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**Cultural Impact Evaluation  
for Nāwiliwili-Ahukini Bike/Pedestrian Path Project  
Nāwiliwili, Kalapakī and Hanamā‘ulu Ahupua‘a  
Līhu‘e District (Puna Moku), Island of Kaua‘i  
TMK: [4] 3-2-004; 3-5-001, 002 & 3-6-002, 019, 020, and  
various rights-of-way between various plats**

**Prepared for  
R.M. Towill Corporation**

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Kailua, Hawai‘i  
(Job Code: NAWILIWILI 2)**

**July 2008**

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## Management Summary

Reference	Cultural Impact Evaluation (CIE) for Nāwiliwili-Ahukini Bike/Pedestrian Path Project, Nāwiliwili, Kalapakī and Hanamā‘ulu Ahupua‘a, Līhu‘e District (Puna Moku), Island of Kaua‘i, TMK: (4) 3-2-004; 3-5-001, 002 & 3-6-002, 019, 020, and various rights-of-way between various plats (Spearing, Monahan and Hammatt 2008)
Date	July 2008
Project Number	Cultural Surveys Hawai‘i (CSH) Job Code: NAWILIWILI 2
Project Location	The project area is located in coastal and near-coastal portions of three <i>ahupua‘a</i> in Līhu‘e District, Island of Kaua‘i: Hanamā‘ulu, Kalapakī and Nāwiliwili. The proposed bike- and pedestrian-path route alignments are located near and adjacent to the Ahukini Landing, Ninini Point Lighthouse, Līhu‘e Airport, Kaua‘i Lagoons and Marriot Resort, Līhu‘e Civic Center and residential areas <i>makai</i> (seaward) of the civic center, Nāwiliwili Park and Harbor, and Niumalu Park. This area is depicted on portions of the 1996 Līhu‘e and 1996 Kapa‘a USGS 7.5-minute topographic quadrangle maps (see Figure 1)
Land Jurisdiction	Public and private land
Agencies	State Historic Preservation Division (SHPD)
Project Description	The subject project is one phase of a larger project to connect Nāwiliwili with Anahola by a bike and pedestrian path. The subject project links Nāwiliwili, Ahukini Landing, and the Līhu‘e Civic Center (see Figures 1 and 2).
Project Acreage	Approximately 8 miles (12.9 km) of bike- and pedestrian-path routes are included in the current alignment options for the subject phase of the project; design and widths of the various alignment options vary.
Area of Potential Effect (APE) and Results of Prior Surveys	The Area of Potential Effect (APE) consists of all the alignment-option corridors between Nāwiliwili, Ahukini Landing and Līhu‘e Civic Center, defined as the center line of the corridors and their immediately adjacent alignment shoulders. While this investigation focused on the project APE, for the purposes of this CIE, the study area considered the <i>ahupua‘a</i> of Hanamā‘ulu, Kalapakī and Nāwiliwili.
Document Purpose	At the request of R.M. Towill, Corp., CSH undertook this Cultural Impact Evaluation (CIE) to assist in determining if there is a need for a more comprehensive Cultural Impact Assessment (CIA) satisfying Hawai‘i Revised Statutes (HRS) Chapter 343, Act 50, which mandates assessment of potential impacts to cultural practices and resources by proposed projects undergoing an environmental review. The subject CIE provides <i>preliminary</i> information pertinent to the assessment of the proposed project’s impacts to cultural practices (per the OEQC’s <i>Guidelines for Assessing Cultural Impacts</i> ), but does not fully meet the guidelines provided by the OEQC.
Consultation Effort	Hawaiian organizations, agencies and community members were

	<p>contacted in order to identify potentially knowledgeable individuals with cultural expertise and/or knowledge of the project area and vicinity. The organizations consulted included the State Historic Preservation Division (SHPD), the Office of Hawaiian Affairs (OHA), and Kaua'i Island agencies pertinent to the proposed project area such as the Kaua'i Island Burial Council (KIBC), Kaua'i Historical Preservation Review Commission (KHPRC), DLNR-L Kaua'i Land Division, Kaua'i Paths, Royal Order of Kamehameha, Kaumali'i Chapter no. 3 and Kaleo O Kaua'i and more.</p>
<p>Results of Background Research and Community Consultation</p>	<p>Thirty-two agencies/organizations or individuals were contacted for this CIE. Seventeen community agencies/organizations or individuals participated in brief informal interviews or provided referrals. Response is still pending from a key cultural consultant, Cheryl Lovell-Obatake. In lieu of Ms. Lovell-Obatake's participation in this CIE, a letter regarding the project sent to R.M. Towill has been included for reference in Appendix A. Ms. Lovell-Obatake indicated in her letter to R.M. Towill that a Cultural Impact Assessment is needed. Ms. Lovell-Obatake states, "Section 106- ACHP and SHPD review, when Federal Highway Funds are contributed to the bikeway project. A cultural impact assessment under the EIS should be conducted."</p> <p>The findings of this CIE suggest that there are four major areas of cultural interest and concern regarding the proposed Nāwiliwili-Ahukini Bike/Pedestrian Path Project:</p> <ol style="list-style-type: none"> <li>(1) The Nāwiliwili-Ahukini Bike/Pedestrian Path may impede access to fishing grounds, in particular, vehicular access for residential fishermen, especially along the shoreline. Additionally, as the Bike/Pedestrian Path could draw more non-residents who engage in fishing, there is concern that there will be increased fishing by non-residents which may lead to overfishing.</li> <li>(2) There may be Native Hawaiian burials (<i>iwi kūpuna</i>) in the Nāwiliwili Valley (Kahumoku Road) and other areas outside of the project area, and generally, a likelihood that <i>iwi</i> (bones) may be discovered in the project area.</li> <li>(3) Many historic and cultural properties and places exist along the pathway, especially in Nāwiliwili Valley. The Office of Hawaiian Affairs wrote, "OHA seeks assurances that should cultural sites be identified within the project area, every effort should be made to route the final path alignment away from these locations to avoid adverse impacts to the sites."</li> <li>(4) This project is only a segment in a larger project. Although not a part of the current segment, the future Anahola section of the Bike/Pedestrian Path could infringe on Hawaiian Homelands. In particular, there is concern that Native Hawaiians may be</li> </ol>

	<p>displaced from Hawaiian Homelands as result of the expanded Bike/Pedestrian Path.</p>
<p>Recommendations</p>	<p>The results of this CIE present a few possible mitigation measures for the planner/developer's consideration. The following recommendations are offered as a way to address some of the concerns expressed by study participants in the statements presented in Sections 6 and 7:</p> <ol style="list-style-type: none"> <li>(1) For further information concerning the cultural activities documented in this report, referrals provided by current CIE study participants could be contacted for further comment or possibly more in-depth interviews, in particular, Cheryl Lovell-Obatake.</li> <li>(2) In light of statements made by a few of the participants in this study that there may be burial sites (<i>iwi kūpuna</i>, ancestral remains) in the project area, it is recommended that:             <ol style="list-style-type: none"> <li>a. There is concern for the immediate vicinity of previously identified archaeological sites and areas along the coast. Personnel involved in development activities in the project area be informed of the possibility of inadvertent cultural finds, including human remains in culturally sensitive areas. Should cultural or burial sites be identified during ground disturbance, all work should immediately cease, and the appropriate agencies notified pursuant to applicable law.</li> </ol> </li> <li>(3) As there are Kānaka Maoli (native born, Native Hawaiians), as well as other <i>kama'āina</i> groups who are culturally active in the area, it is recommended that ongoing cultural practices of (possible) plant gathering, fishing, surfing and other reasons (e.g., ceremonial) for visits to the project area and vicinity be recognized, protected and accommodated. In particular, it is recommended that fisher's concerns regarding access to fishing sites be recognized and accommodated.</li> <li>(4) Generally, it is recommended that community members be consulted regarding the preservation, restoration, and interpretation of cultural resources and/or properties — including archaeological sites, possible burials and other features, that proactively includes the community and descendents of those with connections to the subject parcel (e.g., past residency) throughout the development of the Ahukini Bike/Pedestrian Path Project</li> <li>(5) It is hoped that seasonal fishing restrictions will be</li> </ol>

	monitored and enforced due to the potential for increased fishing activity along the shoreline.
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## Section 1 Introduction

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### 1.1 Project Background

At the request of R.M. Towill Corporation, Cultural Surveys Hawai'i, Inc. (CSH) prepared this Cultural Impact Evaluation (CIE) for the Nāwiliwili-Ahukini Bike/Pedestrian Path Project, which is located in coastal and near-coastal portions of three *ahupua'a* in Līhu'e District, Kaua'i: Hanamā'ulu, Kalapakī and Nāwiliwili. The proposed alignments are located adjacent to Ahukini Landing, Ninini Point Lighthouse, Līhu'e Airport, Kaua'i Lagoons, Marriot Resort, Līhu'e Civic Center and residential areas *makai* (seaward) of the civic center, Nāwiliwili Park and Harbor, and Niūmalu Park. This area is depicted on portions of the 1996 Līhu'e and 1996 Kapa'a USGS 7.5-minute topographic quadrangle map (Figures 1 and 2).

The subject project is one phase of a larger project to connect Nāwiliwili with Anahola by a bike and pedestrian path, a distance of some 17 miles (27.4 km) of coastline along windward Kaua'i. The subject project (Phase VI of the overall project) links three main sub-areas at the southern end of the overall project corridor: Nāwiliwili, Ahukini Landing, and the Līhu'e Civic Center. Preliminary planning includes several main alignment options (see Figures 1 and 2), all of which were inspected for this study.

Approximately 8 miles (12.9 km) of bike- and pedestrian-path routes are included in the current alignment options for Phase VI. Design specifications and widths of the different alignment options vary. The Area of Potential Effect (APE) consists of the entire approximately 8 miles of alignment-option corridors between Nāwiliwili, Ahukini Landing and Līhu'e Civic Center, defined as the center line of the corridors and their immediately adjacent alignment shoulders.

This Cultural Impact Evaluation study was completed as a component of an Environmental Assessment for the proposed Nāwiliwili-Ahukini Bike/Pedestrian Path Project. The study was conducted in order to identify any sensitive areas and potential impacts to cultural practices that may require further investigation or mitigation before the project proceeds. This document is intended to facilitate the project's planning and support the project's historic preservation review compliance. Based on the findings of this study, recommendations are presented.

### 1.2 Document Purpose

The proposed project may (now or in the future) require compliance with the State of Hawai'i environmental review process [Hawai'i Revised Statutes (HRS) Chapter 343, Act 50 law enacted in 2000], which mandates inclusion of an assessment of impacts to local cultural practices and resources by proposed projects undergoing an environmental review. At the request of R.M. Towill, Corp., CSH is undertaking this Cultural Impact Evaluation to assist the landowner / developer in determining if there is a need for a more comprehensive Cultural Impact Assessment (CIA) satisfying Hawai'i Revised Statutes (HRS) Chapter 343, Act 50, which mandates assessment of potential impacts to cultural practices and resources by proposed projects undergoing an environmental review. The subject CIE provides preliminary information pertinent to the assessment of the proposed project's impacts to cultural practices (per the OEQC's *Guidelines for Assessing Cultural Impacts*), but does not fully meet the requirements of

the OEQC guidelines. This document is intended to support the project's environmental review and may also serve to support the project's historic preservation review under HRS Chapter 6E-42 and Hawai'i Administrative Rules Chapter 13-284.

### **1.3 Scope of Work**

The scope of work for this CIE includes:

1. Examination of cultural and historical resources, including Land Commission documents, historic maps, and previous research reports, with the specific purpose of identifying traditional Hawaiian activities including gathering of plant, animal, and other resources or agricultural pursuits as may be indicated in the historic record.
2. A review of previous archaeological work at and near the subject parcel that may be relevant to reconstructions of traditional land use activities; and to the identification and description of cultural resources, practices, and beliefs associated with the parcel.
3. Limited consultation with knowledgeable parties regarding past and present cultural resources and practices at or near the parcel; present uses of the parcel; and/or other (non-Hawaiian) practices, uses, or traditions associated with the parcel.
4. Preparation of a report summarizing the results of these research activities.

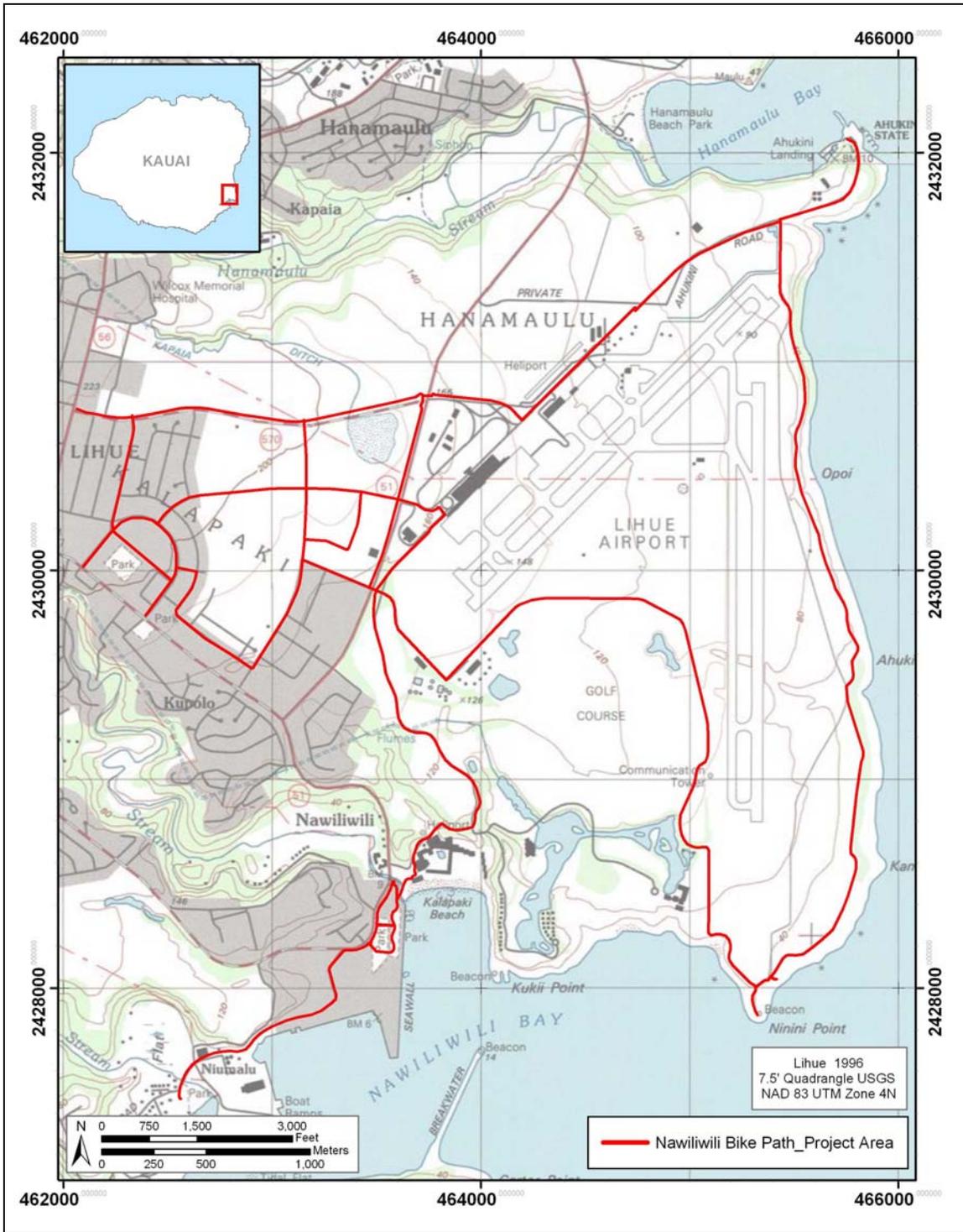


Figure 1. Project area location show on portions of the USGS 1996 Lihue and 1996 Kapa'a quadrangles 7.5 minute topographic map, red line depicts all proposed alignments.



Figure 2. Project area location show on aerial image (source: Orthoimagery 2005); red line depicts all proposed alignment.

## 1.4 Environmental Setting

### 1.4.1 Natural Environment

The project area extends from the coastline, between Ahukini Landing in the north to Ninini Point in the south, inland approximately 2.7 kilometers (1.7 miles), rising from sea level to approximately 220 feet above mean annual sea level in Līhu'e Town. The area's topography is gently sloping up to the west; there are several shallow intermittent, unnamed drainages between Līhu'e Town and the coast (Juvik and Juvik 1998).

Located on the southeast coast of Kaua'i, the project area is exposed to the prevailing northeast trade winds, and receives 40 to 50 inches of rainfall annually along the coast and up to 100 inches annually inland (western portion of the project area). The annual average temperature ranges from 75-80° F at the airport (Giambelluca et al. 1986; Juvik and Juvik 1998).

Soils in and around project area consist primarily of Līhu'e silty clay (LhB and LhC) and Līhu'e gravelly silty clay (LIB) (Foote et al. 1972) (Figure 3). Līhu'e soils have a surface layer of dusky-red to dark reddish-brown firm silty clay. The substratum is soft, weathered basic igneous rock. Sugar cane has been the main commercial crop in this area in historic times.

Given the relatively large area covered by the proposed bike and pedestrian-path route alignments, and given the presence of developed areas, road ways, resorts and other facilities (e.g., parks, harbors and the airport), vegetation in and around the project area is quite variable. Areas around the airport, for example, consist of landscaped lawns and introduced ornamental and exotic plants. Tall invasive grasses cover much of the project area that was once utilized for commercial sugar cane. The coastal strip is covered in dense vegetation with both native and introduced species, including *Naupaka* (*Scaevola sericea*), *'Ilima* (*Sida* spp.), *Koa haole* (*Leucaena leucocephala*), Christmasberry (*Schinus terebinthifolius*), Ironwood (*Casuarina* spp.) and tall grasses.

### 1.4.2 Built Environment

Background research indicates that nearly the entire project area was, prior to the construction of the Līhu'e Airport, under commercial sugar cane agriculture. This agricultural use of most of the project area resulted in the grading and repeated plowing of the project area. With the construction of the airport, residential areas to the west in Līhu'e Town, the resorts between Ninini Point Lighthouse and Nāwiliwili, and other facilities and infrastructure (e.g., roadways and utilities), most of the project area was further modified by modern land uses. The coastal strip area has been less affected by modern land use, but still shows clear evidence of modifications, such as dirt trails and tracks and illegal dumping of refuse materials.

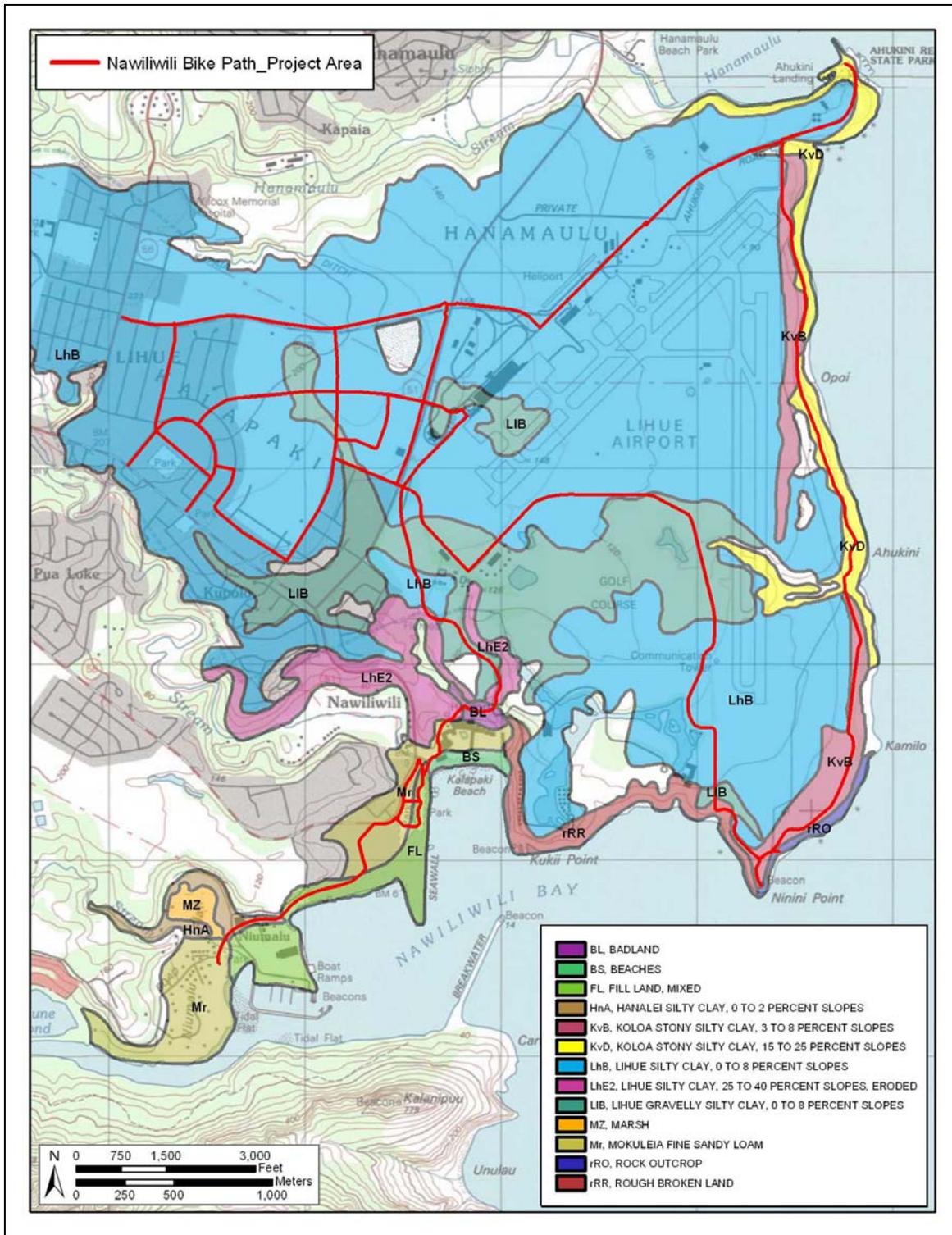


Figure 3. Soil types in and around the project area (data from Foote et al. 1972)

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## Section 2 Methods

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Historical documents, maps and existing archaeological information pertaining to the sites in the vicinity of this project were researched at the Cultural Surveys Hawai'i library. Information on Land Commission Awards was accessed through Waihona Aina Corporation's Māhele Data Base ([www.waihona.com](http://www.waihona.com)). The State Historic Preservation Division, Office of Hawaiian Affairs, Kaua'i Island Burial Council, Kaua'i Historical Preservation Review Commission and community and cultural organizations in Hanamā'ulu, Kalapakī and Nāwiliwili, etc. were contacted in order to identify potentially knowledgeable individuals with cultural expertise and/or knowledge of the project area and the surrounding vicinity. The names for potential community contacts were also provided by colleagues at CSH and from the authors' familiarity with people who live in or around the project area. The cultural specialist conducting research on this evaluation employed snowball and judgment sampling methods, an informed consent process and semi-structured interviews according to standard ethnographic methods (as suggested by Bernard 2005). Some of the prospective community contacts were not available to be interviewed as part of this project. A discussion of the consultation process can be found in Section 6 on Community Consultations. Please refer to Table 1, Section 6 for a complete list of individuals and organizations contacted.

## Section 3 Traditional Background

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This section focuses on the traditional background of coastal and near-coastal portions of three *ahupua'a* in the *moku* (traditional district) of Puna: Hanamā'ulu, Kalapakī and Nāwiliwili (Figure 1). The subject project area is located between the two main bays and streams of Nāwiliwili (to the south) and Hanamā'ulu (to the north). These two meandering streams, which drain the slopes of Kilohana Crater (1143 feet elevation), were once home to thousands of Native Hawaiians living a traditional subsistence lifestyle.

Handy (1940:67) describes these two valleys in his chapter on the main *kalo* (taro) growing locations in Puna Moku:

[Nāwiliwili] For 3 miles inland from the sea the Nawiliwili River twists (*wiliwili*) through a flat valley bottom which was formerly all in terraces. Inland, just above the bay, three Hawaiian taro planters cultivate wet taro in a few small terraces. Most of the land is [now] in pasture.

Hanamaulu River, rising below Kilohana Crater, winds its zigzag way to the sea through a relatively broad gulch, which had many small terraces commencing at a point about 2.5 miles up from the sea and continuing down to the delta of the river which begins about a mile inland. The small terraces inland from the highway are unused. The delta region is a continuous area of flatland now mostly under sugar cane and house sites. Formerly this [delta] must have been planted in taro.

A fishing village called Kalapakī was located between these two major stream valleys, near the seashore, before the historic period. This general area between the streams and *makai* of the present town of Līhu'e, *mauka* of the village house sites, had several fishponds and small drainages. The village was located east and north (around and up the coast) from Kalapakī Beach. There are some unique aspects of local land use and settlement in the subject project area, as discussed below (Section 2.3 Subsistence and Settlement).

Kalapakī, famous for its wind, appears to have had closer ties with Nāwiliwili than with Hanamā'ulu. Kalapakī is well-known in a traditional sense for its several *heiau*. Hanamā'ulu is probably best known as the birth place of Kawelo, the famous hero and *Mō'ī* (king) of Kaua'i in the late 17<sup>th</sup> to early 18<sup>th</sup> century. Nāwiliwili is well-known for its *heiau* at Kuhiau, reportedly at least four acres in size, and its associated *pōhaku* (rock) called Paukini located in the bay.

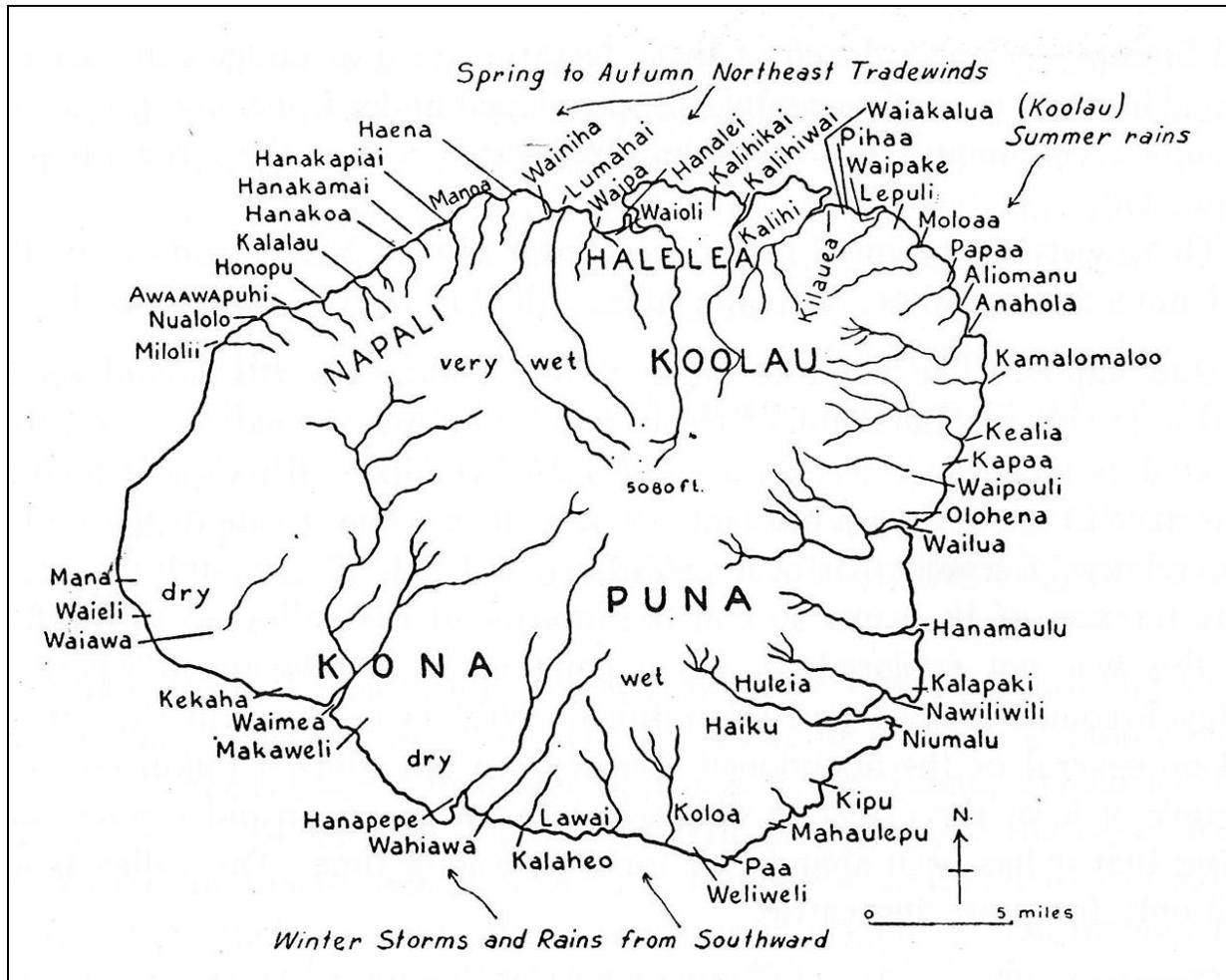


Figure 4. *Moku* (traditional districts) and *ahupua'a* of Kaua'i; note the location of “Hanamaulu,” “Kalapaki,” and “Nawiliwili” (Handy 1940)

### 3.1 Place Names

Translations presented without attribution in this subsection are from Pukui et al. (1974), unless indicated otherwise.

