey of general Bay environments and marine biota. More recently Ludwig, et al. (1980) have conducted a census of reef-fish communities in the waters of Honaunau Bay and Madden (1981) has undertaken a more general biological reconnaissance in conjunction with the Gray, Rhee

and Associates (1981) survey of South Kona boat launching sites.

1. Tides

The tidal range at Honaunau Bay is small with the mean being 2.1 feet between MLLW and MHHW. This range, however, is sufficient to expose much of inner Kapuwai Cove during low tide.

2. Currents

Because of the shallow protected conditions within Kapuwai Cove there is very little wave activity at the existing and proposed ramp sites. However, because of exposed rock outcrops and the narrow passage from Kapuwai Cove into Honaunau Bay hazardous conditions can prevail in this area, particularly during high wave conditions.

3. Water Quality

Chapter 37-A, Hawaii Public Health Regulations designates the waters within Honaunau Bay as "Class AA." Research, propagation of marine life, conservation of coral reefs, wilderness areas and aesthetic enjoyment are to be protected in these waters. It is the objective of this class of waters that they remain in as nearly their natural, pristine state as possible with an absolute minimum of pollution from any source.

Water samples taken from Honaunau Bay in 1969 indicated that the entire bay met standards for Class AA water except at the southern shore of Keone-ell Cove where Class B water standards were obtained. In June, 1971, the National Park installed its own sewage treatment plant. By 1972, the quality of water in Keone-ell Cove had improved to Class A standards (Neighbor Island Consultants, 1972). In addition,

water near the shore of Kapuwai Cove was found to be brackish (Doty, 1969). In the present survey several fresh water seeps were noted at low tide along the eastern shore of Kapuwai Cove.

As part of the present study, five water samples were collected for analysis in and around Kapuwai Cove during low tide conditions on the morning of 24 May 1982. The location of sampling points is shown in Figure 2. Table 1 shows total coliform and fecal coliform bacteria counts, as well as phosphorus and nitrogen concentrations for the samples.

Three of samples collected (No. 1, 3, and 4) did not meet the standards of Class AA waters for total coliform (limit of 230/100 ml.) established under Chapter 37-A of the Hawaii Public Health Regulations. The fecal coliform bacteria count was also extremely high at sample point 4. While nitrogen was not detected, none of the samples met Class B standards for total phosphorus (limit 0.03 mg/l). The results for phosphorus could reflect the brackish water conditions at the site. Nevertheless, this single sampling period may not be indicative of general (or average) conditions as bacterial and chemical concentrations can vary considerably as a function of season, tides and fresh water discharge.

TABLE 1

Chemical and bacteriological analysis of surface water samples collected at Kapuwa'i Cove, Honaunau, South Kona Hawaii, 24, May 1982

Site [1]	Description	Total Coliform (per 100 ml H_2O)	Fecal Coliform (per 100 ml H_2O)	Total Phosphorus (mg/l.)	Total Nitrogen (mg/l.)
1	Near 'toe' of proposed ramp, Water depth 1.5 ft.	490	40	0.11	No detection
2	In Honaunau Bay proper adjacent to Kapuwa'i Cove, Water depth 4 ft.	10	5	0.05	" "
3	In channel between Honaunau Bay proper and Kapuwa'i Cove, Water depth 3 ft.	460	190	0.10	" "
4	"Beach area" of Kapuwa'i Cove, Water depth 6-inches.	<3,000	2,670	0.11	" "
5	Rocky area at south side of Kapuwa'i Cove, Water depth 1.5 ft.	95	30	0.12	" "

1 For exact site locations see Figure 2.

These results do indicate, however, potential pollution problems within Kapuwai Cove, which is a popular swimming and shoreline recreational area. Possible existing pollution sources in the area may be from cesspools serving residences adjacent to the Cove. At present Hale O Ho'oponopono School occupies a building immediately adjacent to Kapuwai Cove. The daytime student/staff population (33-42 range) exceeds the total of other permanent residents living in the area. This possible pollution source should, however, be eliminated during 1985 when a recently installed (summer 1982) sewer line will connect the National Park sewage treatment plant with new restrooms to be constructed at the school. (See appended letter from Fred Cachola, Director, Kamehameha Schools/ Bernice Pauahi Bishop Estate)

4. Marine Biota

Doty (1969), Ludwig, et al. (1980) and Madden (1981) provide detailed reports of the marine flora and fauna of Honaunau Bay. In conjunction with the present study Dr. Leon E. Hallacher (marine biologist) undertook a survey of the marine resources of the proposed boat launching site and adjacent waters on 3 April 1982. A copy of Dr. Hallacher's report is included as Appendix A of this EIS.

Dr. Hallacher's survey of the specific areas to be covered by the proposed boat ramp revealed the presence of 8 algae, 4 echinoderm species, 6 mollusk species, 2 crustacean species and 7 species of fish (Table 2). Two additional marine pulmonates species were encountered in a resurvey of Kapuwai Cove area on November 5, 1982. These species were Littosina piratado and Melampus castaneus. Dr. Hallacher reported that the proposed site does not appear to harbor any species not found in the adjacent shoreline areas. Kapuwai Cove was generally described as of "desolate appearance" devoid of coral growth and supporting a low density of small biota with the exception of a few large sea cucumber (Holothuria pervicax). Few fish were encountered in the Cove as might be expected for such a shallow inlet subjected to heavy use by recreational swimmers and waders.

Honannau Bay, adjacent to Kapuwai Cove, stands in stark contrast with respect to diversity and abundance of marine organisms. Dramatic coral growth covers much of the inner Bay at depths between 12 and 70 ft. Honaunau Bay supports a high diversity of marine biota by Hawaiian standards. Ludwig, et al. (1980) have recorded 126 fish species associated with the reef environment and they have further noted that: "Honaunau Bay appears to be recovering from previously documented human exploitation. One unnamed species (fish), two species described during the course of the study, one new Hawaiian record and several very rare Hawaiian species were found to be residing in Honaunau Bay.

TABLE 2
Biota of substrate to be
covered by ramp
Hōnaunau, South Kona

Flora	
Cyanophyta	
Lyngbya majuscula	blue-green algae
Chlorophyta	
Ulva fasciata	sea lettuce
Phaeophyta	
Choospora implexa	brown seaweed
Rhodophyta	
Coelothrix irregularis	red seaweed
Jania sp.	coralline algae, branching form
Hydrolithon reinboldii	coralline algae, encrusting form
Porolithon onkodes	" "
Sporolithon erythraeum	" "
Fauna	
Echinodermata	
Echinometra mathaei	rock boring urchin
Tripneustes gratilla	collector urchin
Ophiocoma pica	brittle star
Holothuria pervicax	brown-banded sea cucumber
Mollusca	
Serpulorbis variabilis	tube-shell snail
Littorina sp.	periwinkle
Nerita sp.	pipipi
Conus sp.	cone shell
Isognomon californicum	bivalve
Isognomon perna	bibalve
Arthropoda (Crustacea)	
Carpilius sp.	small rock crab
Grapsus tenuicrustatus	a'ama crab
Chordata (Osteichthys)	
Abudefduf abdominalis	Sergeant Major
Plectroglyphidodon johnstonianus	Small Damsel Fish
Stegastes fasciolatus	Formerly Jenkin's Damsel Fish (*Pomacentrus jenkinsi*)
Labridae - juvenile	Wrasse
Canthigaster jactator	White-spotted pufferfish
Acanthurus triostegus sandvicensis	Manini
Cirripectus variolosus	Common blenny

C. Coastal Flora and Vegetation

The terrestrial vegetation currently established in the vicinity of Honaunau Bay and around the project site at Kapuwai Cove consists largely of plant species introduced to Hawaii in the Polynesian or later historial period. Bryan, et al. (1957), Doty (1960) and Yen (1971) have described the vegetation at Honaunau and speculated on probable changes in local vegetation since European contract. In the Pre-European period herbaceous cover of the extensive lava land surrounding Honaunau Bay would have been largely restricted to native pili grass (Heteropogon contortus) with such shoreline tree species as coconut (Cocos nucifera) hala (Pandanus sp.) kou kou (Cordia subcordata) and noni (Norinda citrifolia) (Bryan, et al., 1957). Today the vegetation surrounding Honaunau Bay is largely scrub-forest dominated by such exotic species as ekoa (Leucaena leucocephala) and opiuma (Pithecellobium dulce). The shrubs include lantana (Lantana, camara), Christmas berry (Schinus, terebinthifolius) and the indigenous iiima (Sida, sp.) along with many introduced herbaceous species (Doty, 1969).

On the exposed coastal lava shelf surrounding Honaunau Bay (including the project site at Kapuwai Cove), terrestrial vegetation is generally sparse. Tuffs of the indigenous sedge Fimbristylis pycnocephala are present, growing in cracks between slabs of barren pahoehoe lava. Further back from the water's edge, Bermuda grass (Cynodon Dactylon) becomes dominant. A checklist of plant species found growing on or adjacent to the lava shelf at Kapuwai Cove during April-May 1982, is presented in Table 3. A total of 15 species were recorded from the general area, of which 10 (66.6%) are exotic; four (26.6%) are indigenous, and one specie (6.6%) endemic to Hawaii. None of these taxa are considered to be endangered, threatened or

candidate species (Federal Register, 1980). Inland from the lava shelf surrounding Kapuwai Cove, are residential houses fronting the Cove. Here, vegetation includes planted fruit and shade trees and other ornamentals. The most common species include: coconut (*cocos nucifera*), monkey pod (*Samanea saman*), plumeria (*Plumeria sp.*), papaya (*Carica papaya*), bougainvellea(*Boungainvillea sp.*) and the night blooming cereus (*Hylocereus undatus*).

TABLE 3

Checklist of Vascular Plants from the Near Shore Environments of Kapuwa'i Cove, Hōnaunau Bay, South Kona

Botanical Name	Common Name	Status[1]
Monocotyledonae		
CYPERACEAE		
Fimbristylis pycnocephala	coastal sedge	I
GRAMINEAE		
Cynodon Dactylon	bermuda grass	X
Eleusine indica	goosegrass	X
Panicum maximum	guinea grass	X
JUNCACEAE		
Juncus tenuis	rush	X
Dicotyledonae		
ANACARDIACEAE		
Schinus terebinthifolius	Christmas berry	X
CAPPARACEAE		
Gynadropsis gynandra	african spider flower	X
CRASSULACEAE		
Kalanchoe pinnata	air plant	X
COMPOSITAE		
Bidens pilosa	geggars tick	X
LEGUMINOSAE		
Haematoxylum campechianum	logwood	X
NYCTAGINACEAE		
Boerhavia diffusa	alena	1
PASSIFLORACEAE		
Passiflora foetida	poha poha	X
PORTULACAEAE		
Portulaca cyanosperma	'ihi	E
STERCULIACEAE		E
Waltheria americana	'uhaloa	I
		I

[1]Status: I = indigenous: E = endemic: X = exotic

D. Terrestrial Vertebrates

1. Reptiles

At least two species of introduced geckos, the morning gecko (*Lepidodactylus lugubris*) and house becko (*Hemidactylus frenatus*) occur in the vicinity of Kapuwai Cove. Their habitats are generally restricted to residential structures and vegetated areas. Such species are unlikely to utilize the barren lava shelf which forms the proposed boat ramp site.

2. Birds

A variety of indigenous shore birds exploit marine food resources on the exposed lava shelf surrounding Honaunau Bay. Species encountered seasonally in the area include the golden pluver (*Pluvialis dominica fulva*), wandering tattler (*Heteroscelus incanum*) and the ruddy turnstone (*Arenaria interpres*). Common land birds in the Honaunau Bay area include the cardinal (*Richmondena cardinalis*), Japanese white-eye (*Zosterops japocina japonica*), common Mynah (*Acridotheres tristis tristis*) and the barred dove (*Geopelia striata striata*), all of which are exotic species. The native Hawaiian short-eared owl or pueo (*Asio flammeus sandwichensis*) also occurs in the Honaunau area. This species is designated as endangered by the State of Hawaii.

Three federally designated endangered species of native Hawaiian birds have in the past been recorded in the Honaunau area: the Hawaiian hawk or I'o (*Buteo solitarius*), the Hawaiian crow or "Alala (*Corvus tropicus*) and the Hawaiian duck or Koloa (*Anas wyrilliana*). Banko

(1979) in a review of the geographic distribution of published I'o sightings over the past two centuries has noted four historical records for the Kealakekua-Honaunau area. At present I'o are still frequently seen soaring over both makai and mauka areas of South Kona including Honaunau Bay. The 'Alala is now considered to be one of the most critically endangered of Hawaii's land bird species with a total wild population (restricted to North and South Kona) estimated at no more than 150 birds in 1981 (Morin, 1982). Banko and Banko (1980), in reviewing the historical records of 'Alala distribution have tabulated seven past sightings in the Kealakekua-Honaunau area. These researches have also noted that at the turn of the present century, 'Alala were still locally abundant in mauka areas of Kona, between 1700-3000 foot elevations. By the 1970's, birds were much reduced in range and density and were inhabiting higher elevations between 2400 and 5700 feet (Banko and Banko, 1980). There are no recent records of 'Alala sightings in the coastal areas around Honaunau Bay.

The Koloa, an endangered native duck is occasionally seen at brackish water ponds in the Honaunau area (J. Shimoda, pers. comm. 1983).

3. Mammals

Hawaii's only native land mammal, the endemic Hawaiian hoary bat (*Lasiurus cinereus semotus*), is widely distributed on the island of Hawaii and may occur in the environs of Honaunau Bay. It is a federally designated endangered species. Exotic mammals established in the area include the mongoose (*Herpesta auropunctatus*), black rat (*Rattus rattus*) and house mouse (*Mus musculus*). Domestic cats and dogs are also present.

E. Archaeological Features Present at the Project Site

An archaeological survey of the project site was conducted by Paul H. Rosendahl, Ph.D., Inc., Consulting Archaeologist on 30 April 1982. Dr. Rosendahl assisted by field archaeologist Ala Walker conducted a combined walk-through and wade swim-through inspection of the proposed construction site and its immediate vicinity. Dr. Rosendahl's findings and recommendations appear as Appendix 3.

The archaeological survey identified five small cups or mortars ranging from approximately 9-20 cm in diameter pecked 5-15 cm deep into the pahoehoe bedrock a few meters from the edge of the water on the north side of Kapuwai Cove. The location of these cups are shown in Figure 2. Figure 3a illustrates one of these cups, while Figure 3b is an example of a larger cup found in the vicinity, but not within the construction area. Detailed dimensions of the five cups within the project area are presented in Figure 4.

FIGURE 3

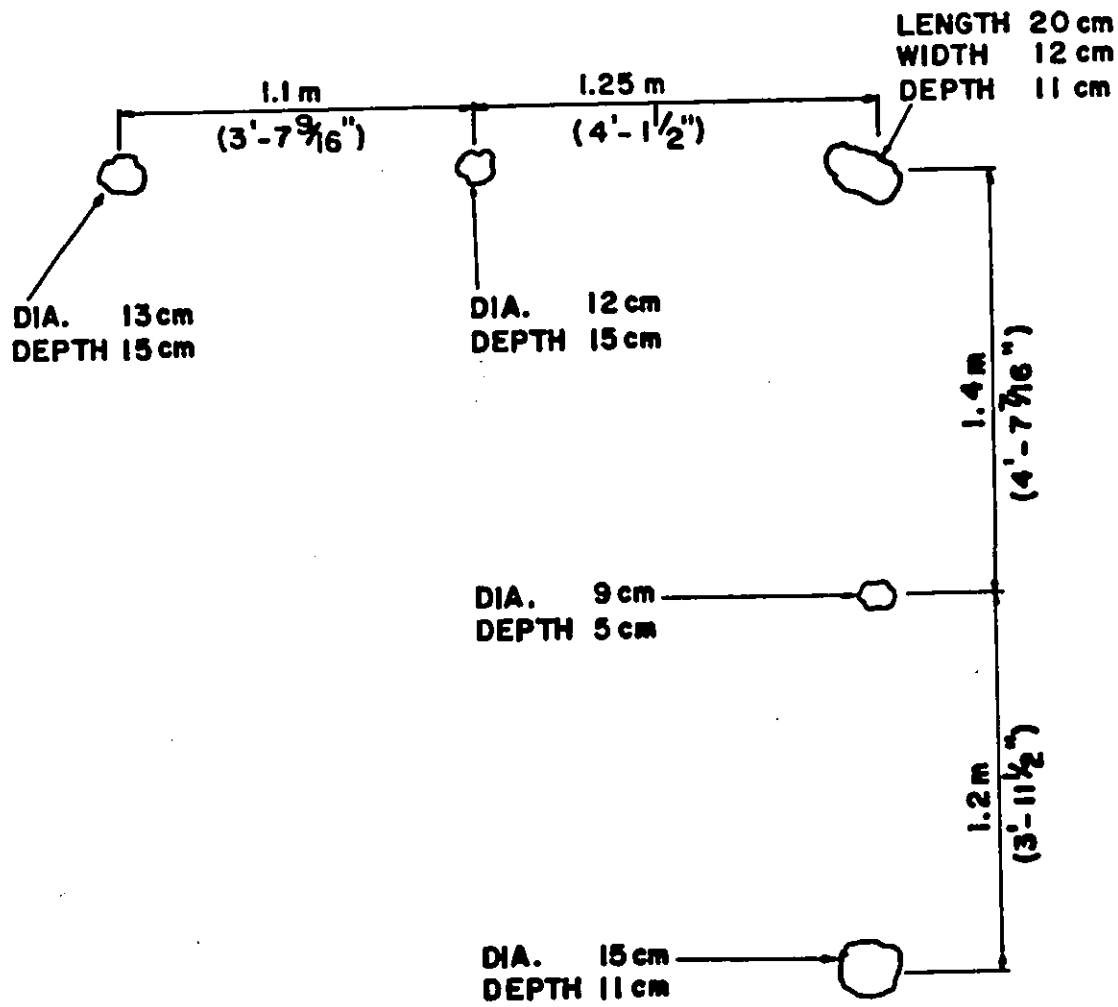
EXAMPLES OF PREHISTORIC HAWAIIAN BAIT CUPS/SOCKETS ON THE PAHOEHOE LAVA SHELF ADJACENT TO KAPUWA'I COVE.

