

**FINAL—Archaeological Inventory Survey at the Oahu Club,
Maunalua Ahupua‘a, Kona District, Island of O‘ahu**

TMK: (1)3-9-008:005 (por.)



Prepared For:

The Oahu Club
6800 Hawaii Kai Drive
Honolulu, Hawai‘i 96825

September 2012

Keala Pono 

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6800 Hawaii Kai Drive
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Prepared By:

Windy K. McElroy, PhD

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MANAGEMENT SUMMARY

At the request of The Oahu Club, Keala Pono Archaeological Consulting, LLC conducted an archaeological inventory survey of 1.8 acres on a portion of TMK: (1)3-9-008:005 in Maunalua Ahupua'a, Kona District, on the island of O'ahu. The purpose of this work was to identify historic properties that may be located on the parcel in anticipation of proposed expansion of the Oahu Club facilities. A total of five archaeological sites were observed during the survey, although only two sites were located within the project area. The other three sites are situated just outside the property boundaries to the east. The two sites within the survey area include a set of three rough terraces and a possibly historic water control feature. They are both recommended for preservation.

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INTRODUCTION

At the request of The Oahu Club, Keala Pono Archaeological Consulting, LLC conducted an archaeological inventory survey of a portion of TMK: (1)3-9-008:005 in Maunalua Ahupua'a, Kona District, on the island of O'ahu. The Oahu Club is planning to expand their facilities in a portion of the surveyed area. The archaeological inventory survey was designed to identify historic properties that may be located on the parcel in anticipation of the proposed expansion.

The report begins with a description of the project area and an historical overview of land use and archaeology in the area. The next section presents methods used in the fieldwork, followed by the results of the archaeological inventory survey. Project results are summarized and recommendations are made in the final section. Hawaiian words and technical terms are defined in a glossary at the end of the document.

The Project Location and Environment

The project area is located in Maunalua Ahupua'a on O'ahu Island, in Hawaii Kai (Figure 1). TMK: (1)3-9-008:005 is an 8 acre parcel on the east side of Hawaii Kai Drive, west of Kaluanui Ridge. The property is owned by Kamehameha Schools and is currently leased by The Oahu Club, with a paved parking lot, swimming pool, tennis courts, and other facilities occupying the western portion of the parcel. The property is situated between 0 and 80 ft. (0–24 m) in elevation. Rainfall averages roughly 30–40 inches (76–102 cm) per year (Juvik and Juvik 1998). There are no perennial streams in the immediate vicinity, and the rocky slopes are subject to slope wash during heavy rain.

The project area consists of approximately 1.8 acres on the east side of TMK: (1)3-9-008:005 (Figures 2 and 3). This area is partially bulldozed but undeveloped and is surrounded by undeveloped land and a cliff line to the east, the Oahu Club facilities to the west, KCAA preschool to the north, and undeveloped land to the south. The north and west boundaries are marked by a chain link fence; the other boundaries are unmarked. Soils in the area include Fill Land, Mixed, Lualualei Extremely Stony Clay, and Stony Steep Land (Foote et al. 1972). Vegetation consists predominantly of *kiawe*, *koa haole*, and thick grass.

The Undertaking

The undertaking consists of proposed expansion to the Oahu Club facilities (Figure 4). The area of potential effect (APE) is defined by this plan (see Figure 4). The proposed expansion includes construction of a wellness center, beach volleyball court, multi sport court, golf practice net, tennis center/pro shop/pump room, two additional tennis courts, a pedestrian trail, and a gazebo. Aside from the gazebo, all of the new features will be located east, or *mauka*, of the current Oahu Club facilities, in a portion of the property that was surveyed. The gazebo will be located west of the pool, in an area that is already developed.

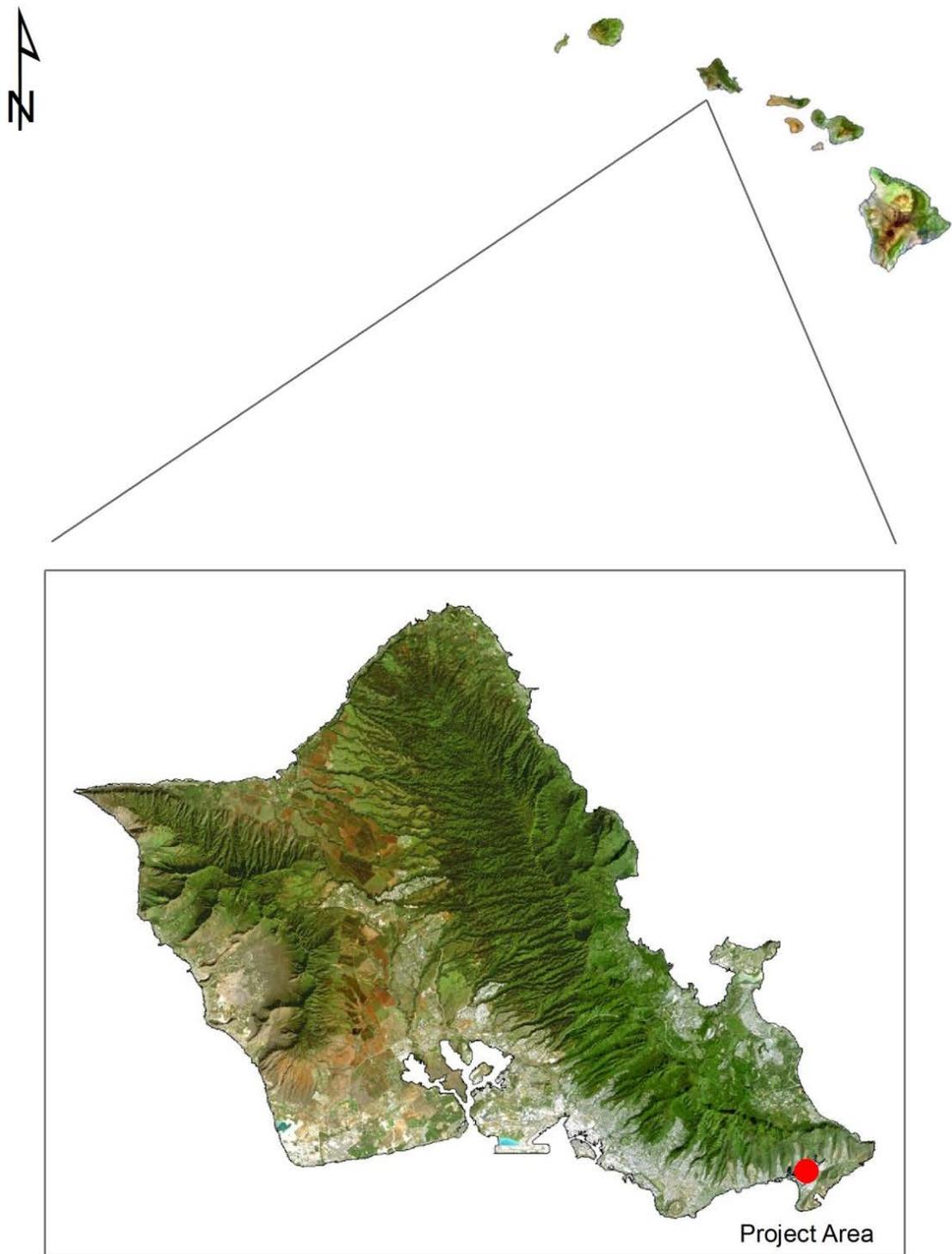


Figure 1. Location of the project area on the island of O‘ahu.