Pukui et al. (1974) list but do not translate **Kalapakī**, defined simply as a “beach” in Līhu‘e district. Pukui and Elbert (1986) define the word kalapakī (with a small “k”) as “double-yolked egg, *Kaua‘i*.” Aside from its beach and landing, Kalapakī is probably best known in a traditional sense for its *heiau* of **Ahukini** and **Ninini** (and possibly another at Kūki‘i). Ahukini has been translated as “altar [for] many [blessings]” (brackets inserted by Pukui et al. 1974), and this was also the name for a *heiau* in Kāne‘ohe. Ninini has been translated as “pour,” as in *ninini wai* (to pour water).

Most sources suggest **Nāwiliwili** takes its name from the *wiliwili* tree (*nā* is the plural article, as in “the *wiliwili* trees” or “place of the *wiliwili* trees”). According to Pukui and Elbert (1986), the *wiliwili* (*Erythrina sandwicensis*) is a native leguminous tree whose flowers and pods are used for *lei*, and whose light wood was once used for surfboards, outriggers, and net floats. Handy (1940:67) suggests a *kaona* (hidden meaning) for the name Nāwiliwili based on a reduplication of the word *wili*, which means “twisted,” as in the meandering Nāwiliwili Stream.

**Hanamā‘ulu** has been translated as “tired (as from walking) bay,” which may be related to *mo‘olelo* (oral history) and *‘ōlelo no‘eau* (poetical sayings) about the stingy people of this place (see below).

**Līhu‘e** (literally translated as “cold chill”) became the modern political name for the traditional *moku* (district) of Puna. It is clear that Līhu‘e is a traditional place name, but less certain that the subject project area was specifically called this name prior to the historic era. Historical documents suggest the name Līhu‘e was first applied to this area by Kaikioewai (Governor of Kaua‘i) in the 1830s, perhaps after Kaiwioewai’s upcountry residence on the island. On the other hand, Nathaniel Emerson’s translation of the famous *oli* (chant) cycle of Hi‘iaka and Pele (see below) mentions Līhu‘e with the other main places names of this area.

It is also well known that Līhu‘e was a traditional settlement area near the current Schofield Barracks on O‘ahu.

**Kilohana**, the source of the water of the Nāwiliwili and Hanamā‘ulu Streams, is associated with *mo‘olelo* of a boy named Lahi and his uncle (see below); there are multiple possible meanings of the name Kilohana (Pukui et al. 1974 list three: “lookout point,” “outer tapa,” or “best, superior.”

### 3.2 Mo‘olelo Associated with Specific Place Names

There are many *mo‘olelo* associated with the project area environs. One of the oldest and most famous legendary accounts in Hawaiian oral tradition describes the travels and exploits of Pele, the Hawaiian volcano goddess, and one of her sisters, Hi‘iakaikapoliopole (more commonly known simply as Hi‘iaka). Pele, in her lengthy *oli* (chant) of literally hundreds of named winds of Kaua‘i, lists those of Nāwiliwili, Kalapakī, Ahukini, Līhu‘e, Kapaia, and Hanamā‘ulu (Nogelmeier 2006):

<i>He he'one ka makani o Nāwiliwili</i>	The wind of Nāwiliwili is a Hu'eone
<i>He Wāmua ka makani o Kalapakī</i>	The wind of Kalapakī is a Wāmua
<i>He 'Ehukai ka makani o Ahukini</i>	The wind of Ahukini is an 'Ehukai
<i>He Pāhola ke kiu ho o kii makani lele kula o Līhu'e</i>	A Pāhola wind is the scout that fetches the winds sweeping the Līhu'e plains
<i>He Kuli'āhiu ka makani o Kapaia</i>	The wind of Kapaia is a Kuli'āhiu
<i>He Ho'oluakainehe ka makani o Hanamā'ulu</i>	The wind of Hanamā'ulu is a Ho'oluako'inehe

### 3.2.1 Kalapakī

According to a collection of Kaua'i place names by Kelsey (n.d.), Kalapakī has also been known in traditional times as "Ahukini," as in the following *'ōlelo no'eau*:

Ahukini, oia ka inoa nui o ka' aina a hiki Hanama'ulu.

Ahukini is the overall name of the land next to Hanama'ulu.

### 3.2.2 Ahukini and Ninini

According to Wichman (1998), Ahukini Heiau was named for Ahukini-a-la'a (who lived about 1250 A.D.), one of three sons of La'a-mai-kahiki, an ancestor of the Kaua'i chiefly lines; Ahukini was also *ali'i nui* (supreme chief) of the Puna district (Wichman 2003).

In the 1920s, the Hawaiian legend chronicler Rice (1974), a life-long resident of Kaua'i, published this *mo'olelo* about Ahukini in the story of "The Goddess Pele":

Two brothers of Pele, who had come from foreign lands, saw Lohiau's body lying as a stone where the lava flow had overtaken him. Pity welled up in their heart and they brought Lohiau to life again. One of these brothers made his own body into a canoe and carried the unfortunate Lohiau to Kauai, where he was put ashore at Ahukini. (Rice 1974: 14)

### 3.2.3 Nāwiliwili

The *menehune* (mythical race of little people famous for building great structures of old) were known to live in the Nāwiliwili area:

It was one of the favorite playgrounds of the tribe of Menehune, the little brown work-people who played as hard as they worked. And again it is William Hyde Rice, who, more than any other teller of stories, has kept for us old tales of this happy playground...(Damon 1931:395-396)

### 3.2.4 Kuhiau and Paukini

Several historic documents talk about the close connection between Kuhiau Heiau and the *pōhaku* known as Paukini. Damon (1931:393) writes:

[Kuhiau Heiau] ... was in its day the largest and most far-famed temple on the island. Below it, in the bay, is still the rock called Paukini, which was said to be

its companion or sister heiau, and was probably also the home of the kahuna, or priest, of Kuhiau. In ancient times this rock was connected with the shore near the site of the former boat landing.

Paukini is located at the *ahupua'a* boundary between Nāwiliwili and Kalapakī, and it is likely that this function was an important part of its traditional importance.

### 3.2.5 Hanamā'ulu

Many references to Hanamā'ulu are made in the "Legend of Kawelo". Kawelo-lei-makua, called Kawelo, was born at Hanamā'ulu. After having become the paramount chief of Kaua'i, he returned to Hanamā'ulu, where he lived with his parents and his wife, Kanewahineikiaoha (Fornander 1918, Rice 1974). The hero of this legend lived in the last half of the seventeenth and early decades of the eighteenth century (Hommon 1976:135).

Rice (1974) recorded this *mo'olelo* about Hanamā'ulu:

Coming to Hanamā'ulu, Lohiau found all the houses but one closed. In that one were two old men, one of whom recognized him and asked him to enter. The men were making tapa, which they expected to carry soon to Kapa'a, where games were being held in honor of Kaleiapaoa and his bride, Hi'iaka. (Rice 1974:14)

The suggestion of inhospitality at Hanamā'ulu recorded by Rice ("Lohiau found all the houses but one closed") is reminiscent of the Hawaiian proverb *No Hanamā'ulu ka ipu puehu*, or "the quickly emptied container belongs to Hanamā'ulu" (Pukui 1983:252), that implies the food containers of Hanamā'ulu were often bare – a plausible reason for the local residents to be stingy.

Another *heiau* mentioned in legend is Kalauokamanu, which means the "tip of the endpiece of the canoe." It was located in Hanamā'ulu near the mill. According to Wichman (1998), human sacrifice was conducted at this *heiau*, and travelers would pass by the temple quickly, holding their noses to avoid the great stench coming from the dead bodies.

According to a study by Lahainaluna School students:

Kalauokamani [*sic*] was another heiau. It was named for a real woman and this is a little story pertaining to it:

Two men came from Kauai, Uukanipo and Kaipoleimanu. While they lived at Kahikimaiaea, they heard of the beauty of Kalauokamani and went in search of her until they arrived in the upland of Wailua. Kalauokamani was dead but her spirit saw the men, followed after them and asked, "Where are you going?" they answered, "To see Kalauokamani to be our wife." The spirit said, "There is no woman, for she is dead." The spirit again warned them, "Do not go up this way but go down below. There is the woman for you, Moeapakii. Do not go up this way lest you smell the stench of the body of the woman [you seek] for she lies unburied.

The men insisted on going up on the upper side of Wailua and they did smell the stench of the woman and both died. They stand at Kaohokaualu to this day. Both had turned to stone. (Lahainaluna Students 1885, HEN I:218)

### 3.2.6 Kilohana

Damon (1931) described Kilohana as a famous nesting place of *'uwa'u* (*Pterodroma phaeopygia sandwicensis*), the dark-rumped petrel, a chiefly delicacy. The top of Mauna Kahili, the peak to the west of Kilohana, was a sacred burial place of Hawaiian chiefs. Kilohana is also associated with the *menehune*:

One of their favorite play places was the little hill of Po-po-pii, Rounded-for climbing-up. This they had themselves built on the top of Kilohana and never were they more delighted than when they could climb it over and over again for the sheer fun of rolling down its sides, frolicking and laughing as they rolled. It was such a sport that their gleeful shouts carried clear across the Kauai channel to the southeast and startled birds at Kahuku on the island of Oahu. (Damon 1931:395-396)

Once, a Menehune called Ka-uki-uki, The-man-of-wrath, boasted that he could climb to the top of this hill at Kilohana and snare the legs of the moon. Ridiculed by his fellow tribesmen, he valiantly attempted to make good his boast, and was turned into a stone when he failed of achievement. For many years this stone was recognized by Hawaiians as a kupua, or demigod, and offerings of lehua-blossoms and fragrant maile leaves were laid upon it in passing, that rain and fog might not hinder the errand which carried the people into the mountains. (Damon 1931:395-396)

## 3.3 Subsistence and Settlement

The *ahupua'a* of Hanamā'ulu, Kalapakī and Nāwiliwili were permanently inhabited and intensively used in pre-Contact times, based on a large amount of archaeological, historical, and oral-historical documentation. The coastal areas were the focus of permanent house sites and temporary shelters, *heiau*, including *ko'a* and *kū'ula* (both types of relatively small shrines dedicated to fishing gods), and numerous trails. There were fishponds at Kalapakī and Nāwiliwili. Further from the current project area, there were numerous house sites and intensive cultivation areas within the valley bottoms of Nāwiliwili and Hanamā'ulu Streams.

Before the historic era, there was a village at Kalapakī (probably between Kalapakī Beach and Ahukini), and another, likely larger, at Nāwiliwili to the southwest. Another village was located near the mouth of the Hanamā'ulu Stream.

The dryland areas (*kula*) of these *ahupua'a* contained native forests and were cultivated with crops of *wauke* (paper mulberry, *Broussonetia papyrifera*), *'uala* (sweet potatoes, *Ipomoea batatas*), and *ipu* (bottle gourd). Legends and historic documentation (especially Land Commission records) elaborate on many of these important natural resources.

The archaeological record of early Hawaiian occupation in the Līhu'e District indicates a date range of c. A.D. 1100 to 1650 for pre-Contact Hawaiian habitations (Walker et al. 1991). A radiocarbon date of A.D. 1170-1400 was obtained from excavated sediments near the mouth of Hanamā'ulu Stream.

Land Commission documents indicate a land use pattern that may be unique to this part of the island, or to Kaua'i, in general, in which *lo'i* (irrigated terraced gardens) and *kula* lands in same 'āpana (portion of land), with houselots in a separate portion. In most places, *kula* lands are defined as drier landscapes and they do not typically occur next to, and among, wetter *lo'i* lands.

### 3.4 Streams

Nāwiliwili and Hanamā'ulu Streams have their *maka* (source) on the upper slopes of Kilohana Crater, located four-and-one-half miles to the west. As described above, Kilohana is associated with *mo'olelo* about a giant, bird hunters who lure him to his death, and *koa* (warriors) that come to avenge the giant's murder only to be thrown to their deaths by the young bird hunter Lahi. It is important to point out that the water in these two streams running by the subject project area, literally defining its northern and southern margins, would have been closely associated with Kilohana in the parlance and expressions of Native Hawaiians living a traditional lifestyle.

Two smaller streams, Koena'awa nui and Koena'awa iki, are identified in Land Commission documents, although neither of these is named on any extant maps. Given the gently-sloping character of the natural lay of the land from Līhu'e to the coast, it is possible that there were once a few other smaller drainages traversing what is now the airport, resort and golf course area; and, that Native Hawaiian planters made use of this water (Figure 2).

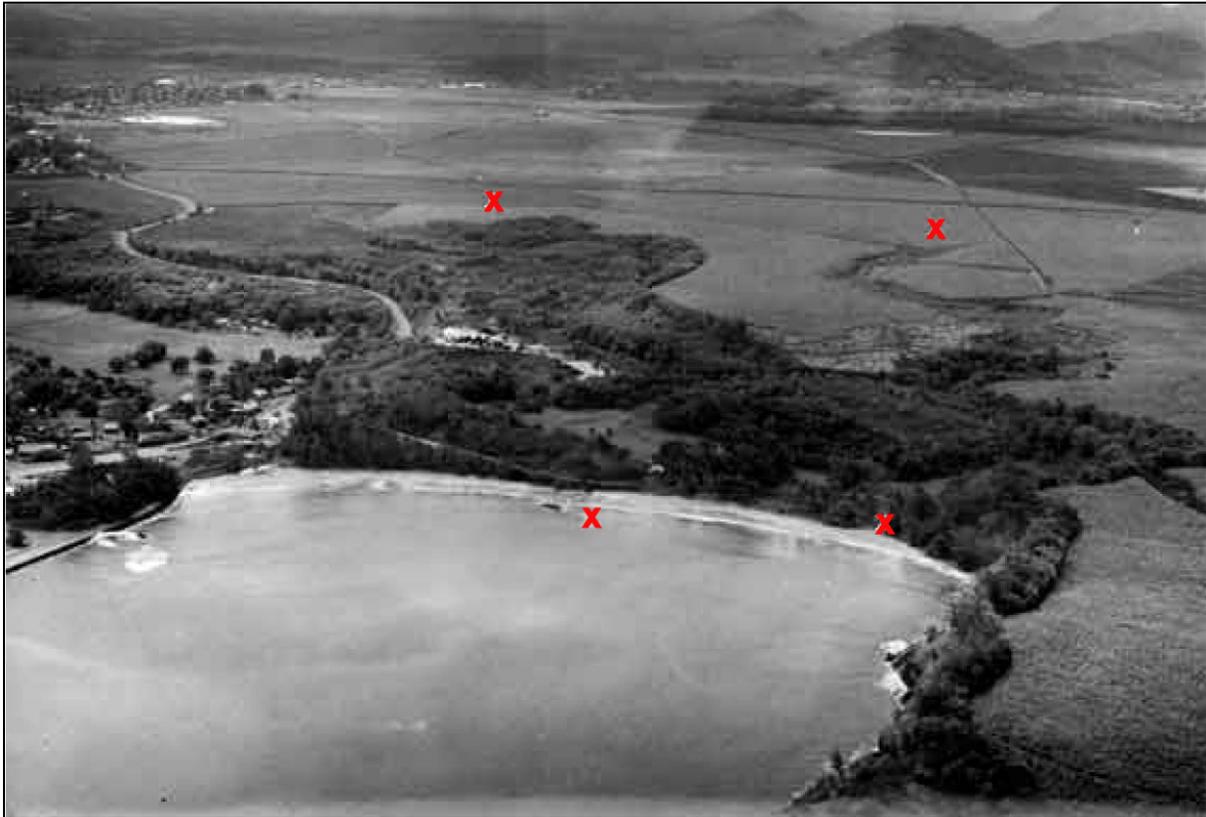


Figure 5. Kalapakī Bay, showing location of two streams and their outlets (red Xs) to Kalapakī Bay; Koena‘awa stream is on the left (undated photograph in Kaua‘i Museum files, see <http://www.hawaii.edu/environment.ainakumuwai.htm>)

### 3.5 Heiau

There are several historic map sources showing multiple *heiau* along the seashore and stream mouths in and around the general footprint area of the proposed project (Figures 3 and 4). For the most part, all physical evidence of these *heiau* has been obliterated by historic activities and more recent development. Despite this, however, many people still appreciate the sacred nature of the landscape areas in and around these *heiau* (e.g., the rocky points at Ninini, Ahukini, and Kūki'i). These differences between western and indigenous ideas about value and significance are rarely mentioned in cultural impact studies, but they are fundamental to understanding traditional resources.

Lt. George G. Jackson's 1881 map of Nāwiliwili Harbor shows there were major *heiau* on both sides of the mouth of Nāwiliwili Stream (see Figure 3). On the east side, in Kalapakī Ahupua'a, Jackson's map depicts "remnants of ancient heiau" near Kūki'i Point. On the west side of the bay, in Nāwiliwili Ahupua'a, there is an area labeled "Kuhiau" near the court house; this was the previous location of Kuhiau Heiau.

In addition to the *heiau* at Kūki'i and Kuhiau, Damon's (1931) map shows two additional sites located in coastal Kalapakī Ahupua'a: Ninini Heiau at the point of the same name, located east of Kūki'i, and Ahukini Heiau, located about halfway to Hanamā'ulu Ahupua'a (see Figure 4).

Bennett's (1931) archaeological survey of the late 1920s documented three *heiau* within the general footprint area of the proposed project (see Section 4 Archaeological Research for Bennett's map). Kuhiau Heiau, State Inventory of Historic Properties (SIHP) No. 99, was located at Nāwiliwili near the site of the old courthouse. By Thrum's time, approximately two decades before Bennett's work, this *heiau* was already described as "long since destroyed" (Bennett 1931:124). Thrum described it as,

[a] large paved heiau, whose enclosure covered an area of about four acres...The rock Paukini, now separated from but formerly connected with the shore, was where the kahuna lived. This is said to have been the largest and most famous on Kauai in its day. (Bennett 1931:124)

Ninini Heiau (SIHP No. 100) and Ahukini Heiau (SIHP No. 101) were both described by Bennett as totally destroyed. According to Thrum (Bennett 1931:125), Ahukini was "[a] heiau of medium size; foundations only now remain." Thrum's (1907) island-wide listing of *heiau* on Kaua'i includes another "destroyed" *heiau* called Pohakoelele.

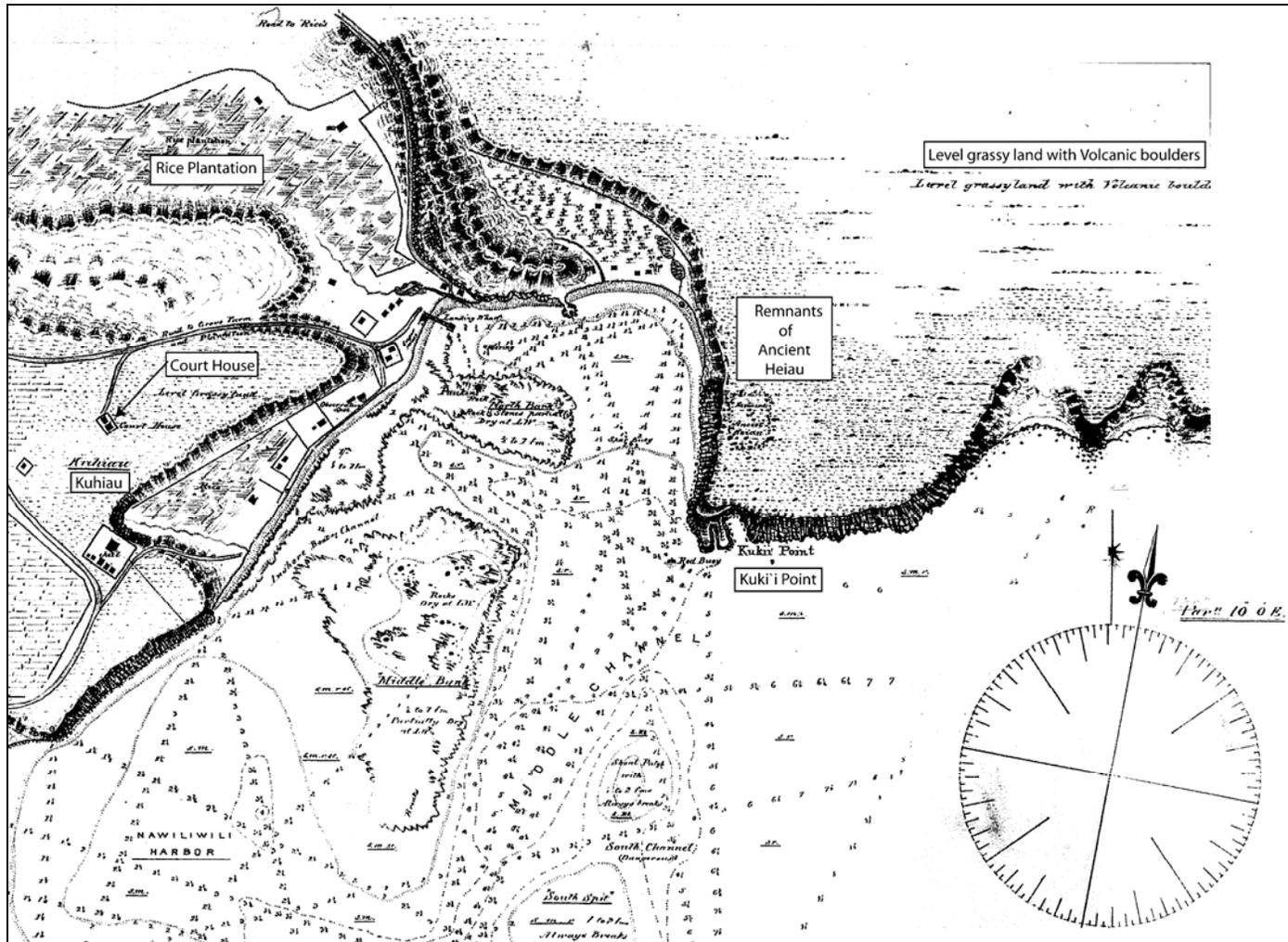


Figure 6. Detail of 1881 map of Nāwiliwili Harbor by Lt. George G. Jackson, showing remnant of ancient heiau near Kūki‘i Point; also note the area called "Kuhiau" near the court house (left-hand side), previous location of Kuhiau Heiau

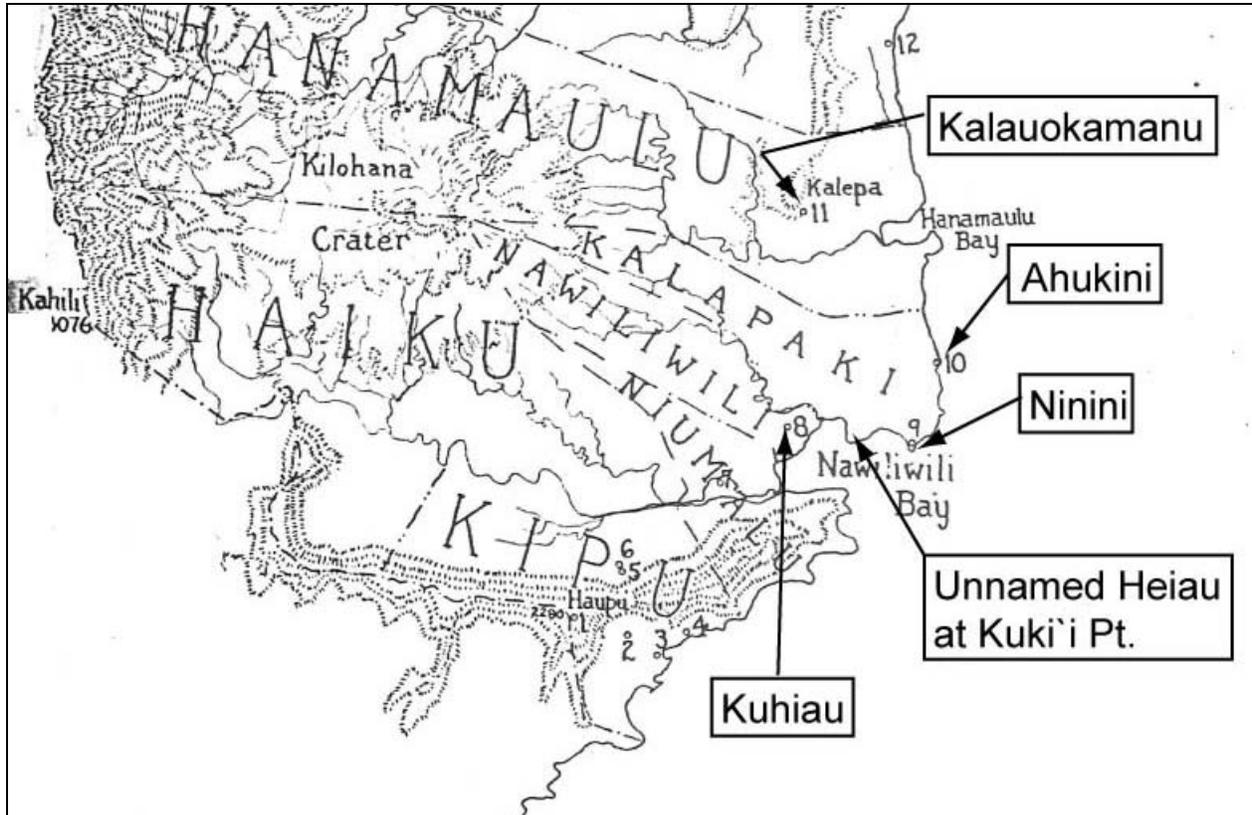


Figure 7. Damon's (1931) map showing *heiau* along the coast sections of Hanamā'ulu, Kalapakī, and Nāwiliwili Ahupua'a

### 3.6 Menehune Fishpond

Niumalu Loko (fishpond), also known as Alakoko in Land Commission documents [alternatively, Alekoko or 'Alekoko in other sources (e.g., Kikuchi 1987, and the Hawai'i State Historic Preservation Division website, respectively), was first described and mapped scientifically by Bennett in the late 1920s. It is located along the Hulē'ia Stream near its mouth to Nāwiliwili Bay, just outside the project area to the west-southwest (Figure 5). Kikuchi (1973, 1987) considered it a Loko Wai class fishpond because of its inland location along a meander of the Hulē'ia Stream; other sources (inaccurately) consider it a Loko Kuapā (a seawall pond, fronting the ocean). The overall size (area) of the pond has apparently varied through time from as small as 32 acres to as large as 39 acres. The site (designated State Inventory of Historic Properties No. 50-30-11-501) was placed on the National Register of Historic Places in 1973.

Early observations by Severin, who photographed the fishpond in the early 1890s, and by John Coney, who eventually assumed its management sometime after 1918, indicate the pond had been neglected and was in a state of disrepair. In the late 1920s, Bennett (1931:124) described the dimensions and construction features of Niumalu Fishpond (SIHP No. 98, labeled "Menehune Fishpond" on the 1996 USGS 7.5-minute Lihue quadrangle map, see Figure 1):

The Niamalu [sic] fish pond consists principally of a stone-faced, dirt wall that runs for over 900 yards and cuts off a large bend in the river for use as a fish pond. It is today [in the early 1930s] used both for fish and ducks. Cement walls and iron gates have obscured any old method of controlling the water or the fish.

This fishpond is associated with the *mo'olelo* of the brother and sister shark guardian spirits named Alekoko and Kahalalehue, who were said to have given the task of construction to the mythical little people of old, the *menehune* (Kaiwi 1921). According to Rice (1974), it is said the *menehune* failed to completely finish their task, thus leaving a small opening (gap) that was later finished by people who did an inferior job of it; this inferior stone-work being still visible in historic times.

It is worth mentioning that the *menehune* concept has long been considered by many researchers (e.g., Pila Kikuchi) as an old Hawaiian metaphor for Ka Po'e Kahiko (the people of old) who were also the *maka'āinana* (commoners); as in, "it was built by the little people," rather than the elites. Whatever the exact meanings of the term, it is clear that Hawaiians in early historic times commonly referred to sites that had been around since before anyone could remember as *menehune* constructions.



Figure 8. Alekoko (Niumalu) Fishpond facing southwest (undated but relatively recent photograph); note Hūle'ia Stream on the mauka side of the fishpond wall (source: CSH files)

### 3.7 Kilohana Crater and Pu'u Hā'upu

Hā'upu *pu'u* (mountain), located approximately five miles southwest of the project area, is the highest nearby landscape feature (2297 feet elevation); it has important associations with Puna Moku, in general, and with Nāwiliwili, in particular (see examples of Hawaiian song, below). Because it is a local topographic high point on the Puna coast, Hā'upu is also specifically linked with *'ōlelo no'eau* (proverbs or poetical sayings) about observing the behavior and quality of the clouds around it, as an indicator of rain. Pukui offers these two (among several others) entries for Hā'upu: (1) *Ka'i ka pua'a i luna o Hā'upu, e ua ana* (“When the pigs [puffy clouds] moved around the summit of Hā'upu, it is going to rain”), and (2) *Ka 'ohu wānana ua o Hā'upu* (“When clouds circle the peak of Hā'upu, it is sure to rain”) (Pukui 1983:151, 163). Although this *pu'u* is located five miles away from Nāwiliwili, it is closely associated with the subject project area in a traditional Native Hawaiian sense.

Kilohana Crater, located approximately four-and-one-half miles west of the project area, is the *maka* of the two main streams that frame the subject project area. As the *maka* of the Wai o Ke Kāne (fresh water), Kilohana is probably even more sacred than Hā'upu. Depending upon the strength and quality of the *makani*, the *ua* (rain) that falls on eastern slopes of Kilohana may flow into either Nāwiliwili or Hanamā'ulu.

Damon (1931) described Kilohana as a famous nesting place of *'uwa'u* (*Pterodroma phaeopygia sandwichensis*), the dark-rumped petrel, a chiefly delicacy.