(a) ONE OF THE CUPS/SOCKETS WITHIN THE PROJECT SITE THAT WOULD BE DESTROYED BY RAMP DEVELOPMENT(DIA. 5 INCHES).

(b) EXAMPLES OF LARGER CUPS FOUND IN THE SURROUNDING AREA BEYOND THE LIMITS OF THE PROJECT SITE.

DIMENSION OF CUPS/POST SOCKETS WITHIN PROPOSED RAMP AREA KAPUWA'I COVE, HONAUNAU, SOUTH KONA*

Figure 4



* LOCATION OF THESE CUPS RELATIVE TO RAMP LOCATION IS SHOWN IN FIGURE 2.

F. Existing Socio-Economic Conditions

The outstanding socio-economic features of the project area are Pu'uhonua O Honaunau National Historical Park and the associated shoreline recreational activities of swimming, boating, picnicking and fishing. A small number (5) of private residential homes and one alternative school (Hale O Ho'oponopono) occupy other parcels adjacent to the National Park fronting on Kapuwai Cove.

Each year 300,000 to 450,000 local residents and off-island tourists visit the National Park (Table 4):

Table 4

PU'UHONUA O HONAUNAU NATIONAL HISTORICAL PARK

VISITOR COUNTS 1977-1982

1977	446,568
1978	491,985
1979	409,436
1980	372,212
1981	335,441
1982 (April)	116,472

The main interpretive themes presented in the park relate to the development of Polynesian civilization in Hawaii, traditional uses of land and sea resources, the rise of the Kamehameha dynasty, as well as the transformation of Hawaiian society in the post-European period (Apple and MacDonald, 1966). The Park thus fulfills an important social role in fostering increased understanding and appreciation for the traditional

history, culture and people of Polynesian Hawaii. The Park also generates jobs and tourist-related income for the South Kona region. Aside from the National Park Bookshop, there are no other commercial activities in the Honaunau Bay area.

The site of the proposed boat launching is a popular recreational area adjacent to the National Park (Figure 1). Swimming, snorkeling, picnicking and boat launching activities are associated with the area. On weekends 50-100 people per day may engage in recreational activities around Kapuwai Cove. Swimmers in Kapuwai Cove frequently number 40-60 at any given time on weekends and the Cove is particularly popular with children because of its shallow water and protection from heavy surge.

Approximately 50-75 power boat owners are regular users of the existing boat ramp at Kapuwai Cove. Depending on tides, weather and fishing conditions, 20 or more boats may utilize the launch ramp facility on any one day. Because of the lack of trailer parking many boaters have family members return home with vehicles and boat trailer until a prearranged pickup time (or as advised by ship to shore radio). In addition to power boats, a further 10-15 large paddling canoes are usually beached round the cove and used for recreational purposes within Honaunau Bay.

III. THE PROBABLE IMPACT OF THE PROPOSED ACTION ON THE ENVIRONMENT AND MITIGATION MEASURES PROPOSED

A. Impact on Surface and Underwater Topography

Alterations to existing surface and subsurface topography will occur as a result of ramp construction. The proposed 100 ft. long approach access and the upper 30 ft. of the sloping entry ramp would rise 1-2 feet above existing elevations on the Pahoehoe shelf adjacent to Kapuwai Cove. Approximately 70 cubic yards of rock rubble and #2 crushed rock base course would be imported to the site for fill. Lava rock walls 1-3 feet high will be constructed abutting both sides of the access lane and ramp to anchor the structures and confine fill material. Dark colored grout will be used in rock wall construction and dark pigments will be added during the casting of concrete ramp slabs in an effort to make the overall color of the structure blend with surrounding black lava. The objective is to make the launch ramp as visually unobtrusive as possible in consideration of sightlines from the National Park visitor paths, with the nearest path 125-150 feet from the proposed ramp site.

The seaward terminal portion of the boat ramp will lie from 0-1.15 ft. below MLLW. These structures will also lie about 1-2 ft. below existing elevations on the submarine portion of the pahoehoe lava ledge. In order to achieve construction elevations at the ramp terminus approximately 10 cubic yards of lava material will be removed by excavation using pneumatic hammers and scrapping (bulldozer). The relatively small size of the project area (approximately 2,295 sq. ft) and the fact that finish elevations vary by 1-3 feet from existing elevations should serve to minimize possible adverse impact of the structure on long-term natural

coastal processes, such as tide and current movement within Kapuwai Cove as well as the natural rates of erosion, deposition, and local subsidence.

B. Impact on Water Quality

Impact of the proposed construction on surrounding water quality can be divided into two categories: those associated with the construction phase and those resulting from the future recreational boating activities facilitated by the new launching ramp.

With respect to the construction phase, grading and excavation for the submarine portion of the ramp could be expected to cause a temporary increase in turbidity and sediment deposition within Kapuwai Cove and perhaps beyond the Bay area. Given the generally shallow conditions and narrow channel entrance into Kapuwai Cove, natural flushing of the Cove is relatively poor compared with Honaunau Bay proper (the water sample results in Table 1 may also be indicative of reduced flushing). Several tidal cycles may be required before construction related turbidity subsides.

It is unlikely that, at the proposed scale of submarine rock removal (estimated at 10 cubic yards) construction related sedimentation or turrbidity will pose severe adverse impacts on the waters beyond Kapuwai Cove. However, any significant sedimentation of the rich coral beds in Honaunau Bay would be deleterious to the entire bay ecosystem. During ramp construction, therefore, construction methods should be adopted that minimize the potential transportation of sediments into Honaunau Bay. Some minor modifications and redistribution of freshwater discharge into Kapuwai Cove may result from submarine excavation.

The environment within Kapuwai Cove has been described as generally

desolate and devoid of coral growth. With the exception of occasionally large sea cucumbers, Kapuwai Cove was found to support a low density of small sized marine biota (Appendix A). Nonetheless, water turbidity and sediment production associated with the installation of the ramp could significantly degrade existing water conditions during the construction phase. Swimming and other recreational uses of Kapuwai Cove will be temporarily prohibited during the construction of the submarine portions of the ramp for the protection of public health and safety. The applicant will retain a marine biologist to monitor water quality and biological impact during the actual submarine excavation phase of the project.

A potentially more serious adverse impact of the project relates to the future increase in recreational use of Honaunau Bay which, in the long term, may not be compatible with the Class AA water quality objectives established by the State. Fortunately, Honaunau Bay experiences a high degree of tidal flushing which would initially moderate the impact of increased boating activities. However, at what future point increased recreational boating activities might become detrimental to water quality in the bay is unknown.

Even though the proposed project is designed to replace the existing deteriorating ramp, it seems logical to assume that provisions of a new boat launching facility combined with the continued population growth in Kona could result in a long term rise in the frequency of boat launchings at Honaunau. The Statewide Boat Launching Facilities Master Plan (1971 draft) estimated approximately 1,849 launches for the Honaunau ramp in 1970. The Master Plan further projected that if no other facilities were developed to meet the demands of South Kona boaters, a new ramp at Honaunau would handle approximately 5,700 launches (annually) by 1990. This

project, however, rests on the assumption that any new ramp would also be accompanied by channel improvements which are not part of the present proposal.

The present consensus of opinion by users of the existing ramp, National Park personnel (Pu'u O Honaunau) and the County of Hawaii, Department of Parks and Recreation is that no substantial increase in boat launching will result from construction of the replacement ramp as proposed. This opinion is based on the fact that the current project does not include any plan to improve the channel connecting Kapuwai Cove with Honaunau Bay. This channel is very difficult to navigate and can be hazardous in heavy seas. These navigational problems are well known to Kona boaters and the Kapuwai Cove ramp is utilized by a comparatively small group of experienced boaters from South Kona. The proposed project will improve the launching and retrieving of boats within Kapuwai Cove but will not mitigate the difficulties of navigating the channel into Honaunau Bay. The new ramp is seen essentially as a replacement facility for existing users in the area.

Any increase in boat traffic would naturally result in increased levels of gasoline and light-weight motor oil in the bay waters. Such increases in refined petroleum products would have some negative impact on the biota existing within Kapuwai Cove. The effect of any added petroleum pollution on the abundant coral growth within Honaunau Bay itself cannot be projected without detailed information on the natural flushing of currents.

Dr. Hallacher (Appendix A) has recommended that any ramp improvements at Honaunau be coupled with a serious effort to protect the bay's biota and water quality from unacceptable levels of mortality. Dr. Hallacher further suggests that this objective might best be accomplished by adopting the following guidelines:

1. No dredging or blasting should be considered, even in the face of probable increase public demand for a deepened channel once improved ramp is in place.

2. The current level of boat traffic should be assessed for baseline purposes. Future growth in boat traffic should also be monitored.

3. The current water quality both inside and outside Kapuwai Cove should be ascertained for baseline purposes, and water quality should continue to be monitored in the future.

4. The biota of Honaunau Bay should be periodically surveyed to assess the impact of increased boat traffic on this marine ecosystem.

About 1977-78, the State Department of Health discontinued periodic monitoring of water quality at Honaunau Bay. At present, there is no water quality monitoring the area by either Federal, State, or County agencies. Given the important biological resources of Honaunau Bay and the current heavy recreational use for swimming, boating and other activities, it is essential that water quality monitoring be established both in Kapuwai Cove and adjacent areas of the Bay. The few water samples collected for this report indicate the potential for public health concern. Any future approval for construction of new or additional boat launching facilities at Honaunau should be tied to a commitment by relevant governmental agencies to implement a long term water quality monitoring program. The County of Hawaii has asked the State Department of Health to reinstitute water quality sampling at Honaunau as a first step in the development of a monitoring program.

C. Impact on Marine Biota

Potential adverse impacts of the propose project on marine biota on Kapuwai Cove and Honaunau Bay are closely related to the foregoing discussion on water quality, since the marine ecosystem could be expected to respond directly to changes in water quality.

During the construction phase individual marine plants and animals (Table 2) occupying the substrata to be covered will be destroyed. Grading and excavation of material in the ramp toe area may also destroy any nearby fish and other marine organisms. Because of the generally low density of marine organisms within Kapuwai Cove, the actual number of fish and other organisms destroyed will be relatively small. Furthermore, human activity in the construction area and water would probably cause some fish to flee the area. The effort of long term increases in boater use on the marine biota of Kapuwai Cove and Honaunau Bay will be dependent on the water quality standards attained in the future (see preceeding section). Because of the dramatic coral gardens and unusually diverse marine biota of Honaunau Bay, baseline and subsequent periodic monitoring of the bay ecosystem should be implemented to ensure that increased boating and other recreational uses do not lead to a deterioration of the existing biotic communities.

D. Impact on Terrestrial Biota

Plants growing within the area to be covered by the boat ramp and access lane include a few tuffs of the indigenous coastal sedge (*Fimbristylis pycnocephala*) growing in the cracks of pahoehoe lava. Where the access lane will join the existing paved county road, an area of bermuda grass (*Cynodon dactylon*) growing at the road verge will be removed. No endemic or endangered plant species will be affected by boat ramp construction.

The proposed project will cover approximately 1,000 square feet of the inter-tidal zone on the lava shelf forming Kapuwai Cove. This area will no longer be available as a shore birds' feeding ground. No endemic or endangered Hawaiian vertebrate species should be affected adversely by the project.

E. Impact on Historical and Archaeological Features

Five small (5-15 cm deep) bait cups or post sockets that occur within the project area on the pahoehoe lava shelf will be destroyed (buried) by the ramp construction. Archaeologist Paul Rosendahl (Appendix B) has stated:

> There are no significant archaeological remains of potential research, interpretative or preservation value located within the specified project area. The identification (discovery and locational plotting) of the five small cups or sockets pecked into the pahoehoe bedrock has served as adequate recovery of archaeological data present within the project area. No further archaeological work of any kind is believed necessary or justified, and the continued physical preservation of the five cups or sockets is not considered essential on the basis of any archaeological criteria.

Should any unanticipated archaeological sights or remains be uncovered during the course of project construction, work will be halted and a professional archaeologist called in to assess any such archaeological discoveries. The Historic Sites Section (DLNR) and staff archaeologists with the National Park Service will also be advised and consulted.

F. Impact on the Socio-Economic Environment

The proposed boat launching ramp is designed to replace the existing ramp at Honaunau. As such, the project will foster the continuation of the same kinds of social and recreational activities that now take place in the area. At present, both boaters and swimmers (including a number of children) utilize Kapuwai Cove. However, boats usually remain in the cove only for a few minutes during the launching and trailering operations. Currenly, boaters show a high level of concern for the safety of swimmers while entering or exiting Kapuwai Cove. This perhaps, reflects the fact that both groups of users are predominantly long-time residents with close interpersonal ties. Whether such cooperative behavior will continue in the future will depend on the extent to which boat traffic increases and the sensitivity of future users to the potential safety hazards attendant with

multiple use of the limited area.

The proposed project should have little effect on the local, regional or island economy. There may be some lowering of the probability of damage to boats and motors if a safer launching facility were provided. The construction of the boat launching ramp should have no major impacts to the environment.

IV. ALTERNATIVES TO THE PROPOSED ACTION

In 1981, Gray, Rhee and Associates, Inc., conducted a study of seven potential boat launching ramp sites in the South Kona District. Their evaluation was based on the parameters of:

1. The requirements of boaters
2. Concern of adjacent residents
3. Oceanographic characteristics of the sites
4. Environmental characteristics of the sites

Gray, Rhee & Associates, Inc. found that (page 5):

"...recognizing the concern relative to Pu'uhonua O Honaunau, boaters are willing to accept an alternate site provided the access is adequate. A site in the Napoopoo area would be acceptable provided the road from Honaunau to Napoopoo is improved, or would be improved in the foreseeable future. The National Park Service is willing to explore the possibility of expenditure of Federal funds for such access. The County of Hawaii is willing to consider a minimum road standard for improvements if the improvements are only for the purpose of providing access to the fishermen. However, it now appears that some of the subsistence fishermen and some of the residents of the Napoopoo area are aopposed to a ramp which will attract weekend fishermen who would compete with the local subsistence fishermen... Opposition from adjacent landowners and the community indicates that the alternatives of Napoopoo, Manini Beach, Kahauloa Bay, and Keel Beach are unavailable. The existing Honaunau Ramp and Honaunau "Springboard" sites are unavailable because of their proximity to the Pu'uhonua O Honaunau, Hookena is unavailable at this time because the access is inadequate.

The only other area that may be remotely possible is the Bishop Estate Land between Paiemano Point and Honaunau. This area was not studied because the coastline is exposed and also because Bishop Estate has indicated they have plans to develop the area and are unwilling to make any commitments at this time. If the community were to persuade Bishop Estate to consider a ramp in the area it may be feasible to design the ramp as a miniature basin to protect against adverse wave conditions."

It was on the basis of these findings that the County of Hawaii initiated the present proposal for a replacement (but not enlarged) ramp at Honaunau.

A no-action alternative would result in continued boater use of the deteriorating ramp at Honaunau until such time as it is no longer functional.

V. THE RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES OF THE ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

This project will facilitate the continuation of the long-term use of this area as a boat launching site. Ramp construction will involve some short-term adverse impacts from grading and other construction activities.

To insure that the long-term maintenance and enhancement of natural marine biological values in Honaunau Bay are not significantly compromised in the future (by incompatible levels of recreational use) a water quality monitoring program will be re-instituted to provide baseline data for effective management of the bay's biological and recreational resources and for the protection of public health.

VI. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

Land, County funds, human labor and construction materials, and fuel will be committed to this project and are not retrievable. Marine and terrestrial organisms and five archaeological features occupying the proposed boat launch ramp site will be irretrievably lost. Modifications to local topography will also be irreversible.

