FINAL—Preservation Plan for Sites 50-50-16-8863, 50-50-16-8864, and 50-50-16-8865 in Kukui'ulaiki Ahupua'a, Kīpahulu District, Island of Maui, Hawai'i

TMK: (2) 1-6-010:002 (por.)



Prepared For:

Imperium-Kipahulu Kai, LP Rosewood Ct., 2101 Cedar Springs, Suite 1050 Dallas, Texas 75201

August 2020



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Prepared By:

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August 2020



MANAGEMENT SUMMARY

Keala Pono Archaeological Consulting has prepared this preservation plan for Sites 50-50-16-8863, 50-50-16-8864, and 50-50-16-8865 located on TMK: (2) 1-6-010:002 (por.) in Kukui'ulaiki Ahupua'a, Kīpahulu District, on the island of Maui. This was done in anticipation of construction for agricultural use including related facilities and other accepted uses. An archaeological inventory survey has already been completed for the project which identified three archaeological sites. These consist of a wall (SIHP 8863), a wall and alignment (SIHP 8864), and a mound (SIHP 8865), all of which are slated for preservation and will not be affected by construction. Construction fencing will be placed around the sites as an interim protection measure.

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Introduction

At the request of Imperium Kipahulu Kai LP, Keala Pono Archaeological Consulting has prepared this preservation plan for Sites 50-50-16-8863, 50-50-16-8864, and 50-50-16-8865 in Kukui'ulaiki Ahupua'a, Kīpahulu District, on the island of Maui, Hawai'i. This plan was prepared in anticipation for construction related to approved agricultural use, which may consist of altering the natural landscape, construction of related facilities, and other approved uses.

The following report describes the preservation plan for the three sites. It begins with a description of the project area and a historical overview of land use, Hawaiian traditions, and archaeology in the region. The next section presents site descriptions and the preservation plan for Sites 50-50-16-8863, 50-50-16-8864, and 50-50-16-8865. The concluding chapter summarizes the main points of the report. Hawaiian words and technical terms are defined in the glossary, and an appendix at the end of the document provides documents related to the archaeological inventory survey (AIS) for this project.

Project Location and Description

TMK: (2) 1-6-010:002 is a 79.69 ha (196.92 ac.) parcel owned by Imperium Kipahulu Kai LP. An AIS was conducted for this parcel as well as an adjacent .002 ha (253 sq. ft.) parcel (TMK: (2) 1-6-010:010, and archaeological sites were only found on TMK: (2) 1-6-010:002. The AIS project area consisted of 28 ha (70 ac.), bounded on the west and north by Haleakala National Park, on the east by several residential properties, on the south by the Hana Highway, and on the southwest by other residential properties (Figures 1 and 2). This is located along the lesser frequented southern road to Hana, on the remote southeastern coast of Maui, within Kukui'ulaiki Ahupua'a, Kīpahulu District. The project area is situated along several ridgelines and two valleys that are interspersed throughout the property.

The AIS was requested by the State Historic Preservation Division (SHPD) in a letter dating to July 30, 2018 (Log No. 2018.01719, Doc No. 1807MBF19) and was carried out by Keala Pono Archaeological Consulting in 2019 (Pinsonneault et al. 2020). The following scope of work was stated in the letter (see Appendix):

Approximately 44.3 acres are slated to be grubbed for the agricultural operation. There are twelve non-contiguous fields that make up the project area. The fields range in size from 0.5 acres to 12.7 acres. The proposed project will use heavy machinery to remove and mulch trees and woody vegetation. The mulch will be applied to the ground surface. Areas that are cleared will have a permanent vegetation established for long term erosion control. Tea and coconut plants will be planted in these areas.

While details of this proposed land use are currently undetermined, the proposed work will likely include alterations of the natural contours of the land along the ridgelines for agricultural uses, as well as probable excavations for related facilities or other approved uses. Figure 3 shows the proposed plans, with the "L" designations as trails and the proposed areas for agricultural uses noted.

This preservation plan was requested by SHPD in the acceptance letter for the AIS report, dated April 30, 2020 (Log No. 2019.01719, Doc. No. 2004AM16) (see Appendix).

Physical Environment

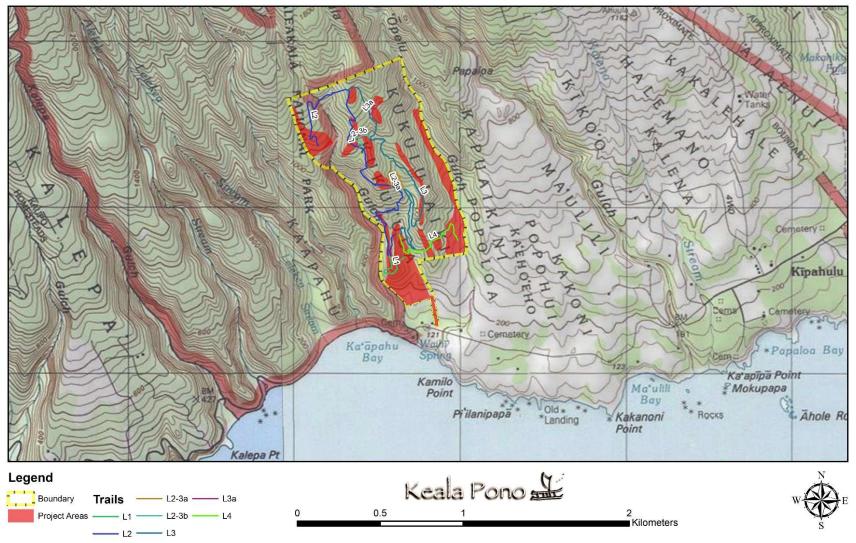
The island of Maui was created by two distinct shield volcanoes, Haleakalā in the east and Pu'u Kukui in the west. The two separate land masses became connected by an isthmus when "lavas of Haleakala banked against the already existing West Maui volcano" (Macdonald et al. 1983:380). Kīpahulu is located on the leeward coast of the island. The project area is mountainous and stands approximately between 50 and 390 m (160–1280 ft.) above mean sea level (AMSL). The lower portion of the project lies approximately 200 m (.12 mi.) from the coast at Ka'āpahu Bay. The nearest watercourse is Kukui'ula Stream, which runs through the northern portion of the property and skirts the parcel's western border. 'Opelu Stream runs along the property's eastern boundary.

The soil in the region primarily consists of Makaalae silty clay, 7–25% slopes (MID) (Figure 4). Makaalae soils are typified by their strong physical structure and a relatively high proportion of rock fragments (Foote et al. 1972). The density of rock in the first meter of soil makes cultivation on the shallower slopes difficult, and the steeper slopes largely impractical (University of Hawai'i at Mānoa 2014). Makaalae soils are generally used for water supply, pasture, and wildlife habitat (Foote et al. 1972:87).

Within the project area, Rough mountainous land (rRT) is the main soil type, with Hydrandepts-Tropaquods (rHT) in the northern portions. Rough mountainous land "consists of very steep land broken by numerous intermittent drainage channels. In most places it is not stony" (Foote et al. 1972:119). It is used for recreation, wildlife habitat, and water supply. Hydrandepts-Tropaquods are located in uplands and are used for wildlife habitat and water supply (Foote et al. 1972:46). Small areas of the parcel lie on Makaalae silty clay, 7–25% slopes; this soil type is described above.

Also within the vicinity are Makaalae clay, 7–40% slopes (MWE); Makaalae extremely stony silty clay, 7–25% slopes (MJD); and Rough broken land (rRR). The Makaalae soils are described above. Rough broken land is very steep and is broken by many intermittent drainages (Foote et al. 1972:119). It is used for wildlife habitat and watershed.

Kīpahulu experiences an average rainfall of 1876.4 mm (74 in.) per year (Giambelluca et al. 2013). The parcel supports a vibrant forest that includes strawberry guava (*Psidium cattleyanum*), kukui (*Aleurites moluccana*), hau (*Hibiscus tiliaceus*), and mango (*Mangifera* sp.) groves.



Layer Credits: USGS Topographical Kapahulu Quadrangle Map 1997 Topographical Kaupo Quadrangle Map 1998

Figure 1. The AIS project area on a 1997 Kipahulu USGS quadrangle map and 1998 Kaupo USGS quadrangle map.

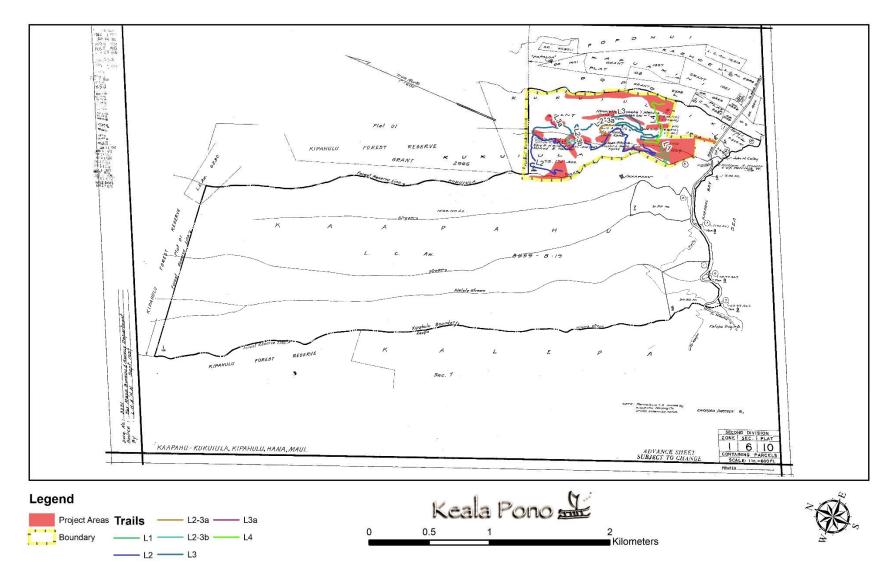


Figure 2. The AIS project area on TMK plat (1) 6-010. Note that the AIS project area was located on TMK: (2) 1-6-010:002 (por.) and (2) 1-6-010:010, while the archaeological sites covered in this preservation plan were found entirely within TMK: (2) 1-6-010:002.