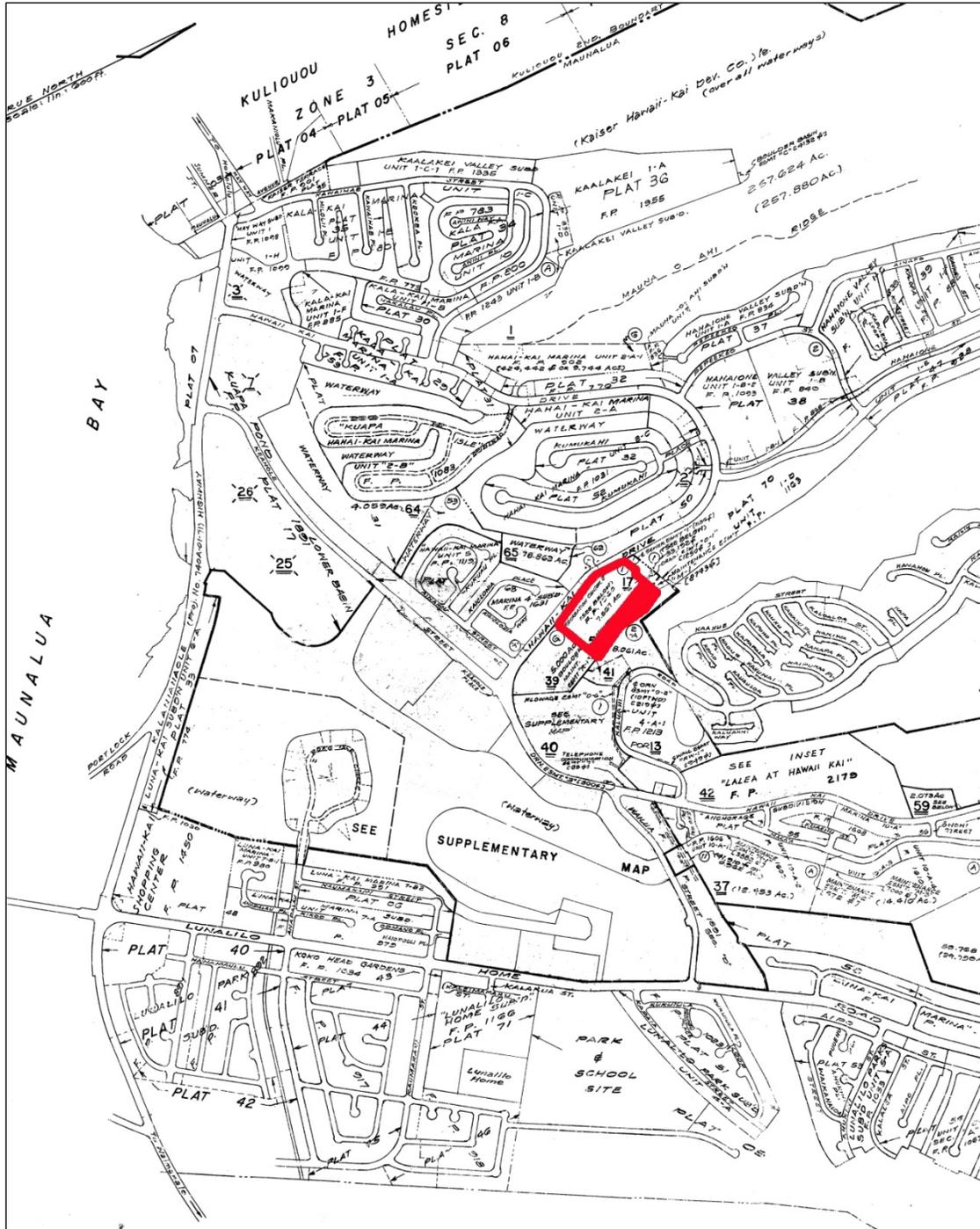


Figure 2. TMK plat map, showing TMK: (1)3-9-008:005 outlined in red and the project area in solid red.

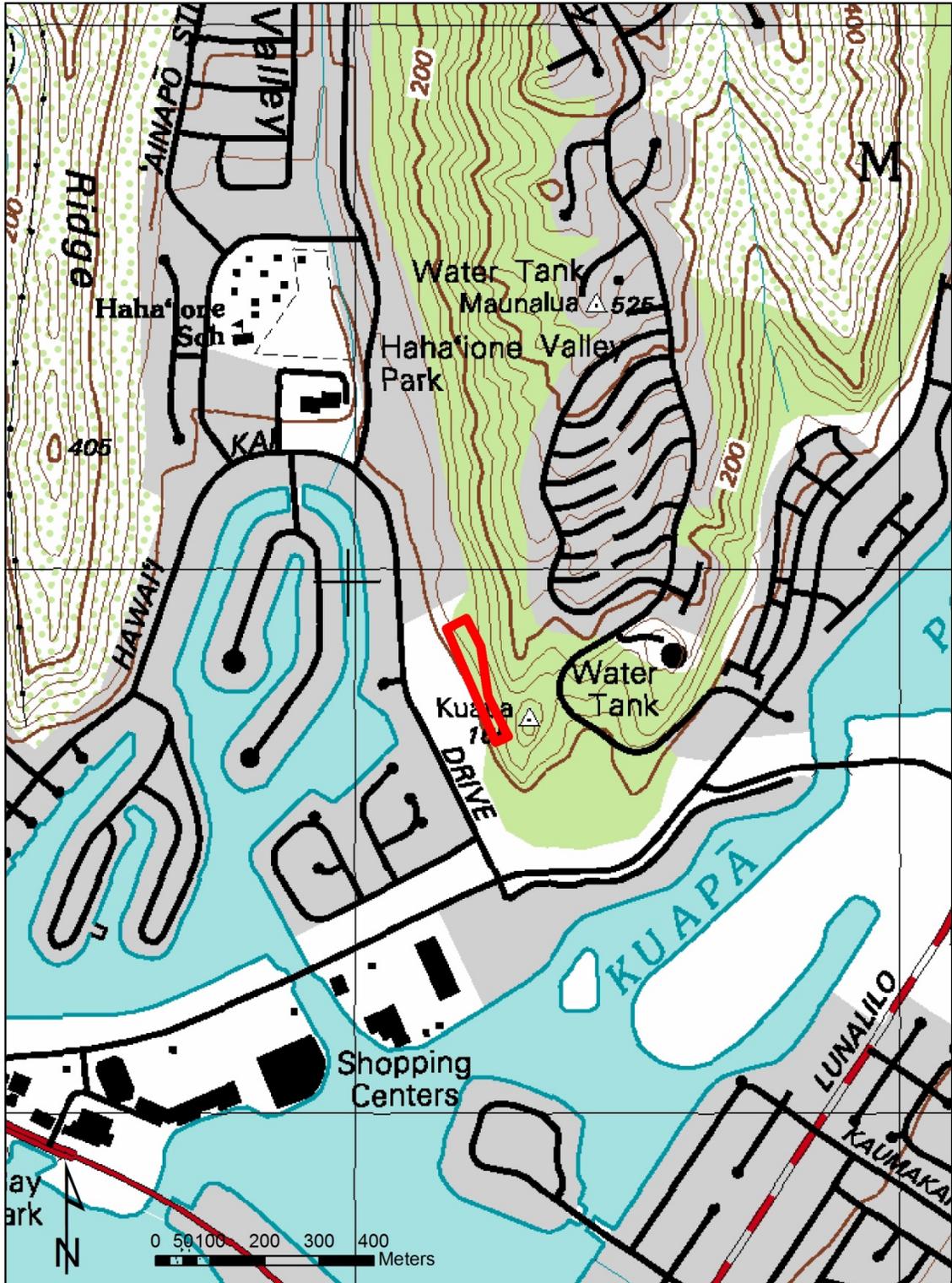


Figure 3. Location of the project area (in red) on a 7.5 minute USGS Koko Head quadrangle. This is on the east side of TMK: (1)3-9-008:005.