VIII. AGENCIES ORGANIZATIONS AND PERSON CONSULTED IN THE PREPARATION OF THE EIS

1. State Department of Health (Water Quality)
2. Pu'uhonua O Honaunau National Historical Park (Project Copatability
3. County of Hawaii - Planning Department (SMA Permit)
4. State of Hawaii, Harbors Division (Permit for work in the shorewaters)
5. U.S. Army Corps of Engineers (Permit processing)
6. Kamehameha Schools/ Bernice Pauahi Bishop Estate

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APPENDIX A

MARINE BIOLOGICAL SURVEY

BIOLOGICAL SURVEY OF THE PROPOSED BOAT RAMP CONSTRUCTION, SITE IN HONAUNAU BAY, HAWAII

PREPARED FOR:

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PREPARED BY:

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30, APRIL 1982

Biological Survey

The Honaunau Bay region was surveyed on April 3, 1982. About 5 hours were spent on site, with underwater observations taking approximately 3 hours. Areas surveyed included the substrate to be covered by the proposed boat ramp, the "S" channel and its adjoining small embayments, and the coral zone that begins on the ocean side of the "S" channel (see Figure 1). Epifaunal organisms on exposed surfaces were noted, as well as commonly occuring fishes. At the site of the proposed construction, a randomly selected sub-sample of rocky cobbles were turned over and organisms living on the underside were noted.

The survey of the bottom to be covered by the new ramp revealed the presence of 8 species of algae, 4 echinoderm species, 6 mollusc species, 2 crustacean species, and 7 species of fish (see Table I). It should be noted that the true diversity of this bottom area is underestimated. Mobile nocturnal fauna (noteably crustaceans and fishes) almost certainly hide in the rocky intersticies of the proposed ramp site during the day. Sifting of sand samples would probably reveal molluscs and annelid worms that were not recorded. Additionally, some low density species were probably overlooked.

Although the list of species living in the area to be covered by the boat ramp is not complete, it seems unlikely, based on the biota that were observed, that this site harbors any species that cannot be found elsewhere on adjacent shoreline in this area of Honaunau Bay, or in similar environments elsewhere along the Kona Coast. It does not appear to represent a unique habitat.

The same assessment applies to the small embayment between the existing ramp and the beginning of the "S" channel (Figure 1,

area 1). This sheltered area is shallow, being perhaps 4 feet at its maximum depth. The water on the day of the site visit appeared to be vertically stratified as indicated by the appearance of a mixing layer of fresh and saltwater at a depth of about 2 feet, as well as a pronounced drop in temperature near the surface. The bottom consists of patches of sand between areas covered with dead coral rubble and basalt cobbles. Most of this bottom rubble is covered by a thin layer of algae, of a species composition similar to that listed on Table I. The entire area is characterized by a desolate appearance, is devoid of coral growth, and has a low density of small biota except for an occasional large sea cucumber (Holothuria atra). Relatively few fishes were observed in this exposed sand/cobble area, with only a few Thalassoma duperreyi and Saurida gracilis seen.

The "S" channel, and contiguous regions of bottom, is clearly a transition zone between the sparse biota of the boat ramp area and the abundant life of the coral zone that lies on the ocean side of the channel (Figure 1, area 2). This area marks the beginning of coral growth with occasional colonies of Pocillopora meandrina and Porites lobata being scattered widely over the bottom. This zone is also marked by a dramatic increase in urchin density. Shallow reef platforms are infested with rockboring Echinometra mathaei, with more than 30 urchins per m^2 being seen in some areas. The high density of urchins has resulted in considerable erosion of the rocky substrate, and probably represent a genuine threat to any archeological sites that are now subtidal as a result of submergence. This transition zone abounds with fishes, particularly

surgeonfishes and wrasses. Large aggregations of Zebrasoma flavescens and Acanthurus nigrofuscus were observed foraging along the surface of the shallow (approx. 4-7 ft.) rocky platforms near the ocean side of the channel. This area also supports a substantial population of Thalassoma duppereyi and Abudefduf abdominals. Other species that occur in this region in lower numbers are too numerous to list (see Madden 1981 for a detailed list of fish species that occur in Honaunau Bay). The overall impression imparted by this transition zone is one of high diversity and abundance of echinoderms and fishes, with the beginnings of coral growth being evident.

The ocean side of the channel is marked by dramatic coral growth which begins in about 12 feet of water, and extends downward to 60 or 70 feet depth (Figure 1, area 3). Living coral cover in this area approaches 90%, and is dominated by Porites compressa and P. Lobata, although Pocillopora eydouxi and P. meandrina colonies are also common. Other corals seen include Porites evermanni, Montipora verrucosa, and Pavona varians. Some low density species of coral may have been overlooked. Prominent populations of the urchin species Echinometra mathaei and Heterocentrotus mammillatus occur in the shallower regions of this "coral garden". In addition, the crown of thorns seastar Acanthaster planci occurs in this zone, and its feeding activities were evidenced by leached patches of coral. Fishes of this zone are extremely diverse, although aggregations of surgeon fishes were not as dense as in the shallower transition zone.

Assessment of biological impact of proposed ramp construction

The proximal impact of the proposed structure on existing biota will probably be small providing that construction is confined to the specified shoreline site. This area of Honaunau Bay does not appear to be biologically unique, and although individuals occupying the substrate to be covered will be killed, it is unlikely that any species currently existing in the ramp's proximity will be threatened by the construction process. However, it must be stressed that any blasting or dredging in the channel area would have profoundly deleterious effects on the fauna of Honaunau Bay. Madden's (1981) survey of seven areas of the Kona Coast that were being considered for boat ramp construction, indicates that Honaunau Bay possesses the highest species richness of fishes of any of the sites (81 species vs 32-50 species for other sites). In that survey, he also noted the abundance of coral in Honaunau Bay. It is my impression as well, that the coral zone outside the "S" channel is particularly rich by west Hawaii standards, and that the fishes in the outer channel area and coral zone are also unusual in their diversity and abundance. Blasting would result in a significant fish kill, while silting from dredging activities would result in a substantial coral die off.

Assessment of the long range effects of an improved single-lane boat ramp at Honaunau is difficult. Even though no channel improvement is planned, it seems logical to assume that the ramp improvements will result in a modest increase in boat traffic. Furthermore, if Kona's population continues to increase during the 1980's, boat traffic at Honaunau may show a corresponding increase over present

useage levels. It must be assumed that increased boat traffic will result in increased levels of gasoline and light-weight motor oil in the bay's water, and that this increase in refined petroleum products will have a negative impact on the biota existing near and inside the "S" channel. The effect of any added petroleum pollutants on the abundant coral growth outside the channel cannot be projected without detailed information on the natural flushing of currents in the bay.

If the County of Hawaii proceeds with the development of an improved ramp at Honaunau, an effort should be made to protect the bay's biota from unacceptable levels of mortality. This might best be accomplished by the following guidelines:

1. No dredging or blasting should be considered, even in the face of probable increased public demand for a deepened channel once an improved ramp is in place.

2. The current level of boat traffice should be assessed for baseline purposes.

3. The current water quality inside and outside of the "S" channel should be ascertained for baseline purposes.

4. The level of future boat traffic should be monitored.

5. Water quality should be monitored.

6. The biota of Honaunau should be periodically surveyed to assess the impact of increased boat traffic on this system.

TABLE I
Bioto of substrate to be
covered by ramp
Hōnaunau, South Kona

Flora	
Cyanophyta	
Lyngbya majuscula	blue-green algae
Chlorophyta	
Ulva fasciata	sea lettuce
Phaeophyta	
Choospora implexa	brown seaweed
Rhodophyta	
Coelothrix irregularis	red seaweed
Jania sp.	coralline algae, branching form
Hydrolithon reinboldii	coralline algae, encrusting form
Porolithon onkodes	" "
Sporolithon erythraeum	" "
Fauna	
Echinodermata	
Echinometra mathaei	rock boring urchin
Tripneustes gratilla	collector urchin
Ophiocoma pica	brittle star
Holothuria pervicax	brown-banded sea cucumber
Mollusca	
Serpulorbis variabilis	tube-shell snail
Littorina sp.	periwinkle
Nerita sp.	pipipi
Conus sp.	cone shell
Isognomon californicum	bivalve
Isognomon perna	bibalve
Arthropoda (Crustacea)	
Carpilius sp.	small rock crab
Grapsus tenuicrustatus	a'ama crab
Chordata (Osteichthys)	
Abudefduf abdominalis	Sergeant Major
Plectroglyphidodon johnstonianus	Small Damsel Fish
Stegastes fasciolatus	Formerly Jenkin's Damsel Fish (*Pomacentrus jenkinsi*)
Labridae - juvenile	Wrasse
Canthigaster jactator	White-spotted pufferfish
Acanthurus triostegus sandvicensis	Manini
Cirripectus variolosus	Common blenny

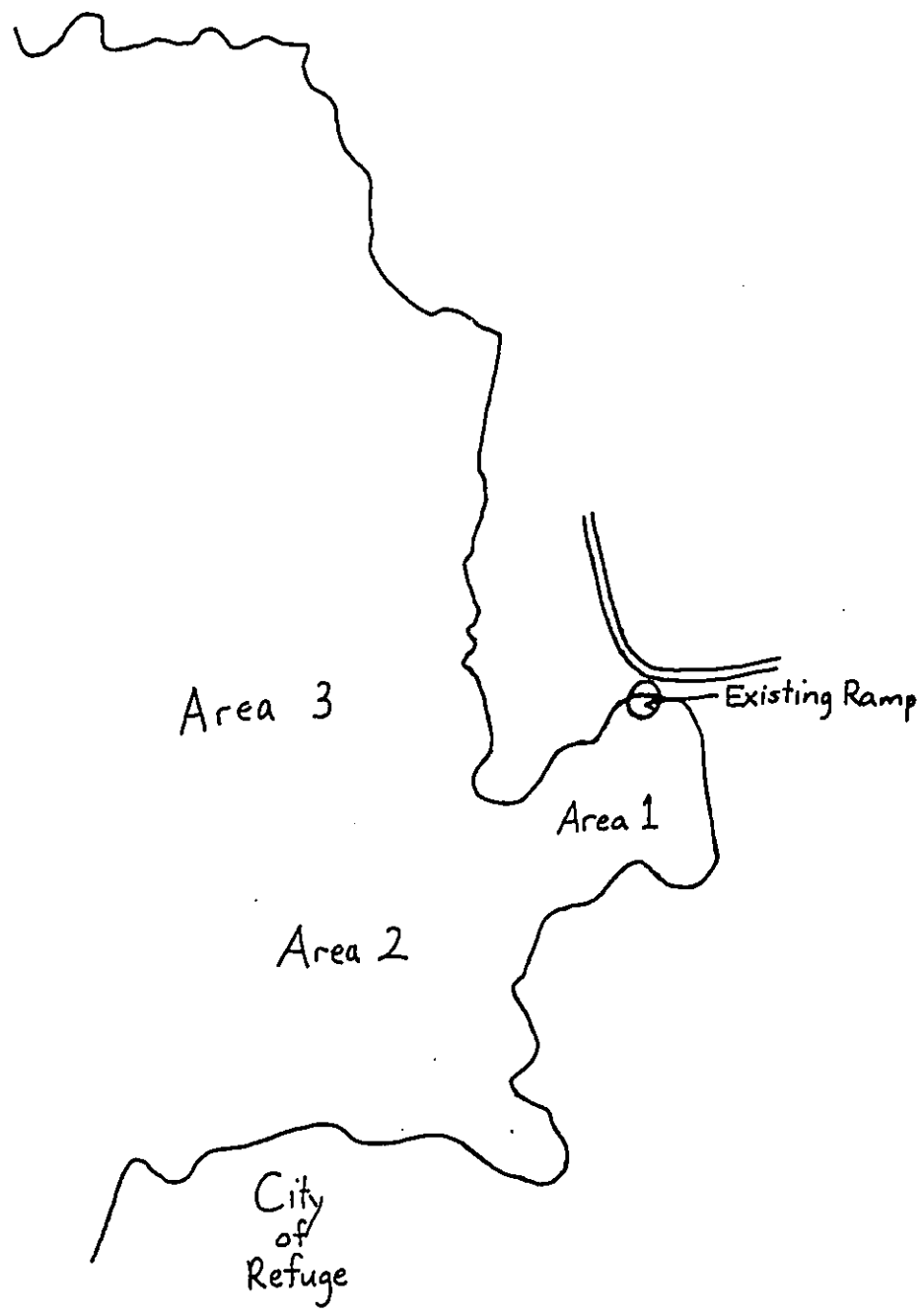

Figure 1

Honaunau Bay

References

Madden, William D. 1981. Marine reconnaissance of six south Kona sites, Kona Hawai'i. Appendix B, pp. 1-8 [In] Site study report for a boat launching ramp south Kona, Hawaii, Job H. C. 6104. Gray, Rhee and Associates, Inc., 116 South King Street, Room 508, Honolulu, Hawaii 96813.

APPENDIX B

FIELD ARCHAEOLOGICAL SURVEY

PAUL H. ROSENDAHL, Ph.D., Inc.
Consulting Archaeologist

Report Ms.47-050982

May 15, 1982

Subject: Archaeological Field Inspection
Boat Launching Ramp Site
Honaunau Bay, Honaunau
South Kona, Island of Hawaii
(TMK:3-8-4-13:14)

Dear Dr. Juvik:

On Friday, April 30, 1982, I conducted an archaeological field inspection of the above subject site. The purpose of this work was to determine the presence or absence of any archaeological features of potential significance. The subject site is located on the north shore of Kapuwai Cove--at the head of Honaunau Bay, and immediately north of Puuhonua-o-Honaunau (formerly City of Refuge) National Historical Park in South Kona District, County of Hawaii, Island of Hawaii. This field inspection was carried out as part of the preparation of an Environmental Impact Statement for construction of a new boat launching ramp and related improvements proposed by the County of Hawaii.

As part of relevant background research, I checked with both the Hawaii County Planning Department in Hilo and the State Historic Preservation Office in Honolulu concerning the presence of any previously recorded archaeological sites within the project area. Neither office had any records of specific sites known to be present within the project site, but the State Historic Preservation Office did state that the project area was situated within the overall four-corner locational boundary of the Kona Field System (Hawaii Register of Historic Places Site No. 50-10-37-6601), an extensive complex of aboriginal dryland cultivation sites and features which has been declared eligible for inclusion on the National Register of Historic Places (pers. comm., Staff Archaeologist Wendell Kam, 12 May 1982). The land immediately around Honaunau Bay, including the puuhonua (place of refuge), had been surveyed and mapped in 1919 by J.F.G. Stokes for Bishop Museum, and therefore the area was not covered again by J. Reinecke during his subsequent coastal survey of West Hawaii in 1930.

I carried out the on-site field inspection of the boat launching ramp site on April 30, 1982 with the assistance of Field Archaeologist Alan Walker. Our work consisted of a combined walk-through and wade/swim-through inspection of the proposed construction site and its immediate vicinity. This inspection was facilitated by

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use of a 1"=20' (1:240) scale topographic blueprint map (1-ft. contours) of the proposed construction site prepared in February 1982 by the Hilo firm of Okahara, Shigeoka & Associates, Inc. This map showed the locations of both the existing launching ramp and the proposed new ramp.

For purposes of the field inspection, the project area was defined as the location of the proposed new launching ramp and the immediately adjacent open pahoehoe flats and shallows within an average distance of approximately 60 feet. Thus the total project area covered on the north side of Kapuwai Cove comprised about 9,600 sq. ft. (0.22 ac.±). A total of two man-hours was expended during the 100% coverage of the project area.

In addition to the defined project area, two adjacent areas with known archaeological features were inspected--the small point on the northwest side of Kapuwai Cove, and the narrow lava shelf that extends out into Kapuwai Cove from the south side of the cove. Both of these areas, which are now under water except at low tide, have numerous artificial concavities that had been pecked and ground into the pahoehoe bedrock by aboriginal Hawaiians during prehistoric times (Apple and Macdonald 1966:129-134; Stokes 1957: 199-207). These concavities varied considerably in size and shape, and apparently had served a variety of different functions--basins for tanning nets and dyeing barkcloth; mortars and cups for pounding seaweeds, salt, and chum (for fish bait); sockets for holding religious images and sticks defining the boundaries of forbidden (kapu) areas; and sockets for holding posts supporting temporary shelter structures.

The only archaeological features found within the new boat launching ramp project area were five small cups or mortars, ranging from c. 8-12 cm. in diameter, and pecked from c. 6-12 cm. into the pahoehoe bedrock a few meters from the edge of the water on the north side of Kapuwai Cove. The cup locations were plotted onto the field copy of the 1"=20' scale map. No photographs were taken, as the cups are somewhat poorly defined, and the light conditions were poor. The cups were situated about midway along the length of the proposed new ramp, and will thus be covered over by construction of the new ramp.

The five cups appeared to form a roughly "L" shaped alignment about two by three meters in extent overall. This alignment did indicate that they might well have functioned, as suggested by Stokes (1957:203), as sockets "...for posts of shelters, at the water's edge, under which the chiefs' wives were accustomed to lounge and eat newly gathered loli (holothuria [sea cucumbers]) and sea urchines." No other features of any kind were found within the proposed boat launching ramp site or its immediate vicinity.