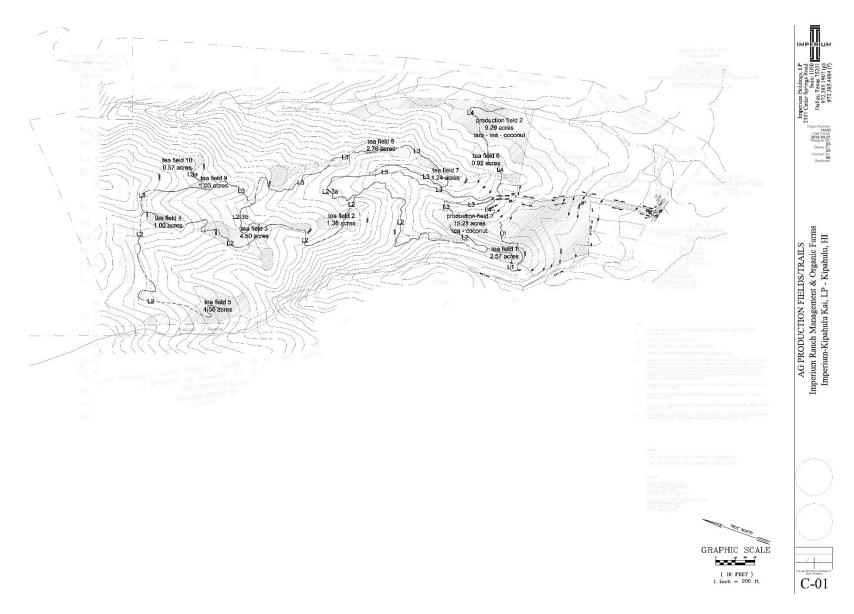


Figure 3. Proposed plans for TMK (2) 1-6-010:002 (por.) and (2) 1-6-010:010, showing 12 fields as well as trails (marked with "L").

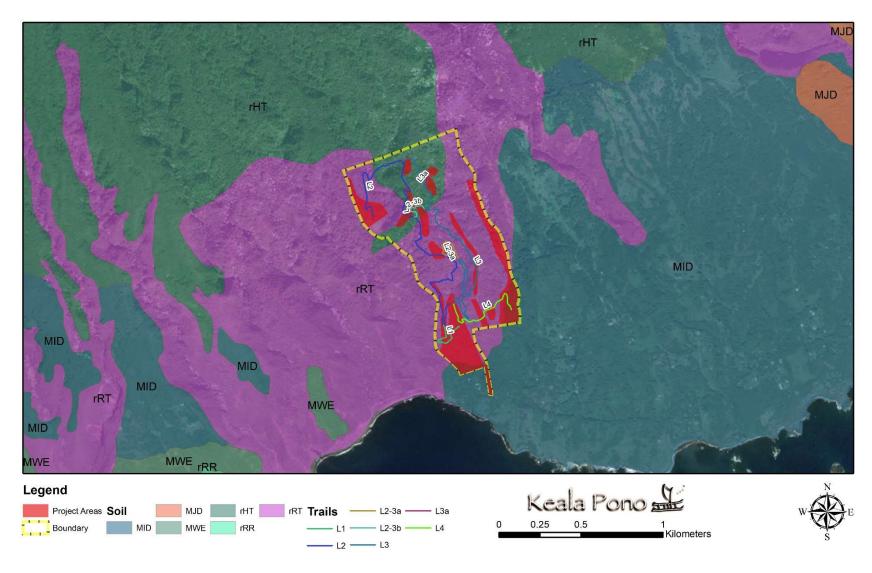


Figure 4. Soils in the vicinity of the AIS project area (data from Foote et al. 1972).

BACKGROUND

This section of the report presents background information as a means to provide a context through which one can examine the cultural and historical significance of the project lands. In the attempt to record and preserve both the tangible (e.g., traditional and historic archaeological sites) and intangible (e.g., moʻolelo, ʻōlelo noʻeau) culture, this research assists in the discussion of anticipated finds. Research was conducted at the Hawaiʻi State Library and the SHPD library, and using online resources at the University of Hawaiʻi at Mānoa libraries, as well as databases such as Ulukau, Kipuka, and Papakilo, as well as the State of Hawaiʻi Department of Accounting and General Services (DAGS) website. Historical maps, archaeological reports, Māhele data, and historical reference books were among the materials examined.

Traditional Land Divisions and Place Names

Under the ancient Hawaiian system, one island or section of an island was the domain of an ali'i nui or mō'ī who had gained control through a combination of inherited rank and personal prowess (Handy et al. 1991:278). It was during the time of the ali'i Kaka'alaneo of Maui that land on the island was divided up and portioned out into districts, sub-districts, and smaller divisions. Each of these was ruled over by an appointee of the landlord of the next larger land division. All of these divisions and subdivisions were ultimately under the control of the chief who ruled a portion of, if not the entire, island. Traditional sources recount that this division on Maui came shortly after the time of Wā-kea, ancestor of all ali'i (Handy et al. 1991:491). The unification of Maui by the brothers Pi'ilani and/or Kihapi'ilani simply brought together two comparable systems operating in East and West Maui, pulling them together under a single ali'i nui or mō'ī. Joerger remarks on the traditional division of land:

The Hawaiians made the divisions of the lands...following a mountain ridge, the bottom of a ravine, or the center of a stream or river. But oftentimes only the line of growth of a certain type of tree or grass marked a boundary, and sometimes only a stone determined the corner of a division. (Joerger 1974:1)

The largest divisions were the islands themselves. These were then divided into moku and smaller districts called kalana, though neither of these had designated administrators. The next unit down in size was the ahupua'a, which was ruled over by a chief or a konohiki. Ahupua'a could, in turn, be subdivided into 'ili. These 'ili could either be a simple subdivision of the ahupua'a, where a konohiki acted as agent to the ahupua'a chief, or could operate with greater autonomy as 'ili kūpono, where a chief paid tribute directly to the mō'ī (Joerger 1974:3–4).

The ancient land tenure system in Hawai'i was feudal in nature. After the conquest of an area, a chief would generally take the choicest lands, allotting those that remained to chiefs who had assisted in the conquest. Those chiefs would, in turn, take the best of the lands allotted to them and distribute what remained to their followers. Any lands distributed were revocable, meaning that the chief or administrator at the level above could revoke the land of subordinates at will. While this system was feudal in its top-down organization, the tenants on the land were not serfs tied to the soil. They could and did move freely from the land of one chief to another. Within this system, one's social superior could only lay claim to labor and the produce of the soil, not military service (Joerger 1974:5).

Whereas district and ahupua'a boundaries were likely defined roughly 500 years ago, some district boundaries were established more recently (Sterling 1998:3), and this is the case with Hāna. Due to governmental changes in the mid-19th century, some district boundaries on Maui were renamed or redefined as people moved to different areas and land use changed. The current district of Hāna includes the ancient districts of Kahikinui, Kaupō, Kīpahulu, Hāna, and Koʻolau.

Kīpahulu, the smallest moku on Maui, was the home of the god Laka, who was worshipped by makers of canoes (Pukui et al. 1974:112). The name translates to "fetch [from] exhausted gardens ($k\bar{t}$ is short for ki'i)" (Pukui et al. 1974:112). Kukui 'ulaiki translates to "small red light," and the promontory Kamilo literally means "the milo tree" (Soehren 1963:18).

'Ōlelo No'eau

'Ōlelo no'eau, or Hawaiian proverbs and poetical sayings, provide insight into traditional beliefs and practices related to a given area. Two 'ōlelo no'eau were found for Kīpahulu, while none were found for Kukui'ulaiki.

He iki huna lepo mai kēia e pula ai ka maka.

This is a small speck of dust that causes roughness in the eye.

One may be small but he can still cause distress. This was the retort of Ka'ehuiki, a shark-god of Puna, when he was taunted for his small size by Kai'anuilalawalu, shark-god of Kīpahulu, Maui. (Pukui 1983:71)

Ka makani kā'ili aloha o Kīpahulu.

The love-snatching wind of Kīpahulu.

A woman of Kīpahulu, Maui, listened to the entreaties of a man from Oʻahu and left her husband and children to go with him to his home island. Her husband missed her very much and grieved. He mentioned his grief to a *kahuna* skilled in *hana aloha* sorcery, who told the man to find a container with a lid. The man was told to talk into it, telling of his love for his wife. Then the *kahuna* uttered an incantation into the container, closed it, and hurled it into the sea. The wife was fishing one morning at Kālia, Oʻahu, when she saw a container floating in on a wave. She picked it up and opened it, whereupon a great longing possessed her to go home. She walked until she found a canoe to take her to Maui. (Pukui 1983:159)

Mo'olelo

Like 'ōlelo no'eau, mo'olelo offer insight into what life may have been like in the project region in ancient Hawai'i. They preserve topics of interest relevant to particular areas that were meant to be passed down the generations of those living in that place.

The island of Maui was named for the demigod Māui, who lived in Hāna at Ka'uiki (Pukui et al. 1974:92, 148). Kīpahulu is specifically mentioned in mo'olelo concerning Māui:

They [Maui and his brothers] went to the fishing ground frequented by kahala fish. It was named Po'o, and is located directly outside of Kipahulu. The land mark is Ka-iwi-o-Pele, a place in Hana. (Sterling 1998:156)

Another mo'olelo of Kīpahulu involves Laka, son of the chief Wahieloa (Sterling 1998:156). One day Wahieloa sailed to Hawai'i Island to find a toy for his son. Unfortunately, he was killed in a cave shortly after landing at Punalu'u in Ka'ū. After not hearing from his father for a long time, Laka was determined to find out what happened to him. He went into the mountains to find a koa tree to make a canoe, yet each day he would cut a tree, the next morning he would return to find it upright again. He dug a trench and hid overnight to find that Menehune were to blame. Laka sprang from the trench and captured two of the Menehune, threatening to kill them for their prank. The Menehune bargained with Laka, promising to finish his canoe and carry it to the coast if Laka would build a canoe hālau and provide food for them. The Menehune each had one 'ōpae, one o'opu, and a bite of kalo and then completed their task. It is noted that, "There are some who know the site of Kuahalau, the halau that Laka built. And it is said that on the mountain slopes above Kipahulu, the hole he dug for the koa tree can still be seen" (Sterling 1998:157).

The wind of Kīpahulu is known as "Makani kaili aloha o Kipahulu," or "the love-snatching-wind of Kipahulu," and there is a moʻolelo that explains this name (Sterling 1998:157–158) (also see the 'ōlelo no'eau concerning this story, above). A husband and wife lived in Kīpahulu, but the wife left with another Kīpahulu man to live on Oʻahu. The husband sent messages to his wife to return, but she ignored them and soon forgot about her former life in Kīpahulu. The husband sought the advice of a kahuna, who told him to fetch the couple's favorite calabash. The kahuna whistled melodies of every kind into the calabash, and he prayed to the aumākua of the sky, the

earth, and the sea. He then sealed the calabash and set it adrift on the ocean. The kahuna prayed to the wind aumākua and the shark aumākua to take the calabash to Honolulu. The wife, now living in Makiki, had an intense urge to eat līpoa, so she set out for Waikīkī to collect some. As she gathered the līpoa, she spotted the calabash floating in on a wave and noted how it resembled her favorite calabash when she was married. When she opened the lid, the fragrance of love for her husband overcame her and she immediately left to be reunited with him in Kīpahulu.

