

Appendix B

Archaeological Literature Review and
Field Inspection for the
Island School
State Land Use District Boundary Amendment Project
Prepared by
Cultural Surveys Hawai‘i, Inc.
January 2013 (revised)
And
Letter from the State Department of Land and
Natural Resources, Historic Preservation Division
Dated October 26, 2012

**Archaeological Literature Review and Field Inspection
for the Island School
State Land Use District Boundary Amendment Project,
Nāwiliwili Ahupua'a, Līhu'e District, Kaua'i Island
TMK: [4] 3-8-002:016**

Prepared for
Wilson Okamoto Corporation

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Management Summary

Reference	Archaeological Literature Review and Field Inspection for the Island School State Land Use District Boundary Amendment Project, Nāwiliwili Ahupua'a, Līhu'e District, Kaua'i Island, TMK: [4] 3-8-002:016
Date	January 2013
Project Number (s)	NAWILIWILI 5
Investigation Permit Number	The field inspection was conducted under archaeological permit number 10-10 issued by the Hawai'i State Historic Preservation Division (SHPD/DLNR), Department of Land and Natural Resources, per Hawai'i Administrative Rules (HAR) Chapter 13-282.
Project Location	The project area consists of the 38.448 -acre Island School campus as shown on the U.S. Geological Survey 7.5-Minute Series Topographic Map, Līhu'e (1996) Quadrangle
Project Funding and Land Jurisdiction	The proposed project is privately funded
Agencies	SHPD/DLNR
Project Description	The Island School is an existing Pre-K through Grade 12 private school located on a 38.448-acre site in Pūhi, Island of Kaua'i. The Island School site, identified as Tax Map Key: (4) 3-8-02: 16, is located adjacent to the northeast boundary of the University of Hawai'i's Kaua'i Community College campus. To meet increased enrollment projections, Island School has prepared a development master plan for the 38.448-acre campus that includes new classrooms and other school facilities.
Project Acreage	38.448 acres
Document Purpose	This archaeological literature review and field inspection study was prepared as an aid to planning. The study is intended to facilitate planning involving the State Land Use Commission and SHPD/DLNR. This revised study addresses comments in an October 26, 2012 (Log No. 2011.0117, Doc No. 1210SL44) SHPD/DLNR Chapter 6E-42 review of an earlier draft.
Fieldwork Effort	The fieldwork component of the archaeological literature review and field inspection study was accomplished on August 12, and 13, 2010, by CSH archaeologists Gerald K. Ida, B.A. and Nancine "Missy" Kamai, B.A., under the general supervision of Principal Investigator Hallett H. Hammatt, Ph.D. The fieldwork required four person-days to complete.

Summary of Findings	One site, SIHP (State Inventory of Historic Properties) # 50-30-11-2179, consisting of a total of four historic surface features related to the Lihue Plantation, was observed during the pedestrian inspection. SIHP # -2179 consists of a reservoir (Feature A) that is within the same parcel, but outside of and surrounded by the project area, and three associated irrigation ditches (Features B-D).
Recommendations	The proposed project may have an adverse effect on SIHP # 50-30-11-2179, plantation era infrastructure features. Consultation with SHPD/DLNR (October 26, 2012; Log No. 2011.0117, Doc No. 1210SL44 SHPD/DLNR Chapter 6E-42 review of an earlier draft) has led to the determination of the need for an archaeological inventory survey with additional documentation of features.

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Section 1 Introduction

1.1 Project Background

At the request of Wilson Okamoto Corporation, Cultural Surveys Hawai'i, Inc. (CSH) completed an archaeological literature review and field inspection study for the Island School State Land Use State Land Use District Boundary Amendment Project, Nāwiliwili Ahupua'a, Līhu'e District, Kaua'i Island (Figure 1 and Figure 2). The Island School is an existing Pre-K through Grade 12 private school located on a 38.448-acre parcel in Puhī, Island of Kaua'i. The Island School campus, identified as Tax Map Key: [4] 3-8-02:16 (Figure 3), is located adjacent to the northeast boundary of the University of Hawai'i's Kaua'i Community College campus. To meet increased enrollment projections, Island School has prepared a development master plan for the 38.448-acre campus that includes new classrooms and other school facilities (Figure 4).

This revised study addresses comments in an October 26, 2012 (Log No. 2011.0117, Doc No. 1210SL44) SHPD/DLNR Chapter 6E-42 review of an earlier draft.

1.2 Scope of Work

The scope of work for this archaeological literature review and field inspection study was as follows:

1. Historical research to include study of archival sources, historic maps, Land Commission Awards and previous archaeological reports to construct a history of land use and to determine if archaeological sites have been recorded on or near this property.
2. Limited field inspection of the project area to identify any surface archaeological features and to investigate and assess the potential for impact to such sites. This assessment will identify any sensitive areas that may require further investigation or mitigation before the project proceeds.
3. Preparation of a report to include the results of the historical research and the limited fieldwork with an assessment of archaeological potential based on that research, with recommendations for further archaeological work, if appropriate. It will also provide mitigation recommendations if there are archaeologically sensitive areas that need to be taken into consideration.

1.3 Environmental Setting

1.3.1 Natural Environment

The project area is located approximately 3.2 km (kilometers; 2 miles) west of Līhu'e, *mauka* (inland) of Kaumuali'i Highway in Nāwiliwili Ahupua'a, Līhu'e District, in the southeastern quadrant of the island of Kaua'i. The parcel is fairly far inland, about 4.8 km (3 miles) from the southeastern coast. The project area is exposed to the prevailing northeast trade winds, and receives up to 254 cm (100 inches) of rainfall annually (Giambelluca et al. 1986). The project area lies on level to gently sloping lands that range from approximately 360 feet to 400 feet

above mean annual sea level with a tributary of Nāwiliwili Stream to the east. A tributary of Puhi Stream is approximately 250 meters to the west.

Project area soils predominately consist of Puhi silty clay loam, 3 to 8 percent slopes (PnB) with a ribbon of Puhi silty clay loam, 8 to 15 percent slopes (PnC), running along its southwestern boundary. Rough broken land (rRR) abuts the north boundary and extends into the northeastern portion of the project area (Figure 5).

Puhi silty clay loam consists of well-drained soils on uplands. These soils developed in material derived from igneous rock. Slope ranges primarily from 3-15 percent. The run-off of the Puhi silty clay loam is slow, creating an only slight erosion hazard. Puhi silty clay loam is used for sugar cane, pasture, pineapple, orchards, wildlife habitat, and woodland

Rough broken land (rRR) consists of very steep land broken by frequent intermittent drainage channels. Slope is 40-70 percent, runoff and geologic erosion are both rapid. (Foote et al. 1972:62, 75, 118; Sheet 22).

1.3.2 Built Environment

Development within the project area consists of existing school and administrative buildings (Figure 6 and Figure 7). The University of Hawai'i's Kaua'i Community College campus is adjacent to the south. The residential community of Puhi lies just south across Kaumuali'i Highway. The lands to the west, north and east are relatively undeveloped.

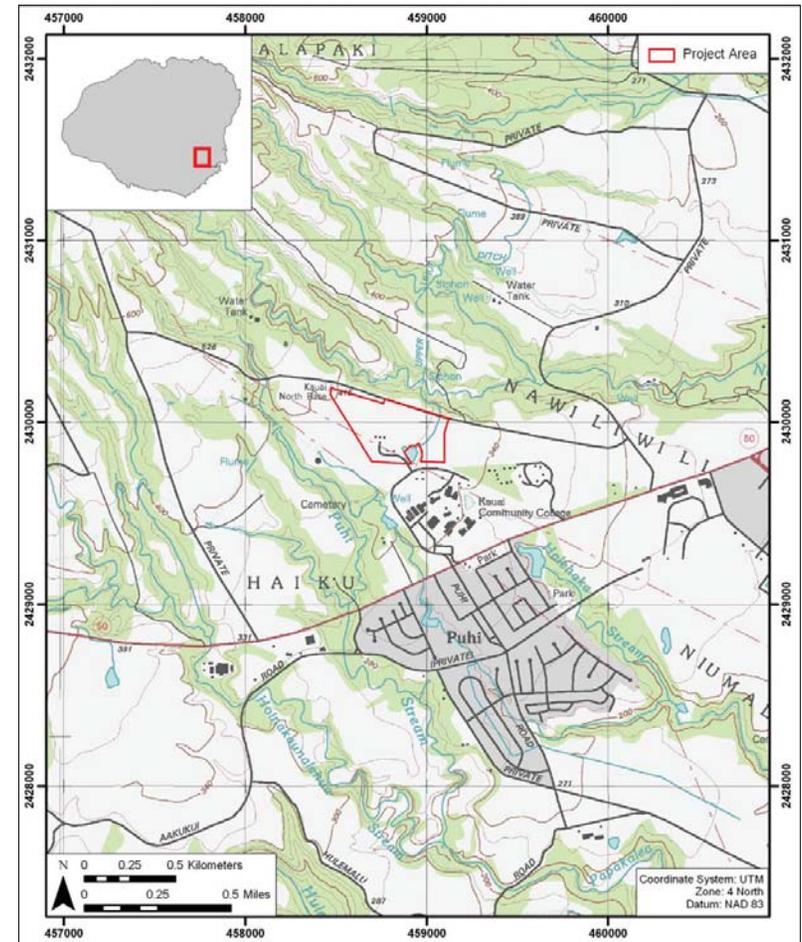


Figure 1. Portion of 1996 U.S. Geological Survey 7.5-Minute Series Topographic Map, Līhu'e quadrangle, showing the project area



