



APPENDIX F
Archaeological Inventory Survey dated March 2014,
revised August 26, 2015

**AN ARCHAEOLOGICAL INVENTORY SURVEY
FOR ON- AND OFF-SITE IMPROVEMENTS ASSOCIATED
WITH THE PROPOSED PIILANI PROMENADE
PROJECT, AND UPDATED RECOMMENDATIONS
FOR SITES IDENTIFIED IN A
1994 ARCHAEOLOGICAL INVENTORY SURVEY,
KA'ONO'ULU *AHUPUA'A*,
WAILUKU AND MAKAWAO DISTRICTS,
ISLAND OF MAUI
(ON-SITE TMK (2) 3-9-001: 16, 169-174, AND OFF-SITE TMK (2) 2-2-
002: 016, 077 AND 082, (2) 3-9-001: 148, (2) 3-9-048: 122)**

Prepared on behalf of:

**Mr. Robert Poynor,
Vice President
Sarofim Realty Advisors**

Prepared by:

**Xamanek Researches, LLC
Pukalani, Maui**

Erik M. Fredericksen

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ABSTRACT

The project area is located within Ka'ono'ulu *Ahupua'a*, Makawao and Wailuku Districts, Maui. The proposed 74.871-acre Piilani Promenade project is subject to a pending motion to amend before the State Land Use Commission. For the purposes of the Environmental Impact Statement review process this archaeological inventory survey is using a total Area of Potential Effect (APE) of 101.658 acres of land. Effected on-site TMKs include: TMK (2) 3-9-001: 16, 169-174. Effected off-site TMKs include TMK (2) 2-2-002: 016, 077 AND 082, (2) 3-9-001: 148, and (2) 3-9-048: 122).

Xamanek Researches previously conducted an archaeological inventory survey of a c. 88-acre portion of the proposed project area in 1994 (formerly TMK: (2) 3-9-001: 16, and (2) 2-2-02: Portion of 15). About 14 acres of land that had not been previously surveyed at the inventory survey level will be used for proposed off-site improvements associated with the Piilani Promenade development. The proposed off-site improvements include a water storage tank facility, access roads, and improvements to the Piilani Highway.

Xamanek Researches LLC carried out an archaeological survey of the proposed on- and off-site improvements project area in January and February 2014, with follow-up work carried out in the drier months of July and August 2015. Previous bulldozing activities, prior ranching and more recent farming operations, road construction activities, as well as erosion have impacted portions of the project area. No significant material culture remains were located on the c. 14-acre off-site improvements portion of the proposed project area during archaeological fieldwork. One new site was identified during our July-August 2015 fieldwork on Parcel 16 of the on-site improvements project area. Site 50-50-10-8266 is interpreted as a possible precontact temporary habitation area, and qualifies for significance under Criterion "d" for its information content. Data recovery is the recommended mitigation for this low rock enclosure.

The 1994 archaeological inventory survey identified a total of 20 archaeological sites (Fredericksen, et. al, 1994). These historic properties were designated Sites 50-50-10-3727 through 3746. Given the time that has elapsed since the 1994 inventory survey of the original 88-acre project area, a re-evaluation of the previously identified sites was conducted in the winter of 2014 and in the drier summer of 2015. Several sites were found to have been impacted, and 2 (Sites 3734 and 3739) essentially destroyed by post-1994 bulldozing activities on the on-site portion of the project area (Parcel 16). While the significance assessments for remaining Sites 3727-3733, 3735-3738, and 3740-3745 remain the same (all Criterion "d"), data recovery is now the recommended mitigation for several of these sites.

A forthcoming data recovery plan will be developed for Sites 3727, 3728, 3735, 3736, 3741-3745, as well as newly identified Site 8266. In addition, per input from the SHPD Maui office, a project specific archaeological monitoring plan will be prepared for the entire 101.658-acre APE for on-site and off-site improvements for the proposed Piilani Promenade project.

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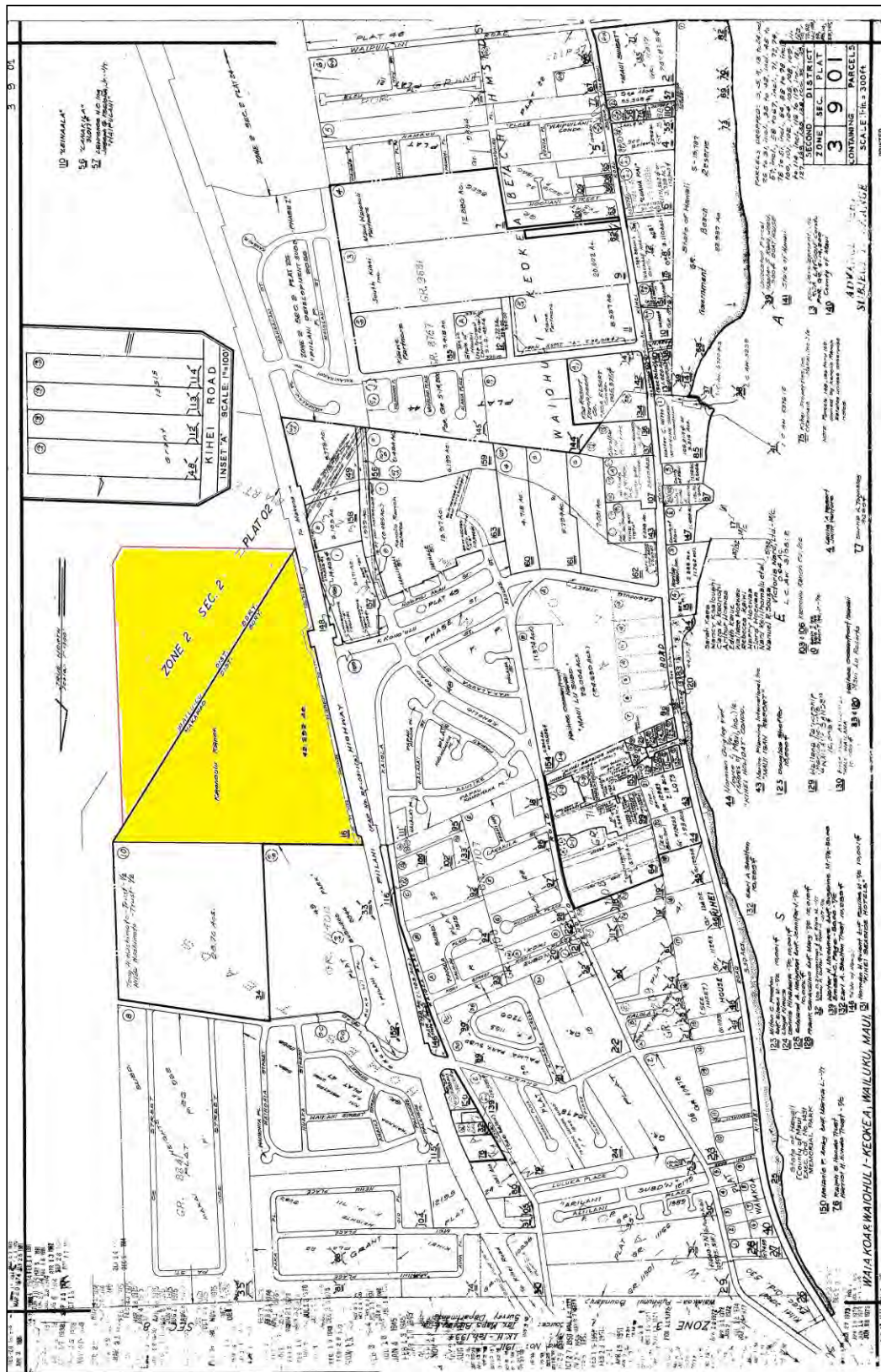
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Figure 1: General project area location (on-site depicted in red, off-site in green), Kihei.



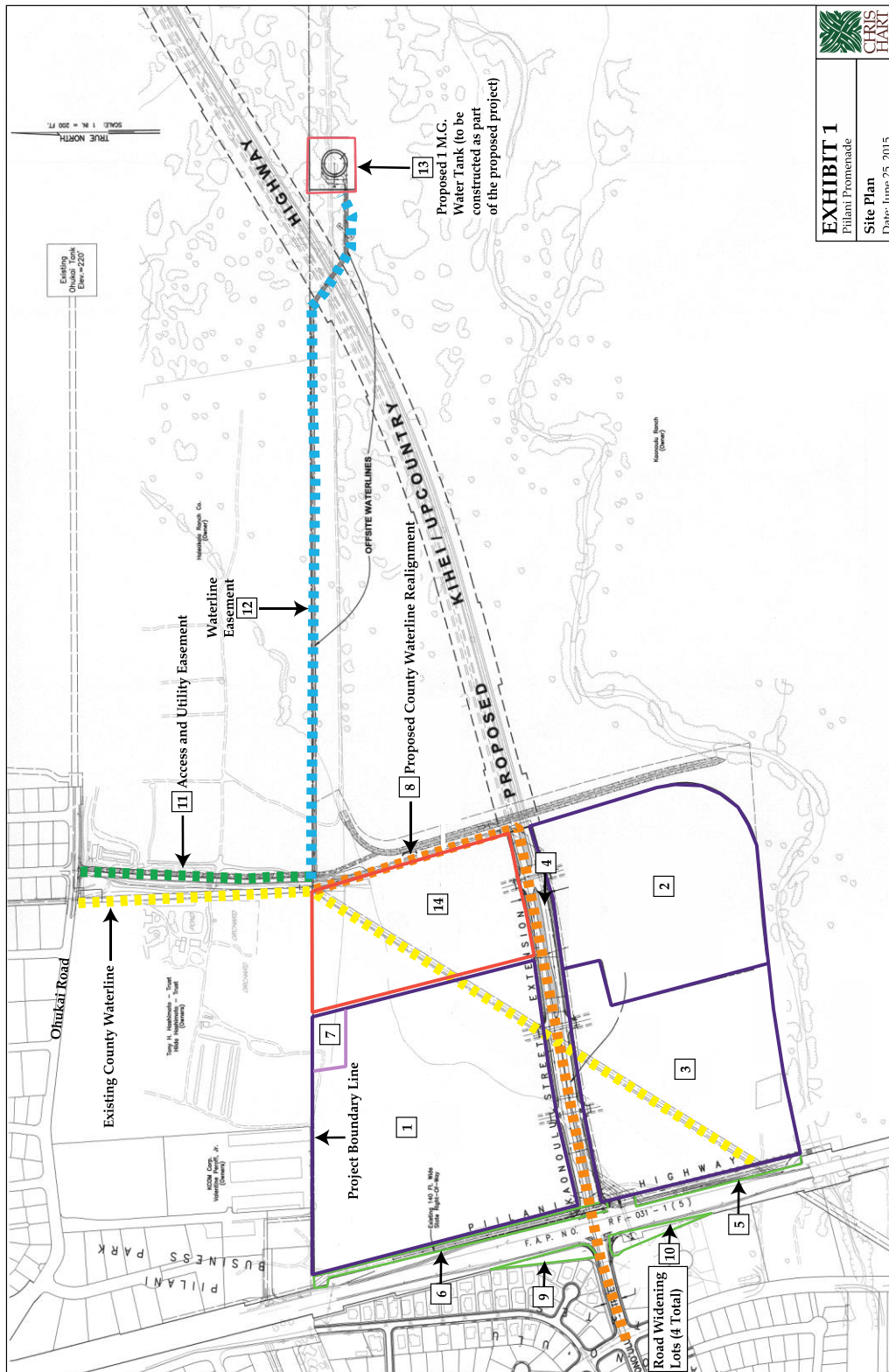


Figure 3: Plan view of the proposed Piilani Promenade project area, including the COM waterline easement (in yellow) that crosses along the Makawao and Wailuku District line.



Figure 4: Satellite photo of general on-site project area (in red) and off-site project area (in yellow). Shovel Tests 1-3 at water tank area depicted in green.

INTRODUCTION

Mr. Charles Jencks, representative for the Piilani Promenade project, contacted Erik Fredericksen, Xamanek Researches LLC, in 2013 about a proposed development in Kihei, Maui (Figures 1-4 and 8). The proposed project included a parcel that had been previously surveyed at the inventory level in 1994 (Fredericksen, et al., 1994). In addition, a c. 14-acre portion of land that had not been surveyed was proposed for off-site improvements. The proposed project is located in Ka'ono'ulu *ahupua'a*, Makawao and Wailuku Districts, Maui (see Figure 8). The current proposed development has a different landowner and is known as the Piilani Promenade. Xamanek Researches previously conducted an archaeological inventory survey of the c. 88-acre parcel in 1994 (TMK: (2) 3-9-001: 16, and (2) 2-2-02: Portion of 15). The proposed 74.871-acre Piilani Promenade project is subject to a pending motion to amend before the State Land Use Commission. For the purposes of the Environmental Impact Statement review process this archaeological inventory survey is using a total Area of Potential Effect (APE) of 101.658 acres of land. This total includes the Piilani Promenade project as proposed, the adjacent proposed Honua'ula affordable housing project and associated off-site infrastructure easements. Effected on-site TMKs include TMK (2) 3-9-001: 16, and 169-174. Effected off-site TMKs include TMK (2) 2-2-002: 016, 077 and 082, (2) 3-9-001: 148, and (2) 3-9-048: 122). Refer to Table 6 for specific information regarding on-site and off-site TMKs. Lot 2-B, a 13.129-acre portion of the original 88-acre property covered in the 1994 AIS, is now owned by a separate entity, Honua'ula Partners, LLC (Figure 8). This portion of the original 88-acre property will be developed for an affordable housing project, and is not part of the proposed Piilani Promenade development, but is included in the EIS process and the current archaeological inventory survey.

About 14 acres of land that had not been previously surveyed at the inventory survey level will be used for proposed off-site improvements associated with the Piilani Promenade development. The proposed off-site improvements include a 1.0 MG water storage tank facility, access roads, and improvements to the Piilani Highway. These TMK's include (2) 2-2-002: 016, 077 and 082, (2) 3-9-001: 148, and (2) 3-9-048: 122. Xamanek Researches LLC carried out fieldwork for the proposed off-site improvements in January and February 2014. Previous bulldozing activities, as well as prior ranching and more recent farming activities, and road construction activities appear to have impacted this land. No significant material culture remains were encountered during our survey of the off-site improvements portion of the APE in 2014.

As noted above, the 1994 AIS covered an 88-acre portion of land, c. 75 acres of which are to be included in the proposed development, and c. 13 acres that will be developed for an affordable housing project (by Honua'ula, LLC). The 1994 inventory

survey identified a total of 20 archaeological sites, all of which are located within the proposed Piilani Promenade development. These historic properties were designated SIHP No. 50-50-10-3727 through 3746. The various sites included stone piles and cairns (8), enclosures (2), parallel alignments (3), erosion containment wall segments (1), surface scatters (5), and a petroglyph on a boulder. Some of the stone piles, the alignments and one of the enclosures appeared to be associated with previous military activities in the area. The surface scatters and the petroglyph were interpreted as possible precontact features. The erosion containment wall segments were interpreted as ranch era features. Portions of the project area were found to have previously been impacted by bulldozing activities, likely associated with military and ranching activities, and the construction of a County of Maui waterline (completed in 1979). The previous installation of this large (36-inch diameter) County of Maui Central Maui waterline was found to have impacted a portion of the project area along the boundary between Makawao and Wailuku Districts.

All of the sites identified in the 1994 AIS qualified for significance, because of their information content (Criterion “d”). The petroglyph (Site 3746) also qualified for cultural significance under Criterion “e”. The 1994 report recommended preservation for the Site 3746 petroglyph, and the State Historic Preservation Division concurred that no additional work was needed for the remaining sites. At this time there was no recommendation for archaeological monitoring. A prior landowner removed the petroglyph/boulder and transported it to a location in upcountry Kula.

Given the time that has elapsed since the 1994 inventory survey of the original c. 88-acre parcel was carried out, a re-evaluation of mitigation treatment for the previously identified sites was conducted during the winter of 2014, and the project area was again examined in the drier months of July and August 2015. Our most recent fieldwork in 2015 was in response to comments from Maui Cultural Lands regarding several previously identified sites that were not relocated during our 2014 fieldwork. One new site, an enclosure (Site 8266) was located as a result of our 2015 fieldwork. In addition, the status of individual previously identified sites was updated. Results are included in this revised inventory survey report.

The following report presents the results of our current inventory survey for the proposed on-site and off-site improvements for the Piilani Promenade development. This report has been prepared on behalf of the Piilani Promenade development per the direction of Mr. Charles Jencks.

STUDY AREA

The project area is located in Kihei, Makawao and Wailuku Districts, within Ka'ono'ulu *Ahupua'a*. Pi'ilani Highway borders the study area on the west, Monsanto leased land borders the north, and east. Kulanihakoi Gulch borders the property on the south. The Kihei Commercial Center is located to the north of the project area, as are agricultural land and a commercial nursery. Much of the land surrounding the project area have been previously disturbed by farming, ranching, road construction, and industrial use.

Surface visibility on the study area at the time of the original field visit and project testing during the 1994 inventory survey was fair to good. At the time of the 2014 fieldwork, Kihei had experienced heavy rains prior to the survey and vegetation growth was heavy. Subsequent follow-up work was undertaken in July and August 2015, when the project area was quite dry, and visibility was generally fair to good. Observed vegetation was dominated by non-native grass species (primarily buffelgrass). In addition, a few scattered *kiawe* (*Prosopis pallida*) trees (young), as well as *koa haole* (*Leucaena leucocephala*) shrubs and various annual weeds were also noted. Two pioneering native plants species, *'ilima* (*Sida fallax*) and *'uhaloa* (*Waltheria americana*), were noted in low quantities in some open portions of this previously disturbed parcel. The project lies an estimated 600 m inland from the Kihei coastline.

This arid portion of Maui is typical of the inland Kihei region, with soil components primarily composed of aeolian sands, silty clay, and weathered parent material and shallow bedrock. This dry region receives an average annual rainfall of c. 10 to 15 inches.

As previously noted, the proposed development is located in Makawao and Wailuku Districts, Maui. The approximate elevation of the on- and off-site project area ranges from c. 30 ft. to 234 ft. AMSL. The project area presently contains large amounts of imported fill (including boulders), a large sand stockpile, a base yard, and informally deposited fill/debris. The off-site water storage tank is partially within an area that Monsanto has cultivated over a number of years. The other proposed off-site improvements are located in previously disturbed areas, including the road shoulder area *makai* (west) of Piilani Highway. Land clearing associated with the relatively recent installation of a cattle fence has impacted portions of the overall project area as well (primarily Parcel 16).

BACKGROUND RESEARCH

Pre-contact period/Early Post-contact Period

The Piilani Promenade project area is located within Ka'ono'ulu *Ahupua'a*, in the modern Districts of Wailuku and Makawao. The traditional district of Kula included all of Ka'ono'ulu *Ahupua'a*. Given that the project area is situated within the traditional district of Kula; most of the background information included is reflective of the subject project area's location. The traditional district of Kula was known for the propagation of *'uala* or sweet potato in prehistoric times.

The "potatoes were planted in crumbling lava with humus, as on eastern Maui and in Kona....the soil is softened and heaped carelessly in little pockets and patches using favorable spots on slopes.... rocky lands in the olden days were walled up all around with the big and small stones of the patch until there was a wall about 2 feet high" (Handy and Handy, 1972).

Kula had the combination of good volcanic soil, cool temperatures, arid climate and frequent cloud cover that provided the ideal growing environment for the sweet potato.

The archaeological evidence supports the claims of a considerable population of early Hawaiians in the Kula area. Walker (1931) recorded many *heiau* in the Makawao district, which includes Ka'ono'ulu, around the 2000-3000 ft. elevation indicating a large level of human activity. The slopes of Haleakala provided wood for fuel, shelter and canoe building. There were also a large variety of plants used to make medicines and native birds, which were caught for a variety of uses. Residents of Kula traveled down slope to the "coastal zone" in order to exploit the ocean resources (Cordy, 1977). This along with the resources of the upper Kula area made it possible for habitation on the slopes of Haleakala.

The slopes of Haleakala were also well suited for raising pigs. The abundance of *'uala* was ideal for feeding the pigs. Pigs were a supplementary food source, used as sacrifices in elaborate ceremonies and collected as taxes from chiefs. Later, pigs were provided to the sailors entering Lahaina to replenish their food supply.

Post-contact Period/Early Historic Period

The traditional district of Kula was a relatively minor political territory under the jurisdiction of the West Maui chiefs. It is an arid region with no perennial streams, located on the western slope of Haleakala Crater. The primary resources of the upland area of Kula district were dry forest products, and dry land agricultural products, e.g. sweet potatoes (Kolb, July 1997, p. 25). Within this larger traditional land division (*moku*) there are several long, narrow *ahupua`a* that stretch to the ocean shore (See Figures 5 and 6).

While the bulk of Ka'ono'ulu *Ahupua`a* lies within Makawao District (traditional District of Kula), a small portion of this land unit is located in Wailuku District. Nearly the entire *ahupua`a* of Ka'ono'ulu was included in Land Commission Award 3237, to H. Hewahewa, and consisted of 5715 acres. The current project area is located within Ka'ono'ulu *Ahupu`a*, and is a part of a portion of Royal Patent Number 7447, Land Commission Award Number 3237 part 2 also to H. Hewahewa.