A final mo'olelo involves the establishment of fishing ko'a by Ai'ai (Sterling 1978:161). Ai'ai left Hāna and took his fishhook Manaiakalani and fish pearl Kahoi from a cave at Ka-iwi-o-pele. He established ko'a by setting ku'ula stones at Pu'uiki, Mūolea, Hanakaiole, and other places as far as Kīpahulu. It is said that one of the stones still stands "at the streams of Kikoo and Maulili...at a bend in the waters, unmoved by the many freshets that have swept the valleys since that time" (Sterling 1978:161). Offshore at Ma'ulili is a fishing station called Koanui. When Ai'ai was first fishing there, he met a lawai'a named Kanemakua. Ai'ai gave him a fish that he had caught and provided instructions to take charge of the ko'a. Kanemakua returned to shore and sacrificed the fish's eyes and then prepared it to eat. Sterling (1978:161) closes the story as follows:

During all this time Kanemakua was thinking of the words spoken by the young man [Aiai], which he duly observed. The first kuula established in Maulili, Maui, was named after him and from that time its fish have been given out freely without restriction or division.

Traditional Land Use and Subsistence

The general area of Kīpahulu, on the southern coast of East Maui, includes a number of small bays with good fishing where the gulches that carve through the southern slopes of Haleakalā drain into the ocean. Handy et al. (1991:507) describe Kīpahulu District as having "rich and diverse but scattered agricultural resources." Taro was grown in the large valley, lower forests, and lower kula lands. Kukui 'ulaiki Ahupua'a is not specifically mentioned, although Kukui'ula Stream was said to have supported a series of small lo'i complexes (Handy et al. 1991:507). Other areas of Kīpahulu known for lo'i agriculture were Lolokea, Hanawi, Kalepa, and Nuanualoa, where small plots were scattered along the streams. Whereas sugar and cattle enterprises disturbed much of Kīpahulu in the historic period, Handy et al. (1991:507) note that kalo was still grown in small pockets of land as late as 1934.

The Ala Loa, the "long road" extended into East Maui by chief Kihapi ilani, passed through Kukui ulaiki by way of the coast, where streams that otherwise cut deep gulches in the landscape were most easily passible as they emptied into the ocean (Handy et al. 1991:489). Descriptions of the Kīpahulu portion of the trail are as follows:

Remains of sections of the trail may be seen in Kaupo, and from there winding in and out of small gulches to Kipahulu. Six miles of trail here is almost undisturbed. Between Kipahulu and Hana it is overgrown with brush. (Handy et al. 1991:490)

At Kipahulu the paving of 'ala stone was begun, from Alae-iki to Kukui'ula. Between some of the lands in this locality some of the paving is gone, having been dug out by the plow of T.K. Clarke. The 'ala stones were scattered about and sugar cane planted at this time. It was thus at the stream of Manawainui. (Sterling 1998:157)

The island of Maui exhibits eleven great heiau (200 ft. in length or longer), and six of them are located within Hāna District (Sterling 1998), demonstrating the importance of the project region in traditional times. A number of smaller heiau were also scattered throughout the district. Specifically in Kīpahulu, were Napua Heiau on the north side of 'Ohe'o Gulch; Wailoa Heiau at 'Alaenui; Kanekauila Heiau at Kākalahale; an unnamed heiau, Waihe'e Heiau, and Mahinaula Heiau at Halemano; Ma'ulili Heiau in Ma'ulili; Manekineki Heiau at Kukui'ula; and Paokahi Heiau in Ka'apahu (Sterling 1998:157–163).

Māhele Land Tenure

When King Kamehameha I united the islands under his single rule at the beginning of the 19th century, he continued to use the existing system for dividing and allotting land. Allotments were still on a revocable basis, and tenure was still non-military in nature. Taxes to Kamehameha I were owed by all, from ali'i nui down to tenant-commoners, in the form of land taxes and services that could be called on at the king's discretion. After his death, Kamehameha I's son Liholiho was recognized as Kamehameha II. He inherited his father's absolute sovereign power over the islands. He made few changes in the distribution of lands, however, mostly maintaining the status quo until his death and the ascension of Kamehameha III (Joerger 1974:5–6).

Kamehameha III was faced with serious pressures from the growing presence of foreigners in the islands who were accustomed to possessing the title to lands outright, without the threat of dispossession by local rulers. To address these issues, and under pressure from the navies of those countries from which resident foreigners had come, Kamehameha III and his chiefs reviewed their national policy. This led to the enactment of the Bill of Rights of 1839. In defining and protecting the rights of Hawaiians, this bill led to many important changes, not the least of which was explicitly prohibiting landlords from dispossessing a tenant without sufficient cause. The Bill of Rights was followed by the first constitution of the Hawaiian Kingdom, granted by King Kamehameha III on October 8, 1840. This constitution changed the government from an absolute monarchy to a constitutional monarchy. Many changes followed suit, most importantly for land tenure was the declaration that, although all the land belonged to the king, it was not considered his private property. This ushered in the possibility of some form of land ownership for commoners (Joerger 1974:5–7).

The creation of the Board of Commissioners to Quiet Land Titles, or Land Commission, was the first major step in the process of land tenure reform. The Land Commission was responsible for validating or rejecting the claims of both native and foreign individuals to previously acquired lands, not to create new interests in land. The rulings of this commission were binding, barring appeal to the Hawaiian Supreme Court. Upon having a claim confirmed by the commission, and paying a commutation to the government, an awardee was issued a Royal Patent on the Award by the minister of the interior. The Land Commission was hindered in rendering awards to claimants in the greater portion of cases because they were not empowered to define or separate out the intertwined interests of king, chiefs, konohiki, and tenant-commoners in relation to land divisions, as inherited from the ancient feudal system that had held up until then (Joerger 1974:8–9).

The Māhele of 1848 addressed many of these problems. As early as 1846 the Land Commission had suggested that Hawaiian lands should be divided into three roughly equal parts. One third would be retained by the king, one third would go to the chiefs and konohiki, and the final third would go to common tenants. This required, first, the identification and separation of the relative rights and interest of the king, chiefs, and konohiki in the lands of the kingdom. The matter was discussed for a year before the Privy Council, in December 1847, created a committee to assist in determining the relative rights and interests that these ruling classes had in the land of Hawai'i (Joerger 1974:14–16).

The divisions that followed were recorded in the Māhele Book. Due to a lack of surveyors in the islands during the period, the Māhele was made without survey. All the lands were divided according to their ancient names and boundaries. The Māhele itself also did not convey any title to land. Chiefs and konohiki who participated were still required to present their claims before the Land Commission to receive awards of Konohiki land (the portion of all lands to be divided up among this ruling class) quitclaimed to them by Kamehameha III. Until awards were issued, titles to such lands remained with the government (Joerger 1974:20–21). Upon completion of the Great Māhele, the King further subdivided his third into a smaller portion that was deemed his private property, the Crown Lands, and a larger portion that would be reserved as government lands (Joerger 1974:25).

Subsequent acts allowed the Land Commission to authorize the sale of lands in fee simple to resident aliens, and authorized the award of kuleana plots to native tenants. Until its dissolution in 1853, the Land Commission handled over 12,000 individual land claims. The Land Commission was, in effect, a judicial court that issued a Land Commission award (LCA) when it found in favor of a land claim. A Royal Patent was also issued, but it

did not confer or confirm title to land. Rather, it served to quitclaim the government's (king's) interest in the land (Joerger 1974:8–12).

From time to time, Crown, Government, and Konohiki lands might be sold to create revenue for the government. It was not necessary for recipients of these grants to obtain an award (LCA) from the Land Commission. After laws passed in 1849 that clarified the rights of native tenants, the Land Commission was empowered to award fee simple titles to all native tenants who occupied and improved any portion of Crown, Government, or Konohiki Lands. Although 1,500,000 acres of land were set aside for the government and the people during the Māhele, fewer than 30,000 acres of land were awarded to native tenants as kuleana lands, even after an act clarified this process in 1850 (Joerger 1974:27–30).

There is one land grant within the AIS project area (see Figure 8). This is Land Grant 1902, given to Kaumia, Moo, Kapele, Mukahio, Hauhio, Kaimi, Pimana, and Kuluai. The grant spans 273 acres within the ahupua'a of Popoloa, Kukui'ula, and Kukui'ulaiki. No information on land use on this parcel could be found. LCA 8559B, awarded to William C. Lunalilo, includes discontiguous plots of land over much of Maui. One plot, of 1,480 acres ('Āpana 19), was located in Ka'apahu Ahupua'a and a small portion overlaps with the AIS project area (see Figure 8). No information on land use on this parcel could be found. One other LCA is nearby (Figure 5). LCA 8987, claimed by Kunaka, is in the 'ili of Mana'apua of Popoloa Ahupua'a. It stretched for 10.75 acres from the ocean to the ama'umau fern belt, and was used for growing kalo.

Historic Land Use

An early account of the Kīpahulu coastline was penned by La Pérouse, a French explorer that stopped in the islands in 1786 as part of a voyage that circled the globe. La Pérouse (1968) described the village there:

Water cascades from the mountain tops, irrigating the native villages before it enters the sea. The dwellings are so numerous that a single village extends for three or four leagues. All the houses are at the edge of the sea, and the mountains are so near that the habitable land does not appear to be more than a quarter league wide.

By the mid-1800s missionaries began to settle in East Maui, establishing mission stations and churches, some constructed near traditional heiau. In 1837 a mission station at Hana was built, and within a few years, people from Kīpahulu came to worship there.

Also in the mid-1800s, the sugar industry reached East Maui, with the establishment of the first sugar plantation in Hāna, near Kaʻuiki. By 1884, there were four sugar enterprises in the area: the Kipahulu Mill run by Davies & Co., Hana Plantation operated by Grinbaum & Co., Kipahulu Plantation run by Hackfield & Co., and Reciprocity Sugar Co. operated by McFarlane & Co. (Wilcox 1996:3–5). The Kipahulu Mill had 125 acres planted in sugar, and went bankrupt in 1886. Historic maps of this era depict the coastal road, along with place names, and LCAs in the region (Figures 6 and 7). The extent of sugar lands, unfortunately, is not shown.

After the bankruptcy, the Kipahulu Sugar Co. took over the mill and its lands. In 1915 a railroad was built to transport sugar to wharves along the coast, three of which were located in Kīpahulu. Plantation communities emerged along the railroad, housing multi-ethnic immigrant workers and their families. A historic map from this period illustrates many LCAs, as well as the coastal road, and several place names (Figure 8). Nothing of interest is depicted within the project area, aside from Land Grant 1902 and LCA 8559B.