Figure 2. Aerial photograph (source: U.S. Geological Survey Orthoimagery 2005), showing the location of the project area

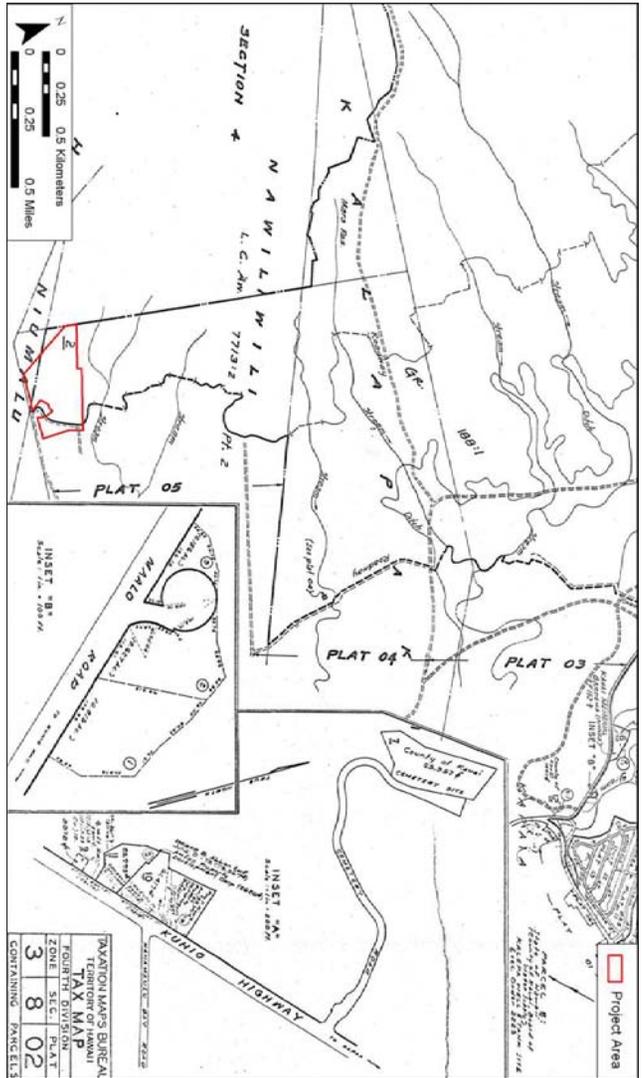


Figure 3. Tax Map Key 3-8-02, showing the project area

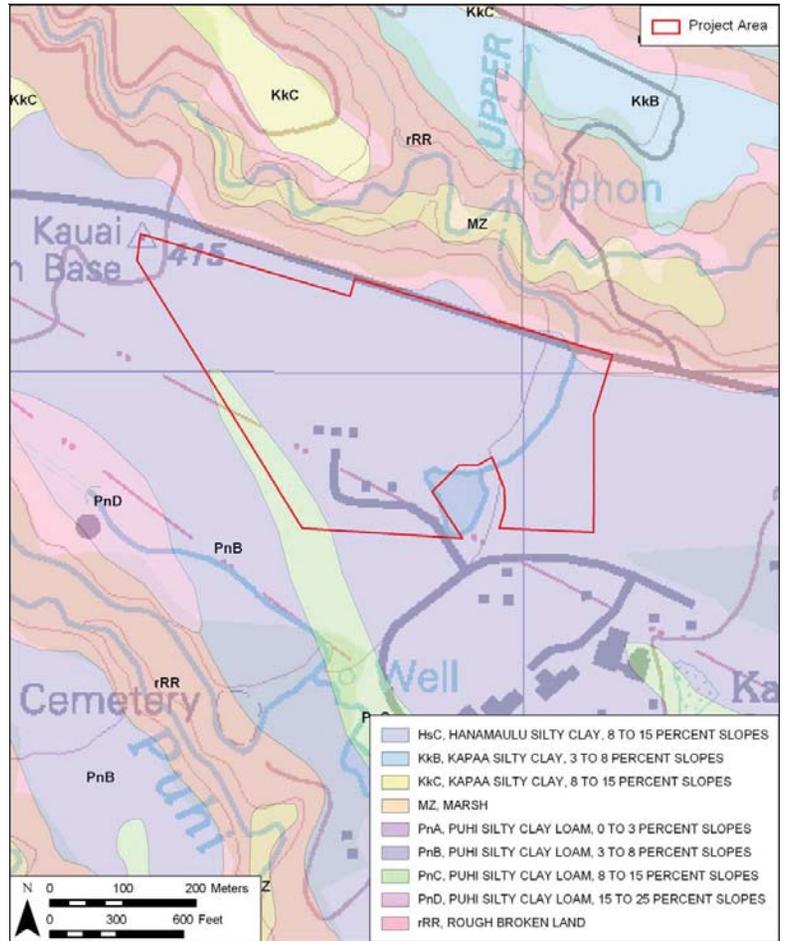


Figure 5. Portion of 1996 U.S. Geological Survey 7.5-Minute Series Topographic Map, Lihū'e quadrangle, with overlay of the Soil Survey of the State of Hawai'i (Foote et al. 1972), indicating sediment types within the project area



Figure 4. Plan showing existing buildings and new buildings (provided by client)



Figure 6. Entrance to Island School, school buildings in background, view to north



Figure 7. Island School grounds, gym to left, *hālau* to right, athletic fields in foreground, view to north

Section 2 Methods

2.1 Document Review

Historic and archival research included information obtained from the University of Hawai'i at Mānoa's Hamilton Library, the State Historic Preservation Division Library, the Hawai'i State Archives, the State Land Survey Division, and the Archives of the Bishop Museum. Previous archaeological reports for the area were reviewed, as were historic maps and primary and secondary historical sources. Information on Land Commission Awards was accessed through Waihona 'Āina Corporation's Māhele Data Base (www.waihona.com) and Ulukau: The Hawaiian Electronic Library's Māhele Data Base (<http://ulukau.org/cgi-bin/vicki?!=en>).

This research provided the environmental, cultural, historic, and archaeological background for the project area. The sources studied were used to formulate a predictive model regarding the expected types and locations of historic properties in the project area.

2.2 Field Methods

The fieldwork component of the archaeological literature review and field inspection was conducted on August 12, and 13, 2010 by CSH archaeologists Gerald K. Ida, B.A. and Nancine "Missy" Kamai, B.A., under the general supervision of Hallett H. Hammatt Ph.D. (principal investigator). The fieldwork required four person-days to complete.

In general, the purpose of the field inspection was to develop data on the nature, density, and distribution of archaeological sites within the project area, and also to develop information on the degree of difficulty that vegetation and terrain create for future archaeological studies. The field inspection consisted of a walk-through reconnaissance of the project area. The spacing between the archaeologists was generally 5-10 m. Potential archaeological sites or site areas were documented with written descriptions, maps, and photographs.

Section 3 Background Research

3.1 Traditional and Historical Background

Nāwiliwili Ahupua'a is located in the ancient *moku*, or district of Puna and is probably best known in a traditional sense for its *heiau* at Kuhiau, reportedly at least four acres in size, and its associated *pōhaku* (rock) called Paukini, located in the bay.

3.1.1 Mythological and Traditional Accounts

Many 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 duplication of the word *wili*, which means “twisted,” as in the meandering Nāwiliwili Stream.

According to Hammatt and Creed (1993:22), Land Commission documents indicate the shoreline location of several house lots in Nāwiliwili Ahupua'a was known as Papalinahoa. Kikuchi (1973) states this was the name of “an early chief (*mo'o*),” but Hammatt and Creed (1993) suggest it may also have been the name of an *'ili* (land division) or of the *konohiki* (headman of an *ahupua'a* land division). Papalinahoa was also the name of an *'auwai* (irrigation ditch) on the south side of Nāwiliwili Stream, associated with Land Commission Award (LCA) 3566 (Hammatt and Creed 1993).

The *menehune* (legendary race of small people) 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)

Handy (1940:67) describes Nāwiliwili Valley in his chapter on the main *kalo* (taro) growing locations in Puna, Kaua'i:

[Nāwiliwili] For 3 miles inland from the sea the Nāwiliwili 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.

The *lo'i* terraces are south of the project area. Due to the concentration of *lo'i* within the vicinity of the coast, as well as the availability of aquatic resources, the coastal area contained a majority of the population of the *ahupua'a* of Nāwiliwili.

