Archaeological Inventory Survey of a Roughly 15 Acre Parcel

TMK: (3) 9-2-156:045

Kahuku Ahupua’a
Ka’ū District
Island of Hawai‘i

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ASM Project Number 21810
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EXECUTIVE SUMMARY

At the request of Lehua Lopez-Mau (President of Ho’omalau Ka‘ū), on behalf of Ho’omalau Ka‘ū, ASM Affiliates Inc. completed an archaeological inventory survey of an approximately 15 acre parcel (TMK (3) 9-2-156:045) in Kahuku Ahupua‘a, Ka‘ū District, Island of Hawai‘i. The project area is located between 1,880 to 1,960 feet above sea level on the makai side of Māmalahoa Highway, roughly 5.5 miles mauka of the shoreline (Humuhumun Point). Portions of two archaeological sites were observed and recorded as a result of the current study. Both are trails, one (SIHP Site 26623) seems to be a primary transportation route and the other (SIHP Site 26624) a secondary footpath. SIHP Site 26623 appears to be a portion of the former Government Road (constructed during the 1870s), which was built on top of a more ancient trail known as Keala‘ehu “the path of ‘Ehu” (built ca. A.D. 1520-1540); and as such is considered significant under multiple criteria (A, B, and D). Preservation is the recommended treatment for this site. SIHP Site 26624 is a secondary footpath that connects to Site 26623 and was likely used during historic times as a mauka/makai access route to get to the main Government Road. Site 26624 is considered significant under Criterion D. Site 26624 is also recommended for preservation. An archaeological preservation plan that addresses both of these sites should be prepared and submitted to DLNR-SHPD for approval.
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1. INTRODUCTION

At the request of Lehua Lopez-Mau (President of Ho’omalu Ka’ū), on behalf of Ho’omalu Ka’ū (landowner), ASM Affiliates Inc. has completed an archaeological inventory survey of an approximately 15 acre parcel in Kahuku Ahupua’a, Ka’ū District, Island of Hawai’i (TMK (3) 9-2-156:045) (Figures 1 and 2). The fieldwork for this project was originally conducted by Rechtman Consulting, LLC for another landowner that went bankrupt in 2008. The current landowner recently acquired the property and intends to create a Ka’ū cultural center that will emphasize the preservation of both cultural and natural resources. This center will also have a commercial aspect to help fund the non-profit organization Ho’omalu Ka’ū. The current archaeological inventory survey study was undertaken in accordance with Hawai’i Administrative Rules (HAR) 13§13-284, and was performed in compliance with the Rules Governing Minimal Standards for Archaeological Inventory Surveys and Reports as contained in HAR 13§13–276. Compliance with the above standards is sufficient for meeting the initial historic preservation review process requirements of both the Department of Land and Natural Resources and the County of Hawai’i Planning Department. This report contains background information outlining the project area’s physical and cultural contexts, a presentation of previous archaeological work in the vicinity of the parcel, and current survey expectations based on that previous work. Also presented is an explanation of the project’s methods, a detailed description of the archaeological sites encountered, interpretation and evaluation of those resources, and treatment recommendations for the documented sites.

PROJECT AREA DESCRIPTION

The current project area (TMK: (3) 9-2-156:045) consists of approximately 15 acres located in Kahuku Ahupua’a, Ka’ū District, Island of Hawai’i (see Figures 1 and 2). The parcel is bounded on the northeast side by Māmalahoa Highway (Route 11), and the southwestern corner of Hawaiian Ocean View Estates (Figures 3 and 4), the northwest side by the Manukā Natural Area Reserve at the boundary of Kahuku and Manukā ahupua’a, the southeast side by a parcel (Parcel 044) developed as a commercial nursery, and the southwest side by a vacant parcel (Parcel 043). The study parcel is roughly 5.5 miles mauka of the shoreline (Humuhumu Point). Humuhumu Point is accessed via the ‘Road to the Sea’ which is located just southeast of the study parcel. Elevation within the project area ranges from 1,880 to 1,960 feet above sea level.

Soil in the study area is classified as a histosol; a thin soil that develops on geologically young, yet forested lava. In this case, the soils developed primarily on a Mauna Loa ‘a’ā flow dating from 750-1500 B.P., as well as small portions of an older 1500-3000 B.P. flow (Wolfe and Morris 1996). Due to the relatively recent nature of the flow, soil is found only in pockets between exposed lava. Terrain is very uneven with small rises and gullies marking the topography of the original flow.