The Kipahulu Sugar Co. remained in operation until 1922 when it was obtained by the Haiku Fruit and Packing Company and its cane fields were replanted in pineapple. Pineapple, however, proved unsuccessful in Kīpahulu, and by 1927 the fields were abandoned. At this time, the derelict fields were taken over by Ulupalakua Ranch for cattle grazing. By 1946, the last sugar plantation in Hāna closed, in part due to tsunami damage to the harbor.

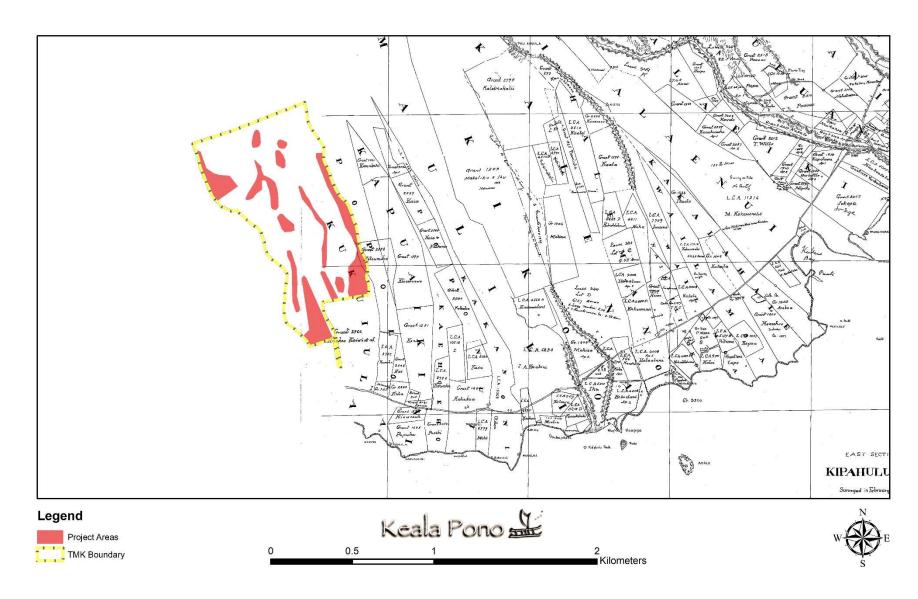


Figure 5. Portion of an 1881 map of Kīpahulu (Alexander 1881) with the areas covered by the AIS shaded in red.

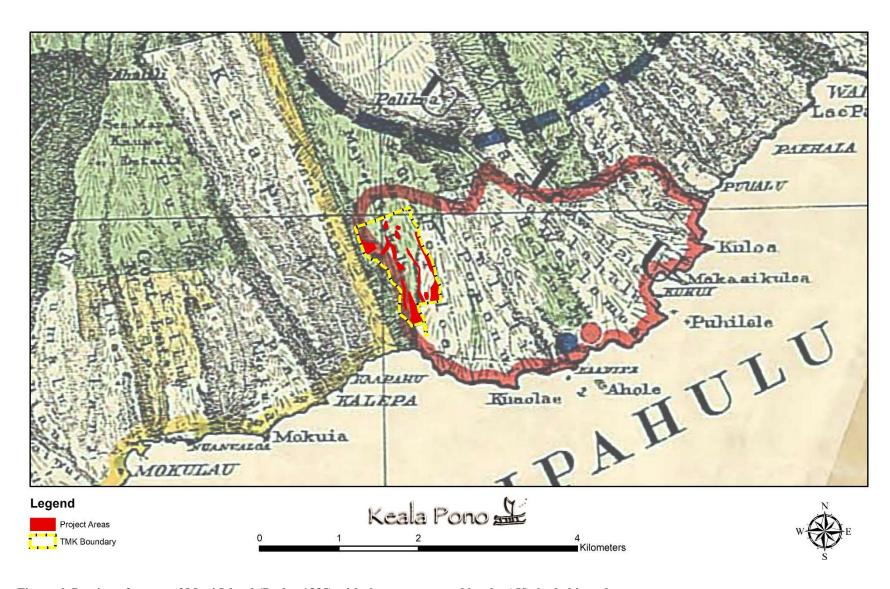


Figure 6. Portion of a map of Maui Island (Dodge 1885) with the areas covered by the AIS shaded in red.

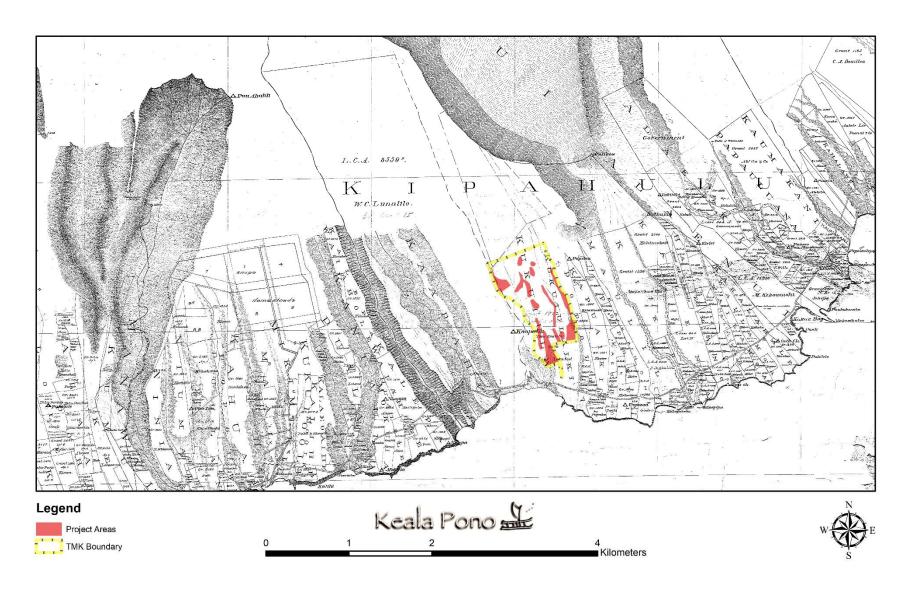


Figure 7. Portion of a map of Kīpahulu and Kaupō (Willis 1894) with the areas covered by the AIS shaded in red.

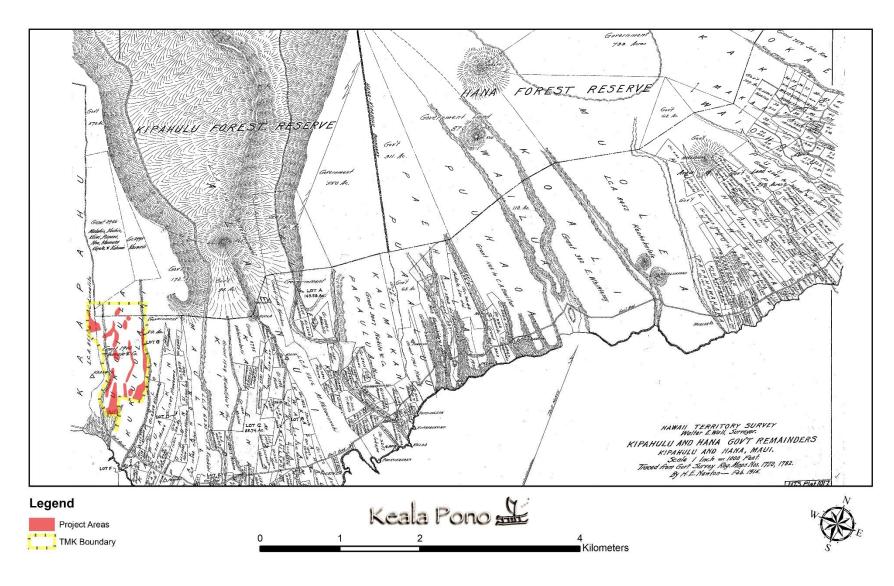


Figure 8. Portion of a map of Kīpahulu and Hāna (Newton 1915) with the areas covered by the AIS shaded in red.

Previous Archaeology

There are a few projects that have been carried out in the vicinity of the archaeological sites covered in this preservation plan (Table 1). The following paragraphs summarize reports that were found in the SHPD Kapolei library for projects within approximately 2.5 km of the project. Previous study summaries are presented in chronological order, and their locations are illustrated in Figure 9. State Inventory of Historic Places (SIHP) numbers are prefaced by 50-50-16; site locations are shown in Figure 10.

Early archaeological work in Kīpahulu took the form of a survey of portions of East Maui (Soehren 1963). Although no archaeological sites were documented for Kukui'ulaiki Ahupua'a, several were identified nearby. These consist of five sites in Kiko'o: a shelter, walls, and three habitations; six sites in Ka'apahu: a heiau, a cemetery, two lo'i, walls, and a shrine; and eight sites in Ma'ulili: two heiau, three habitations, a shelter, an animal pen, and petroglyphs. SIHP numbers were not assigned at the time of the study.

A reconnaissance survey in 'Alelele recorded the 'Alelele Stream Terraces (SIHP 1129) that were identified by Soehren (1963), as well as five terraces, a mound, and a retaining wall that were not given SIHP numbers (Kornbacher 1992). An archaeological inventory survey of the Ka'apahu Bay area further documented SIHP 1129, as well as two other sites identified by Soehren (1963): a ko'a (1130) and the Leleka Complex (1492). In addition, eight newly identified sites were found: several rockshelters (SIHP 3140, 3142, 3144, and 3146), a wall (3145), a subsurface cultural deposit (3141), the King's Highway Trail (3143), and a complex of surface architecture (3147).

An archaeological inventory survey in Kakanoni Ahupua'a identified three sites (Burgett et al. 1995). These consist of an enclosure (SIHP 4149), a wall and terraces (4150), and a modified outcrop (4151). Excavations at SIHP 4149 and 4151 yielded traditional artifacts and volcanic glass. SIHP 4149 returned a radiocarbon date of 310±60 BP (calAD 1446–1668).

A 1998 study compiled site information from other sources for the entire island of Maui (Sterling 1998), much of it obtained from Walker's (1933) unpublished manuscript *Archaeological Survey of the Island of Maui*. There were no sites listed for Kukui'ulaiki Ahupua'a, although three heiau were noted in the area: one in Ka'apahu, another in Kukui'ula, and one in Ma'ulili.

In coastal Ma'ulili, an archaeological inventory survey recorded four previously identified sites and three new sites (Masterson et al. 2000). The previously recorded sites are a rockshelter (SIHP 1112), a habitation/religious complex (1113), a rockshelter and pictographs (1121), and a culturally significant stone (4481). The newly identified sites consist of a rockshelter (4511), a cave (4541), and culturally important islets (4542). The excavation of SIHP 1113 Feature H was later reported on separately (Kolb 2000). This feature is a large U-shaped wall with a partially paved interior, thought to be a small heiau. The only items collected were charcoal and a fragment of branch coral. The charcoal was not dated due to disturbance. A preservation plan was also prepared for all seven sites (Paul et al. 2002).