3.1.2 Early Historic Period

Western homesteading and commerce were established on the lands above Nāwiliwili Bay that would evolve into Līhu'e Town within a few years after the establishment of the missionary and business activities at Kōloa in the mid 1830s. Accounts of 19th century travelers on the trail

between Kōloa and Līhu'e present the first record of the lands surrounding Līhu'e and therefore also Nāwiliwili. William DeWitt Alexander, son of the former Waioli missionary William P. Alexander, described a return visit to Kaua'i in 1849, six years after his family had left the island. Traveling on horseback from Kōloa to Wailua, Alexander noted in his diary:

We then rode through a gap in the hills, leading out from Kōloa. The scenery was very fine, and worthy of Kaua'i. Mauna Kāhili was close on the left, & on the right a beautiful range of hills extending towards the northeast, and terminating in an abrupt peak which goes by the name of “Hoary Head” [Hā'upu]. We rode on over a beautiful undulating table land, dotted with groves of lauhala and kukui. After riding about five miles, we crossed a stream fitly called Stoney Brook. We afterwards crossed many other streams on our way. Five miles further we passed Dr. Lafon's former residence. Here we began to descend towards the sea. (Alexander 1991:122)

Apparently, Alexander observed no conspicuous Hawaiian settlements between the Gap and Dr. Lafon's residence in the Līhu'e area. It may be, however, that substantial settlement down in the Hulē'ia Stream valley was largely obscured from his view.

In the 1830s, the Governor of Kaua'i (Kaikio'ewa) 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 19th century. 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 the ruling chief Kaikio'ewa, who apparently named it after his nearby upcountry home (see below). 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. Forty to sixty whaling ships would call at Kōloa in one season (Smith 1991:77).

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. In 1839, Governor Kaikio'ewa 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 Kaikio'ewa'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."

Following Kaikio'ewa's death in 1839 shortly after the establishment of the sugar plantation, the plantation 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 established, 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 that passed through Līhu'e in 1840, described the area.

At noon they reached Lihui [sic], 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 [sic] 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...

On the fertile places, although the pasturage was good, yet no cattle were to be seen. (Wilkes 1845:67-68)

With the death of Kaikio'ewa, 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 Keali'iahonui (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 location of Kaua'i High School) and another at Papalinaloa, north of the bay (Damon 1931).

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 then grew almost down to the water's edge. (Damon 1931:17-18)

3.1.3 The Māhele (Land Divisions)

In 1845, the Board of Commissioners to Quiet Land Titles, also called the Land Commission, was established "for the investigation and final ascertainment or rejection of all claims of private individuals, whether natives or foreigners, to any landed property" (Chinen 1958:8). This led to the Māhele, the division of lands between the king of Hawaii, the *ali'i* (chiefs), and the common people, which introduced the concept of private property into the Hawaiian society. In 1848, Kamehameha III divided the land into four categories: certain lands to be reserved for himself and the royal house were known as Crown Lands; lands set aside to generate revenue for the government were known as Government Lands; lands claimed by *ali'i* and their *konohiki* (land manager for the *ali'i*) were called Konohiki Lands; and habitation and agricultural plots claimed by the common people were called *kuleana* (Chinen 1958:8-15).

Victoria Kamāmalu was awarded LCA 7713, which included over two thousand acres of Nāwiliwili Ahupua'a. She was the daughter of Kīna'u, and thus the granddaughter of Kamehameha I; her brothers were Kamehameha IV and Kamehameha V.

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.

According to Kikuchi (1973), Nāwiliwili was home to at least five (5) other fishponds in addition to Alekoko (Menehune) Loko. The names of two of these were unknown, but the others are Kalalalehua (near a *mo'o* of the same name), Lokoponu, and Papalinaloa (near a *mo'o* of the same name). Land Commission documents identify the *konohiki* for Nāwiliwili at the time of the Māhele as Daniela Oleloa; in testimony and register documents, claimants and their witnesses trace the right to live and work the lands from the *konohiki*.

No *kuleana* LCAs were awarded within the project area or its vicinity. There were a few scattered houselots sites in the higher portions of the valley floor and along the lower slopes

bordering the *lo'i* and *kula*. However, most of the habitation sites appear to be along the shoreline with a pattern of clustering in villages, a typical settlement pattern for Hawaiian valleys.

3.1.4 Mid- to late-1800s

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.

As a direct result of the availability of large tracts of land for sale during the Māhele, in 1849, Lihue 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 began as a partnership between Henry A. Pierce, Judge William 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 Lihue 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 ditch was the first large-scale irrigation project utilized by the sugar plantations (Moffatt and Fitzpatrick 1995:103). Dorrance and Morgan (2000:28) provide a slightly different list of achievements for Lihue 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 Lihue Plantation was located east of the subject project area, now downtown Līhu'e, Kaua'i's political center and most developed area.

The success of the Lihue Plantation allowed it to continue to expand. When the owner of Hanamā'ulu Ahupua'a, Victoria Kamāmalu, died in 1870, all 9,177 acres in the *ahupua'a* were purchased by Paul Isenberg, the manager of Lihue 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. Lihue Plantation built a second mill in 1877, north and west of the present airport. This mill operated until 1920, when it was converted into housing for laborers.

An 1878 Government Survey map (Figure 8) shows little development within the project area vicinity and sugar plantations have not expanded to their later extent; Lihue Plantation fields are to the east, and Grove Farm fields are to the southeast. Kaumuali'i Highway appears to be an unimproved or dirt road.

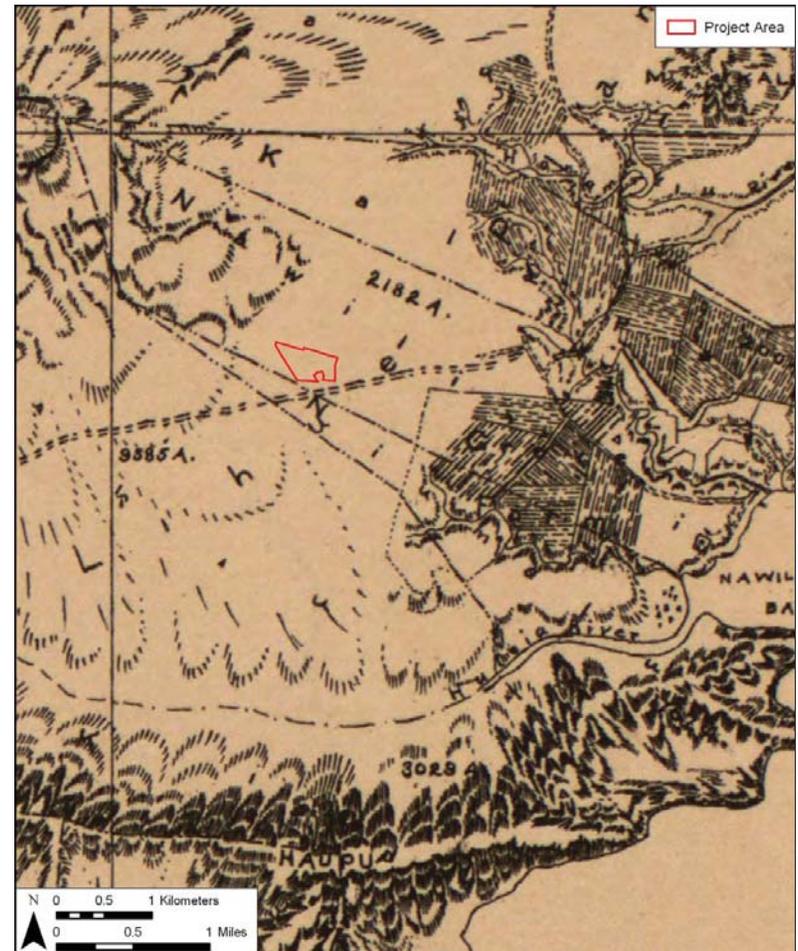


Figure 8. 1878 Government Survey map by W.D. Alexander, showing location of project area

3.1.5 1900s

Lihue Plantation remained a vibrant and successful commercial operation throughout most of the 20th century, in part, because of a continued interest in technological innovation. By 1910 little development had occurred within the project area and its vicinity as shown on the 1910 U.S. Geological Survey map (Figure 9). An unpaved road or trail extends more or less southeast to northwest and is adjacent to the western boundary of the project area.

Lihue Plantation's technological innovations include the 1912 installation of two 240-kilowatt generators above the cane fields on the slopes of Kilohana Crater. The plantation became one of the first hydroelectric power producers (along with Kekaha, Kaua'i) in the Hawaiian Islands with the generator installation (Dorrance and Morgan 2000). In 1919 Lihue Plantation began the development of an extensive irrigation water system that eventually "spanned and connected several watersheds from Hanalei to Koloa" (Wilcox 1998:70).

Lihue Plantation Co.'s irrigation ditches rivaled those of the East Kauai Irrigation Company, which was established in 1924. The two entities oversaw 51 miles of ditches. Wilcox (1998:68) relates that "Lihue Plantation had more ditches than ditch records, so only a rough chronology of its water development can be pieced together." The first irrigation ditch, originally constructed in 1856 by William Hyde Rice, eventually "metamorphosed into the Lower Lihue Ditch" (Wilcox 1998:70).