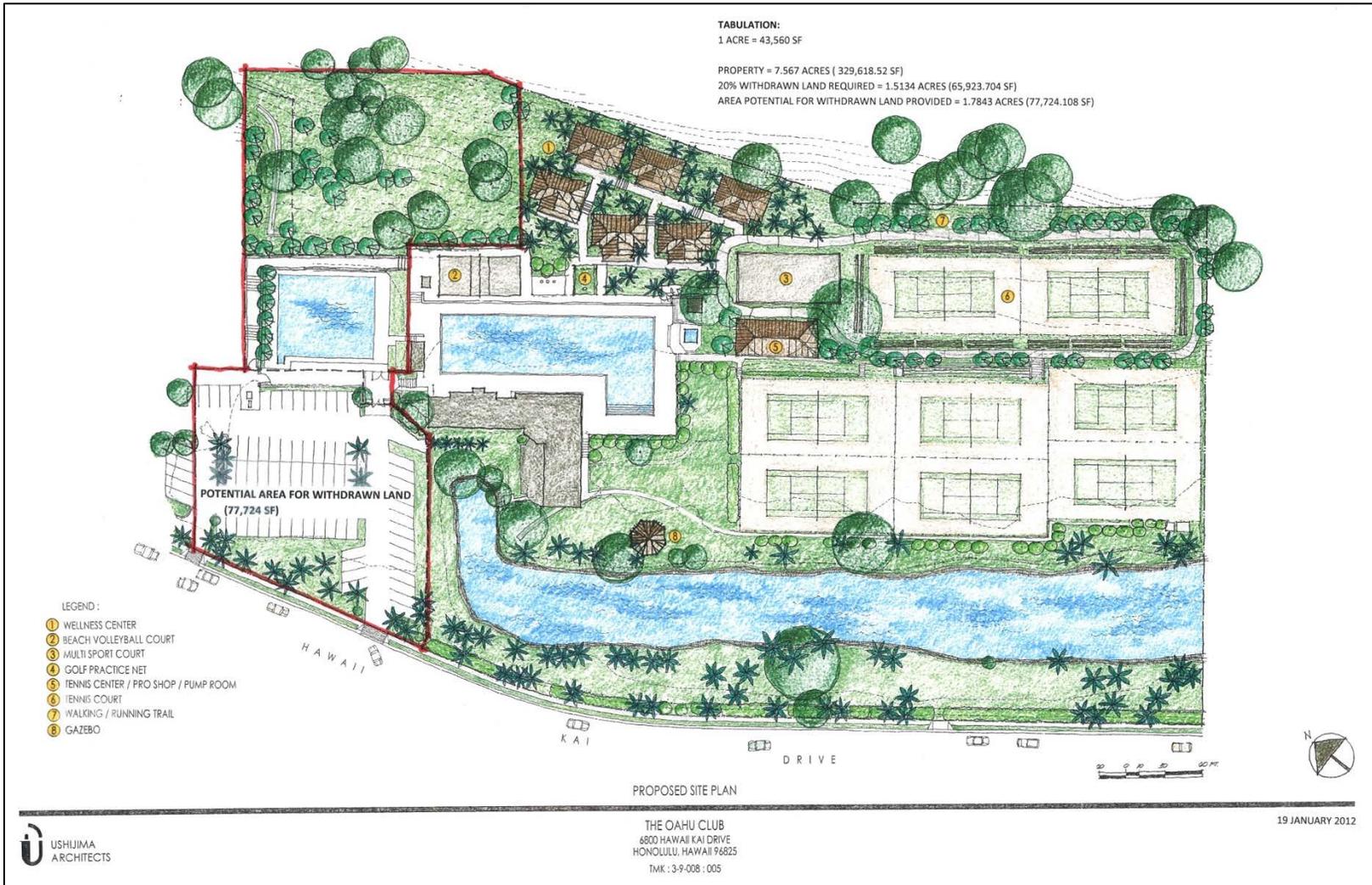


Figure 4. Proposed plan for Oahu Club expansion.

BACKGROUND

This section includes information on traditional and historic land use in Maunalua Ahupua‘a as well as a summary of previous archaeology that has been conducted in the vicinity of the project area. Background research was conducted at the Hawai‘i State Library, Bernice Pauahi Bishop Museum Archives, Hamilton Library at the University of Hawai‘i at Mānoa, and the Hawai‘i State Historic Preservation Division Library. Historical maps, archaeological reports, and historical reference books were among the materials examined.

Land Use

The *ahupua‘a* of Maunalua was traditionally known as a prime fishing spot and for a large fishpond, Keahupua O Maunalua, although *mo‘olelo* note a dearth of food in the area (Handy and Handy 1991; Walker et al. 1996). Nevertheless, Maunalua was thought to have been well-populated, and remnants of sweet potato cultivation remain (Handy and Handy 1991:483–484).

The name Maunalua translates to “two mountains” (Pukui et al. 1974:149). The ridge abutting the project area is Kaluanui, which translates to “the big pit” (Pukui et al. 1974:79). Keahupua O Maunalua, the famous fishpond, was labeled as “Kuapa Pond” on an 1851 map, referring to the type of pond, a *loko kuapā*, or walled fishpond. The name stuck, however, and the pond is referred to as Kuapā today.

The original name for Maunalua Bay was Kohelepelepe, and was associated with a *mo‘olelo* involving the volcano goddess Pele (Beckwith 1970:186–187; Pukui et al. 1974:115, 190). The pig god Kamapua‘a attacked Pele at Kalapana on Hawai‘i Island, and Pele’s sister, the sorcery goddess Kapo, detached her *kohe*, or vagina, and sent it to O‘ahu to lure Kamapua‘a away. Kamapua‘a followed the *kohe* to Koko Crater, where it left an impression that formed the hill and crater. Thus Kohelepelepe literally means “Vagina Labia Minor” (Pukui et al. 1974:115). As a result of missionary influences, the name of the area was changed to Koko, and this name was used into the 19th century.

A prominent *heiau* was located on Kaluanui Ridge. Known as Hāwea, it housed a sacred drum by the same name (Thrum 1907). It is said that when the renowned chief Kualī‘i was born at Alala in ‘Ewa, the Hāwea drum and another from Opuku were taken there for the event. Kualī‘i would later unify all of O‘ahu in the 16th century.

The Hāwea drum is also mentioned in a *mo‘olelo* involving the voyager La‘amaikahiki (Beckwith 1970). It is said that a man named Haikamalama heard the beating of the drum from the waters off Hanauma Bay and landed his canoe to investigate. After memorizing the drum’s rhythm and the drummer’s chant, he was able to get a close look at the drum and made his own replica.

The earliest historical accounts of Maunalua come from British sea captains Portlock and Dixon, who put in at Maunalua Bay in the summer of 1786 (Stump 1981). Portlock noted a shortage of fresh water in the area and encountered a small but friendly population who traded provisions for nails and beads. After Kamehameha I united the Hawaiian Islands in 1795, he began improvements to fishponds and agricultural fields that had fallen into neglect during many years of war. The fishpond at Maunalua (Kuapā) was one of the ponds he personally helped to reconstruct (Kamakau 1961:192).

At least three villages were located in Maunalua during the 19th century (Stump 1981). Maunalua Settlement was situated near the opening of the fishpond and was known to be occupied in the

early 1800s. Keawa‘awa was a fishing village located at the end of the fishpond. In 1821 the village comprised approximately 100 *hale*. Wāwāmalu, on the Waimānalo side of Sandy Beach, was a provisioning stop for whaling ships from roughly 1825 to 1850.

During the Māhele of 1848, Maunalua was awarded to Victoria Kamāmalu, sister of Kamehameha IV and V, and granddaughter of Kamehameha I as LCA 7713. There were no native tenants that were awarded *kuleana* lands in the *ahupua‘a*. In 1856 Kamāmalu leased all of Maunalua to cattle rancher William Webster. Ten years later, upon Kamāmalu’s death, Maunalua was transferred to Bishop Estate.