The survey area is dominated by ‘ōhi’a (Metrosideros polymorpha), but also exhibits a diverse collection of predominantly native species including ‘a‘ali‘i (Dodonea viscosa), ‘ulei (Osteomeles anthyllidifolia), alahe’e (Psydrax odoratum), kopiko (Psychotria hawaiensis), ‘akia (Wikstroemia phillyreifolia), and lama (Diospyros sandwicensis). Vegetation throughout the project area was moderately dense (Figure 5), although ground visibility was excellent.
Figure 1. Project area location.
Figure 2. Tax Map Key (3) 9-2-156:045 showing the location of the study parcel.
1. Introduction

Figure 3. Current Google Satellite™ image showing location of project area (in red).
1. Introduction

Figure 4. The northwestern portion of the project area (left of Māmalahoa Highway), view to the west.

Figure 5. The current project area showing the native forest and rugged ‘a‘ā terrain.
2. BACKGROUND

To generate a set of expectations regarding the nature of archaeological resources that might be encountered on the study parcel, and to establish an environment within which to assess the significance of any such resources, a culture-historical context for the Ka‘ū-Kahuku region and previous archaeological studies relative to the project area are presented.

CULTURE-HISTORICAL CONTEXT

The current project area is located on the Island of Hawai‘i within the District of Ka‘ū in the ahupua‘a of Kahuku (Figure 6). It is within this context that the following discussion is framed. Conventional wisdom has it that the first inhabitants of Hawai‘i Island probably arrived by at least A.D. 300 (at South Point in Ka‘ū), and focused habitation and subsistence activity along the windward side of the island (Burtchard 1995; Kirch 1985; Hommon 1986). However, there is no archaeological evidence for occupation of Hawai‘i Island (or perhaps anywhere in Hawai‘i) during this proposed initial settlement, or colonization stage of island occupation (A.D. 300 to 600). More recently, Kirch (2011) and others (Wilmshurst et al. 2011) have convincingly argued that Polynesians may not have arrived to the Hawaiian Islands until at least A.D. 1000, but expanded rapidly thereafter.

Figure 6. A map of the southern half of Hawai‘i Island showing Kahuku Ahupua‘a and the current project area.
The initial settlement in Hawai‘i is believed to have occurred from the southern Marquesas Islands. This was a period of great exploitation and environmental modification, when early Hawaiian farmers developed new subsistence strategies by adapting their familiar patterns and traditional tools to their new environment (Kirch 1985; Pogue 1978). Their ancient and ingrained philosophy of life tied them to their environment and kept order. Order was further assured by the conical clan principle of genealogical seniority (Kirch 1984). According to Forndner (1969), the Hawaiians brought from their homeland certain universal Polynesian customs: the major gods Kāne, Kū, and Lono; the "kapu" system of law and order; cities of refuge; the ‘aumakua concept; various epiphenomenal beliefs; and the concept of mana. Initial permanent settlements in the islands were likely established at sheltered bays with access to fresh water and marine resources. Communities shared extended familial relations and there was an occupational focus on the collection of marine resources. Over a period of several centuries the areas with the richest natural resources became populated and perhaps even crowded, and there was an increasing separation of the chiefly class from the common people. By this time a uniquely Hawaiian culture had emerged, not only with respect to material culture but also within the cosmological realm as the goddess Pele came to be of preeminence among the peoples of Ka‘ū and Puna.

As the environment reached its maximum carrying capacity, the result was social stress, hostility, and war between neighboring groups (Kirch 1985). Soon, large areas of Hawai‘i were controlled by a few powerful chiefs. Within the Ka‘ū region of Hawai‘i Island, Keōua ruled between 1782 and 1791. Keōua was living in the uplands of Kahuku “far inland above the Kahuku pali on the fertile ash lands” (Kamakau 1961: 155). In 1791 Kamehameha completed the rededication of Pu‘ukoholā Heiau at Kawaihae and he sent for Keōua. Keōua was killed at the heiau thus ending warfare between the districts of Hawai‘i and unifying the island under Kamehameha. Following Kamehameha’s death in 1819, the Hawaiian Islands underwent a radical change in which the "kapu" system was overthrown, paving the way for missionaries to install a new religion and westerners to impose a new order.

