

**A Preservation Plan for a Section of the
Māmalahoa Trail (SIHP Site 50-10-27-2)
(TMK:3-7-3-9:24,34)**

‘O‘oma 1st Ahupua‘a
North Kona District
Island of Hawai‘i



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ARCHAEOLOGICAL, CULTURAL, AND HISTORICAL STUDIES

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INTRODUCTION

At the request of the Natural Energy Laboratory of Hawai‘i Authority (NELHA), Rechtman Consulting, LLC has prepared this preservation plan for a portion of SIHP Site 50-10-27-2 on TMK:3-7-3-9:24,34. This site is the 1847 *makai* Government Road that has been variously referred to as the Māmalahoa Trail and the King’s Highway. The section of this trail located on the NELHA property runs northwest from the southern property boundary for 0.95 miles to Keāhole Airport at the northern property boundary (Figures 1 and 2). The primary NELHA access road and an associated utility corridor cross SIHP Site 50-10-27-2 approximately midway along its length within the NELHA property. The trail is visible across the landscape as a kerbstone alignment that has been elevated in select locations with stone filled “bridges” that level out the contour of the roadway. The utility corridor that runs adjacent to the primary access road contains a major water pipeline. Future utilities may be added within this corridor as the NELHA facility continues to expand.

The trail site has been maintained (kerbstone replacement and vegetation removal) over the years through the efforts of a community-based group composed of student volunteers from Kealakehe Intermediate School, members of Kohanaiki ‘Ohana, and *kūpuna* of the area. A sign along the trail to the south of the primary NELHA access road reads in part “MAMALAHOA TRAIL PROJECT...A collaborative project with Kealakehe Intermediate School 8th graders and the Kohanaiki Ohana. This project started in Oct. 1992 and continues with an annual maintenance program” (Figure 3). The maintenance appears to have occurred primarily on the trail section to the south of the NELHA access road (Figure 4). This portion of the trail contains less vegetation and the kerbing has been more recently modified than the section to the north (Figure 5).

Figure 1. USGS.