A site inspection in Ma'ulili Ahupua'a identified five sites (Fredericksen 2004). These consist of three rockshelters (SIHP 5536, 5537, and 5538), a railroad crossing and rock wall (5539), and a remnant enclosure (5540).

An archaeological inventory survey in Kīpahulu, Ma'ulili, and Kakanoni Ahupua'a documented two archaeological sites (Monahan 2005). These are SIHP 5716, four modified outcrops; and 5717, a complex of temporary habitation features and an 'auwai.

An archaeological inventory survey in Kukui'ula, Kukui'ulaiki, and Popoloa Ahupua'a partially overlapped the current project (Moore et al. 2006). A total of seven sites were identified: a disturbed terrace/pavement

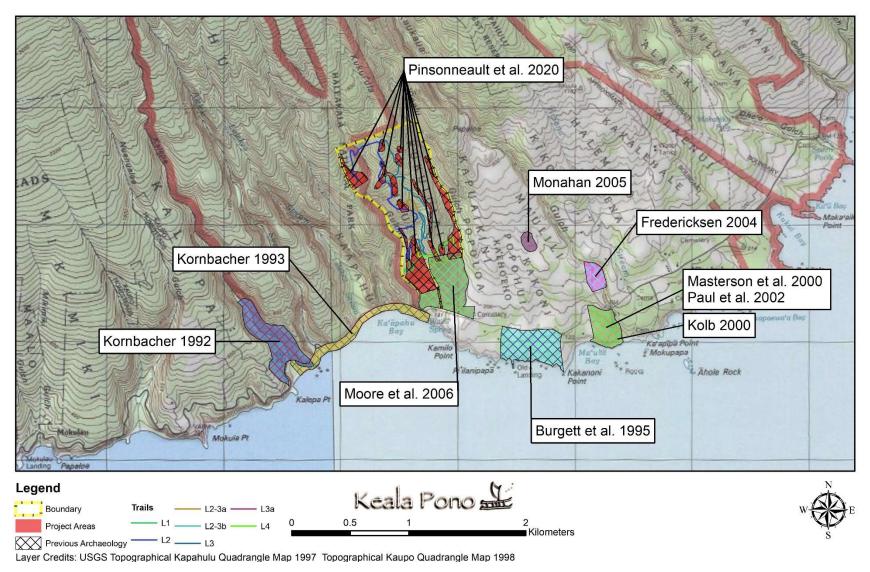


Figure 9. Previous archaeological studies in the vicinity of the project.

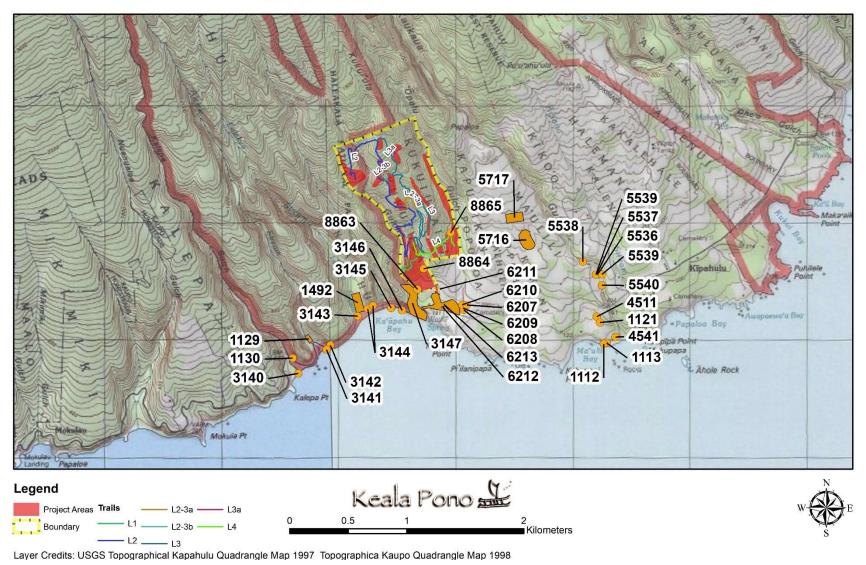


Figure 10. Known archaeological sites in the project vicinity. Note that the locations of SIHP 4149, 4150, and 4151 could not be determined, as the Burgett et al. (1995) report was missing from the SHPD library. See Figure 9 for the location of the Burgett et al. (1995) project area.

Table 1. Previous Archaeological Studies in the Vicinity of the Project

Author & Year	Location	Study	Findings
Soehren 1963	East Maui	Survey	Recorded five sites in Kiko'o: a shelter, walls, and three habitations; six sites in Ka'apahu: a heiau, a cemetery, two lo'i, walls, and a shrine; and eight sites in Ma'ulili: two heiau, three habitations, a shelter, an animal pen, and petroglyphs. SIHP numbers were not assigned.
Kornbacher 1992	'Alelele Stream	Reconnaissance Survey	Recorded the previously identified 'Alelele Stream Terraces (SIHP 1129) as well as five terraces, a mound, and a retaining wall that were not given SIHP numbers.
Kornbacher 1993	Ka'apahu Bay	Archaeological Inventory Survey	Documented three previously recorded sites: the 'Alelele Stream Terraces (SIHP 1129), a ko'a (1130), and the Leleka Complex (1492), as well as eight newly identified sites: several rockshelters (3140, 3142, 3144, 3146), a wall (3145), a subsurface cultural deposit (3141), the King's Highway Trail (3143), and a complex of surface architecture (3147).
Burgett et al. 1995	Kakanoni Ahupuaʻa	Archaeological Inventory Survey	Identified an enclosure (SIHP 4149), a wall and terraces (4150), and a modified outcrop (4151). Excavations at SIHP 4149 and 4151 yielded traditional artifacts and volcanic glass. SIHP 4149 returned a radiocarbon date of 310±60 BP (calAD 1446–1668).
Sterling 1998	Island-Wide	Synthesis	Compiled information from other sources; notes three heiau in the area: one in Kaʻapahu, another in Kukuiʻula, and one in Maʻulili.
Masterson et al. 2000	Coastal Maʻulili	Archaeological Inventory Survey	Recorded four previously identified sites: a rockshelter (SIHP 1112), a habitation/religious complex (1113), a rockshelter and pictographs (1121), and a culturally significant stone (4481); as well as three newly identified sites: a rockshelter (4511), a cave (4541), and culturally important islets (4542).
Kolb 2000	Coastal Maʻulili	Excavation Report	Documented the excavation of SIHP 1113, a previously recorded habitation and religious complex.
Paul et al. 2002	Coastal Ma'ulili	Preservation Plan	Outlined preservation measures for the seven sites documented by Masterson et al. (2000).
Fredericksen 2004	Maʻulili Ahupuaʻa	Site Inspection	Identified five sites: three rockshelters (SIHP 5536, 5537, and 5538), a railroad crossing and rock wall (5539), and a remnant enclosure (5540).
Monahan 2005	Kīpahulu, Maʻulili, and Kakanoni Ahupuaʻa	Archaeological Inventory Survey	Documented SIHP 5716 (four modified outcrops) and 5717 (a complex of temporary habitation features and an 'auwai).
Moore et al. 2006	Kukuiʻula, Kukuiʻulaiki, and Popoloa Ahupuaʻa	Archaeological Inventory Survey	Identified seven sites: a disturbed terrace/pavement (SIHP 6207), a revetment/alignment (6208), terraces that may mark burials (6209 & 6211), a wall segment (6210), a low platform (6212), and several wall segments (6213).

Table 1. (Continued)

Author & Year	Location	Study	Findings
Pinsonneault et al. 2020	Current Project Area	Archaeological Inventory Survey	Identified three sites: a wall (SIHP 8863), a wall and alignment (SIHP 8864), and a mound (SIHP 8865).

(SIHP 6207), a revetment/alignment (6208), terraces that may mark burials (6209 and 6211), a wall segment (6210), a low platform (6212), and several wall segments (6213). None of these sites are located on the subject property (see Figure 10).

The archaeological inventory survey for the current project identified three sites (Pinsonneault et al. 2020). These consist of a wall (SIHP 8863), a wall and alignment (SIHP 8864), and a mound (SIHP 8865). SIHP 8863 and 8864 were interpreted as agricultural features of traditional to early historic age, while SIHP 8865 was thought to be a historic cattle ramp. These sites are further described in the Preservation Plan chapter below.

Summary of Background Research

The island of Maui was named for the demigod Māui, who lived in Hāna and Kīpahulu, was the home of the god Laka, who was worshipped by makers of canoes. Both Māui and Laka are celebrated in mo'olelo of the area. In pre-Contact times, Kīpahulu supported scattered lo'i, and fishing was another principal means of subsistence. Several heiau were known for the district as well. During the Māhele, one land grant and one LCA were recorded on the project area, although no information on land use was found for these two parcels. Another LCA was located nearby and it was used for growing kalo. In the historic period, sugar and cattle enterprises transformed the region.

One previous archaeological project was conducted near the current area of study, partially overlapping it and adjacent to the south (Moore et al. 2006). Sites found include the following: a disturbed terrace/pavement, a revetment/alignment, terraces that may mark burials, a wall segment, a low platform, and several wall segments. None of these sites are located within the current project area. For the current project, an archaeological inventory survey identified three sites: a wall, a wall and alignment, and a mound. These three sites are the subject of this preservation plan.

PRESERVATION PLAN

The following section includes an outline of regulatory requirements for preservation plans, detailed descriptions of Sites 50-50-16-8863, 50-50-16-8864, and 50-50-16-8865 (Table 2 and Figure 11), and proposed strategies for preservation of the sites. Site descriptions are from Pinsonneault et al. (2020) where the sites have been assessed as significant under Criterion d of HAR §13-284-6(b) and will be preserved for their potential to yield further information. Consultation was conducted with the Office of Hawaiian Affairs (OHA) between May 11, 2020 and July 16, 2020. OHA comments have been addressed in this plan.

Regulatory Requirements

This preservation plan adheres to current regulatory requirements as set forth under Hawai'i Administrative Rules Title 13 of the Department of Land and Natural Resources. Chapter 277 of said rules specifically outlines requirements governing archaeological site preservation and development. The policy establishes standard procedures to safeguard the public's interest in "no adverse effects" to sensitive archaeological and cultural sites. The preservation plan should identify each significant site and whether preservation will be avoidance and protection (conservation) or exhibition (interpretation). In either case, the preservation plan for each culturally significant site should a) specify buffer zones, b) indicate short-term courses of action to protect sites inside or adjacent to construction areas, and c) detail long-term preservation measures.