One of the most detailed accounts of traditional practices and place names within the Ka‘ū Region is the “The Heart Stirring Story of Ka-Miki”. Hawaiian historians John Wise and J.W.H.I. Kihe published this mix of oral history, narratives, and site-specific histories over a span of four years (1914-1917). It is a tale of two brothers, Ka-Miki and Kahuku. Ka-Miki and Kahuku were a very important part of the region. During the Kona Chief Ehu’s rule, circa 1520-1540, he built a trail “from the uplands of Kona into Kau which is called the way of Ehu” (Kamakau 1961: 429). Ehu’s trail known as “Keala‘ehu” is in the vicinity of the present Māmalahoa Highway (Maly and Maly 2004). Ehu and the Ka‘ū Chief Imaikalani were overpowered by ‘Umi a Liloa (‘Umi) by use of the upland trails and “he became famous as a chief who traveled through the mountains of Hawai‘i, and [its trails] became the routes by which he went to war” (Kamakau 1961:18). Shortly after ‘Umi conquered the districts of Hawai‘i he was visited by a Maui chief (Kiha a Pi‘ilani) who sought his support. The native Historian S.M. Kamakau wrote:

Lonoapiilani heard that Kihaaapiilani was on Hawaii, and that war canoes were being built there in great numbers. The kauila wood of Napuu and Kahuku, the oa and koaie were being made into clubs to be used against Maui (Kamakau 1961:28-29).

Umi and Kiha a Pi‘ilani were victorious.
2. Background

When Umi a Liloa died his kingdom was divided in two and descended to his sons. Keawenuiaumi ‘Umī chose Hilo and Keali‘ikōloa chose Kailua. Regarding the brothers’ distrust and dislike of each other, Kamakau related the following:

When Keawenuiaumi learned of the unjust rule of Keliikōloa and the burdening of the common people, he was filled with compassion for the chiefs and commoners of Kona. Therefore he made himself ready with his chiefs, war lords, war leaders, and warriors from Hilo, Puna, and Kau to make war on Kona. The war parties [met?] at the volcano (pit of Pele) before going on to battle along the southern side of Mauna Kea and the northern side of Mauna Loa. The mountain road lay stretched on the level. At the north flank of Hualalai, before the highway, was a very wide, rough bed of lava barren, waterless, and a desert of rocks. It was a mountain place familiar to Umiāloa when he battled against the chiefs of Hilo, Kau, and Kona. There on that extensive stretch of lava stood the mound (ahu), the road, the house, and the heiau of Umi. It was through there that Keawenuiaumi’s army went to do battle against his older brother Keliikōloa (Kamakau 1961: 35-36).

The mound, road, house, and heiau are all within the ancient upland boundaries of Kahuku and native testimonies before the Boundary Commission during the middle and late nineteenth century refer to these features when discussing the upland boundaries of Kahu ku Ahupua‘a. The upland routes of Kahuku were pivotal in the dealings of Hawai‘i Island chiefs.

Successive lava flows in 1868, 1887, 1907, and 1950 devastated the Kahu ku area, but despite its rough and forbidding appearance, ethnographic and early historic accounts clearly indicate that Kahuku was once an active and settled area. Its coastline was noted as a fine fishing ground and even attracted Kamehameha I (Kamakau in Silva 1987:D-4). Kahuku is said to have had “flourishing gardens of sweet potato and sugar cane on the land now covered by lava” (Handy and Handy 1972: 571). Fishermen and their families likely inhabited the coastal region in significant numbers. A large scale archaeological survey conducted at Pohue Bay in 1987 confirms the relatively intensive use of the coastal region (Haun and Walker 1987). This survey of 3,360 acres produced 298 sites with 1,144 features in distributions what were described as “fairly dense concentrations along the coast” (1987:ii). A variety of site types were identified including C, U and L shaped walls, enclosures, platforms, terraces, cairns, linear and curved walls, petroglyphs, lava tubes and blisters, mound alignments, pāhoehoe excavations, anchialine ponds, overhangs, and other modified areas.