In my opinion, there are no significant archaeological remains of potential research, interpretive, or preservation value located within the specified project area. The identification (discovery

and locational plotting) of the five small cups or sockets pecked into the pahoehoe bedrock has served as adequate recovery of archaeological data present within the project area. No further archaeological work of any kind is believed necessary or justified, and the continued physical preservation of the five cups or sockets is not considered essential on the basis of any archaeological criteria. It is recommended that full archaeological clearance be granted for the construction of the proposed boat launching ramp. This evaluation and recommendation is given on the basis of the field inspection, and with the general qualification that on-site construction work should be confined to the defined project area limits so as to avoid any possible damage to the archaeological features present on the northwest and south sides of Kapuwai Cove.

Sincerely yours,

Paul H. Rosendahl

Paul H. Rosendahl, Ph.D.
Principal Archaeologist

References Cited

Apple, Russell A., and Gordon A. Macdonald
1966 The Rise of Sea Level in Contemporary Times at Honaunau, Kona, Hawaii. Pacific Science XX: 125-136.

Stokes, J.F.G.
1957 Features Pertaining to Early Hawaiian Life in the Honaunau Bay Area. In: The Natural and Cultural History of Honaunau, Kona, Hawaii. Manuscript, B.P. Bishop Museum, Vol.2.

APPENDIX C

CORRESPONDENCE

EXTENSION EDUCATION DIVISION
Kapalama Heights
Honolulu, Hawaii 96817

KAMEHAMEHA SCHOOLS / BERNICE PAUAHI BISHOP ESTATE

November 8, 1982

Department of Parks and Recreation
County of Hawaii
25 Aupuni Street
Hilo, Hawaii 96720

Attention: Mr. Milton P. Hakoda, Director

Gentlemen:

Mr. Wallace K. Tirrell, Area Development Manager at the Kamehameha Schools/B. P. Bishop Estate, has informed us of your EIS Draft for the proposed Honaunau Boat Launching Ramp Project. We are cognizant of his official approval of your plans and the 10-year lease of the site. This letter does not negate his previous action. However, since we have a vested interest in the adjacent areas, we would like to express some concerns which, hopefully, can be used to focus on the continued positive multiple-use proposed for the site.

1. Clarification of Terms

Pages i, 9 and 22 refer to our project. It is not a "private residential school and recreational buildings." We recommend that HALE O HO'OPONOPONO be inserted as the proper identification on any reference to the project in your report. (See Addendum A for brief description of the project.)

2. Possible Future Needs for More Facilities, Parking Areas and Additional Land

Pages iii, 30 and 31 refer to this topic. This is a major concern for us. The project has been operating at that site for over eight years. We have recently completed a Master Plan study which addresses the long-range facility requirements of the project...and if these plans are approved and implemented by all parties involved (City and County of Hawaii, KS/BE Trustees,

et.al.) we will require use of all the adjacent lands under KS/BE school inventory. (See Addendum B.)

We believe that our project which has been developed and sustained in close cooperation with the State Department of Education is meeting a critical need of the Kona community--providing alternative education to high-risk, potential high school dropouts. The beneficiaries of this program are public high school students referred to the project by Konawaena High School. It is not an exclusive private operation or a "satellite" Kamehameha Schools. Our master planners have been in contact with the National Park Service and Mr. Sidney Fuke of your Planning Department. They are aware of our Master Plan for the area. We recommend that a careful analysis be made to determine the highest and best use of the adjacent areas in relation to critical public needs of the Kona community.

3. Our Project As a Possible Pollution Source For the Bay

Page 13 refers to this and recognizes that we are connecting our sewer lines to the existing National Park's sewage treatment system. We would like to confirm this as phase one of the master plan, and inform you that the job is almost completed.

4. Student-Staff Population

Page 13 refers to this topic. We would like to confirm that the student-staff population has peaked at 25-30 students and 8-12 staff. We do not anticipate any increase in the future. We cannot comment if our project population exceeds the residents living in the area.

5. Safety, Control Factors

Pages 26 and 35 recognize that canoe paddlers and swimmers also utilize the ramp site and the bay area. We feel that your improvements will increase the number of motorized craft in the vicinity and endanger the current cooperation and respect that all users have for the area and each other. We recommend that your EIS address this problem in a more deliberate fashion. We also believe that a one-way traffic pattern leading to and from the ramp area may increase the safety factors associated with the flow of vehicles, trailers, and pedestrian traffic in the vicinity.

6. Construction Interference with Project

Reference is made on Page 29 to the temporary prohibition of activity in the area during construction. We would appreciate cooperative planning of construction activity and schedules which would minimize potential conflicts with our project.

7. Impact On the Bay's Biota and Water Quality

We concur with Dr. Hallacher's suggestion on pages 30-31 for protecting the Bay's biota and water quality and initiating a plan to maintain water quality monitoring. The Bay's biota is an important element in our outdoor instructional operations to meet our science, physical education and Hawaiian studies requirements. Our project may be able to assist your efforts to monitor the biota and water quality of the Bay as part of our science curriculum.

8. Other Concerns

Your EIS recognizes increased multiple use of the area, but fails to address the concommitant problems that are inevitable--need for public water, garbage containment and collection, toilet facilities, lights. Our project has already been adversely affected by current users of the area, i.e. we have policed the area for trash, we have had to mend our broken faucets and pipes, fix broken locks on our toilets, etc. We would appreciate your thoughts on alleviating these problems. The area provides environments which meet the recreation, education and cultural preservation needs of the immediate community, state and nation. It is a fragile environment sustained by a delicate balance of respect and cooperation from all users. We hope that the enlarged and improved boat ramp will not upset this balance in human ecology.

In summary, we believe that our KS/BE-DOE project is functioning in a manner which provides a direct public benefit to the Kona community. We have sufficient evaluation documents and data which verify that the adjacent land areas are an effective classroom for "mainstreaming" alienated youth who fail to experience success in the traditional school setting. We are not adverse to the proposition of sharing the site and its surrounding environment with the boating community. However, we believe that effective multiple-use must be deliberately planned and not casually implied.

Copies of this statement have been reviewed by the Hale O Ho'oponopono project staff, KS/BE Land Division staff, Mr. Tirrell, Mr. Bill Stayton, Mr. Morris Kimura, principal at Konawaena High School and Mr. Jerry Shimoda, superintendent at Pu'uhonua O Honaunau National Park.

Sincerely,

Fred Cachola
Director

Enclosures

d. Hale O Ho'oponopono

Program Description: Provides direct educational services to alienated students in grades 7-12 from Konawaena High.

Target Population: Students manifesting symptoms of alienation who have demonstrated inability to cope within regular school setting

Funding Source: State, Kamehameha Schools

[Excerpted from Program Plan for Alienated Students (Comprehensive School Alienation Program), OIS Special Needs Branch, DOE, October, 1981]

ADDENDUM A

___Alternative Education
___Post High School
___Neighbor Island Regional
___Resource Centers

PROGRAM/PROJECT TITLE: HALE O HO'OPONOPONO

DIRECTOR/COORDINATOR: DIANA NUI (Acting Director)

SITE LOCATION: HONAUNAU, KONA, HAWAII

PROJECT PHONE: 328-9166

STAFF MEMBERS:

Diana Aki	Hula/Music Instructor
Fidelis Aki	Fishing Instructor
Puna Kihoi	Counselor
Harvey Low	Farming Instructor
Win Onishi	D.O.E
Earl Regidor	P.E./Health Instructor
Ellen Regidor	D.O.E.

PROGRAM DESCRIPTION:

Hale O Ho'oponopono is primarily an outdoor educational program designed to provide a special learning environment for students from Konawaena High School who are unable to function in a normal school setting. Some come with learning disabilities, many have severe reading problems, and almost all have family trouble or problems with the law. Students who complete the program receive a Konawaena High School diploma.

PROGRAM GOALS & OBJECTIVES:

1. To improve student attendance.
2. To help and improve the social behavior of students.
3. To help students acquire basic living skills inherent in the Hawaiian culture as well as those necessary to live in the predominant society.
4. To help each student in his/her transition from the program to the world of work or continue on to higher education.

OTHER PERTINENT INFORMATION:

Program focuses on Hawaiian cultural activities as the bases to promote learning.

ADDENDUM B

DRAFT

HALE O HO'OPONOPONO/Site Plan

The project site has a history dating back to the 16th Century when the wall surrounding the Puuhonua (city of refuge) was constructed. It is the largest and best preserved refuge of its kind in the Hawaiian Islands, and therefore the establishment of a new sanctuary for alienated youth is singularly appropriate. Honaunau was for generations the seat of power on the Kona Coast, and Hale O Keawe, the tomb-temple associated with the Kamehameha dynasty, was the most sacred building in ancient Hawaii.

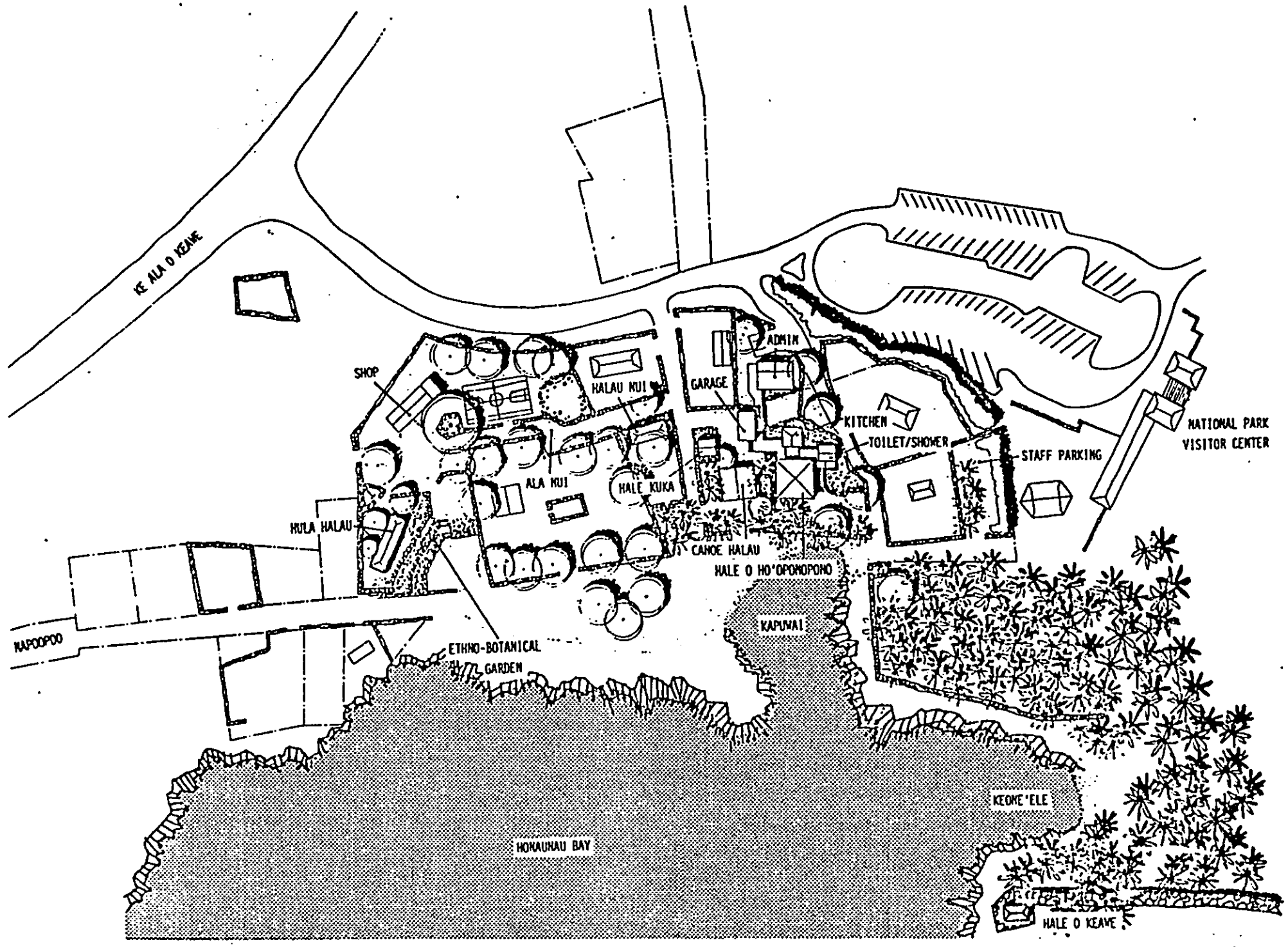
The seaside village of Honaunau was the ocean portion of an ahupua'a extending to the uplands where more rainfall supported food crops. Sheltered bays such as this one were the favored residences of chiefs at a time when canoes were a major form of transportation.

At the time of the Mahele, the ahupua'a of Honaunau was given to M. Kekauonohi, grand-daughter of Kekaulike formerly ruler of Maui. Kuleana were laid out on the most favored sites ringing the bay where access to the ocean was convenient and cooling breezes off the sea were strong. The puuhonua and the royal residential area in the coconut grove were not sub-divided. Stone walls were erected to define Kuleana, but in most cases they do not coincide with the legal description and property lines.

The large parcel owned by the Roman Catholic Church contains the ruins of Saint Benedict Church built around 1871 and abandoned when the now-famous Painted Church was consecrated in 1902. Its location close to the puuhonua may have been influenced by the continuing per-ception even after the overthrow of kapu that this was a sacred area.

By the early 20th Century, many kuleana had been abandoned. The remaining residents of Honaunau fished for a living. Greater population growth took place in the mauka area where agriculture was more successfully practiced. Goat husbandry took place on some of the sur-rounding lands. The last residents of Kiilae Village, south of the puuhonua left around 1926.

The most significant change in the area has been the installation of the National Park Visitor Center and parking lot in 1970. The park master plan calls for the acquisition of the whole of Honaunau Village, but this is not about to occur in the near future. Without the development of Hale O Ho'oponopono there would most likely be no new growth in the village. Therefore, the installation of new facilities proposed by this plan will have a significant impact upon the entire village.


KE ALA O KEANE
SHOP
HALAU NUI
GARAGE
ADMIN
KITCHEN
TOILET/SHOWER
STAFF PARKING
NATIONAL PARK
VISITOR CENTER
ALA NUI
HALE KUKA
HULA HALAU
CANOE HALAU
HALE O HO'OPONOPONO
KAPUWAI
KAPOOPOO
ETHNO-BOTANICAL
GARDEN
KEONE'ELE
HONAUNAU BAY
HALE O KEAVE

This plan recognizes three distinct areas only the first of which is the scope of this study.

- o Honaunau Village, a crescent-shaped area centered on the sea inlet called Kapuwai.
- o National Park, consisting of the Puuhonua, the coconut grove, the Visitors' Center, and the parking lot.
- o Kiilae Village, to be restored by the National Park Service to demonstrate the adaptations made by the Hawaiian fishing community from the arrival of Western civilization until the mid-20th Century.

The master plan for Hale O Ho'oponopono is based on the following premises:

- o Reconstruct and build new facilities consistent with traditional patterns of site planning and architecture of the Kona coast. This means that the most ideal sites will be re-used. Significant alteration and disturbance has already occurred due to work of almost two centuries.
- o Design the new facilities as an integral part of the village. This is necessary because ownership of several key parcels in the village remain in other hands. The remaining Bishop Estate lands assigned to the Kamehameha Schools are not contiguous. Both roads and footpaths bisect them, and the existing atmosphere of a school interwoven with the neighborhood must be maintained.

The strong presence of history, the widely varying landscape in such a small area, and the unique mission which the Kamehameha Schools and the Department of Education, State of Hawaii have embarked upon place a special challenge and responsibility upon the planner and architect. General planning principles were explored as illustrated in the charts. With the consensus of the staff, the space program and site plan was developed - a unique response to history, topography, practicality, and sentimentality.

For the purposes of discussion, the lands transferred to the school inventory were divided into parcels and subjected to individual study and recommendations as follows.

<u>Parcel (8-4-13-15) (8-4-13-17) (8-4-13-18)</u>

This parcel is presently used for most of the daily activities. The former Akana store is still standing, and serves as offices. It has been suggested that this parcel was formerly the

residence of the konohiki or land manager of Honaunau. The parcel is evenly divided between a rather level sandy section and a very large lava outcropping supplemented by some man-made platforms. The stone walls that once marked the interior property lines have been mostly removed, leaving only hedges and lua to suggest their former locations. The seawall has sustained a good deal of damage in the past from heavy surf as it is built on top of the old sand beach. Due to proximity to the ocean, all new structures must respect a 40-foot setback. This is the finest portion of Honaunau not included as part of the royal residential area, primarily for its view of Hale O Keawe and the perception of the ocean. This parcel would contain most of the new facilities including:

- Hale O Ho'oponopono, a multi-purpose classroom and open-air pavilion occupying the chief position atop the lava platform facing the ocean.

- Toilet/shower to the south of this pavilion. Traditionally sited as it would be in the Hawaiian homestead - at the side property line.