At the turn of the 20th century, cattle were brought to the *ahupua‘a* in conjunction with the establishment of Maunalua Ranch in 1900 by the Damon family (Stump 1981). In the early 1900s, land was utilized largely for agriculture and livestock farming, with mullet being raised commercially in Maunalua Bay, a Kamehameha Schools vocational farm in Hahaione Valley, and pig farms occupying Kalama Valley. A Federal Aviation Administration communications center with several radio towers stood where the Hawaii Kai Golf Course is now. The Makapu‘u Lighthouse was constructed in 1906 after the luxury ocean liner Manchuria ran aground on the Makapu‘u reef (Stump 1981), and the Makapu‘u Military Reservation was established in the lighthouse area in 1922 (Farrell and Spear 2002).

In 1932 Bishop Estate trustee Alan Davis leased 600 acres of land for cattle ranching near Queen’s Beach (Stump 1981). The area would later come to be known as “Alan Davis.” A 1946 tsunami destroyed Davis’ ranch along with many coastal sites in the *ahupua‘a*. In 1961 Bishop Estate entered into a development agreement with Henry J. Kaiser, and Maunalua’s name was changed to “Hawai‘i Kai” (Hancock 1983). In the 1970s housing and business development began to dominate the landscape, and today Hawai‘i Kai is a highly developed residential and commercial area.

Previous Archaeology

Several archaeological projects have been conducted in the vicinity of the current project area (Figure 5; Table 1). Summaries of these projects below are listed in chronological order.

McAllister (1933) recorded Hāwea Heiau (Site 42) and a house site (Site 43) near the project area. He noted that the *heiau* was partially destroyed, with only the western portion remaining. He observed multiple low-walled terraces, stone walls, and paved terraces, one with a rectangular pit. Possible steps were located on the *makai* side of the structure. The house foundation was thought to have been used into the historic era. The house site included an associated enclosure, a possible pigpen, and a stone-lined well.

In the early 1960s cave site O-5 was excavated by the University of Hawai‘i (Smart 1965; Bayard 1965). This is located on the east side of Kaluanui Ridge. An abundance of cultural material was recovered, and radiocarbon dates indicated initial occupation prior to AD 1300. A total of five occupational episodes were hypothesized, with the latest extending into the historic period.

A series of rock shelters and a house platform were noted at the base of Kaluanui Ridge during a University of Hawai‘i student project (Bayard 1967). Their exact location cannot be determined from the sketch (Figure 6) and notes, although they appear to be just west of the current project area. Below the project area to the south, several other features were recorded, including stone mounds, another rock shelter, a wall, and the Site 43 house platform identified by McAllister (1933). All features were designated as part of Site O-16, which encompasses a number of features in the area, and excavations revealed an abundance of historic material.

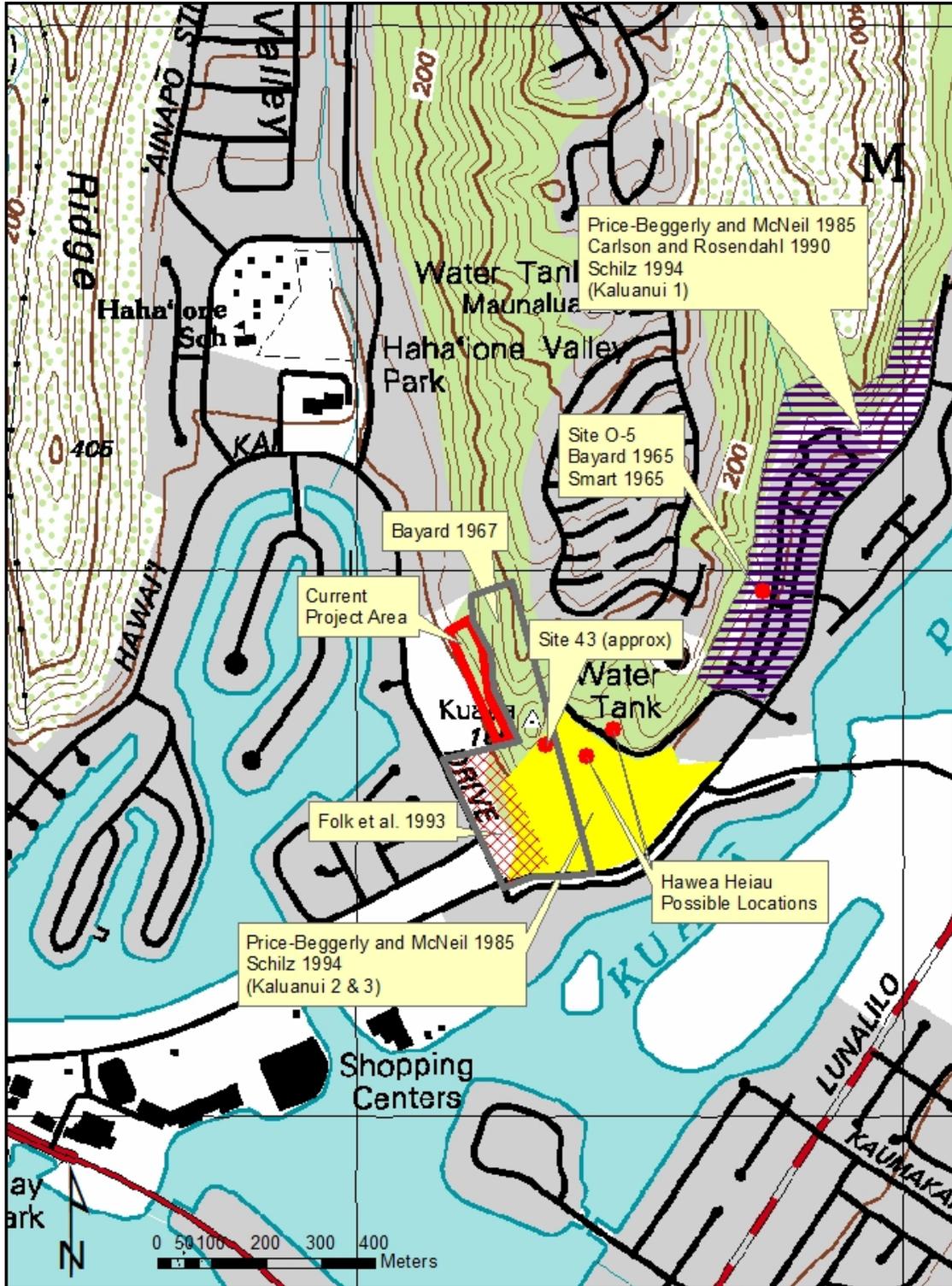


Figure 5. Locations of previous archaeological studies in the vicinity of the project area.

Table 1. Previous Archaeology in the Vicinity of the Project Area

Author & Year	Work Completed	Findings
McAllister 1933	Survey	Hāwea Heiau and historic house foundation.
Smart 1965; Bayard 1965	Excavation of Site O-5	Abundant cultural material, five phases of occupation, spanning from pre-AD 1300 into the historic period.
Bayard 1967	Student Project at Site O-16	Rock shelters, house platforms, mounds, and a wall.
Price-Beggerly and McNeill 1985; Carlson and Rosendahl 1990; Schilz 1994	Survey, Reassessment of Sites	Historic house site, caves, platforms, petroglyphs, stone cavities, Site O-5, complex thought to be Hāwea Heiau.
Folk et al. 1993	Survey, Subsurface Testing	Re-evaluated two previously identified sites.