Moving away from the coast, the more inland and upslope areas were utilized for dispersed dry-land agriculture and habitation. Planting or clearing mounds, trails, house platforms, ahu, and walls are likely present in this zone. The extreme upland areas of Kahuku were apparently not inhabited on a permanent basis, but were laced with an intricate trail system:

The inland ala nui, main trial, rose up through the Kahuku escarpment from the western lava lands of Kahuku ahupua‘a, then descended gradually seaward through the rich, high rainfall, ash lands above the pali, passing amidst house lots and farms” (Cordy 2000: 348).

By the middle of the nineteenth century, the ever-growing population of Westerners forced socioeconomic and demographic changes that promoted the establishment of a Euro-American style of land ownership in Hawai‘i, and the Māhele became the vehicle for determining ownership of native lands. During the Māhele, land interests of the King (Kamehameha III), the high-ranking chiefs, and the low-ranking chiefs, the konohiki, were defined. The chiefs and konohiki were required to present their claims to the Land Commission to receive awards for lands provided to them by Kamehameha III. They were also required to provide commutations to the government in order to receive royal patents on their awards. The lands were identified by name only, with the understanding that the ancient boundaries would prevail until the land could be surveyed. This process expedited the work of the Land Commission (Chinen 1961).

During the Māhele all lands were placed in one of three categories: Crown Lands (for the occupant of the throne), Government Lands, and Konohiki Lands. All three types of land were subject to the rights of the native tenants therein. In 1862, the Commission of Boundaries (Boundary Commission) was established to legally set the boundaries of all the ahupua‘a that had been awarded as a part of the Māhele. Subsequently, in 1874, the Commissioners of Boundaries were authorized to certify the boundaries for lands brought before them. The primary informants for the boundary descriptions were old native residents of the lands, many of which had also been claimants for kuleana during the Māhele. This information was collected primarily between A.D. 1873 and 1885 and was usually given in Hawaiian and transcribed in English as they occurred. Boundary descriptions were not collected for all ahupua‘a.
As a result of the Māhele, Kahuku Ahupua’a was awarded to W. P. Leleiohoku (LCAw. 9971). This award was relinquished by Leleiohoku in 1850 as commutation for other lands he retained. The ahupua’a was held by the Board of Public Instruction until 1861, when it was sold by Royal Patent Grant No. 2791, to C.C. Harris. While several kuleana were awarded within Kahuku near the coast, no individual awards were made in the vicinity of the current project area. Native testimonies at the Boundary Commission indicate that upland areas were noted for bird catching, wood procurement (sandalwood and koa), goat hunting, and gathering fern pulu (Silva 1987).

During the late nineteenth century, improvements to the Keala’ehu were undertaken to establish a good road from Kona to Ka’ū. Portions of this old road parallel the current Māmalahoa Highway and consist of both single and two track paths and improved graveled/cindered roadways. A portion of the old road going through Kahuku (well to the east of the current study area) was covered by an 1868 lava flow and a letter from R.A. Lyman in 1869 to F.W. Hutchinson (Minister of the Interior) he stated that the “old road at Kahuku can be reopened for about $200.00 so as to be a good road” (Maly and Maly 2004: 40). In another letter dated 1880 from W.T. Martin (Ka’ū Road Supervisor) to the Minister of the Interior it was stated that the road running to Kona from Mamalu, Kahuku and reaching Kaulanamauna, Kona…is perhaps 13 or 14 miles long. Half of the road is 7 feet wide, and the other half 4 feet wide. Money considered by me, needed to finish it, $1,200” (Maly and Maly 2004: 41). In 1894, Frank S. Dodge, Assistant-H.G. Survey wrote to Hon. Jas. A. King, the Minister of the Interior about the condition of the roads:

From Homomalino to the Kahuku Ranch the only road is about as bad as it can be, especially where it crosses the lava flows of 1868 and 1887, and it needs reconstruction over its entire length. Most of the land along this section of road is a barren waste and of little value for cultivation, but the main road should be built, as a very important link in the chain around the island . . . (Maly and Maly 2004:44).