Figure 10, a 1941 map of Lihue Plantation Co., shows the project area primarily within field 39B and extending into 39A. Grove Farm abuts these fields to the southwest. The 1963 U.S. Geological Survey map (Figure 11) shows a portion of the "Upper Lihue Ditch" extending into the project area. The location of the ditch corresponds with the separation between field 39A and 39B (Figure 10). Unfortunately, Wilcox's (1998:764-65) Table 4 does not include a construction date for Upper Lihue Ditch. The ditch does not appear to be visible on the 1910 U.S. Geological Survey (Figure 9) but is evident in 1941. The ditch therefore dates to the early 20th century.

3.1.6 Modern Land Use

A 1965 aerial photograph (from Foote et al. 1972) (Figure 12) and a 1977-1978 aerial (Figure 13) both show sugar cane cultivation within the project area and its immediate vicinity prior to the construction of Island School.

Lihue Plantation continued commercial sugar cane cultivation in Lihue until 2000, when it finally shut down (Dorrance and Morgan 2000).

Island School's (2009) website details the history of the school, relating the concept of the school originated in 1975 and was implemented on January 27th, 1977 in Keālia. In 1989 American Factors, Inc., (AMFAC) donated 10 acres in Puhi, in an area described as "behind Kaua'i Community College," for the present location of Island School. Pre-kindergarten through fourth-grade classrooms were constructed in 1990. Two large buildings donated by Hawaiian Dredging were reconfigured into the current Administration Building and Main Hall. Three portable classrooms from Keālia completed the new campus that opened in September 1991.

On September 11th, 1992, Hurricane Iniki demolished the three portable buildings, and other buildings lost their roofs or were severely damaged. However, Island School reopened within

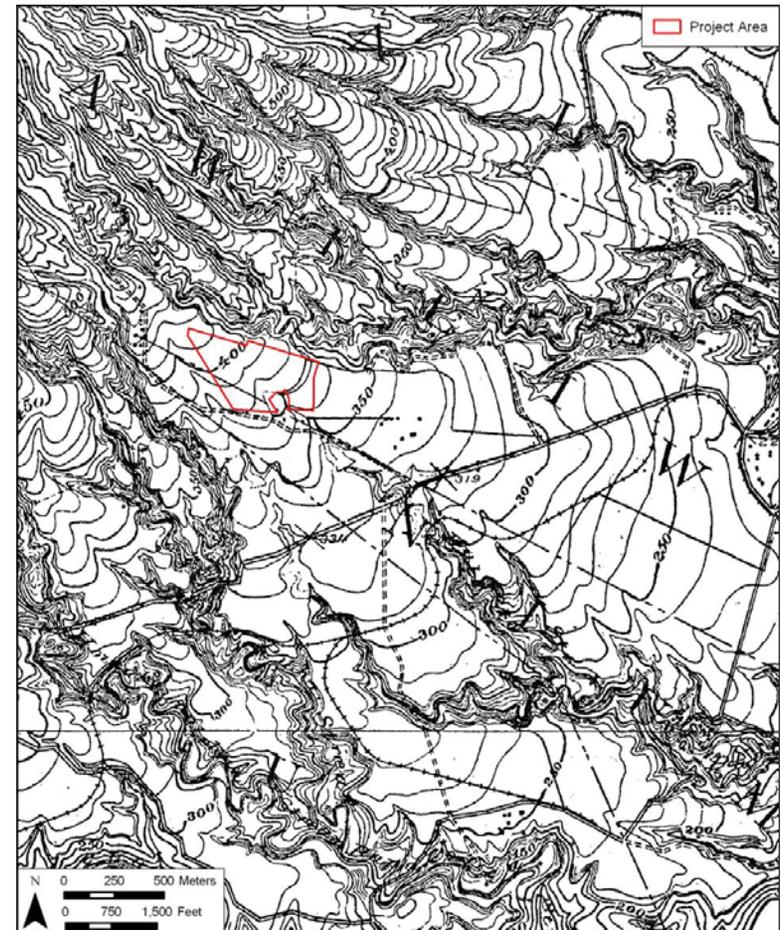


Figure 9. Portion of 1910 U.S. Geological Survey Map, Lihue quadrangle, showing the project area

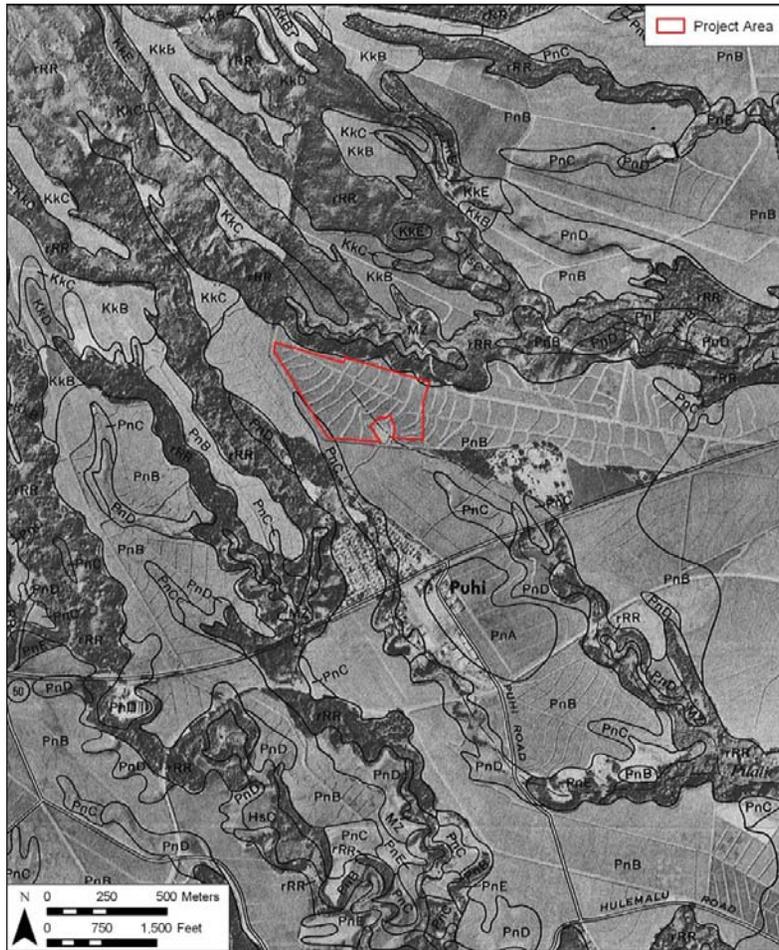


Figure 12. 1965 aerial photograph (from Foote et al. 1972) showing sugar cane cultivation within the project area and its vicinity

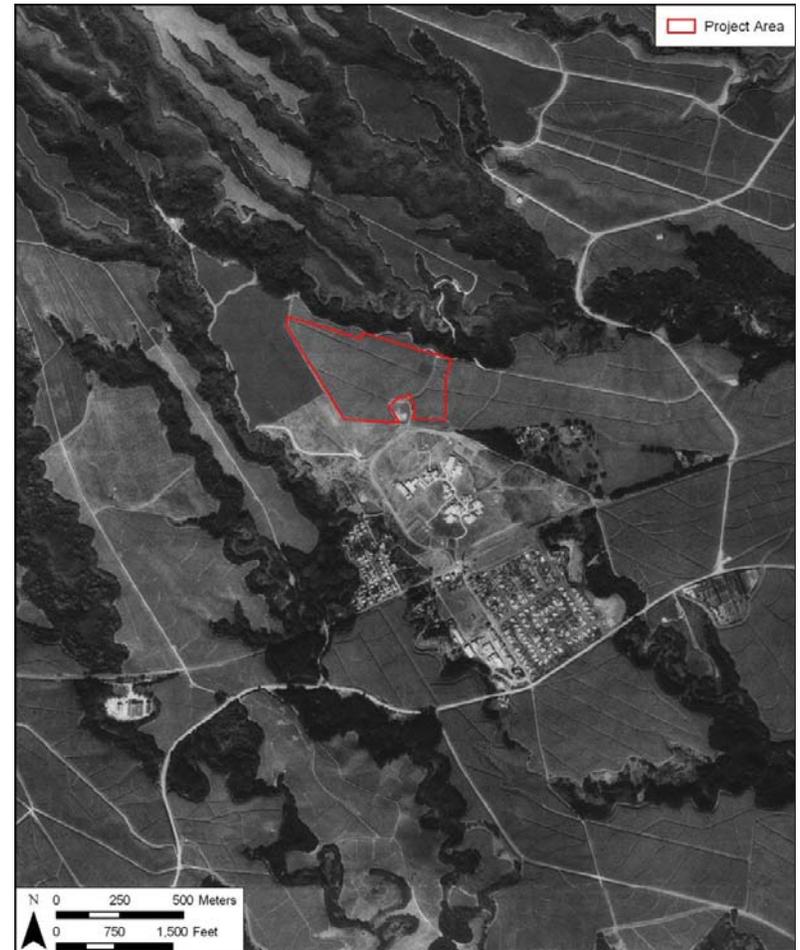


Figure 13. 1977-1978 U.S. Geological Survey aerial of Līhu'e showing the project area and its vicinity

eleven days of the hurricane. Some classrooms were housed in other facilities until the Fall of 1993, “when all was again in order, with old facilities repaired and new facilities finished” (Island School 2009).