The nearby *ahupua`a* of Keokea became part of the Hawaii Government Lands during the Mahele of 1848. Perusal of the Land Commission Awards data reveal that no *kuleana* were awarded in the coastal portion of the *ahupua`a*. A total of 52 claims were recorded, all of which were in the traditional Kula District. Of these claims, more than half (28) were not awarded (Waihona 'Aina data base). Awarded LCA's were for house lots, and/or garden plots (*kula* lands). A number of claimants lived in Wailuku and Waikapu, where they had primary claims, their claims in Keokea being subsidiary claims on small farm plots. All of the awarded plots are located above the 750-foot contour line, on both sides of the Old Government road that follows the general route of the *alanui apuni* (See Figure 6) [Kolb et al., 1997, pp. 50-60].

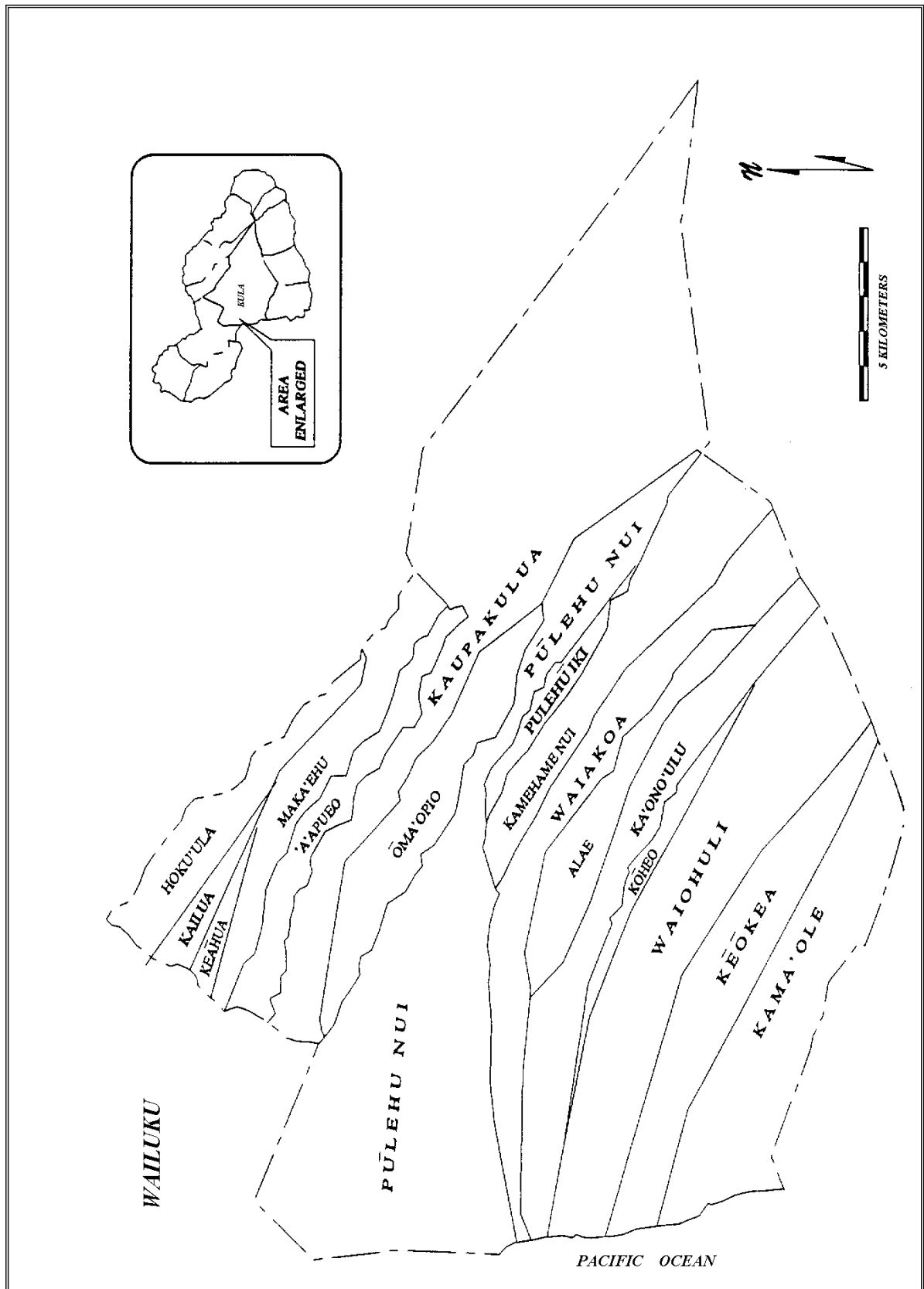


Figure 5: Map showing the Kula lands (Kolb et al., 1997, p. 24).

Kula land is described by Handy and Handy (1972, pg. 510) as:

“...open country, or plain, as distinct from valley or stream bottom, and has long been used as a term to distinguish between dry, or “kula land” and “wet-taro land”. This is an essential characteristic of Kula, the central plain of Maui which is practically devoid of streams. ...Kula was widely famous for its sweet-potato plantations. ‘Uala was the staple of life here.”

By the 1840s, the increased number of whaling ships anchoring off Maui shores created a substantial market for produce such as sweet and Irish potatoes, which grew well in the Kula region. Irish potatoes were coveted more highly, however, and became of greater importance in the produce trade. They were transported from the Kula fields to the shore, where they were often sold directly to ships that called at Kalepolepo. From there they were shipped to Lahaina, where the bulk of the whaling fleet moored.

The California Gold Rush began in 1848, and resulted in a potato “boom” on Maui that began in the fall of 1849. Captain John Halstead established a trading post¹ in 1849 in the village of Kalepolepo, in order to take advantage of this commercial activity. He built a large Pennsylvania Dutch-style, 3-story residence next to the south wall of Kalepolepo Fishpond. His trading station was located on the first floor of this structure. It was known locally as the *Koa House*. Halstead’s large prominent house stood as a landmark for nearly one hundred years² —and was visited by Kamehamehas III, IV and V between 1850 and 1870.

Kuykendall (1938, p. 313) refers to an article in the Polynesian in November of 1849:

“The call for [potatoes] is loud and pressing, as some vessels bound for California have taken as many as 1,000 barrels each. The price is high, and the probability is that the market cannot be supplied this autumn. Kula, however, is full of people...preparing the ground for planting, so that if the demand from California shall be urgent next spring as it is now the people will reap a rich harvest.”

The coastal portions of Ka’ono’ulu, Keokea and Waiohuli *Ahupua’a* appear to have been relatively unaffected by the upland “potato boom”, which lasted only a few years. For the most part, the coastal area was fairly sparsely, and occupied by people who primarily concentrated on the exploitation of marine resources.

¹ Captain Halstead arrived in Lahaina from New York in 1838, and married the chiefess Kauwikilani Davis, granddaughter of Isaac Davis, Kamehameha I’s advisor.

² In 1946 it was abandoned and was leased by the Kihei Yacht Club, the members of which tried to burn it down because it was so unsafe. Several attempts failed, but eventually the Maui Fire Department was called in and succeeded in reducing it to ashes in August of 1946 (Kolb, 1997, p. 70).

Despite the relatively low population reported living in the overall Kihei area, the trading village of Kalepolepo (to the west) represented a concentration of people, and it was felt that they were in need of spiritual guidance. To this effect, construction of a small stone church was begun in 1843 at Kalepolepo near the trading post, under the direction of David Malo.

David Malo was the son of a soldier in the army of Kamehameha I, and was born in 1793 on the Big Island. He later moved to Lahaina in the 1820s, where he came under the influence of Reverend William Richards and was converted to Christianity. With the establishment of Lahainaluna high school in 1831, David Malo enthusiastically enrolled as one of its first students. In 1843 he was licensed to the Christian ministry, and assigned to a congregation in Kalepolepo. He began construction of Kilolani Church, which continued until 1852. It was completed shortly before the death of David Malo on October 21, 1853. Following his death, his Kilolani congregation dispersed, and never met again at Kalepolepo. A fire is said to have damaged the structure, while a flood in the 1880s also impacted the little stone church. The ruins of this church are listed on the National Register of Historic Places (SIHP NO 50-50-09-1587). Religious services were once again conducted at the ruins of this church in 1976. It is locally known today as “Trinity-Church-By-The-Sea”.

Another economic activity in the traditional district of Kula was cattle ranching, which had become a booming enterprise by the 1880s.

History of Ka’ono’ulu Ranch Land and Land Commission Awards (LCA)

The ranch is made up of portions of three *ahupua’a*: Ka’ono’ulu, Alae, and Koheo. The subject parcel is located near the western border of the 5966.72-acre Ka’ono’ulu Ranch. The bulk of the *ahupua’a* of Ka’ono’ulu was included in Land Commission Award 3237, to H. Hewahewa, and consisted of 5715 acres. Land Commission Award 3237: 20 consisted of a portion of the *ahupua’a* of Alae to A. Keohokaole, identified as Alae 3 of an unknown size. Land Commission Award 8452: 19 gave title to a portion of the *ahupua’a* of Koheo, again to A. Keohokaole. The acreage was not specified in the LCA listings.

A Chinese immigrant on Maui, Young Hee, obtained the Ranch lands during the 1860’s – 70’s from A. Keohokaole, (who was granted the lands from Kamehameha IV on June 8, 1858). In the early 1980’s, Young Hee returned to China because of personal family problems, and while there, decided to sell his Maui properties. Clause Spreckels, a major entrepreneur on Maui at that time, heard about Young Hee’s property and was determined to buy it. To that end, he sent an offer to buy and a check for the amount of the offer via sailing ship to Young Hee in China.

At that time, William H. Cornwall, who was also looking for land on Maui, heard that the Young Hee property was for sale. He literally “caught the ship” to China, in

hopes of meeting Young Hee and purchasing the property. During a conversation with the Captain he learned that Claus Spreckels' letter to Young Hee was onboard. Cornwall then arranged to be put ashore before reaching the final port. During the interim, he found Young Hee, offered to buy the property, paid for it, obtained the land title and was sailing back to Hawaii by the time Mr. Spreckels' offer reached the former owner.

Harold W. Rice purchased the property from the Cornwall family in 1916. An article in The Maui News, dated August 25, 1916, states that Mr. Rice became the largest individual landowner on Maui with the purchase of the Hee Property. It also goes on to say that Mr. Rice resigned as the assistant manager of Maui Agricultural Company, where he had worked for five years, to devote himself to his ranching activities. In 1918 he was elected senator from Maui to the territorial legislature, and served in that capacity for many terms.

In another article dated December 4, 1926, The Maui News mentions the success of Ka'ono'ulu Ranch:

"Ka'ono'ulu Ranch, the property of Senator Harold Rice, is a combination of five different ranch properties which were known as the Robinson Ranch, The Enos Ranch, the Frank Correra Ranch, and the old Cornwall Ranch. It is one of the largest properties of its kind in the whole territory and from the outset has met with the greatest success. Cattle from its pastures, horses from its breed farm and hogs from its fattening lot are eagerly sought on the markets of the territory..."

Ka'ono'ulu Ranch is a business concern pure and simple and Senator Rice gives it his personal supervision throughout the entire year. The ranch property extends over a wide area and there is not a month in the year in which the genial owner does not visit every portion of the property to keep in touch with the various phases of the industry of cattle raising."

The article continues with a discussion of the Senator's love for polo, and for selecting and training colts for playing the game. It says:

"Senator Rice is of the firm belief that this will result in Maui having a string of ponies in the not distant future that will equal anything anywhere in the world and go a long way towards perpetuating the name of the Valley Isle in polo circles the world over."

Always on the lookout for ways to improve the products of the Ranch, Senator Rice began shipping beef, which had been fattened on pigeon peas, to market in Honolulu. The Maui News reports (August 3, 1927):

“A unique feature of Senator Rice’s new enterprise is the fact that he will do all his slaughtering at his Maui plant, shipping the dressed beef to Honolulu in cold storage.

‘It has been my experience that livestock is frequently badly bruised when shipped from other islands’, said Rice, ‘and this results in an inferior grade of beef. I believe we will obtain much better results by slaughtering on Maui and shipping the dressed beef.’

Senator Rice’s cattle ranch on Maui is one of the showplaces of that island. All his stock is finished off on pigeon peas before being sent to market.”

The Ka’ono’ulu Ranch Co., Ltd. purchased Ka’ono’ulu Ranch from Senator Rice in 1956. In 1982, this company entered into a Limited Partnership.

In her discussion of land use in the upper and lower Kula areas, Wong-Smith (in, Donham, April 1990, Appendix B, p. B-6) points out that by the 1880’s, lower Kula sections had largely become pastureland for the booming cattle industry. Large sections of Crown land were leased for grazing acreage. By 1918, Harold Rice was purchasing large tracts of land from Kula farmers for the purpose of establishing a ranch.

Previous researchers have categorized this region as the “intermediate”, probably used intermittently by humans for subsistence and perhaps some agricultural activities (e.g., Cox, 1976, Cordy 1977). Although more recent work supports this idea, and even implies greater usage than initially suspected, it is still likely that the “intermediate” was more an area of transit between the marine resources of the coastal zone and the inhabited inland zone (Corey and Athens, 1988; Dobyns, 1988).

During the latter half of the 19th century, cattle ranching became well established in the Kihei region. During World War II, Kihei was utilized in various military training programs. Many of the military activities imposed physical changes on the land. Firing ranges for small and large-bore weapons were developed; areas for “mock” combat training exercises were constructed; and mechanized combat equipment was used to practice beach assault landings (Oral history from Jack Crouse, 1993).

Large portions of Ka’ono’ulu Ranch were used by military. The Army, Navy and Marines engaged in practice maneuvers on the property. Henry Rice recounts one occasion when he and other family members were caught on a shelling practice session and had to take refuge in the small gulch, which bisects the property. He described the many kinds of military machinery used in modifying the property, and the dummy pillboxes that were built in this area. He said that Wailea area also had pillboxes, and that it was a practice area for the Iwo Jima landing.

Since World War II, the general Kihei region has undergone rapid commercial and residential development. The former Maui Lu Resort³ had been part of the Ranch and was purchased by a Canadian named Gibson. Prior to the Maui Lu Resort's development, the property on which it was formerly located, had been the base for a large piggery which extended *mauka* to what is now Pi'ilani Highway.

A smaller ranch was located in the general vicinity of the project area - Kama'ole Ranch. An article in The Maui News (December 19, 1908) states that Antone F. Tavares of Makawao "purchased S. Ahmi's Kama'ole Ranch property for \$8,500.00. The ranch, located in droughty Kula district was a fine piece of property." It goes on to say that Mr. Ahmi refused a former offer for \$9,500.00 when he was asking \$15,000.00 for it.⁴

The Maui News (March 7, 1928) noted:

"Senator A.F. Tavares has sold Kama'ole Ranch to Haleakala Ranch for approximately \$110,000. For himself he retains the title to the cottage on the place and about 5.95 acres surrounding it... At present there are about 500 head of cattle running over the ranch and the purchasers have an option on this livestock at \$40 per head. Kama'ole ranch has an area of approximately 1500 acres. It adjoins the Ulupalakua ranch, which is owned by Frank F. Baldwin. Alexander and Baldwin, Ltd., is agent for Haleakala ranch and the purchase of Kama'ole brings together two properties, which occupy many thousands of acres of cattle land on the slopes of Haleakala. Kama'ole is to be continued by the purchasers as a cattle ranch."

The bulk of the *ahupua'a* of Ka'ono'ulu lies within Makawao District, which was considered to be government lands after the Great Mahele. While a good deal of agricultural activity took place in the mid- and latter 1800's in the upland Kula region, little activity is noted for the lower portions of the *ahupua'a* where the current project area is located.

Since the early part of the 20th century portions of the Kihei area have been used primarily for cattle ranching. The importation of alien grass species such as buffel grass (*Cenchrus ciliaris*) for livestock feed has greatly altered the natural flora of the general area. In addition, ranching activities have no doubt impacted archaeological features that are present in the general area.

During the early 20th century, there was little to attract people to South Maui, except good fishing and fine beaches. Only about 350 people made Kihei their home at

³ The Maui Lu Resort was sold in 2014, and was demolished in early 2015. The property is currently being redeveloped.

⁴ Mr. Ahmi was also known as Sun Mei, a notable personage in Kula in the early part of the century. In 1901 he was arrested for stealing cattle, and he sued for false imprisonment a few weeks later. In 1903 he was indicted in a police bribery case, but was later acquitted. He was also involved in civil suits, and tax cases, as well as being outspoken in political matters during 1904 and 1905. By 1906 his property was listed in a sheriff's sale, and sold in 1908 (Bartholomew, 1985).

this time. Finally, in 1932, the government offered 11 beach lots for sale—the Waiohuli-Keokea Homesteads—with the hope of spurring development of a desirable residential district. These homestead lands lie to the west of the present study area.

An article in *The Maui News* dated November 11, 1931 reports that the coveted Kihei Beach lands “will be opened for Public Sale in the near future for home building”. Those in favor of the sale, say that it would promote development of the Kihei area into a better-class residential district. The chief of the opposition for the sale was Senator Harold W. Rice, who maintained that the area should be preserved as government property and should be turned over to homesteaders.

As it turned out there was little interest in Kihei lands, and only 6 of the parcels were sold. By 1950, farmland could be gotten for about \$225 per acre and residential lots sold for 5 to 10 cents a square foot (Bartholomew and Bailey, p. 142). Kihei was not thought of as a desirable living area, for the most part, due to the general dry, dusty and hot conditions.

A few years after the partition of these homestead lots, World War II erupted, and this part of South Maui was soon dominated by the military. As previously mentioned, during World War II, military activity impacted portions of Kihei. Such activities included operations of the Naval Combat Demolition Training and Experimental Base, the Kama’ole Amphibious Training Base, and the Pu’unene Naval Air Station. The present study area may likely have been impacted as well. Archaeological evidence of such military activity was located during an inventory survey of Parcels 16 and 15 (Portion) in 1994 (Fredericksen, et. al., July 1994).

An article on the front page of *The Maui News* dated June 9, 1945, gave information about the placing off-limits of land located in Kihei-Makena. It reads:

“Beginning at the north at the southern boundary of the property of William Harvey, tax map key 390257, which is approximately 3.3 miles south of the pier located across Makena road from the Kihei Store and ending at the south of the southern end of the Naval Air Station, Pu’unene, recreation beach five miles south of the pier across from the Kihei Store, and extending from the western boundary of Makena Road to an imaginary extension of the shore line of Ma’alaea Bay extending at all point 2000 yards seaward of the actual shoreline thereof. The northern and southern boundaries of the area described herein have been identified by placing of out-of-bounds signs thereon.”

The prohibition applied to military as well as civilian personnel, with the exception of those attached to the Naval Combat Demolition Training and Experimental Base, the Kama’ole Amphibious Training Base, and the Pu’unene Naval Air Station. They were allowed to use the facilities of the Naval Air Station recreation beach situated within the area. Kalama Park was accessible, but persons had to remain within the park boundaries, and could not swim, wade,

or fish in the waters adjacent to the park under any circumstances. Civilians living within the restricted area were allowed access to their homes, however.

Only in fairly recent times—from the 1960s on—has Kihei taken on importance as a place of residence and commerce. At present it is one of Maui's busiest tourist areas, with condominium/hotel development, and associated commercial activities. At the same time, with the increase of population, it has become a major residential area.



Photo 1: Aerial view of Kama'ole Beach area in Kihei during the 1940s, showing military installations (probably the Kama'ole Amphibious Training Base). [Bartholomew and Bailey, p. 142]

Previous Archaeological Work in the Kihei Area

As previously noted, the current project area lies within Ka'ono'ulu *Ahupua'a*. Archaeologists have studied this land division and others in the Kihei area over the last 20+ years, in conjunction with tourist resort, community housing, and commercial development.

Previous work withn the Piilani Promenade project area

Xamanek Researches (1994)

Xamanek Researches conducted an archaeological inventory survey of the c. 88-acre parcel of land in 1994 (TMK: [2] 3-1-09: 16 and Portion of 15). As previously noted, approximately 75 acres of this parcel will form the on-site portion of the Piilani Promenade development (Figure). A total of 20 sites, designated Sites 50-50-10-3727 through 3746, were located during this survey. These sites consisted of rock piles and cairns (8), enclosures (2), parallel alignments (3), erosion containment wall segments (1), surface scatters (5), and a petroglyph on a boulder. Some of the stone piles, the alignments and one of the enclosures appeared to be associated with previous military activities in the area. The surface scatters and the petroglyph were interpreted as possible precontact features. The erosion containment wall segments were interpreted as ranch era features. Portions of the project area had been previously impacted by bulldozing activities, likely associated with previous military and ranching activities. The previous installation of a large (36-inch diameter) waterline that runs diagonally through the parcel was found to have impacted this portion of the project area. This 1994 report is included in its entirety in Appendix A of this document.

Kihei-Upcountry Highway (2000)

An archaeological inventory survey for the proposed Kihei-Up Country Highway examined a portion of the current project area (Colin et al., 2000). A number of sites were identified in the overall corridor, which extended from the Kula area to Piilani Highway, a distance of several km. One site was identified as a previously undocumented historic property within the Piilani Promenade project area. This site, designated SIHP No. 50-50-10-4776, was described as a rock mound with an associated midden scatter. What appeared to be a previously excavated test unit was noted at the time of this 2000 survey. Subsequent fieldwork undertaken by Xamanek Researches LLC in the summer of 2015 indicates that Site 4776 is a portion of previously identified Site 3727.