- Kitchen facilities combining food preparation and a staff lounge. It is located immediately adjacent to Hale O Ho'oponopono and faces a garden on the mauka side.

- Administration building for staff offices is also to be constructed atop a natural lava outcropping. A small parking lot off the National Park Road is available for staff and guest parking. This building overlooks a large and unique depression which will be redeveloped as a garden. A view corridor to the bay allows the occupants to sense the immediacy of the ocean.

- A deck will connect all the afore-mentioned facilities at a common elevation with steps leading down to the lawn fronting the sea.

- Canoe Halau is located adjacent to the public boat ramp and sand beach for launching of both boats and canoes. The canoes are presently stored here. The new service drive will pass through the halau for ease in transporting boats.

- A garage and fish freezer are sited on a portion of the largest level ground of this parcel in order to accommodate school vehicles. The fish freezer is located across from the Canoe Halau for convenience.

- Hale Kuka is an existing building of native construction. It is used primarily for ho'oponopono and practical application/demonstration of native building skills.

- The seawall must be redesigned to minimize damage to itself, the sand beach, and the school property. As part of the new design, a seating area and hula platform should be integrated into the wall. Audiences may sit on the lawn or the lanai of Hale O Ho'oponopono and enjoy hula with a backdrop of Hale O Keawe and the ocean.

Parcel (8-4-12-3)

A Bishop Estate survey of 1918 indicates that this lot was used as a paddock. It was located at the confluence of several old trails and still contains a large concrete water trough which should be preserved in place. This parcel has almost no lava outcroppings but sports a fine sloping lawn and large tree.

Halau Nui is an existing pavilion of native construction built with the advice and assistance of many kupuna in the local community and is a symbol of their support for this project. Halau Nui is also the first structure built by the program.

The only change at this parcel would be the creation of a new ala nui to connect the non-contiguous parcels available for new facilities (8-4-11-14, 8-4-12-5, 7). An existing shower would be removed.

Parcel (8-4-11-14)

This parcel of 6.151 acres has no kuleana plots, suggesting that it was less than desirable for habitation if one takes into account historic Hawaiian site planning criteria. Without an archaeological survey it is impossible to say if it was inhabited in prior centuries. It is thickly overgrown with koa haole and covered with lava outcroppings and loose rock very suitable for building. A grave site is marked on the 1918 survey and is most likely of 19th Century origin. Until Ke Ala O Keawe was built in 1966 this parcel was an indistinguishable portion of generally barren land which typically occurs on the Kona Coast between the oceanfront and the fertile farm lots near the Mamalahoa highway.

All contemporary use has been concentrated on the southern portion of this parcel as this area is the logical point of expansion for Honaunau Village, and is the flattest portion of the site. The siting of new Hale O Ho'oponopono facilities will recognize the pattern of growth at Honaunau and will adapt to a crescent shape focused on Kapuwai inlet.

Improvements on this parcel will include:

- o A new ala nui along the mauka boundary of Aina Kakolika will connect the rest of the facilities (on parcel 8-4-13-15, 17, 18) with specialized instruction areas on this parcel, and contribute to the cohesiveness of the entire program facility.

  The ala nui will:

  Function primarily as a pedestrian circulation spine, but occasionally will be used by vehicles to deliver supplies.

  Recognize the traditional Kona country road aesthetic, lined by loose rock walls and trees.

  This pathway will reach the shop area and then turn toward the sea, passing through the Hula Halau site as steps.

Two facilities are placed on this parcel because they have large ground coverage and generate noise which could be detrimental to other activities. The exact locations are subject to change when better topographical information becomes available.

- o Shop and outdoor work area is located within a walled compound. This repeats the pattern of village development of individual buildings encircled by stone walls. Some athletic equipment is also stored and used in this building.

- o A basketball court is situated below the National Park access road, with some landscaping it will not be seen.

The majority of this parcel is left as it exists today. It is the intent of this plan to concentrate the new facilities within the village and leave a generous amount of brush surrounding Honaunau village as a buffer against the impact of Ke Ala O Keawe.

Parcel (8-4-11-13)

This parcel presently is quite rocky and covered with brush. This plan does not place any school facility upon it. This parcel can presently best serve Honaunau and the program environment as an open space buffer similar to parcel 8-4-11-14.

Parcel (8-4-12-5)

This land was formerly a leased house lot and contains what appears to be two stone platforms of undetermined age. It is varied in topography. The north edge of the property is high above the beach road and has a view of Hale O Keawe. It was last occupied by a squatter.

While the parcel is not as close to Hale O Ho'oponopono as good site planning would dictate, it has two assets that can be developed to balance this objection. It has an ocean view toward the puuhonua which could be greatly improved by removal of some trees on adjoining estate lands. There is no view so evocative of ancient Hawaii. This parcel also has a steep slope down to the bay and could be developed into an impressive compound of native structures.

The Hula Halau will be located here and walled on the north and east sides to accentuate the high ground and to serve as a backdrop for the thatched pavilion. Within this wall storage and changing areas could be developed. The southwest portion will be terraced with stone walls to serve as an ethnobotanical garden. At the top of this a triangular-shaped flat area will be developed as a stone platform. Halau will be built here and the area would also be an appropriate spot for display of Hawaiian sculpture.

Adjoining this parcel are several graves. It would appear appropriate at this time to relocate any remains, possibly to the larger grave enclosure mauka on lot 8-4-11-13.

Between the halau and the shop, an outdoor shower should be located for use in conjunction with hula practice. Toilet facilities would be desirable due to the distance to the facilities in parcel 8-4-13-18, and the activities in this area. Sewage disposal could most efficiently be handled by cesspool. Initial discussions with State of Hawaii environmental health officials indicate that a cesspool would be allowed if limited to human waste disposal.

Parcel (8-4-13-22)

Formerly a leased house lot on the edge of Honaunau Village, it is overgrown with koa haole. Remnants of a small house platform built around 1976 are visible. Due to its relationship with the major program facilities, this will be created into a lot for staff parking.

Currently the program staff park on any available flat area at parcels 8-4-13-15, 17, 18. This pattern of use indicates the clear tendency to park as close as possible to the final destination. There is a severe lack of level ground within the entire village with the exception of the shore-

line setback area behind the seawall. The County of Hawaii would be loathe to allow parking within this setback area even if it were not visible, as it is, from the city of refuge. Thus, it will be necessary to pursue a legal solution acceptable to the County and meeting some engineering standards. All of the existing openings in the perimeter stone walls will remain so as not to exclude vehicular access.

- Parcel 8-4-13-22 staff parking area has a capacity of ten cars. Due to the close proximity of the National Park amphitheater, a good deal of landscaping will be needed as a visual buffer. The buffer should continue along the south property line, to reinforce the separation of park and village. This hedge buffer would be some 15 feet thick and at least as tall. A stone wall typical of Honaunau already marks this boundary. The main program facilities would be reached from the parking area by a remnant of the ancient Honaunau trail still owned by B. P. Bishop Estate. An additional stone wall should be built along the trail to separate the occasional automobile traffic from the coconut grove.

If the County of Hawaii should reject this parking proposal due to its proximity to the National Park, then it might be necessary to use an alternate site within the parcel occupied by the shop.

- Parcel 8-4-11-4 parking area would have an unlimited car capacity, although the same number of ten would be constructed. At this stage of planning, the topography within this parcel is unknown. It is a longer walk to the center of activity. However there would be no difficulty screening from view a parking lot in this parcel and assuming that a good road access is developed, no difficulty in gaining County approval.

As another alternative at this time discussions with the National Park Service are taking place concerning use of the visitor center parking lot by school staff.

HALE O HO'OPONOPONO/Zoning

Hale O Ho'oponopono was a pioneer effort in the field of outdoor-oriented alienated youth programs and therefore this land use was never legally established by its founders. The program is now operating without government permits and the existing facilities fall far short of the minimum standards for building safety and health. No meaningful improvements can be made without establishing the use of this site for school use.

The parcels transferred to the school inventory are split-zoned as may be seen in the zoning map. This is the case with both State and County designations.

State Conservation District - subzone Resource was applied to parcels 8-4-13-15, 17, 18 and 8-4-13-22 due to the proximity of the National Park and the ocean. School use is not allowed in this district without either a change to Urban District or a Conservation District Use Permit. The balance of Honaunau is in State Agricultural District where a school use is also not allowed without either a land use change to URBAN or a Special Permit. It is recommended that special permits be pursued rather than a change in the State Land Use, which could take three times as long to obtain. These permits would recognize the unique characteristics of this project, but no use other than a school will be allowed.

County zoning for the parcels 8-4-13-15, 17, 19 and 8-4-13-22 is OPEN in which no buildings are allowed except pavilions and toilet facilities. Ultimate control of zoned use in these conservation/open zoned parcels remains with the State of Hawaii, Department of Land and Natural Resources. No further application need be made with the County of Hawaii in response to its open zoning. The remaining project parcels are in the UNPLANNED zone. Agricultural district regulations usually govern here. Schools are not expressly prohibited in any district. The necessary variances to permit the reconstruction of Hale O Ho'oponopono will be addressed by the County during the Special Management Area Use Permit procedure.

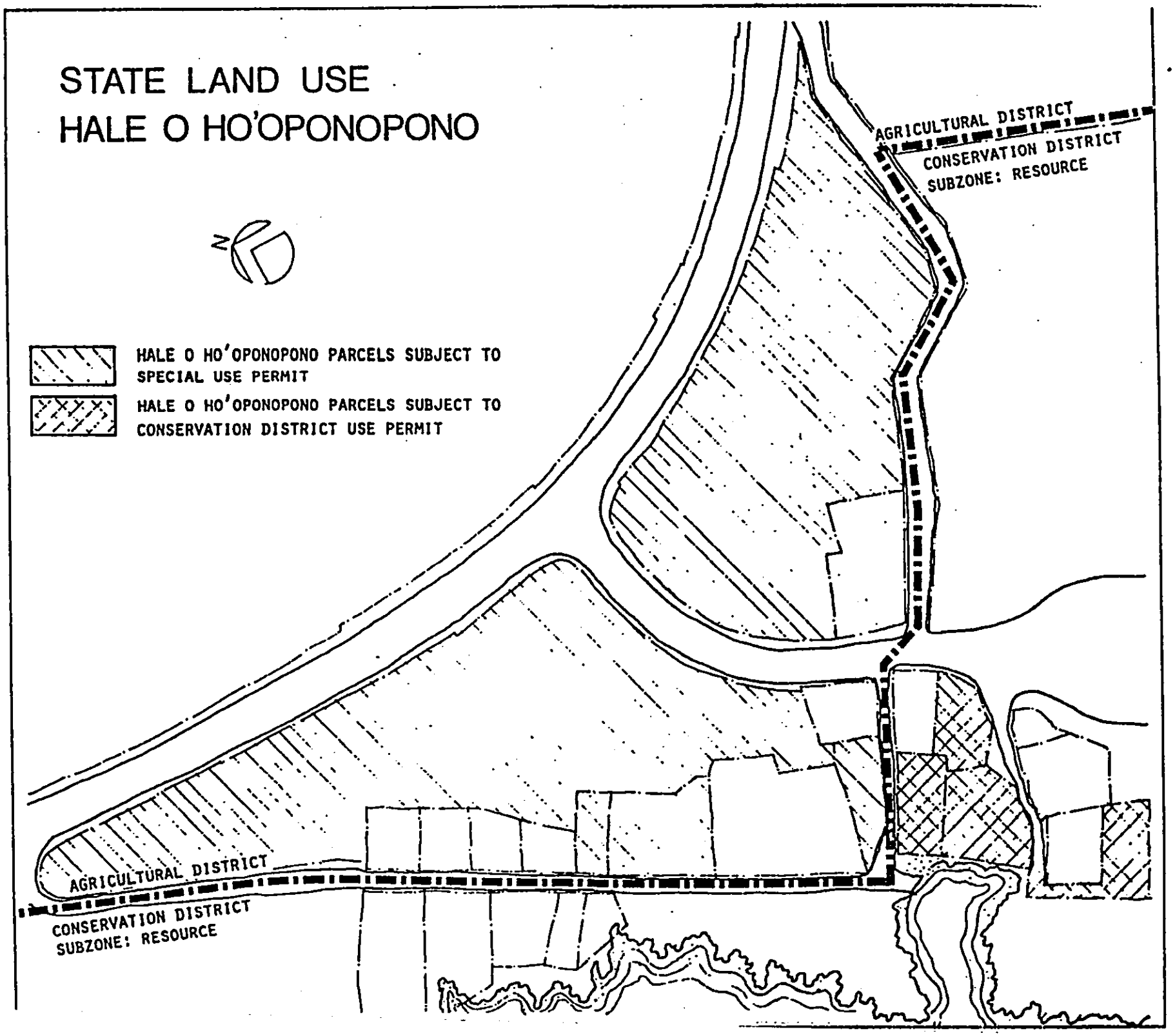
All project parcels except a portion of 8-4-11-13 are further controlled by the Special Management Area (SMA). This process is largely monitored by the county with final judgment by the State Land Use Commission.

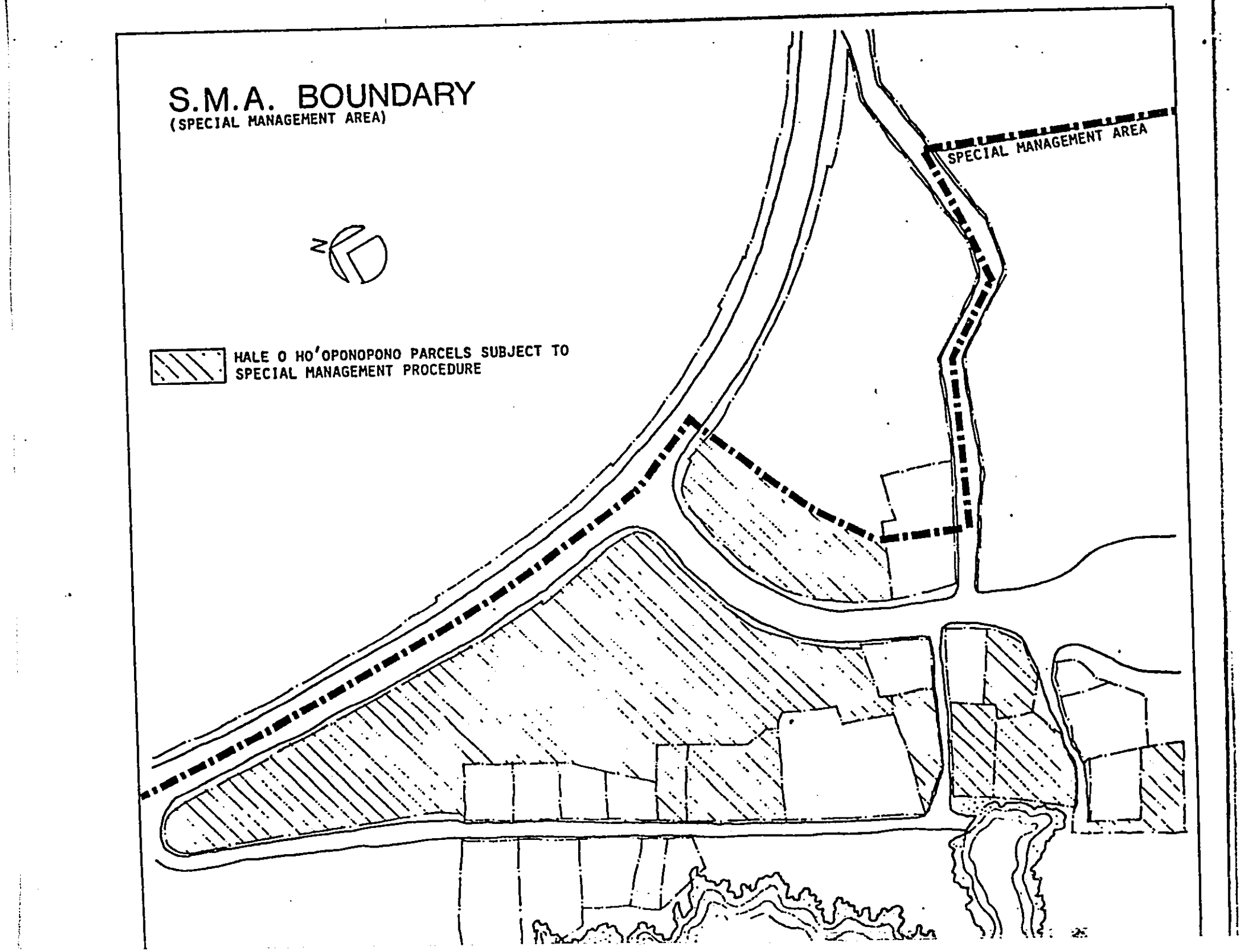
Consolidation of these parcels will be required in the future and at such time it is recommended that the existing private road to the new parking lot and the remnant of the trail to Keokea be

consolidated with the school property to re-establish Bishop Estate ownership of the road. Road and utility easements must be given to the National Park Service, Kekuewa, and parcel 8-4-13-20. Consolidation of these parcels would primarily ease the impact of required County setback requirements.