New construction on the campus since the early 1990s includes: the Weinberg Enrichment Center, constructed in 1995-96; Purdy Hall, constructed in 1998; and new soccer fields and a grass track on half of a 20-acre parcel purchased in 2000 (Island School 2009).

3.2 Previous Archaeological Research

3.2.1 Early Archaeological Studies

The first attempt at a comprehensive archaeological survey of Kaua'i was undertaken by Wendell Bennett (1931) of the Bishop Museum. Bennett's survey report identifies no archaeological sites within or in the vicinity of the present project area. The “Niamalu” or “Menehune” Fishpond (Bennett Site 98), approximately 3 km (kilometers) to the southwest is the closest.

An overview of archaeological studies conducted in the vicinity of the current project area is summarized in Table 1 and indicated on Figure 14. A discussion of the archaeological findings that are relevant to the current project area follows.

Table 1. Previous Archaeological Studies Conducted within the Vicinity of the Project Area

Study	Location	Type	Findings
Bennett 1931	Island Wide Survey	Recordation of Major Pre-contact Sites	Identified 1 site in the area (Site 98)
Palama 1973	Kaua'i Community College area	Reconnaissance Survey	Noted portions of 'auwai, possible lo'i, and an historic military complex
Neller and Palama 1973	Lower portion of the Hulē'ia River	Reconnaissance Survey	31 sites identified including 1 historic human burial
Walker and Rosendahl 1988	Grove Farm Lihue/Puhi Project	Surface and Sub-surface Survey	Identified two historic properties, Japanese cemetery SIHP -503; and historic residence SIHP -9390
Kido 1986	Alekoko Fishpond and Hulē'ia Estuary	Preliminary Survey	Mangrove encroachment on pond wall, breaks in wall and rubbish used to fortify wall. Recommends a more comprehensive survey
Rosendahl 1989	Additional Areas of the Grove Farm Lihue/Puhi Project	Archaeological Inventory Survey	No cultural material observed
McMahon 1990	Lihue	Archaeological Fieldcheck	3 previously-identified historic residential sites (50-30-9390, -9401, -9402)

Study	Location	Type	Findings
Walker et al. 1991	Lihue District	Archaeological Inventory Survey	Identified 10 historic properties; 3 pre-contact, 7 historic including a concrete bridge, concrete wharf, cultural deposits, terraces, roads, walls, retaining walls, a possible agricultural area, and a historic cemetery
Henry et al. 1993	590-acre Grove Farm Lihue/Puhi Project Site	Inventory Survey w/ Subsurface Testing	2 historic properties identified including a cemetery and residence (revised report same as Walker and Rosendahl 1988)
O'Hare et al. 1993	100-acre Puakea Golf and Country Club	Inventory Survey w/ Subsurface Testing	No cultural material observed
Hammatt and Chiogioji 1998	11.5 km portion of Kaumuali'i Highway corridor	Archaeological Assessment	4 historic properties identified: Grove Farm office building in Puhi, the Lihue Mill Bridge, the Ho'omana Overpass Bridge, and the Lihue Public Cemetery
Hammatt and Shideler 2004	One-Stop Center at KCC	Archaeological and Cultural Impact Evaluation Study	No cultural material observed and no cultural impacts anticipated

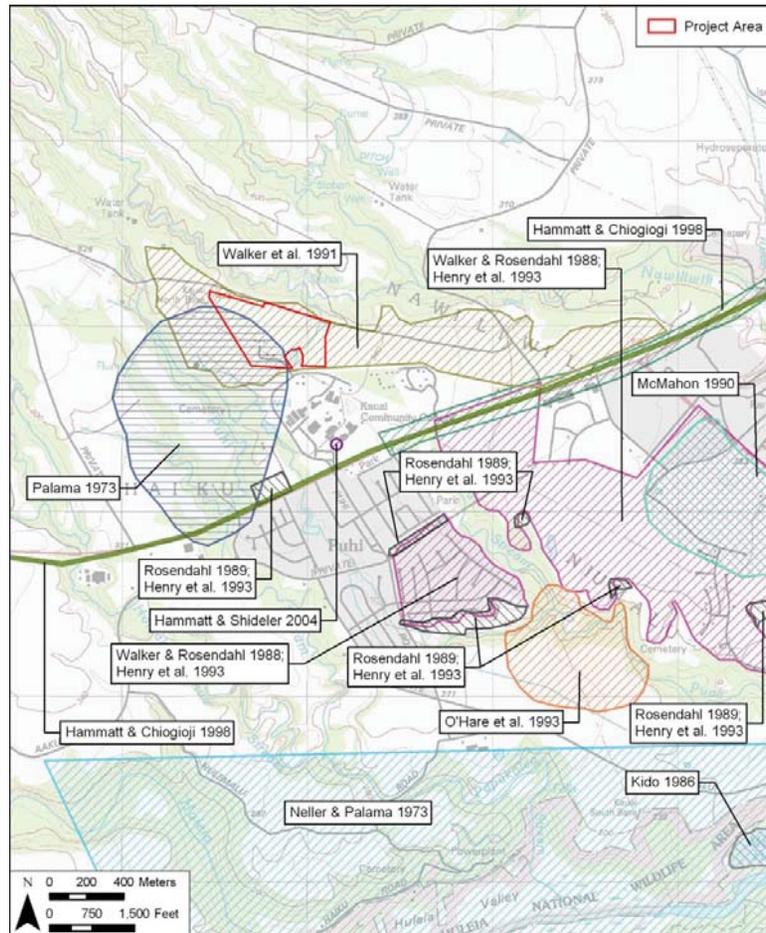


Figure 14. Portion of 1996 U.S. Geological Survey 7.5-Minute Series Topographic Map, Līhu'e quadrangle showing previous archaeological studies in vicinity of the project area

Neller and Palama (1973) carried out an archaeological reconnaissance of the lower portion of the Hulē'ia River and vicinity recording a number of historic properties. The archaeological richness of that area from the "Menehune Fishpond" downstream and near the crest of the trail to Kīpū Kai is clear. They did, however, also document four historic properties upstream of the Menehune Fishpond, the nearest of which (SIHP -3010) consists of contiguous rock wall enclosures and several other features. This historic property is described as:

...a compound, probably belonging to a chief or other important person. Nearby there are stone-faced river terraces, irrigation ditch (auwai), and a stone bridge crossing the auwai. The area is worth restoring to its prehistoric condition. It is an impressive site. (Neller and Palama 1973:3)

Site -3009, also identified by Neller and Palama, is approximately 2.4 km from the current project area, and consists of an "agricultural area along both sides of the river, including rock-walled terraces and irrigation ditches (auwai). Also includes cement covered grave of G. Kalili, died Dec. 17, 1898" (Neller and Palama 1973:11).

Ching et al. (1973) conducted detailed research on Alekoko (Menehune) Fishpond and its vicinity. Nine archaeological features and feature complexes were identified and documented, including three fishpond features (*loko kuapā* and two *loko wai*), two *'auwai*, and four *lo'i* complexes. Although located well to the south of the present study area the Alekoko (Menehune) Fishpond is an important historical property of the general vicinity and a testament to the organization and initiative of the Native Hawaiian population of the area.

Walker and Rosendahl (1988) conducted an archaeological surface and subsurface inventory survey of 450-acre Grove Farm Līhu'e/Puhi that extended from Puhi Town, south of Kaunali'i Highway nearly to Nāwiliwili Bay. A total of two historic properties were identified, a historic Japanese cemetery SIHP -503, and a historic residence SIHP -9390. The following year, Paul Rosendahl (1989) produced an addendum report covering eight additional separate small adjacent areas. No historic properties or cultural material were identified. Henry et al. (1993) covers the same project area and is the final archaeological inventory survey for this area.

O'Hare et al. (1993) carried out an archaeological inventory survey on a 100-acre Puakea Golf and Country Club project area located approximately one km south east of Puhi Town. No historic properties or cultural materials were identified.

CSH (Hammatt and Chiogioji 1998) conducted an archaeological assessment of an approximately 11.5 kilometer-long portion of the Kaunali'i Highway corridor, a portion of which is 500 m south of the project area. During the reconnaissance survey no historic properties were found in the vicinity of the school campus. No surface traditional Hawaiian archaeological sites were observed during the entire survey although four historic sites (two bridges, a cemetery and an office building) were noted. No state site numbers were assigned.