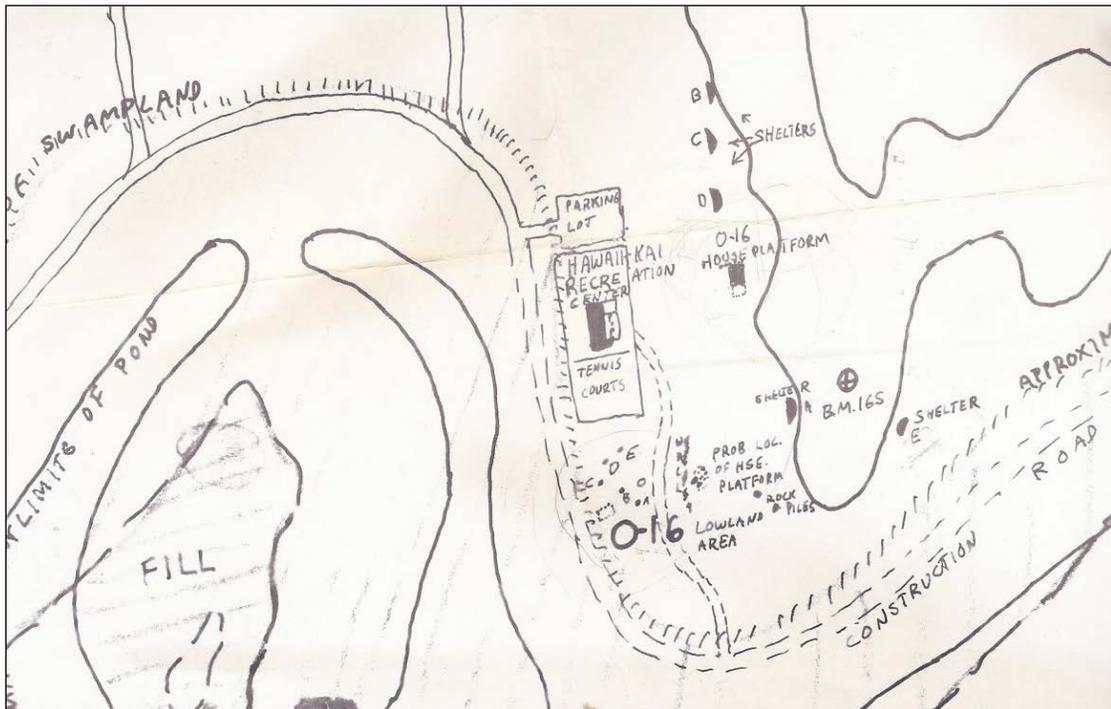


Figure 6. Sketch map of archaeological sites near the project area (adopted from Bayard 1967). The Oahu Club is labeled as “Hawaii Kai Recreation Center.”

In 1985 a survey was conducted of 36 acres in two areas (Kaluanui 1 and Kaluanui 2 and 3 on the slopes and flats below Kamilonui Ridge for the Marina Zoning Project (Price-Beggerly and McNeill 1985). A total of 12 archaeological sites and one possible site were recorded. Features include an historic house site, five caves, two platforms, a large terraced platform with petroglyphs, a set of low terraces thought to be Hāwea Heiau, and a complex of stone cavities. One of the caves recorded was Site O-5, which was previously excavated by the University of Hawai'i (Smart 1965; Bayard 1965). Six natural stone cavities were observed and recorded as a possible site, as it was uncertain if they were used culturally. Later survey and excavation of the same area reassessed several of the sites as no longer significant or non-cultural (Carlson and Rosendahl 1990) (Table 2).

In 1994, the sites in the Price-Beggerly and McNeil (1985) project area were reassessed (Schilz 1994) (Table 3). McAllister's (1933) original field map was used to plot the position of Hāwea Heiau and it was found to lie on the north side of Kaluanui Road (see Figure 5). No archaeological sites have been recorded in this area since McAllister (1933), so Hāwea Heiau was thought to have been destroyed (Schilz 1994).

In 1993 five acres were surveyed for the Kaluanui Park, just south of the current project area (Folk et al. 1993). Previously identified sites included the habitation platform with petroglyphs recorded by Price-Beggerly and McNeill (1985) and the historic house platform documented by Bayard (1967). Results of subsurface testing indicated that the area was a multi-use site that included stone tool production. The historic house platform was found to be no longer intact and was considered not significant. No new sites were identified.

Settlement Patterns and Anticipated Archaeological Remains

Pre-Contact use of Maunalua likely centered around fishing and the large, well known fishponds in the area. The large fishpond known today as Kuapā extended for more than 500 acres (Sterling and Summers 1978). This was clearly a significant source of food in such a dry *ahupua'a*. As the region is too arid for irrigated agriculture, dryland farming likely persisted in addition to fishing. Dryland farming of sweet potato took place “in the small valleys such as Kamilonui, as well as on the coastal plain” (Handy 1940:155).

Habitation areas might have been located along the coast or in areas such as Hahaione Valley, where a large fishing village once stood at the head of the pond (McAllister 1933:69). This settlement was located on the flat between Kuapā Pond and the current project area. At least two other 19th century villages were located in the *ahupua'a* (Stump 1981). Rockshelters have also been documented along the base of Kaluanui Ridge.

Religious practices were carried out at Hāwea Heiau on Kaluanui Ridge. Mentioned in several *mo'olelo*, the renowned Hāwea drum was housed at the *heiau*. Thus a model of traditional settlement pattern would place religious activity on the ridge, dryland farming in the valleys and coastal plain, fishing at the coast and at the large Kuapā Pond, and habitation areas around the pond, one of which stood between the pond and the ridge.

The historic era saw widespread changes to the region, as cattle ranching was introduced in the early 1900s. Maunalua Ranch Co. leased nearly the entire *ahupua'a* until 1925, when the operation failed. From the mid-1900s, housing developments and businesses began to emerge, and Maunalua has grown into a thriving urban center.

Table 2. Re-evaluation of sites on the Kaluanui 1 Parcel

Site 50-80-15-	Price Beggarly and McNeil (1985)	Carlson and Rosendahl (1990)
2901	natural cavity	determined non-cultural
2906	1940–1970 era wooden structure	structure occupied ca. 1960
2907	walled cave and platform	wall and platform not found; no cultural material in cave
2908	habitation and burial cave first recorded as Site O-5 (Smart 1965; Bayard 1965)	recommended as no longer significant, as it was completely excavated
2909	natural cavity containing historic era child burial	burial still in place
2910	cave complex containing basalt flakes on the surface	basalt flakes not found; determined non-cultural
none	natural cavities	determined non-cultural after subsurface testing

Table 3. Re-evaluation of sites on the Kaluanui 2 and 3 Parcels

Site 50-80-15-	Price Beggarly and McNeil (1985)	Subsequent Studies
2900	paving (Fe. 1), platform with petroglyphs (Fe. 2), terraced paving (Fe. 3), and U-shaped feature (Fe. 4)	after subsurface testing, Fe. 1 and 3 thought to be bulldozer push, Fe. 2 natural, and Fe. 4 modern (Folk et al. 1993); Fe. 1 and 2 destroyed by grubbing (Schilz 1994)
2902	cave, possibly part of Site O-16 (Bayard 1967) and Site 43 (McAllister 1933)	found no cultural features aside from a possible historic well (Folk et al. 1993); cave still intact (Schilz 1994)
2903	wall and platform with wooden fence and metal wire, thought to be historic boundary wall	partially destroyed by grubbing (Schilz 1994)
2904	platform and barbed wire	thought to be destroyed (Schilz 1994)
2905	natural cavity with no surface cultural material	still intact (Schilz 1994)
0042	originally recorded as Hāwea Heiau (McAllister 1933); recorded as complex of terraces and alignments located south of Kaluanui Rd.	Hāwea Heiau thought to be located north of Kaluanui Rd. (Schilz 1994)

Given the location of the project area within this settlement pattern model, expected pre-Contact sites would be associated with habitation and/or with the religious and ceremonial activity occurring at the nearby Hāwea Heiau. Habitation remains might consist of terraces, platforms, or enclosures that were used as living areas, while evidence of ceremonial activity might occur in the form of more substantial architecture located higher on the slopes. Historic-era sites might be associated with ranching, and could include such features as cattle walls, animal pens, historic homesteads and wells, or earlier (pre-1920) historic homesteads and associated features.