The project schedule illustrates maximum time periods for the various government approvals required. No allowance has been made for denial of these permit applications as there is good reason to believe that these efforts will meet with success.

STATE LAND USE
HALE O HO'OPONOPONO

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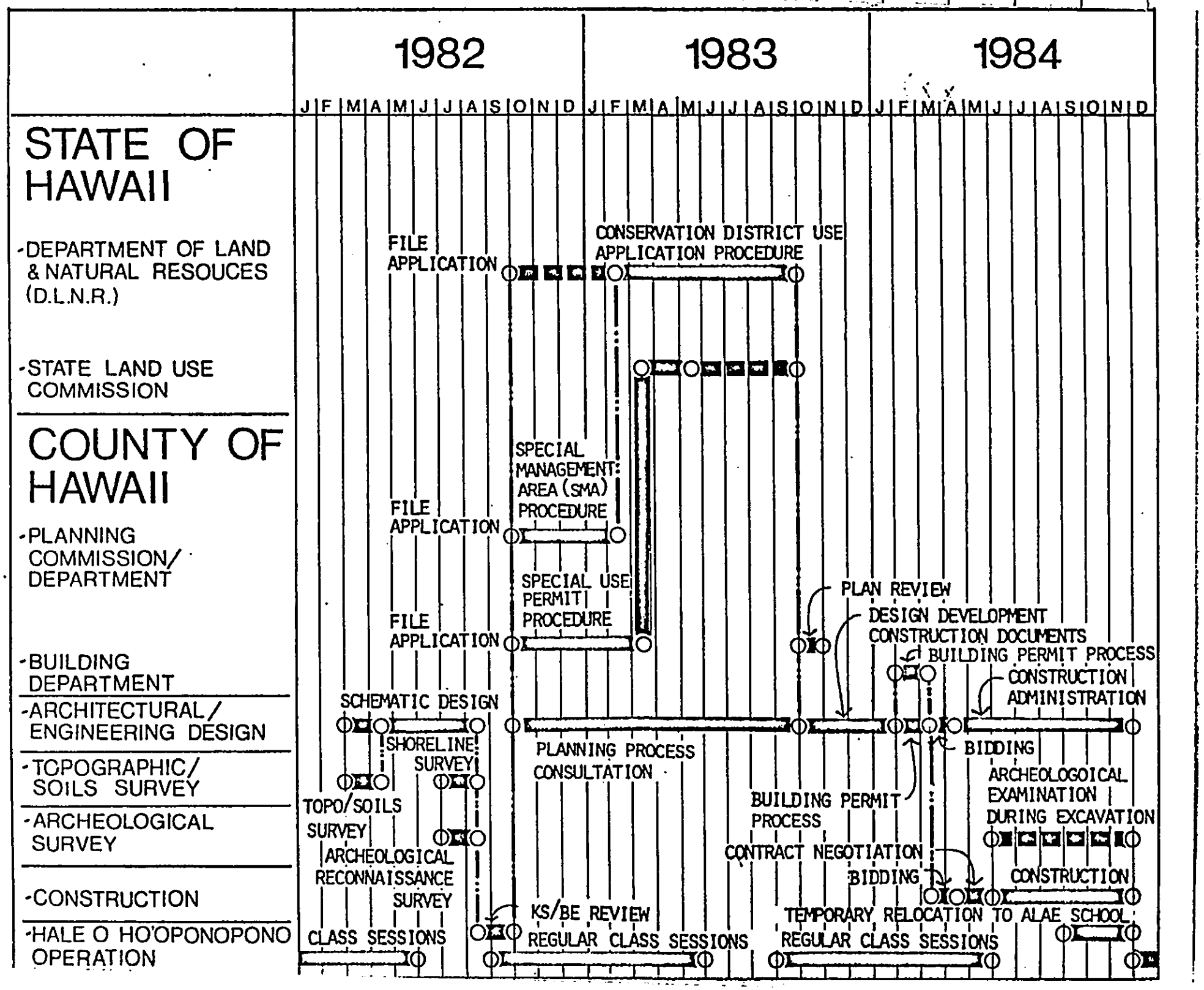
HALE O HO'OPONOPONO PARCELS SUBJECT TO
SPECIAL MANAGEMENT PROCEDURE
SPECIAL MANAGEMENT AREA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J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D
STATE OF HAWAII
-DEPARTMENT OF LAND & NATURAL RESOUCES (D.L.N.R.)
-STATE LAND USE COMMISSION
COUNTY OF HAWAII
-PLANNING COMMISSION/ DEPARTMENT
-BUILDING DEPARTMENT
-ARCHITECTURAL/ ENGINEERING DESIGN
-TOPOGRAPHIC/ SOILS SURVEY
-ARCHEOLOGICAL SURVEY
-CONSTRUCTION
-HALE O HO'OPONOPONO OPERATION
FILE APPLICATION
CONSERVATION DISTRICT USE APPLICATION PROCEDURE
SPECIAL MANAGEMENT AREA (SMA) PROCEDURE
FILE APPLICATION
SPECIAL USE PERMIT PROCEDURE
FILE APPLICATION
PLAN REVIEW
DESIGN DEVELOPMENT
CONSTRUCTION DOCUMENTS
BUILDING PERMIT PROCESS
CONSTRUCTION ADMINISTRATION
SCHEMATIC DESIGN
PLANNING PROCESS CONSULTATION
BIDDING
SHORELINE SURVEY
TOPO/SOILS SURVEY
ARCHEOLOGICAL RECONNAISSANCE SURVEY
BUILDING PERMIT PROCESS
ARCHEOLOGOICAL EXAMINATION DURING EXCAVATION
CONTRACT NEGOTIATION
BIDDING
CONSTRUCTION
KS/BE REVIEW
TEMPORARY RELOCATION TO ALAE SCHOOL
CLASS SESSIONS
REGULAR CLASS SESSIONS
REGULAR CLASS SESSIONS

HALE O HO'OPONOPONO/Cost

Priorities for new construction were developed in consultation with the staff with the final recommendation approved by the administration. Highest priority is reserved for health and sanitation, the second for academic and specialty buildings, and the lowest priority set aside for support facilities. This concept would rank the facilities in the following order:

1. Toilet/shower
2. Kitchen
3. Hale O Ho'oponopono
4. Hula halau
5. Shop
6. Canoe halau
7. Administration building
8. Garage

The funding schedule closely coincides with the project schedule with relatively small expenditure for design fees and surveys at the initial phases of the future work. The entire cost of the project is accounted for by the end of 1983 if the entire facility is constructed without phasing. Order-of-magnitude cost is based on a June 1983 bid date.

The order-of-magnitude cost was determined by quantity survey with unit prices applied. Factors were added to account for the remote location of the site as well as the customary profit, general conditions, taxes and ten percent contingency. Design fees have also been added. No detailed design work has been funded at this time and therefore this cost represents our best professional judgment.

Sitework, utilities, landscaping (approximately 4 acres)	$ 736,661
Toilet/shower	122,425
Kitchen and equipment	70,993
Hale O Ho'oponopono classroom	122,777
Hula halau (thatching not included)	12,263
Shop and outdoor work area athletic equipment storage	67,994
Canoe halau (thatching not included)	9,785
Administration building	77,203
Garage (fish freezer not included)	26,211
Subtotal construction cost	$1,246,312
Architectural/engineering services	100,000
Total	$1,346,312

Okahara / Shigeoka & Associates

November 18, 1982
Letter No. 926
Job No. 82-006

Mr. Fred Cachola, Director
Extension Education Division
Kamehameha Schools/Bernice Pauahi Bishop Estate
Kapalama Heights
Honolulu, Hawaii 96817

RE: DRAFT EIS
HONAUNAU BOAT LAUNCHING RAMP
HONAUNAU, SOUTH KONA, HAWAII

Dear Mr. Cachola:

Thank you very much for your comments on the draft Environmental Impact Statement for the Hōnaunau Boat Launching Ramp. The following statements have been prepared in response to the concerns enumerated in your letter of November 8, 1982 to Mr. Milton Hakoda.

1. We thank you for the information regarding nomenclature of your project. HALE O HO'OPONOPONO as well as the student and staff population numbers will be included in our revised EIS. We have also noted the fact that the construction of sewer lines connecting Hale O Ho'oponopono to the existing National Park's sewage treatment system is almost completed.

2. We recognize the positive aspects of the current mix of recreational users of Hōnaunau Bay. Accordingly, the boat launching ramp is designed as a replacement facility for the deteriorating ramp now in existence at the site. As such, the proposal does not include any plans to modify the channel connecting Kapuwai Cove with Hōnaunau Bay. The present channel configuration makes boat launching difficult for all but those with experience in using the area. The proposal also does not include any plans for the addition of land-based facilities which would render the area more attractive to the various user groups. In view of these facts it is the opinion of the Applicant, the National Park and the present ramp users that no substantial increase in launchings will result from the proposed construction. Likewise the applicant does not foresee that an increase in trespassing and vandalism will result from installation of the new ramp.

3. Your recommendation concerning the possibility of developing a one way traffic pattern leading to and from the ramp area will be submitted to the County Department of Public Works for consideration.

November 18, 1982

4. Should the proposal be approved, communication will be established between the Applicant and Hale O Ho'oponopono to minimize potential conflicts during the construction phase.

5. With regards to the monitoring of water quality within the Bay the County Department of Parks and Recreation is in contact with the State Department of Health and Department of Forestry and Wildlife to establish a monitoring program for these waters which are under State jurisdiction. We appreciate your offer of possible involvement in this undertaking and will attempt to develop a system which will contribute to the science curriculum at Hale O Ho'oponopono.

Again, thank you for your interest in the proposal.

Sincerely,

Dennis K. Shigeoka

DENNIS K. SHIGEOKA, P.E.
Executive Vice President/Treasurer

cc: Honorable Mayor Herbert Matayoshi
Milton Hakoda - Department of Parks & Recreation

COPY

DEPARTMENT OF WATER SUPPLY • COUNTY OF HAWAII
25 AUPUNI STREET • HILO, HAWAII 96720

RECEIVED
OCT 29 1982
OKAHARA, SHIGEOKA, & ASSOC.

October 27, 1982

Mayor Herbert Matayoshi
County of Hawaii
Hilo, HI 96720

ENVIRONMENTAL IMPACT STATEMENT (EIS)
HONAUNAU BOAT LAUNCHING RAMP
HONAUNAU, SOUTH KONA
ISLAND OF HAWAII
TAX MAP KEY 8-4-13:14

We reviewed the draft of the EIS and have no comments to make at this time. The project will not affect any of our existing or future water facilities.

The draft of the EIS was returned to the Office of Environmental Quality Control.

H. William Sewake
Manager

CS

cc - Department of Parks and Recreation
c/o Okahara, Shigeoka and Associates

... Water brings progress...

University of Hawaii at Manoa

Environmental Center
Crawford 317 • 2550 Campus Road
Honolulu, Hawaii 96822
Telephone (808) 948-7361

October 22, 1982
RE:0362

Mayor Herbert Matayoshi
County of Hawaii
25 Aupuni Street
Hilo, Hawaii 96720

Dear Mayor Matayoshi:

Honaunau Boat Launching Ramp
Draft Environmental Impact Statement
Honaunau, South Kona, Hawaii

The Environmental Center review of the above cited document has been prepared with the assistance of the following members of the University community; Alison Kay, Zoology, Theodore Lee, Ocean Engineering, Matthew Spriggs, Anthropology, Jacquelin Miller and Richard Erwin, Environmental Center.

The need and advantages of replacing the existing boat launching ramp are recognized by the Center, and the DEIS appears to be generally adequate in its discussion of the potential environmental impacts which may result from this project. However, there are some points which should to be addressed in preparing the Final EIS.

Would it be possible for the Final EIS to include a photo of the project area as it exists and also one with the proposed ramp superimposed on it? These would make it much easier to visualize the project.

Although the DEIS lists the Doty report, "The Ecology of Honaunau Bay", in its references to the area, the biological survey in the appendix does not cite that reference. Our reviewers have brought to our attention that the biological survey seems to have overlooked one of the points in the Doty survey and perhaps misinterprets another.

The Doty reports (in the section on Marine Mollusks, Chapter 9, p. 72 and p. 83):

> "... two unusual populations of high shoreline mollusks were also seen at Honaunau, both on the basalt substrate fringing the shore at the mouth of the inlet, Kapuwali. Beneath the stone wall at the southeastern rim is a colony of two species of marine pulmonates, Melampus sp. and Laemondonta bronni... This colony is unusual in that its members intermingle with the littorines and the usually more seaward-occurring pipipi or nerite, Nerita picea. In a restricted area just beneath the entrance to the Palace grounds, in the southern most corner of the inlet, a very small colony (perhaps no more than ten animals) of the Centeral Pacific Littorine, Littorina cindalata, was found..."

Whether or not these colonies now exist should be noted in the final EIS.

The biological survey report notes the area to be immediately affected by the ramp construction as "desolate. . . devoid of coral growth. . .", and that "This area of Honaunau Bay does not appear to be biologically unique. . ." (Appendix A, p. 2 and p. 4) Although the area is not unique, it is representative of a characteristic ecosystem found along the Kona coast where groundwater mixes with saltwater at the interface between lava flows and the ocean. These areas are characterized by little or no coral growth, usually an abundance of the alga Ahnfeltia (not listed), the bivalve Isognomon californicum (not listed), and the Echinometra mathaes (listed). While there is passing reference to the inflow of groundwater in the main body of the DEIS, there is no mention of this in the appended biological survey. The inflow of groundwater is quite important because of the increased nutrient input. Will the rock breaking and small amount of dredging activity increase the inflow of groundwater as has happened at Honokohau Bay? This needs to be addressed in the Final EIS.

Guideline no. 6 (p. 5) "The biota of Honaunau should be periodically surveyed to access the impact of increased boat traffic on this system" needs to be clarified. Does this mean that there will be a quantitative survey made of coral, urchins, and fish in the boat channel area now, and, that comparable quantitative surveys will be made six months or annually after completion of the project? The only way to assess impact is to have measurements before so that there is a baseline against which subsequent surveys can be checked.

Another concern is related to the design criteria of the ramp and the channel area. Because of the long length of the ramp (approximately 153 feet) and its rather narrow width (12 feet) this could pose considerable difficulties when backing to launch boats. Is it feasible to increase the ramp width to 20 feet, or has any thought been given to including a turn-around area in the project? Also, how is the increased usage going to effect the already limited parking area?

In the draft statewide Boat Launching Facilities Master Plan it was recommended that the Honaunau boat launching ramp be restricted from use by boats over 20 feet long because of the shallow channel (p. 5) Has any action been taken on this recommendation? It is possible that the proposed project may attract new boaters to this area. What type of mitigative measures, if any, are proposed to lessen the likelihood of accidents when launching or retrieving boats at low tide?

We appreciate the opportunity to comment on the DEIS.

Yours truly,

Doak C. Cox
Director

cc: Department of Parks and Recreation
Alison Kay
Theodore Lee
Matthew Spriggs
Jacquelin Miller
Richard Erwin

Okahara / Shigeoka & Associates
ENGINEERING AND PLANNING CONSULTANTS

November 18, 1982
Letter No. 929
Job No. 82-006

Mr. Doak C. Cox
Director
UNIVERSITY OF HAWAII AT MANOA
ENVIRONMENTAL CENTER
Crawford 317
2550 Campus Road
Honolulu, Hawaii 96822

RE: DRAFT EIS
HONAUNAU BOAT LAUNCHING RAMP
HONAUNAU, SOUTH KONA, HAWAII

Dear Mr. Cox:

Thank you for your comments on the draft Environmental Impact Statement for the Hōnaunau boat launching ramp proposal.

We submit the following responses to the querries raised in your letter of October 22, 1982 to Mayor Herbert Matayoshi.

1. Marine pulmonate communities along the south eastern rim of Kapuwai Cove described by Doty (1969) were surveyed on November 5, 1982. Two species were found in the general area described by Doty: the common littorine Littorina pintado (Wood, 1828) and Melampus casteneus (Muhfeld, 1816).

   The two species Laemondonta bronni and Littorina cindalata described from the area by Doty (1969) were not encountered during our survey of the area. Laemondontia bronnis is now referred to as Allochroa bronni (Philippi, 1846), and Litorina cindalata is not listed at all in the standard reference work Hawaiian Marine Shells by E.A. Kay (1979).

2. The possible modification of groundwater inflow to Kapuwai Cove resulting from the proposed construction is not anticipated to create a significant impact. Our observation of ground water steeps into the Cove at low tide revealed that, as expected, major inflows occurred along the eastern (landward) side of the cove and not on the projecting lava shelf where the ramp will be constructed. While not evident from surface examination, some groundwater no doubt does enter the Bay and Cove via the lava shelf. The magnitude of the proposed excavation (approximately 10 cubic yards), plus the fact that the excavated area will be capped by concrete and asphalt, should reduce the potential for significant modification or redistribution of local groundwater discharge in the area.