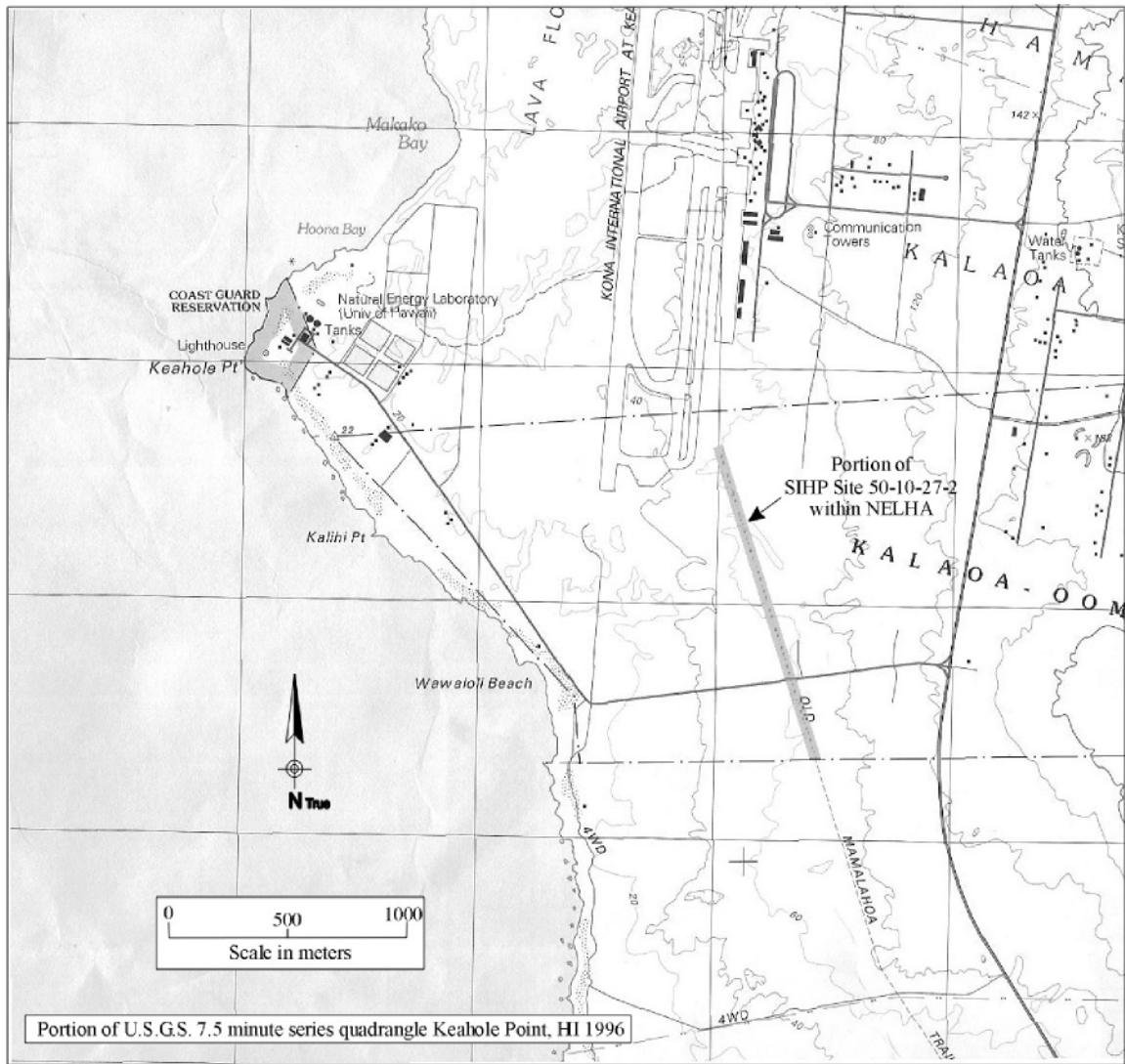


Figure 1. Location of proposed preservation site.