Archaeological monitoring plan

Archaeological monitoring was recommended by the State Historic Preservation Division (SHPD) in a 2011 letter that cites the 1994 Xamanek Researches AIS of the c. 88-acre parcel that will contain the planned on-site improvements for the proposed Piilani Promenade project (SHPD DOC #1103MD05). This letter can be found in Appendix B of the current report. Pursuant to this SHPD comment letter, an archaeological monitoring plan was prepared for a larger portion of land in Ka'ono'ulu *ahupua'a* (Chafee and Dega, 2011). This AMP was submitted to the SHPD and approved in a March 2011 review letter (SHPD DOC NO: 1108MD12). While this monitoring plan includes much of the current project area, it is not project specific. Per input from SHPD, Xamanek Researches LLC will prepare an updated monitoring plan for the proposed Piilani Promenade development.

Previous nearby archaeological work

In 2008 (Shefcheck et al.) conducted an inventory survey of a c. 515-acre portion of land in Ka'ono'ulu *Ahupua'a*, some of which is adjacent to the current project area. During this 2008 survey 40 new archaeological sites were identified and recorded. Of the 40 sites, eight were associated with precontact activities. These sites consisted of a temporary rock shelter with petroglyphs, enclosures, platforms, a rock mounds and a rock wall. The remaining sites are associated with the WWII era and ranching activities. Two sites – 6405 and 6412 were slated for Data Recovery. Site 6405 was a lithic scatter. Site 6412 was a mix of precontact and historic military components showing evidence of adaptive re-use. A number of sites were recommended for preservation because they represent Hawaiian traditional structures. These sites included Sites 6390, 6413, 6414, 6415, 6416, 6419, and 6420. The above sites were located within an area that has been referred to by some as the “intermediate zone” - where habitation is limited and temporary. SHPD approved mitigation measures consisting of monitoring, data recovery, and preservation (DOC No 0809PC17). This letter is included in Appendix B.

Environmental Impact Study Corp (EISC) conducted an archaeological study in Kihei in 1982. A second study was undertaken by PHRI in July of 1989, for Baldwin Pacific's Pi'ilani Residential Community, Phase I (TMK 2-2-02: poor 42). These studies took place to the south of the project area

The EISC study located one site that was described as “a possible alignment of very loosely stacked basalt extending downslope from an outcrop knoll” (1982, pg. B-4), and did not recommend further work because of low research potential. The PHRI survey, conducted by Theresa Donham (July, 1989), encompassed 114 acres situated along the western side of Pi'ilani Highway, between Kihei Elementary School and Lokenani Intermediate School and the northern border of Waiohuli *Ahupua'a*. During that survey five new sites were discovered, and two others relocated—Site 2476 identified by EISC, and Site 1705 initially recorded by Cordy during his reconnaissance survey for the Corps of Engineers (1977).

Donham's work on all 7 identified sites determined that two sites were bulldozer push piles, and these were not assigned SIHP numbers. The other five sites were mapped and tested in order to determine their significance. Site 1705 was described as a faced wall, possibly a corral. Sites 2473 and 2475 are thought to be historic dependency structures associated with ranching activities. Site 2475 consists of two stone cairn features, one of which was recommended for data recovery, as it was thought it might contain human remains. The fifth site, Site 2476 is a complex of five rock alignments, which may have had an agricultural function (Donham, 1989, pp. 8-14).

Archaeological data recovery was undertaken in 1990 on Site 2475, to determine if it was a burial complex. Subsurface test excavations did not produce human remains, or evidence of cultural deposits, midden or charcoal. However, further data recovery "indicated that it was a terrace complex covering a major portion of the natural terrace crest and its slopes" (Donham, 1990, p. 10). The site was interpreted as an agricultural complex and appeared "to represent relatively intensive modification of natural slopes for purposes of planting" (Ibid.). The rock alignments that compose Site 2476, which lies nearby, may also be additional terracing. The location of the site, one-half mile mauka of the coastal zone", an area which was exploited more heavily than the "intermediate zone" in general. She suggests the possibility of seasonal usage during periods of increased rainfall, or simply the response to land availability pressures in the coastal zone (Donham, 1990, p. 10).

Two of the first studies in the lowland portion of the *ahupua`a*, were conducted in association with the construction of Pi'ilani Highway (Cox, 1976; Cordy, 1977). The studies by Cox (1976) along the coastal area included information about two heiau, Kalaihi Heiau (in Ka'ono`ulu *Ahupua`a*), and Kealaipoa Heiau in the adjacent Waiohuli *Ahupua`a*. He also mentions 3 fishponds noted from historic sources, one of which may have been rebuilt by Kamehameha I. Cordy found wall remnants at the mouth of Waipuilani Gulch (Site 1704), which may be the remains of one of these ponds (1977). He also located Site 1705, mentioned earlier, which was in the Piilani Residential Subdivision, which lies to the south of the current project.

In 1986, Kennedy conducted a surface reconnaissance survey for the Silversword Golf Course, and reported in a brief letter that no archaeological features were found in the approximate 125-acre survey area. This golf course lies to the southeast of the present project area.

On the grounds of Lokelani Intermediate School, about 2 km southwest of the project area, Xamanek Researches excavated a rock shelter, Site 3193, in July of 1993 (Fredericksen, et al., September 1993). This shelter was 5.5 meters in length, extended a maximum of 1.6 meters inward, and had a maximum interior height that was 0.85 m. The ceiling was dome shaped and dropped to the ground level at either side. A large kiawe tree, which had recently burned, had formerly grown at the drip line of this overhang. The site appears to have been used intermittently, and contained midden, artifacts and over 100 pieces of volcanic glass. Much of the volcanic glass was waste material, the by-product of knapping activity. Midden consisted primarily of *pipipi*

(*Nerita picea*), cowry (*Cypraea* sp.), and cone shell (*Conus* sp.). Recovered artifacts included bone picks, coral abraders and a piece of worked faunal bone. Three hearths were excavated, and charcoal from one yielded a radiocarbon date of AD 1560-1800 (270 +/- 120 RCYBP).

Other archaeological work southwest or *makai* of the study area in Waiohuli *ahupua'a* was carried out by Xamanek Researches for the Azeka II Shopping Center and Longs Drug Center (Fredericksen, et. al., 1990a and 1990b). No significant archaeological finds were made. However, identification of the wetland areas was established at this time, and subsequently the Federal and State Wetlands Sanctuary were developed. A parcel at the intersection of Lower Kihei Road and Lipoa was also surveyed (Fredericksen, et. al., February 1994), and no significant archaeological finds were made. The above study areas would have likely been within a wetlands area directly east or *mauka* of the coastal zone sand dunes in precontact times.

In the upland region, PHRI carried out an inventory survey of Keokea and Waiohuli Subdivision for the Department of Hawaiian Home Lands (Brown and Haun, 1989). The University of Hawaii-Manoa held an archaeological field school there in the summer of 1994, under the direction of Michael Kolb. Both of these studies identified numerous precontact sites, indicating fairly extensive habitation and agricultural activity in the uplands region.

Monahan (2003) conducted an Archaeological Inventory Survey, including subsurface testing, of a 28.737-acre portion of the Maui Research and Technology Park, within the area investigated by Kennedy in 1986. The only observation was a small arrangement of stacked boulder interpreted as a "push pile". No other historic or precontact features were noted.

McGerty et al. (2000) surveyed 15 selected areas within the Elleair Maui Golf Club. Five archaeological sites were identified. State Site Nos. 50-50-10- 5043 -5047 contained a total of seven surface features. These features were interpreted as agricultural terraces, perhaps dating from the precontact periods while the C-shaped rock formations were built during the WWII training era. Ten test units were excavated which did not yield any further cultural material.

Additional testing was carried out along the northeastern flank of the Elleair Maui Golf Club property (Tome and Dega, 2002). This study identified an historic ranching corral and a short agricultural wall, collectively Site 5233. No other structures or subsurface deposits were identified. Another inventory survey along the southern flank of the Elleair Maui Golf Course failed to yield any additional archaeological features (Dega 2003).

In 2004, Scientific Consultant Services (SCS), Inc. conducted an archaeological inventory survey on two undeveloped lots totaling approx. 56.647 acres near the Elleair Maui Golf Club Course, across Ka'ono'ulu to the south of the Piilani Promenade project area. A surface survey and subsurface testing was performed. Four surface features

consisting of stacked basalt stones were located within the project area, each was assigned a separate state site number (Site 50-50-10-5506 through Site 50-50-10-5509). Test excavations yielded buried cultural material consistent with precontact-era in three of these sites. Site -5509 however was a C-shaped rock pile and did not yield any cultural material and was interpreted as WWII era. No additional work was recommended (Monahan, 2004).

Xamanek Researches, LLC carried out a field inspection of a c. 9.5-acre parcel known as Ka'ono'ulu Estates Phase V to the west of the Piilani Promenade project area. This previous field inspection of this parcel was carried out in early 2006. The property was found to have been extensively disturbed and no further work was recommended (Fredericksen, 2006). The SHPD subsequently issued a no-effect letter, following review of the field inspection report (SHPD DOC NO: 0607JP19).

In 2013 Xamanek Researches LLC completed an assessment survey of an 8.274-acre parcel for the Ka'ono'ulu 201-H Housing project (formerly known as Ka'ono'ulu Phase VI). This project is located directly across Pi'ilani Highway (west) from the proposed Piilani Promenade development. Test results indicate that the study area had been heavily impacted by previous earth moving activities associated with the construction of access roads along on its southern half; as well as large amounts of imported fill (including boulders), a stock pile, a base yard, informally deposited fill/debris, and a portable office complex. The southern portion of the project area was previously altered for a permitted flood control project in 2000, which leads into a water retention area that cannot be developed. There was no evidence of any significant material culture remains encountered during this prior assessment survey. (Fredericksen, 2013)

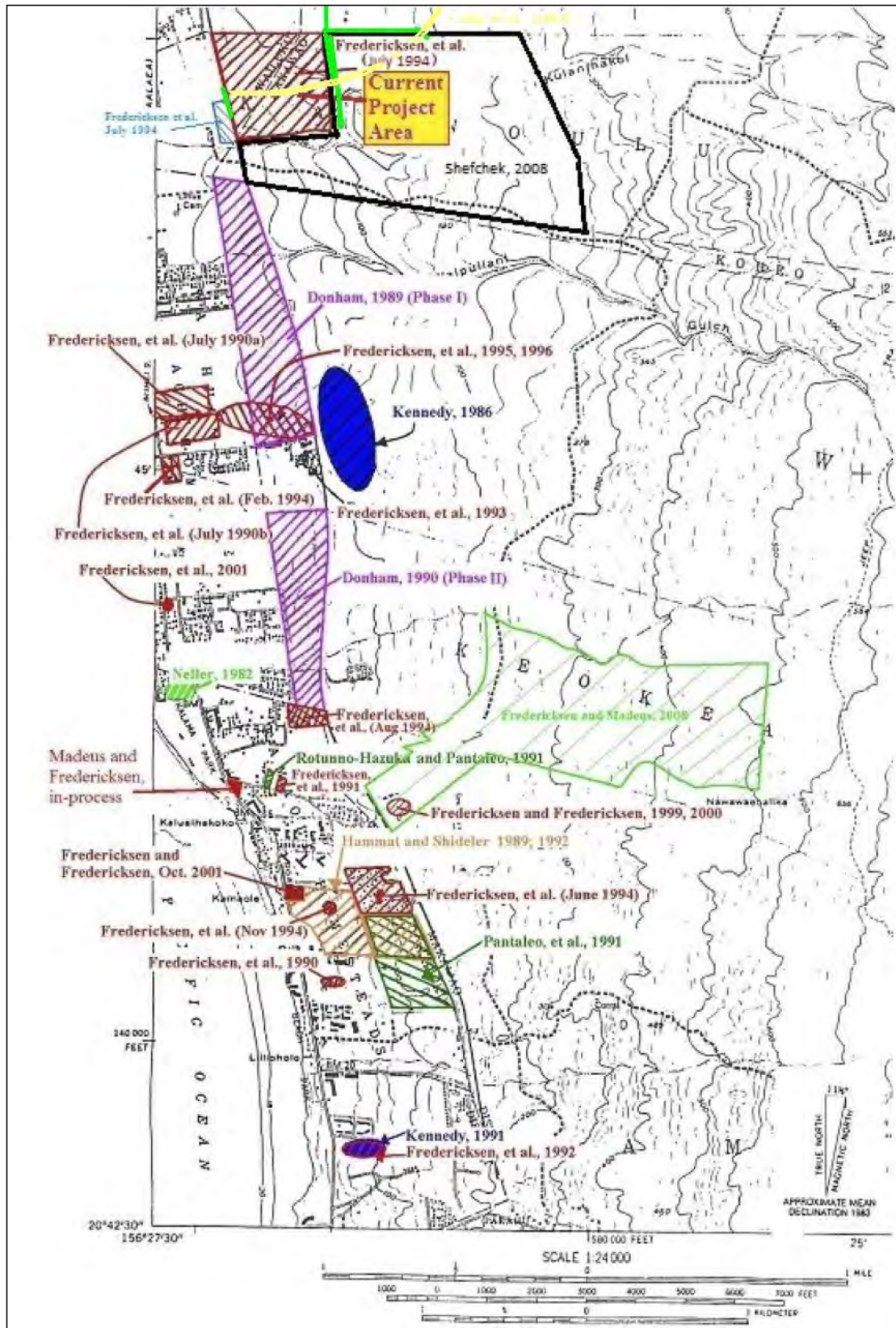


Figure 7: Previous archaeological studies in the Kihei area (note: off-site project area is depicted in green; Kihei-Upcountry Highway AIS [Colin et al., 2000] in yellow).

Table 1: Selected Archaeological Studies in the Kihei Area

Authors	Date	Nature of Work	Findings
Burgett, McGerty Dunn and Spear	June 1996	TMK: 3-9-12: 13, Monitoring at Kihei Public Library, Kama'ole <i>Ahupua'a</i>	Five sites with 20 features – 2 habitation sites, 1 habitation and shrine (<i>ko'a</i>), 1 habitation and probable burial and 1 scatter of human remains. Date ranges AD 1280 to c. 1800.
Donham, Theresa	1989	Inventory survey of Pi'ilani Residential Community, Phase I—TMK 2-2-02: por. 42. Waiohuli <i>Ahupua'a</i> and Phase II- Keokea <i>Ahupua'a</i>	5 Surface sites, including agricultural terrace (Site 2475). Suggests “coastal perimeter zone” be added to Cordy's model. Similar, but fewer features
Fredericksen, Walter and Demaris	1990	TMK: 3-9-20: 7. Inventory survey.	No significant findings
	July 1990a	Monitoring for Azeka Place.	Wetlands-no significant archaeological findings.
	July 1990b	Monitoring for Longs Drugs	Wetlands-no significant archaeological findings.
	1991	TMK: 3-9-17: 26. Inventory survey.	No significant findings
	1992	TMK: 3-9-04: 79. Additional inventory work.	Scattered surface human remains in large sand dune area.
Fredericksen, Demaris, Erik and Walter	September 1993	TMK: 2-2-02: 21. Inventory survey and data recovery	Rock shelter (Site 3193) with hearths and volcanic glass debitage, shellfish midden. Dated AD 1560-1800 (270 +/- 120 RCYBP).
	August 1994	TMK: 3-9-30: 21. Inventory survey.	No significant findings
Fredericksen, Erik, Demaris, and Walter	June 1994	TMK: 3-9-18: 1. Inventory survey	11 sites including rock shelter (Site 3541) dated AD 1520 to c. 1800 (220 +/- 60 RCYBP).
	July 1994	TMK: 3-9-01: 16 and 2-22-02: por. 15. Inventory survey.	20 surface sites, including walls, military cairns, modified rock piles, and 1 petroglyph (Site 3746).
	February 1994	TMK: 3-9-02: 91-94, 133-135. Inventory survey.	Wetlands—no significant archaeological findings.
	November 1994	TMK: 3-9-18: 17 and 3-9-20: 27. Subsurface testing Site 2636	Open area site, indigenous artifacts, and hearth—radiocarbon date: AD 1295 to 1495 (530 +/- 80 BP)
Fredericksen, Erik and Demaris	April 1995	TMK: 2-2-02: portion 66, 67; 3-9-02: 109. Inventory survey	Wetlands near South Kihei Road. Rock overhang shelter (Site 3529). Volcanic glass debitage, indigenous artifacts, shellfish midden.
	September 1996	Data recovery on Site 3529.	Additional indigenous artifacts. 3 radiocarbon dates: AD 1470-c.1800 (260 +/- 70 BP; 240 +/- 60 BP; 230 +/- 60 BP).
	February 1999	TMK: 2-2—02: por. 69 - Inventory survey	Rock enclosures, temporary habitation (Sites 4725-4727)
Fredericksen, Demaris and Erik	2000	TMK: 2-2-02: por. 69. Data recovery on Site 4727	Rock enclosure, temporary habitation, and activity area of coral tool manufacture
	2001	TMK: 3-9-10: 75 and 78	Habitation site remnant (Site 5003) with possible associated human burial.
	2002	TMK: 3-9-20: 34	Coastal habitation site remnant (Site 5170). Radiocarbon date of 220 +/- 50 BP.
Fredericksen, Erik	2013	TMK: 3-9-001: 157 and 158 - Assessment survey	No significant findings during this survey project.

Table 1 continues

Authors	Date	Nature of Work	Findings
Hammatt and Shideler	1989 and 1992	Inventory survey, Kama'ole <i>Ahupua'a</i>	Historic house platform, 2 <i>ko'a</i> (Sites 2633 and 2637).
Kennedy	1986	Archaeological reconnaissance of Silversword golf course.	No significant findings in 125-acre area.
McCurdy, T. and H. Hammatt	2013	AIS for the Kulanihakai Bridge Replacement TMK: 3-9-001, 999, 162, and 143 pos	No significant findings, bridge built in 1911- SIHP 7606
Neller, Earl	1982	TMK: 3-9-12: 3. Reconnaissance survey of Kalama Park	Investigated finds of human remains.
Pantaleo et al., 1991	1991	Inventory Survey of Kihei school lots. Kama'ole lands.	Historic sites, food midden scatter.
Rotunno-Hazuka and Pantaleo 1991	1991	TMK: 3-9-18: 1—Diamond Resort parcel.	No significant findings.
Shefcheck, D., S. Cordle, M. Dega	2008	TMK: 2-2-002: 015 por	40 new sites located, 8 identified as precontact

ADDITIONAL REFERECES ARE LOCATED IN THE "REFERENCES" SECTION IN THIS REPORT

Settlement Patterns and Predicted Findings

The study area lies in the “intermediate zone” beyond the “coastal zone”, which is an area of habitation, using the model developed by Cordy (1977). There are no *kuleana* claims in this near coastal portion of Ka’ono’ulu *ahupua’a*, suggesting that habitation was likely temporary in these arid lands. Ross Cordy (1977) identified the occurrence of three ecological “zones” in the Kihei area. These included the coastal zone of habitation, the intermediate, or barren zone, and the inland habitation zone. The “coastal zone” was one of habitation and marine resource exploitation (i.e., the fishponds). The “intermediate or barren zone” was generally considered to be an inhospitable area, in which little human activity was to be expected, with the exception of intermittent and/or transitory habitation along *makai-mauka* trails inland.⁵ The “inland habitation zone” was an area above c. 1500 feet of elevation, where conditions were ideal for growing sweet potatoes and other subsistence crops.

The “intermediate zone” has proven to be less barren than was originally thought, as more studies have identified sites used for intermittent habitation scattered along inland trail routes. Donham’s identification of agricultural terraces in a similar elevation of the study area suggests that the perimeter of the coastal zone may have been more heavily utilized for seasonal food production activities than had been previously thought. However, she also noted that agricultural activity could have been intermittent during seasonal increases in rainfall, or periods of overall increased moisture. She proposed another zone, the “coastal perimeter zone” to designate this area (Donham, 1990).

The “inland zone” has also been more intensively studied, principally with the research done on behalf of the Department of Hawaiian Home Lands in Waiohuli and Keokea Subdivisions (Brown and Haun, 1989; Riford, 1987; Kolb, Conte and Cordy, 1997). All of the *kuleana* claims and awards in Waiohuli, Keokea and Kama’ole are in this *mauka* habitation zone, as well.

The overall pattern of this part of the island is fairly well understood, with relatively intensive activity on the coast, and further inland (*mauka*). These two areas are connected by *makai-mauka* trails, along which economic goods were transported for exchange. The existence of such a trail in Kama’ole has been suggested by several archaeological studies.

Post-contact land usage consisted primarily of pasture for cattle grazing on lands mauka of the coastal zone. During World War II, the near coastal area was impacted by military activity, which no doubt altered the topography to some degree. Refer to Photograph 1 for an aerial view of the Kama’ole Beach area, which lies c. 3 km to the southwest of the study area. This photograph was taken during WWII, and shows the extent of clearing and construction carried out by the military in this portion of Kihei.

⁵ Subsequent work has indicated that this area was more utilized than was thought at the time in the 1970s.

The predicted findings, based on background research, could include remnants of temporary habitation areas, trails, remnants of *mauka/makai* trails, ranch-era features such as rock walls and enclosures, and military features.