[illegible] • [illegible] Shigeoka P.E. • Melvin Tanaka P.E. • Masahiro Nishida P.E.
[illegible] • [illegible] HONOLULU 96720 • TELEPHONE (808 [illegible] 5527

3. With respect to future monitoring of water quality and marine biota within Kapuwai Cove and Hōnaunau Bay, the County of Hawaii, Department of Parks and Recreation is currently in contact with the State of Hawaii Department of Health and Department of Forestry and Wildlife regarding the implementation of an effective monitoring plan for these coastal waters which are under State jurisdiction. As a temporary measure, the Applicant intends to retain a marine biologist who will be at the site to monitor the effects of submarine construction activities.

4. The proposed boat ramp design (length and width) was developed in accordance with the desires of local users and the National Park. A wider ramp is neither desired nor necessary according to local users, since such a change might encourage dramatic increases in ramp use. Increased boater usage is not consistent with the objective of providing a replacement facility which does not substantially alter the mix of recreational uses in the area.

   It should also be emphasized that the generally hazardous nature of the channel connecting Kapuwai Cove with Hōnaunau Bay will not be improved by this project nor would any such future channel improvements be supported by the National Park. The existing channel configuration precludes the launching of larger boats and hence the need for a wider ramp. It is unlikely that the new ramp will foster a substantial increase in boat launching because of the well known difficulty of negotiating the channel linking Kapuwai Cove with Honaunau Bay. This is the concensus of both National Park, local users and the County Department of Parks and Recreation.

5. The proposed launching ramp will itself reduce the likelihood of accidents when launching or retrieving boats at low tide because the existing ramp terminates at a level that is above water at low tide. The new ramp will extend below low tide level.

We hope that we have adequately dealt with your concerns. Again, thank you for your comments on the draft EIS.

Sincerely,

Dennis K. Shigeoka

DENNIS K. SHIGEOKA, P.E.
Executive Vice President/Treasurer

cc: Honorable Mayor Herbert Matayoshi
Milton Hakoda - Department of Parks and Recreation

GEORGE R. ARIYOSHI
GOVERNOR OF HAWAII

RECEIVED
OCT 26 1982
OKAHARA, SHIGEOKA, & ASSOC.

CHARLES G. CLARK
DIRECTOR OF HEALTH

JOHN F. CHALMERS, M.D.
DEPUTY DIRECTOR OF HEALTH

HENRY N. THOMPSON, M.A.
DEPUTY DIRECTOR OF HEALTH

MELVIN K. KOIZUMI
DEPUTY DIRECTOR OF HEALTH

ABELINA MADRID SHAW, M.A., J.D.
DEPUTY DIRECTOR OF HEALTH

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

October 22, 1982

In reply, please refer to:
File: EPHS-SS

MEMORANDUM

To: The Honorable Herbert Matayoshi
Mayor, County of Hawaii

From: Director of Health

Subject: Environmental Impact Statement (EIS) for Honaunau Boat Launching Ramp, S. Kona, Hawaii

Thank you for allowing us to review and comment on the subject EIS. On the basis that the project will comply with all applicable Public Health Regulations, please be informed that we do not have any objections to this project.

We realize that the statements are general in nature due to preliminary plans being the sole source of discussion. We, therefore, reserve the right to impose future environmental restrictions on the project at the time final plans are submitted to this office for review.

Melvin Koizumi
CHARLES G. CLARK

cc: OEQC
Dept. of Parks & Recreation, County of Hawaii ✓

GEORGE R. ARIYOSHI
GOVERNOR OF HAWAII

SUSUMU ONO, CHAIRMAN
BOARD OF LAND & NATURAL RESOURCES
EDGAR A. HAMASU
DEPUTY TO THE CHAIRMAN

DIVISIONS:
AQUACULTURE DEVELOPMENT PROGRAM
AQUATIC RESOURCES
CONSERVATION AND RESOURCES ENFORCEMENT
CONVEYANCES
FORESTRY AND WILDLIFE
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT

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

OCT 1 9 1982

Honorable Herbert Matayoshi
Mayor, County of Hawaii
25 Aupuni Street
Hilo, Hawaii 96720

Dear Mayor Matayoshi:

We appreciate the opportunity to review the environmental impact statement (EIS) for the Honaunau Boat Ramp. We have a few concerns and interests to express:

Recreational Concerns

Some significant recreation concerns have still not been adequately addressed: 1) The National Park Service has a Natural and Cultural Resources Management Plan and Environmental Assessment prepared in 1976 which include the subject project area. This proposal or the rationale for it are not addressed. 2) The area is popular for swimmers and offers an exceptional reef available to snorkelers. Increasing use by swimmers, snorklers, and boaters may create a serious conflict among recreation users. The likelihood of increased recreation use and conflicts among users should be addressed.

Further, the new ramp will probably increase launchings, thereby resulting in congestion and vehicle-trailer parking space problems, which should be addressed in any subsequent update of this EIS.

Historic Sites Concerns

We concur with Paul Rosendahl's recommendation that no further archaeological work is necessary, provided that on-site construction work is confined to the defined project limits so as to avoid possible damage to archaeological features on the northwest and south sides of Kapuwai cave (Rosendahl, 1983:3). A copy of the map showing the locations of the five bait cups should be sent to our historic sites for recordation.

We further recommend that if any unanticipated sites or remains (such as artifacts, shell, bone charcoal deposits; human burials; rock or coral alignments, pavings, or walls) are encountered during construction, please inform the applicant to stop work and contact our historic sites office at 548-7460 (Honolulu) immediately.

Aquatic Interests

In brief, the applicant appears to share our interest in maintaining the rich resources characteristic of the Bay proper. The applicant notes (p. 31) a series of precautions recommended by the consultant to prevent construction in the cove from affecting aquatic organisms in the Bay: no dredging or blasting, monitoring present and resulting levels of boating use, monitoring present and resulting water quality in Cove and Bay, and periodic monitoring of aquatic organisms in the Bay. We concur with these recommendations. It is, however, unclear from the draft whether or not the applicant will comply with these recommendations: we find no method proposed for excavating the submerged lava, nor any indication that the applicant intends to monitor the effects of excavation. These issues should be clarified in subsequent drafts or permit applications.

We also find no commitment by the applicant or other agency to carry out water quality monitoring. Since there is an apparent public health concern regarding excessive levels of fecal coliform bacteria (p. 12), the applicant should address the need for a public restroom facility designed to prevent seepage into the Bay.

Sincerely,

SUSUMU ONO, Chairman
Board of Land and Natural Resources
and
State Historic Preservation Officer

cc: Office of Environmental
Quality Control

Okahara / Shigeoka & Associates
ENGINEERING AND PLANNING CONSULTANTS

November 18, 1982
Letter No. 931
Job No. 82-006

Mr. Susumu Ono
Chairman
STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
P.O. Box 621
Honolulu, Hawaii 96809

RE: EIS, HONAUNAU BOAT RAMP
HONAUNAU, SOUTH KONA, HAWAII

Dear Mr. Ono:

We very much appreciate your comments on the draft Environmental Impact Statement for the Hōnaunau Boat Launching Ramp. We have prepared the following statements in response to the concerns raised in your letter of October 19, 1982 to the Honorable Herbert Matayoshi.

We have considered the current and possible future mix of recreational activities at Honaunau (and specifically Kapuwai Cove), and their relationship to the proposed project. A review of the Resource Management Plan for Pu'uhonua O Hōnaunau National Park, and consultation with National Park personnel indicate that the replacement boat launching ramp is not considered to be incompatible with National Park objectives for the area.

The views of local ramp users, National Park personnel and the County Department of Parks and Recreation indicate that no substantial increase in boat launching will occur as a result of ramp replacement. The National Park would be opposed to any dramatic increase in boat launchings at Kapuwai Cove because of the current mix of recreational users of the area. Further, the County of Hawaii has no plan to provide additional parking or other facilities that would encourage a large increase in boater use of the area above current levels. The main reason why no large increase in boat launchings is anticipated, is that the project will not include any navigational improvements to the channel connecting Kapuwai Cove with Hōnaunau Bay. This channel is considered difficult to navigate even in generally calm seas. Hence, only experienced, local small boat owners (with boats under 20 feet) now utilize the Kapuwai launching facility.

The general navigational problems at Hōnaunau are well known to boaters throughout the Kona area. These navigational problems at Hōnaunau will not be removed by the new launching ramp which merely replaces the existing deteriorating ramp.

Donald K. Okahara P.E. • James K. Shigeoka P.E. • Masahiro Nishiga P.E.
[illegible] • Telephone: 808 961 5527

With respect to the future monitoring of water quality and marine biota within Kapuwai Cove and Hōnaunau Bay, the County of Hawaii Department of Parks and Recreation is currently in contact with the State of Hawaii, Departments of Health and Forestry and Wildlife regarding the development and implementation of effective monitoring programs for these coastal waters which are under State jurisdiction.

The County of Hawaii has no plans to develop public restrooms at the proposed project site. Excessive levels of coliform bacteria at Kapuwai Cove may result from adjacent private residences or the alternative school (Hale O Ho'oponopono) which front Kapuwai Cove. However, the school is now being connected to the National Park sewage treatment system (letter dated November 8, 1982 from Fred Cachola to Milton Hakoda). Existing public restrooms in the area are provided by the National Park and are only a few hundred feet from the proposed boat launching ramp.

Excavation of lava rock associated with the proposed project will be by bulldozer scraping and pneumatic hammer at low tide. A marine biologist will be retained by the Applicant to monitor water-quality and other apparent biological impacts during the excavation phase of the project.

Finally, should any unanticipated archaeological sites or remains be uncovered during the construction of the project, work will be halted and the Historic Sites Section, State Department of Land and Natural Resources will be contacted for advice and assistance.

We hope that your concerns have been satisfactorily addressed here. The draft environmental impact statement has been revised to reflect your comments and our response.

Again, thank you for your comments on the draft EIS.

Sincerely,

Dennis K. Shigeoka

DENNIS K. SHIGEOKA, P.E.
Executive Vice President/Treasurer

cc: Honorable Mayor Herbert Matayoshi
Milton Hakoda - Department of Parks and Recreation

United States Department of the Interior

FISH AND WILDLIFE SERVICE
300 ALA MOANA BOULEVARD
P.O. BOX 50167
HONOLULU, HAWAII 96850

IN REPLY REFER TO:
ES
Room 6307

OCT 18 1982

RECEIVED
OCT 21 1982

OKAHARA, SHIGEOKA, & ASSOC.

Mayor Herbert Matayoshi
County of Hawaii
25 Aupuni Street
Hilo, Hawaii 96720

Re: DEIS, Honaunau Boat Launching Ramp, Honaunau, South Kona, Hawaii

Dear Mayor Matayoshi:

We have reviewed the subject Draft Environmental Impact Statement (DEIS) and offer the following comments.

a. The DEIS adequately addresses marine resources within the project area; however, we feel that more discussion should be devoted to potential impacts of increased boating use upon fish and wildlife resources at Honaunau. We endorse the mitigation recommendations of Dr. Hallacher (page 31) and encourage establishment of a program to monitor the water quality and biological effects of construction.

b. Although (on page iv of the DEIS) it is correctly stated that no endemic or endangered Hawaiian vertebrate species will be affected by the boat ramp construction, the Hawaiian hoary bat (Lasiurus cinereus semotus) may occur in the area. Page 21 of the DEIS incorrectly infers that the above mentioned species is merely an exotic race of the North American hoary bat. It is a Federally listed species, and this should be made clear in the document.

c. Page 19 mentions that the Hawaiian short-eared owl occurs in the Honaunau area. It should be pointed out in the document that the pueo is listed as endangered by the State.

Thank you for the opportunity to review this document.

Sincerely yours,

Ernest Kosaka
Project Leader
Office of Environmental Services

cc: OEQC
County of Hawaii Dept. of Parks and Recreation
NMFS - WPPO
HDAR
HDF&W
EPA, San Francisco

CONSERVE AMERICA'S ENERGY

Save Energy and You Serve America!

Okahara / Shigeoka & Associates
ENGINEERING AND PLANNING CONSULTANTS

November 18, 1982
Letter No. 930
Job No. 82-006

Mr. Ernest Kosaka
Project Leader
Office of Environmental Services
UNITED STATES DEPARTMENT OF INTERIOR
Fish and Wildlife Services
300 Ala Moana Blvd.
P. O. Box 50167
Honolulu, Hawaii 96850

RE: EIS, HONAUNAU BOAT RAMP
HONAUNAU, SOUTH KONA, HAWAII

Dear Mr. Kosaka:

Thank you very much for your comments on the draft Environmental Impact Statement for the Hōnaunau Boat Launching Ramp.

As we have now more thoroughly discussed in the revised EIS, the County does not anticipate or wish to encourage any substantial increase in boat launching activity at Hōnaunau Bay. The proposal will not improve the channel leading to the Bay which now limits boat size (to vessels under 20 feet) and which also restricts use of the area to the experienced boater. As a consequence, no additional land based improvements which would promote increased use of the area are being provided.

With regards to measures to mitigate adverse impacts on water quality at Hōnaunau we have taken the following actions: (a) a marine biologist will be retained to monitor the biological effects during construction of the submarine portion of the ramp and (b) the County is in contact with the State Departments of Health and Forestry and Wildlife to implement a more long-term water quality monitoring program for these waters which are under State jurisdiction.

We have noted your comments on the Hawaiian hoary bat (Lasiurus cinereus semotus) and the revised EIS has clarified and acknowledged its status as an endemic and federally endangered species.

• Masahiro Nishida P.E.

The revised EIS also takes note of the fact that the Hawaiian short-eared owl (Asio flammeus sandwichensis) is listed as an endangered species by the State of Hawaii.

We thank you very much for your valuable input to the EIS.

Sincerely,

DENNIS K. SHIGEOKA, P.E.
Executive Vice President/Treasurer

cc: Honorable Mayor Herbert Matayoshi
Milton Hakoda - Department of Parks and Recreation

University of Hawaii at Manoa

Water Resources Research Center
Holmes Hall 283 • 2540 Dole Street
Honolulu, Hawaii 96822

15 October 1982

Mayor Herbert Matayoshi
County of Hawaii
25 Aupuni Street
Hilo, Hawaii 96720

Dear Mayor Matayoshi:

Subject: Draft Environmental Impact Statement, Honaunau Boat Launching Ramp, Honaunau, South Kona, Island of Hawaii
TMK: 8-4-13:14, September 1982

We have reviewed the subject DEIS and have no comment to offer at this time. Thank you for the opportunity to comment. This material was reviewed by WRRC personnel.

Sincerely,

Edwin T. Murabayashi

Edwin T. Murabayashi
EIS Coordinator

ETM:jm

AN EQUAL OPPORTUNITY EMPLOYER

HERBERT T. MATAYOSHI, MAYOR
H. STUART KEARNS, JR.
Director

DEPARTMENT OF RESEARCH AND DEVELOPMENT
COUNTY OF HAWAII • 25 AUPUNI STREET • HILO, HAWAII 96720 • TELEPHONE (808) 961-8366

October 15, 1982

Honorable Herbert T. Matayoshi
Mayor
County of Hawaii
25 Aupuni Street
Hilo, Hawaii 96720

SUBJECT: Environmental Impact Statement
Honaunau Boat Launching Ramp
Honaunau, South Kona, Hawaii

Thank you for this opportunity to review and comment on the above subject. We offer the following for your consideration.

a. We are of the opinion that the construction of a new boat launch ramp at Honaunau will increase boating activity in this area. This will give rise to "land-based" problems such as vehicle and trailer parking, and wash down areas for the boats.

b. Consideration should be given as to the adequacy of land-based facilities to accommodate the sport and commercial fishing activity which will be generated by the new ramp.

c. To accommodate the increasing activity of sport and commercial fishing along the Kona Coast, a new launch ramp will add to and enhance these activities.

H. Stuart Kearns, Jr.
H. STUART KEARNS, JR.
DIRECTOR

Okahara / Shigeoka & Associates

November 18, 1982
Letter No. 928
Job No. 82-006

Mr. H. Stuart Kearns, Jr.
Director
DEPT. OF RESEARCH AND DEVELOPMENT
County of Hawaii
25 Aupuni Street
Hilo, Hawaii 96720

RE: DRAFT EIS
HONAUNAU BOAT LAUNCHING RAMP
HONAUNAU, SOUTH KONA, HAWAII

Dear Mr. Kearns:

Thank you for your timely input on the draft Environmental Impact Statement for the Hōnaunau Boat Launching Ramp.

We appreciate your comments on the need for additional facilities to accommodate increased boater activity as a result of the proposed ramp. However, because the Department of Parks and Recreation has designed the structure as a replacement of the existing facility, substantial increase in boater use of the area is not anticipated. As a consequence, the County also does not plan to expand parking or other land based facilities at the site.

Further, the shallow channel between Kapuwai Cove and Hōnaunau Bay should remain a deterrent to the inexperienced boater and should therefore limit use of the facility to the experienced navigator.

Thank you again for your comments.