### 3.8 Mele (Hawaiian Song)

Bowers (1984) compiled the lyrics (in Hawaiian and English) to over two dozen *mele* (songs) about Kaua'i, several of which mention Nāwiliwili and nearby Līhu'e, Niumalu, and Hā'upu. These *mele* are attributed to a variety of composers (sometimes there is no specific person listed); most of these songs were probably written in the 20<sup>th</sup> century, based on their style [e.g., the second song below uses the term “uapo,” also spelled in some sources as “uwapo,” defined by Pukui and Elbert 1986 as a historically-introduced (i.e., “pidgin”) term for “wharf”]. Regardless of their age—whether they are decades or centuries old—these songs are cherished by many people, and speak to a great love for the beauty of Nāwiliwili, in particular.

The following song (Bowers 1984:3), attributed to “Haunani Kahalewai's Trio with the Waikiki Serenaders” (Kamehameha School Hawaiian Music Collection Record No. 574), associates Nāwiliwili with the nearby Hā'upu and the *mokihana* flower:

<i>Kaulana mai nei a'o Nāwiliwili</i>	Renowned is Nāwiliwili
<i>He nani nō ninini</i>	Attractive even to Ninini
<i>He nani maoli nō</i>	A beauty unsurpassed.
<i>Kuahiwi nani 'oe a'o hā'upu</i>	Splendid ridge of Hā'upu
<i>Ka pua mokihana 'ea</i>	The mokihana flower
<i>Ka pua nani o Kaua'i</i>	The beautiful flower of Kaua'i.
<i>Ho'ohihi ka mana'o iā Kaua'i</i>	The mind is entranced with Kaua'i
<i>Eō mai k oleo aloha</i>	Let your beloved voice respond

*Ke kani a'o pi'ilani* The sound of Pi'ilani.

*Ha'ina 'ia mai ana ka puana*  
*He nani maoli nō*  
*Kaulana mai nei Nāwiliwili*  
 The refrain has been told  
 Renowned is Nāwiliwili  
 A beauty unsurpassed.

Another *mele* entitled “Kaulana ka inoa a'o Kaua'i” (Bowers 1984:2), attributed to a recording (*Music of Old Hawaii*) by the famous Sons of Hawai'i, again mentions the *mokihana*:

*Kaulana ka inoa a'o Kaua'i*  
*Ku'u lei mokihana poina 'ole.*  
 Famous is the name of Kaua'i  
 My unforgettable mokihana lei.

*Ku kilakila 'oe Wai'ale'ale*  
*Me ka nani kaulana 'o Nawiliwili.*  
 Wai'ale'ale you stand majestic  
 With the famous beauty of Nawiliwili.

*Laua'e o makana ka'u aloha*  
*Me ka uapo nani a'o Niumalu*  
 I love the fragrant fern of Makana  
 With the fine wharf of Niumalu.

*E pi'ina I ke 'ike a'o Kipū*  
*Me ka wai 'anapanapa e kaulana nei*  
 Ascending to see Kipu  
 With the famous glittering waterfall.

*I aloha ia noa'o Waimea*  
*Me ke one kani la a'o Nohili*  
 Beloved is Waimea  
 With the barking sands of Nohili.

*Pu'ili kou aloha ma ku'u poli*  
*Honehona kou leo me he ipo ala*  
 Your love is held fast in my heart  
 Sweet your voice like a sweetheart.

*Hea aku no au, e o mai 'oe*  
*Lei ana Kaua'i ka mokihana*  
 I call, you answer  
 Kaua'i, decked in mokihana.

The *mokihana* (*Melicope anisata*) is a native (endemic) tree, found only on Kaua'i, considered traditionally to be a variety of 'alani (a general term for citrus tree). The *lei* made of *mokihana* is a traditional symbol of the island of Kaua'i. According to Abbott (1992), the *mokihana* were used to make the most treasured and rare seed *lei* in the Hawaiian Islands.

There are other *mele* about these and other nearby places that could be included in a more comprehensive document, such as a CIA, should one be warranted.

## Section 4 Historical Background

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This section is based on prior works by Damon (1931), Hammatt and Creed (1993), and Creed et al. (1999). Damon's *Koamalu* (a history of the Rice Family) contains excerpts from a large number of 19<sup>th</sup> century primary sources, including first-hand observations of life and times in and around Līhu'e / Nāwiliwili. Creed's work, in particular, contains extensive documentation and interpretation of Land Commission documents. Dorrance and Morgan (2000), Donohugh (2001), Wilcox (1996) and Condé and Best (1973) all document historical aspects of commercial sugar cane, railroads, irrigation, plantations, and other 19<sup>th</sup> and 20<sup>th</sup> century changes.

### 4.1 Early Historic Period

The first written accounts of Kaua'i are from travelers, missionaries, and surveying expeditions. Missionary accounts of first half of the nineteenth century provide the majority of the early written records for this particular part of Kaua'i (Figure 6).

Damon (1931:401) wrote about Hiram Bingham's 1824 observations from his memoir, *A Residence of Twenty-One Years in the Sandwich Islands*, published in 1847:

In 1824, when walking around the island from Waimea to counsel the people after the wreck of *The Cleopatra's Barge*, Rev. Hiram Bingham crossed from Hanapepe, as has been seen, over the old upland trail back of Kilohana, and wrote of it as 'a country of good land, mostly open, unoccupied and covered with grass, sprinkled with trees, and watered with lively streams that descend from the forest-covered mountains and wind their way along ravines to the sea, - a much finer country than the western part of the island.'

In the 1830s, another missionary, Rev. Peter Gulick, was living on Kaua'i at Waimea and Kōloa. He made the following observation about the kind of provisions one could find in Hanamā'ulu at the time:

...The governor [Kaikioewai] reached Hanamaulu in his canoe just as we entered on horse back... This is the governor's custom, when he travels. A man is sent before to give notice that provision may be made, at the different stopping places, for him and his train: which frequently amounts to two hundred [people]... I with a few natives had a comfortable house at Hanamaulu. The inhabitants brought us fish fresh from the ocean, fowls, taro, potatoes, and a pig, all except the fish roasted or baked in the ground... A youth who went with me for the purpose prepared my food. My bed, which was made with mats, was covered with ten tapas; these were the bed clothes which according to custom were presented to the guest for whom they were spread. (Damon 1931:360)

At this same time, in the 1830s, the Governor (Kaikioewa) founded a village at Nāwiliwili that eventually developed into Līhu'e. According to Hammatt and Creed (1993), the name Līhu'e was not consistently used until the establishment of commercial sugar cane agriculture in the middle 19<sup>th</sup> century'; and from the 1830s to the Māhele, the names Nāwiliwili and Līhu'e were used interchangeably to some extent to refer to a settlement along Nāwiliwili Bay. Some

sources attribute the decision to call this area Līhu'e (literally translated as “cold chill”) to Kaikioewa, who apparently named it after his nearby upcountry home. Waimea and Kōloa were preferred anchorages compared with Nāwiliwili, which opens directly east to the trade winds. Gales were known to blow ships onto the rocks. During the whaling era, Kōloa, which was home to the earliest major commercial operations in the Hawaiian Islands, was the preferred anchorage because of the ready supply of nearby food stuffs for resupply of the ships.

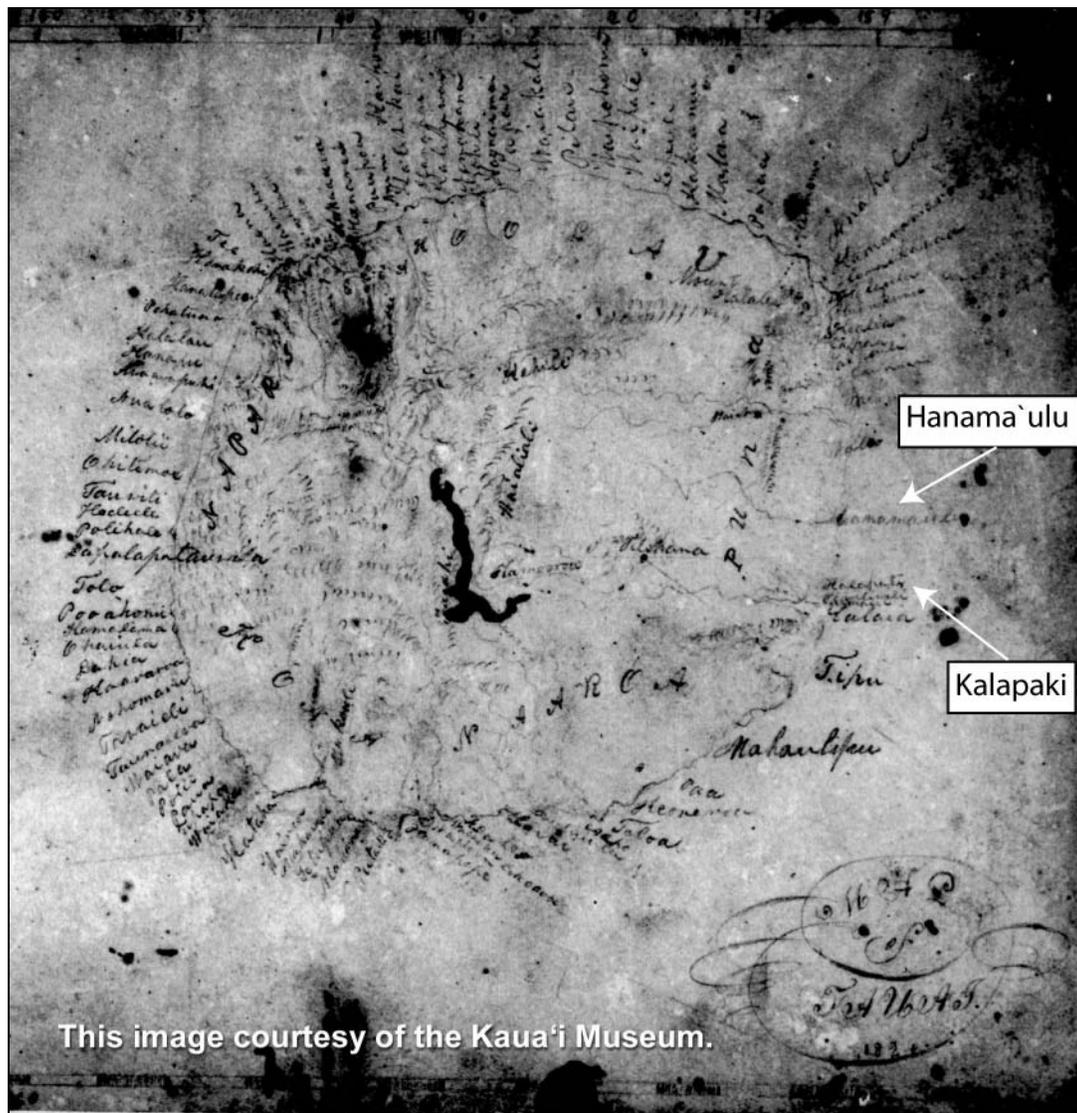


Figure 9. 1824 map of Kaua'i showing Hanamā'ulu and Kalapākī (source: Kaua'i Museum)

By 1830, the sandalwood trade had waned and the whaling industry was just beginning. At the same time, commercial agriculture was being established on Kaua'i. When the first crop of sugar cane was harvested at Kōloa, the king himself commanded that portions of his private land

be planted in cane. The Governor of Kaua'i Kaikioewa in 1839 began farming the slopes of Nāwiliwili Bay where there was more rain than at Kōloa (Dorrance and Morgan 2000). He also built a house and church in Nāwiliwili Ahupua'a.

Donohugh (2001:94) describes Governor Kaikioewa's attempt to establish the first commercial sugar mill and plantation in Līhu'e in 1839:

During the early decades of Kōloa Plantation, other sugar plantations had started up on the island. One was to result in the ascendancy of Līhu'e to the principal town and seat of government on Kaua'i, replacing Wailua. When Kaikio'ewa was appointed governor, he located his home in what is now the Līhu'e District. He planned to grow sugar cane but died in 1839 before his plans could be realized. Kaikio'ewa was responsible for the name [Līhu'e], which means "cold chill," the name of his previous home at a higher and chillier altitude on O'ahu.

Donohugh (2001:94) describes observations by James Jarves, who passed through Līhu'e in 1838:

... [He] found only a church built by Kaikio'ewa and a few grass houses. He commented the governor had selected Hanamā'ulu Bay as the harbor, "entirely overlooking the fact that it opened directly to the windward."

Kaikioewa died in 1839 soon after the start of the sugar plantation, which lasted only one year and closed down in 1840 (Dorrance and Morgan 2000).

Around this time, perhaps as late as 1842, the first missionaries settled in the Līhu'e area led by Dr. and Mrs. Thomas Lafon, and assisted by Rev. and Mrs. Peter Gulick from Kōloa. Schools were opened, and some missionaries attempted to grow cotton as the first intensive cash crop, but were unsuccessful (Damon 1931).

An account of the United States Exploring Expedition, which passed through Līhu'e in 1840, talks about the area, but also mentions the forced removal of *kama'āina* from the coastal areas:

At noon they reached Lihui, a settlement lately undertaken by the Rev. Mr. Lafon, for the purpose of inducing the natives to remove from the sea-coast, thus abandoning their poor lands to cultivate the rich plains above. Mr. Lafon has the charge of the mission district lying between those of Koloa and Waioli. This district [Līhu'e] was a short time ago formed out of the other two.

The principal village is Nawiliwili, ten miles east of Koloa. This district contains about forty square miles, being twenty miles long by two broad. The soil is rich: it produces sugar-cane, taro, sweet-potatoes, beans, etc. The only market is that of Koloa. The cane suffers somewhat from the high winds on the plains.

The temperature of Lihui has much the same range as that of Koloa, and the climate is pleasant: the trade-winds sweep over it uninterruptedly, and sufficient rain falls to keep the vegetation green throughout the year. No cattle are to be seen, although the pasturage is good. (Wilkes 1845:67-68)

With the death of Kaikioewa, governorship of Kaua'i was transferred for a brief period to his widow Keaweamahi. Then followed the brief tenure of Chiefess Kekauonohi and her husband Kealiihonui (son of King Kaumuali'i) after which the governorship passed to Paulo Kanoa in 1848. Kanoa had two houses overlooking Nāwiliwili Bay: one on the bluff south of Nāwiliwili Stream (the present site of Kaua'i High School) and another at Papalinhaha, north of the bay (Damon 1931).

William DeWitt Alexander, son of Waioli missionary William P. Alexander, traveling from Kōloa to the north shore of Kaua'i in 1849 recorded some descriptive notes of Hanamā'ulu :

A few miles further on we crossed the picturesque valley of Hanamaulu. This valley is prettily bordered by groves of Kukui, koa, & hala trees, and is well cultivated with taro. A fine stream flows through the midst of it, which makes a remarkable bend at this place like a horse shoe. We then traveled along the seashore at the foot of a range of hills through groves of hau, & among hills of sand. It was now after dark, but the moon shone brightly, and there was no difficulty in finding our way. About eight o'clock we arrived at the banks of the Wailua river. (Kauai Historical Society 1991:121)

One of the last vestiges of the pre-cash crop landscape is depicted in the diary entry for the Rice family's arrival on Kaua'i in 1854. During the second half of the nineteenth century, western settlers and entrepreneurs set their sights on southeast Kaua'i. Damon describes the Līhu'e landscape at the time of the family's arrival at Nāwiliwili Bay:

From the deck of their river craft in 1854 Mrs. Rice and the children could plainly see above the rocky shore and ruins of Kuhiau, the old heiau, or temple, and nearby on the bluff the flaming blossoms of a great wili-wili tree among koa trees which ten grew almost down to the water's edge. (Damon 1931:17-18)

## 4.2 Middle to Late 19<sup>th</sup> Century

The middle 19<sup>th</sup> century brought great changes to Līhu'e, including private and public land ownership laws known as the *Māhele* (literally, 'to divide' or 'to section'), and commercial sugar cane agriculture, which firmly established Līhu'e's place in state and global economic markets. Coulter's (1931) population density estimates for 1853 (Figure 7) show a relatively large settlement around Nāwiliwili Bay.

### 4.2.1 The *Māhele*

In the middle 19<sup>th</sup> century, during the time of Kamehameha III, a series of legal and legislative changes were brought about in the name of 'land reform' (see the works of Jon Chinen 1958, 1971 for a thorough and well-written explanation). Previous to the *Māhele* (, all land belonged to the *akua* (gods), held in trust for them by the paramount chief, and managed by subordinate chiefs. Following the enactment of a series of new laws from the middle 1840s to middle 1850s, all land in the Hawaiian Kingdom was divided into three main types: government (or Crown) land; *ali'i* (chiefly) lands; and commoner lands, which *maka'āinana* could in principle obtain in fee simple, following passage of the Kuleana Act in 1850. This act allowed *maka'āinana* (in principle) to own land parcels at which they were currently and actively

cultivating and/or residing. In theory, this 'set aside' of hundreds of thousands of acres as potential *kuleana* parcels ultimately led to about 10,000 claimants obtaining approximately 30,000 acres, while 252 chiefs, for example, divided up about a million acres. Many or most Hawaiians were simply disenfranchised by these acts.

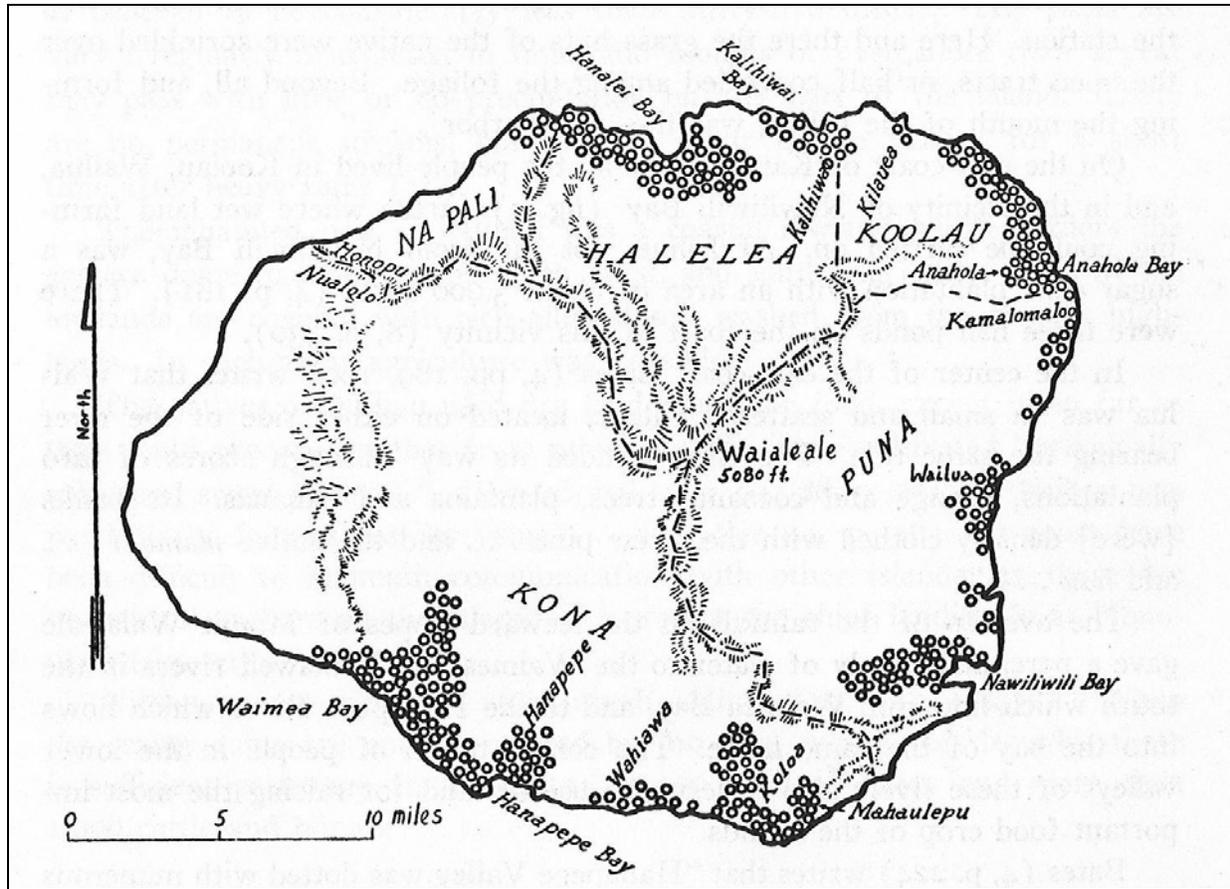


Figure 10. Population estimates for Kaua'i generated by Coulter (1931), each symbol represents 50 people; note densely settled area at Nāwiliwili Bay, with a modest population (150 people) are the coastal boundary between Hanamā'ulu and Kalapakī

#### 4.2.1.1 Hanamā'ulu

Land Commission documents for Hanamā'ulu describe *lo'i*, *kula*, and house sites along both sides of the Hanamā'ulu River, extending from the shore up to the village of Kapaia. *Kula* and *lo'i* lands are often included together in one 'āpana (portion of a claim), with house sites belonging to separate 'āpana, slightly removed from the floodplain. There are four claims in the back bay area of Hanamā'ulu and two claims for house lots (LCA 3650 and 3653) near the beach, south of Kapule Highway. Most of the *kuleana* claims for Hanamā'ulu are located in lands that have been under sugar cane cultivation for much of the 20<sup>th</sup> century; occasionally, traditional artifacts can still be found in the cane fields.

#### 4.2.1.2 Kalapakī

In Kalapakī Ahupua'a, *kalo* (taro) *lo'i* claims were on the north side of Nāwiliwili River (the *wauke* land in Claim 3907 on the south side of the river being the sole exception) and along the smaller drainages of Kalapakī and Koena'awa, where there were also reportedly springs. Two streams, Koena'awa-nui and Koena'awa-iki, were also identified in the claims, but neither is

named on current maps. These two streams, however, can be seen an undated photograph on file at the Kaua'i Museum (see Figure 2, above).

Most Kalapakī claimants lived at the shore in the *kulana kauhale*, or, village of Kalapakī, located on Nāwiliwili Bay. Several claimants describe their village house lots in relation to the fishponds of Koena'awa (Koena'awai-nui & Koena'awa-iki). There is also a description of the *muliwai*, or estuary, of Koena'awa-nui.

Claim 3640 mentions a footpath for the 'ili of Limawela near the shore at the boundary between Hanamā'ulu and Kalapakī. These documents therefore indicate a north/south path along the shoreline, and other paths going inland from the shore, which is a traditional transit pattern for Kaua'i *ahupua'a*.

Paulo Kanoa, Governor of Kaua'i at the time of the Māhele, claimed both the *ahupua'a* of Hanamā'ulu and Kalapakī but was awarded neither. Instead, Victoria Kamāmalu was awarded both *ahupua'a* under LCA (Land Commission Award) No. 7713:2. A portion of this award (7713:2 part 7) includes land within the present project area. Following the death of Victoria Kamāmalu in 1866, Princess Ruth Ke'elikōlani inherited her lands. In 1870, Ke'elikōlani sold large portions of her Kalapakī and Līhu'e lands to William Hyde Rice of Līhu'e Plantation. In addition, in 1870, Paul Isenberg purchased the *ahupua'a* of Hanamā'ulu from J.O. Dominis, which includes the land of the present airport area. William Hyde Rice made subsequent land purchases from Princess Ruth in 1879:

William Hyde Rice, who already had his own home on the hill east of the mill, bought a large makai section of the ahupuaa of Kalapaki from Princess Ruth in 1879 and there conducted the Lihue Ranch. In later years he sold most of this land to the plantation. (Damon 1931:747)

The large tracts of inland areas (*kula*), not in the river valleys or at the shore, are not described in the claims but were probably in use. This *kula* land at the time of the Māhele belonged to Victoria Kamāmalu. Land use is not elaborated in her claims for Hanamā'ulu or Kalapakī. Traditional *kula* resources for all claimants would have been medicines, herbs, construction materials such as *pili* grass and trees for building houses, canoes, and perhaps lithic materials for tools. Sweet potatoes and other dryland crops, such as *wauke*, probably were cultivated in patches throughout the area at one time or another.

#### 4.2.1.3 Nāwiliwili

Victoria Kamāmalu was awarded over two thousand acres of Nāwiliwili Ahupua'a (LCA 7713), along with much of Niūmalu, Haiku and Kipu, as well as Kalapakī and Hanamā'ulu. In addition to Kamāmalu's large award at Nāwiliwili, there were many smaller *kuleana* awards. According to Hammatt and Creed (1993):

Within the valley floor and adjacent to the alluvial plain [in Nāwiliwili] ... are 14 land Commission Awards for which there are testimonies available in the Land Commission records ... The awards vary in size between one to two acres and are generally around one acre. The majority of land recorded is for *lo'i* (wetland agriculture) but *kula* (dryland plots) are present as are a few houselots.

In all there are 54 *lo'i* recorded. Each award is generally two to three *lo'i* plots. The largest award comprised eight *lo'i*; a single award consisted of one *lo'i*. All awards contained *lo'i* and nine of the fifteen total awards had *kula* lots. Without exception, the nine awards containing *kula* mention only one *kula* per award. This is of interest because it shows that the alluvial plain was not entirely dedicated to wetland planting and that a small *kula* lot was essential for subsistence agriculture.

Some awards at Nāwiliwili mention houselots along the shoreline.

#### 4.2.2 Commercial Sugar Cane Agriculture

As a direct result of the availability of large tracts of land for sale during the *Māhele*, in 1849, Līhu'e Plantation "was established on the site Kaikio'ewa had chosen, and the cluster of homes and stores around it was the start of the town of Līhu'e." (Donohugh 2001:94). The plantation was started by Henry A. Pierce, Judge Wm. Little Lee, chairman of the Land Commission, and Charles Reed Bishop, doing business as Henry A Pierce and Company (Damon 1931). The first 3,000 acres were purchased in Nāwiliwili and an additional 300 acres were purchased in Ahukini in 1866. The Līhu'e Plantation became the most modern plantation at that time in all Hawai'i. It featured a steam-powered mill built in 1853, the first use of steam power on a Hawaiian sugar plantation, and the ten-mile-long Hanamā'ulu Ditch built in 1856 by plantation manager William H. Rice, the first large-scale irrigation project for any of the sugar plantations (Moffatt and Fitzpatrick 1995:103). Dorrance and Morgan (2000:28) provide a slightly different list of achievements for Līhu'e Plantation: "The first irrigation ditch in Hawai'i was dug in 1857 [at Līhu'e], and in 1859 the first steam engine in a Hawai'i mill was installed at Lihue Plantation."

The residential and administrative heart of Līhu'e Plantation was located in the western portion of the subject project area, now downtown Līhu'e, Kaua'i's political center and most developed area. There are many documentary resources about the history of commercial sugar cane in Līhu'e (see, e.g., the Kaua'i Museum's website, <http://www.kauaimuseum.org>). Dorrance and Morgan (2000) have summarize highlights of the history of both the Līhu'e and Hanamā'ulu Plantations (see pp. 28-29), and there are other, more detailed histories of these operations (e.g., Condé and Best 1973; Wilcox 1996; Donohugh 2001).

The success of the Līhu'e Plantation allowed it to continue to expand. When the owner of Hanama'ulu Ahupua'a, Victoria Kamāmalu, died in 1870, all 9,177 acres in the *ahupua'a* were purchased by Paul Isenberg, the manager of Līhu'e Plantation from 1862-1878 (Damon 1931:742-747). By 1870, the plantation owned 17,000 acres in Hanamā'ulu. A total of 30,000 leased acres in Wailua were later added in 1878. Līhu'e Plantation built a second mill in 1877, north and west of the present airport, recorded in an 1885 map of Hanamā'ulu Bay by Lt. George G. Jackson. This mill operated until 1920, when it was converted into housing for laborers.

#### 4.2.3 Changing District Names

The traditional districts, or *moku*, of Kaua'i were replaced in the middle to latter part of the 19<sup>th</sup> century by modern political-district names (Figure 8). Given its economic importance to the island, Līhu'e became the modern district name, as described by Rice:

The name, Lihue, applied in a larger sense, included the districts of what are now Kawaihau and Lihue, reaching from Anahola to the Gap, being made so by law in about the year 1861, according to early court records, but some years later divided into the present two districts. The large district was also known as the Puna district, and is found on early maps as such. It was August thirteenth, 1880, that the district was divided into two, by act of Legislature with King Kalākaua's signature. . . . Lihue, in a local sense, and from which the name of the district was derived meant only that little portion of land upon which the present village, as consisting of bank, post office and store, now stands (Rice 1914:46).

#### 4.2.4 Later 19<sup>th</sup> century

*Māhele* records indicate that taro continued to be cultivated in Nāwiliwili Valley through the middle 19th century. However, later in that century, much of the taro lands in Nāwiliwili, as in other wetland regions of the Hawaiian Islands, were converted to rice cultivation. This shift was, dictated by changes in the ethnic make-up of the islands' population and economic demands. Little is known of the rice industry in Nāwiliwili; however, an 1881 map of Nāwiliwili Bay shows the entire *makai* portion of Nāwiliwili Valley under rice cultivation. Early 20th century photographs in the Bishop Museum Archives show large rice terraces within the valley. Rice was also grown in the flatlands *makai* of the *pali* of Kuhiau.

According to Dorrance and Morgan (2000:24-25), there were at least four different major sugar cane operations (i.e., mills and/or plantations) in the near vicinity of the subject project area during the later 19<sup>th</sup> century, including the Līhu'e and Hanamā'ulu Plantations (founded 1870, closed 1898) as well as the Hanamaulu Mill Company (founded 1870, closed 1880) and Charles L. L'Orange (founded 1882, closed 1888).