METHODS

Pedestrian survey was conducted on July 14, 2011 by Windy McElroy, PhD and Juanita Aguerrebere, BA, with McElroy serving as Principal Investigator. The ground surface was visually inspected for surface archaeological remains, with archaeologists spaced approximately 5–10 m apart. Of the 1.8 acre survey block, 100% was covered on foot, although heavy vegetation impaired visibility of the ground surface in almost the entire project area. This included *kiawe*, *koa haole*, and thick grass that rose to 5 ft. tall (Figure 7). In the heaviest areas of vegetation, archaeologists were spaced 5 m apart or closer, to improve visibility.

The upper (eastern) property boundary was not marked, and the archaeologists surveyed to the base of the slope to ensure that the entire survey area was covered. After GPS positions were downloaded, it was found that the base of the slope was 5–25 m beyond the eastern property boundary, thus a 5–25 m swath was covered outside the survey area.

Archaeological sites were defined by visual inspection and were described and digitally photographed. Features were numbered sequentially and marked with orange flagging tape. Keala Pono transect boundaries were marked with biodegradable red flagging tape. Sites were recorded with a Garmin Geko, with a single GPS location recorded at the center of each feature. The Garmin was accurate to between 5 and 11 m. The sites were mapped with tape and compass on April 20, 2012 by Windy McElroy. No subsurface testing was conducted because all sites found are located outside the APE and will not be affected by construction. The sites are therefore slated for preservation and the decision was made to not disturb them by subsurface testing.

The scale in all field photographs is marked in 10 cm increments. The north arrow on all maps points to magnetic north. Throughout this report rock sizes follow the conventions outlined in *Field Book for Describing and Sampling Soils*: Gravel <7 cm; Cobble 7–25 cm; Stone 25–60 cm; Boulder >60 cm (Schoeneberger 2002:2–35). No material was collected and no laboratory analyses were conducted.



Figure 7. Typical vegetation conditions within the project area.

RESULTS

A total of five archaeological sites were observed during the survey; two within the project area and three just outside the survey boundaries to the west (Figure 8). The survey area included a bulldozed area just outside the Oahu Club gate, which is currently used for storage. Bulldozer push piles surround the storage area, and were noted throughout the survey block, indicating modern disturbance (Figure 9). Other evidence of disturbance includes modern trash, scattered concrete pieces, and broken utility pole remnants with bases still embedded. The most obvious bulldozed zone is a 10 by 40 m rectangle adjacent to the Oahu Club gate, and bulldozer pushpiles are evident along almost the entire eastern fenceline of the Oahu Club. In addition, Bayard (1967) noted a construction road running through the southwest side of the project area (see Figure 6), and this likely contributed to the disturbance of this region.

Consultation was conducted on various levels throughout the course of the project. This was done in compliance with SHPD's guidelines on ethnographic surveys and reports. Consultation with the landowner (Jason Jeremiah of Kamehameha Schools Land Assets Division) and the leasee (Robin Flanagan, Oahu Club General Manager) was conducted through email and telephone throughout the course of the project. Topics discussed include the work that was being done, why the work was being done, and how it fits within the regulatory requirements.

Community consultation was conducted in the form of telephone and email discussions with Ann Marie Kirk of the community group Livable Hawaii Kai Hui. This group was chosen for consultation by Keala Pono and The Oahu Club, as the Hui is very active in archaeological issues in the area and is knowledgeable about the archaeology of Maunalua. There was no one who chose not to be part of the consultation. The consultation took place over several weeks in July and August of 2011. Kirk was interested in the survey findings and the relationship of the sites to the nearby Hāwea Heiau. She stressed the importance of preserving and maintaining the sites outside the Oahu Club property.

Following the fieldwork, consultation was conducted to determine the age of Site 7318, as it was unclear if the site is more than 50 years old. This began with phone calls and a visit to the Bureau of Conveyances on June 14, 2012 by Keala Pono archaeologist Jeffrey Lapinad. The Bureau of Conveyances directed Lapinad to the Kamehameha Schools offices, which were visited on the same day. Shawn Gahler of the Kamehameha Schools Land Assets Division searched their repositories for any information that might determine the construction date of the site, but none was found. On June 22, 2012 Lapinad contacted Keoni Mattos of the City and County Board of Water Supply Communications Office. Mattos could find no information on the site.

Sites within the Project Area

Two sites were located within the survey boundaries. Site 50-80-15-7317 is a complex of rough terraces in the southeast corner of the project area, and Site 50-80-15-7318 is a possibly historic water control feature in the northwest corner of the survey block (see Figure 8).

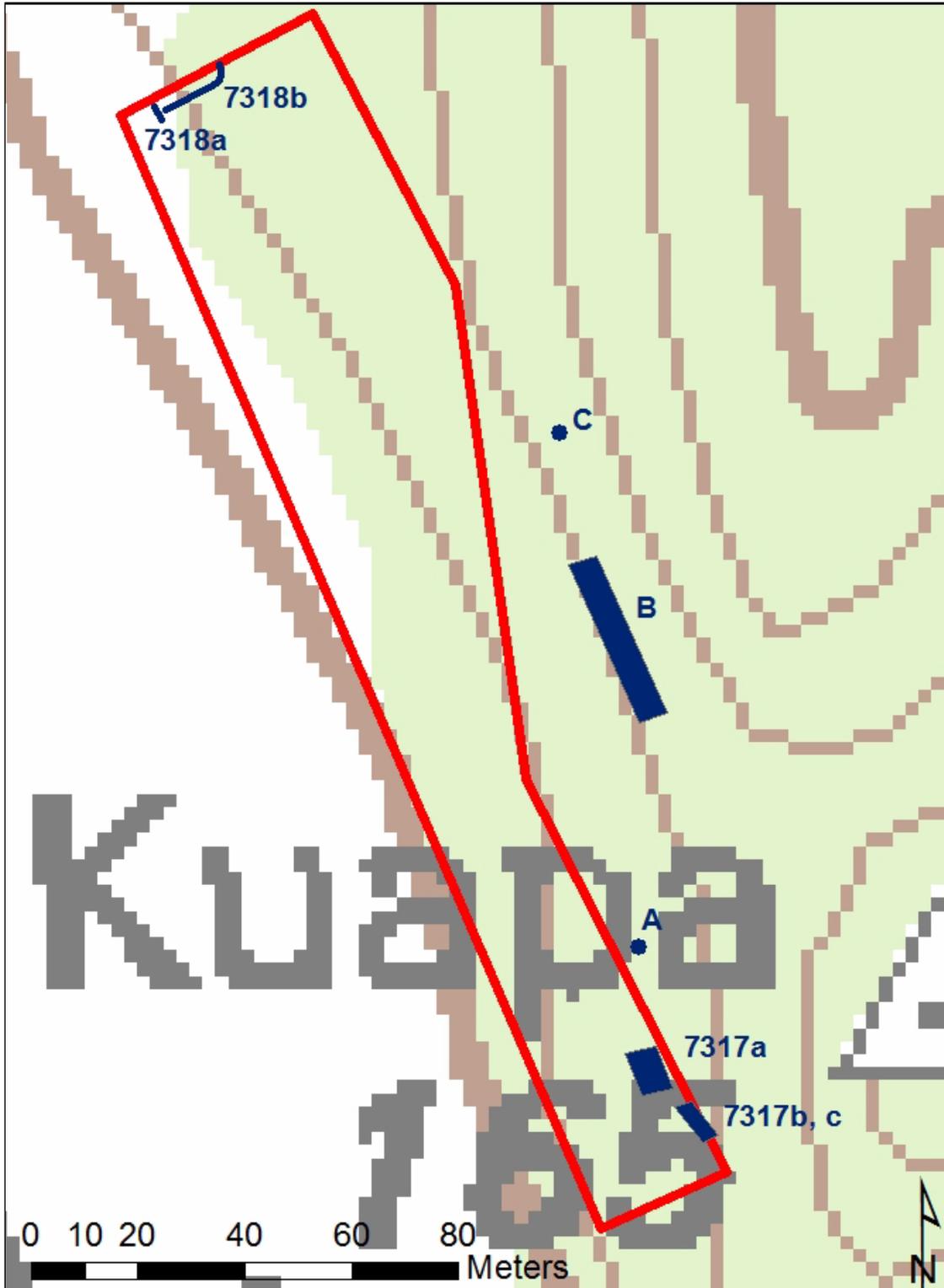


Figure 8. Location of archaeological sites in relation to the project area.