Figure 2.-NELHA map

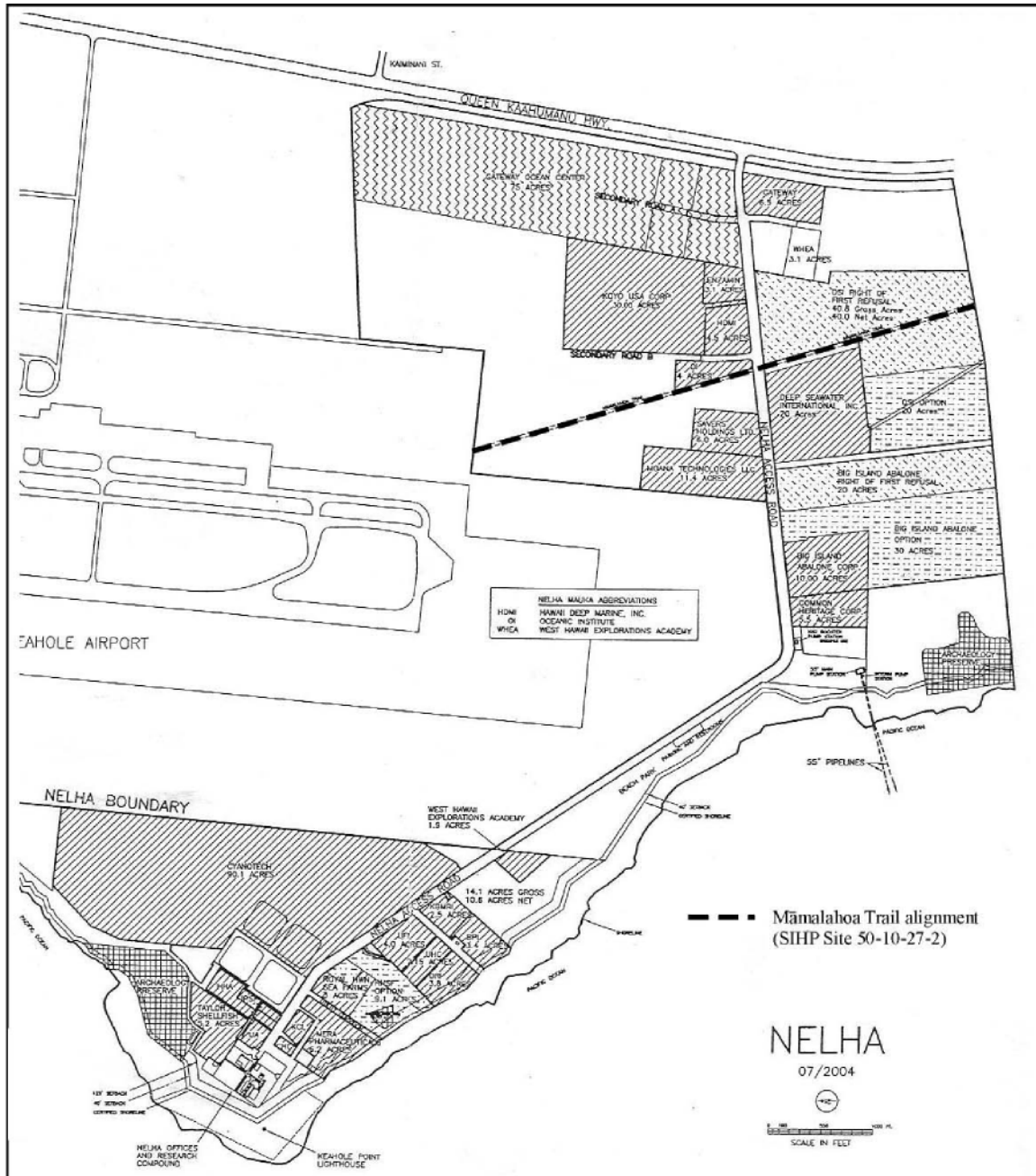


Figure 2. Map of Natural Energy Laboratory of Hawai'i Authority (NELHA) showing the location of SIHP Site 50-10-27-2.



Figure 3. Plaque along trail south of NELHA primary access road.



Figure 4. SIHP Site 50-10-27-2, view to southeast from NELHA access road.



Figure 5. SIHP Site 50-10-27-2, view to northwest from NELHA access road.

BACKGROUND

Background information about trails and trail use in the general vicinity of the current project area is extracted and summarized from Rechtman and Maly (2003). *Alahele* (trails and byways) and *alaloa* (regional thoroughfares) are an integral part of the cultural landscape of Hawai‘i. The *alahele* provided access for local and regional travel, subsistence activities, cultural and religious purposes, and for communication between extended families and communities. Trails were, and still remain important features of the cultural landscape.

Along the trails of the Kekaha region of which Kalaoa is a part, are found a wide variety of cultural resources, including, but not limited to residences (both permanent and temporary), enclosures and exclosures, wall alignments, agricultural complexes, resting places, resource collection sites, ceremonial features, *ilina* (burial sites), petroglyphs, subsidiary trails, and other sites of significance to the families who once lived in the vicinity of the trails. The trails themselves also exhibit a variety of construction methods, generally determined by the environmental zone and natural topography of the land. “Ancient” trail construction methods included the making of worn paths on *pāhoehoe* or ‘*a* ‘*ā* lava surfaces, kerbstone and coral-cobble lined trails, or cobble stepping stone pavements, and trails across sandy shores and dry rocky soils.

Following the early nineteenth century, western contact brought about changes in the methods of travel (horses and other hoofed animals were introduced). By the mid-nineteenth century, wheeled carts were also being used on some of the trails. In the Kona region portions of both near shore and upland *ala hele-ala loa* were realigned (straightened out), widened, and smoothed over, while other sections were simply abandoned for newer more direct routes. In establishing modified trail and early road-systems portions of the routes were moved far enough inland so as to make a straight route, thus, taking travel away from the shoreline.

It was not until 1847 that detailed communications regarding road construction on Hawai‘i began to be written and preserved. It was also at that time that the ancient trail system began to be modified and the alignments became a part of a system of “roads” called the “*Alanui Aupuni*” or Government Roads. Work on the roads was funded in part by government appropriations, and through the labor or financial contributions of area residents and prisoners working off penalties. Where the *Alanui Aupuni* crosses the

lands of ‘O‘oma the alignment includes several construction methods: kerbing, elevating, and bridging. It was noted in a recent archaeological study (Rechtman 2002) that the alignment on the ground in this area does not match the alignment indicated on most early maps (and transposed to new maps). This deviation appears to be a result of early surveying errors. The actual alignment of the trail (labeled Māmalahoa Trail) was surveyed in 1986 as depicted on the Hawai‘i State Survey Division’s map C.S.F. No. 20499 (Figure 6). Rechtman (2002) found no physical evidence of a trail route on the ground matching the location of the “mapped” King’s Trail.