Overview of the Kihei Piilani Promenade Project

Xamanek Researches previously conducted an archaeological inventory survey (AIS) of a c. 88-acre parcel in 1994 (TMK: (2) 3-9-001: 16, and (2) 2-2-02: Portion of 15). This property is located in Ka'ono'ulu *Ahupua'a*, Makawao and Wailuku Districts. The current proposed development area, now known as the Piilani Promenade, consists of a c. 75-acre portion of this original survey area (Figure 8). In addition, about 14 acres of land that had not been previously surveyed at the inventory survey level will be used for proposed off-site improvements (Figure 8). Previous bulldozing activities, as well as prior ranching and more recent farming activities, and road construction activities have impacted this land that is slated for off-site improvements. Lot 2-B, a c. 13-acre portion of the original 88-acre property covered in the 1994 AIS, is now owned by a separate entity, Honua'ula Partners, LLC. This portion of the 88-acre property will be developed for an affordable housing project, and is not part of the proposed Piilani Promenade development. Xamanek Researches LLC carried out fieldwork on the on-site and off-site improvements project areas for the proposed Piilani Promenade development in the winter of 2014 and summer of 2015.

As noted above, the 1994 AIS covered an 88-acre portion of land (Figures 8 and 9). The original inventory survey identified a total of 20 archaeological sites. These historic properties were designated Sites 50-50-10-3727 through 3746. The various sites included stone piles and cairns (8), enclosures (2), parallel alignments (3), erosion containment wall segments (1), surface scatters (5), and a petroglyph on a boulder (Table 2). Some of the stone piles, the alignments and one of the enclosures appeared to be associated with previous military activities in the area. The surface scatters and the petroglyph were interpreted as possible precontact features. The erosion containment wall segments were interpreted as ranch era features. Portions of the project area were found to have previously impacted by earthmoving activities, likely associated with previous military, ranching activities, and the construction of a County of Maui waterline (completed in 1979). The prior installation of this large (36-inch diameter) County of Maui Central Maui waterline was found to have impacted a portion of the project area around the boundary between Makawao and Wailuku Districts.

All of the sites identified in the 1994 AIS qualified for significance, because of their information content (Criterion "d"). The petroglyph (Site 3746) also qualified for cultural significance under Criterion "e". The 1994 AIS recommended preservation for the Site 3746 petroglyph, and the State Historic Preservation Division concurred that no additional work was needed for the remaining sites. At this time there was no recommendation for archaeological monitoring. The landowner at the time removed the petroglyph/boulder from the property and relocated it to upcountry Kula in 1994 after the inventory survey was completed.

Given the time that has elapsed since the 1994 inventory survey of the 88-acre parcel, a re-evaluation of the previously identified sites was conducted, with fieldwork undertaken in January and February 2014 and July and August 2015. Five of the originally identified sites have been impacted by post-1994 bulldozing activities on the property. Two of the five sites have been heavily impacted by mechanical land disturbance activities (i.e. Sites 3738 and 3739). While the significance assessments for Sites 50-50-10-3727 through 3745 remain the same, data recovery is now the recommended mitigation for several of these sites. A forthcoming data recovery plan will be developed for Sites 3727, 3728, 3735, 3736, and 3741-3745, as well as newly identified Site 8266. In addition, an archaeological monitoring plan will be developed for the entire 88-acre property, including Lot 2-B that is owned by Honua'ula Partners, LLC, and the c. 14-acre portion of land for the proposed off-site improvements for the Piilani Promenade project.

Table 2: Summary of Sites and artifacts located during the 1994 AIS - Xamanek Researches

Site 50-50-10-	Site Type	Findings
3727*	Stone pile	Basalt core, worked basalt flakes, ww** rock
3728*	Stone pile	Water worn rock
3729*	Stone cairn	Utilized basalt flake, basalt core, ww rock
3732	Stone cairn	Coral chunk
3735*	Enclosure	Waterworn rocks, food can metal key
3737*	Parallel alignment	Basalt core, ww hammer stone, ww rock, coral chunk, lead slug
3738	Parallel alignment	Utilized cobble
3741*	Surface scatter	Basalt flakes, ww rocks, coral
3743	Surface scatter	Basalt cores, basalt flakes, ww rocks, coral
3744*	Surface scatter	Utilized basalt flakes, basalt core, grinding stone, ww rock, coral, volcanic glass flake and core
3745*	Surface scatter	Basalt flakes, basalt core, ww rock, utilized basalt, coral

* = Tested sites

** = waterworn

To see a more detailed description of these sites refer to Appendix A for the 1994 AIS report.

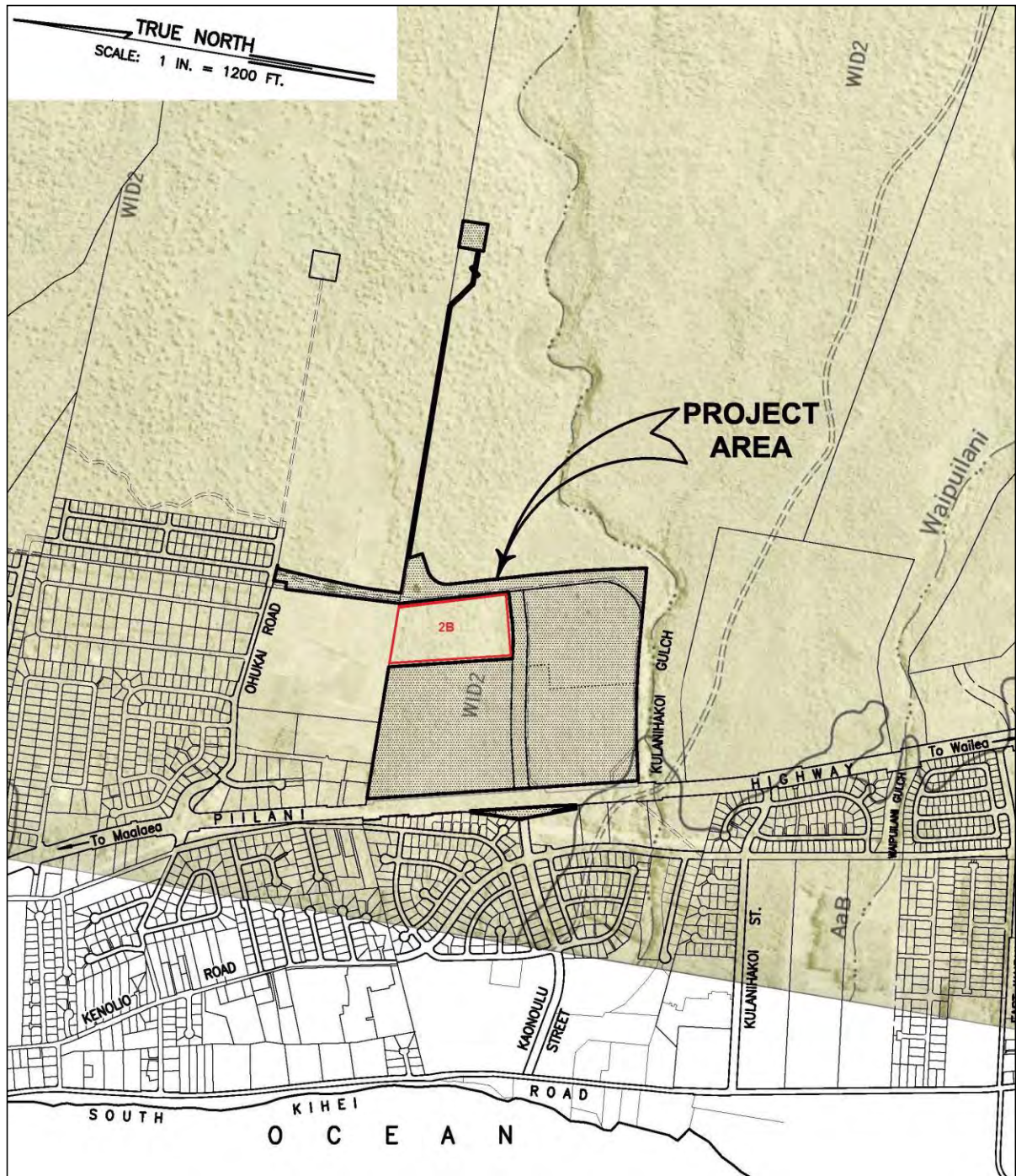


Figure 8: Piilani Promenade project area, with Lot 2B outlined in red (owned by Honua'ula Partners, LLC). This c. 13-acre portion of land is included in the proposed Piilani Promenade development EIS and the current AIS.



Table 3: Sites located during the 1994 AIS - Xamanek Researches

STATE SITE #50-50-10-	DESCRIPTION	FUNCTION/AGE	SIGNIFICANCE/ ADDITIONAL WORK**
3727*	Stone piles	Agricultural/indeterminate	"D"/no
3728*	Stone piles	Agricultural/indeterminate	"D"/no
3729*	Stone cairn	Marker/indeterminate	"D"/no
3730	Stone cairn	Marker/indeterminate	"D"/no
3731	Stone cairn	Marker/post contact	"D"/no
3732	Stone cairn	Marker/indeterminate	"D"/no
3733	Stone cairn	Marker/post contact	"D"/no
3734	Stone pile	Agricultural/indeterminate	"D"/no
3735*	Enclosure	Military/WW II	"D"/no
3736*	Enclosure	Possible shelter/pre contact	"D"/no
3737	Parallel alignment	Military/WW II	"D"/no
3738	Parallel alignment	Military/WW II	"D"/no
3739	Parallel alignment	Military/WW II	"D"/no
3740	Erosion containment walls	Ranching/post contact	"D"/no
3741*	Surface scatter	Temp habitation/pre contact	"D"/no
3742	Surface scatter	Temp habitation/indeterminate	"D"/no
3743	Surface scatter	Temp habitation/precontact	"D"/no
3744*	Surface scatter	Temp habitation/precontact	"D"/no
3745*	Surface scatter	Temp habitation/precontact	"D"/no
3746	Petroglyph	Marker/precontact	"D" and "E"/removed

* = Tested sites

**Updated mitigation recommendations are noted in Table 4.

Table 4: Updated 2015 Mitigation Recommendations

Site # 50-50-10-	Site Type	2015 Mitigation Recommendation
3727	Stone piles	Data Recovery (DR)
3728	Stone piles	DR
3729	Stone cairn	DR
3730	Stone cairn	No further work (NFW)
3731	Stone cairn	NFW
3732	Stone cairn	DR
3733	Stone cairn	NFW
3735	Enclosure	DR
3736	Enclosure	DR
3737	Parallel alignment	NFW
3738	Parallel alignment	NFW
3740	Erosion containment walls	NFW
3741	Surface scatter	DR
3742	Surface scatter	DR
3743	Surface scatter	DR
3744	Surface scatter	DR
3745	Surface scatter	DR
8266	Enclosure	DR

DR = Data Recovery

Discussion

Of the 20 identified sites during the 1994 AIS, 8 were sampled with a total of 10 test units.⁶ Out of those 10 test units, only two units yielded any subsurface cultural remains. The majority of the recovered cultural material consisted of marine shellfish midden, interpreted as food remains. Other portable remains included one utilized-basalt flake fragment, several unworked basalt flakes, and several pieces of coral and waterworn rocks. No suitable charcoal for radiometric analysis was located during the subsurface testing process. These results are summarized in Table 2 of the 1994 AIS, which is included in Appendix A of the current document. Refer to Figures 10-29 below for plan views of previously identified Sites 3727 through 3746. In addition, refer to the On-site Improvements Project Area section (pg. 67) for updated figures (Figures 35-37), and photo views (Photos 25-38) of relatively recently altered Sites 3730, 3732, 3734, and 3737-3745. See Figure 39 for a plan view of newly identified Site 8266.

⁶ As previously noted, a former landowner removed the Site 3746 petroglyph boulder from the project area in late 1994.

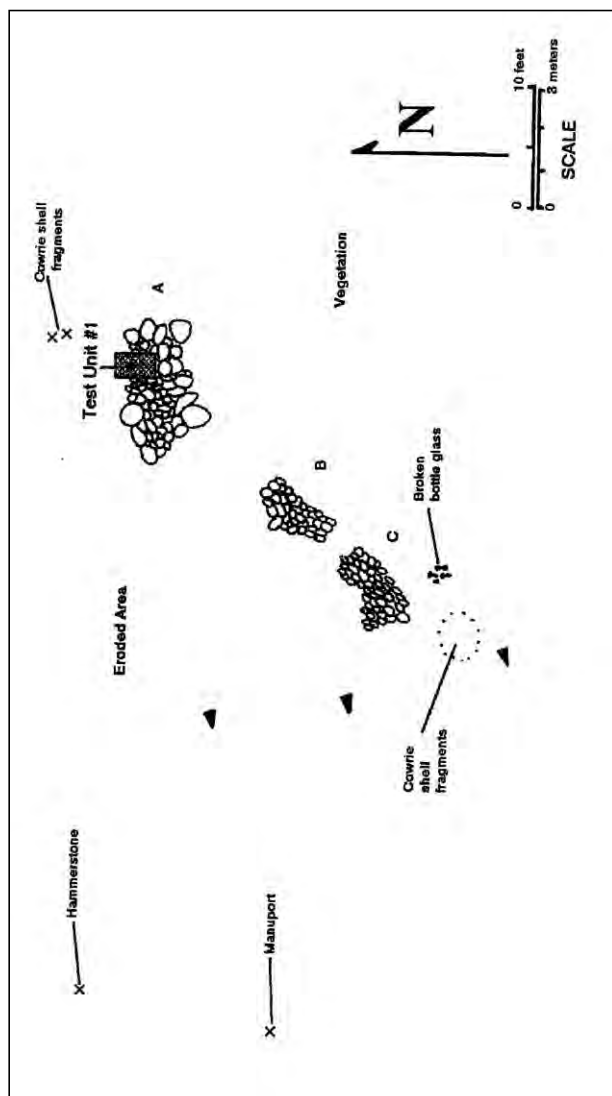


Figure 10: Site 3727 – Plan View.

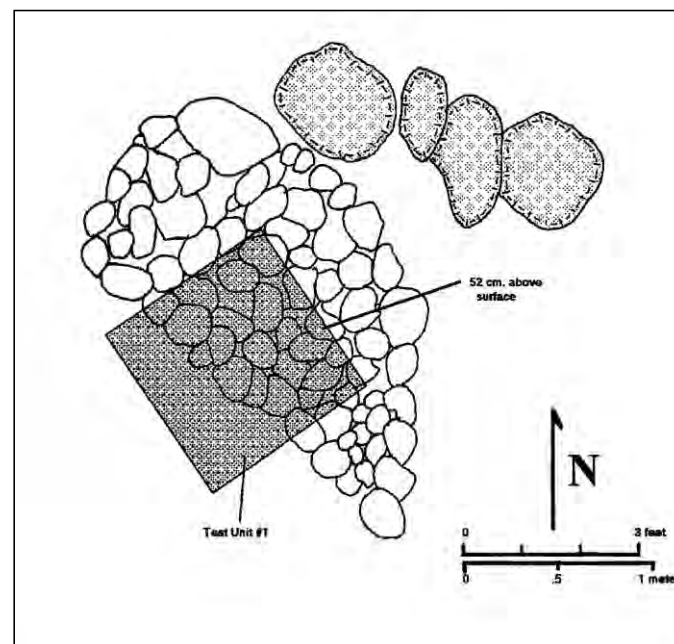


Figure 11: Site 3728 – Plan View.

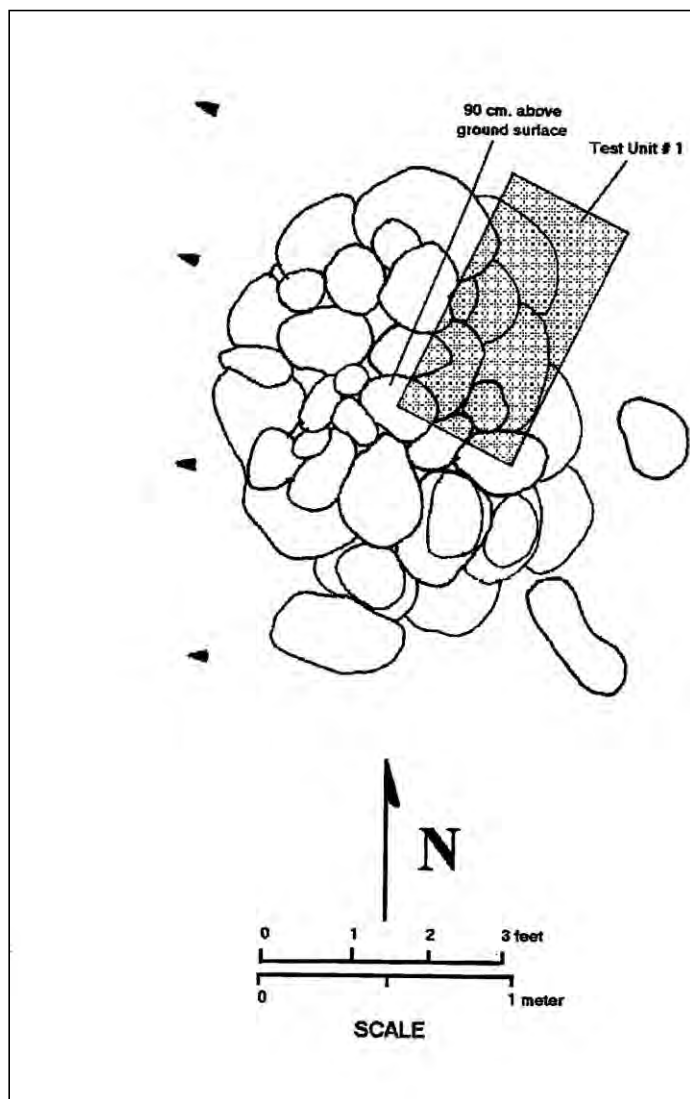


Figure 12: Site 3729 – Plan View.

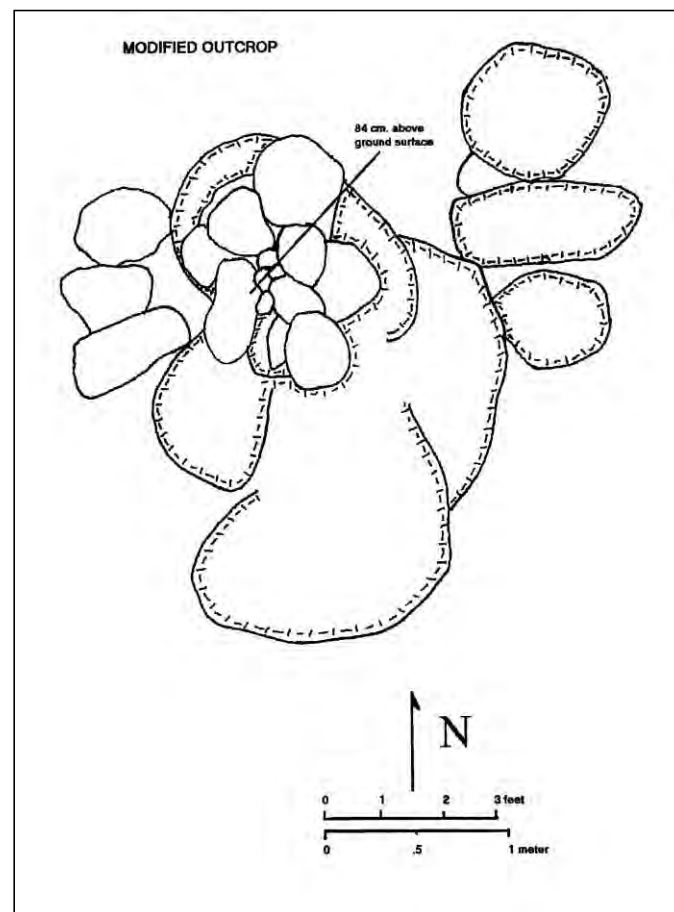


Figure 13: Site 3730 – Plan View.

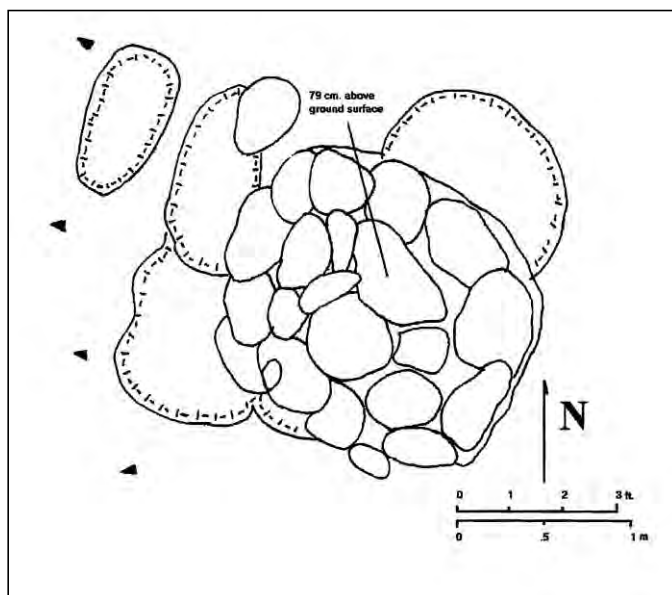


Figure 14: Site 3731 – Plan View.