In 1870, the Lihue Plantation Company bought up approximately 17,000 acres of undeveloped land in Hanamā'ulu, which were then used to grow sugar cane and to capture and deliver water to both plantations. Later, in 1870, George N. Wilcox started the first sugar cane plantation in Hanamā'ulu, the Hanamā'ulu Plantation (Dorrance and Morgan 2000). In 1898, Hanamaulu Plantation was merged into Lihue Plantation.

Historic maps show most of the subject project area, especially the current airport, was not yet in commercial sugar cane agriculture by the late 19<sup>th</sup> century (Figure 9), but this would change by the early 20<sup>th</sup> century when nearly the entire subject project area was plowed under for cane.

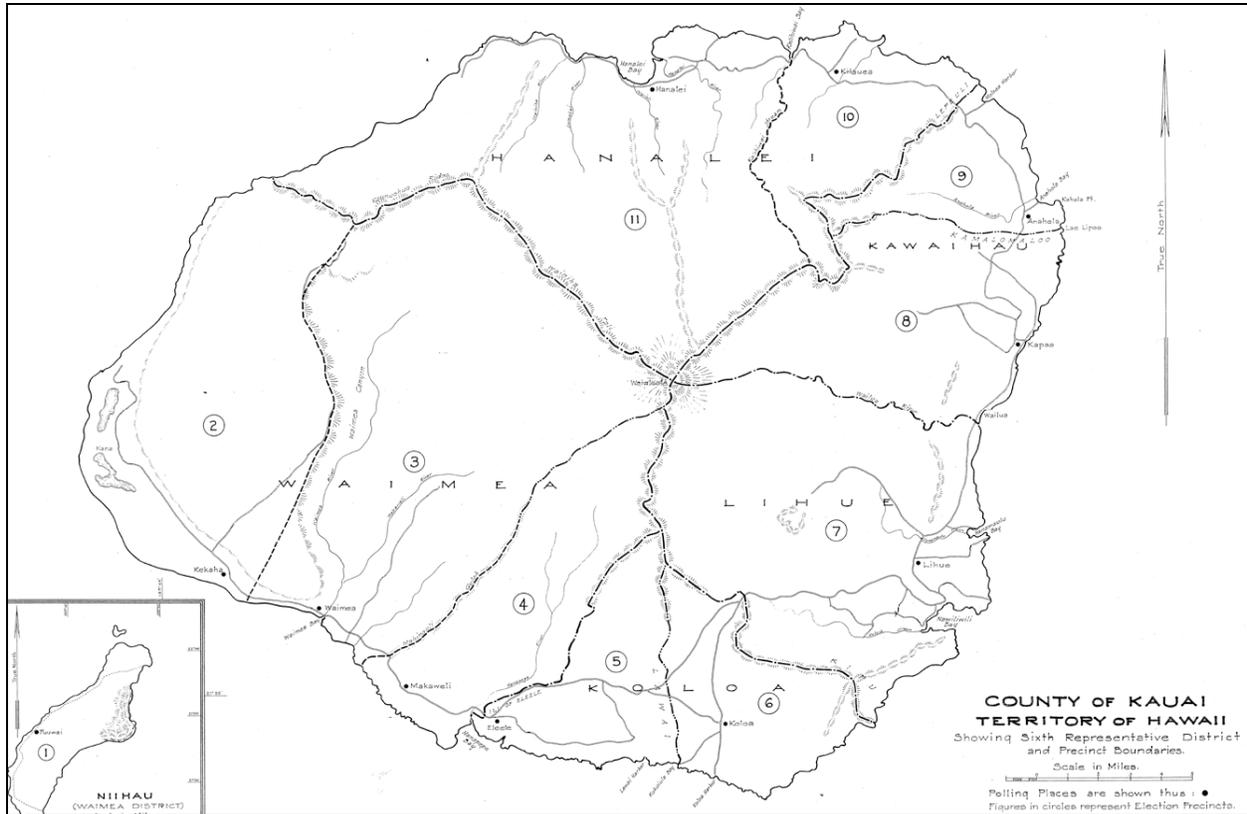


Figure 11. 1936 map of the political districts of the County of Kaua'i, Territory of Hawai'i

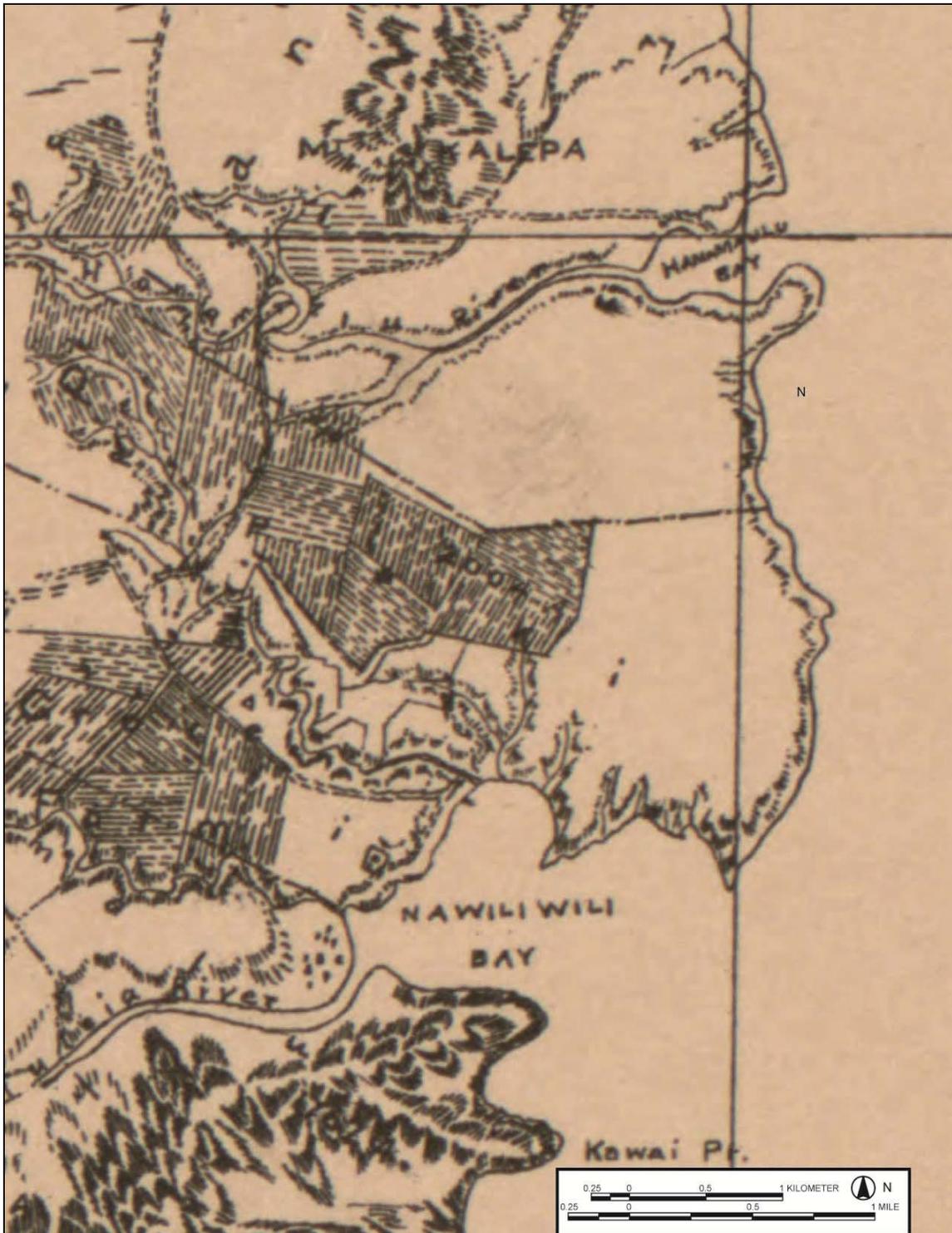


Figure 12. Detail of late 19<sup>th</sup> century Hawaiian Government Survey map clearly showing the general footprint area of the proposed project not yet under cultivation of sugar cane

## 4.3 Twentieth Century

This subsection documents important aspects of the 20<sup>th</sup> century history of the subject project area; this includes previously gathered interviews with *kama'āina* and other residents of Kaua'i, and ongoing practices and uses of the landscape. The emphasis in this subsection is on personal histories and remembrances of *kūpuna* (elders), rather than reiteration of other widely available information.

### 4.3.1 Līhu'e Plantation

Commercial sugar cane agriculture continued in Līhu'e until 2000, when it and the Kekaha Sugar Co. finally shut down and terminated approximately 400 workers. The nearby Kipu Plantation, founded in 1907, operated until 1942 (Dorrance and Morgan 2000).

Līhu'e Plantation remained a vibrant and successful commercial operation throughout most of the 20<sup>th</sup> century, in part, because of a continued interest in technological innovation (Figure 10). For example, in 1912, Līhu'e Plantation installed two 240-kilowatt generators above the cane fields on the slopes of Kilohana Crater, becoming one of the first hydroelectric power producers (along with Kekaha, Kaua'i) in the Hawaiian Islands (Dorrance and Morgan 2000).

There are many first-hand recollections about life in the early 20<sup>th</sup> century plantation days of Līhu'e, including extensive documentary archives maintained by the historical museum at Grove Farm Homestead.

The following example, which appeared in the *Honolulu Advertiser* (24 April 2000), and was written by Jan TenBruggencate, describes the struggles of 78-year-old Tadeo Suemori to keep his house at the so-called Rice Camp. Suemori was born and lived his whole life at this house, which was previously one of a total of 18 plantation cottages on a 14-acre parcel owned by Wm. Hyde Rice, Ltd. When the landowner began moving people out in 1989 to sell the property to the museum, Suemori refused to vacate: "They never evicted me. I said, "I ain't moving out."" (TenBruggencate 2000:B-1). He was eventually allowed to rent the place for the remainder of his life, but had wished to restore and rehabilitate the old Rice Camp. The article continues:

He is concerned about the environment, and particularly about pollution in Nawiliwili Stream, which runs below his house. It was clean when he and his childhood friends skinnydipped there while the U.S. stock market was crashing in 1929. It was the place where they caught prawns and 'o'opu and frogs...Today the streams runs brown and smells bad. Only a few frogs and mosquito fish live there. That angers Suemori. He wants someone to clean it up. (TenBruggencate 2000:B-2)

According to the article, the Grove Farm Homestead Museum director hoped to document Suemori's oral history, which includes knowledge of many Hawaiian-Portuguese, Chinese-Hawaiian, Japanese, and Spanish-Filipino families that used to live nearby.

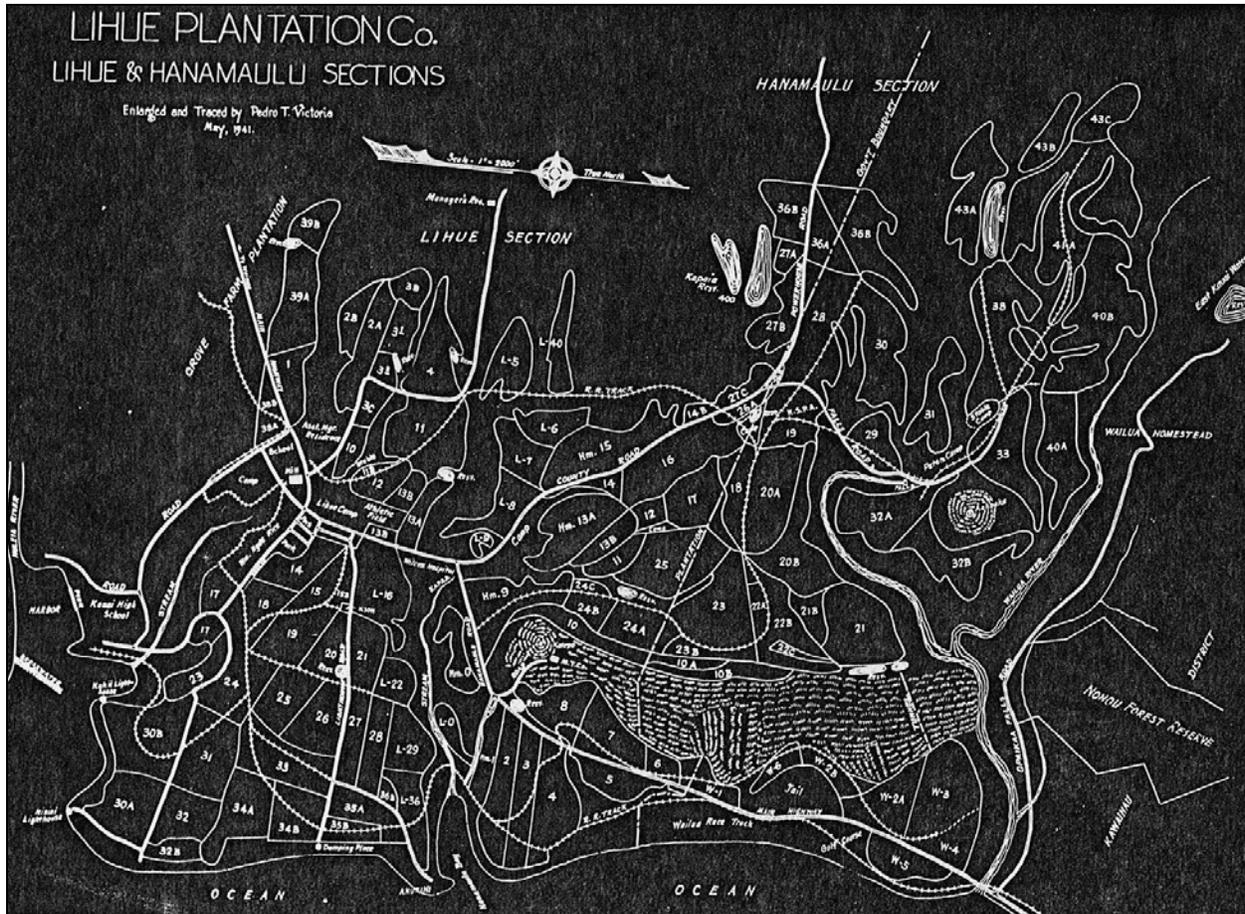


Figure 13. Lihue Plantation Co. in 1941 with subject project area in lower left-hand portion of the image (source: Condé and Best 1973:168)

### 4.3.2 Ahukini Port and Village

There are many remembrances about the nearly-forgotten port village of Ahukini, located at the northern end of the proposed Bike/Pedestrian Path, but also referring more generally to the coastal area of Hanamā‘ulu (Figure 11). According to Donohugh (2001), a dock for large ships was initially built at Ahukini in 1921 because Hanamā‘ulu Bay, totally exposed to the trade winds, was so treacherous. In 1950, Ahukini was abandoned as a commercial dock in favor of Nāwiliwili Bay.

An excellent series of newspaper articles by Lucinda Baptiste in *The Garden Island* (appearing in November of 1993) documented important aspects of Ahukini’s 20<sup>th</sup> century history, including numerous *kama‘āina* recollections about the place. According to Baptiste (1993a:1), until the tidal wave of 1946, Ahukini was Kaua‘i’s “most modern first-class wharf,” supplying fuel (Standard Oil Company) and other materials to the east side of the island while Port Allen (‘Ele‘ele) supplied the west side.

Baptiste interviewed Sanji Fujii, one of Ahukini’s oldest survivors, who talked about the origins of the little port, which was the first on Kaua‘i where large passenger ships could dock:

In 1919, Lihu'e Plantation wanted to start shipping raw sugar in bags to the mainland, so they started building the breakwater in Ahukini ... There was a channel that (allowed) the ships to come in here and turn around and then go over to the pier. (Baptiste 1993a:1)

Before this, passenger ships had to drop anchor in Nāwiliwili Bay and send passengers to shore at Ahukini in small launches. Fujii talks about meeting his parents upon their return from Honolulu:

They didn't have the Nawiliwili breakwater at that time, and the water was rough. Then with the waves, the launch would go up and down. When the waves go up, then the big Hawaiian sailors would catch these Japanese and swush, throw them up on the pier. (Baptiste 1993a:1)

Baptiste also interviewed Masao Yotsuda, whose father (Masakichi Yotsuda) moved the family to Ahukini in 1920. The younger Yotsuda became a stevedore at the Ahukini docks, eventually joining a dockworkers' strike that also included the Port Allen workers. During interviews with several members of the Yotsuda family, Baptiste documented the impact of these events on the families of Ahukini:

Striking workers were no longer welcome in company housing. According to Masao's sister, Flora Shota, "That is when we all moved out of Ahukini." Roughly 100 people moved to the old skating rink in Nawiliwili, which sat where Hale Kaua'i is located today... "The whole town of Ahukini stayed in one building," says Robert Yotsuda. "If the community wasn't tight-knit, we'd never have been able to live in one building for 10 months. Nobody had sever quarrels or fights." ...The historical root of Kaua'i is in Ahukini and Port Allen. You talk about political revolution, that's where it started," said Robert. "That's the beginning of the Democratic Party on Kaua'i." (Baptiste 1993a:5)

Baptiste's series also documented the impacts of the 1946 tidal wave on Ahukini, which had been transformed by the 1930s and 1940s into a relatively prosperous little port village. Robert Yotsuda talked fondly about those days, and the effects of the big wave:

...Coconut groves, fish. We used to fish all the time. We caught little fish with our little bamboo poles. We'd stand around and crabs crawling on our feet ... Since the tidal wave in 1946, the path of the Hanamaulu river has changed. It changed the bottom of the ocean, too ... Fish were in the trees all over. (Baptiste 1993b:1)

Baptiste's series ends with several people talking about the present and future importance of the Ahukini pier for subsistence and recreational fishing. One man suggested that the loss of shade trees in and around the fishing area has been a detriment to good fishing, since "[f]ish don't like to stay in the open." (Baptiste 1993b:2)

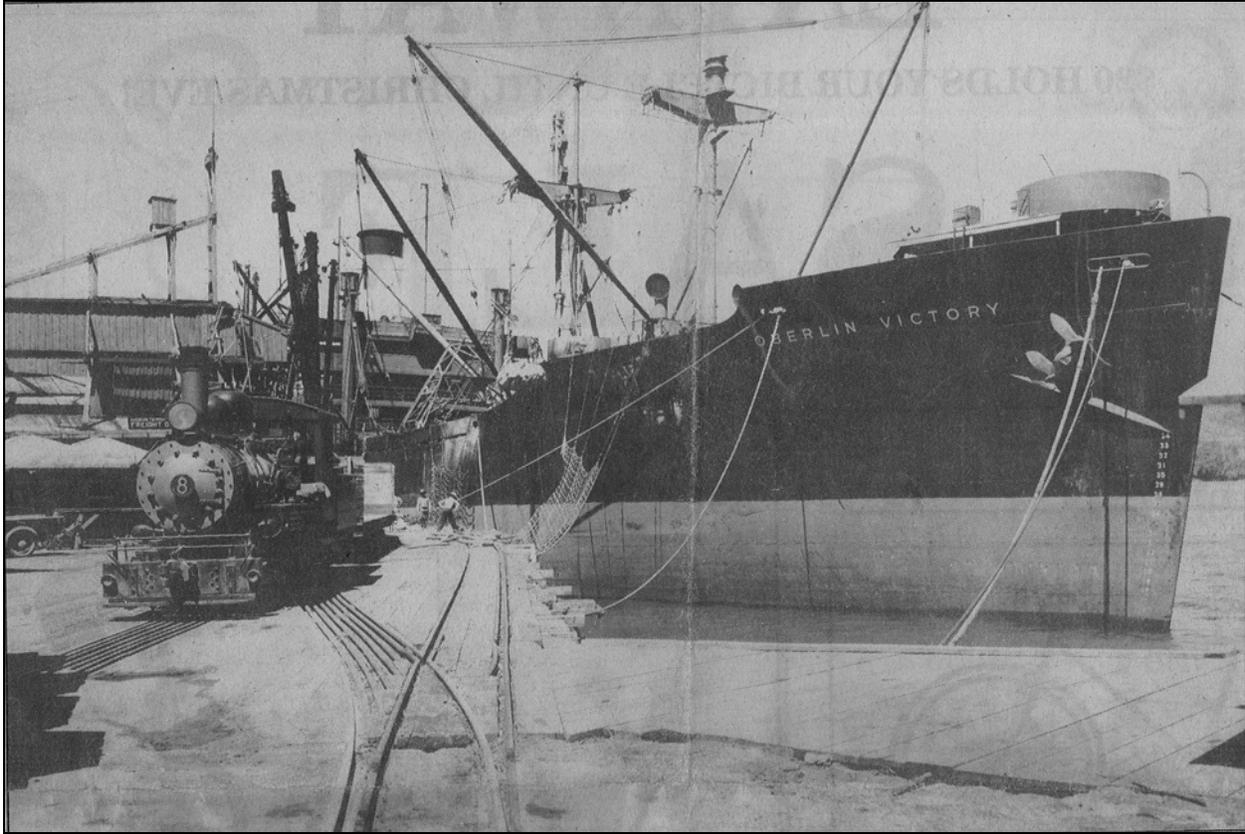


Figure 14. Ahukini port in 1946 (from Baptiste 1993a)

### 4.3.3 The Development of Nāwiliwili Harbor

The federal River and Harbor Act of March 2, 1919 authorized the construction of a modern harbor at Nāwiliwili. Some aspects of the construction phases of this bay can be gleaned from historic maps and aerial photographs (Figures 12–14).

The selection of Nāwiliwili as the harbor of the future on Kaua‘i was preceded by a year’s worth of debate between advocates of Hanapēpē and Nāwiliwili. The specifications for the harbor included support from local government and business interests:

Upon completion of a rubble-mound breakwater 2,450 feet long along the reef dividing the inner and outer harbors, the entrance channel would be dredged to a depth of 35 feet, a minimum width of 400 feet, and a length of 2,400 feet. Also included in the estimated cost of \$1,086,000 was a harbor basin 35 feet deep, 1,025 feet wide, and averaging 2,000 feet in length. The same act provided an initial appropriation of \$250,000 for construction of the harbor. Local interests were to assure eventual railroad connections between Nāwiliwili and the southern part of the island ‘in reasonable time,’ while the Territory of Hawaii or the

County of Kauai was to give the Secretary of War \$200,000 toward the project. (van Hoften 1970: 12)

The dredged material would be used as fill for the proposed wharf areas.

Construction of the breakwater, the initial phase of the harbor project, began in October 1921. By 1924, a total of 1,454 feet of breakwater had been set in place. However, dredging within the now semi-protected bay could not begin until the Territorial Legislature appropriated the \$200,000 promised to the project. Action by the legislature was delayed when the sugar companies on west Kaua'i – continuing to press for Port Allen at Hanapēpē as the island's major harbor facility – threatened to boycott the Nāwiliwili harbor after its completion. The Legislature finally approved its share of the funding in 1925, and the breakwater was completed in March 1926. Development of the harbor continued apace as:

...the Territory took over the Federal camp and equipment and began construction of a concrete wharf. As soon as the Government dredge A. Mackenzie finished [dredge work] at Hilo she began work at Nawiliwili in fiscal year 1929, and dredging was completed in July 1930. The official opening of the \$1.3 million harbor on 12 July inaugurated an entrance channel 600 feet wide, 2,400 feet long, and 35 feet deep, a harbor basin 1,100 feet wide, 2,000 feet long, and 35 feet deep; and a rubblemound breakwater 2,150 feet long. (van Hoften 1970:18–19)

Construction of the wharf facilities continued throughout the 1930s.

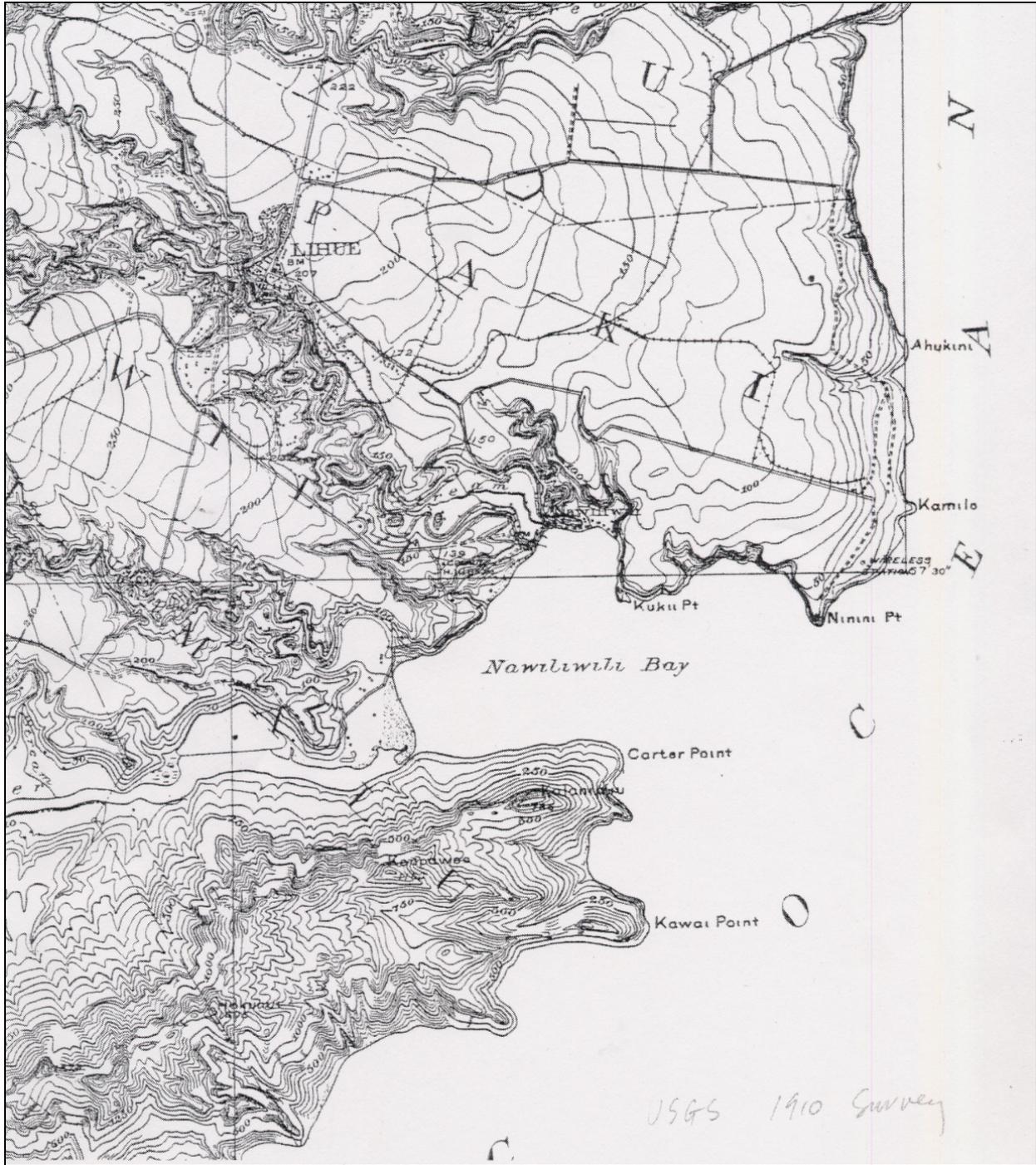


Figure 15. Portion of 1910 US Geological Survey map of Nāwiliwili and the subject parcel to its immediate north



Figure 16. 1924 photograph showing Nāwiliwili Bay before construction of the harbor facility on the north side of the bay (Bishop Museum Archives)



Figure 17. Circa 1930 photograph showing Nāwiliwili Harbor under construction (Bishop Museum Archives)

Historic maps and photographs document Nāwiliwili Bay before and after the construction of the harbor. A USGS map of 1910 shows the original configuration of the shoreline at Nāwiliwili Bay before the construction of the harbor (see Figure 12). The early stages of the breakwater construction are evident in an aerial photograph taken on July 4, 1924 (see Figure 13), in which the end of the newly constructed breakwater is visible in the left-central portion of the photograph. Construction of the harbor facility on the north side of the bay had not yet begun by this time.

Another aerial photograph from c. 1930 shows the continued development of the harbor (see Figure 14). By this time, the filling-in for the harbor had not been completed; the area of the current pier facility is still open water; the land behind the constructed jetty was built up by imported fill. More recent maps of the harbor, compared with the 1910 map, reveal that the modern pier area is located entirely upon a 20th century landfill.

#### 4.3.4 Consultation for Nāwiliwili Harbor Improvement Project

Cultural Surveys Hawai‘i, Inc. (CSH) conducted interviews and extended email exchanges with several local residents and *kama‘āina* in conjunction with a historical and cultural assessment of a proposed improvement project at Nāwiliwili Harbor (Chiogioji et al. 2004). Four of these interviews are reproduced here, followed by some synthesizing comments. The interviewees were asked about their knowledge and/or concerns about traditional cultural resources, practices, and beliefs specifically related to the Nāwiliwili Harbor project area.

#### 4.3.4.1 James Burgess

Mr. James Burgess was born in Niumalu in 1924. He is a life-long Kaua'i resident and is a respected elder in the Royal Order of Kamehameha, Kaumuali'i Chapter. He spent his childhood in Niumalu / Nāwiliwili and has continued to visit and participate in activities in the area up to the present. Mr. Burgess (JB) was interviewed by CSH at the Niumalu Pavilion on October 11, 2001.

Mr. Burgess was shown some historic photos of the Nāwiliwili bay and harbor:

JB: When they were building this breakwater, they had a bridge going across here. This was the Niumalu River, the stream. We call it Niumalu River but it's actually a stream. Like I said they had a bridge going across here for transporting men and everything else to build this breakwater. I was born in June of 1924. We left here when I was about six years old. When we left Niumalu here and went to the west side. My dad got a job as a judge on the west side.

CSH: Where in Niumalu did you live?

JB: This road here. Maybe about a hundred yards in, there's a big green house over there. That's where us children were born in that house. Like I said, when I was five or six years old we moved to the west side. My dad got a job as a judge in Waimea. Then we came back here in 1938.