Figure 9. The survey block from the bulldozed area, facing south. Note the bulldozer push piles in the background.

Site/Feature Numbers: -7317a (western terrace), -7317b (central terrace), 7317c (eastern terrace)

Temporary Feature Numbers: 2 (western terrace), 3 (central terrace), 4 (eastern terrace)

Dimensions: -7317a: 8 m long, 5.8 m wide, .75 m tall
-7317b: 7 m long, 3.2 m wide, 1.2 m tall
-7317c: 1.2 m long, 1.7 m wide, .5 m tall

Construction Material: stones and cobbles

Construction Method: stacked and piled

Condition: poor

Possible Age: traditional

Possible Function: habitation

Site 50-80-15-7317 consists of a series of three rough terraces located in the southeast corner of the project area, 20 m east of the chain link fence that demarcates the Oahu Club tennis courts. The terraces are situated along the base of the slope that leads to the cliff line to the east. Feature 7317a is the westernmost terrace. It is composed of a stone perimeter alignment with a piled cobble and gravel interior (Figure 10). The terrace measures 8 m long, 5.8 m wide, and .75 m high and includes a triangular upright in its construction. The central terrace, Feature -7317b, is located 5 m to the southeast (Figure 11). It is of the same construction as the western terrace but is less defined. It measures 7 m long, 3.2 m wide, and 1.2 m high. The eastern terrace, Feature -7317c, is located 3 m southeast of the central terrace. It is constructed of three courses of stacked cobbles, with the stacked segment measuring 1.2 m long, 1.7 m wide, and .5 m high (Figure 12). The stacked remnant is the only clearly defined portion of the terrace.

The construction style of the terraces suggests a traditional age for the site. As the slope is too rocky for agriculture, the terraces were likely used for habitation. It is possible that the site is associated with Site O-16, of which habitation features were recorded to the northeast and southeast (see Figure 6). Site 7317 as a whole is in poor condition, affected by erosion and heavy vegetation. It is unclear if subsurface deposits exist, though this is unlikely given the rockiness and poor soil development in the immediate area. Subsurface testing was not conducted in an effort to help preserve the site, as it will not be affected by construction. Subsurface testing in the vicinity did uncover buried cultural deposits, but this was located more than 100 m south and downslope of the site, well below the rocky substrate upon which the terraces were built.

Site 50-80-15-7317 is significant under Criterion D of HAR §13-275-6, as it may yield information on history or prehistory, particularly the way in which traditional Hawaiians lived in a semi-arid environment. As the site might be part of the larger O-16 complex, it may provide information that would place the terraces in the larger context of habitation in the region. The site might also yield material suitable for dating, which would determine if it was associated with the 19th century villages around Kuapā Pond.



Figure 10. Site 50-80-15-7317 western terrace, facing northeast.

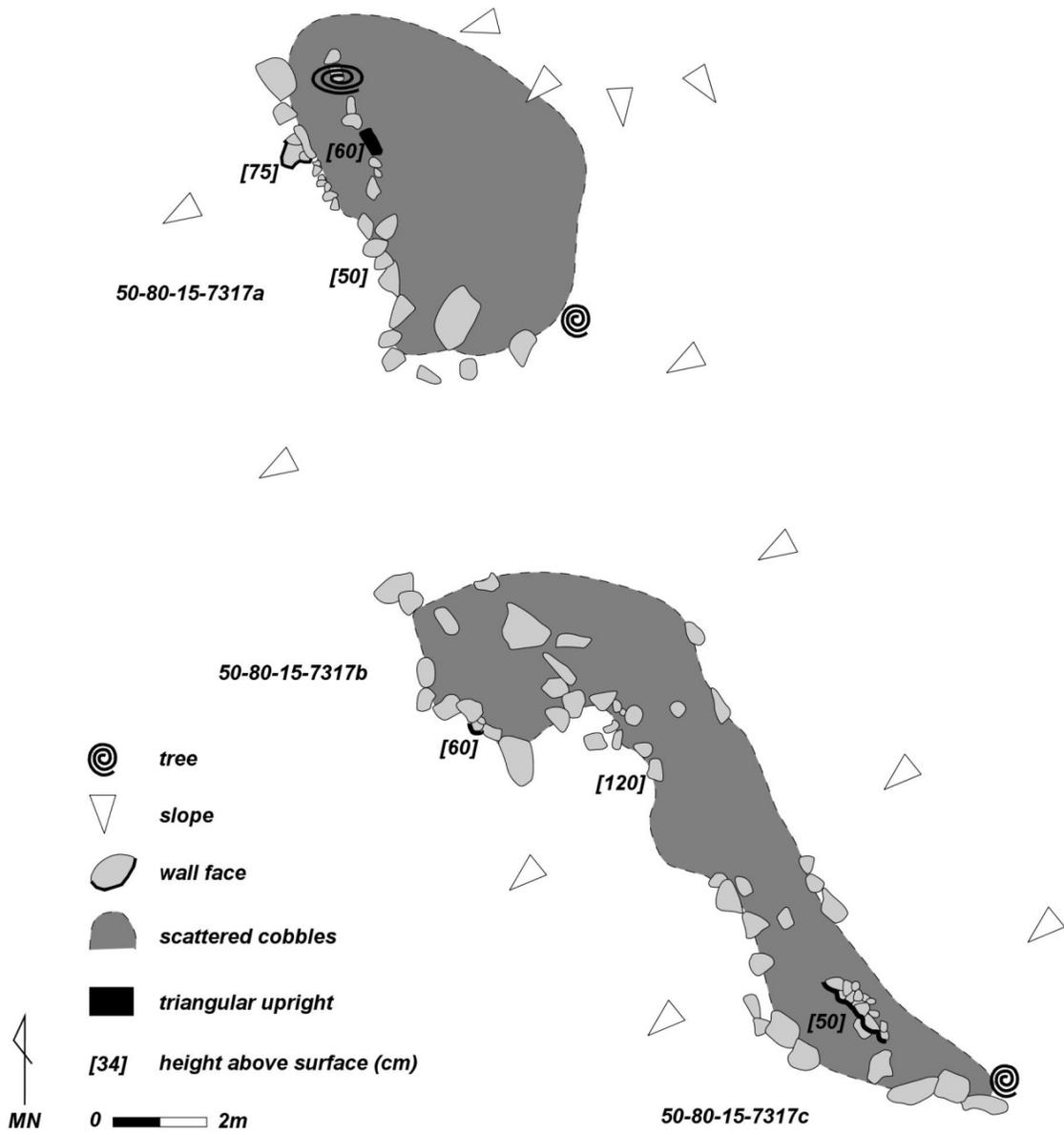


Figure 11. Site 50-80-15-7317 terraces, plan view drawing.