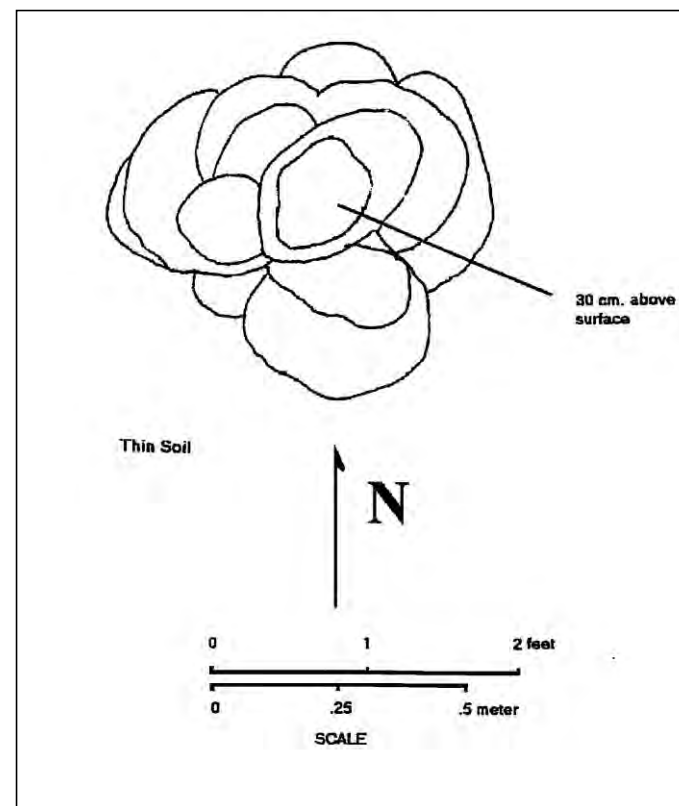


Figure 15: Site 3732 - Plan View.

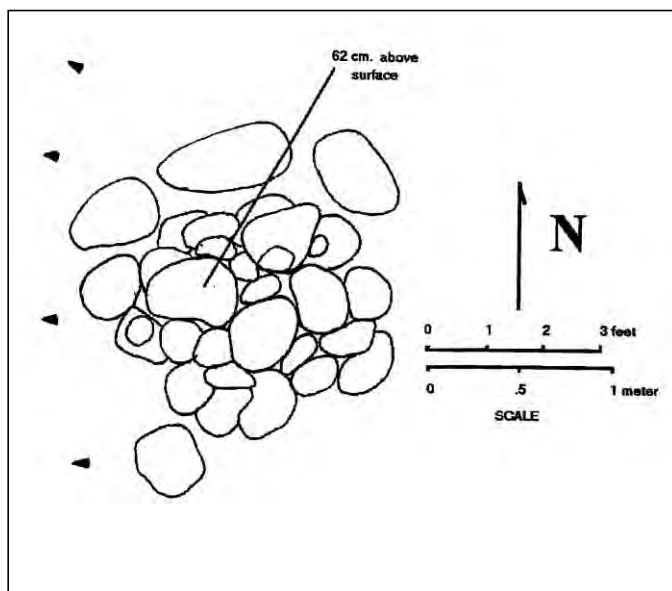


Figure 16: Site 3733 – Plan View.

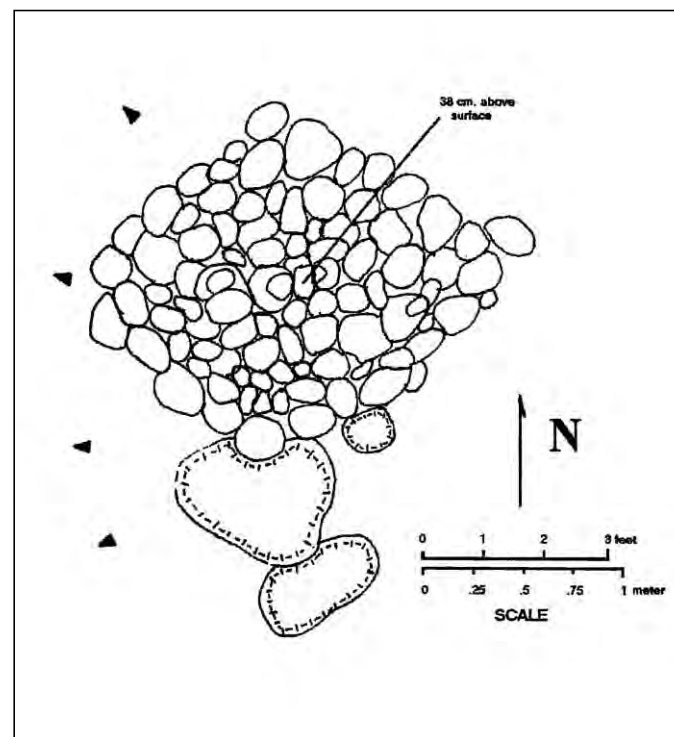


Figure 17: Site 3734 – Plan View.

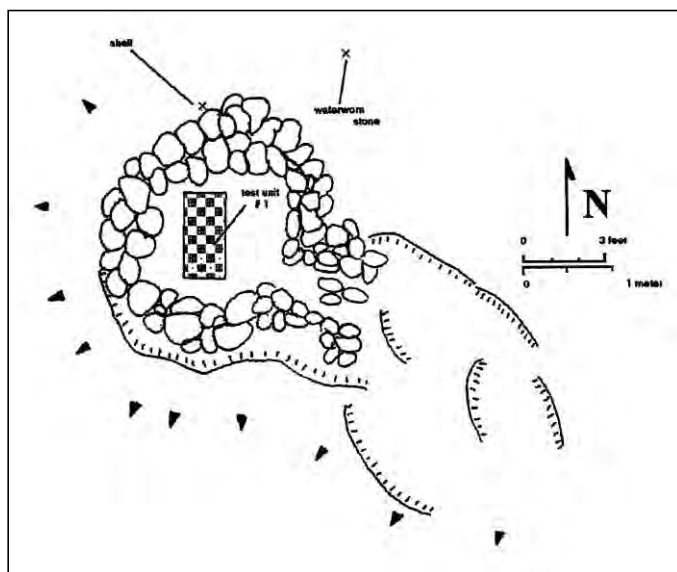


Figure 18: Site 3735 – Plan View.

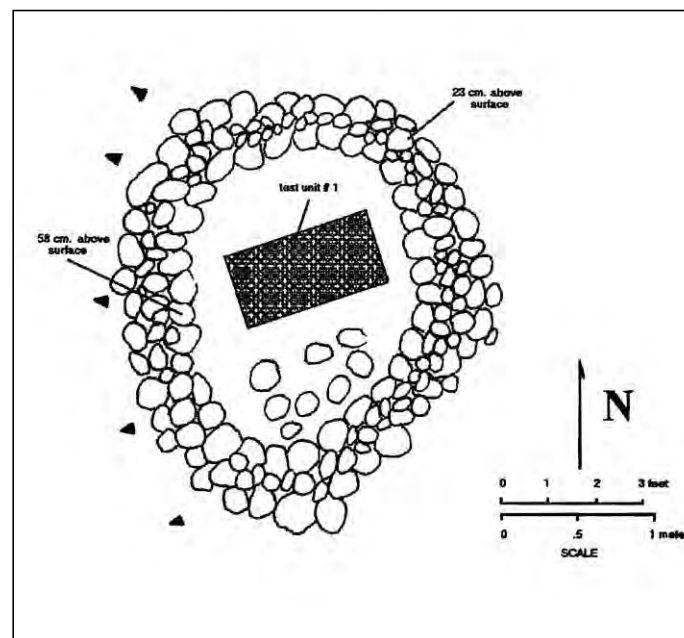


Figure 19: Site 3736 – Plan View.

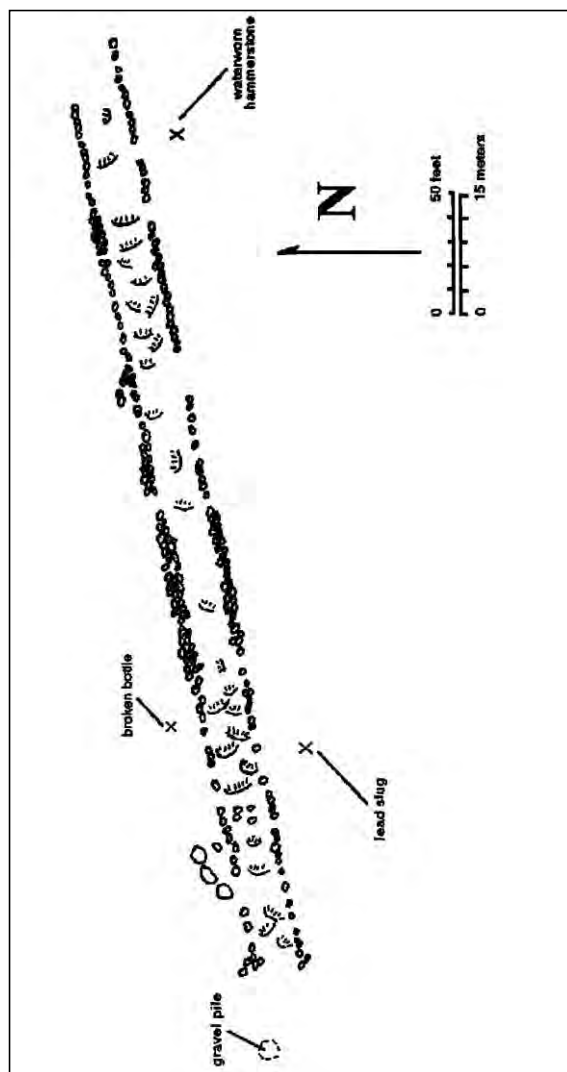


Figure 20: Site 3737 – Plan View.

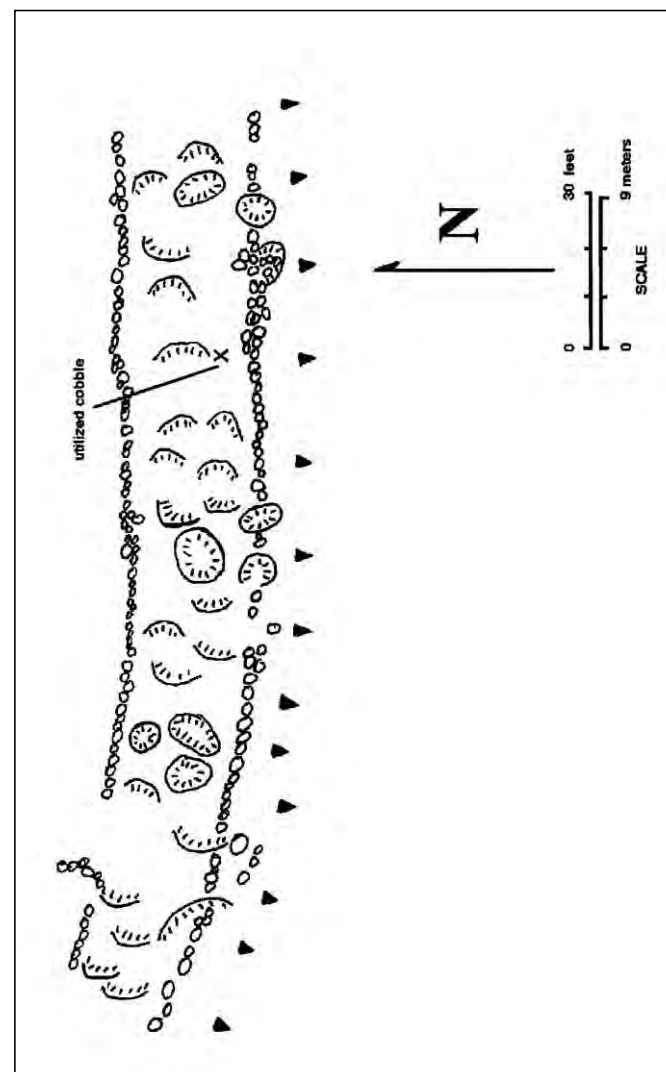


Figure 21: Site 3738 – Plan View.

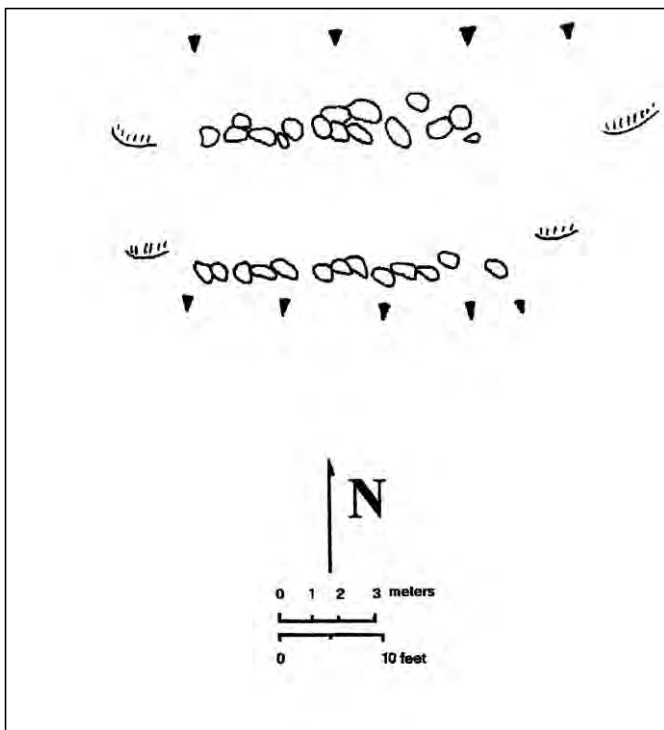


Figure 22: Site 3739 – Plan View.

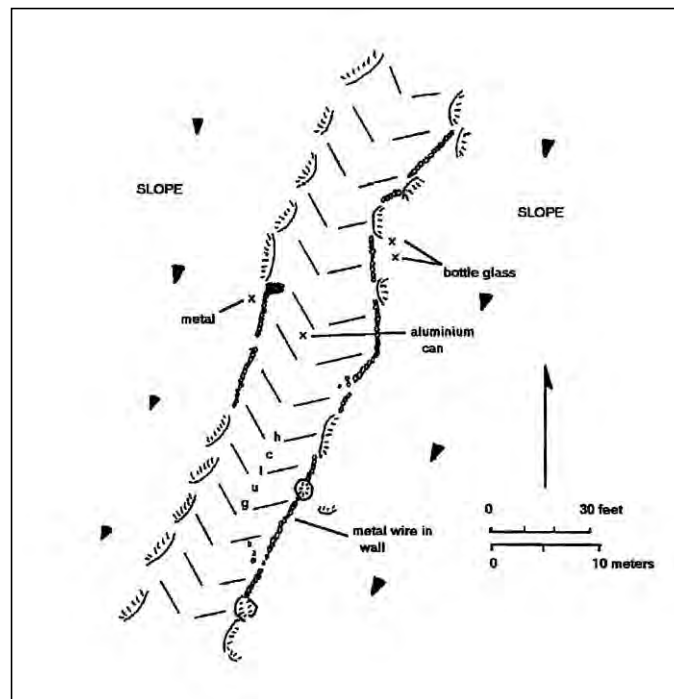


Figure 23: Site 3740 – Plan View.

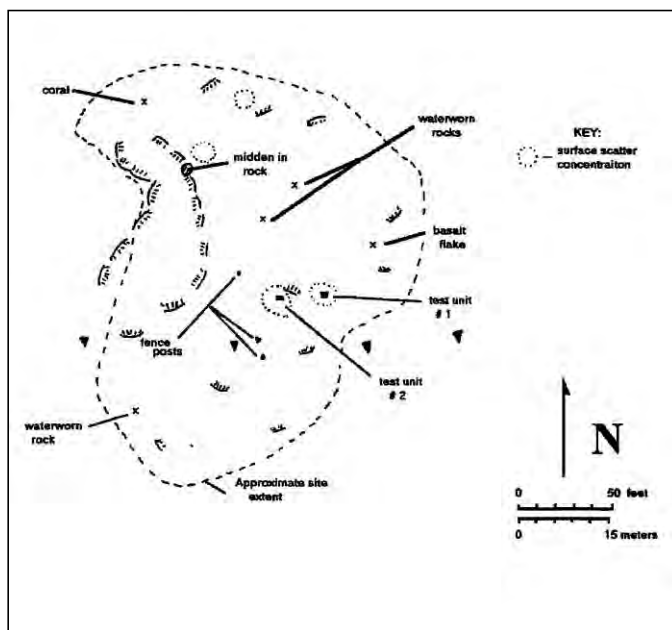


Figure 24: Site 3741 – Plan View.

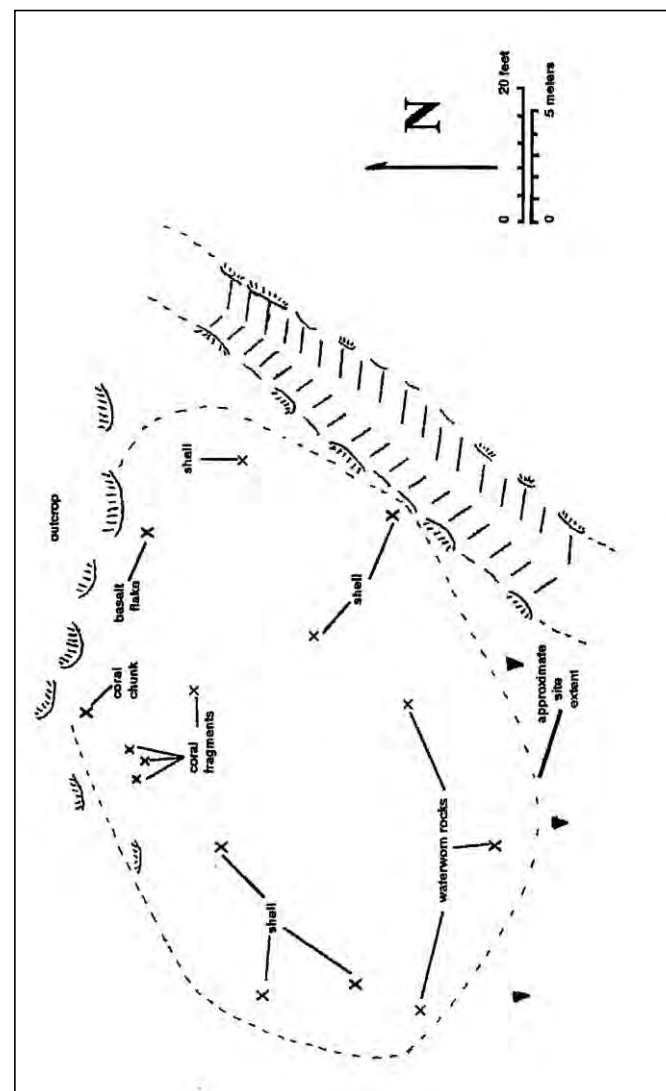


Figure 25: Site 3742 – Plan View.

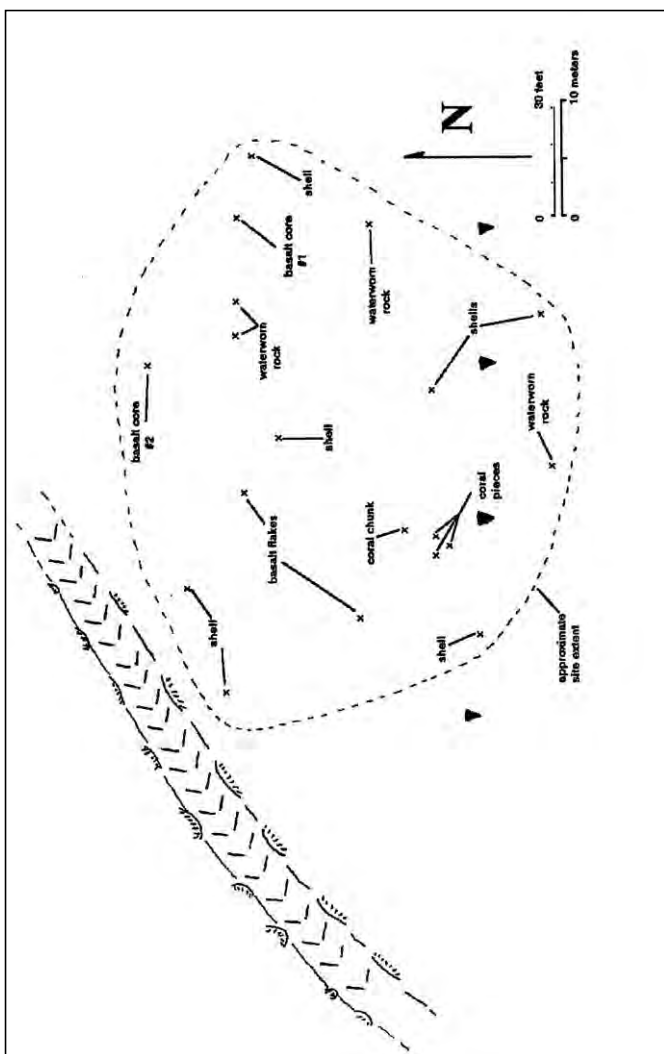


Figure 26: Site 3743 – Plan View.