3.2.2 Studies within or adjacent to the project area

3.2.2.1 KCC Archaeological Reconnaissance (Palama 1973)

In 1973, the Archaeological Research Center Hawaii conducted an archaeological reconnaissance of approximately 57 acres of KCC that also included the southwestern portion of

the current project area (Palama 1973). Portions of an “old ‘auwai” (conforming to Grove Farm’s Mauka Ditch), an old military complex, a Japanese Cemetery, plantation camp remains, and possible *lo‘i* were found but nothing was deemed to warrant further investigation (Palama 1973). Palama (1973:2) “recommended that no further work is warranted” for the historic features he identified and no state site numbers were assigned. The “old ‘auwai” is approximately 100 m west of the northern portion of the project area.

3.2.2.2 Walker et al. (1991) AIS

The entire proposed project area was included in the 1,550 acre Lihue/Puhi/Hanamaulu Master Plan AIS (Walker et al. 1991). Designated as Section No. 1, it is described as:

...bounded on the north and east by the Nawiliwili Stream gulch, on the south by Kauai Community College and Kaunualii Highway, and on the west by the Puhi Stream gulch. This entire parcel has been modified and is presently in sugar cane (*Saccharum officinarum* L. hybrid) cultivation. (Walker et al. 1991:2)

The report states that

areas in sugar cane were only sampled ... [and] were not generally surveyed because areas altered by sugar cane cultivation are unlikely to contain archaeological features, and because sugar cane cultivation within the present project area does not occur in low swale or alluvial flat areas that may contain buried cultural deposits. (Walker et al. 1991:7)

While Section No. 1 is listed as an area subjected to “inventory-level survey” in the Conclusion section of the report, this statement is further explained that “only very limited surface survey was done in sugar cane fields ... [and] no subsurface testing was performed in sugar cane fields” (Walker et al. 1991:18). No historic properties were identified in or within the vicinity of the current project area during the Walker et al. (1991) inventory survey. Additionally, none of the ten historic properties (SIHP -1838 through -1847) identified during the Walker et al. (1991) study, including a concrete bridge, concrete wharf, cultural deposits, terraces, roads, walls, retaining walls, a possible agricultural area, and a historic cemetery, was identified in or within close proximity to the project area.

3.2.2.3 2004 KCC One-Stop Center AIS and CIA (Hammatt and Shideler 2004)

In 2004, CSH (Hammatt and Shideler 2004) conducted an archaeological and cultural impact evaluation study for the One-Stop Center at KCC approximately 600 m south of the project area. The proposed project involved construction of a two-story building of approximately 35-40,000 net square feet (about 55-60,000 gross square feet) in the southwest (Kaunualii Highway) side of the existing KCC campus. A field inspection of the vicinity of the proposed project was conducted and observed to be a graded, established lawn with no observed indicators of any archaeological concern. As the project area was under sugar cane cultivation for many decades and the location of the project area was observed to be graded with an established lawn, it was concluded that there were unlikely to be any cultural impact issues associated with the “one-stop” project.

A summary of the proposed project and findings was mailed to Dr. Pua Aiu (then) of the Office of Hawaiian Affairs and to Mr. Dennis Chun of the Hawaiian Studies program of Kaua'i Community College on December 23, 2003. Follow-up telephone consultation was held with Mr. Chun of February 19, 2004 and with Dr. Aiu on February 24, 2004. A brief telephone conversation on the subject was also held with Ms. LaFrance Kapaka-Arboleda of the Kaua'i Office of Hawaiian Affairs and the Kaua'i/Ni'ihau Islands Burial Council on February 20, 2004. None of these parties expressed any concerns for adverse impacts to cultural practices by the proposed project as described. SHPD/DLNR concluded “No further archaeological work is needed for the project” (see Appendix A).

Section 4 Results of Fieldwork

4.1 Survey Findings

CSH archaeologists Gerald K. Ida, B.A. and Nancine “Missy” Kamai, B.A., completed the field inspection on August 12, and 13, 2010, which required four person-days. All fieldwork was conducted under CSH’s annual archaeological permit No. 10-10 issued by SHPD/DLNR per HAR Chapter 13-282, and also under the general supervision of Hallett H. Hammatt, Ph.D. (principal investigator).

The field inspection consisted of a pedestrian inspection of the Island School campus. No access restrictions impeded the inspection, however, ground visibility is somewhat obstructed by landscaped grass and previous development.

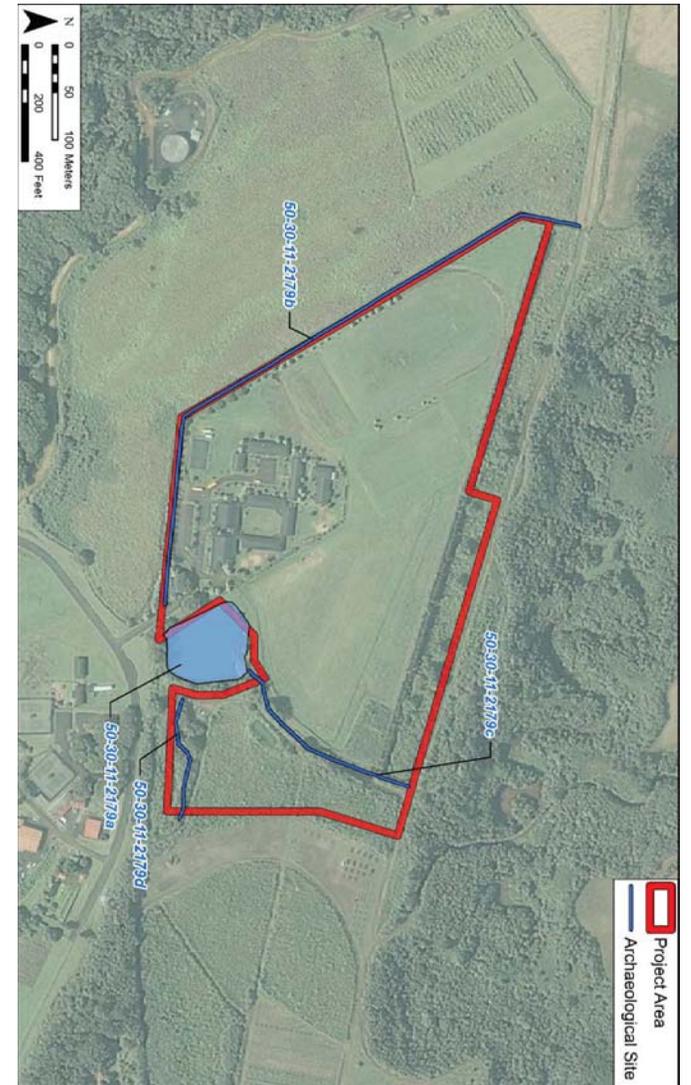
No evidence of Palama’s (1973) findings that were outside of and within the vicinity of the project area including the “old *‘auwai*” (conforming to Grove Farm’s Mauka Ditch), an old military complex, a Japanese Cemetery, plantation camp remains, and possible *lo‘i* were found. Additionally, no evidence of ten historic properties (SIHP -1838 through -1847), including a concrete bridge, concrete wharf, cultural deposits, terraces, roads, walls, retaining walls, a possible agricultural area, and a historic cemetery that were identified by Walker et al. (1991) in the general vicinity of the project area were found.

During the pedestrian inspection, several surface features were observed that are related to the Lihue Plantation (Table 2 and Figure 15). The surface features consist of a reservoir that is adjacent to and surrounded by the project area, and three irrigation ditches. All three of the irrigation ditches are associated with the adjacent reservoir. The four historic surface features related to the Lihue Plantation are designated as SIHP 50-30-11-2179 Features A through D. Descriptions and photograph documentation for SIHP 50-30-11-2179 is presented in section 4.2.

Table 2. SIHP 50-30-11-2179 Historic Features

Feature	Feature Type	Function	Age	Notes
A	Reservoir	Water control	Plantation era	Outside of project area
B	Irrigation ditch	Water control	Plantation era	Currently in use for run-off
C	Irrigation ditch	Water control	Plantation era	Currently in use
D	Irrigation ditch	Water control	Plantation era	Currently in use

Figure 15. Aerial photograph (source: U.S. Geological Survey Orthomimagery 2005), showing SIHP 50-30-11-2179 and the project area boundaries



4.2 Historic Property Description

4.2.1 SIHP 50-30-11-2179

FORMAL TYPE: Reservoir/Ditches

MEASUREMENTS: 660 m long (E-W); 410 m wide (N-S)

FUNCTIONAL INTERPRETATION: Water Control (Agriculture)

CONDITION: Very Good

TEMPORAL INTERPRETATION: Historic-Plantation-related

DESCRIPTION: SIHP 50-30-11-2179 consists of a total of four water control features related to the Lihue Plantation: Feature A is a reservoir, and Features B through D are associated irrigation ditches (see Figure 15). The 1963 U.S. Geological Survey map (see Figure 11) shows Upper Lihue Ditch, which dates to the early 20th century, extending into Feature A.