Figure 12. Site 50-80-15-7317 eastern terrace, facing northeast.

Site/Feature Numbers: -7318a (ditch), -7318b (wall)

Temporary Feature Numbers: 5a (ditch), 5b (wall)

Dimensions: 7318a: 15 m long, 1.4 m wide, .4 m deep
7318b: 2.7 m long, .3 m wide, 1 m tall

Construction Material: stone and cement

Construction Method: mortared stones overlain with poured cement

Condition: good

Possible Age: historic or modern

Possible Function: water control

Site 50-80-15-7318 is a water control feature located in the northwest corner of the project area, just south of the adjacent KCAA preschool property (Figure 13). It consists of a ditch and wall segment. The ditch is constructed with stone and cement (Figure 14). It measures 1.4 m wide, .4 m deep and runs downslope for approximately 15 m, with a curve on the upslope (northeast) end. The wall segment is at the southwest end of the ditch. It is composed of six courses of stacked cobbles, embedded in cement (Figure 15). It measures 2.7 m long, .3 m wide, and 1 m tall. The features are adjoined by a modern manhole with a metal grate (Figure 16). The wall appears to direct water from the ditch into the manhole.

The ditch and wall segment are either historic (more than 50 years old) or modern. No inscriptions could be found in the concrete to indicate an age of construction, and consultation with the Bureau of Conveyances, Kamehameha Schools, and the Board of Water Supply yielded no information. Sewer, drain, and maintenance easements are depicted on a 1962 TMK map, possibly indicating that the site was in place at that time (Figure 17). The earliest Oahu Club structures were not built

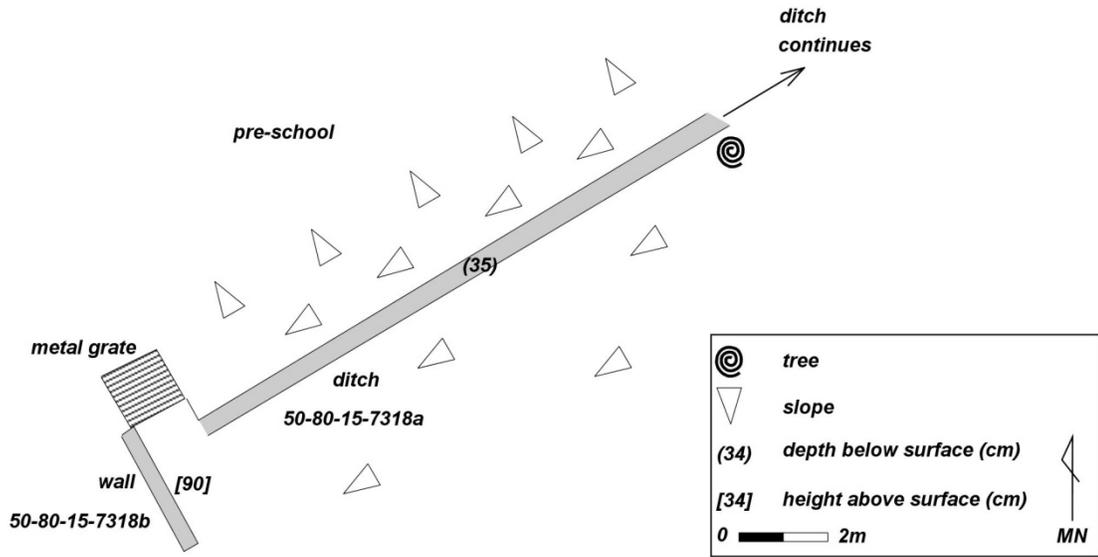


Figure 13. Site 50-80-15-7318 concrete features, plan view drawing.



Figure 14. Site 50-80-15-7318 drainage ditch, facing northeast. The stone interior can be seen in the foreground beneath the concrete lining.



Figure 15. Site 50-80-15-7318 wall segment, facing west.



Figure 16. Site 50-80-15-7318 modern manhole, facing northwest.



Figure 18. Site A, stacked stone outside the project area, facing south.



Figure 19. Site B, tall enclosure outside the project area, facing north.



Figure 20. Site C, roughly stacked wall outside the project area, facing north.

Summary of Findings

In sum five archaeological sites were observed during the survey of TMK: (1)3-9-008:005. Only two of these sites were located within the property boundaries, however. The two sites include a series of three dilapidated terraces and a possibly historic water control feature. The terraces were likely used for habitation and may be associated with the Site O-16 habitation complex. Some components of this complex might be part of 19th century villages that occupied the area around Kuapā Pond or might represent earlier habitation. Three sites were situated just outside the survey area to the east. They include a stacked stone feature, a substantial complex thought to be part of Site O-16 (Bayard 1967), and a roughly stacked wall, also possibly part of O-16.

SUMMARY AND SIGNIFICANCE DETERMINATIONS

Archaeological inventory survey was conducted on a portion of TMK: (1)3-9-008:005 for the Oahu Club in Maunalua Ahupua‘a, O‘ahu. Of the 1.8-acre project area, 100% was covered by pedestrian survey. Five archaeological sites were observed during the survey, two within the project area and three outside the parcel boundaries to the east. The two sites within TMK: (1)3-9-008:005 include a series of three rough terraces and a possibly historic water control feature. Both sites are considered significant under Criterion D of HAR §13-275-6 for their potential to yield further information on history or prehistory (Table 4). Site 7317 might inform on the way in which traditional Hawaiians lived in a semi-arid environment. As the site might be part of the larger O-16 complex, it may provide information that would place the terraces in the larger context of habitation in the region. Site 7317 might also yield datable material, which would determine if it was associated with the 19th century villages around Kuapā Pond. Site 7318 might yield information on late historic use of the area, particularly how flood water was controlled on the rocky slope.

Both sites are recommended for preservation. If construction will occur in the vicinity of the sites, a preservation plan should be prepared pursuant to HAR §13-277. If construction activity will occur within 10 ft. (3 m) of either site, construction fencing should be installed as a protective measure. A 10 ft. (3 m) buffer should be left within the fencing to protect the site from any possible impacts from construction. Given the low visibility during the survey because of heavy vegetation as well as the uncertainty of intact subsurface deposits in the area, archaeological monitoring is recommended during all ground disturbance. If the Sites 7317 or 7318 are to be impacted in the future, a program of subsurface testing and/or data recovery should be carried out.

Conclusion

This study has identified five archaeological sites, two of which are within the project boundaries. The two sites are significant for the information they might yield and are recommended for preservation.

Table 4. Significance Determinations

Site	Description	Function	Criterion	Justification
7317	Three Terraces	Habitation	D	Potential to yield information on history or prehistory.
7318	Cement Features	Water Control	D	Potential to yield information on history or prehistory.

GLOSSARY

<i>ahupua‘a</i>	Traditional Hawaiian land division usually extending from the uplands to the sea.
boulder	Rock 60 cm and greater.
cobble	Rock fragment ranging from 75 cm to less than 25 cm.
gravel	Rock fragment less than 7 cm.
<i>hale</i>	House.
<i>heiau</i>	Place of worship and ritual in traditional Hawai‘i.
<i>kiawe</i>	The algarroba tree, <i>Prosopis</i> sp., a legume from tropical America, first planted in 1828 in Hawai‘i.
<i>koa haole</i>	The small tree <i>Leucaena glauca</i> , historically-introduced to Hawai‘i.
<i>kuleana</i>	Right, title, property, portion, responsibility, jurisdiction, authority, interest, claim, ownership.
<i>loko kuapā</i>	A fishpond composed of a stone wall built upon a reef.
Māhele	The 1848 division of land.
<i>makai</i>	Toward the sea.
<i>mo‘olelo</i>	A story, myth, history, tradition, legend, or record.
stone	Rock fragment ranging from 25 cm to less than 60 cm.

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