CSH: So you were about fourteen at the time you came back.

JB: Yeah. 1938 we came back here and at that time of course all of this was wide open ocean. Ocean all the way out to the piers now. But like I said I was very familiar with this area. And then we left here in 1942. I graduated from Kaua'i High School, which is right up here. This place is all different [now].

CSH: Maybe you can describe what it was like when you were growing up here. What did the people who were living here do in the bay? What kind of activities?

JB: Everybody fished. Hawaiians did a lot of fishing. I did a lot of throw net, trolling, and stuff like that. Like I said this was all open – just like paradise. And the development that has happened, in my growing up even, was fantastic. They had homes over here for the people that were working on the breakwater. Bungalows. They had quite a number of bungalows over here. Like I said, all this was wide open. Crabbing – Samoan crab, white *kūhonu* crab. We did just about everything. And then of course there was the river. And the river: mullet was *konohiki*; they had *konohiki* on mullet. Life has changed drastically, in my mind – doesn't make it comfortable. You see so much progress, so many people coming in. They don't know what they're doing anyway. And of course governmental agencies attempt to make things better. But better or not – hard to say.

CSH: So when you noticed people using the bay, it was mostly for subsistence, to eat? Not for sport?

JB: Very little sport. Lot of it was for subsistence. Like we used to have – Mike Coney, who had the *konohiki* for the mullet. In fact he had *konohiki* in this area.

They had *hukilau* nets. They used to *hukilau* here for *akule*. Make a surround and then put the nets on the boat, bring 'em down here. And then the people take out the fish from the nets. And then everybody gets share. Everybody that works gets share. Used to have turtles in the bay. We used to go out and harpoon turtle. You go out and catch one turtle. That's enough for the family. And share with the guys on the boat. So like I said my recollection of this area is all dreams now. [Laughs.]

CSH: In the 1930s, could you guess how big the population was down here? How many families?

JB: Well, there were quite a number of families because in this area you would be considering going toward the hill, in the valley. And then going up this side. Families, I would say a hundred, maybe little over a hundred families. And then you had families on this side too. And on this side maybe you had six or eight homes, on the right side, going down. Of course, now I don't know how many there are. But I would say better than a hundred, between a hundred and two hundred families in this particular area.

CSH: All Hawaiian?

JB: No. Chinese, Japanese, Filipino, Hawaiians. So not all Hawaiians.

CSH: When you were growing up in the '30s, there was just the original harbor construction? With the breakwater here, the jetty on this side, the pier over here?

JB: They even had a factory, a fish factory. Right around the bend where the end of the – Commercial fishermen used to bring in fish and they would process it at that factory over there. Right at the bend over here. Shannon, the guy's name was Shannon, if I remember correctly. Right close to the bank there was a fish factory. So commercial fishermen who had fished out in the ocean would bring in marlin and big fish would process it at that factory.

CSH: But in this area where you folks lived, it was all open? There was no development of the harbor?

JB: Oh, yeah. Nothing, no development. Like I say, only the bridge that came across here. Other than that, the fish factory was only in this area, and this is Kalapaki side.

CSH: Would other people from outside Niumalu come down here to go fishing –

JB: Oh, yeah. Like I said, this was a place that everybody came. From Kapa`a, from the west side. We had friends that used to come down here. And of course this was the pavilion all the time. This area. This pavilion – I think this concrete is the original. Of course with [Hurricane] Iniki and everything else, they've expanded. But people used to come down. In fact, we had built us an eighteen-foot long flat bottom boat. So people used to come down, camp. I had a motor that I used to take kids out, lay crab nets, go up the river.

CSH: Did many people have boats?

- JB: Oh, yeah. You would find maybe about. – anchored out in this ocean – because from these trees out was wide open – you would find maybe like about nine, ten boats anchored out here. People would anchor their boat rather than take ‘em home. I used to take my motor, carry ‘em on my back, go back to the house. So that buggah no disappear.
- CSH: So you folks came back to the same house?
- JB: Yeah, we were born there. Then we left. Then we were fortunate enough to get the same house back again. So I used to walk up here to go to Kaua‘i High School.
- CSH: Is the house still there?
- JB: The house is still there. Every so often I come down and take a ride, go up to the Menehune Fishpond. Even that Menehune Fishpond – I don’t know if you’ve been up to see it yet. It takes this road and goes up on the hill. Not too far. And my recollection of those days, they had nothing on the wall. Now it’s all mangrove and that’s a project I think the state or somebody should try to look at and restore. Not necessarily all the rocks, but at least to clean it up to see what the value is. Beautify the place so people can understand what it’s all about.
- CSH: So we’re up to the ‘40s.
- JB: The war broke out in ‘41, December ‘41. In fact, that morning I was on my way out to go fishing.
- CSH: You folks were living here then.
- JB: Yeah, we were still living here. And then we left in 1942, after the war started. We had property up in Wailua Houselots where I live now. It was sad because the war broke out but it’s one of the things that happens.
- CSH: So that’s when you moved away again, in ‘42?
- JB: Yeah, in ‘42 we left here to go on our own property. Up to that point my parents were renting this house here. For four years we lived here. I went to Kaua‘i High School. And then we left in ‘42. At that time I was working in the U.S. Army Engineers in Mānā.
- CSH: In the ‘40s, you still came back here occasionally?
- JB: Oh, yes. In the ‘40s, yes.
- CSH: Maybe we can take it by decades, the changes you’ve seen. In the ‘40s, say after ‘42, when you’d come down here was it still pretty much the same? Just the harbor out here [as shown in the ca. 1930 photograph]?
- JB: Yeah, the harbor and then the pier. Yeah. Of course, the jetty in the ‘40s was built. The jetty was built. And they even had a nightclub over here on the jetty. They used to call it the “Jetty Club”. The Ouye’s put up a nightclub over here. Of course [the jetty] is all developed now. Had nothing over here except for the Jetty Club. And of course the pier. The pier was over here.

- CSH: In the '40s you were still fishing and –
- JB: Oh, yeah. I used to come down here, go throw net, go across the breakwater. You could walk across on a sandbar with your throw net. And of course we had a boat that we could bring down but – I live in Wailua, see. It was no sense to bring it from Wailua, to come down here. So I used to take my throw net and my fish bag and walk across. I got to learn all the spots where the fish used to come.
- CSH: Were there still a lot of regular people fishing? The same people you'd see every time you'd come down.
- JB: Yeah, because the local people that still lived here – There was a Chinese family, the Chows. One of the boys just passed away recently. But they lived up in the valley. Like I said, for food. A big family – the Chows must have had about eight or nine children. And of course offspring after that comes.
- CSH: So we're still talking about people coming for subsistence fishing, netting?
- JB: Yes. Those days, whatever fish we could catch, you didn't have to go buy.
- CSH: So basically in the '40s it was still pretty much like what you remember from the '30s. Let's try to figure out when you started feeling something was different. Were the fish still plentiful?
- JB: Plenty. And this big open space. Now not too much space because everything is all built in: the boat harbor, the development over there. I guess the development was necessary due to the transporting or bringing in of equipment and material.
- CSH: You're talking about the development of the harbor?
- JB: Yeah. But this used to be like paradise. There were times in the late '40s, early '50s that I used to transport my boat down here and then go out and cast, go trolling. All the way to Kalapakī, around this bend. Times that I'll never forget and I only can dream about here now.
- CSH: What about in the '50s, '60s? Any changes?
- JB: Yeah, it started to develop. They added a pier. Used to be only one pier – to take inter-island barges that came in. And the boats: the Hualalai, the Wai'ale'ale, inter-island boats.
- CSH: That was the original use of the harbor, for the inter-island –
- JB: Yeah, the inter-island barges and the inter-island transportation.
- CSH: So back in the '50s, '60s, fishing was still okay?
- JB: Oh, yeah. As I can recollect up to the '60s the fishing in this area was still good. I still used to go, like I say, surround net for akule in the harbor, in the harbor. In this area over here. In fact, sometimes in this area down here. There used to be a guy that used to go up on that mountain. He went daily. In the '30s, the '40s. This old man that lived down here, George Kanehiwa. He used to climb this mountain daily to go spot fish. I'd be in school and when he spotted fish I used to run home, come down home, take off. [Laughs.] In the '40s. Because I graduated high

school in 1942. The war came in '41 and I graduated in '42. He'd climb up the mountain and when he spotted the fish and if they were in the right area, then he would – He had one red flag that he would raise up. The guys on the boat they would watch him and he'd direct them with the flag. Just like paradise. Then later on they started to use the planes. Progress.

CSH: At that time, there was no canoeing yet?

JB: Canoeing started in the early '50s. In fact, I belong to an organization, the Royal Order of Kamehameha – Up to that point I don't recollect any local canoes, Hawaiian canoes. You're talking about the Hawaiian canoe, right? I don't remember any of those till – Our organization, we were fortunate enough to get two canoes from O`ahu. I can't recollect who it was from, right now. But we brought in these two canoes and we had to refurbish them. Because they all were in a state of disrepair.

CSH: Those were koa canoes? Not fiberglass?

JB: No, not fiberglass. That was the original koa, six-man canoes. So we brought 'em over here.

CSH: Do you remember what year that was?

JB: That was in 1952 or '53. After we brought these canoes in, we used to train from over here. After we refurbished them we used to train over here. That's how started the Kaua'i Canoe Club. At that time, I don't recollect anybody else that had canoes. So we used to share with people that were interested in canoeing. And that was a process to get members into our organization, too.

CSH: On all the island this was the only place –

JB: That I know of on Kaua'i. I don't know about the other islands but on Kaua'i that was the beginning of the Kaua'i Canoe Association. And then the other groups started to develop, start making their own canoes.

CSH: Did you work on the canoes or did you paddle?

JB: I paddled. I refurbished. I paddled, trained. In this area, Niumalu-Nāwiliwili. And then, from my recollection, there were other canoes that were located and brought in to the island by different organizations.

CSH: But you folks were the first –

JB: The first, as far as I can recollect.

CSH: What was it like, paddling out here?

JB: Hard work. [Laughs]

CSH: We're getting closer to present time – the '70s, '80s, and '90s. Can you summarize your feelings about how the harbor has changed the way people do things like fishing.

- JB: I believe that the build-up in Nāwiliwili, Niumalu has gone to more commercial than anything else. We never had people living on the boats. If they came in with a boat, they would park their boat and come on land with their tents. So the whole life system is different. In my personal opinion, it's a big waste.
- CSH: How about the people living here? Has that changed?
- JB: I don't know. All I can tell you is that those people that knew each other a long time ago, they don't forget. But the opportunity, I guess, to go out and see old friends – And with the amount of traffic that we have on the island today – The traffic on the island is terrible. There's so much roadwork, construction that's going on. Everything that is being done today [at Nāwiliwili/Niumalu], it looks like its for people to associate in some kind sport or picnicking.
- CSH: Based on what I've described of the pier project, any final thoughts on the project's impact to cultural practices in the harbor area?
- JB: Well, my personal comment would be that I don't think that it would have any kind of cultural impact. It's the same like extending this industrial development that they have done here, expanding the area for commercial activity. So I cannot definitely say that I would consider what is being planned here to [accommodate] another boat there other than that you're just going to get more people coming, more often. But what do you do? What industry do we have that can sustain the economy of the island? I hate to see it develop any more than we can handle but how do you stop it? You cannot even stop immigrants from coming into the islands. Or into the United States. Live and let live. [Laughs.] So I cannot say any adverse conditions on extending the pier so they can put in another boat. Maybe one of these days they gonna line up four or five, you know.
- CSH: Do you think it's already been changed so much that you cannot go back –
- JB: You cannot go back. Yeah. They cannot – It never happen that they could restore the area to a comfortable situation. Because I'm sure like – even in the sailboats here – people are are living there. Why? Because they have their boat. They got free sewage system. Like us we build house, we gotta put sewage, yeah. [Laughs.] Sometimes, I used to go up this road here to see the fishpond. And there's one spot up there that can overlook this area. Sometimes I cry. But it's for people that need subsistence to work. More people that means – supposed to be more people spend money.

#### 4.3.4.2 Robert Crowell

Mr. Robert Crowell has been the harbormaster at Nāwiliwili Harbor since 1994. Mr. Crowell (identified as RC in the transcript below) was interviewed by CSH at Nāwiliwili Harbor on October 11, 2001. Mr. Crowell began by discussing fishing practices inside at harbor and the impact of the terrorist attacks of September 11, 2001 on harbor security procedures.

- RC: Basically, my take on this, when I first came up here, being from Honolulu, there's very limited fishing off of piers in Honolulu because of commercial

activity. Here [at Nāwiliwili Harbor] because it was a lot slower we continued to let people fish on the piers. And that's the biggest thing I think.

CSH: So there's never been any restrictions until now [before the emergency measures put into place following the terrorist bombings of September 11, 2001]?

RC: No. The only restrictions we have is because, in the early '90s, we fenced off the whole compound, the whole harbors division area of the property. So, basically, people can only come in through walk-through gates. There's no vehicular traffic allowed on the piers after hours. So there are a number of fishermen that were still doing that, prior to September 11th. They would come, bring their baskets, roll them on in, and then go fishing. For *halalū*, *menpachi* or whatever they had. Like I said, when I came on board I continued the practice. I didn't have any objections to that practice. And we still allow people to fish off of the jetty road, our interior seawall out here which is on harbors division property. They still go fishing there. We also still allow commercial net fishing within the harbor. We never did have a ban on that. And in recent days, recent years I should say, there has been a conflict between recreational and commercial fishermen. The *akule* fishermen, especially. I think the Department of Land and Natural Resources, the Aquatics Division, is taking an active step towards trying to resolve the conflict there. Other than that, we still allow canoe races to happen within the harbor. There again they enter the harbor through the area at the end of our jetty here. They jump in their canoes there and use the harbor as their racing grounds. I think they have a six-lane quarter-mile course that they use.

CSH: Are they allowed also to practice inside of the harbor.

RC: They would be allowed to practice. However we don't have that many that do. Our only rule is to stay out of commercial traffic. And that also goes for commercial, recreational fishing. Commercial fishermen, canoeing, kayaking, sailing. If you're going to do it in the harbor, just stay out of the commercial traffic way. Because they'll lose that battle every time. And it's basically for their safety so it would behoove them to stand clear of the commercial traffic. And I must say, on this island, I don't have any complaints with anyone. For the most part, they have stayed out of the way. I think at any time that we had a problem, if we had a problem, it was probably not a local. It was probably a stray from the hotel. That was in a kayak that was in the way of a ship. She gotta blow her horns and – But I don't recall but one complaint in the time I've been here, since '94, of any traffic crossing commercial traffic.

CSH: So, as far as something that we'd identify as traditional Hawaiian activity, besides canoeing and fishing, have you noticed anything else going on in the harbor that might relate to that kind of traditional practice?

RC: Not really. That's about it. As I say, we have fenced off the area where we work containers, where we have developed container yards, where we've developed a cruise terminal. So people don't have that kind of ready access to the area. Whether they would want [access] to this huge – acre of concrete – I'm not sure. But they don't have readily available access to our pier areas.

- CSH: So the fishing: is it restricted to shoreline fishing or are people allowed to fish from small boats in the harbor?
- RC: People can fish from boats. It's not restricted to the shoreline.
- CSH: Would you guess at the number of fishing people who might be considered regulars.
- RC: I understand there are [regulars]. Who they are I'm not sure. My guy who does know who they are isn't here today. He's on vacation. I know he has a contact – or someone contacts him all of the time to ask about the fishing. And once he gives the word to this one individual, usually everybody who's out there knows. I think it has impacted them since we have locked the pedestrian gates because of September 11th. But, this island being the way they are, they're very understanding as to what the reasons were and the reasons why we have restricted the access. We have opened up the jetty road, where at one point in time we had it locked down. So I think they're grateful for that, that they're able to go down there. Still can fish down there.
- CSH: Without estimating the number of people, since '94, you do see certain regulars [fishing in the harbor]?
- RC: Right. I couldn't give you a number off-hand.
- CSH: Now, you know the extent of this [renovation] project. Do you have any thoughts on the impact that project might have on any of these activities – canoeing, fishing. Do you see any direct or indirect impact on either of those?
- RC: The canoeing side, no. I don't see that being impacted because, basically, they stay water-borne. They don't come from land side. And the area that we're looking at as expanding doesn't really get into their lanes or the area that they have used in the past. Fishing, I'm not sure. If ever lift the security threat that we're in and allow fishing once again, I'm not sure how many people would be impacted. Because along that area where we're looking at expanding, we do have some people, a handful of regulars, that do out to the dock in the corner. That like to just do some pole fishing. Some recreational stuff. But the majority of the people fish off of Pier 2 presently where it doesn't look like we'll be touching, as far as this project. We do have some guys that do whip along that area of the proposed expansion but how it will affect them, I'm not really sure. I don't know how it would affect the fishing grounds. But I think if we still do allow them back in and fish, I'm not sure if they will be impacted because the areas will still be there. Where they can still whip off of, after the project is completed. I don't think it impacts that many people.
- CSH: Just as a side note, because of this emergency, a lot of things are up in the air in terms of future decisions about public access to the harbor area?
- RC: That's correct. The Coast Guard tells us that the threat level that we're in will be around for a while. And a lot of these changes may be permanent. It won't go back.

- CSH: So, irrespective of this project, there might be changes anyway [regarding public access and activities within the harbor]?
- RC: Correct.
- CSH: To summarize, you've been here since '94?
- RC: Yes.
- CSH: Has it been basically a good relationship between the local community and the harbors division?
- RC: I think so. I think this community is very understanding. They've understood reasons why we've had to close down areas. They understand why we've had to expand.
- CSH: Have you had any complaints expressed to you? Or concerns expressed to you by any of the local folks?
- RC: Very minor-type complaints. Like: "Can you open the bathrooms at night because we fish at night?" And: "Us men don't need it but we're thinking about the women out there." And stuff like that. And we accommodate. Like I said, the people here are very understanding. They're very concerned about areas. And the fishermen in general, the regulars as we would call them, are very conscientious. I don't have people trashing our place. They use the facility. We leave the bathrooms open for them. They treat it with respect and don't abuse. I don't have any problems with them on the pier. And I don't think they have – Other than because we locked it – they don't like that idea, I'm sure. But they understand. I don't get a call everyday, kind of thing.
- CSH: Would you discuss the conflict between the commercial and recreational akule fishermen?
- RC: It has to do with commercial akule fishermen who are netters, who net the schools of akule versus the recreational akule fishermen off of boats that basically hand-line or pole fish for the akule. And the conflict is that on occasion the commercial fishermen would come in to a harbor area, a calm area, where there may be a school of akule and the recreational guys who are in smaller boats would be over there fishing the akule. And then once they depart, the school is still there but the commercial guys will come in and surround, net up all of that akule and now the recreational guys no longer have that school to work off of. So I think [the aquatics division] is in the process, like I said, of trying to resolve that conflict. And drawing areas or boundaries where, limits where commercial can come only so far and surround only so much in, I guess, a calm area. Versus where the recreational guys can fish within that boundary for the school. I don't know how often it happens because the complaints don't come to me. Very rarely the complaints were coming to me. There would be a couple of complaints about the commercial guys coming in and wiping out a school. But I had no jurisdiction over that because they weren't really abusing or disobeying our laws, our rules.

The commercial guys, if they came in, if they did surround akule schools it would be on the off-hours, anyway, and didn't impede commercial traffic.

CSH: Do you know how long this conflict has been going on?

RC: I imagine it was going on probably even before I came.

CSH: So all the time you've been here it's been a problem?

RC: Yes. But you see even that hasn't been that great where anybody has really done anything about it. I guess there is this abundance of akule on this island so I guess everybody felt that there was enough. It's not only within Nāwiliwili Harbor either. The problem lies at Hanamā'ulu Bay, Port Allen, Hanapēpē Bay. I think even in Hanalei there's the same problem. So I think it's come to a head in recent years because some guys have taken it to their legislators.

CSH: Do you think this harbor project will have any impact on that situation?

RC: No. As a matter of fact, I don't know how aquatics has drawn their line but I think the harbor expansion is out of the area that they're concerned about.

[Mr. Crowell was asked to comment on previous harbor expansion projects during his tenure as harbormaster.]

RC: Actually, Pier 3 opened in late '94. And that sits on the far end. And that's where Young Brothers operates off of now. And then what we did – There wasn't really any more expansion. What we did was demolish Pier 1 and cut down our pier shed that was on Pier 1 that was formerly Young Brothers. And we rebuilt that pier. So, basically, Nāwiliwili is pretty much ahead of its time right now. We have two brand-new piers, as far as pier strength. We have a lot of working area, working cargo area. Expanding Pier 2 would enable us to use the area – more of an area for passenger ships. So, like I said, '94 was the opening of the Pier 3 area where Young Brothers is. And then it took us a couple of years and Pier 1 was redeveloped.

CSH: And, as best you remember, at those times were there any concerns raised about the impact on traditional practices?

RC: As far as I can remember, no. None at all.

#### 4.3.4.3 Cheryl Lovell-Obatake

Ms. Cheryl Lovell-Obatake is a Hawaiian cultural specialist and community activist. CSH prepared a list of questions for Ms. Lovell-Obatake and she kindly responded by email on October 14, 2001.

Ms. Lovell-Obatake was asked to describe her background in Nāwiliwili and Niumalu:

I was born in the Kona District, Waimea, Kaua'i, which is where my mother is from. I was raised in Kalapaki, Nawiliwili and Niumalu, which is where my father is from. My paternal grandfather (Lovell) was born 1893 and raised in Nawiliwili

his entire life. His father was also born (1861) and raised in Nawiliwili. My 3rd great-grandparents were also raised in Nawiliwili.

My ohana are one of the few Hawaiians that still retain possession of kuleana lands (L.C.A.) in Nawiliwili, Niumalu & Kalapaki. My ohana were known fishermen and surfers.

I was the community monitor for Nawiliwili Cemetery (presently known as Kalapaki Memorial Gardens which Cultural Survey of Hawaii was hired for archaeological testing and disinterment and re-interment of na iwi kupuna around 1989, 1990s or so...

Who am I? What am I? I am the hawk in the community...How old am I? Only 47.

I did a lot of fishing in my younger days until I left to college in 1972. My father, my mother, my uncle taught me how to fish.

My uncle & I often visited the pohaku site which Papalinaloa Stream discharges under pier 2 at the harbor. There is a pohaku which the moi would rub their belly or feed on certain nutrients during certain seasons. Besides moi, aholu hole, palani, papio, oama, weke, menpachi, aweo weo, akule, halalu were caught by pole fishing under and off the pier.

Although there exists the name of a fish (mo'i), a fish eaten by royalty, there is another Mo'i (kahuna), name of a kahuna and yet a ranking individual (mo'i) that had certain responsibilities to fulfill in the area, such for the villagers and royalties of ancient times. This pohaku could well be a selected place where rituals took place (Makahiki) as I was told. There are twin reefs that extend from the County park at Nawiliwili to Union 76. That was all filled in. The reef was a natural habitat area for marine life, such as fish, shellfish, octopus, sharks, turtles etc. 1860-1890's, I was told that a woman from the area fed the sharks along the shorelines going to Niumalu. There also was an ancient heiau site near by the sugar bulk, above or below? Although destroyed, or leveled, the site is considered sacred. The sacredness [of the] spot was determined by elements in the sky. (stars, moon, etc.)

Kuhiau heiau the largest on the island is about four acres [and] is located at Kauai High School (puuhonua type). Paukini is located on the reef at Kalapaki by the seawall. She is the sister rock of Kuhiau heiau. Another rock located in the middle of Kalapaki Beach is Mokuweo. This is another ancient site which there existed another kahuna that fed the fish and the sharks. There were plenty fish in the area. My grandmother (born 4/12/1892) told me of her experiences catching a fish with her holumu (long dress). The story is written in Ainakumuwai "You Like Fish?"

Ms. Lovell-Obatake was as asked to describe Hawaiian cultural practices that she had observed taking place in Nāwiliwili Bay over the years:

Fishing still exists in Nawiliwili. Shoreline fishing (on the pier) by the jetty, across the breakwater, Niumalu (small boat harbor), etc. Also net fishing (surround). DLNR, State politicians are presently reviewing a HB restricting certain areas for (surround) net fishing. There has been no resolution thus far and no bill was passed.

As I recall the County (Keith Nitta) who attended the 2025 Harbor Master Plan informational meetings indicated that the County along with the State are considering closing the bottom road (near pier 2) which may also eliminate fishing access to the pier and along that area where people fish.

I am concerned about Native Hawaiian Fishing Rights. PASH Kohanaiki Supreme Court Ruling. Check with Davinnia McGregor, Jon Matsuoka, Luciano Minerbi who were assigned by State Office of Planning to implement the law.

Ms. Lovell-Obatake was asked to comment on the impact of the pier project on Hawaiian cultural practices:

The State system has in the past inadvertently over expanded on the submerged lands that exist. Proper control was overlooked, therefore cultural practitioners and other ethnic origins have a small wiggle area to fish at Nawiliwili. Many of us have our own favorite spots to fish. Pier 2 is one shared by many for fishing.

I have witnessed (observed) more modern commercial economic practices encroaching on cultural practices. Politics!

Ms. Lovell-Obatake was asked if she knew of any important cultural sites in the harbor that would be affected by the pier project. She was also asked if there were other cultural concerns she had in regard to the project. Ms. Lovell-Obatake declined to respond to these questions. She explained:

Within the perimeters of the project? Its tax map key and boundaries? I have a hard time staying within boundaries. Cultural sites ( wahi pana) have connections. If I were to comment on another cultural site nearby, not within the boundaries of this project I would be irrelevant in the eyes and ears of the accepting authority. You have not provided me with a map TMK of where you are specifically covering.

#### 4.3.4.4 William Kikuchi

The late Dr. William Pila Kikuchi was for many years a professor of archaeology at Kaua'i Community College until his retirement in 2000. He was a leading expert on Hawaiian fishponds. William Kikuchi (WK) was interviewed by CSH by telephone on December 11, 2001.

CSH: Would you discuss where information on traditional Hawaiian culture and cultural practices in the Nāwiliwili/Niumalu area can be found?

WK: Material that was published, especially the Kaua'i Historical Society material about the stories of Niumalu and all that. Another place you can get some stuff on

that is the environmental impact statement about the Nāwiliwili Community Association or the Niumalu Community Association, when they were working on trying to evict those people... [the current Nāwiliwili pier] ...was [once] all swamp. And the most interesting site, I thought was Niumalu, that area, because of these stories. And if you go west, there are a whole bunch of fishponds, and they're still there, I think. But that's out of your area.

- CSH: Our research indicates that the pier area is landfill created in the 1920s and 1930s.
- WK: That's right. I wasn't too concerned because it was all filled up. And they had to tear down that side of the mountain. That's where they had that interesting rock formation and fill that for the harbor. And the only other one that I was concerned for was Papalinahoa. So, everything else I know of that area was simply – not through archaeological stuff – because when we came it was fill so all we did was cursory historical, cultural things like that.
- CSH: When you say “when we came” what year was that?
- WK: 1972. We kind of got involved with the Nāwiliwili Community Association or the Niumalu one. And if you take material from that – I don't think it was published in any kind of form. But that was interesting because they would bring out roughly the same kinds of concerns I think you're going to receive up there [for the pier renovation project]. But your area may be easier because it's all filled in.
- CSH: What Hawaiian cultural practices have you observed taking place in Nāwiliwili Harbor over the years?
- WK: Just fishing and the canoes. Canoe landing. That's about all I've ever observed.
- CSH: What impact do you think the ... project will have on these practices?
- WK: Well, I think most of it has gone into the river now. It looks like it went into Hūle'ia River. So I don't think the expansion will have too much of an impact.
- CSH: Are there any important cultural sites that you know of in the harbor that would be affected by the project?
- WK: No. I wish I did. I wish I had information but, like I said, all the stuff I saw was actually in Kalapakī Bay. And the rest of the stuff was on land.
- CSH: Are there any other cultural concerns that you would have about the pier project?
- WK: I think just that it be sensitive to the people involved. Access, improve the water quality. Fishing off the pier.
- CSH: Thank you.

#### 4.3.5 Consultation for Proposed Development of Kaua'i Lagoons Resort Property

CSH conducted a phone interview and an email exchange with two *kama'āina* in conjunction with a historical and cultural assessment of the proposed development of the Kaua'i Lagoons Resort Property, which is located in prior sugar cane fields immediately south of the Līhu'e airport (and within the general, footprint area of the proposed project) (Mitchell et al. 2005). The interviewees

were asked about their knowledge and/or concerns about traditional cultural resources, practices, and beliefs specifically related to the Kaua'i Lagoons project area.

#### 4.3.5.1 Ms. Sabra Kauka

Ms. Kauka, a Kanaka Maoli Cultural Practitioner/Hawaiian Studies Kumu, commented in an e-mail on Monday, October 24, 2005:

I live in the Kalapaki ahupua'a of the Lihu'e district of Kaua'i. As a cultural practitioner I frequently visit Ninini Point for many reasons.

The first reason I go to Ninini is because it is a very beautiful place to practice my 'oli and hula. There is nobody there to bother with my chanting and I can practice in relative privacy.

A second reason is because I bring kanaka malihini to Ninini to welcome them to Kaua'i. From this point you can see all of the Ha'upu Range, Nawiliwili, Kilohana, Wai'ale'ale, and the back side of Halele'a. So we go there for welcoming protocol.