Sincerely,

DENNIS K. SHIGEOKA, P.E.
Executive Vice President/Treasurer

cc: Honorable Mayor Herbert Matayoshi
Milton Hakoda - Department of Parks & Recreation

United States
Department of
Agriculture

Soil
Conservation
Service

P. O. Box 636
Kealakekua, HI
96750-0636

October 14, 1982

Mayor Herbert Matayoshi
County of Hawaii
25 Aupuni Street
Hilo, Hawaii 96720

Dear Sir:

SUBJECT: Honaunau Boat Launching Ramp
LOCATION: Honaunau, South Kona, Hawaii
CLASSIFICATION: Agency Action

We have reviewed the Environmental Impact Statement (EIS) for the above mentioned subject and have no comments to offer at this time.

Thank you for the opportunity to review these documents.

Sincerely yours,

Gay Kam
District Conservationist

GK:jsa

cc: County of Hawaii Department of Parks and Recreation
% Okahara, Shigeoka and Associates.

file: [illegible]

RECEIVED
OCT 18 1982
OKAHARA, SHIGEOKA, & ASSOC.

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

14 October 1982

Milton Hakoda, Director
Department of Parks & Recreation
County of Hawaii
25 Aupuni St.
Hilo, Hawaii 96720

Dear Mr. Hakoda:

We have reviewed your permit application for the Honaunau Boat Launching Ramp, Kapuwai Cove, Honaunau, South Kona, Hawaii.

The application is complete and is being processed.

Sincerely yours,

EVERETTE A. FLANDERS
Chief, Construction-Operations
Division

CF:
Okahara, Shigeoka & Associates, Inc.
200 Kohola St.
Hilo, HI 96720

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 15TH AIR BASE WING (PACAF)
HICKAM AIR FORCE BASE, HAWAII 96853

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OCT 15 1982
OKAHARA, SHIGEOKA, & ASSOC.

REPLY TO ATTN OF: DEEV (Mr Yamada, 449-1831)

13 OCT 1982

SUBJECT: Environmental Impact Statement for the Honaunau Boat Launching Ramp

TO: Office of Environmental Quality Control
550 Halekauwila Street, Room 301
Honolulu, HI 96813

1. This office has reviewed the subject EIS and has no comment relative to the proposed project.

2. We greatly appreciate your cooperative efforts in keeping the Air Force apprised of your project and thank you for the opportunity to review the document.

WILLIAM F. MORIOKA
Chief, Engrg & Envmtl Plng Div
Directorate of Civil Engineering

1 Atch
Draft EA

Cy to: Mayor Herbert Matayoshi
County of Hawaii
25 Aupuni Street
Hilo, HI 96720

County of Hawaii
Dept of Parks & Recreation
c/o Okahara, Shigeoka & Associates
200 Kohala Street
Hilo, HI 96720

State of Hawaii
DEPARTMENT OF DEFENSE
OFFICE OF THE ADJUTANT GENERAL
3949 Diamond Head Road
Honolulu, Hawaii 96816

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OCT 14 1982
OKAHARA, SHIGEOKA, & ASSOC.

12 OCT 1982

HIKMG

The Honorable Herbert Matayoshi
County of Hawaii
25 Aupuni Street
Hilo, Hawaii 96720

Dear Mayor Matayoshi:

Honaunau Boat Launching Ramp

Thank you for providing us the opportunity to review the proposed project, "Honaunau Boat Launching Ramp" Environmental Impact Statement (Draft).

We have completed our review and have no comments to offer at this time.

Yours truly,

signed

JERRY M. MATSUDA
Captain, HANG
Contr & Engr Officer

cc: County of Hawaii Dept of
Parks and Recreation
c/o Okahara, Shigeoka & Assoc.
Ms. Jacqueline Parnell
Office of Env Quality Control
Office of Env Quality Commission w/EIS Draft

DEPARTMENT OF PLANNING
AND ECONOMIC DEVELOPMENT

GEORGE R ARIYOSHI
GOVERNOR
HIDETO KONO
DIRECTOR
FRANK SKRIVANEK
DEPUTY DIRECTOR

October 12, 1982

Ref. No. 6660

COPY

RECEIVED
OCT 21 1982
OKAHARA, SHIGEOKA, & ASSOC.

Ms. Jacqueline Parnell
Director
Office of Environmental Quality
Control
550 Halekauwila Street, Room 301
Honolulu, Hawaii 96813

Dear Ms. Parnell:

Subject: Honaunau Boat Launching Ramp Draft Environmental Impact Statement (EIS)

We have reviewed the subject draft EIS and offer the following comments with respect to the Hawaii Coastal Zone Management Program's objectives and policies pertaining to Coastal Ecosystems, Recreational Resources, and Historic Resources.

The location of the boat launching ramp within Kapuwai Cove, Honaunau Bay, warrants the careful attention given in the draft EIS to potential adverse impacts on the surrounding area and offshore ecosystem. While we understand that the ramp will essentially replace the existing one, the absence of any future boat ramp plans and feasible alternative locations would suggest that the proposed ramp may be subject to greater demands on its usage over time. Any such increased or expanded use would be of particular concern in view of the already poor water circulation within Kapuwai Cove, the fragile offshore reef ecosystem, the neighboring Pu'uhonua O Honaunau National Historic Park, and the existing mix of recreational activities within the Cove.

In consideration thereof, we would discourage any EIS references to future expansion of ramp usage. We would also recommend the establishment of monitoring procedures to prevent any further degradation of the coastal water quality.

Thank you for the opportunity to comment.

Sincerely,

Frank Skrivanek

for Hideto Kono

cc: Department of Parks and Recreation
Hawaii County

cc: Charles Simpson

DEPARTMENT OF PUBLIC WORKS
COUNTY OF HAWAII
HILO, HAWAII

DATE October 8, 1982

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OCT 11 1982
OKAHARA, SHIGEOKA, & ASSOC.

Memorandum

TO : Planning Department

FROM : Chief Engineer

SUBJECT: HONAUNAU BOAT LAUNCHING RAMP
HONAUNAU, SOUTH KONA, HAWAII

We have reviewed the Draft EIS for the subject project and we have no comments to offer.

EDWARD HARADA
Chief Engineer

cc: Okahara, Shigeoka & Assoc.
Parks & Recreation
Office of Env. Quality Control

RECEIVED
OCT 8 1982
OKAHARA, SHIGEOKA, & ASSOC.

October 7, 1982

Mayor Herbert Matayoshi
County of Hawaii
25 Aupuni Street
Hilo, Hawaii 96720

Dear Mayor Matayoshi:

SUBJECT: Honaunau Boat Launching Ramp

The Department of Hawaiian Home Lands has reviewed the Draft Environmental Impact Statement relative to the above subject project and has no comments to make.

Sincerely yours,

Georgiana K. Padeken
Chairman

GKP:RF:GW:nm

cc: County of Hawaii Department
of Parks and Recreation
c/o Okahara, Shigeoka and Associates
200 Kohola Street
Hilo, Hawaii 96720

RECEIVED
OCT 8 1982

OKAHARA, SHIGEOKA, & ASSOC.
0 6 OCT 1982

APZV-EHV

Honorable Herbert Matayoshi
Mayor of the County of Hawaii
25 Aupuni Street
Hilo, Hawaii 96720

Dear Mayor Matayoshi:

The draft Environmental Impact Statement (EIS) for the Honaunau Boat Launching Ramp, Honaunau, South Kona, Island of Hawaii has been reviewed and we have no comments to offer. There are no Army installations or activities in the vicinity of the proposed project.

Thank you for the opportunity to comment on the draft EIS.

Sincerely,

Original signed by

RONALD A. BORRELLO
COL, EN
Director of Engineering and Housing

Copy Furnished:
County of Hawaii Department of
Parks and Recreation
c/o Okahara, Shigeoka and Associates
200 Kohola Street
Hilo, Hawaii 96720

GEORGE R. ARIYOSHI
GOVERNOR

Jacqueline Parnell
DIRECTOR

TELEPHONE NO.
548-6915

STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY CONTROL
550 HALEKAUWILA ST.
ROOM 301
HONOLULU, HAWAII 96813

October 1, 1982

The Honorable Herbert Matayoshi
Mayor of the County of Hawaii
25 Aupuni Street
Hilo, Hawaii 96720

Dear Mayor Matayoshi:

Subject: Comments to Honaunau Boat Launching Ramp
Draft Environmental Impact Statements (DEIS)

Our primary concern with this project is that five man-made cups carved into the pahoehoe lava shelf which may be of possible archaeological significance will be destroyed. Since we do not have any expertise in this area, we have relayed our concerns to the Historic Sites Section of the Department of Land and Natural Resources to assure that a response is made in this regard.

Should the Historic Sites Section determine that the cups are of historic significance, we suggest that the realignment of the boat launching ramp be examined as an alternative.

Thank you for the opportunity to comment on your draft EIS.

Sincerely,

Jacqueline Parnell

Jacqueline Parnell
Director

cc: Okahara, Shigeoka and Associates

Okahara / Shigeoka & Associates
ENGINEERING AND PLANNING CONSULTANTS

November 18, 1982
Letter No. 927
Job No. 82-006

Ms. Jacqueline Parnell
Director
STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY CONTROL
550 Halekauwila Street, Room 301
Honolulu, Hawaii 96813

RE: DRAFT EIS
HONAUNAU BOAT LAUNCHING RAMP
HONAUNAU, SOUTH KONA, HAWAII

Dear Ms. Parnell:

Thank you very much for your comments on the draft Environmental Impact Statement for the Hōnaunau Boat Launching Ramp.

In response to your concern that the pre-historic cups/sockets might be destroyed by the proposed construction, we wish to advise that the Department of Land and Natural Resources has indicated concurrence with the archaelogist's recommendations contained in the Draft Environmental Impact Statement. Thus, the plan for ramp alignment has not been altered. Should any unanticipated archaelogical sites or remains be uncovered during construction of the project, work will be halted and the Historic Sites Section (Department of Land and Natural Resources) contacted for advice and assistance.

Again, thank you for your interest in the proposal.

Sincerely,

Dennis K. Shigeoka

DENNIS K. SHIGEOKA, P.E.
Executive Vice President/Treasurer

cc: Honorable Mayor Herbert Matayoshi
Milton Hakoda - Department of Parks & Recreation

HEADQUARTERS
NAVAL BASE PEARL HARBOR
BOX 110
PEARL HARBOR, HAWAII 96860

IN REPLY REFER TO:
002A:QLB:jal
Ser 2326

1 OCT 1982

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OKAHARA, SHIGEOKA, & ASSOC.

The Honorable Herbert Matayoshi
Mayor, County of Hawaii
25 Aupuni Street
Hilo, Hawaii 96720

Dear Mayor Matayoshi:

Environmental Impact Statement
Honaunau Boat Launching Ramp

The EIS for the Honaunau boat launching ramp has been reviewed and the Navy has no comments to offer. As this command has no further use for the EIS, the EIS is being returned to the Environmental Quality Commission.

Thank you for the opportunity to review the EIS.

Sincerely,

Q. L. BRUHN
LIEUTENANT, CEC, U. S. NAVY
Deputy Facilities Engineer
By direction of the Commander

Enclosure

Copy to:
County of Hawaii Department
of Parks and Recreation

Environmental Quality Commission

GEORGE R. ARIYOSHI
GOVERNOR

JACK K. SUWA
CHAIRMAN, BOARD OF AGRICULTURE

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1982
OKAHARA, SHIGEOKA, & ASSOC.

State of Hawaii
DEPARTMENT OF AGRICULTURE
1428 So. King Street
P. O. Box 22159
Honolulu, Hawaii 96822

September 30, 1982

MEMORANDUM

To: Honorable Herbert Matayoshi
Mayor, County of Hawaii

Subject: Environmental Impact Statement
Honaunau Boat Launching Ramp
TMK: 8-4-13:14 Honaunau, South Kona, Hawaii

The Department of Agriculture has reviewed the subject statement and does not have any comments to offer. We are returning the Draft Environmental Impact Statement for your further use.

Thank you for the opportunity to comment.

Jack K. Suwa
JACK K. SUWA
Chairman, Board of Agriculture

Encl.

cc: √County of Hawaii Department
of Parks and Recreation

DEPARTMENT OF TRANSPORTATION
UNITED STATES COAST GUARD

COMMANDER (dpl)
Fourteenth Coast Guard District
Prince Kalanianaole Federal Bldg.
300 Ala Moana Blvd.
Honolulu, Hawaii 96850

29 SEP 1982
RECEIVED
SEP 30 1982
OKAHARA, SHIGEOKA, & ASSOC.

Mayor Herbert Matayoshi
County of Hawaii
25 Aupuni Street
Hilo, Hawaii 96720

Dear Mayor Matayoshi:

The Fourteenth Coast Guard District has reviewed the Environmental Assessment for the Honaunau Boat Launching Ramp and has no objection or constructive comments to offer at the present time.

Sincerely,

J. E. SCHWARTZ
Commander, U. S. Coast Guard
District Planning Officer
By direction of
Commander, Fourteenth Coast Guard District

[redacted]: County of Hawaii Dept. of Parks & Recreation
c/o Okahara, Shigeoka & Associates

GEORGE R. ARIYOSHI
GOVERNOR

HIDEO MURAKAMI
COMPTROLLER

MIKE N. TOKUNAGA
DEPUTY COMPTROLLER

STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P. O. BOX 119, HONOLULU, HAWAII 96810

LETTER NO. (P)1871.2

SEP 29 1982

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OCT 21 1982
OKAHARA, SHIGEOKA, & ASSOC.

Honorable Herbert Matayoshi
Mayor
County of Hawaii
25 Aupuni Street
Hilo, Hawaii 96720

Dear Mayor Matayoshi:

Subject: Honaunau Boat Launching Ramp
Environmental Impact Statement

We have reviewed the EIS for the subject project and determined that it will not affect any of our facilities. We have no other comments to offer.

Respectfully,

HIDEO MURAKAMI
State Comptroller

cc Okahara/Shigeoka

RECEIVED SEP 21 1982
NOV 3 1982

GEORGE R. ARIYOSHI
GOVERNOR

ROY R. TAKEMOTO
CHAIRMAN

OKAHARA, SHIGEOKA, & ASSOC.

TELEPHONE NO.
(808) 543-8945

STATE OF HAWAII
ENVIRONMENTAL QUALITY COMMISSION
850 HALEKAUWILA ST.
ROOM 301
HONOLULU, HAWAII 96813

September 22, 1982

Dear Reviewer:

Attached for your review is an Environmental Impact Statement (EIS) that was prepared pursuant to Chapter 343, Hawaii Revised Statutes and the Rules and Regulations of the Environmental Quality Commission:

Title: Honaunau Boat Launching Ramp

Location: Honaunau, South Kona, Hawaii

Classification: Agency Action

Your comments or acknowledgement of no comments on the EIS are welcomed. Please submit your reply to the accepting authority or approving agency:

Mayor Herbert Matayoshi
County of Hawaii
25 Aupuni Street
Hilo, Hawaii 96720

Please send a copy of your reply to the proposing party:

County of Hawaii Department of Parks and Recreation
c/o Okahara, Shigeoka and Associates
200 Kohola Street
Hilo, Hawaii 96720

Your comments must be received or postmarked by: October 22, 1982

If you have no further use for this EIS, please return it to the Commission.

Thank you for your participation in the EIS process.

82:774

September 28, 1982

State Energy Division has no comments.

9/28/82
3

Edward J. Greaney
Chief, Conservation Branch

GEORGE R. ARIYOSHI
GOVERNOR OF HAWAII

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

SUSUMU ONO, CHAIRMAN
BOARD OF LAND & NATURAL RESOURCES
EDGAR A. HAMASU
DEPUTY TO THE CHAIRMAN

DIVISIONS:
- AQUACULTURE DEVELOPMENT PROGRAM
- AQUATIC RESOURCES
- CONSERVATION AND RESOURCES ENFORCEMENT
- CONVEYANCES
- FORESTRY AND WILDLIFE
- LAND MANAGEMENT
- STATE PARKS
- WATER AND LAND DEVELOPMENT

APR 2 1 1982

Mr. Dennis Shigeoka
Okahana, Shigeoka & Associates
200 Kohola Street
Hilo, Hawaii 96720

Dear Mr. Shigeoka:

Notice that an EIS was being prepared for a boat launching ramp at Honaunau appeared in the March 23, 1982 issue of the Environmental Quality Commission's Bulletin.

As you may know, Honaunau Bay already has a ramp, but it is difficult to use at low tides. Moreover, it is the only ramp available between Keauhou Bay and Milolii. You are doubtless aware that Honaunau Bay is a popular shoreline recreation spot: sightseeing, picnicking, tidepools, swimming, limu picking, and diving. We therefore request that the EIS address potential impacts of the project on marine life and recreational activities, and measures to mitigate such impacts. The impacts may include erosion, temporary turbidity and sedimentation, construction materials and preservatives inadvertently falling into the waters, and the handling of boat and human waste.

Your attention to these concerns would be appreciated.

Sincerely,

SUSUMU ONO, Chairman
Board of Land and Natural Resources

RECEIVED
APR 23 1982
OKAHARA, SHIGEOKA, & ASSOC.