Table 2. Archaeological Features within the Project Area

Site	Description	Possible Age and Function
8863	Wall	Pre-contact to early post-contact, agricultural
8864	Wall and Alignment	Pre-contact to early post-contact, agricultural
8865	Mound	Post-contact cattle ramp possibly associated with the Kipahulu Cattle Co.

SIHP 50-50-16-8863 Site Description

Formal Type: Wall

Size: 30 m long, 20–80 cm high

Shape: Linear

Construction: Stacked and piled Surface Cultural Material: None Subsurface Deposits: None

Condition: Fair Function: Agriculture

Age: Pre-contact or early post-contact Significance Criteria: Criterion d Mitigation: Avoidance and protection

Site 8863 is a low wall located parallel to a deep stream cut (roughly 8 m) into the valley floor. The wall appears to terminate in an "L" or hook, at its northwest inland end and measures 30 m long in total (Figures 12 and 13). It is composed of stones stacked one to three courses, in addition to piled construction. The wall may have once been part of a terrace system and is likely associated with agriculture in the area. The site retains integrity of location, design, setting, materials, workmanship, and feeling. It is currently in its original location and setting; its design remains the same; the original materials remain unchanged; workmanship of the site remains largely unchanged, and the site does convey its original time and place. The site does not retain integrity of association as it is not likely associated with a historic event or person. It is in fair condition, although impacted by the AIS excavations, as directed by SHPD. Excavations did not yield any information as to the age or function of the site.

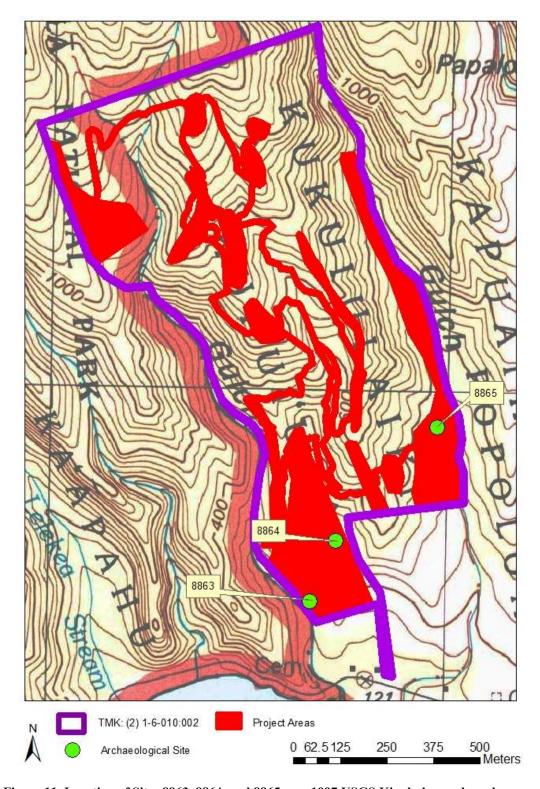


Figure 11. Location of Sites 8863, 8864, and 8865 on a 1997 USGS Kipahulu quadrangle map.

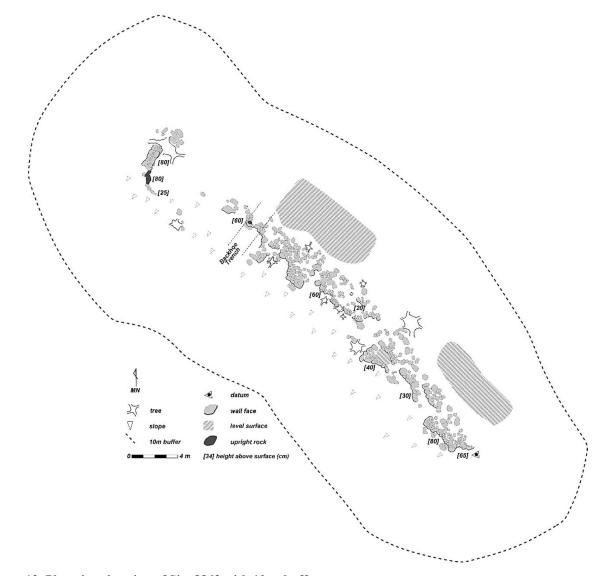


Figure 12. Plan view drawing of Site 8863 with 10 m buffer zone.



Figure 13. Photo of Site 8863 facing southeast.

SIHP 50-50-16-8864 Site Description

Formal Type: Wall and Alignment

Size: Wall is 30 m long, 1 m wide, and up to 50 cm tall; alignment is 3.3 m long, 60 cm wide, and

20 cm tall **Shape:** Linear

Construction: Stacked and piled Surface Cultural Material: None Subsurface Deposits: None

Condition: Good Function: Agriculture

Age: Pre-contact or early post-contact Significance Criteria: Criterion d Mitigation: Avoidance and protection

Site 8864 is a wall located in the lower area of a small valley which faces the sea to the south (see Figure 11). The wall measures 30 m in length, 1 m in width, and up to 50 cm in height (Figure 14). The orientation of the wall begins along a 150° heading and turns to 166° midway through. The wall was in excellent condition previous to the AIS excavation that was directed by SHPD, and the unexcavated sections remain well preserved and stable, and as a whole the site is now in good condition (Figure 15). Site 8864 runs along a dry (at the time of observation) drainage and may possibly be subject to flood events. It appears that the wall diverges from the drainage as it runs downhill, however. Being that this wall is at the bottom of the slope, the ground surface on the upslope side of the wall is higher than the downhill side – presumably from sheet wash filling the upslope side. The location and form vaguely suggest an 'auwai or irrigation ditch, except that it deviates in form from the classic 'auwai at its lower end where it dips sharply downhill (most 'auwai

maintain a more consistent and moderate downhill slope/run). Excavations did not yield any information as to the age or function of the site.

An alignment is located roughly 6 m away from the wall on the upslope side of the wall. The alignment appears to be in good condition, with a single course of rocks that lie roughly parallel to the wall (Figure 16). It measures 3.3 m long, 60 cm wide, and approximately 20 cm tall. The stones in the alignment are of a very uniform size and are low to the ground. The alignment terminates on its southeastern extent in a single stone set perpendicular to the rest of the alignment. The function of the alignment is unclear; it could be the remains of a small terrace.

Site 8864 retains integrity of location, design, setting, materials, workmanship, and feeling. It is currently in its original location and setting; its design remains the same; the original materials remain unchanged; workmanship of the site remains largely unchanged, and the site does convey its original time and place. The site does not retain integrity of association as it is not likely associated with a historic event or person. It is likely an agricultural site that dates to the pre-contact or early post-contact period.

SIHP 50-50-16-8865 Site Description

Formal Type: Mound **Size:** 7.65 by 5.25 m Shape: Circular

Construction: Stacked

Surface Cultural Material: Kipahulu Cattle Company kapu sign

Subsurface Deposits: N/A

Condition: Poor

Function: Ranching, possible cattle ramp

Age: Post-contact

Significance Criteria: Criterion d Mitigation: Avoidance and protection

Site 8865 is a sloping stone structure that appears to have been a ramp, possibly for loading cattle, in the south central portion of the project (see Figure 11). The structure encompasses an area of 7.65 by 5.25 m and is built using stacked construction (Figure 17). Larger facing stones are on the west, southwest, southeast, and east perimeter, while smaller stones are in the center where a large tree is now growing (Figure 18). Two large boulders leaning on the western perimeter of the ramp appear to be from the modern period, as indicated by the fractured stones caused by the impact that occurred when they were placed. These stones are likely the result of later machine clearing, such as previous bulldozing in the area that occurred during previous ownership of the property several decades ago. The site is in poor condition, although several segments of wall facing remain. The north side is collapsed, and the western section is collapsed in the center due to water action. Site 8865 may represent a historic cattle ramp associated with ranching in the area. The site retains integrity of location, design, setting, materials, workmanship, and feeling. It is currently in its original location and setting; its design remains the same; the original materials remain unchanged; workmanship of the site remains largely unchanged, and the site does convey its original time and place. The site does not retain integrity of association as it is not likely associated with a historic event or person.

One artifact was encountered throughout the survey and left in place. The artifact is a sign that was found in "Production Field 2" near Site 8865 printed with "KAPU / KEEP OUT / NO HUNTING / PLEASE! / KIPAHULU CATTLE CO." (Figure 19). The sign was in fair to poor condition, having been bent and shot through at some point. The wording on this sign would indicate that the Kipahulu



Figure 14. Plan view drawing of Site 8864.



Figure 15. Photo of Site 8864 facing south.



Figure 16. Photo of the alignment within Site 8864 facing south.

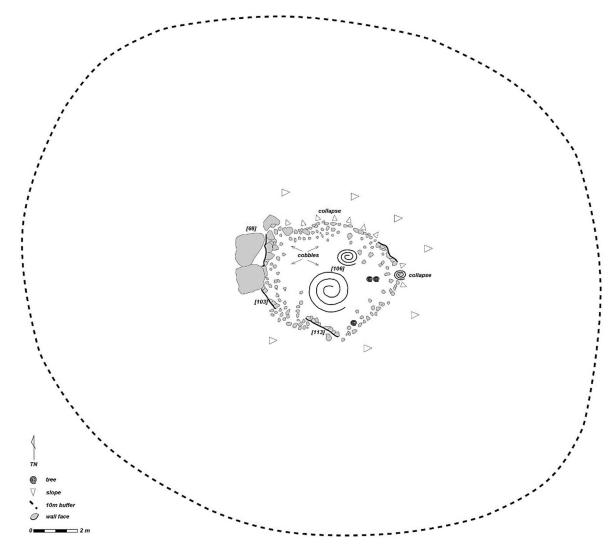


Figure 17. Plan view drawing of Site 8865.



Figure 18. Photo of Site 8865 facing northeast.



Figure 19. Kapu sign found near Site 8865.

Cattle Company was operating within the project area either under the Ulupalakua Ranch or possibly as a competitor. Unfortunately, aside from a brief mention during the 1972 Kīpahulu expedition up into the valley, the Kipahulu Cattle Company has little documentation (U.S. National Park Service 2018). In either case, the proximity of the sign to a nearby cattle ramp (Site 8865) would further confirm ranching activity throughout this portion of the project area in the early 20th century.

Summary of Findings

Surface survey of TMK: (2) 1-6-010:002 (por.) and (2) 1-6-010:010 in Kīpahulu identified three archaeological sites all within TMK: (2) 1-6-010:002. SIHP 50-50-16-8863 is a wall segment that runs for 30 m parallel to a deep stream. The low wall is composed of stones stacked one to three courses, in addition to piled construction and is associated with agriculture, possibly part of a precontact to early post-contact terrace system.