Keala’ehu was supplanted by the Kona to Ka’u portion of the “Hawai’i Belt Road” during the late 1800’s to early 1900’s. The “Belt Road” was an improvement to the narrow Keala’ehu wagon trail, and was more suited for automobiles. Its route is depicted on a 1925 Territory of Hawai’i (Kamaoa Quadrangle) map (Figure 7). In 1933 Māmalahoa Highway was constructed along the “Belt Road” corridor, further improving Kona to Ka’u travel. A 1954 aerial photograph (Figure 8) of the land surrounding the current project area, shows the straighter Māmalahoa Highway and a few abandoned curves of the “Belt Road”. The current roadway along the northern edge of the project area is Highway 11, which was completed in the 1970s and again, rerouted away from sections of the Māmalahoa Highway leaving looping remnant roads as a result of having a more direct, less curvy route.
2. Background

Figure 8. Aerial photograph taken in 1954, showing the current study area (in red).
PREVIOUS ARCHAEOLOGICAL STUDIES

Reviewing and evaluating prior archaeological work in the vicinity of the current study area provides an idea as to what, if any archaeological resources may be present within the boundaries of the current study. Presented below is a synopsis of prior archaeological work in the vicinity of the current project area and Table 1 lists those reports.

One of the first archaeological studies conducted on Hawai‘i Island was a survey of heiau by John Stokes (Stokes and Dye 1991). John Stokes worked for the Bishop museum beginning in 1899 managing the museums library and assisting in superintending the collections. In 1906 Stokes ventured to the Island of Hawai‘i and began recording heiau and documenting native stories and/or traditions associated with them. He recorded two heiau in Kahuha Ahupua‘a:

**Halepōhāhā Heiau**

Heiau of Halepōhāhā, and of Kahuku, Ka‘ū. Described as being on the west of the lava flow of 1887, 3 or 4 miles north of the Kona-Ka‘ū road. Said to have been used for human sacrifices and to have been built by ‘Umi.

**Malino Heiau**

Heiau of Malino, land of Kahuku, Ka‘ū. Described as located above Kaunakaumaha, near the boundary of Pākini nui, and south of the Kona-Ka‘ū road.

Most archaeological research in Kahuku Ahupua‘a has focused intensively on the coast, particularly Pohue Bay. The earliest work conducted at Pohue Bay was conducted under the aegis of the Bernice Pauahi Bishop Museum by such figures as W.J. Bonk, Y.H. Sinoto, V. Hansen, J. Halley Cox, and Roger Green. Although much of this research was never published, field notes remain on file at the Bishop Museum. In sum, a number of sites were identified at Pohue Bay including walled house sites, burial platforms, cave shelters, trails, anchialine ponds, and petroglyphs. Cox also reports several hundred petroglyphs in the Pohue Bay area (Cox and Stasack 1970:80, 82). In 1965, L. Soehren excavated at two cave-shelters southeast of Pohue Bay at Kahakahakea, one of which produced a radiocarbon date ranging from the A.D. 1300s to the 1400s (Soehren 1966). The large-scale survey done by Haun and Walker (1987) has been mentioned above in the cultural-historical section.

Work in upland areas of Kahuku has been much more infrequent and more recent; Rechtman Consulting conducted four small surveys (Desilets and Rechtman 2004; Rechtman 2000, 2002, 2007). In April 2000, a portion of a one-acre parcel at the upper limits of Hawaiian Ocean View Estates Subdivision was surveyed. The parcel was situated on a 1907 flow and produced no cultural remains. Later, in January 2002, a 2.5-acre parcel along Kohala Blvd. was surveyed. A lava tube was discovered on the property and only modern era items were found. No other cultural remains were recorded during that study. In 2004, Rechtman Consulting (Desilets and Rechtman 2004) conducted an archaeological and limited cultural assessment for approximately 66.5 acres located at TMK: (3) 9-2-156:002, 003, 043. A portion of Parcel 043 borders the southwest side of the current project area. No archaeological features were observed as a result of their survey. Rechtman Consulting surveyed roughly 21 acres in 2007, southeast of the current project area at TMK: (3) 9-2-150:060. No archaeological features were observed as a result of that survey.