Feature A, reservoir (Figure 16), is located adjacent to and northeast of the gate at the Island School campus road entrance. The reservoir is within the same parcel but outside of the project area, and almost completely surrounded by the project area.

The reservoir measures 88.5 m by 82.3 m with a constructed berm on the east and south sides. A wooden catwalk extends from the east bank out over the water for 2 m. The end of the catwalk has a metal, mechanical device for opening and closing an underground drain pipe. A formed, slotted concrete gate frame (Figure 17) is at the southwest side of the reservoir. The wooden gate is missing. Water flows from the reservoir through the gate frame to the west to an area outside of the project area and within the Kaua'i Community College campus. This is the reservoir's only outlet. A modern concrete pipe storm drain outlet from the school campus enters the reservoir at the northwest side.

A 1941 map of Lihue Plantation Co. (see Figure 10) shows Feature A between the boundaries of fields 39A and 39B. The 1963 U.S. Geological Survey map (see Figure 11) shows a portion of the "Upper Lihue Ditch" that corresponds with the separation between field 39A and 39B, indicating Feature A was likely associated with the Upper Lihue Ditch. The reservoir also appears on the 1910 U.S. Geological Survey (see Figure 9) although its associated ditches are not evident.

Feature B, irrigation ditch (Figure 18), forms the west, southwest, and a portion of the south boundary of the project area. The earthen ditch is 703 m long, 0.9 m deep with a maximum width of 2.0 m. The ditch walls are sloped resulting in a bottom width of 1.0 m. The ditch is not currently used for irrigation but collects storm drainage and surface run-off from the Island School campus and its athletic fields.

A 1941 map of Lihue Plantation Co. (see Figure 10) shows Feature B forming the western boundary of field 39B, separating Lihue Plantation and Grove Farm. Although the ditch does not currently extend to Feature A, the Lihue Plantation Co. map shows a connection.



Figure 16. SIHP 2179 Feature A, reservoir adjacent to project area, view to south



Figure 17. SIHP 2179 Feature A, reservoir showing its outlet at a concrete gate frame, view to west



Figure 18. SIHP 2179 Feature B, earthen irrigation ditch, view to east

Feature C, section of an irrigation ditch (Figure 19), enters the project area from the north, near the parcel's northwest corner. The portion of the ditch within the project area is 209 m long. Water flowing through the ditch feeds SIHP 2179 Feature A, reservoir adjacent to the project area. The irrigation ditch has mounded earthen berms on each side that measure 2.0 m wide and are from 0.5 to 0.7 m high. The water channel is 2.5 m wide and approximately 1.2 m deep. The ditch has two concrete gate frames that lack gates (Figure 20).

A 1941 map of Lihue Plantation Co. (see Figure 10) shows that Feature C is the boundary between fields 39A and 39B. Irrigation ditches frequently formed the boundaries of fields. The 1963 U.S. Geological Survey map (see Figure 11) depicts a portion of the "Upper Lihue Ditch" whose location corresponds with the separation between field 39A and 39B (see Figure 10) indicating SIHP 2179 Feature C is associated with the Upper Lihue Ditch.

Feature D, portion of an irrigation ditch (Figure 21), would have bordered the southwest portion of field 39A, as shown on a 1941 map of Lihue Plantation Co map (see Figure 10). Feature D is also evident on the 1965 and 1977-1978 aeriels (see Figure 12 and Figure 13). Based on its association with Feature A, Feature D also appears to have been associated with the Upper Lihue Ditch.



Figure 19. SIHP 2179 Feature C, earthen irrigation ditch showing mounded berms on both sides, view to northwest



Figure 20. SIHP 2179 Feature C, irrigation ditch gate frame, view to north



Figure 21. Feature D, irrigation ditch, view to east

Section 5 Significance Assessments

SIHP 50-30-11-2179, consisting of a total of four historic water control features related to the Lihue Plantation, was evaluated for significance according to the broad criteria established for the Hawai'i Register of Historic Places (see discussion below). The five criteria are:

- A Associated with events that have made an important contribution to the broad patterns of our history;
- B Associated with the lives of persons important in our past;
- C Embodies the distinctive characteristics of a type, period, or method of construction, represents the work of a master, or possesses high artistic value;
- D Have yielded, or is likely to yield information important for research on prehistory or history;
- E Have an important value to the native Hawaiian people or to another ethnic group of the state due to associations with cultural practices once carried out, or still carried out, at the property, or due to associations with traditional beliefs, events or oral history accounts – these associations being important to the group's history and cultural identity.

SIHP 50-30-11-2179 has been assessed as significant under Criterion D, meaning that this historic property has “yielded, or is likely to yield, information important for research on prehistory or history.” This reflects its value to our understanding of Plantation-era infrastructure. Water control was essential to Lihue Plantation, as evidenced by the fact that water was transferred from as far away as Hanalei to the plantation (Wilcox 1996:70). SIHP 50-30-11-2179 is associated with the Upper Lihue Ditch, which dates to the early 20th century, and extends more than 7 kilometers (4 miles) inland. The ditch, which corresponds with SIHP 2179 Feature C, empties into SIHP 23179 Feature A, and bordered Lihue Plantation fields 39A and 39B (see Figure 10). Features B and D also bordered portions of Lihue Plantation fields 39A and 39B.

The proposed project may have an adverse effect on these historic features. In accordance with the SHPD/DLNR review of October 26, 2012 of an earlier draft of this study an archaeological inventory survey is recommended to provide additional documentation of these features.

Section 6 Summary and Recommendations

6.1 Summary

At the request of Wilson Okamoto Corporation, Cultural Surveys Hawai'i, Inc. has conducted this Literature and Field Inspection for the Island School State Land Use District Boundary Amendment Project and proposed Island School expansion that includes construction of new classrooms and other school facilities within its existing 38.448-acre campus.

Few access restrictions impeded the field inspection, however, ground visibility is somewhat obstructed by vegetation and previous development. During the pedestrian inspection, SIHP 50-30-11-2179, consisting of four water control features related to the Lihue Plantation (Table 2 and Figure 15), was identified. Research also indicates that all of the features are also associated with the Upper Lihue Ditch which extends more than 7 kilometers (4 miles) inland.

6.2 Recommendations

The proposed project may have an adverse effect on the plantation era infrastructure features of SIHP 2179 that are documented within this study. Consultation with SHPD/DLNR (October 26, 2012; Log No. 2011.0117, Doc No. 1210SL44 SHPD/DLNR Chapter 6E-42 review of an earlier draft; Appendix A) has led to the determination of the need for an archaeological inventory survey with additional documentation of features. In accordance with that SHPD/DLNR review of October 26, 2012 the current recommendation for the features documented here-in is preservation. This recommendation may change following completion of an archaeological inventory survey. Should development plans be proposed that may adversely affect this historic property, further documentation is recommended to mitigate these possible effects.

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Appendix A SHPD/DLNR Correspondence

 LINDA LINGLE GOVERNOR OF HAWAII	 STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES HISTORIC PRESERVATION DIVISION KARLUPHEVA BUILDING, ROOM 555 601 KAMOKILA BOULEVARD KAPOLEI, HAWAII 96737	PETER T. YOUNG CHAIRPERSON BOARD OF LAND AND NATURAL RESOURCES COMMISSION ON WATER RESOURCE MANAGEMENT DAN DAVIDSON DEPUTY DIRECTOR - LAND ERNEST Y.H. LAU DEPUTY DIRECTOR - WATER AQUATIC RESOURCES BOATING AND OCEAN RECREATION BUREAU OF CONSERVANCES COMMISSION ON WATER RESOURCE MANAGEMENT CONSERVATION AND COASTAL LANDS CONSERVATION AND RESOURCES ENFORCEMENT ENGINEERING FORESTRY AND WILDLIFE HISTORIC PRESERVATION KAHOLAWE ISLAND RESERVE COMMISSION LAND STATE PARKS
January 13, 2004 Mr. David Shideler Cultural Surveys Hawaii 733 N. Kalaheo Avenue Kailua, Hawaii 96734	LOG NO: 2004.0039 DOC NO: 0401NM05	
Dear Mr. Shideler:		
SUBJECT: Chapter 6E-8 Historic Preservation Review – Request for Determination of the Need for Archaeological Study in Support of Development of the “One-Stop Center Kauai Community College” Project, (Shideler, CSH, 2003) [State/University of Hawai’i] TMK: 3-4-5: 9 Puhī, Lihue, Kauai		
Thank you for submitting the above letter report. We received the request for determination and the attached letter report on December 26, 2003, and provide the following comments (Shideler, 2003. <i>Request for Determination of the Need for Archaeological Study in Support of Development of the “One-Stop Center Kauai Community College” Project</i> (TMK: 3-4-5: 9) CSH ms.).		
Based on your research and the brief field inspection, no historic sites were found nor are any likely to be present, given the extent of past land alterations and development. No further archaeological work is needed for this project.		
We would only ask that a copy of the letter report be provided to our O’ahu office. If you have any questions, please call Nancy McMahon (808) 742-7033.		
Aloha,  P. Holly McEldowney, Administrator State Historic Preservation Division		
c. Ian Costa, Planning Department Chair, Kaua’i Historic Preservation Review Commission		
NM.ak		