SIHP 50-50-16-8864 is a wall and alignment in the lower area of a small valley. The wall is 30 m long and is approximately 6 m away from the alignment which runs roughly parallel on the upslope side of the wall. Due to the form and location, the wall may be an 'auwai or irrigation ditch and it is

possible that the alignment is a remnant of a small terrace. The site likely dates to the pre-contact or early post-contact period.

SIHP 50-50-16-8865 is a mound measuring 7.65 by 5.25 m that appears to be a historic ramp, possibly for loading cattle. The site is in poor condition, although several segments of wall facing remain. Near the site a sign was found printed with "KAPU / KEEP OUT / NO HUNTING / PLEASE! / KIPAHULU CATTLE CO." The sign suggests that the Kipahulu Cattle Company had operations within the project area and further suggests ranching was prevalent in the vicinity.

Preservation Strategy

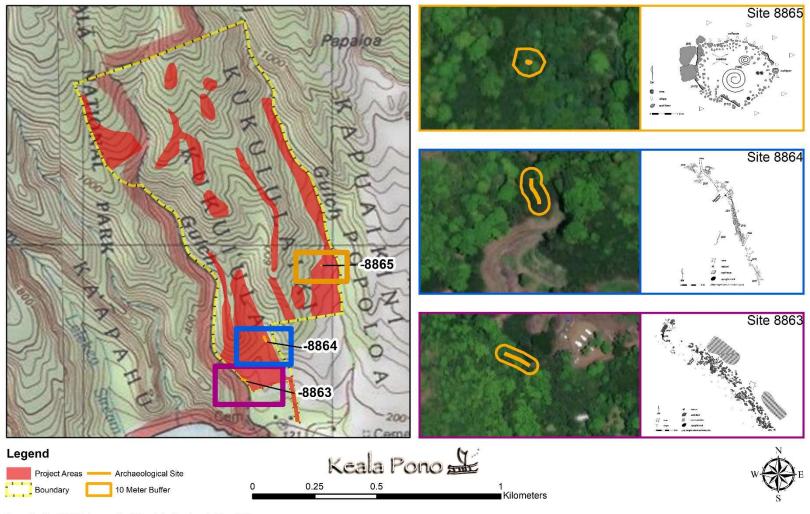
SIHP 50-50-16-8863, 50-50-16-8864, and 50-50-16-8865 are recommended for avoidance and protection (Pinsonneault et al. 2020). The three sites are significant under Criterion d of HAR §13-284-6(b). All three sites may yield further information on land use of the area. SIHP 8863 and 8864 on agriculture and SIHP 8865 on historic ranching in Kīpahulu.

The short-term preservation strategy is to preserve all three sites *as is*. A buffer zone of 10 m (32.8 ft.) will be established around the sites during construction activities (Figures 20 and 21). Construction fencing will be installed to mark the buffer zones before ground disturbing activity takes place. No construction will be allowed within this limit. The landowner will install the fencing and will provide photos to the SHPD. The locations of each historic property and their corresponding 10-m-wide buffer zones will be added to construction plans along with avoidance instructions that specify that no construction work, vehicular access, pedestrian access, or stockpiling will occur within the fenced 10 m-wide buffer areas.

The long-term strategy is avoidance of the sites as a whole and to leave them *as is*. Factors that might endanger the sites in the future include damage by future construction, by vegetation growth, by water such as the stream and/or ditch, or by unmonitored access. Although the construction fencing may be removed after completion of the project, the buffer zone will still be enforced, and no ground disturbing activity will be permitted within this zone. Vegetation clearance with hand tools and litter control measures will be performed within the buffer zone every six months (biannually) or more frequently as necessary. The SHPD will be consulted for any future work that could have the potential to impact the conservation of these historic properties.

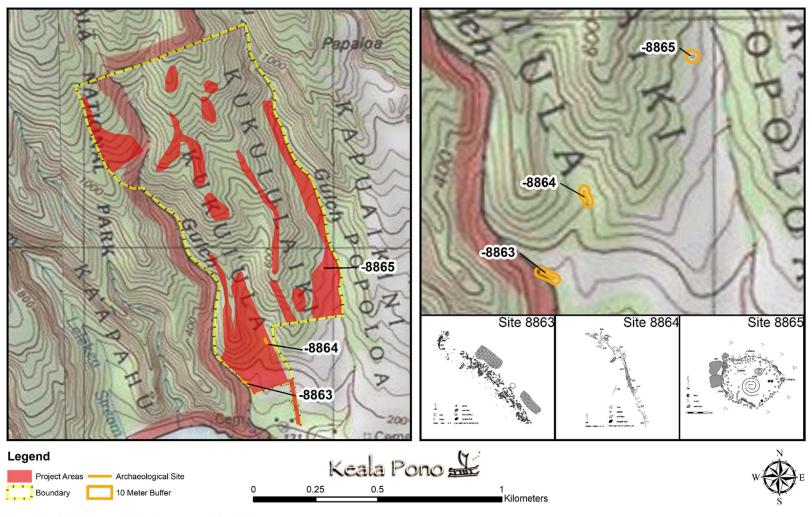
The preserve areas will be inspected by the landowner on a bi-annual basis. Any changes to the integrity of the historic properties will be reported to the SHPD. The SHPD is authorized to conduct inspections of the preserve areas without notice in order to assure compliance. The landowner should keep a photo log of site conditions and a record of when vegetation clearing and litter clean-up activities occur. The following protocol for vegetation clearing should be followed, as suggested by OHA:

- Vegetation within 3 feet of site features should avoid the use of large hand tools like machetes and pickaxes;
- Weeds are to be cut, not pulled in areas close to site features to prevent any inadvertent damage;
- Vegetation cuttings should be placed in designated piles away from site features. Clipped vegetation should not be dragged, but carried to avoid inadvertently displacing archaeological features;
- Greenwaste disposal or reuse (i.e, mulching) protocols should be in place prior to initiating any vegetation clearing activities;



Layer Credits: USGS Topographical Kapahulu Quadrangle Map 1997

Figure 20. Map showing Sites 8863, 8864, and 8865 buffer zones.



Layer Credits: USGS Topographical Kapahulu Quadrangle Map 1997

Figure 21. Map showing Sites 8863, 8864, and 8865 buffer zones.

• For the removal of large trees that pose a risk to safety or site, caution should be exercised to protect the site/features from damage. A certified arborist may be needed for the removal of large trees. Prior to any actual removal of large trees, SHPD should be consulted.

The buffer zone enforcement and maintenance shall be the responsibility of the landowner. There shall be no signage or interpretive elements. The sites will remain closed to the public, with access arranged through the landowner. The landowner should consider allowing cultural use of the sites if Native Hawaiians should come forward in the future or be identified as part of any additional outreach efforts. Access will be provided by written requests to the landowner, with entrance by confirmed appointment only. Requests should be made to:

Imperium-Kipahulu Kai, LP Rosewood Ct., 2101 Cedar Springs, Suite 1050 Dallas, Texas 75201

SUMMARY AND CONCLUSION

Keala Pono Archaeological Consulting has prepared this preservation plan for Sites 50-50-16-8863, 50-50-16-8864, and 50-50-16-8865 located on TMK: (2) 1-6-010:002 (por.) in Kukui'ulaiki Ahupua'a, Kīpahulu District on the island of Maui. Keala Pono conducted an archaeological inventory survey on the parcel to identify and document historic properties that may be affected by construction for agricultural purposes (Pinsonneault et al. 2020). A total of three archaeological sites were recorded in the 28 ha (70 ac.) survey area. All three sites will be preserved in place, with a 10 m wide buffer zone established around the perimeter of each site (Table 3). Construction fencing will be installed to mark the buffer zones, and the fencing will be in place before construction begins on the property. No construction activity will be allowed within the buffer zones. The fencing may be removed after construction, although the buffer zone will be enforced for the long term, with no ground disturbance to occur within the buffer. Vegetation clearance will be performed at least every six months within the buffer zone.

Table 3. Preservation Methods for Sites

Site Short Term Preservation		Long Term Preservation	
50-50-16-8863	Avoidance and Protection	Avoidance and Protection	
50-50-16-8864	Avoidance and Protection	Avoidance and Protection	
50-50-16-8865	Avoidance and Protection	Avoidance and Protection	

GLOSSARY

ali'i Chief, chiefess, monarch.

ali'i nui High chief.

'ama'u The endemic ferns of the genus Sadleria. In traditional Hawai'i, the trunk was eaten during

times of famine, leaves were used as mulch, for dryland taro, stems were woven and used as sizing for tapa. One species was utilized for pillow stuffing. The 'ama'u fern was also one of

the forms that the pig god Kamapua'a could take.

'ama'uma'u The young 'ama'u fern, or many 'ama'u ferns.

'āpana Piece, slice, section, part, land segment, lot, district.

'aumakua Family or personal gods. The plural form of the word is 'aumākua.

'auwai Ditch, often for irrigated agriculture.

hālau Meeting house for hula instruction or long house for canoes.

hau The indigenous tree *Hibiscus tiliaceous*, which had many uses in traditional Hawai'i. Sandals

were fashioned from the bark and cordage was made from fibers. Wood was shaped into net

floats, canoe booms, and various sports equipment and flowers were used medicinally.

heiau Place of worship and ritual in traditional Hawai'i.

'ili Traditional land division, usually a subdivision of an ahupua'a.

'ili kūpono An 'ili within an ahupua'a that was nearly independent. Tribute was paid to the ruling chief

rather than the chief of the ahupua'a, and when an ahupua'a changed hands, the 'ili kūpono

were not transferred to the new ruler.

kalana A division of land smaller in size than a moku, or district.

kalo The Polynesian-introduced *Colocasia esculenta*, or taro, the staple of the traditional Hawaiian

diet.

kapu Taboo, prohibited, forbidden.

ki'i Image, drawing, idol, petroglyph.

koʻa Fishing shrine.

koa Acacia koa, the largest of the native forest trees, prized for its wood, traditionally fashioned

into canoes, surfboards, and calabashes.

konohiki The overseer of an ahupua'a ranked below a chief; land or fishing rights under control of the

konohiki; such rights are sometimes called konohiki rights.

kukui The candlenut tree, or *Aleurites moluccana*, the nuts of which were eaten as a relish and used

for lamp fuel in traditional times.

kuleana Right, title, property, portion, responsibility, jurisdiction, authority, interest, claim, ownership.

kū'ula A stone god used to attract fish, an altar near the sea, or a hut where fishing gear was kept with

kū'ula images to invoke their power.

lawai'a Fisherman; to catch fish.

The brown seaweeds (*Dictyopteris plagiogramma* and *D. australis*), highly prized as a delicacy.

lo'i, lo'i kalo An irrigated terrace or set of terraces for the cultivation of taro.