Thirdly, I go to pick 'ilima papa and kaunaoa to make lei for hula. As more and more development occurs along the coastline of Kaua'i there are fewer and fewer places to pick these beautiful native species. The name of the halau that I belong to is Pua Ali'i 'Ilima, so the 'ilima flower is very important to us and we wear it whenever we can, if there's enough to pick and make lei. My kumu hula is Victoria Holt Takamine. Our Kaua'i branch of Pua Ali'i 'Ilima is called Papa Laua'e o Makana. That tells you that we are also connected to Makana in Ha'ena.

Fourthly, I go to malama the rare Shearwater birds that lay their eggs in the rock walls, boulders and bushes along the coast. I have been taking my 3<sup>rd</sup> and 4<sup>th</sup> grade students from Island School to count, capture, weigh, measure, and return the chicks to their nesting sites for the past two years. We have a special permit from the Department of Land & Natural Resources, State Forestry Division, to do this work. Last year we counted 38 chicks there. This year, unfortunately, a predator has eliminated them. We don't know what predator it is but we couldn't find any chicks. This bird is very important to me and my students because it teaches them the connection between the kai and the 'aina. It teaches them that what humans do at sea and on the land affect other life on earth. If the birds have nowhere to nest, their species will die. If they have not fish and squid to eat, if man overharvests the ocean, the birds will have nothing to eat. They are an indicator that there is still fish in the sea for them and for us. There is still land for them and for us.

While we are at Ninini, and this is the fifth reason, we malama the 'aina by picking up 'opala. There is a heiau at Ninini. Unfortunately, it's overgrown with weeds and I have not yet cleared it because I already have two other large areas of

kuleana at Wailua and Nu‘alolo Kai. I malama one place in the winter and one in the summer.

This past week my friends and I went out to watch the sunset over the Ha‘upu range and moon rise at Ninini. The moon was soon followed by Mars, just a few degrees further north. Ninini is a great place to star watch, to teach people about the night sky, and to feel the pulse of nature.

There are many fishermen and surfers who also use this area. I would like to make sure that we all continue to have access to this beautiful and special area.

#### 4.3.5.2 Ms. Cheryl Lovell-Obatake

Ms. Lovell-Obatake participated in a telephone interview with CSH on October 20, 2005:

I remember that Hal [Hammatt of Cultural Surveys Hawai‘i] did work there along the coast and Kalapakī Point. I am sure you will find cultural sites in his report.

Independently we still access the place today. Not many people go in – only certain ones because the area is the last remnant of open space with no buildings. I never heard of any burials in the area of study and Nancy McMahan would verify that. It is important that we still have access rights to this land that will be developed. I remember some native plants in the area we used for medicine, such as the *‘ilima*.

I am very active in the fishing rights along the coastal regions of Kalapakī. My Uncle Enoka Lovell III, known as “Buddy”, was a traditional practitioner when it came to fishing. He is also the one who salvaged the boat when it sank in Wailua. There are sacred trails that run from Nāwiliwili side coming from Kalapakī Point along the coast.

### 4.3.6 Other Recollections and Remembrances

There are many other examples of diverse documents that attest to the historical and cultural importance of resources located in and around the subject project area. The following example could be augmented and expanded many times over should the need for additional data gathering arise in the future of the subject project.

#### 4.3.6.1 Fishing the Hulē'ia at Night

In the 8 March 1997 Honolulu Advertiser, James Itamura, a Kaua'i-based attorney with family ties to the Garden Isle, contributed a remembrance entitled "Family life made rich by fishing" (in a special section "Reader's Journal"). Itamura talked about going to visit his *'ohana* in the late 1950s and early 1960s. They lived "near the [lower] end of Huleia River, up a ways from the Menehune [Alekoko / Niumalu] Fishpond" (Figure x):

My uncles fished the river with a net Uncle Joe knit by hand that seemed like it was hundreds of feet long. They laid the net off the back of a flat-bottom tow boat traversing the river in a zigzag manner. Much to my horror, they would only go in the black of the night and liked taking me.

Huleia River at night is the scariest experience a person can have. The shadows of gnarly mangroves were everywhere, and I felt like we were being watched by something. Being frightened, wet and cold was more than a city kid could take. My granduncles, on the other hand, did not seem to be scared by anything.

We never failed to catch washtub-loads of *papio*, barracuda, mullet and Samoan crabs ... The Huleia house has since been blown away by Hurricane Iwa and my family's land is now a federal bird sanctuary [Huleia National Wildlife Area]. I can still go there because of our family gravesites, but it's not the same without the laughter of the *kupuna*, God bless their souls.

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## Section 5 Archaeological Research

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This section focuses on the most relevant archaeological research in and directly around the general footprint area of the proposed project. Results from previous studies of coastal and near-coastal areas of Hanamā'ulu, Kalapakī, and Nāwiliwili are briefly summarized. This is followed by a detailed treatment of prior research and results from the shoreline at Kalapakī and Hanamā'ulu (south of the Hanamā'ulu Stream), immediately east (*makai*) of the airport. Collectively, these observations provide some expectations regarding the types of cultural and historic resources that may be located in the subject project area.

The shoreline at Kalapakī and Hanamā'ulu is the most sensitive archaeological area; most of the rest of the general footprint area has been substantially modified by commercial sugar cane operations, the development of Līhu'e Town, Nāwiliwili Harbor, Ahukini port, and the airport, the Marriot resort and golf course, and other development. Except for its shoreline segment—which runs from Ahukini Landing (i.e., south-side of Hanamā'ulu Bay) to Ninini Point (north side of Nāwiliwili Bay), the proposed Bike/Pedestrian Path mostly travels along existing rights-of-way whose subsurface sediments have already been substantially disturbed. There are no extant *heiau* or reconstructions of *heiau* in the general footprint area of the proposed footprint, despite the fact that at least three large shrines were once located along the coast from Ahukini to Kūki'i.

This archaeological review is based on a prior CSH report documenting the results of an archaeological inventory survey of the proposed impacts of improvements to Līhu'e Airport (Bell et al. 2006); and other original source materials from archaeological studies of the specific coastal area of concern (Hammatt 1988, 1990; Creed et al. 1999).

Figure 15 shows prior archaeological investigations in the general footprint area of the proposed project. Figure 16 shows historic properties that have been documented in this area as a result of these studies. These data show there are at least 33 known cultural and historic sites of interest in this area; 26 of these are historic properties listed on the State Inventory of Historic Properties (SIHP); the other seven sites of interest are cemeteries not listed on the SIHP.

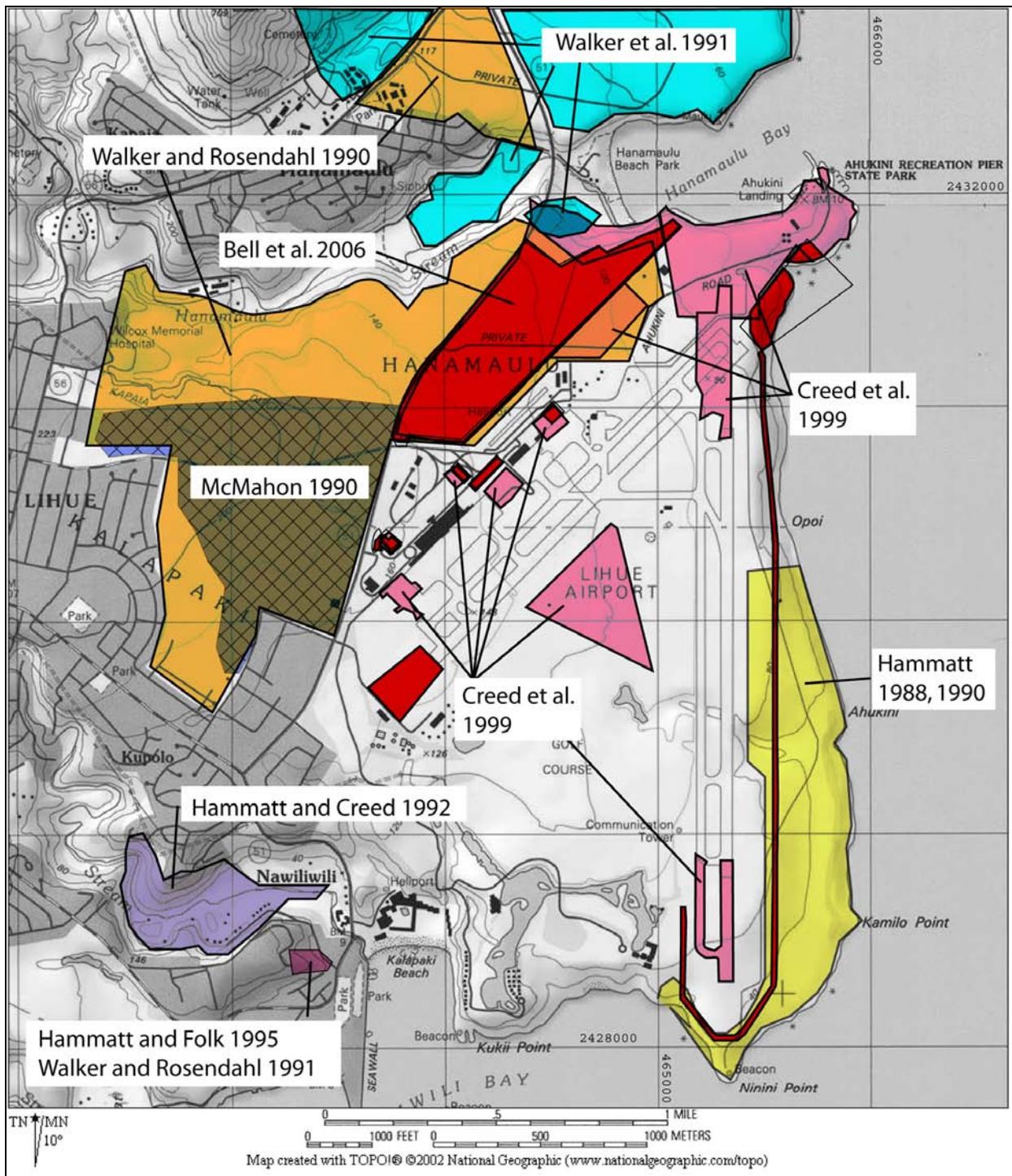


Figure 18. Map of the Līhu'e area showing the location of previous archaeological projects

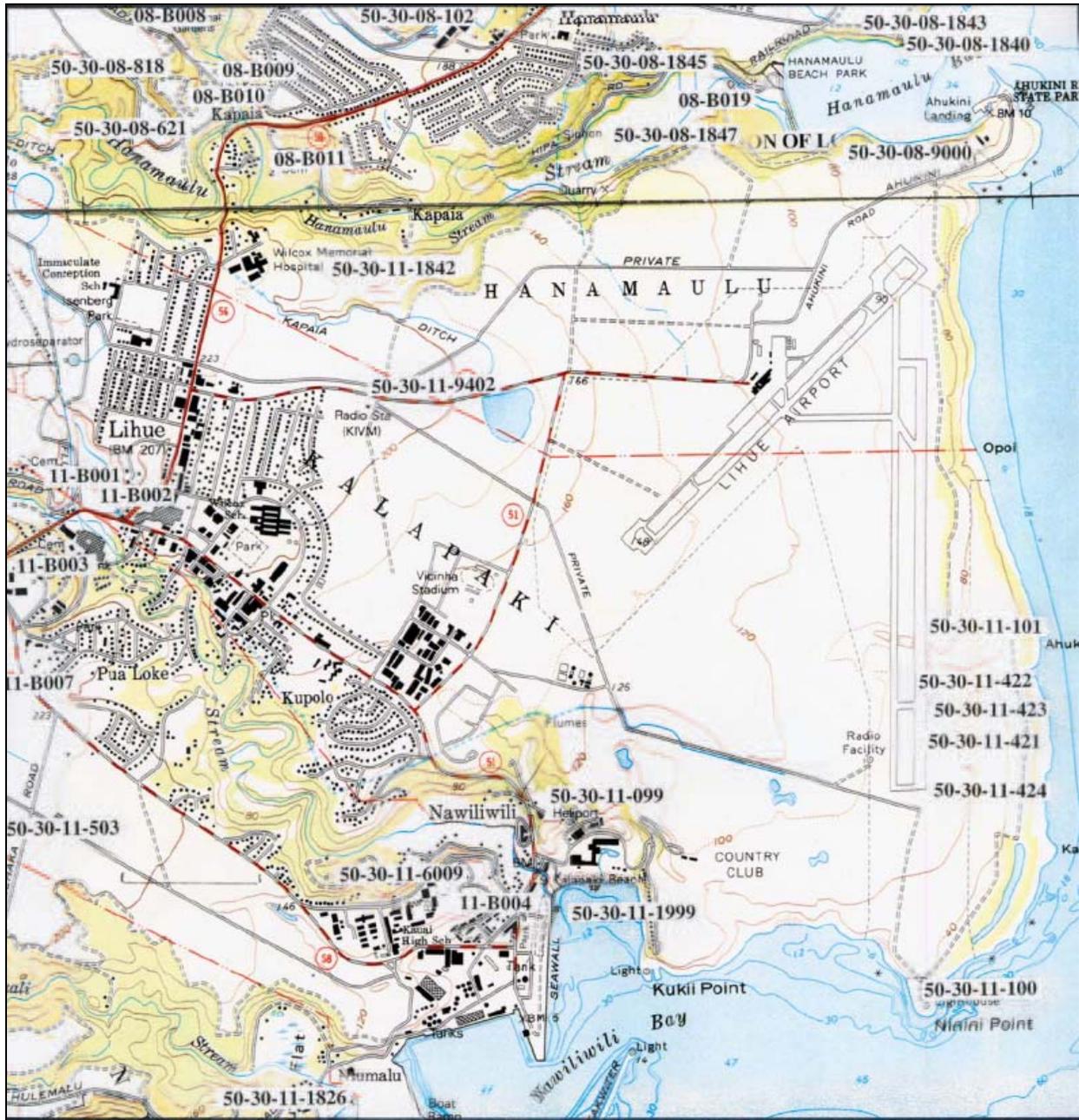


Figure 19. Historical and cultural sites of interest within and near the subject project area (projected on portions of Lihue and Kapa'a USGS 7.5-minute topographic quadrangle maps)

## 5.1 Early Documentation of *Heiau*

Thomas G. Thrum (1907), publisher of the *Hawaiian Almanac*, gathered lists of *heiau* on all the islands; and reported five from the *ahupua'a* of Hanamā'ulu, Kalapakī and Nāwiliwili:

1. Ninini, Kalapakī, near site of Nāwiliwili light house; described as destroyed (SIHP No. 100)
2. Ahukini, Kalapakī; described as a *heiau* of medium size, with some foundation stones in evidence at the time of Thrum's work (SIHP No. 101)
3. Pohakoelele, Kalapakī; described as a medium-sized *heiau*; destroyed by the time of Thrum's survey (no site number)
4. Kalauokamanu, Hanamā'ulu; described as a large walled *heiau* that stood above the present mill; destroyed around 1855- of *po'okanaka* (sacrificial) class (SIHP No. 102)
5. Kuhiau, Nāwiliwili, near site of court house - a large paved *heiau*, whose enclosure covered an area of about four acres: long since destroyed (SIHP No. 99). The rock Paukini, now separate from but formerly connected with the shore, was where the *kahuna* (priest) lived

The first comprehensive archaeological survey of Kaua'i was undertaken by Wendell Bennett in the late 1920s and published by the Bishop Museum in 1931. Bennett used Thrum's list for reference and documented many additional (mostly non-*heiau*) sites. Bennett listed two *heiau* for Hanamā'ulu Ahupua'a and one for Kalapakī (both described as "destroyed"). He also noted sand-dune burials (SIHP No. 103) towards the Wailua River (Figure 17).

Bennett repeats the descriptions provided by Thrum for the "destroyed" Sites 100–102, and adds the following:

Site 103. Dune burials. In the sand dunes that run along the shore halfway between Hanamā'ulu and Wailua River are many burials. (Bennett 1931:125)

Paukini Rock, a *heiau* or priest's house now under water in Nawiliwili harbor [this site is now designated SIHP No. 50-30-11-1999] (Bennett 1931:48)

In addition to SIHP No. 103, which is located outside (north) of the general footprint area of the proposed project, several other sand-dune burials or grave sites have been noted in Hanamā'ulu; for example, at Kālepa (SIHP Nos. 50-30-08-746 and -1827), documented by Rosendahl (1990) and CSH archaeologist Kaipō Akana during a field survey of damage after Hurricane 'Iniki by the Kaua'i Island Burial Council in 1992.

In an archaeological reconnaissance survey for the Kaua'i Lagoons Resort, a wall, possibly related to Ninini Heiau was noted by Hammatt (1990:11): "A high well-constructed wall running 400' north of Ninini Lighthouse [is a] possible prehistoric wall and [it is] possibly related to the former Ninini Heiau (SIHP No. 100)." A dune midden scatter (SIHP No. 421), two probable cattle walls (SIHP Nos. 422 and 423), and an oval terrace alignment (SIHP No. 424) were also recorded in this area.

Bennett places Ahukini *heiau* (SIHP No. 101) "in Kalapaki, near Ahukini Point on the bluff overlooking the sea. This is now entirely destroyed." (Bennett 1931:125)

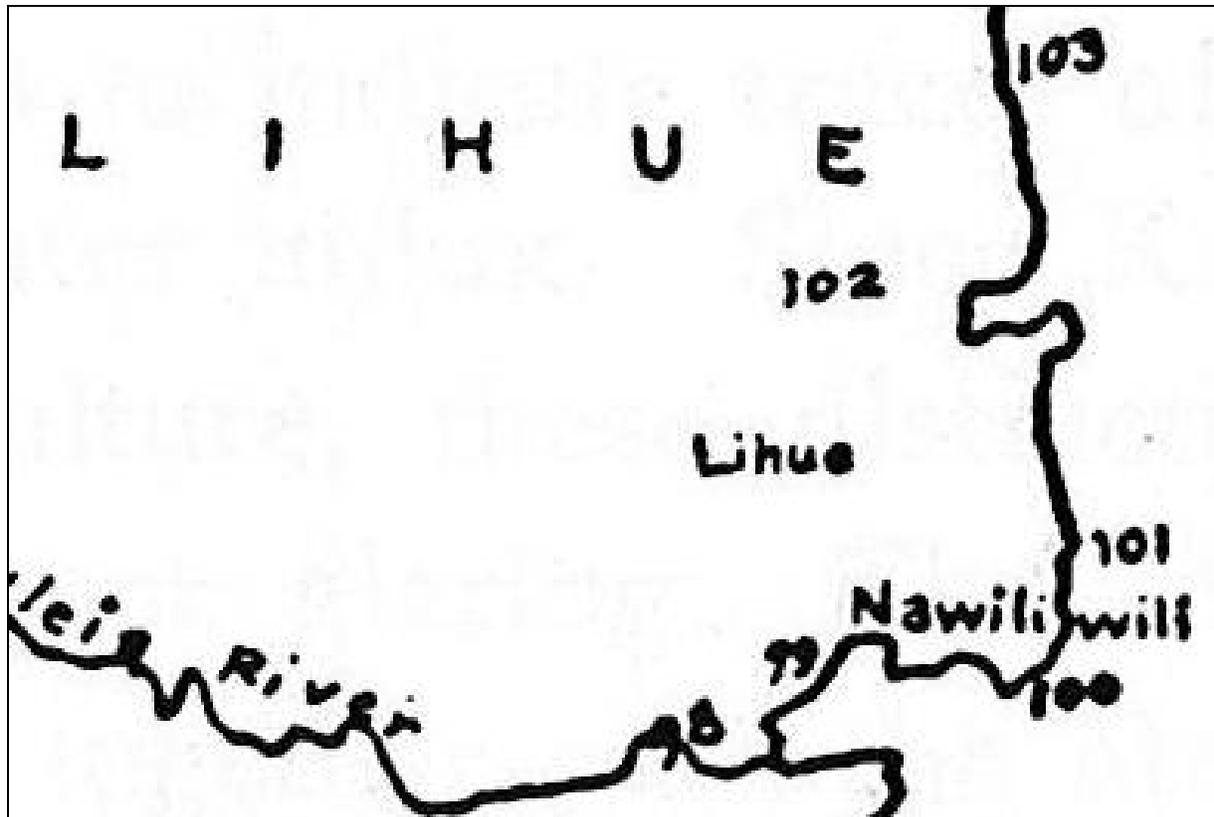


Figure 20. Detail of Bennett's (1931) map of Kaua'i showing location of archaeological sites

Bennett (1931:152) lists Pohakoele'ele Heiau in Kalapakī under "Kauai sites not located." Damon probably would have mentioned its location if she had known about it. There do not seem to be other references to Pohakoele'ele Heiau in Kalapakī, and it is unknown if Damon used Thrum for her source, or if she knew the information from persons on Kaua'i. Although Bennett could not verify its existence, and its location is speculative, it is included as a non-located site of pre-Contact Kalapakī, passed down in local memory. There was a *heiau* in the neighboring (north) *ahupua'a* of Wailua called Pōhaku'ele'ele, said to have been located just *mauka* of the junction of 'Ōpaeka'a Stream and the Wailua River (Dickey 1917:29). It is possible that these two *heiau* are the same, and Thrum was confused on the location. It is also possible that this was the name of an unnamed *heiau* on Kūki'i Point. Neither Thrum nor Bennett mention a *heiau* noted by Lt. George G. Jackson, Navy surveyor for the Hawaii Government Survey Office in 1881 (see Figure x) at Kūki'i Point. The Kaua'i Community College newsletter, *Archaeology on Kaua'i* (1973:4), notes that the "remains of ancient heiau" noted by Jackson are "where the cottages of the Kauai Surf now stand."

Ethel Damon (1931) mentions Kuhiau Heiau in Nāwiliwili, placing it near the location of the Court House (see Figure x). She mentions Pohako-ele'ele, location unknown, and Paukini Rock (SIHP No. 1999), located at Kalapakī Beach, Nāwiliwili Bay:

An additional area of four acres was during this same year, 1851, sold to the government for harbor and road near Nawilwili Bay. The first sighting point in this deed was the north corner of Kuhiau heiau. (Damon 1931:415)

From the deck of their rivercraft in 1854 Mrs. Rice and the children could plainly see above the rocky shore the ruins of Kuhiau, the old heiau, or temple, and nearby on the bluff the flaming blossoms of a great wili-wili tree among koa trees which then grew almost down to the water's edge. (Damon 1931:17)

On the bluff overlooking the bay of Nawiliwili, where the public High School now stands, was once the large paved heiau called Kuhiau, extending over about four acres of ground. It was in its day the largest and most far-famed temple on the island. Below it, in the bay, is still the rock called Paukini, which was said to be its companion or sister heiau, and was probably also the home of the kahuna, or priest, of Kuhiau. In ancient times this rock was connected with the shore near the site of the former boat landing. All the dredging and filling in for the modern wharves have not yet touched this old rock of Paukini, the sole remnant of the famous heiaus of Nawiliwili Bay. For almost no traces, even of the great Kuhiau temple, are now [in 1931] to be found; and of the three small heiaus in the neighboring ahupuaa of Kalapaki, those of Ninini, Ahukini and Pohako-eleele, little more than the names survive. (Damon 1931:397-398)

In a collection of Kaua'i Place names (Kelsey n.d.), the *heiau* of Kuhiau is also mentioned:

Nawiliwili, oia ke awa kumoku. Aia ilaila ka heiau of Kuhiau. Kalapaki, aia oia makao o Nawiliwili.

Nawiliwili is the harbor. The temple of Kuhiau is there. Kalapaki is on the shoreline of Nawiliwili.

Thrum placed the location of Kuhiau Heiau near the "Court House," which is labeled on a 1881 Jackson map (see Figure 3) in an area called "Kuhiau." Jackson does not label any structure as the *heiau*, so it may have been destroyed sometime between 1854, when Mrs. Rice and her children saw it from the harbor, and 1881, when Jackson made his map. According to Dr. William Kikuchi (personal communication), the *heiau* was destroyed when people took the rocks to use for other purposes. Its general location was near the ironwood tree next to the Kaua'i High School flagpole (Kalima and Smith 1991:B-5). Nancy McMahon (SHPD Archaeologist for Kaua'i) indicated that the Paukini Rock location in Kalapakī Bay was shown to her by Cheryl Lovell-Obatake in 1999, and subsequently added to the State Inventory of Historic Properties (SIHP No. 1999).

Thrum gives the location of Kaluaokamanu Heiau as "above the mill." A 1934 *Garden Island Press* newspaper account and Ethel Damon give additional information on the location of this *heiau*:

Another *heiau* located in Hanamā'ulu is Kalauokamanu. This was situated just west of the Lihu'e Plantation Yard and adjacent to a cane haul road. It is said to be of the *pookanaka* [sacrificial] class and was destroyed in 1855. (*Garden Island Press* 1934)

Within the ahupua'a of Hanamaulu was a large walled heiau called Ka-lau-o-ka-manu of the poo-kanaka type, or one in which human sacrifices were offered; but in the almost unconscious days of transition, when popular interest in such thing was still asleep, most of the stones from this enclosure were taken to make firm the foundation of the Hanamaulu sugar mill. (Damon 1931:397)

There were also two stones associated with this temple, which guarded the pathway to the *heiau*. Mary Rice, in her "History of Līhu'e" stated that there were "two large rocks formerly in the field opposite Mr. Wolter's residence, of which it is said they were chiefs on their way to this heiau but stricken dead by the stench from the human sacrifices" (Rice 1914: 48). Carl Wolters was the manager of Līhu'e Plantation from 1893 to 1900. Kalauokamanu Heiau was said to have been located "above the mill" at the base of Kālepa Ridge (Wichman 1998:61). The *heiau*, therefore, may once have been located in the area now occupied by Kālepa Village and Hanamā'ulu Plaza (Lo 2005).

## 5.2 More Recent Archaeological Projects

The following archaeological projects studied lands located within the general footprint area of the proposed project. Most of these investigations yielded no significant historic or cultural sites, or relatively minimal finds:

- (1) McMahan (1990) conducted a brief walk-through field check of three parcels of land immediately west of the airport, and east of Līhu'e town center. Three previously identified historic residences (SIHP Nos. 50-30-9390, -9401 and -9402) were documented; no archaeological resources were identified.
- (2) Hammatt and Creed (1993) conducted an archaeological survey of 61 acres of land in Nāwiliwili. Historical evidence suggested this land was intensively used for agriculture in both pre- and post-Contact times. They documented three *'auwai* (traditional irrigation ditches) (SIHP Nos. 50-30-11-491; -492 & -493); and a single rock (SIHP 50-30-11-494) interpreted as a burial marker.
- (3) Franklin and Walker's (1994) archaeological inventory survey of 552.3 acres including portions of the airport showed that nearly the entire area was previously disturbed and most sites obliterated. Two sites were documented: a stone wall (SIHP No. 1842) interpreted as a historic boundary marker (possibly marking off an old agricultural field), along the south side of Hanamā'ulu Valley near Kapaia; and a historic structure (SIHP No. 9402) associated with Radio Station KIVM located in the Kalapakī portion of the airport.
- (4) Hammatt and Folk (1995) conducted an archaeological and osteological study of Nāwiliwili Cemetery (SIHP No. 50-30-11-6009), located between Kauai High School and Kalapakī Bay. A total of 68 burials of historic age were documented, disinterred, and reburied nearby; the burials represent a wide variety of ethnicities and ages. Walker and

Rosendahl (1991) surveyed this same general area and discovered 34 intact, historic burials with several associated headstones.

- (5) Creed et al.'s (1999) archaeological inventory survey of several discontinuous parcels within the airport area documented no evidence of prehistoric or early historic sites. However, extensive remains of Ahukini Camp (part of Ahukini Landing, SIHP 50-30-08-9000) were documented at Hanamā'ulu Bay. The remains consisted of 15 concrete slabs believed to have been associated with residential structures, concrete drainage systems remnants, piles of historic trash, railroad tracks, loading dock and camp-related infrastructure. Additionally, a large wooden house (the Bertrand House) with attached garage/living area and an associated rock wall lie within the project area, adjacent to and south of Ahukini Landing.
- (6) Bell et al.'s (2006) archaeological inventory survey of approximately 175 acres of discontinuous lands in Hanamā'ulu and Kalapakī Ahupua'a associated with proposed improvements to Līhu'e Airport identified one historic property (SIHP 50-30-08-3958), a piggery dating from the plantation era.

Just north of the subject project area, Walker and Rosendahl (1990) excavated nine backhoe trenches in association with the Hanamā'ulu Affordable Housing Project from which only "several small isolated coral fragments" were found. No further archaeological work was recommended at this location [TMK: (4) 3-7-003: portion 020], which was determined to have been entirely disturbed to a significant depth below surface by historic sugar cane operations. Walker et al.'s (1991) archaeological inventory survey near the mouth of the Hanamā'ulu Stream identified 10 sites; three of these date from pre-Contact times: a subsurface cultural deposit associated with a traditional living site area (SIHP No. 1838 A & B), an agricultural wall and terrace of unknown function (SIHP No. 1839 A & B), and a terraced river valley of some 50 acres (SIHP No. 1847). SIHP No. 1839 provided a radiocarbon date of 1170-1400 A.D. Other sites documented by Walker et al. (1991) north of the subject project area include plantation-era structures, and a historic cemetery (SIHP No. 1844 Japanese-Buddhist and Filipino-Catholic cemetery).

Just south of the subject project area, in Niumalu, Folk and Hammatt's (1991) archaeological inventory survey at the Kanoa Estate Lands documented two fishponds originally recorded by Ching et al. (1973). In addition, a previously unrecorded 'auwai was found connected to one of these fishponds, known as Kanoa's fishpond, to Hūle'ia Stream.

Kikuchi and Remoaldo's *Cemeteries of Kauai* (1992) notes eight cemeteries in Hanamā'ulu and Kalapakī. Descriptions do not exist for two of them (B019, B004). A pre-Contact burial platform on Kālepa Ridge was found by Kaipō Akana in 1992 in an inspection of areas damaged by Hurricane 'Iniki. These burial sites are not located within the subject project area.