Literature Review and Field Inspection for Island School LUC Petition, Nāwiliwili Ahupua’a, Kaua’i

A-1

TMK (4) 3-8-002:016

 NEIL AMERCOMBIE GOVERNOR OF HAWAII	 HISTORIC PRESERVATION DIVISION DEPARTMENT OF LAND AND NATURAL RESOURCES 601 Kamokila Boulevard, Suite 555 Kapolei, HI 96806	WILLIAM F. AHA, JR. CHAIRPERSON BOARD OF LAND AND NATURAL RESOURCES COMMISSION ON WATER RESOURCE MANAGEMENT KEVINER KEALANA DEPT DEPUTY WILLIAM AL TAM DEPT DEPUTY-PLATE AQUATIC RESOURCES BOATING AND OCEAN RECREATION BUREAU OF CONSERVANCES COMMISSION ON WATER RESOURCE MANAGEMENT CONSERVATION AND COASTAL LANDS CONSERVATION AND RESOURCES ENFORCEMENT ENGINEERING FORESTRY AND WILDLIFE HISTORIC PRESERVATION KAHOLAWE ISLAND RESERVE COMMISSION LAND STATE PARKS
October 26, 2012 David Shideler Cultural Surveys Hawai'i, Inc. P.O. Box 1114 Kailua, Hawaii 96734 dshideler@culturalsurveys.com	LOG NO: 2011.0117 DOC NO: 1210SL44 Archaeology	
Dear Mr. Shideler:		
SUBJECT: Chapter 6E-42 Historic Preservation Review – Archaeological Literature Review and Field Inspection for the Island School Project Nāwiliwili Ahupua’a, Lihue’s District, Island of Kaua’i TMK: (4) 3-8-002:016		
Thank you for the opportunity to review this draft report titled <i>Archaeological Literature Review and Field Inspection for the Island School State Land Use District Boundary Amendment Project, Nāwiliwili Ahupua’a, Lihue’s District, Kaua’i Island TMK: (4) 3-8-002:016</i> (Groom and Hammati, October 2010). Our office received this submittal on January 11, 2011; we apologize for the delay and thank you for your patience. An archaeological literature review and field inspection study was requested by Wilson Okamoto Corporation to assist in identifying historic properties and to provide mitigation recommendations in advance of proposed development. The project area consists of the 38.448-acre campus of the Island School in Puhī, Kaua’i.		
The literature review provides a sufficient discussion of the environmental setting but requires additional discussion of the historical context, particularly the development of irrigation systems and technology within Lihue Plantation in order to better assess the age and significance of the irrigation features identified during the field inspection (see also attached section of map 1900 Monsarrat map of Lihue Plantation). This historic context discussion should incorporate plantation features identified in previous studies conducted within the vicinity, particularly features related to the several reservoirs and to various irrigation and water diversion projects (see also O’Hara and Monahan, Sept 2012, Job Code NAWILIWILI 11, AIS for Ho’omana Road Alignment for recently recorded irrigation and water diversion features within Lihue Plantation).		
One reservoir and three irrigation ditches associated with Lihue Plantation were identified and briefly described. These features comprise components of a historic property that requires assignment of a state site number, completion of a historic property description, and an assessment of historic significance. SHPD requests that this historic property not be adversely affected by any proposed Island School development without prior consultation with and concurrence from SHPD. In addition, we believe the present documentation is not sufficient to mitigate any potential adverse effect to this historic property and request that an archaeological inventory survey be completed.		
We have included an attachment that identifies the issues and concerns that are in need of revision prior to the acceptance of this literature review and field assessment pursuant to Hawaii Administrative Rule §13-276(5)(a) and (c) and §13-284(b)(5)(A). To aid in rapid review of the subsequent revision please include a cover letter that specifies the changes made to this document and their page numbers.		
Please contact Susan A. Lebo at (808) 692-8019 or Susan.A.Lebo@hawaii.gov if you have any questions or concerns regarding this letter.		
Aloha,  Theresa K. Donham, Archaeology Branch Chief		

Literature Review and Field Inspection for Island School LUC Petition, Nāwiliwili Ahupua’a, Kaua’i

A-1

TMK (4) 3-8-002:016

Mr. Shideler
October 26, 2012
Page 2

Attachment

Comments and Questions: *Archaeological Literature Review and Field Inspection for the Island School State Land Use District Boundary Amendment Project, Nāwiliwili Ahupua'a, Līhu'e District, Kaua'i Island*
TMK: (4) 3-8-002:016 (Grosa and Hammatt, October 2010).

Management Summary

- (1) Revise (page i) field work effort to state (principal investigator).
- (2) Revise (page ii) summary of findings to insert SIHP numbers for temporary site numbers

Environmental Setting

- (3) Revise (page 1) last paragraph to state "...District, in the southeastern quadrant..."
- (4) Revise (page 2) last paragraph to state "...of existing school and administrative buildings..."

Background Research

- (5) Revise (page 11) end of 4th paragraph to provide citation for statement that "During the whaling era, ...for resupply of the ships."
- (6) Revise (page 16) 1st paragraph to state "An unpaved road..."
- (7) Revise (page 22) 4th paragraph to state "A discussion of the archaeological findings that are relevant..."
- (8) Revise (page 22) Table 1 Ching et al. 1973 is not shown in Fig14.
- (9) Revise (page 27) last sentence to read "...for the project" (see Appendix A)." [no need to say current Appendix A unless you make reference to a previous one]

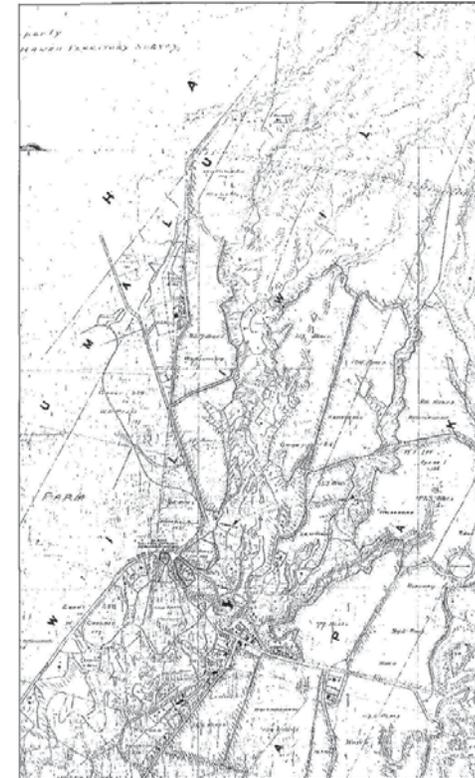
Significance Assessments

- (10) Revise (page 36) to include SIHP for this historic property
- (11) Revise (page 36) to insert a Historic Property Description for this historic property. This description should describe these features in a broad historic context that includes the Līhu'e Plantation and the other related features identified in the previous archaeological studies in the vicinity.
- (12) Revise (page 36) last paragraph and Table 3 to indicate that additional documentation is recommended. First, none of these features have been sufficiently described. Some do not have dimensions, none are described in terms of when they were constructed, how long were they in use, what is their current use, how have they been altered, what is their integrity, and so forth. This needs to be done. The current recommendation should be preservation.

Recommendations

- (13) Revise (page 37) to state that preservation is recommended. Should development plans be proposed that may adversely affect this historic property, further documentation is recommended to mitigate these possible effects.

Mr. Shideler
October 26, 2012
Page 3



Cropped section of 1900 Monsarrat Map of Līhu'e Plantation

NEIL ABECHROMBIE
GOVERNOR OF HAWAII



**HISTORIC PRESERVATION DIVISION
DEPARTMENT OF LAND AND NATURAL RESOURCES**

601 Kamohila Boulevard, Suite 555
Kapolei, HI 96806

WILLIAM J. AILA, JR.
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSIONER ON WATER RESOURCES MANAGEMENT

ESTHER KILA'ADNA
FIRST DEPUTY

WILLIAM M. TAM
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATLAND AND OCEAN RECREATION
BUREAU OF COMPLIANCE
COMMISSIONER ON WATER RESOURCES MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENFORCEMENT
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
POLYMER AND SOILS
LAND
STATE PARKS

October 26, 2012

David Shideler
Cultural Surveys Hawai'i, Inc.
P.O. Box 1114
Kailua, Hawaii 96734
dshideler@culturalsurveys.com

Dear Mr. Shideler:

**SUBJECT: Chapter 6E-42 Historic Preservation Review –
Archaeological Literature Review and Field Inspection for the Island School Project
Nāwiliwili Ahupua'a, Līhu'e District, Island of Kaua'i
TMK: (4) 3-8-002:016**

LOG NO: 2011.0117
DOC NO: 1210SL44
Archaeology

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Aloha,

Theresa K. Donham, Archaeology Branch Chief

Mr. Shideler
October 26, 2012
Page 2

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NAWILIWILI 5



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