Māhele The 1848 division of land.

mango Trees of the genus *Mangifera*, introduced to Hawai'i in the 19th Century and well known for

their edible fruit.

mōʻī King.

moku District, island.

mo'olelo A story, myth, history, tradition, legend, or record.

'ōlelo no'eau Proverb, wise saying, traditional saying.

o'opu Fish of the families *Eleotridae*, *Gobiidae*, and *Bleniidae*.

'ōpae Shrimp.

post-Contact After A.D. 1778 and the first written records of the Hawaiian Islands made by Captain James

Cook and his crew.

pre-Contact Prior to A.D. 1778 and the first written records of the Hawaiian Islands made by Captain James

Cook and his crew.

strawberry guava The invasive tree Psidium cattleianum, originating in Brazil and brought to Hawai'i in

1825. Fruit are edible and are used in juice, and the tree is used as an ornamental and for

firewood.

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APPENDIX: SHPD LETTERS FOR TMK: (2) 1-6-010:002

DAVID Y. IGE OVERNOR O





STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION KAKUHIHEWA BUILDING 601 KAMOKILA BLVD, STE 555 KAPOLEI, HAWAII 96707

July 30, 2018

Jason Hew Maui SWCD Conservation Specialist USDA-NRCS-Kahului Service Center 77 Hookele St. Suite 202 Kahului, HI 96732 Jason.Hew@hi.nacdnet.net

Dear Mr. Hew,

SUBJECT: Chapter 6E-42 Historic Preservation Review -

Imperium Kipahulu Kai

Kukui'ulaiki Ahupua'a, Kipahulu District, Island of Maui

TMK: (2) 1-6-010:002

Thank you for contacting the State Historic Preservation Division (SHPD) for review of the subject project. The SHPD received the submittal on July 19, 2018.

A conservation plan for a tea and coconut farm in Kipahulu has been developed according to Natural Resources Conservation Service (NRCS) standards and specifications. Approximately 44.3 acres are slated to be grubbed for the agricultural operation. There are twelve non-contiguous fields that make up the project area. The fields range in size from 0.5 acres to 12.7 acres. The proposed project will use heavy machinery to remove and mulch trees and woody vegetation. The mulch will be applied to the ground surface. Areas that are cleared will have a permanent vegetation established for long term erosion control. Tea and coconut plants will be planted in these areas.

A search of SHPD records indicate there has not been an archaeological inventory survey (AIS) completed on this parcel. A reconnaissance survey performed by Pacific Consulting Services, Inc., identified seven walls, one modified outcrop, and one agricultural terrace in the project area. Based on the results of the reconnaissance survey, an evaluation of significance for these historic properties has been made. The sites have not been given State Inventory of Historic Places (SIHP) numbers. The Maui Soil & Water Conservation Districts (SWCD) has made a determination of "effect, with agreed upon mitigation commitments," pursuant to §6E-42 HRS.

The SHPD does not have enough information to agree with the effect determination made by Maui SWCD. Pursuant to HAR §13-284, SHPD requests that an archaeological inventory survey (AIS) with a subsurface testing component be conducted and that an AIS report meeting the requirements of HAR §13-276-5 be submitted to SHPD for review and acceptance prior to initiation of project related work.

The AIS shall be conducted by a qualified archaeologist to sufficiently identify and document any archaeological historic properties that may be present, to assess their significance, to determine the potential impacts of this project on any identified archaeological historic properties, and to identify and ensure appropriate mitigation is implemented, if needed.

SHPD requests the project proponent and archaeological firm consult with our office regarding an appropriate testing strategy prior to initiation of the AIS.

SUZANNE D. CASE CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

JEFFREY T. PEARSON, P.E. DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
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CONSERVATION AND RESOURCES EMPORCEMENT ENGINEERING
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERV ATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND

STATE PARKS

IN REPLY REFER TO: Log No. 2018.01719 Doc No. 1807MBF19 Archaeology

Mr. Hew July 30, 2018 Page 2

Maui SWCD is the agency of record for this project. Please retain a copy of this letter for your administrative record.

SHPD will notify SWCD when the required reports and/or plans have been reviewed and accepted and project work may proceed.

You may contact Dr. Matthew Barker Fariss at <u>matthew.b.fariss@hawaii.gov</u>, or at (808) 243-4626, for any questions regarding this letter.

Aloha,

Alan Downer

Alan S. Downer, PhD Administrator, State Historic Preservation Division Deputy State Historic Preservation Officer

cc: Steve Schattner Revi Boehrs

<u>sschattner@imperium-holdings.com</u>

<u>RBoehrs@imperium-holdings.com</u>

DAVID Y. IGE GOVERNOR OF





STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION KAKUHIHEWA BUILDING 601 KAMOKILA BLVD., STE 555 KAPOLEI, HI 96707

April 30, 2020

Jason Hew Maui SWCD Conservation Specialist USDA-NRCS-Kahului Service Center 77 Hookele St. Suite 202 Kahului, HI 96732 Jason.Hew@hi.nacdnet.net

Dear Jason Hew:

SUBJECT: Chapter 6E-42 Historic Preservation Review -

Archaeological Inventory Survey - Imperium Kipahulu Kai Grading and Grubbing Project

Kukui'ulaiki Ahupua'a, Kipahulu District, Island of Maui

TMK: (2) 1-6-010:002 por. and 010

This letter provides the State Historic Preservation Division's (SHPD's) review of the subject archaeological report titled, Revised Draft-Archaeological Inventory Survey in Kukui'ulaiki Ahupua'a, Kīpahulu District, Island of Maui, Hawai'i, TMK: (2) 1-6-010:002 (por.) and (2) 1-6-010:010 (Pinsonneault et al. 2020). SHPD previously reviewed the project and requested an archaeological inventory survey (AIS) in a letter dated July 30, 2018 (Log No. 2018.01719, Doc. No. 1807MBF19). SHPD received the subject AIS report on August 2, 2019, requested revisions, and received the revised report via email on April 28, 2020 (Windy McElroy [Keala Pono Archaeological Consulting, LLC] to Andrew McCallister [SHPD]). The project is on private property owned by Imperium Kipahulu Kai, LP and requires approval from the Maui Soil & Water Conservation District (SWCD).

Imperium Kipahulu Kai, LP proposes a conservation plan for a tea and coconut farm within a 70-acre project area on the subject property. The project area includes twelve non-contiguous fields ranging in size from 0.5 acre to 12.7 acres, where of grading and grubbing work will be conducted. Heavy machinery will be used to grub vegetation on the property and the mulch will be applied to the ground surface throughout the project area. Permanent vegetation including tea and coconut plants will be planted in grubbed areas for long term erosion control. SHPD reviewed the project in a letter dated July 30, 2018 (Log No. 2018.01719, Doc. No. 1807MBF19). In the letter, SHPD requested an AIS and indicated the project proponent and archaeological firm consult should consult with our office regarding an appropriate testing strategy prior to initiation of the AIS.

Keala Pono Archaeological Consulting, LLC produced the subject AIS report for Imperium Kipahulu Kai LP. SHPD reviewed and approved the testing strategy for the AIS during in-person consultation and via email between January 14 and May 8, 2019 (Windy McElroy to Jane Allen [SHPD]). The AIS testing included a pedestrian survey of the project area with transects spaced 5 m apart. The Subsurface testing portion of the AIS included seven test units; four were excavated by hand and three with an excavator machine. The report includes a summary of land use history, previous archaeology, documentation of soil profiles in the project area, documentation of three historic properties identified during the AIS (Table 1), an assessment of the project's impacts on these historic properties, and mitigation recommendations for addressing impacts to the historic properties.

Table 1: Identified significant historic properties

SIHP#	Feature Type	Function	Temporal Association	Recommendation
50-50-16-8863	Rock wall	Agriculture	Pre/early-post contact	Preservation
50-50-16-8864	Rock wall with alignment	Agriculture	Pre/early-post contact	Preservation
50-50-16-8865	Mound	Agriculture	Post contact	Preservation

ROBERT K. MASUDA

M. KALEO MANUEL

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HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

IN REPLY REFER TO: Log No.: 2019.01719 Doc. No.: 2004AM16 Archaeology

Jason Hew 4/30/20 Page 2

The pedestrian survey portion of the AIS identified three significant historic properties; SIHP # 50-50-16-8863 is a pre/early post contact stacked rock wall; SHIP # 50-50-16-8864 8863 is a pre/early post contact stacked rock wall with a stone alignment; and SIHP # 50-50-16-8865 is a mound with stack stone retainment walls interpreted as a historic cattle ramp. Keala Pono Archaeological Consulting, LLC determined the historic properties all retain integrity of location, design, setting, materials, workmanship, and feeling and assessed them as significant under criterion d for their potential to provide additional information on the development of agriculture and historic ranching in Kīpahulu. The subsurface testing produced negative results, however the AIS report includes to-scale profiles drawings of the soil stratigraphy, soil descriptions using USDA attributes and terminology with Munsell colors, and the locations of the test units are plotted on a USGS quadrangle map.

The AIS results support an HRS 6E effect determination of "Effect, with agreed upon mitigation commitments." The report recommends mitigation in the form of preservation for SIHP #'s 50-50-16-8863, 50-50-16-8864, and 50-50-16-8865. **SHPD agrees** with the project effect determination and mitigation in the form of preservation.

This AIS report satisfies the minimum requirements of HAR §13-276-5. It is accepted. Please send two hard copies of the document, clearly marked FINAL, along with a text searchable PDF version of the report, to the Kapolei SHPD office, attention SHPD Library, and another copy to <u>Lehua.K.Soares@hawaii.gov</u>.

Steps (1) through (4) of the six-step historic-preservation review process set forth by HAR §13-284-3 have now been completed. HAR §13-284-7 stipulates that, when a project will result in "Effect, with agreed upon mitigation commitments," detailed mitigation plans shall be developed for SHPD's review and acceptance before project work begins. Step 5 consists of preparation of the mitigation plan. Step 6 comprises verification that mitigation has been completed satisfactorily.

SHPD looks forward to receiving an archaeological preservation plan that meets the requirements of HAR §13-277 for review and acceptance prior to the initiation of the project.

SHPD shall notify the SWCD when the archaeological preservation plan is accepted, and project initiation process may proceed.

Please contact Andrew McCallister, Historic Preservation Archaeologist IV, at andrew.mccallister@hawaii.gov or at (808) 692-8015 for matters regarding archaeological resources or this letter.

Aloha,

Alan Downer

Alan S. Downer, PhD Administrator, State Historic Preservation Division Deputy State Historic Preservation Officer

cc: Windy McElroy, Keala Pono Archaeological Consulting, LLC, wkm@keala-pono.com