**Table 1. Previous Archaeological, historical, and cultural studies in Kahuku Ahupua‘a**

<table>
<thead>
<tr>
<th>Year</th>
<th>Author</th>
<th>Type of Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>1966</td>
<td>Soehren</td>
<td>Cave Shelter Excavation</td>
</tr>
<tr>
<td>1970</td>
<td>Cox and Stasack</td>
<td>Petroglyph Survey</td>
</tr>
<tr>
<td>1987</td>
<td>Haun and Walker</td>
<td>Archaeological Survey</td>
</tr>
<tr>
<td>1987</td>
<td>Silva</td>
<td>Archival and Historical Literature Review</td>
</tr>
<tr>
<td>2000</td>
<td>Rechtman</td>
<td>Archaeological Survey</td>
</tr>
<tr>
<td>2002</td>
<td>Rechtman</td>
<td>Archaeological Survey</td>
</tr>
<tr>
<td>2004</td>
<td>Desilets and Rechtman</td>
<td>Archaeological and Limited Cultural Assessment</td>
</tr>
<tr>
<td>2007</td>
<td>Rechtman</td>
<td>Archaeological Survey</td>
</tr>
</tbody>
</table>
3. PROJECT AREA EXPECTATIONS

Based on the results of previous work in the area, as summarized above, a set of archaeological expectations can be formulated. Given that historical accounts indicate dispersed habitation with associated agriculture; remnant surface features may include house platforms, burial areas, and agricultural features such as mounds and walls. Native informants testifying before the Boundary Commission in the nineteenth century also spoke of roads and trails, one of which was used for hauling tree trunks to the coast for use in canoe manufacture (Silva 1987:D-5). Lava tubes may also be present in the project area. These geologic features are often important loci of traditional Hawaiian activity including temporary habitation and burial.

As the northwestern boundary of the project area is also the boundary between Manukā and Kahuku ahupua’a, an additional set of expectations can be derived from previous ethnohistoric research. Native inhabitants testifying before the Boundary Commission reported “Waterholes, shelter caves, heiau connected with Umi and Ehu and scattered clusters of house sites” as landmarks along the ahupua’a boundaries (Silva 1987:D-5). If any such features are present within the current study area, they would most likely occur in the northwestern portion of the property.
4. FIELDWORK


METHODS

During the initial 2008 surface survey, the entire area was systematically and intensively examined using parallel north/south trending transects at 15 meter interval spacing. When archaeological features were encountered, they were plotted on a map of the study area along with the project area boundaries using a combination of Garmin 76s handheld Global Positioning System (GPS) technology (with sub five-meter accuracy) and tape and compass reckoning (Figure 10). They were then cleared of vegetation, mapped in detail, photographed, and described using standardized site record forms. No subsurface testing was conducted as the function of the two recorded surface sites was evident. Geomorphic conditions precluded random subsurface testing.

The 2014 inspection of the current project area consisted of intentioned meandering throughout the project area in an attempt to identify cultural resources that may have been missed during the initial 2008 survey. Again, no subsurface testing was conducted, and no new sites were encountered.

FINDINGS

Portions of two archaeological sites (Table 2) were observed and recorded within Parcel 045 as a result of the 2008 study, with no additional sites observed during the 2014 revisit. Both are trails, one (SIHP Site 26623) appears to be a primary transportation route and the other (SIHP Site 26624) a secondary footpath. Below are detailed descriptions of the sites.

SIHP Site 26623

Site 26623 is a roughly 280 meter long segment of a trail/roadway (see Figure 10) that extends in an easterly/westerly direction (roughly parallel to the Māmalahoa Highway) across the entire study parcel, and beyond in both directions (Figure 11). The surface of the trail is roughly paved with ‘a‘ā cobbles (Figure 12) and averages 2 meters in width. To create the more or less level surface of the trail, naturally low areas have been bridged (Figure 13) in seven places within the study area (see Figure 11). Bridging heights range from 0.3 to 1 meter tall. An embankment in an area of elevated ‘a‘ā flow has been artificially modified by cutting (Figure 14) to facilitate the linearity of the trail; and one small section of kerbing is also present (see Figure 15).

This site appears to be a portion of the 1870s road that is referenced in Governmental communications cited in the context section of this report. If this interpretation is correct then it is likely that this site was constructed on top of the earlier Kealā‘ehu, the construction of which is attributed to the Kona Chief ‘Ehu sometime between A.D. 1520-1540. Aside from impacts from the bulldozing along the western property boundary, this site retains sufficient integrity and is in excellent condition to be considered a significant resource.