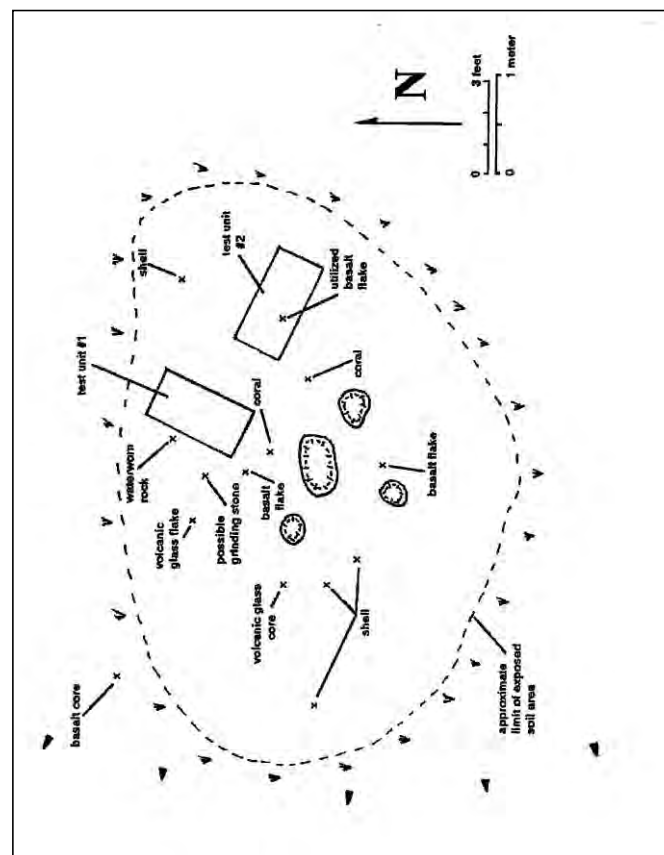


Figure 27: Site 3744 – Plan View.

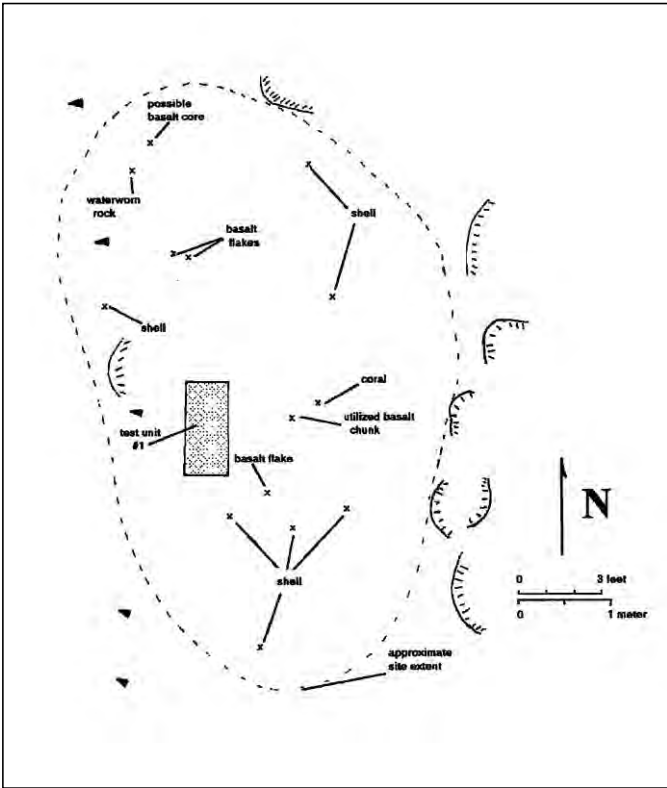


Figure 28: Site 3745 – Plan View.

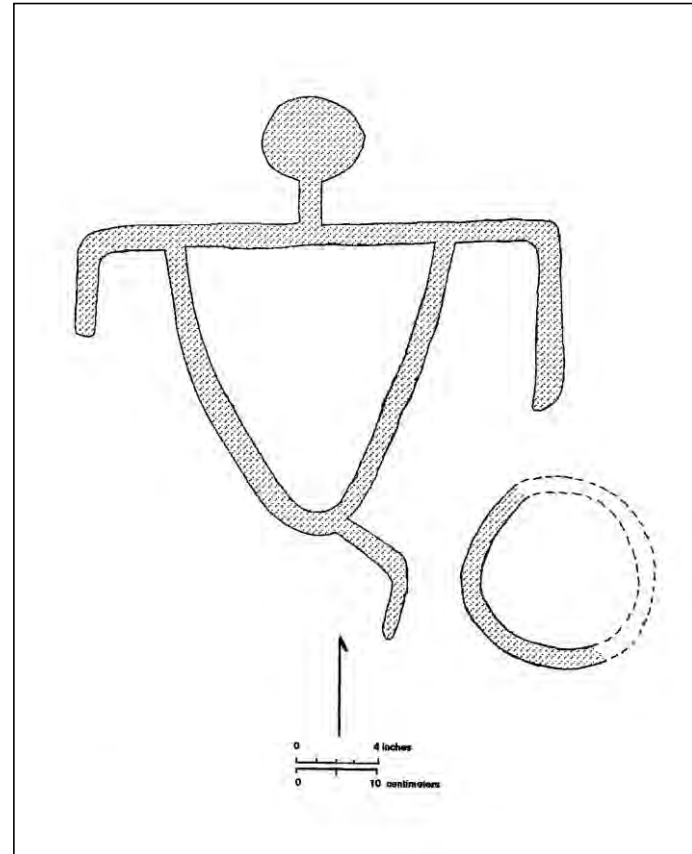


Figure 29: Site 3746 – Plan View.

ARCHAEOLOGICAL SURVEY RESULTS

ARCHAEOLOGICAL FIELD METHODS

Xamanek Researches LLC conducted an archaeological inventory survey of the proposed on- and off-site improvements for the planned Piilani Promenade project in Kihei during the winter of 2014 and the summer of 2015 (TMK (3-9-001: 169, 170-174 and various off-site TMK's). As previously discussed, our work included a reevaluation of archaeological sites that were located during the 1994 Xamanek Researches AIS of what is now referred to as the on-site portion of the Piilani Promenade project.

Proposed off-site improvements portions of the project were the focus of the 2014 inventory survey effort. The off-site fieldwork took place on 9, 13 and 17 January, and 3 February 2014. Project archaeologists included Jennifer Frey, B.A., Daniel Vicars, B.A., and Erik Fredericksen (SHPD Permit #14-11 and #15-14). In addition, Mark Donham, B.A., attempted to relocate sites that were originally documented during the 1994 AIS of what is now the on-site portion of the Piilani Promenade project area. This fieldwork was conducted on 26-28 February 2014, when the project area was heavily grassed over.

Supplemental fieldwork was carried out during the summer of 2015 primarily on the on-site portion of the Piilani Promenade project area. Inventory level fieldwork was undertaken on 21-24, 27, 28, 30, 31 July, 3-6 and 11 August. Project archaeologists Marco Molina, B.A. and Hugh Coflin, B.A. carried out a 100% pedestrian inspection of the on-site project area. In addition, all previously identified sites from the 1994 study were relocated, reassessed, and altered/impacted sites were remapped. One new site, an enclosure (Site 8266), was located and documented during the 2015 fieldwork. Finally, the SHPD Maui staff archaeologist visited the project area on 4 and 11 August to view the identified historic properties on the project area and to visit the location of a modern petroglyph.

Of the originally identified 20 sites, the Site 3746 petroglyph was previously removed, and Site 3734 (stone pile) and Site 3739 (parallel boulder alignment) have been destroyed by previous heavy equipment activity on the project area. The remaining 17 sites are listed in Table 5, along with newly identified Site 8266 (a rock enclosure). Six of the remaining 17 original sites have been impacted in varying degrees by bulldozing activities after the 1994 study and prior to our 2014-2015 fieldwork. Erik Fredericksen was the director and principal investigator for the overall project (SHPD Permit #15-14).

The off-site archaeological investigation consisted of a 100% surface inspection of the proposed 1.0 MG water storage tank and access road, as well as the additional access road off of Ohukai Road and the Piilani Highway improvements. Three manually

excavated shovel tests were utilized to assess the very shallow rocky soil deposit in selected portions of the proposed water tank locale. Excavated soil was screened through 1/8th inch hardware cloth. The on-site portion of the archaeological investigation utilized a 100% surface pedestrian inspection with c. 5 m spacing between field team members and N-S sweeps. Excavation soil at Site 8266 was also screened through 1/8th inch hardware cloth. Written notes were kept in the field, and photographs were taken in a digital format. Field notes and photographs are stored on site at the Xamanek Researches LLC Pukalani facility.

2014-2015 AIS - Xamanek Researches LLC

The current archaeological inventory survey of the 101.658-acre APE included on-site and off-site improvements portions of the Piilani Promenade project area. In addition, a reevaluation of the 1994 AIS site mitigation recommendations for the 88-acre on-site project area was undertaken. The effected on-site TMKs include TMK (2) 3-9-001: 16, and 169-174. Effected off-site TMKs include TMK (2) 2-2-002: 016, 077 and 082, (2) 3-9-001: 148, and (2) 3-9-048: 122).

General Project area

The general project area contains c. 88 acres of previously surveyed property (on-site project area), and c. 14 acres of newly added off-site areas for a total APE of 101.658 acres. A total of 20 sites were located during the inventory survey in 1994 of the 88-acre property. Of these sites there were 8 rock piles and cairns, 2 enclosures, 3 parallel alignments, 1 erosion containment wall segment, 5 surface scatters, and a petroglyph on a boulder. These sites were designated 50-50-10-3727 through 3746. Although the majority of the sites were associated with ranching and WWII military activities, the petroglyph and surface scatter remains were interpreted as possible precontact sites. The petroglyph boulder was removed from the project area by a previous landowner after the 1994 AIS was completed. An after the fact Preservation Plan (Munekiyo & Arakawa, Inc., 1994) was prepared on behalf of the former landowner, and the State Historic Preservation subsequently approved this document.⁷

A 36-inch diameter County of Maui Department of Water Supply waterline was completed in c. 1979 and runs along the Makawao and Wailuku boundary, which runs diagonally through the project area (see Figure 3). This waterline is buried but has, at times, become visible because of soil erosion. At the time of our inspection it was not longer visible. This waterline will be abandoned and removed during the course of the Piilani Promenade development. A replacement waterline will be installed along the eastern boundary of the development in an easement, and near the proposed development's southern boundary.

The 2014 Xamanek Researches LLC survey of the proposed off-site improvements project area was conducted in January and February. No new sites were

⁷ There is continuing discussion among members of the Hawaiian community regarding the status of Site 3746 and if it will be returned to the Piilani Property from its current location in Kula.

located during this fieldwork. The project archaeologists were Jennifer Frey, B.A., and Daniel Vicars, B.A. Erik Fredericksen (SHPD Permit #14-11, #15-14) was the project director and principal investigator for the project. 2014 project viewing conditions were fair, because of recent heavy rainfall, with resultant invasive grass and weed cover. During the survey it was noted that previous sheet erosion has washed away much of the shallow soil deposit and exposed bedrock and boulders.

A portion of the original 1994 AIS 88-acre project area is currently being used for a base yard, a large sand stockpile, and contains a large stockpile of new drainage and waterline pipes. This impacted area is located on much of the 13.129-acre lot identified as Lot 2B, which is owned by Honua'ula Partners, LLC. As previously noted, this portion of land is owned by a different entity and is not part of the proposed Piilani Promenade development, which is on the remaining c. 75-acre portion of the property. However, Lot 2B will be included in the forthcoming project specific monitoring plan for the Piilani Promenade development (refer to Figure 8).

Included in the 2014 portion of the inventory survey are the proposed off-site improvement areas, which are now needed for the Piilani Promenade development. These proposed off-site improvements consist of a water storage tank facility, access roads to the water tank and secondary access to the project area, and finally improvements to Piilani Highway where the main access to the project will be located. These areas are discussed below.

Table 5: Site Relocation - 2015 UTM Data

Site #	Type	Easting	Northing	Condition	Integrity	Cause
3727*	Stone piles	765525	2298536	Good	Unaltered	
3728*	Stone piles	765492	2298510	Good	Unaltered	
3729	Stone cairn	765669	2298615	Fair	Unaltered	
3730	Stone cairn	765689	2298554	Fair	Altered	Dozer
3731	Stone cairn	765773	2298572	Good	Unaltered	
3732	Stone cairn	765843	2298560	Fair	Altered	Dozer
3733	Stone cairn	765840	2298587	Fair	Altered	?
3735*	Enclosure	765633	2298285	Good	Unaltered	
3736*	Enclosure	765596	2298352	Good	Unaltered	
3737	Parallel alignment	765702	2298309	Fair	Altered	Dozer
3738	Parallel alignment	765665	2298277	Poor	Altered	Dozer
3740	Erosion walls	765583	2298775	Good	Unaltered	
3741*	Surface scatter	765422	2298635	Good	Unaltered	
3742*	Surface scatter	765432	2298566	Good	Unaltered	
3743*	Surface scatter	765453	2298491	Good	Unaltered	
3744*	Surface scatter	765617	2298361	Good	Unaltered	
3745*	Surface scatter	765790	2298667	Good	Unaltered	
8266*	Enclosure	765841	2298446	Good	Unaltered	

* Denotes sites recommended for Data Recovery

Table 5 reflects the current (2015 UTM data) location and interpreted function of the sites identified during the 1994 Xamanek Researches AIS of the 88-acre property, and follow up fieldwork in 2014 and 2015, which located a rock enclosure (Site 8266). Our 2015 pedestrian inspection of the on-site project area confirms that relatively recent bulldozer activities likely associated with the installation of a cattle fence and land clearing for the storage of equipment and supplies to be used during planned construction have impacted portions of the property. In addition much of the project area elsewhere also appears to have been impacted by relatively recent (i.e. appears to be within last 5 years) bulldozing activity. A total of 6 sites appear to have been impacted by prior land clearing activities. Sites impacted by relatively recent earthmoving activities include Sites 3730, 3732, 3734, and 3737-3740.

A total of ten sites are recommended for Data Recovery work. These sites include Sites 3727, 3728, 3735, 3736, 3741-3745, and 8266. A forthcoming data recovery plan for the above sites will be developed in consultation with the SHPD.

**Table 6: On-Site and Off-Site TMK's for the Proposed
Piilani Promenade Project**

	TMK	OWNERSHIP	Description	Acreage
	Land owned by PPN/PPS			
	Development Parcels			
1	(2) 3-9-01:016	PPN/PPS	Development Parcel Phase 1	30.132
2	(2) 3-9-01:170	PPN/PPS	Development Parcel Phase 2	18.519
3	(2) 3-9-01:171	PPN/PPS	Development Parcel Phase 2	19.539
	Kihei-Upcountry Highway lot			
4	(2) 3-9-01:172	PPN/PPS	Roadway Widening Lot	4.898
	Piilani Highway Widening Lots			
5	(2) 3-9-01:173	PPN/PPS	Piilani HWY widening lot	0.924
6	(2) 3-9-01:174	PPN/PPS	Piilani HWY widening lot	0.859
			subtotal	74.871
	Onsite Easements			
7	no TMK	-	MECO substation	
8	no TMK	-	County waterline relocation	
	Land Not owned by PPN/PPS			
	Piilani Highway Widening Lots			
9	(2) 3-9-048:122	KENRANES	Piilani HWY widening lot	0.332
10	(2) 3-9-001:148	PACIFIC WEST COMMUNITIES Inc.	Piilani HWY widening lot	0.407
			subtotal	0.739
	Offsite Easements			
11	(2) 2-2-02:016 (portion)	Haleakala Ranch Company	Roadway and utility easement	1.119
12	(2) 2-2-02:082 (portion)	Kaonoulu Ranch LLLP	1.0 MG Water Tank transmission line easement	10.646
			subtotal	11.765
	Offsite Water Tank			
13	(2) 2-2-02:077 (portion)	Kaonoulu Ranch LLLP	1.0 MG Water Tank site	1.154
			subtotal	1.154
	Off site land reviewed for EIS purposes			
	Offsite Multi-family			
14	(2) 3-9-01:169	Honuaula Partners	Future affordable Multi-family development	13.129
			subtotal	13.129
				101.658 acres



Photo 2: General view of the project area showing current vegetated conditions. View towards the northwest along Piilani Highway.



Photo 3: Photo of the sand storage pile, c. 2 meters tall, is stored on northern portion of proposed Piilani Promenade development, near Lot 2B.



Photo 4: View to the east of the proposed off-site waterline easement project area. The cultivated Monsanto fields are in view in background.



Photo 5: Photo showing the existing waterline manhole near the northeast of the base yard. This water line will be abandoned and a new waterline will be installed along the east and south border of the Piilani Promenade project area.



Photo 6: Small drainage gully that crosses Lot 2B near the base yard.



Photo 7: Base yard near Lot 2B. View to the west. Note the chain link fence is within the Lot 2B section owned by Honua`ula Partners, LLC. View to the west.



Photo 8: Base yard on portion of Piilani Promenade. Note the fenced area is owned by Honua'ula Partners, LLC. View to the northeast.



Photo 9: Base yard on Lot 2B - owned by Honua'ula Partners, LLC. View to the north.

Off-Site Improvements - 2014 Fieldwork

Off-Site Water Storage Tank and access road:

Survey of the 1-acre off-site water storage tank area (TMK: 2-2-002: 077 and 082) took place on 13 January and 3 February 2014. The project archaeologists included Jennifer J. Frey B.A. and Daniel Vicars, B.A. Three manually excavated shovel tests were utilized to assess the very shallow soil deposit in selected locations (refer to Figure 4 for ST locations). Excavated soil was screened through 1/8th inch hardware cloth. Shovel test results are discussed in the Archaeological Findings section.



Photo 10: Overview of the off-site water storage tank facility.



Photo 11: Overview of off-site water storage facility and access area, view towards the ocean(west). Note Monsanto cultivated fields in background. TMK: 2-2-002: 077 and 082.

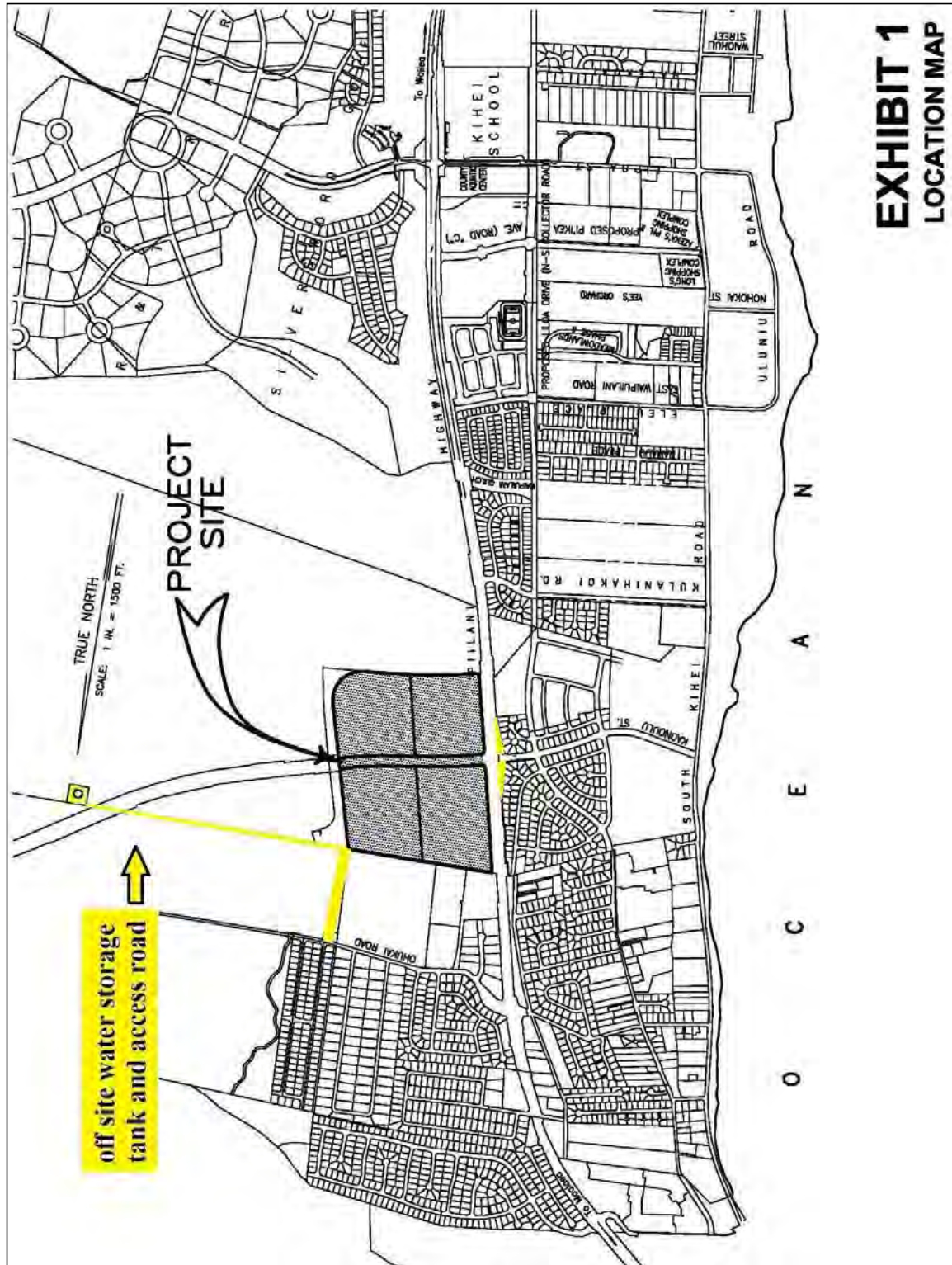


EXHIBIT 1 LOCATION MAP

Figure 30: Off-Site water storage facility tank and access road, TMK: 2-2-002: 077 and 082. Off-site access road to Ohukai Road, TMK: 2-2-022: 016. Off-site road improvements along Piilani Highway, TMK: 3-9-001: 148 and 3-9-048: 122.