### **5.3 Coastal Portions of Hanamā'ulu and Kalapakī Ahupua'a**

Three previous studies have focused on the seashore at Kalapakī Ahupua'a and Hanamā'ulu Ahupua'a (south of the Hanamā'ulu Stream), which constitute the most sensitive archaeological portions of the general footprint area of the proposed project (Figure 18).

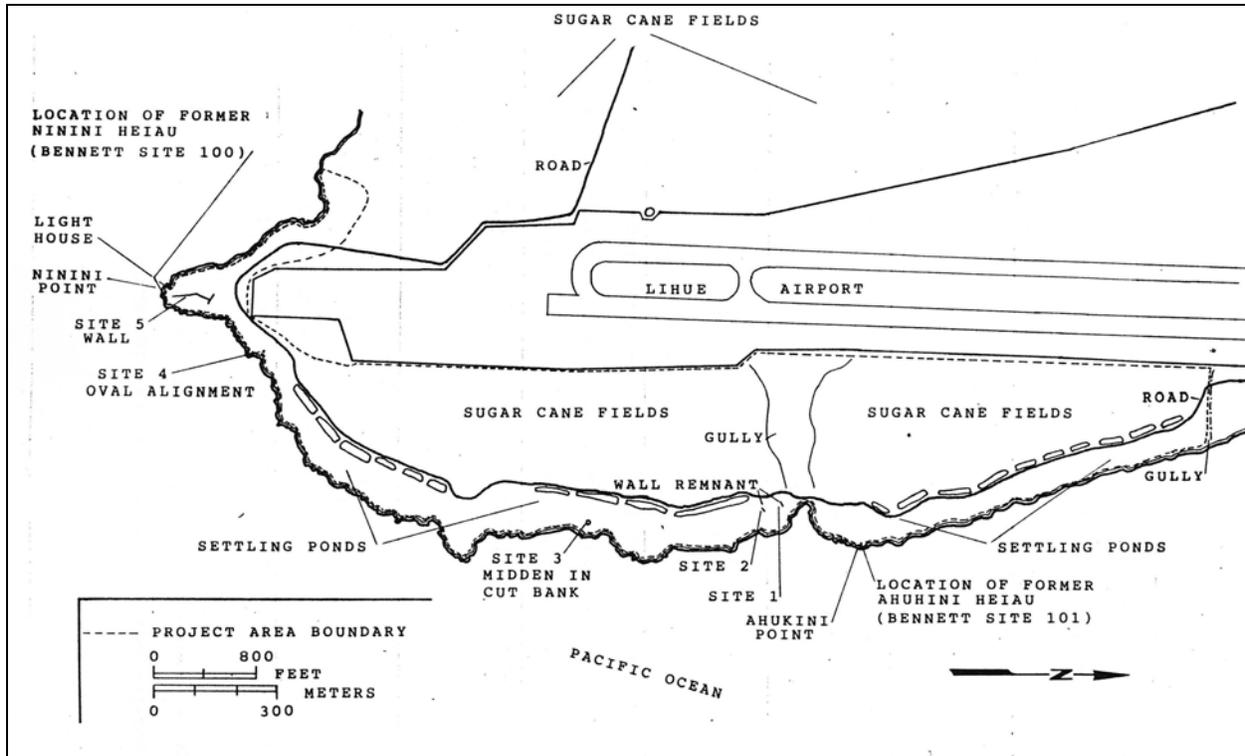


Figure 21. Archaeological sites along the coast at Kalapaki documented by Hammatt (1988, 1990)

Hammatt's (1988, 1990) archaeological reconnaissance and survey of this coastal area documented five sites, including two dry-stacked stone walls (both incomplete remnants) dating from the historic era (SIHP Nos. 50-30-11-422 & 423), a cultural layer (midden scatter) along the wave-cut shoreline (SIHP No. 50-30-11-424), an oval-shaped dry-stacked stone alignment or terrace (SIHP No. 50-30-11-421), and a 400-foot long stone wall considered to be a possible extension of Ninini Heiau (SIHP No. 50-30-11-100). Hammatt noted that much of the area had been heavily disturbed by prior activities, and that no definitive traces of Ahukini Heiau (SIHP No. 101) could be found.

Creed et al.'s (1999) archaeological inventory survey of several discontinuous parcels within the airport area included portions of the coast at Hanamā'ulu (south of the stream, but documented no evidence of prehistoric or early historic sites, but did find extensive ruins of the early 20<sup>th</sup> century port of Ahukini (see details above).

## Section 6 Community Consultations

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Throughout the course of this evaluation, an effort was made to contact and consult with Hawaiian cultural organizations, government agencies, and individuals who might have knowledge of and/or concerns about cultural resources and practices specifically related to the project area. This Cultural Impact Evaluation (CIE) includes some consultation but no formal interviews, which would be recommended if it were determined that a full-blown Cultural Impact Assessment (CIA) is warranted.

A number of attempts (1-7) were made to contact individuals, organizations, and agencies apposite to the Cultural Impact Evaluation for Hanamā'ulu, Kalapakī and Nāwiliwili Ahupua'a. Table 1 summarizes the community consultation process. All letters and emails were sent along with a map and aerial photograph of the project area with the following text:

At the request of R.M. Towill Corp., Cultural Surveys Hawai'i Inc. (CSH) is conducting a Cultural Impact Evaluation (CIE) for the County of Kauai's proposed Nāwiliwili – Līhu'e Civic Center – Ahukini Bike/Pedestrian Path Project. The proposed project is located in Nāwiliwili, Kalapakī and Hanama'ulu Ahupua'a, Līhu'e District, Kaua'i Island, Multiple TMK's. A Cultural Impact Evaluation (CIE) is not a full-blown, in-depth study. *A CIE is a small-scale study conducted to help the landowner/developer to determine if there is a need for a more comprehensive cultural impact assessment (CIA).* For this CIE, CSH will be contacting a few key agencies and organizations for commentary (e.g., SHPD, OHA, Island Burial Council), as well as a few community cultural consultants for brief phone interviews regarding the proposed project. The project is the sixth and final segment of the 16-mile Nāwiliwili to Anahola Bike and Pedestrian Path Project, which was proposed in the 1994 State of Hawai'i, Master Plan – Bike Plan Hawai'i. The Nāwiliwili – Civic Center – Ahukini segment will connect four key destination points with a network of on- and off-street path improvements. Connections between these points are identified within four primary corridors:

- I Ahukini Landing to Nāwiliwili Beach Park (approximately 6 miles)
- II Ahukini Landing to Līhu'e Civic Center (approximately 2.5 miles)
- III Nāwiliwili Beach Park to Līhu'e Civic Center (approximately 2.5 miles)
- IV Nāwiliwili Beach Park to Niumalu Beach Park (approximately 1 mile)

The proposed improvements include:

10'-wide shared-use coastal path between Ahukini and Ninini Point,

10'-wide shared-use path connection into Līhu'e Civic Center,

Bike lane and sidewalk improvements to existing and planned street corridors,

End-of-ride facilities at Nāwiliwili Beach Park, Niumalu Beach Park, and Līhu'e Airport.

The purpose of this cultural study is to assess potential impacts to cultural practices as a result of proposed development in the Nāwiliwili, Kalapakī and Hanama'ulu Ahupua'a. We are seeking your *kōkua* and guidance regarding the following aspects of our study:

- **General history and present and past land use of the project area.**
- **Knowledge of cultural sites which may be impacted by future development of the project area - for example, historic sites, archaeological sites, and burials.**
- **Knowledge of traditional gathering practices in the project area, both past and ongoing.**
- **Cultural associations of the project area, such as legends and traditional uses.**
- **Referrals of *kūpuna* or elders and *kama'āina* who might be willing to share their cultural knowledge of the project area and the surrounding *ahupua'a* lands.**
- **Any other cultural concerns the community might have related to Hawaiian cultural practices within or in the vicinity of the project area.**

Table 1. Community Consultation

<b>Name</b>	<b>Background, Affiliation</b>	<b>Comments</b>
Achi, June and Karen	Nāwiliwili residents	CSH called on April 29 and June 5, 2008. Karen Achi said she was not familiar with the project and has no comment.
Aipoalani, C. Kunane	Kaua'i Island Burial Council Member	CSH emailed him on April 29, 2008. Mr. Aipoalani referred CSH to Cheryl Lovell-Obatake.
Asing, Kaipo	Kaua'i County Council member and Niumalu resident	CSH emailed and sent letter on April 29, 2008.
Ayau, Halealoha	Hui Mālama O Nā Kūpuna O Hawai'i Nei	CSH sent email March 31, 2008 and a follow-up email on April 22, 2008.
Carvalho, Aaron	Kaua'i Resident	CSH called on June 5, 2008, number has been disconnected.
Chun, Dennis	Kaua'i Community College Professor	CSH called and sent an email with letter on June 5, 2008.
Cockett, Pat	Nāwiliwili resident	CSH called on April 29, 2008 and on June 3, 2008. No answer.

Name	Background, Affiliation	Comments
Craft, Gary	Niumalu resident	See below table for phone interview response.
Daubert, Warren	Former Nāwiliwili resident	CSH sent email June 4, 2008.
Grace, Mike and Sondra	Anahola Residents	See response below table.
Hubbard, Mark	Kaua'i Island Burial Council Chair	CSH sent letter on March 31, 2008 and a follow up email email on April 22, 2008. Mr. Hubbard referred the letter to Nancy McMahon of SHPD.
Ikeda, Malcolm	Nāwiliwili fisherman and resident	CSH called on 06/05/08. Mr. Ikeda was unavailable.
Kagawa, Kanani	Kaua'i Office OHA Community Resource Coordinator	See Figure 21 below for the OHA response.
Kekua, Kehaulani	Director of Kaua'i Culture & Heritage Center/Kumu Hula	CSH sent an email on March 31, 2008 and a follow-up email April 22, 2008.
Kinimaka, Percy	Head of Security at Kauai Lagoons	CSH called on 06/05/08, no answer.
Kruse, John	Kaua'i Island Burial Council Kawaihau Regional Rep.	CSH sent letter on March 28, 2008 and emailed him on April 22, 2008. Mr. Kruse referred CSH to Cheryl Lovell-Obatake.
Lovell-Obatake, Cheryl	Nāwiliwili Resident	CSH sent the letter on March 31, 2008. Follow-up phone calls were made April 15 <sup>th</sup> and 29 <sup>th</sup> as well as May 7 <sup>th</sup> and 23 <sup>rd</sup> . A follow-up letter was sent May 14, 2008. It is CSH's understanding that Ms. Lovell-Obatake is interested in sharing her <i>mana'o</i> on this project but that she is currently out of town. CSH hopes to be able to include Ms. Lovell-Obatake's perspectives on the current project in the final draft of this report. See comments below table and letter in Appendix A.

<b>Name</b>	<b>Background, Affiliation</b>	<b>Comments</b>
Manea, Jo	Nāwiliwili Resident	CSH received an email on April 12, 2008 referring CSH to Cheryl Lovell-Obatake, Kaipō Asing, Niūmalu resident and Kauai County Council member, Bob Schleck of Grove Farm Museum, and residents Pat Cockett, June Achi and daughter Karen.
Masumura, Wesley	Nāwiliwili fisherman and Kaua'i Planning Committee Council member	CSH called on June 5, 2008 and left a message.
McMahon, Nancy	State Historic Preservation Department (SHPD) Kaua'i Archaeologist	CSH sent letter on March 28, 2008 and follow-up email on April 22, 2008. She forwarded the email to Mark Hubbard and referred Cheryl Lovell-Obatake.
Nāmu'o, Clyde	Administrator, Office of Hawaiian Affairs	See Figure 21 below table.
Noyes, Thomas	Kaua'i Paths	CSH sent letter March 31, 2008. He referred Jo Manea.
Oi, Tommy	DLNR-L Kaua'i Land Division	CSH sent letter on March 28, 2008 and a follow-up email April 23, 2008. Mr. Oi has no comment on the project, but referred Cheryl Lovell-Obatake.
Paik, Linda Kaleo	State Historic Preservation Division (O'ahu Office)	See below table for response.
Perry, Warren	Royal Order of Kamehameha, Kaumali'i Chapter Number 3	CSH sent letter on March 28, 2008 and emailed on April 22, 2008.
Pomroy, Sharon	Anahola Resident	See below table for response.
Rogers, Nani	Ho'okipa Network member, Kapa'a Resident	See below table for response.
Schleck, Bob	Grove Farm Museum	CSH spoke to him on April 22, 2008 and emailed letter. On May 6, 2008, CSH sent follow-up email CSH re-sent letter on May 14, 2008.
Trugillo, William	Ka Leo O Kaua'i	CSH sent an email on March 31, 2008 and a follow-up email April 22, 2008. Mr. Trugillo called CSH

Name	Background, Affiliation	Comments
		on April 23, 2008 saying he would forward new contacts. <i>Response pending.</i>
Tsuchiya, Rick	Kaua'i Historic Preservation Review Commission (KHPRC)	CSH sent letter March 28, 2008. Letters were dispersed amongst members at the June 5, 2008 meeting.
White, Chris	Kaua'i Resident	See response below table.
White, Robert	Niumalu Resident	See response below table.

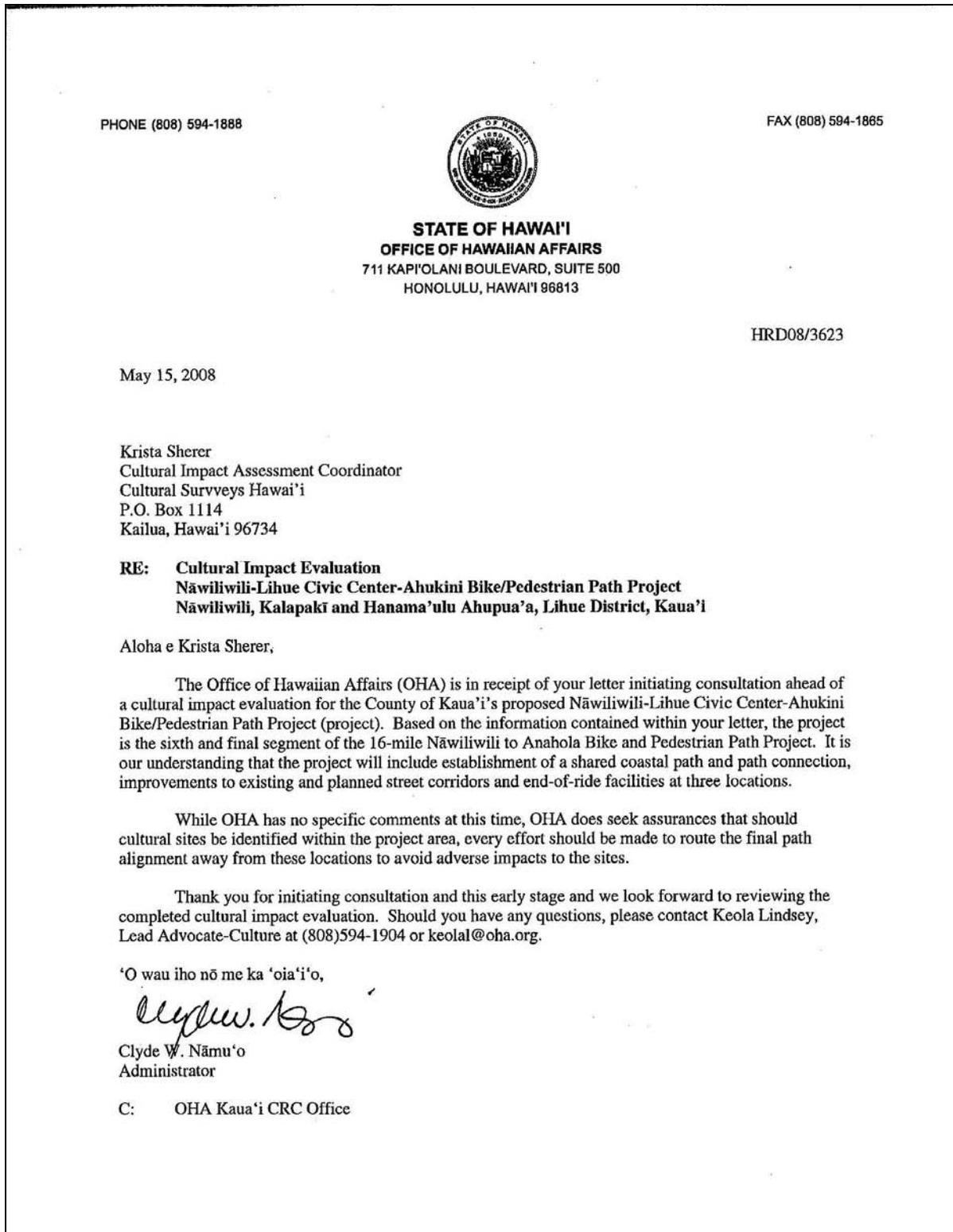


Figure 22. Office of Hawaiian Affairs Response Letter, May 15, 2008

## 6.1 Summaries of Community Consultations

### 6.1.1 State Historic Preservation Department (SHPD)

CSH contacted Linda Kaleo Paik on March 28, 2008. In an email response sent to CSH on April 16, 2008, Linda Kaleo Paik, Cultural Specialist for the History and Culture division of the State Historic Preservation Department (SHPD) provided the following:

It is a hard call as I see benefits to having this recreational land use for the community but I also see the detriment of Hawaiian traditional use for the area, such as fishing and gathering. Saying that, I can offer no added information or history at this time. Mahalo for offering me the opportunity to comment on this project.

### 6.1.2 Cheryl Lovell-Obatake

Ms. Cheryl Lovell-Obatake is a Hawaiian cultural specialist and community activist. She was referred to CSH by C. Kunane Apiolani and John Kruse, both Kaua'i Burial Council Members, Nancy McMahan of the State Historic Preservation Department, Tommy Oi of DLNR-L Kaua'i Land Division and resident Jo Manea. CSH has made several attempts to contact Ms. Lovell-Obatake. It is our understanding that Ms. Lovell-Obatake is interested in sharing her *mana'o* regarding the proposed project but has been out of town. In lieu of a formal statement for this CIE from Ms. Lovell-Obatake, a letter sent to R.M. Towill Corp. (dated November 3, 2007) has been included in the report (see Appendix A). In addition to a number of other concerns (e.g., traffic, policing, beach setbacks, maintenance), Cheryl Lovell-Obatake (writing on behalf of herself and her daughter and son, Maureen and Leslie Lovell-Obatake) expressed the following key cultural concerns regarding the proposed bike/pedestrian path:

Nawiliwili Valley (Kahumoku Rd.)

- Historical properties exist in the valley. Ancient burials, auwai(s) (ditches), L.C.Awards (kuleana 'āina, ancient habitation, etc.. I refer to Cultural Surveys of Hawaii cultural assessment in the 80's of Nawiliwili Valley....
- Section 106 – ACHP and SHPD review, when Federal highway funds are contributed to the bikeway project. A cultural impact assessment under the EIS should be conducted.
- Many historical sites that have been consecrated by people of the old, specifically kanaka maoli (Native Hawaiians) are located in the proposed path areas.
- A cultural impact assessment was completed for the DOT Airport's Division. Refer to Kehau Kekua and Pua Kanahele – cultural practitioners of Hawaii.
- Kehau Kekua – Heritage Center CIA for Kauai Lagoons

- Fishermen's concerns of the bikeway and bikers impeding on existing fishing accesses. The rough dirt road have long been used by fishermen. The proposed bikeway should not interfere with fishermen's access to the coastal shoreline. Vehicular access is preferable to reach fishing destinations.
- Is DOCARE aware of the bikeway and their responsibilities to police and regulate fishing methods and seasonal (kapu system) fishing when non-residents from other islands enter these fishing grounds, via Hawaii Super Ferry?
- Native Hawaiians Access Rights Project – Kauai Pilot Project
- Therefore, *it is* our opinion that the proposed route into Nawiliwili Valley be rejected.

### 6.1.3 Robert White

Mr. Robert White, a resident of Niumalu, submitted his statement to CSH in an email sent on June 4, 2008. During his childhood Mr. White would spend summers in Nāwiliwili. In the 1970's he moved to the island of Kaua'i and twelve years ago moved into Niumalu. Following are Mr. White's comments about the proposed project:

I would like to say that the proposed end of the path in Niumalu would allow the Niumalu residents a great opportunity to start their bike ride in a safe manner. The road along Nawiliwili pier is well used and for an alternate route through Lihue.

The added safety of having a Bike/Pedestrian Path designation along the road to the Kauai Marriott property makes a lot of sense. After entering the Marriott property, this area also is already improved with roads, so I cannot see any cultural changes except adding to the safety and enjoyment of the local community. The entire route up to where the Marriott golf course is adjacent to the airport security fences is already developed for the most part with the existing network of roads and golf cart paths. As you leave the Marriott property, there is a well-used dirt road that has been the access to Ninini Point for as long I can remember. It may be a remnant road from the pineapple and sugar that was grown near the airport in the early 1960's. And of course, it serves as a service road to the lighthouse beacon. Even though it is hard to determine from the maps provided, it appears that the section from Ninini Point to Ahukini also exists roads used by local fishermen and people riding their bikes.

I believe this road is a remnant from the plantation days where their service roads often ran along the perimeters of their fields. Since the area has already undergone extensive use for the past 48 years that I know of, I believe that the road that is close or parallels the existing dirt road along the airport would be relatively non-invasive. I can speak of my experience past this point, as we never played past Ahukini.

I believe that adding to the outdoor recreational experience in a safe way would be a great legacy for this generation to pass on.

Most of the people I know do not ride their bikes along the roads due to the narrow road conditions and lack of safe shoulder space for bikes to traverse.

I never heard of cultural sites along this area but I am sure if there is testimony to this fact, that there will be an archaeological survey done.

#### **6.1.4 Chris White**

Mr. Chris White, a resident of Niumalu, and brother to Mr. Robert White, submitted his statement to CSH in an email sent on June 4, 2008. During his childhood, Mr. White would spend summers in Nāwiliwili. Mr. White provided the following thoughts regarding the proposed project:

I am aware of development and use by the plantations, fishermen and beach goers but do not know of any archaeological sites. I support the path is a great way of increasing community cohesiveness and health by providing a safe and beautiful path where neighbors can meet, get exercise, provide an important recreation amenity, and offer an alternate way of getting between Lihue and the beach/coast without cars.

#### **6.1.5 Gary Craft**

In a telephone interview conducted by CSH on June 4, 2008, Gary Craft shared his thoughts about the proposed project. A resident of Niumalu for nineteen years, Mr. Craft is an avid bike rider, riding his bike everyday to work and on the weekend for exercise. He has traveled extensively across the United States, Japan, New Zealand and northern Europe on bike.

He says that once the final part of the path is connected (the Anahola section), it will be a great boost for tourism. The 100-mile Bike/Pedestrian Path would be a great tourist attraction, one of the best in the world. Yearly bike riding events could take place and boost tourism. He believes that the Bike/Pedestrian Path is a great way to enhance tourism without detracting from the island.

He does object to the high cost of the bike route. He refers to other trails in the U.S. that the Nāwiliwili-Ahukini Bike/Pedestrian Path could be modeled after; One is the "Rails to Trails" program in Minneapolis, which converts old railways into bike routes. He suggests instead of using concrete to pave the path, a pea gravel path should be instated, like those in Minneapolis. This would cut down on costs and inhibit bikers from speeding and hurting pedestrians.

When asked about cultural infringement, Mr. Craft says that he doesn't see the Bike/Pedestrian Path detrimental to anyone.

When asked about fishing in the area, he reported that he occasionally sees a few fishermen along the coast and even if it's only one person, they should have access. The Bike/Pedestrian Path is not directly on the coast, so it won't affect fishermen. However, there may be some trouble with four-wheelers used for beach access that may ride over the Bike/Pedestrian Path.

Access for fishermen should be a part of the plan. He believes that the plan should be inclusive of both fishermen and bike riders. The biker's path and the cars could be parallel at times, and a policeman could monitor the cars not driving on the Bike/Pedestrian Path.

When asked about security, Mr. Craft suggests having proper signage with rules plainly stated. He recalls biking in Mount Tam [Mt. Tamalpais], California and seeing policemen on bicycles enforcing the rules by giving tickets to violators. He also recalls seeing "biker etiquette" such as bikers ringing their bells well in advance before driving past a pedestrian. If bikers could follow the same etiquette in the Nawilwili-Ahukini Bike/Pedestrian Path, it would be ideal for both pedestrians and bikers. He recalls there being some homeless people illegally squatting in the area three or four years ago, but they have since moved.

Another suggestion Mr. Craft shared was to have the trail go closer to the Nāwiliwili Lighthouse. He believes it is an important cultural place that should be highlighted to tourists.

He believes that the Bike/Pedestrian Path will pay off in the long run. He uses his car an average of 1,000 miles/year as he rides his bike to work and also rides for fun on the weekends.

#### **6.1.6 Sharon Pomroy**

Ms. Pomroy has been a resident of Anahola for thirty years and is a recipient of a Hawaiian Homelands agricultural/residential parcel. CSH interviewed her at her home on June 6, 2008.

Ms. Pomroy is concerned about the upkeep and care of the Bike/Pedestrian Path. She also expressed concern about a part of the Bike/Pedestrian Path that will have to cross with a street. The area is one-lane traffic only and may affect drivers. Although not part of the current Nāwiliwili-Ahukini Bike/Pedestrian Path project, Ms. Pomroy shared that she is concerned with the Bike/Pedestrian Path's connection in Anahola. There is Hawaiian Homelands in the area and she does not want Hawaiians to be displaced from their homes because of the Bike/Pedestrian Path.

#### **6.1.7 Mike and Sondra Grace**

Mike and Sondra Grace, *kama'āina* of Anahola, were interviewed via telephone by CSH on June 6, 2008. They have been the owners of the Anahola Beachfront Bed and Breakfast for thirty years. Mr. and Mrs. Grace support the Bike/Pedestrian Path, saying that it is very popular for the public. Everyday they drive near the Path and always see people on it. They, like Ms. Pomroy, express concern over the connection in Anahola and do not want to see Native Hawaiians displaced from Hawaiian Homelands.

#### **6.1.8 Aunt Nani Rogers**

Aunt Nani Rogers was interviewed by CSH via telephone on June 9, 2008. She is a Native Hawaiian, born and raised in Kapa'a. She is a member of the Ho'okipa Network, which strives to preserve Kaua'i.

When asked if there were any culturally significant sites in the project area, Aunt Nani states that there is the possible presence of burials in the Wailua Golf Course. She also mentioned the very real possibility that *iwi* (bones) may be discovered, and if so, they should be treated respectfully and appropriately.

She also mentions recent public discussions about allowing dogs on the Bike/Pedestrian Path. She says that dogs were originally allowed on the Bike/Pedestrian Path, but were banned after irresponsible pet ownership (e.g. leaving dog excrement on the path). She believes that the dogs should be allowed back on the path, but the community needs to police themselves.

Another concern is how close the Bike/Pedestrian Path is to the Līhu'e Airport. Airport security as well as safety for bike riders is an issue.

She also would like the Anahola Hawaiian Homelands to be left alone by the Bike/Pedestrian Path. She states that the public is not allowed access to that area.

Generally, she says that the public enjoys the Bike/Pedestrian Path and is in support of the project.

## Section 7 Cultural Landscape of the Project Area

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Discussions of specific aspects of traditional Hawaiian culture as they may relate to the project area in the broader context of the encompassing Hanamā'ulu, Kalapakī and Nāwiliwili *ahupua'a* landscapes are presented below. Excerpts from the aforementioned Community Consultations (Section 6) and past CSH interviews (Section 4) are incorporated throughout this section where applicable.

### 7.1.1 Agriculture and Gathering of Plant Resources

The project area is located between the two main bays and streams of Nāwiliwili (to the south) and Hanamā'ulu (to the north). These two meandering streams were once home to thousands of Native Hawaiians living a traditional subsistence lifestyle. As noted by Handy (1940), these two valleys were primary *kalo* (taro) growing locations in Puna Moku. The dryland areas (*kula*) of these *ahupua'a* contained native forests and were cultivated with crops of *wauke* (paper mulberry, *Broussonetia papyrifera*), *'uala* (sweet potatoes, *Ipomoea batatas*), and *ipu* (bottle gourd). Legends and historic documentation (especially Land Commission records) elaborate on many of these important natural resources. Land Commission documents indicate a land use pattern that may be unique to this part of the island, or to Kaua'i, in general, in which *lo'i* (irrigated terraced gardens) and *kula* lands in same *'āpana* (portion of land), with houselots in a separate portion. In most places, *kula* lands are defined as drier landscapes and they do not typically occur next to, and among, wetter *lo'i* lands. Upland forest regions once provided various woods needed for canoes, tools and more, as well as cordage, food and herbs (Abbott 1992).

The area is associated with *mokihana* (*Melicope anisata*), an endemic tree, found only on Kaua'i. The *lei* made of *mokihana* is a traditional symbol of the island of Kaua'i and the *mokihana* were used to make the most treasured and rare seed *lei* in the Hawaiian Islands (Abbott 1992). In Hawaiian song, Nāwiliwili and the nearby ridge, Hā'upu, are associated with the *mokihana* flower:

As mentioned in Section 1.4.1, given the relatively large area covered by the proposed bike and pedestrian path route alignments, and given the presence of developed areas, road ways, resorts and other facilities, vegetation in and around the project area is quite variable. A number of the plants in and near the project area have past and present ethnobotanical uses as medicinal, building, weaving and hula plants).