SIHP Site 26624

Site 26624 is a roughly 85 meter long segment of a foot trail that extends in a northwesterly/southeasterly direction in the northwestern portion of study parcel and beyond to the northwest (see Figures 10 and 11). The surface of the trail is a slightly cleared worn path across the bare lava (Figure 16). This trail segment averages 50 centimeters in width, and exhibits bridging (Figure 17) that stands 0.9 meters tall at one location within the study area (see Figure 11). Site 26624 appears to be a mauka/makai trail (the origin point of which lies off the property) that terminates at Site 26623. As the intersection point between the two trails is constructed it seems likely that Site 26624 is more properly associated with nineteenth century use. Aside from impacts from the bulldozing along the western property boundary, this site retains sufficient integrity and is in excellent condition to be considered a significant resource.

Table 2. Sites recorded in the current study area.

<table>
<thead>
<tr>
<th>Site/Feature #</th>
<th>Description</th>
<th>Function</th>
<th>Association</th>
</tr>
</thead>
<tbody>
<tr>
<td>26623</td>
<td>Government Road</td>
<td>Transportation</td>
<td>Historic</td>
</tr>
<tr>
<td>26624</td>
<td>Trail</td>
<td>Transportation</td>
<td>Historic</td>
</tr>
</tbody>
</table>
Figure 10. Project area and site location map.
Figure 11. SIHP Sites 26623 and 26624 plan view.
4. Fieldwork

Figure 12. SIHP Site 26623, rough 'aʻā cobble paving, view to the west.

Figure 13. SIHP Site 26623, bridging in a low area, view to the north.
4. Fieldwork

Figure 14. SIHP Site 26623, cut through an elevated 'ā‘ā flow, view to the west.

Figure 15. SIHP Site 26623, kerbing, view to the west.
4. Fieldwork

Figure 16. SIHP Site 26624 at its section just mauka of Site 26623, view to the northwest.

Figure 17. SIHP Site 26624, narrow section of trail with bridging on the left, view to the northwest.
5. SIGNIFICANCE EVALUATION AND TREATMENT RECOMMENDATIONS

The recorded archaeological sites are assessed for their significance based on criteria established and promoted by the DLNR-SHPD and contained in the Hawai‘i Administrative Rules 13§13-284-6. This significance evaluation should be considered preliminary until DLNR-SHPD provides concurrence. For a resource to be considered significant it must possess integrity of location, design, setting, materials, workmanship, feeling, and association and meet one or more of the following criteria:

A. Be associated with events that have made an important contribution to the broad patterns of our history;
B. Be associated with the lives of persons important in our past;
C. Embody the distinctive characteristics of a type, period, or method of construction; represent the work of a master; or possess high artistic value;
D. Have yielded, or is likely to yield, information important for research on prehistory or history;
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—these associations being important to the group’s history and cultural identity.

The significance and recommended treatments for the recorded sites are presented in Table 3 and discussed below.

Table 3. Site significance and treatment recommendations.

<table>
<thead>
<tr>
<th>SIHP Site #</th>
<th>Site Type</th>
<th>Temporal Affiliation</th>
<th>Significance</th>
<th>Recommended Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>26623</td>
<td>Government Road</td>
<td>Historic</td>
<td>A, B, D</td>
<td>Preservation</td>
</tr>
<tr>
<td>26624</td>
<td>Trail</td>
<td>Historic</td>
<td>D</td>
<td>Preservation</td>
</tr>
</tbody>
</table>

SIHP Site 26623 appears to be a portion of the former Government Road (constructed during the 1870s), which was built on top of a more ancient trail known as Keala‘ehu “the path of ‘Ehu” (built ca. A.D. 1520-1540); and as such is considered significant under multiple criteria: Criterion A given the importance historical patterns resulting from the development of the Governmental roadway system, Criterion B for the association of the earlier version of this roadway with the Hawaiian chief ‘Ehu, and Criterion D for the information it has yielded relative to sixteenth through nineteenth century transportation patterns. Preservation, with the allowance for additional breaches, is the recommended treatment for this site. SIHP Site 26624 is a secondary footpath that connects to Site 26623 and was likely used during historic times as a mauka/makai access route to get to the main Government Road. Site 26624 is considered significant under Criterion D for the information it has yielded relative to nineteenth century transportation patterns. Given its direct association with Site 26623, Site 26624 is also recommended for preservation. An archaeological preservation plan that addresses both of these sites should be prepared and submitted to DLNR-SHPD for approval.

In the unlikely event that additional archaeological resources are encountered during development activities, work in the immediate area of the discovery should be halted and DLNR-SHPD contacted as outlined in Hawai‘i Administrative Rules 13§13-284-12.
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