Off Site access road to Ohukai Road

The proposed off-site access road to Ohukai Road was covered by a 100% pedestrian survey. Given that the current dirt access road is regularly utilized by farm-related traffic, no subsurface testing was carried out. The off-site access road is contained on a portion of TMK: 2-2-002: 016. The current access road is highly disturbed and modified. Monsanto Farms uses much of this parcel for storage of discarded farm equipment and “trash”. Invasive non-native vegetation springs up along the roadway. There is no evidence of significant material cultural remains in this area. Photos and map follow:



Photo 12: Overview of the Ohukai Access Road – TMK: 2-2-002: 016.



Photo 13: Overview of the Ohukai Access Road – TMK: 2-2-002: 016.



Photo 14: Overview of the Ohukai Access Road – TMK: 2-2-002: 016.

Off-Site Piilani Highway Improvements

The final off-site project area is located along the *makai* side of the Piilani Highway at the entrance to the Ka Ono Ulu Estates housing neighborhood. This small 2-

acre portion of the project will include improvements to the existing intersection. These roadside parcels are contained on TMK's 3-9-001: 148 and 3-9-048: 122.



Photo 15: Photo of the off-site improvement area, view towards the North. Piilani Promenade Project in view on the right of the highway.



Photo 16: Off-site project improvements area, view towards Wailea (South), Piilani Promenade Project in view just to the left of the highway.

Waterline Improvement easement

This portion of the off-site improvements project area was formerly proposed for an overflow diversion to the nearby Kulanihakoi Gulch. However, project plans now call for overflow diversion to be carried in a proposed drain line that will cross the on-site portion of the development within the roadway right-of-way in an east-west manner. The off-site easement is now only being used for the to be rerouted Central Maui waterline. Jennifer Frey and Erik Fredericksen surveyed the proposed waterline easement on 11 February 2014. This waterline easement is located along the eastern edge of the Piilani Promenade project area (Figure 31). The southern portion of the waterline corridor runs within the on-site portion of the Piilani Promenade Project area, parallel to and above a section of Kulanihakoi Gulch.

At the time of the survey, the impact of sheet erosion was noticeable in much of the corridor. Signs of prior erosion were noted and the majority of the visible surface consisted of weathered subsoil and exposed bedrock. Invasive grasses and weeds covered the ground wherever remnant soil was present. No cultural remains were located during this portion of the archaeological survey. No shovel tests were attempted due to rocky conditions and limited soil cover. A location map and photos of the survey area follow below:

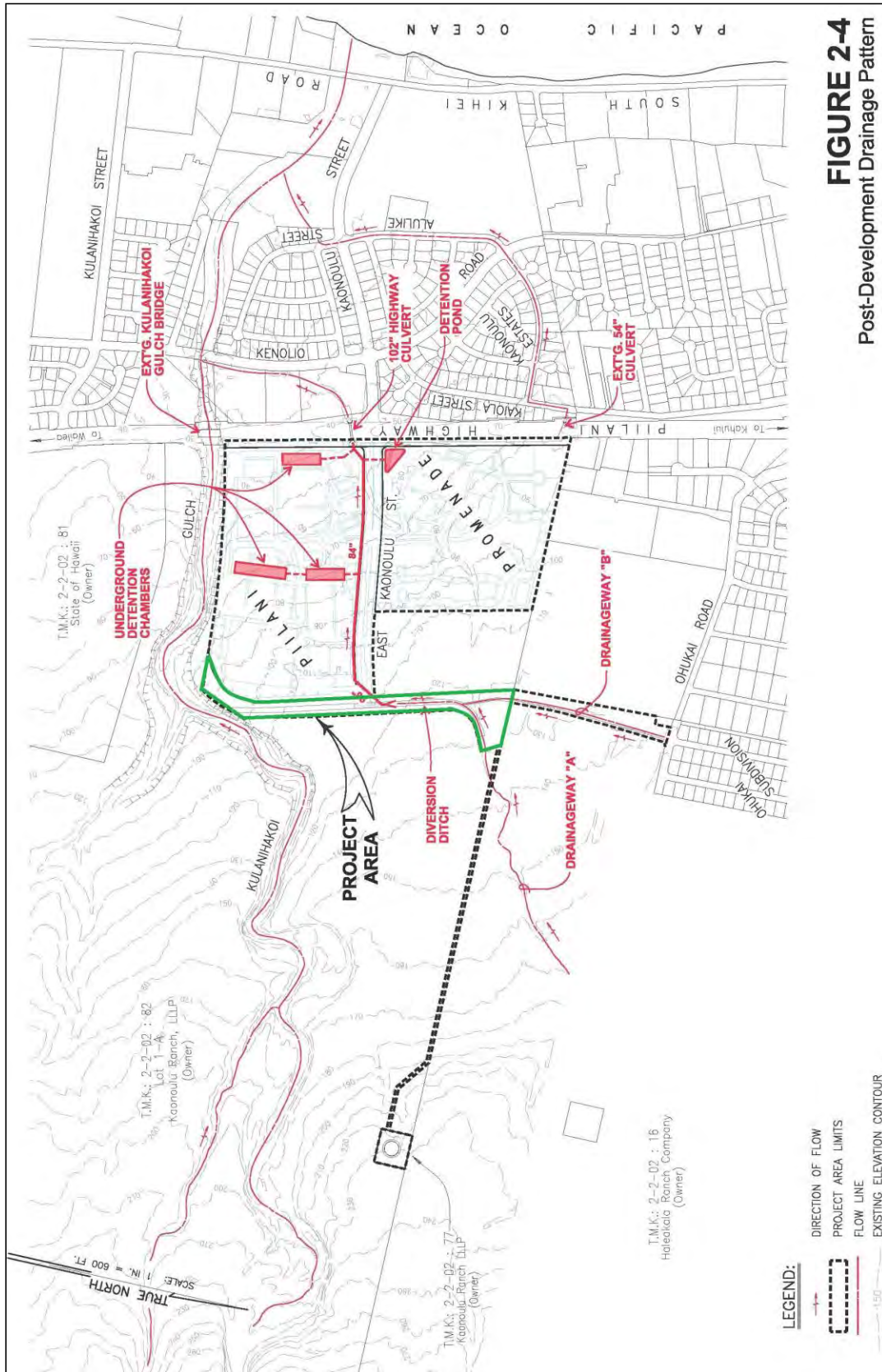


FIGURE 2-4
Post-Development Drainage Pattern

Figure 31: Surveyed area of the newly proposed water line easement (in green).



Photo 17: Bulldozer scarring on rocks.



Photo 18: General condition of the waterline easement area.



Photo 19: View of the proposed waterline easement area near the south end, above Kulanihakoi Gulch.



Photo 20: Kulanihakoi Gulch showing the flood washed bottom after the heavy recent rains. This gulch will not be impacted during the construction project.



Photo 21: View to the southeast of Kulanihakoi Gulch after the recent rains. This gulch is off of the project area and will not be impacted.

Community Consultation

On Tuesday, 25 February 2014, a community consultation meeting was held for interested parties to address their concerns regarding this specific project. A total of 12 community members attended. The meeting was recorded and the transcripts are available in Appendix C of this report for further reference.

Off-Site Water Storage Tank Facility (TMK: 2-2-022: 077 and 082)

The archaeological survey of the off-site water storage tank area was carried out in January 2014. The archaeologists systematically surveyed the proposed c. 13-acres of the off-site water storage tank and access road areas. There were no significant material culture remains located during the course of this survey. In addition three 50x50cm shovel tests were excavated in the area of the proposed water storage tank off-site facility. There were no sites located within the proposed APE for the water tank and access road. However a remnant of a bulldozed roadway and a linear rock alignment were noted c. 50 m upslope and east (*mauka*) of the water tank site locale. These features are outside of the easement and APE and will not be affected by construction.

There was one soil layer type encountered during the shovel testing. Each shovel test is discussed below:

Shovel Test 1: Located in the locale of the proposed future 1.0 MG water tank.

Layer I: 0-6cmbs, brown silt, topsoil covering the rocky terrain, this layer is sterile

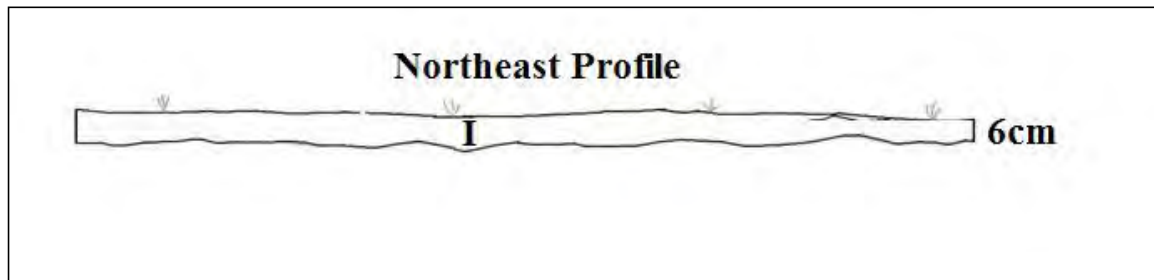


Figure 32: Northeast profile of Shovel Test 1.



Photo 22: Northeast profile of Shovel Test 1.

Shovel Test 2: Located within the proposed water tank locale.

Layer I: 0-9cmbs, brown silt, topsoil covering the rocky terrain, this layer is sterile

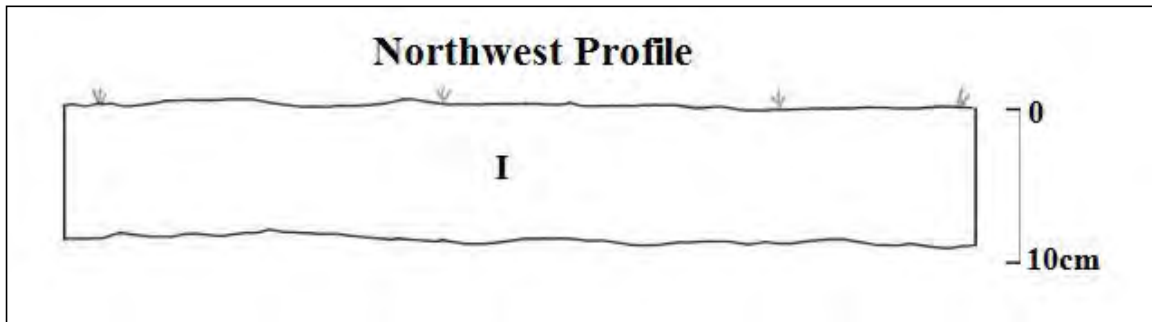


Figure 33: Northwest profile of Shovel Test 2.



Photo 23: Northwest profile of Shovel Test 2.

Shovel Test 3: Located within the proposed water tank locale.

Layer I: 0-30cmbs, brown silt, slightly rocky, this layer is sterile.

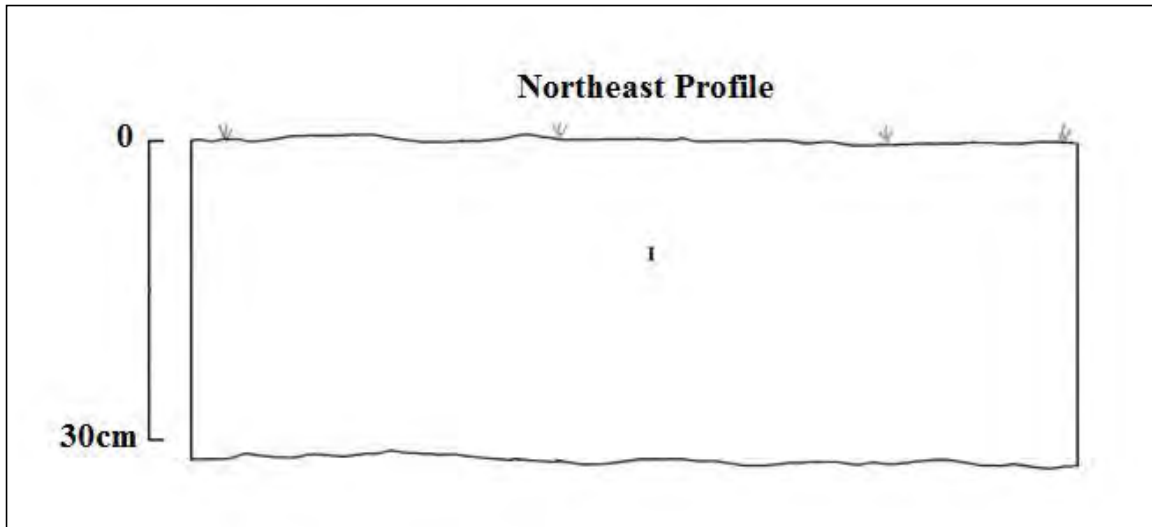


Figure 34: Representative Profile 3, northeast profile.



Photo 24: Northeast Profile of Shovel Test 3.

On-site Improvements Project Area - 2015 Fieldwork

As previously noted, Xamanek Researches LLC conducted supplemental fieldwork primarily on the on-site improvements portion of the proposed Piilani Promenade project area (Parcel 16). The additional fieldwork was carried out between mid-July and the first week of August 2015. This supplemental effort was undertaken following comments by Maui Cultural Lands that some sites previously not relocated during our 2014 fieldwork might still be on the project area (Appendix E). Given that our 2014 fieldwork was carried out in the winter months and that surface visibility was obscured by thick vegetation, our 2015 fieldwork was conducted in the drier summer months of 2015.

The entire on-site improvements project area was reexamined with a 100% pedestrian inspection utilizing 5 meter spacing between crewmembers. All 19 of the originally identified sites were relocated.⁸ However, several of these sites appear to have been disturbed to varying degrees by relatively recent (i.e. between 1994 and 2015 fieldwork) bulldozing activities on the project area. In addition, one new site, a rock enclosure, was located and documented; it has been designated SIHP 50-50-10-8266. It is discussed after the following section that documents recent disturbances to Sites 3730, 3732, 3734, 3737-3739, and 3740.

Sites altered by relatively recent mechanical activities

The 7 sites that have been impacted by relatively recent bulldozing activities on the project area include Site 3730 (rock cairn), Site 3732 (rock cairn), Site 3734 (rock pile), Sites 3737-3739 (parallel boulder alignments), and a section of the Site 3740 erosion containment walls in the gully that crosses the northern portion of Parcel 16 (identified as Ka'ono'ulu Gulch on some maps). The impacts described below have occurred sometime after the 1994 inventory survey and prior to our recent fieldwork. Disturbances documented at these previously identified sites are discussed below.

Site 3730

Several rocks have been dislodged from this stone cairn. Some mechanical scars were noted on rocks nearby this site, suggesting that this site may have been inadvertently disturbed during earthmoving activities on the project area. Refer to Photo 25 for the current condition of Site 3730 (compare with Figure 13).

⁸ This total does not include the Site 3746 petroglyph, which was removed from the project area by a former landowner.



Photo 25: View to the SE of Site 3730 stone cairn - 2015.

Site 3732

This second stone cairn also appears to have been disturbed by relatively recent heavy equipment activities on the project area. Several dislodged cobbles were noted around the base of this feature. Refer to Photo 26 for the current condition of Site 3732; compare with Figure 15 of this report.



Photo 26: View to the south of Site 3732 stone cairn - 2015.

Site 3734 (stone pile)

This low rock pile was originally documented in 1994. At the time, it measured c. 1.5 m N/S by 2.1 m E/W by 0.38 m in height. When it was relocated in 2015, it had been essentially destroyed. It appears that a bulldozer had run over it, crushing and displacing feature component rocks. Refer to Photo 27 below for current condition of this site.



Photo 27: View to the north across remnants of Site 3734 rock pile. Note displaced component rocks and flattened nature of feature.

Site 3737 (parallel alignment)

This long, linear military-era site consists of two parallel boulder alignments. It remains in generally good condition. However, the site appears to have been traversed by a bulldozer in several different locations. Recent heavy equipment scars were noted on some of the boulders contained within the site, along with older mechanical scars that were noted during the 1994 archaeological inventory survey. Refer to Photos 28-30 for current conditions.



Photo 28: View to the north of Site 3737, scarred boulders visible at center left - 2015.



Photo 29: View to the north of Site 3737, scarred boulders, displaced soil - 2015.



Photo 30: View to the north of Site 3737, scarred boulders visible at center left - 2015.

Site 3738 (parallel alignment)

This linear military-era site consists of two parallel boulder alignments, which have been heavily impacted by bulldozing activities, likely associated with the installation of a nearby cattle fence. At the time of our recent fieldwork, Site 3738 was in generally poor condition, and had been substantially altered. It is estimated that the site is less than 25% intact. Recent heavy equipment scars were again noted on some of the boulders contained within this site, along with older mechanical scars that were seen during the 1994 archaeological inventory survey. Refer to Figure 35 and Photos 31-34 for current conditions.

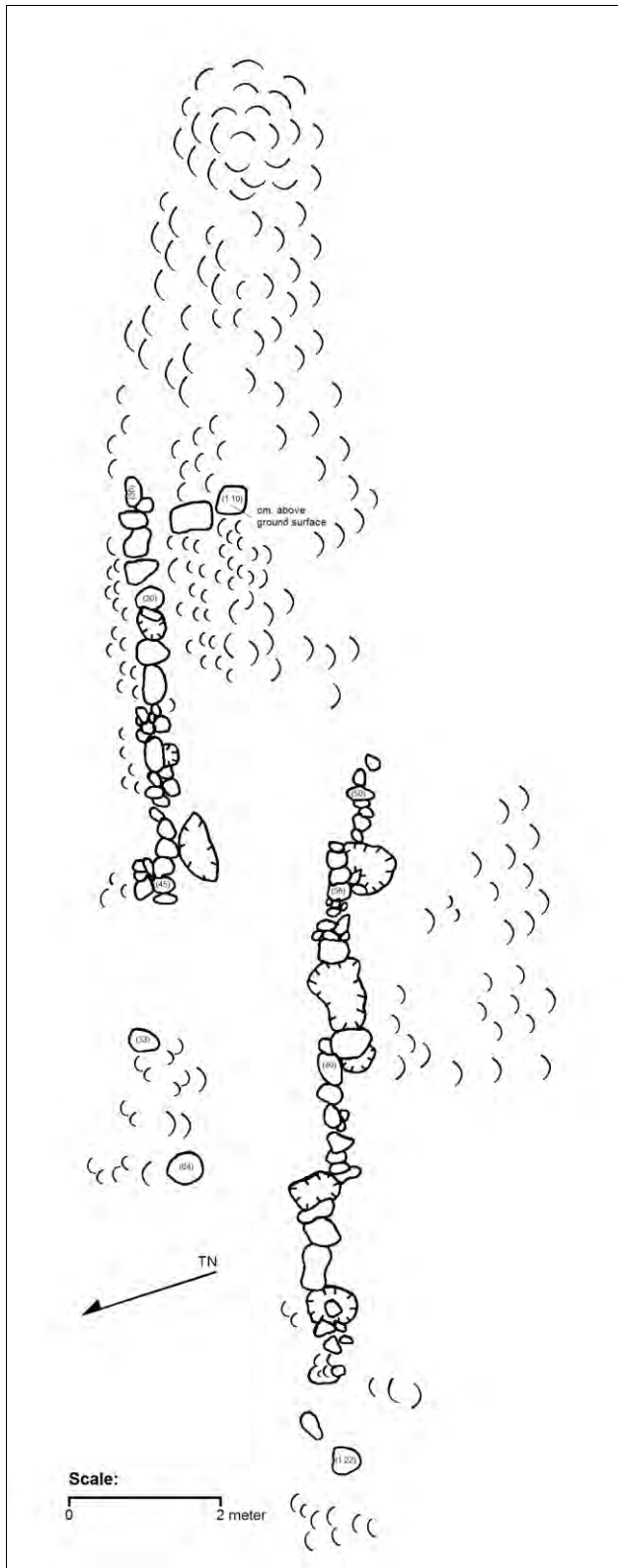


Figure 35: Plan view of Site 3738, modern disturbance.



Photo 31: View to the west of altered Site 3738. Note: newer cattle fence and bulldozed access road at left.



Photo 32: Overview to the west of bulldozed access road near Site 3738. Note displaced boulders in background.



Photo 33: View to the south of displaced boulders, Site 3738.



Photo 34: View to the north, displaced boulders with machine scars visible.

Site 3739

This third World War II era parallel rock alignment has essentially been destroyed. Possible displaced feature boulders were noted at the southwestern edge of the former site. As in the case of Site 3738, Site 3739 appears to have been impacted by earthmoving activities carried out in support of the construction of the newer cattle fence that forms the project area's southern boundary. Refer to Figure 36 and Photo 35 for current conditions.