None of the study participants for this current CIE mentioned past or ongoing plant gathering activities. In a 2005 email to CSH from Sabra Kauka for the Kaua'i Lagoons Resort Property, located immediately south of the Līhu'e airport (and within the general, footprint area of the proposed project), Ms. Kauka describes going to Ninini Point to pick *'ilima papa* (also known as *'ilima kū kula*, a wild form of *'ilima*) and *kauna'oa*, a native dodder (*Cuscuta sandwichiana*) the stems of which are used for orange *lei* for *hula*. Linda Kaleo Paik also indicated that there could be gathering activities in the project area.

### 7.1.2 Aquaculture, Marine and Freshwater Resources

A fishing village called Kalapakī was located between these two major stream valleys, near the seashore, before the historic period. This general area between the streams and *makai* of the present town of Līhu'e, *mauka* of the village house sites, had several fishponds and small drainages. The village was located east and north (around and up the coast) from Kalapakī Beach.

Fishing is still a significant activity in the project area. Past CSH interviews with Cheryl Lovell-Obatake, James Burgess, Robert Crowell and Dr. William Kikuchi for a 2004 CSH study on Nāwiliwili Harbor Improvements, include several stories about fishing in the Nāwiliwili Harbor. Cheryl Lovell-Obatake recalled fishing with her uncle at the *pōhaku* site which Papalinahoa Stream discharges under at Pier 2 at the harbor. *Moi, aholehole, palani, pāpio, weke, menpachi, āweo weo, akule, halalū* were caught by pole fishing under and off the pier. She also stated that, "Fishing still exists in Nāwiliwili. Shoreline fishing (on the pier) by the jetty, across the breakwater, Niumalu (small boat harbor). James Burgess recalls fishing, crabbing for Samoan crab, white *kūhonu* (*Portunus sanguinolentus*) crab, doing *hukilau* (to fish with the seine) for *akule* and harpooning turtles in 1930's through the 1960's in the Nāwiliwili Harbor. Robert Crowell speaks about fishermen in the Nāwiliwili Harbor that were fishing for *halalū* and *menpachi* pre-September 11, 2001. He also mentions canoe racing occurring within the harbor. The late Dr. William Kikuchi also remembers seeing fishing and canoe landing in the Nāwiliwili Harbor area. In reference to the Ninini area, Sabra Kauka in her 2005 email, reports there are many fishermen and surfers who also use this area. Worth noting in the experiences provided by the above cultural consultants, particularly the testimony of James Burgess, is their discussion of subsistence fishing as opposed to sport fishing. Subsistence fishing was ongoing practice in Nāwiliwili Harbor.

Five of the participants/respondents in the current CIE study (Cheryl Lovell-Obatake, SHPD Administrator Linda Kaleo Paik, Gary Craft, Robert and Chris White) also state in their testimony that the Bike/Pedestrian Path from Ninini Point to Ahukini is frequented by local fishermen.

### 7.1.3 Cultural and Historic Properties

As described in Section 3, there are several historic map sources showing multiple *heiau* along the seashore and stream mouths in and around the general footprint area of the proposed project (Figures 3 and 4). For the most part, all physical evidence of these *heiau* has been obliterated by historic activities and more recent development. Despite this, however, many people still appreciate the sacred nature of the landscape areas in and around these *heiau* (e.g., the rocky points at Ninini, Ahukini, and Kūki'i). In a 2005 email, Sabra Kauka states that she goes to Ninini Point to practice *oli* and *hula*.

The coastal areas were the focus of permanent house sites and temporary shelters, *heiau*, including *ko'a* and *kū'ula* (both types of relatively small shrines dedicated to fishing gods), and numerous trails. The area is also the site of several fishponds. Niumalu Loko is located along the Hulē'ia Stream near its mouth to Nāwiliwili Bay, just outside the project area to the west-southwest (Figure 5). Kikuchi (1973, 1987) considered it a Loko Wai class fishpond because of its inland location along a meander of the Hulē'ia Stream; other sources (inaccurately) consider it

a Loko Kuapā (a seawall pond, fronting the ocean). The site (designated State Inventory of Historic Properties No. 50-30-11-501) was placed on the National Register of Historic Places in 1973.

Hammatt and Creed (1993) found historical evidence that Nāwiliwili was intensively used for agriculture in both pre- and post-Contact times. They documented three 'auwai (traditional irrigation ditches) (SIHP Nos. 50-30-11-491; -492 & -493); and a single rock (SIHP 50-30-11-494) interpreted as a burial marker.

Participants in this CIE, for the most part, did not mention specific Hawaiian cultural and/or historic properties. However, a few contributors to this study stressed that, generally, there are cultural and historic sites in and near the project area. Ms. Lovell-Obatake mentioned the presence of 'auwai (irrigation ditches), habitation and historic sites on or near the proposed pathway. Robert White commented that he believes that an existing dirt road between Ninini Point and Ahukini is a remnant from the plantation days. Chris White wrote he is aware of development and use by the plantations, but does not know of any archaeological sites. Gary Craft spoke of the historic significance of the Nāwiliwili Lighthouse located on Ninini Point.

#### 7.1.4 Burials

As mentioned in Section 5, the first comprehensive archaeological survey of Kaua'i was undertaken by Wendell Bennett in the late 1920s and published by the Bishop Museum in 1931 in which he also noted sand-dune burials (SIHP No. 103) towards the Wailua River (Figure 17). He also refers to Site 103. Dune burials. In the sand dunes that run along the shore halfway between Hanamā'ulu and Wailua River are many burials. (Bennett 1931:125)

Nani Rogers states that there is a real possibility that *iwi* (bones) may be discovered, particularly in the Wailua Golf Course. Cheryl Lovell-Obatake states in her letter that ancient burials exist in the Nāwiliwili Valley (Kahumoku Road) (Appendix A).

#### 7.1.5 Trails

As the coastal portion of the project area was once the site of dense habitation, it is to be expected that the area had numerous foot trails. In Damon's account of Hiram Bingham's 1824 observations from his memoir, *A Residence of Twenty-One Years in the Sandwich Islands*, published in 1847: he wrote of "Hiram Bingham crossing from Hanapēpē...over the old upland trail back of Kilohana" (1931:401).

In a 2005 email sent to CSH, Cheryl Lovell Obatake refers to sacred trails that run from Nāwiliwili side coming from Kalapakī Point along the coast. No other mention was made of trails in prior, or the current, cultural impact studies.

#### 7.1.6 Wahi Pana (Storied Places)

As detailed in Section 3, there are many *mo'olelo* associated with the project area environs. One of the oldest and most famous legendary accounts in Hawaiian oral tradition describes the travels and exploits of Pele, the Hawaiian volcano goddess, and one of her sisters, Hi'iakaikapoliopole (more commonly known simply as Hi'iaka). Pele, in her lengthy *oli* (chant) of literally hundreds of named winds of Kaua'i, lists those of Nāwiliwili, Kalapakī, Ahukini, Līhu'e, Kapaia, and Hanamā'ulu. Ahukini once housed a heiau and is referenced in a *mo'olelo* in

the story of “The Goddess Pele. Nāwiliwili is known for a *mo‘olelo* involving *menehune* (mythical race of little people famous for building great structures of old). Several historic documents talk about the close connection between Kuhiau Heiau and the *pōhaku* known as Paukini. Many references to Hanamā‘ulu are made in the “Legend of Kawelo”. Damon (1931) described Kilohana as a famous nesting place of ‘*uwa‘u* (*Pterodroma phaeopygia sandwichensis*), the dark-rumped petrel, a chiefly delicacy. The top of Mauna Kahili, the peak to the west of Kilohana, was a sacred burial place of Hawaiian chiefs. Kilohana is also associated with the *menehune*.

For the most part, participants in the current CIE study did not mention legends or stories about places and/or features of the landscape associated with the project area and environs. However, Ms. Lovell-Obatake spoke to the cultural significance of many of the sites in the project area and surrounding *ahupua‘a*.

## Section 8 Summary and Recommendations

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At the request of R.M. Towill Corp., Cultural Surveys Hawai'i Inc. (CSH) conducted a Cultural Impact Evaluation (CIE) for the County of Kauai's proposed Nāwiliwili – Līhu'e Civic Center – Ahukini Bike/Pedestrian Path Project. The proposed project is located in Nāwiliwili, Kalapakī and Hanama'ulu Ahupua'a, Līhu'e District, Kaua'i Island, Multiple TMK's. This Cultural Impact Evaluation (CIE) was conducted in order to assist the planner and developer in determining if there is a need for a more comprehensive Cultural Impact Assessment (CIA) satisfying Hawai'i Revised Statutes (HRS) Chapter 343, Act 50, which mandates assessment of potential impacts to cultural practices and resources by proposed projects undergoing an environmental review. The subject CIE provides preliminary information pertinent to the assessment of the proposed project's impacts to cultural practices (per the OEQC's *Guidelines for Assessing Cultural Impacts*), but does not fully meet the guidelines provided by the OEQC.

Thirty-two agencies/organizations or individuals were contacted for this CIE. Seventeen community agencies/organizations or individuals participated in brief informal interviews or provided referrals. Notably, response is still pending from a key cultural consultant, Cheryl Lovell-Obatake. In lieu of Ms. Lovell-Obatake's participation in this CIE, a letter regarding the project sent to R.M. Towill has been included for reference in Appendix A. It is worth noting that Ms. Lovell-Obatake indicated in her letter to R.M. Towill that a Cultural Impact Assessment is needed. Ms. Lovell-Obatake states, "Section 106- ACHP and SHPD review, when Federal Highway Funds are contributed to the bikeway project. A cultural impact assessment under the EIS should be conducted."

Generally, participants in this CIE (an abbreviated CIA) support the proposed Ahukini Bike/Pedestrian Path Project with a few caveats pertaining to cultural resources and properties as well as associated community concerns. The findings suggest that there are four major areas of cultural interest and concern regarding the proposed Nāwiliwili-Ahukini Bike/Pedestrian Path Project:

- (1) The Nāwiliwili-Ahukini Bike/Pedestrian Path may impede access to fishing grounds, in particular, vehicular access for residential fishermen, especially along the shoreline. Additionally, as the Bike/Pedestrian Path could draw more non-residents to the area who engage in fishing, there is concern that there will be increased fishing by non-residents which may lead to overfishing.
- (2) There may be Native Hawaiian burials (*iwi kūpuna*) in the Nāwiliwili Valley (Kahumoku Road) and other areas outside of the project area, and generally, a likelihood that *iwi* may be discovered in the project area.
- (3) Many historic and cultural properties and places exist along the pathway, especially in Nāwiliwili Valley. The Office of Hawaiian Affairs wrote, "OHA seeks assurances that should cultural sites be identified within the project area, every effort should be made to route the final path alignment away from these locations to avoid adverse impacts to the sites".
- (4) This project is only a segment in a larger project. Although not a part of the current segment, the future Anahola section of the Bike/Pedestrian Path could infringe on

Hawaiian Homelands. In particular, there is concern that Native Hawaiians may be displaced from Hawaiian Homelands as result of the expanded Bike/Pedestrian Path.

The results of this initial study present a few possible mitigation measures for the planner/developer's consideration. The following recommendations are offered as a way to address some of the concerns expressed by study participants in the statements presented in Sections 6 and 7:

- (1) For further information concerning the cultural activities documented in this report, referrals provided by current CIE study participants could be contacted for further comment or possibly more in-depth interviews, in particular, Cheryl Lovell-Obatake.
- (2) In light of statements made by a few of the participants in this study that there may be burial sites (*iwi kūpuna*, ancestral remains) in the project area, it is recommended that:
  - a. There is concern for the immediate vicinity of previously identified archaeological sites and areas along the coast. Personnel involved in development activities in the project area be informed of the possibility of inadvertent cultural finds, including human remains in culturally sensitive areas. Should cultural or burial sites be identified during ground disturbance, all work should immediately cease, and the appropriate agencies notified pursuant to applicable law.
- (3) As there are Kānaka Maoli (native born, Native Hawaiians), as well as other *kama'āina* groups who are culturally active in the area, it is recommended that ongoing cultural practices of (possible) plant gathering, fishing, surfing and other reasons (e.g., ceremonial) for visits to the project area and vicinity be recognized, protected and accommodated. In particular, it is recommended that fishers concerns regarding access to fishing sites be recognized and accommodated.
- (4) Generally, it is recommended that community members be consulted regarding the preservation, restoration, and interpretation of cultural resources and/or properties — including archaeological sites, possible burials and other features, that proactively includes the community and descendents of those with connections to the subject parcel (e.g., past residency) throughout the development of the Ahukini Bike/Pedestrian Path Project.
- (5) It is hoped that seasonal fishing restrictions will be monitored and enforced due to the potential for increased fishing activity along the shoreline.

## Section 9 References Cited

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### **Abbott, Isabella A.**

1992 *Lā'au Hawai'i, Traditional Hawaiian Uses of Plants*. Bishop Museum Press, Honolulu, Hawai'i.

### **Baptiste, Lucinda**

1993a "Ahukini memories: The glory days." *The Garden Island*, November 24.

1993b "Bustling Ahukini fades into fond memories." *The Garden Island*, November 26.

### **Bell, Matthew, Constance R. O'Hare, Matt McDermott, and Shawn Barnes**

2006 *Archaeological Inventory Survey of the Proposed Līhu'e Airport Improvements, Hanamā'ulu and Kalapakī Ahupua'a, Līhu'e District (Puna Moku), Island of Kaua'i, TMK [4] 3-5-001: Por.005, 008, 102, 160, and 3-7-002: Por. 001*. Cultural Surveys Hawai'i, Inc. Kailua, Hawai'i.

### **Bennett, Wendell C.**

1931 *The Archaeology of Kaua'i*. Bernice P. Bishop Museum, Bishop Museum Bulletin 80, Honolulu, Hawai'i.

### **Bernard, Russell H.**

2005 *Research Methods in Anthropology: Qualitative and Quantitative Approaches*. Fourth Addition. AltaMira Press, Walnut Creek, CA.

### **Bowers, Mandy**

1984 *Compilation of Songs about Kaua'i, for the Friends of Foster Garden, produced (typescript) by Moanalua Gardens Foundation*. On file at Cultural Surveys Hawai'i, Kailua, Hawai'i.

### **Chinen, Jon J.**

1958 *The Great Māhele, Hawaii's Land Division of 1848*. University of Hawaii Press, Honolulu, Hawai'i.

1971 *Original Land Titles in Hawai'i*, University of Hawaii Press, Honolulu, Hawai'i.

### **Chiogioji, Rodney, Kēhaulani E. Souza, and Hallett H. Hammatt**

2004 *Historical and Cultural Assessment for the Proposed Improvements Project at Nāwiliwili Harbor, Nāwiliwili Ahupua'a, Island of Kaua'i*. Cultural Surveys Hawai'i, Inc., Kailua, Hawai'i.

### **Condé, Jesse C., and Gerald M. Best**

1973 *Sugar Trains, Narrow Gauge Rails of Hawai'i*. Glenwood Publishers, Felton, California.

### **Coulter, John W.**

1931 *Population and Utilization of Land and Sea in Hawaii, 1853*. B.P. Bishop Museum Press, Honolulu, Hawai'i.

### **Creed, Victoria S., Loren Zulick, Gerald K. Ida, D.W. Shideler, and H.H. Hammatt**

1999 *Archaeological Assessment of the Proposed Līhu'e Airport Expansion Area, Hanamā'ulu and Kalapakī Ahupua'a, Līhu'e District, Island of Kaua'i (TMK 3-5-*

01: 5, 6, 8, 9, 109, 111, and 158 and 3-7-02: Por. 1). Cultural Surveys Hawai'i, Kailua, Hawai'i.

**Damon, Ethel M.**

1931 *Koamalu*. Privately printed at the Honolulu Star-Bulletin Press, Honolulu, (2 Volumes).

**Dickey, Lyle**

1917 "Stories of Wailua," in six consecutive installments of *The Garden Island* newspaper, Lihu'e, Kaua'i.

**Donohugh, Donald**

2001 *The Story of Kōloa, A Kauai Plantation Town*. Mutual Publishing, Honolulu, Hawai'i.

**Dorrance, William H. and Francis S. Morgan**

2000 *The 165-Year Story of Sugar in Hawai'i*. Mutual Publishing, Honolulu, Hawai'i.

**Emerson, Nathaniel B.**

1993 *Pele and Hi'iaka, A Myth from Hawaii*. Reprinted from 1915, University of Hawaii Press, Honolulu, Hawai'i.

**Folk, William H., and Hallett H. Hammatt**

1991 *Archaeological Survey and Subsurface Testing at Kanoa Estate Lands, Niumalu, Kaua'i*. Cultural Surveys Hawai'i, Inc., Kailua, Hawai'i

**Fornander, Abraham**

1918 *Fornander's Collection of Hawaiian Antiquities and Folklore. Vol V, Part 1*. Bishop Museum Press, Honolulu, Hawai'i.

**Franklin, Leta J., and Alan T. Walker**

1994 *Additional Archaeological Inventory Survey, Molokoa Lands Project Area, Lands of Hanama'ulu and Kalapakī, Lihu'e District, Island of Kauai*. PHRI, Inc, Hilo, Hawai'i.

**Hammatt, Hallett, H.**

1988 *Archaeological Reconnaissance Survey of 150 acres of Coastal Land, Kalapakī, Kauai Island* [Kauai Lagoon's Resort]. Cultural Surveys Hawai'i, Kailua, Hawai'i.

1990 *Archaeological Assessment of Phase III, IV, V Kaua'i Lagoons Resort, Kalapaki, Kaua'i, TMK 4-3-5-001:102*. Cultural Surveys Hawai'i, Kailua, Hawai'i.

**Hammatt, Hallett H., and Victoria S. Creed**

1993 *Archaeological Inventory Survey of 61.6 Acres in Nawiliwili, Kauai*. Cultural Surveys Hawai'i, Inc., Kailua, Hawai'i.

**Hammatt, Hallett H., and William H. Folk (eds)**

1995 *Nāwiliwili Cemetery Burial Treatment: An Archaeological and Osteological Study*. Cultural Surveys Hawai'i, Inc., Kailua, Hawai'i.

**Handy, E.S. Craighill**

1940 *The Hawaiian Planter, Volume 1*. Bishop Museum Bulletin No. 161, Bernice P. Bishop Museum, Honolulu.

**Hommon, Robert J.**

1976 *The Formation of Primitive States in Pre-Contact Hawai'i*. Ph.D. Dissertation, University of Arizona, Tucson, Arizona.

**Kaiwi, J.H.**

1921 "Story of the Race of Menehunes of Kauai." In *Hawaiian Annual* (Thomas G. Thrum, Ed.), pp. 114-118, Honolulu, Hawai'i.

**Kalima, Lehua, and Helen Wong Smith**

1991 Appendix B: Historical Documentary Research, IN, *Archaeological Inventory Survey, Hanamā'ulu Affordable Housing Project Area, Land of Hanamā'ulu, Lihue District, Island of Kauai (TMK: 3-7-03:Por. 20)*, by Alan T. Walker, and Paul H. Rosendahl. Paul H. Rosendahl, Ph.D., Inc, Hilo, Hawai'i.

**Kaua'i Historical Society**

1991 *The Kauai Papers*. Kaua'i Historical Society, Līhu'e, Kaua'i.

**Kelsey, Theodore**

n.d. "Kauai' Place Names." Unpublished manuscript, Kelsey Collection, Hawai'i State Archives.

**Kikuchi, William K.**

1973 *Hawaiian Aquacultural System*, Ph.D. Dissertation. The University of Arizona, Tucson, Arizona.

1987 "The Fishponds of Kaua'i," *Archaeology on Kaua'i, Vol. 14, No. 1, March, Anthropology Club*. Kaua'i Community College, Puhi, Kaua'i.

**Kikuchi, William K., and Susan Remoaldo**

1992 *Cemeteries of Kaua'i* (vol.1). Kaua'i Community College and the University of Hawai'i, Committee for the Preservation of Hawaiian Language, Art and Culture, Puhi, Kaua'i.

**Lahainaluna Students**

1885 *Record of a tour of Kauai (heiaus and fishing grounds), Wailua, September 14, 1885* (Translated by Mary Pukui). Lahainaluna Students Contributions, No. 19. Hms. Misc. 43, Hawaiian Ethnological Notes I:217-22, Bernice P. Bishop Museum Archives, Honolulu, Hawai'i.

**Lo, Catherine P.**

2005 *The Hanama'ulu Experience: The Land*. Hanama'ulu Town Celebration, <http://poipuwebdesigns.tripod.com/id5.html>, 1-10-2006.

**McMahon, Nancy**

1990 *Archaeological Fieldcheck of Three Parcels in Lihue Judiciary District: Possible Locations for a New Kaua'i Judiciary Building, Nawiliwili, Kalapakī, and Hanamā'ulu, Kaua'i*. State Historic Preservation Division, State of Hawai'i.

**Moffat, Riley M. and Gary L. Fitzpatrick**

1995 *Surveying the Mahele, Mapping the Hawaiian Land Revolution, (Palapala'aina, Volume 2)*. Editions, Ltd., Honolulu, Hawai'i.

**Nogelmeier, M. Puakea**

2006 *The Epic Tale of Hi'iakaikapoliopele*. Awaiaulu Press, Honolulu.

**Pukui, Mary K.**

1983 *‘Ōlelo No’eau: Hawaiian Proverbs and Poetical Sayings*. Bishop Museum Special Publication No.71, Bernice P. Bishop Museum Press, Honolulu, Hawai‘i.

**Pukui, Mary K., Samuel H. Elbert, and Esther Mookini**

1974 *Place Names of Hawai‘i*. University of Hawai‘i Press, Honolulu, Hawai‘i.

**Pukui, Mary K., and Samuel H. Elbert**

1986 *Hawaiian Dictionary*. Revised and Updated. University of Hawai‘i Press, Honolulu, Hawai‘i.

**Rice, Mary A.**

1914 “History of Lihue.” Typescript of a talk presented on December 17, 1914 to the Kauai‘ Historical Society. Reprinted in *The Kauai Papers*, pp. 46-67. Kauai Historical Society, Lihue, Kaua‘i.

**Rice, William H.**

1974 *Hawaiian Legends*. Originally published in 1923. Bernice P. Bishop Museum, Honolulu, Hawai‘i.

**Rosendahl, Paul H.**

1990 *Archaeological Field Inspection and Limited Subsurface Testing Kalepa Radio Station and Kalepa Road Improvement Project Areas, Land of Hanamaulu, Lihue District, Island of Kauai, 4-3-8-002:005*. Paul H. Rosendahl, Ph.D., Inc, Hilo, Hawai‘i.

1991 *Burial Treatment Plan, Kalepa Radio Station Project Area, Land of Hanamaulu, Lihue District, Island of Kauai*. Paul H. Rosendahl, Ph.D., Inc, Hilo, Hawai‘i.

**TenBruggencate, Jen**

2000 “Kauai man a constant in world of change.” *Honolulu Advertiser* 4/24/2000, pp. B-1 & 2.

**Thrum, Thomas G.**

1907 “Heiaus and Heiau Sites Throughout the Hawaiian Islands,” *Hawaiian Annual 1907*. Honolulu, Hawai‘i.

**Van Hoften, Ellen**

1970 *History of the Honolulu Engineer District, 1905-1965, U.S. Army Engineer Distric*, Unknown publisher.

**Walker, Alan T., and Paul M. Rosendahl**

1990 *Archaeological Inventory Survey, Hanamā’ulu Affordable Housing Project Area, Land of Hanamā’ulu, Lihue District, Island of Kauai (TMK: 3-7-03:Por. 20)*. PHRI, Inc, Hilo, Hawai‘i.

1991 *Archaeological Inventory Survey, Kalapaki Point Development Project Area. Land of Nawiliwili, Lihue District, Island of Kauai*. Paul PHRI, Inc, Hilo, Hawai‘i.

**Walker, Alan T., L. Kalima, and Susan T. Goodfellow**

1991 *Archaeological Inventory Survey Lihue/Puhi/ Hanamaulu Master Plan, Lands of Hanamaulu, Kalapaki, Nawiliwili, and Wailua, Lihue District, Island of Kauai (TMK 4-3-2-; 4-3-3-; 4-3-9-)*. PHRI, Inc, Hilo, Hawai‘i.

**Wichman, Frederick B.**

- 1998 *Kauai: Ancient Place-Names and Their Stories*. University of Hawaii Press, Honolulu, Hawai'i.
- 2003 *Nā Pua Ali'i O Kaua'i. Ruling Chiefs of Kaua'i*. University of Hawai'i Press, Honolulu, Hawai'i.

**Wilcox, Carol**

- 1996 *Sugar Water, Hawaii's Plantation Ditches*. University of Hawai'i Press, Honolulu, Hawai'i.

**Wilkes, Charles**

- 1845 *Narrative of the United States Exploring Expedition, Volume 4*. Lea and Blanchard, Philadelphia, Pennsylvania.

# **Appendix A Cheryl Lovell-Obatake Letter**

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Cheryl Lovell-Obatake  
P.O. Box 366  
Lihue, Hawaii 96766

Phone: 346-1544

November 3, 2007

R.M. Towill Corporation  
420 Waiakamilo Rd. Suite 411  
Honolulu, Hawaii 96817-4950

Phone: (808) 842-1133  
FAX: (808) 842-1937  
Attention: Jim Niermann - R.M. Towill Lead Consultant

Subject: Ahukini phase of Nawiliwili to Anahola Bike & Pedestrian Path project.

Aloha e Mr. Niermann,

As you may recall we spoke over the phone in the beginning of the year 2007, regarding the above subject matter. There were some concerns that I mentioned have been mentioned by others at the October 23, 2007 meeting at the War Memorial Convention Hall, and at the Kauai County Council meeting.

The following are my comments and I represent my daughter Maureen Lovell-Obatake and my son Leslie Lovell-Obatake, owners of TMK 3-2-06: 19; who received your meeting notice. I also received meeting notice for the Lovell's kuleana aina at Kalapaki and in Nawiliwili valley.

- Nawiliwili Valley (Kahumoku Rd.) -
  1. It is obviously that the County do not own properties in the valley. Land acquisition will be costly. Slopes and floodways can be challenging to maintain the path.
  2. The bikeway will impede private landowners privacy and possible off the path intruders trespassing and /or theft.
  3. Emergency access for fire, police and ambulance.
  4. ADA compliances etc..
  5. Historical properties exist in the valley. Ancient burials, auwai(s) (ditches), L.C.Awards (kuleana aina), ancient habitation etc.. I refer to Cultural Surveys of Hawaii cultural assessment in the 80's of Nawiliwili Valley.

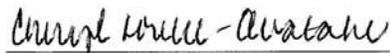
Therefore, it is our opinion that the proposed route into Nawiliwili Valley be rejected.

- Real property taxes -

1. Will this project increase or decrease property value and taxes?
  - DOT/Traffic etc. - I am confused with DOT highways and Federal Highways criterion and financial grant qualifications.
1. Is this a recreational path?
  2. Is this a transportation path?
  3. What is the purpose of the path?
- DOT/Airport Division -
  1. What are their comments?
  2. Security concerns?
- Kauai Police Department - enforcement to serve and protect.
  1. Comments from the Kauai Police Commission and the Kauai Police Department should be strongly considered.
- Commercial operations on the bike path -
  1. Already advertisement for commercial bike tours or bike rentals have been sought by some individuals already. Administrative rules are not in place and there has been no public hearings regarding commercial operations. This should stop immediately and a resolution with the County Council should be seriously considered. "After the fact" permits can be conflicting later.
  2. Commercial bike and horseback operations should not be allowed.
- Section 106 - ACHIP and SHPD review, when Federal highway funds are contributed to the bikeway project. A cultural impact assessment under the EIS should be conducted.
  1. Many historical sites that have been consecrated by people of the old, specifically kanaka maoli (Native Hawaiians) are located in the proposed path areas.
  2. A cultural impact assessment was completed for the DOT Airport's Division. Refer to Kehau Kekua and Pua Kanahele - cultural practitioners of Hawaii.
  3. Kehau Kekua - Heritage Center CIA for Kauai Lagoons.
- Fishermen's concerns of the bikeway and bikers impeding on existing fishing accesses. The rough dirt road have long been used by fishermen. The proposed bikeway should not interfere with fishermen's access to the coastal shoreline. Vehicular access is preferable to reach fishing destinations.
- DLNR - DOCARE State responsibilities = Fisheries

1. Is DOCARE aware of the bikeway and their responsibilities to police and regulate fishing methods and seasonal (kapu system) fishing when non-residents from other islands enter these fishing grounds, via Hawaii Super Ferry?
2. Comments from DOCARE and BLNR Laura Thielen should be considered.
  - Native Hawaiian Access Rights Project - Kauai Pilot Project
1. "The Office of Planning, Department of Business, Economic Development and Tourism received a three-year grant from the National Oceanic and Atmospheric Administration (NOAA Award No. NA770Z0185 and Award No. NA870Z233 to develop a process for the Hawaii Coastal Management Program to comply with the Supreme Court ruling in the PASH/Pilago decision."
  - Maintenance, trash, and restroom facilities -
    1. The proposed bikeway will increase human traffic traversing in and out, and more to come when the Hawaii Super Ferry begins its operations.
    2. Is the County going to maintain the area?
  - The Ritz-Carlton Residence/Kauai Lagoons -
    1. What are their comments? Liabilities?
    2. Gated community concerns?
  - Marriott Hotel/Time shares -
    1. What are their comments? Liabilities?
  - County of Kauai - Liabilities
    1. Does the County have a cost estimate regarding liabilities?
    2. How can the County avoid suits on the bike/pedestrian path?
  - Certified shoreline setbacks -
    1. What areas have been certified recently?

This concludes my comments for now.



Cheryl Lovell-Obatake  
Nawiliwili, Kalapaki, Puna, Kauai

CC: County of Kauai - Kauai Planning Department/Planning Commission