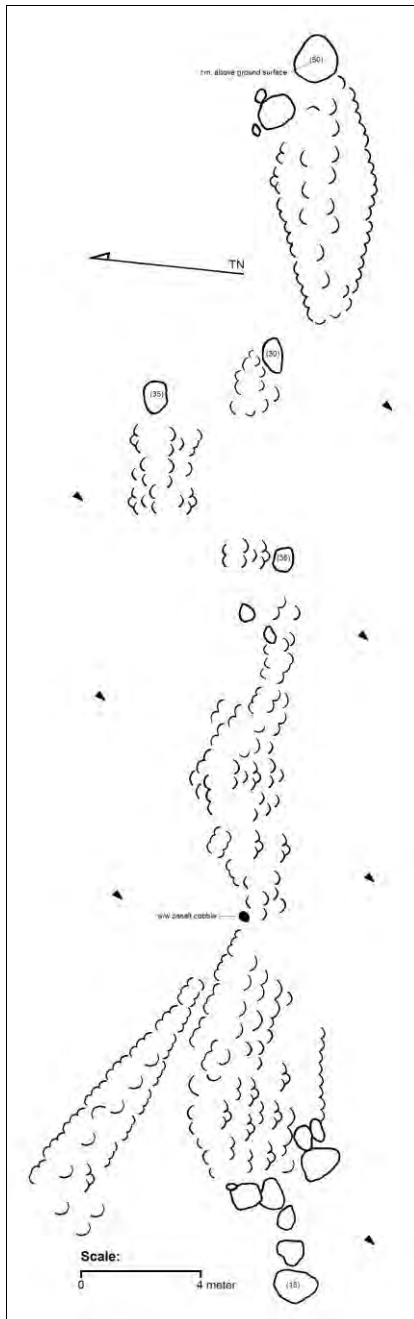


Figure 36: Plan view of former Site 3739.



Photo 35: View to the east of displaced boulders possibly associated with former Site 3739.

Site 3740

This ranch-era erosion control feature is located in the gully that crosses the northern portion of the project area. While Site 3740 has been impacted by prior heavy equipment activities on the project area, this impact has been minimal in this locale. At the time of our walkover, one low wall section exhibited some minor heavy equipment scars likely associated with a recent gulch crossing. Refer to Photo 36 below. This site remains in generally good condition.



Photo 36: View to the NE across a section of Site 3740. Note small, displaced boulders at lower center right (base yard visible in background right).

Reconstructed rock pile near Site 3745

Site 3745

Site 3745 was originally located during the 1994 inventory survey of Parcel 16. This site consisted of a modestly sized surface scatter. A nearby, altered rock pile was located during our supplemental fieldwork in July-August 2015. This low feature appears to have been substantially reconstructed. This interpretation is based upon the presence of non-weathered and weathered rocks mixed within the construction of the overall feature. Given that this feature is located in a small, natural depression, and is not readily visible from the surrounding area, its function remains unknown. Refer to Figure 37 and Photos 37-38 for current conditions.

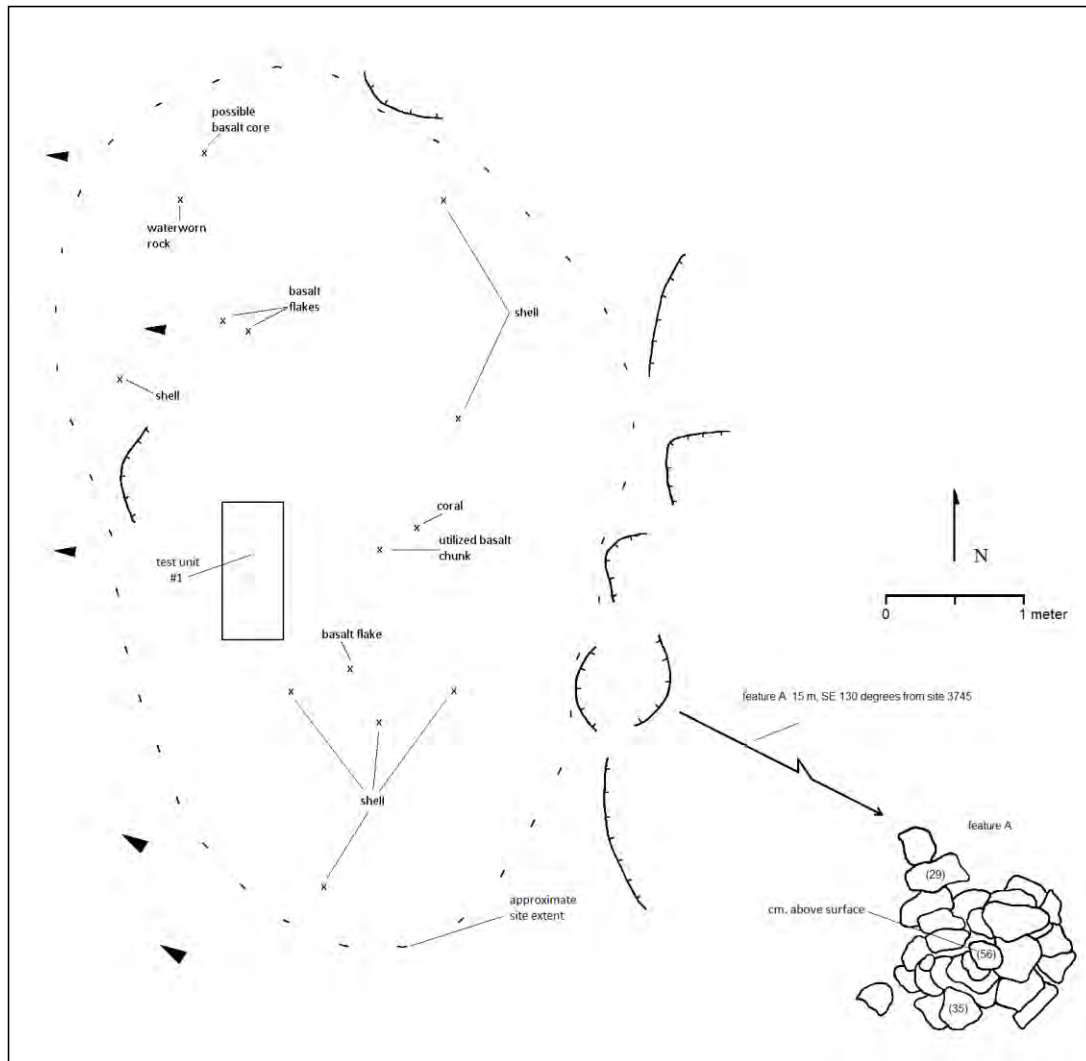


Figure 37: Plan view of Site 3745, with reconstructed stone pile.



Photo 37: View to the NNW across Feature A, reconstructed rock pile.



Photo 38: View to the ESE of Feature A, reconstructed rock pile.

Site 50-50-10-8266

This previously unidentified site consists of a rectangular-shaped rock enclosure that incorporates some native bedrock in its construction. This site was noted when Maui Cultural Lands volunteers made an informal visit to the project area in the early summer of 2015. Site 8266 is located near a promontory in an area of relatively dense grass cover. Xamanek Researches LLC staff located and recorded this feature during our supplemental work on the project area in July-August 2015.

SITE:	50-50-10-8266
SITE TYPE:	Enclosure
FUNCTION:	Temporary habitation
PROBABLE AGE;	Possible precontact
TOTAL FEATURES:	One
DIMENSIONS:	6.4 meters long by 3.5 m wide by up to 0.25 m high
SIGNIFICANCE:	Criterion “d”
CONDITION:	Fair
DESCRIPTION:	Site 50-50-04-8266 consists of a low rectangular enclosure that appears to have been utilized on a temporary basis. This feature is constructed of subangular basalt cobbles. This enclosure is c. 6.4 meters in length by up to 3.5 m wide by a maximum 0.25 m high. The feature appears to have been impacted by cattle grazing and heavy equipment activities sometime in the past. One small piece of weathered coral was noted on the surface near this site. One test unit was utilized to assess subsurface conditions in the interior of this low feature, which is in fair to good condition.

Test Unit 1

This 0.5 by 0.5 meter unit was placed in the central interior of the enclosure to sample subsurface conditions (see Figure 37 and Figure 38). Two shallow soil layers were encountered in TU 1. Recovered portable remains included marine shellfish, small pieces of weathered coral, and a small, unutilized basalt chip (Table 7). Layer I (0-20 cm), slightly compact, reddish brown (5 YR 4/4) silty clay with a fine-grained texture. Modest amounts of portable remains consisting of marine shellfish (9.3 g) were recovered, along with a small, unworked basalt flake (0.7 g), 10 fragments of weathered coral (7.8 g). Layer II (20-23 cm) was composed of yellowish red (5 YR 4/6) clay with small pieces of weathered bedrock. Small amounts of marine shellfish (2.9 g), and 4 small pieces of coral were recovered from this thin stratum, which terminated at bedrock.

Discussion

Recovered portable remains from excavation at this small enclosure suggest that Site 8266 was utilized on an intermittent basis for temporary habitation. The absence of any post-contact trade items suggests that this feature was utilized in precontact times.

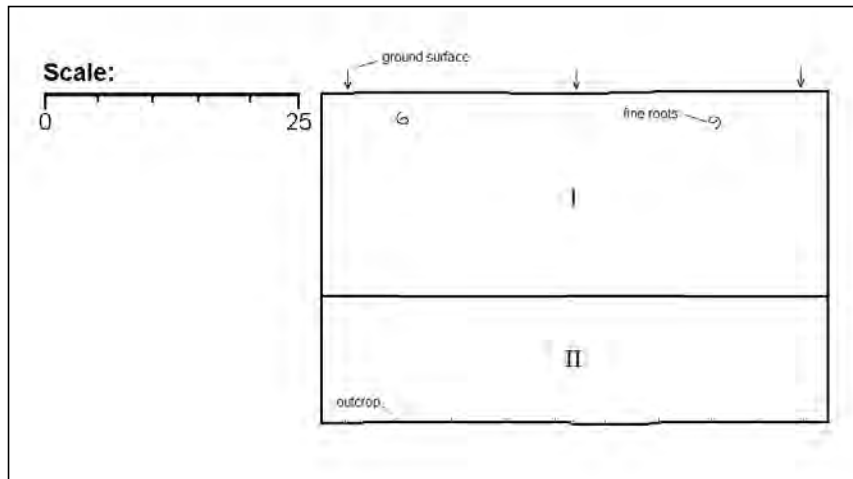


Figure 38: North face profile of Test Unit 1, Site 8266.

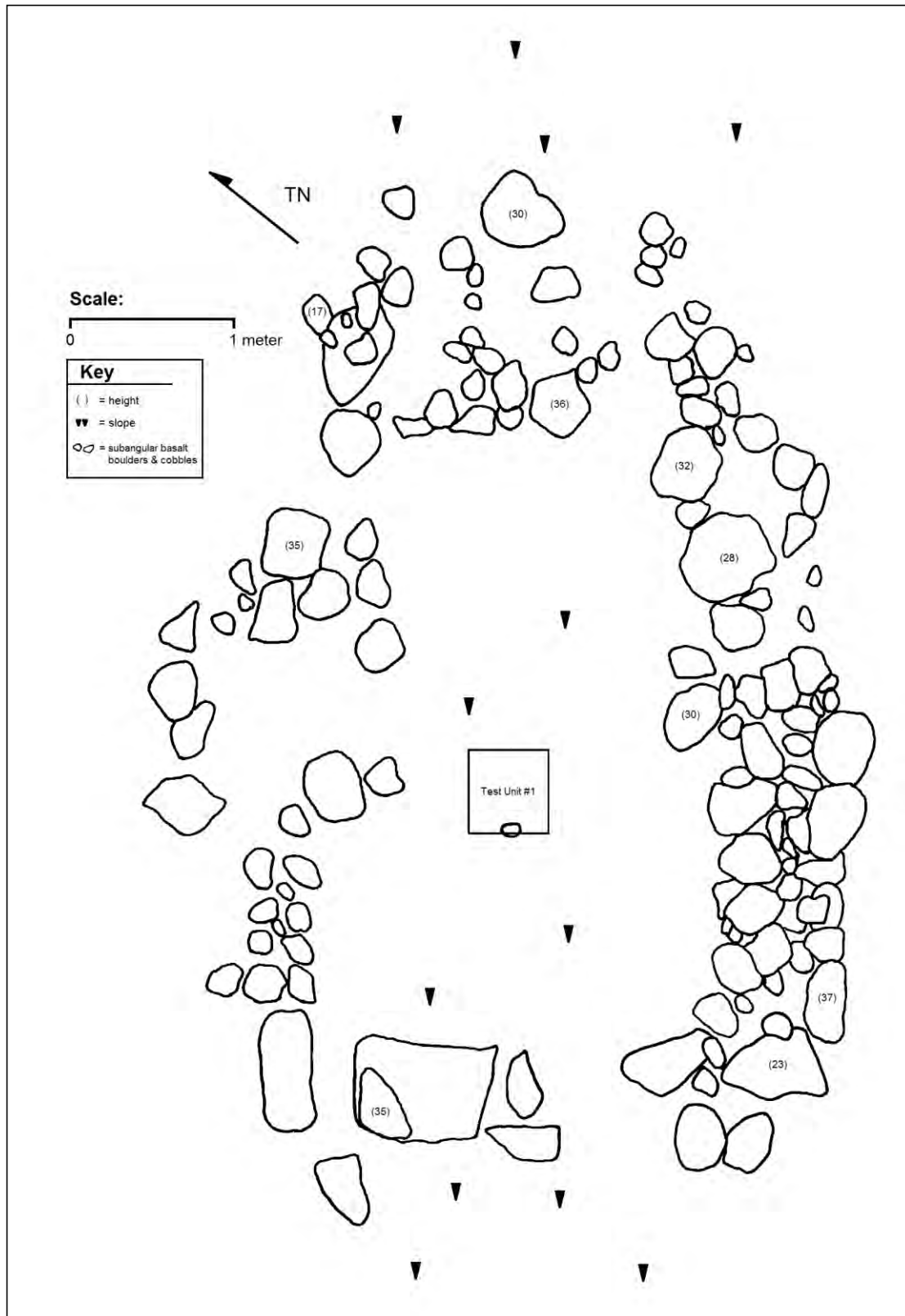


Figure 39: Plan view of Site 8266 enclosure, Piilani Promenade project, Kihei.



Photo 39: View to the NW across Site 8266, site cleared of vegetation and debris.



Photo 40: View to the SW across Site 8266.



Photo 41: View to the NE across Site 8266.



Photo 42: View to the SW, excavation of TU 1 at Site 8266 complete.

TABLE 7: Summary of portable remains - TU 1, Site 8266

Portable remains (Layer I, Level I [0-20 cmbs])	Weight (g)	Comments
Brachidontes sp.	2.9	7 pcs. (weathered)
Cypraea sp.	4.3	6 pcs. (weathered)
Nerita picea	2.1	4 pcs. (weathered)
Coral	7.8	10 small pieces
Basalt flake	0.7	Unworked
Portable remains (Layer I, Level II [20-23 cmbs])	Weight (g)	Comments
Cypraea sp.	1.1	1 pc. (weathered)
Nerita picea	1.8	4 pcs. (weathered)
Coral	4.5	4 pcs.

SUMMARY AND CONCLUSIONS

The archaeological survey of the Piilani Promenade project 101.658-acre APE was conducted in the winter of 2014 and in the summer of 2015. Surface visibility was poor to fair in the winter, and fair to good in the drier summer. One new historic property was located during our inventory survey of the project area. This site consists of a rectangular rock enclosure and has been designated SIHP No. 50-50-10-8266. Based on subsurface test results, this site appears to be a temporary habitation area that was possibly used in precontact times. The c. 88-acre on-site portion of the project area was first examined during a survey carried out by Xamanek Researches in 1994. A total of 20 sites were originally located by this earlier survey. The previously identified Sites were designated SIHP No. 50-50-10-3727 through 3746. Of the original sites, 17 remain. Seven of these have been impacted to some extent by post-1994 earthmoving activities on the project area. Of the impacted sites, Site 3734 (a rock pile) and Site 3739 (parallel boulder alignment) have essentially been destroyed. In addition, the Site 3746 petroglyph was physically removed from the project area in late 1994 by a previous landowner. As such, a total of 18 sites are present within the Piilani Promenade on-site portion of the project area. No historic properties were located on the previously disturbed off-site portions of the project area.

The 18 sites that are contained within the Piilani Promenade project area include 7 stone piles and cairns (Sites 3727-3733), 3 enclosures (Sites 3735, 3736 and 8266), 2 parallel alignments (Sites 3737 and 3738), erosion containment wall segments (Site 3740), and 5 surface scatters (Sites 3741-3745). The erosion containment wall segments (Site 3740) are interpreted as ranch era features, with possible erosion or animal control function(s). Some of the stone piles (Sites 3731 and 3733), the alignments (Sites 3737 and 3738), and 1 of the enclosures (Site 3735) appear to be associated with previous WWII era activities in the project area. Of the 5 remaining stone piles/cairns, Sites 3727 and 3728 may possibly be agricultural clear piles (based upon the generally small size of component rocks). Sites 3729, 3730, and 3732 have indeterminate functions but are tentatively interpreted as markers. The 5 surface scatters (Site 3741-3745) are interpreted as possible precontact features associated with temporary habitation activities. Two of the enclosures (Sites 3736 and 8266) are interpreted as possible precontact temporary habitation/shelter areas. The presence of only modest amounts of food midden remains at sampled Sites 3736, 3741, 3744, 3745 and 8266 suggests that use was intermittent, rather than intensive.

As noted earlier in this report, bulldozing activities, likely associated with previous military and ranching era activities, have previously impacted portions of the project area. The previous installation of a large (36-inch diameter) waterline was found

to have impacted a portion of the proposed development area along the Makawao and Wailuku District boundary.

Based on the results of the previous 1994 study, the current survey, as well as nearby archaeological work, it appears that this portion of Kihei was used for a variety of purposes in the past. The presence of possible precontact sites within the project area including 2 temporary habitation areas, 5 surface scatter sites, 2 sites that contain possible agricultural clear piles, as well as 3 possible rock markers and the former Site 3746 petroglyph boulder suggests that the project area was utilized on a temporary basis, possibly as a rest area while transiting *mauka/makai*. The project area was utilized for ranch land in the post-contact period, and activities associated with this type of land use may have impacted portions of the project area. Military use appears to have impacted portions of the project area, altering the landscape, and, possibly dismantling former sites to construct newer ones (such as the parallel boulder alignments). More recently, the installation of the Central Maui waterline in the late 1970s impacted a portion of the on-site project area.

Site Significance Evaluations

The following significance evaluations are based on the Rules Governing Procedures for Historic Preservation Review (DLNR 1996; Chapter 275). According to these rules, a site must possess integrity of location, design, setting, materials, workmanship, feeling and association and shall meet one or more of the following criteria:

Criterion “a”—Be associated with events that have made an important contribution to the broad patterns of our history;

Criterion “b”—Be associated with the lives of persons important in our past;

Criterion “c”—Embody the distinctive characteristics of a type, period, or method of construction; represent the work of a master; or possess high artistic value;

Criterion “d”—Have yielded, or is likely to yield, important information for research on prehistory or history;

Criterion “e”—Have an important traditional cultural value to the native Hawaiian people or to another ethnic group of the state due to associations with traditional cultural practices once carried out, or still carried out, at the property or due to associations with traditional beliefs, events or oral accounts.

The 17 remaining sites identified in the 1994 inventory survey continue to qualify for significance under Criterion “d” for their information content. Two sites: Site 3734 and Site 3739; have been essentially destroyed by relatively recent bulldozing activities on Parcel 16. In addition, Site 3738 is c. 75% disturbed. The newly identified Site 8266 enclosure on the on-site project area (Parcel 16) qualifies for significance under Criterion “d” for its information content. As previously noted, a former landowner removed the Site 3746 petroglyph from Parcel 16 following the 1994 archaeological inventory survey. Refer to Table 8 for Significance Evaluations and Mitigation Recommendations.

Mitigation Recommendations

One new site, a rectangular-shaped rock enclosure was identified on Parcel 16 during fieldwork in 2015. This site has been designated SIHP 50-50-10-8266, and is significant for its information content (Criterion “d”). As previously noted, 20 sites were originally located during the 1994 inventory survey of the on-site portion of the proposed Piilani Promenade development (Parcel 16). Of these, a total of 7 appear to have been impacted by post-1994 bulldozing activities on the on-site portion of the project area (Parcel 16). Sites 3734 and 3739 have been essentially destroyed. Data recovery is now the recommended mitigation for Sites 3727-3729, 3732, 3735 and 3736, Sites 3741 through 3745, and newly identified Site 8266 (see Table 8). A data recovery plan will be prepared and submitted once the AIS report has been approved by the SHPD.

As previously noted, the Site 3746 petroglyph was removed from the property in late 1994 by a former landowner. An after the fact Preservation Plan for the treatment of this petroglyph was submitted in October 1994 (Munekiyo & Arakawa, Inc.).

In 2011 a monitoring plan was completed and accepted for a large parcel within Ka’ono’ulu *ahupua’a* (SHPD DOC #1108MD012). While the proposed Piilani Promenade development is located within this *ahupua’a*, a project specific monitoring plan will be prepared for on- and off-site project improvements per input from the SHPD Maui office. Also included in the forthcoming monitoring plan will be Lot 2B, which is owned by a separate entity, but which will be affected by actions of the proposed development.

TABLE 8: Site Evaluations and Recommendations - Piilani Promenade

Site # 50-50-10-	Site Type	Recommendation
3727	Stone piles	Data Recovery (DR)
3728	Stone piles	DR
3729	Stone cairn	DR
3730	Stone cairn	No further work (NFW)
3731	Stone cairn	NFW
3732	Stone cairn	DR
3733	Stone cairn	NFW
3735	Enclosure	DR
3736	Enclosure	DR
3737	Parallel alignment	NFW
3738	Parallel alignment	NFW
3740	Erosion containment walls	NFW
3741	Surface scatter	DR
3742	Surface scatter	DR
3743	Surface scatter	DR
3744	Surface scatter	DR
3745	Surface scatter	DR
8266	Enclosure	DR

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