By the early 1900s in this area the *Alanui Aupuni* was becoming less frequently used in favor of routes of travel descending from upland Kohanaiki and Kaloko, *mauka* to the shore. In the 1950s, Hu‘ehu‘e Ranch bulldozed a jeep road to the shore at Kaloko. The ranch, and some individuals who went to the shore either as a part of their ranch duties, or for leisure fishing along the coast, used this jeep road. Travel northward out of Kailua town through the 1970s resulted in modification to the *Alanui Aupuni* at least as far as Honokōhau and Kaloko. However, it was not until the Queen Ka‘ahumanu Highway was opened (ca. 1973) that substantial travel across the *kula kai* (shoreward plains) of Kekaha was once again made possible for the general public.

CONSULTATION

As part of the preparation of this plan, the following individuals and organizations were consulted: Mr. Soderberg (Kealakehe Intermediate School), Department of Land and Natural Resources-Division of Forestry and Wildlife *Na Ala Hele* Program, Department of Land and Natural Resources-State Historic Preservation Division, and Ruby McDonald of OHA-West Hawai‘i. The collective *mana ‘o* was that the important thing was the right-of-way is preserved. It was recognized and acknowledged by all that the existing maintenance program, although potentially impacting physical attributes of the site (kerbing), does more good than harm with respect to education and preservation; and that the practices of this longstanding program should be allowed to continue with some conditions related to yearly monitoring of impacts (see below).

PROPOSED PRESERVATION TREATMENT OF SIHP SITE 50-10-27-2

The portion of SIHP Site 50-10-27-2 that traverses the NELHA property is contained within an already established preservation easement that extends 15 feet on either side of the trail centerline (the trail itself averages about 2 meters [6.5 feet] wide through the project area). No construction or land modification is permitted within this preservation easement. There will be an additional 10 feet on either side of this easement within which no buildings or fences will be erected or ground-altering activity will be permitted; effectively creating a 25-foot preservation buffer on either side of the trail centerline. The existing utility corridor adjacent to and south of the primary NELHA access road will continue to be used and all utilities placed in this corridor will be buried where they cross the trail site and its buffer. No further breaches of the trail will be allowed. If in the future it is necessary to bring utilities from one side of the trail to the other in an area remote from the existing utility corridor, those utilities will be placed using boring equipment that enters and exits the ground surface on either side of the preservation buffer.

Additionally, temporary protection fencing will be placed along the preservation buffer boundary in the event that any construction activities occur on parcels adjacent to the site. NELHA will inform its tenants of the protective measures required for development of parcels adjacent to the trail and will inspect the potential job sites to verify the proper placement of protective fencing. DLNR-SHPD will be notified in writing of all such activities. Additionally, NELHA encourages its tenants to use environmentally sensitive color schemes for building exteriors. This practice will help preserve the integrity of both *mauka* and *makai* view planes for those walking along the trail. To help further preserve the visual context of the trail, NELHA will require those tenants who choose to erect permanent fences along the preservation buffer to make the fences appear solid (e.g., wood; chain link with vinyl or aluminum slats) using appropriate tones to block potential unsightly views into industrial yards.

DLNR-DOFAW *Na Ala Hele* Program considers the trail a public right-of-way and NELHA will not prohibit pedestrian access and use, although use of the trail north of the primary access road toward to airport will not be encouraged. As has been the longstanding practice, the community-based vegetation maintenance program will focus on the portion of the trail south of the primary access road. It will be in this section, near the existing plaque, that an interpretive sign will be established. The sign will be of durable weather resistant construction and contain the following language:

Māmalahoa Trail
State Inventory of Historic Places
Site 50-10-27-2

This historic trail is a section of the road network that was constructed between 1830 and 1855, connecting Kailua-Kona to Kawaihae. It is also known as the *Alanui Aupuni* or lower Government Road. In prehistoric times, a coastal trail ran along the sandy shore from Kailua-Kona to Keāhole passing habitation settlements. With depopulation in the early 1800s, the Hawaiian monarchy chose to bypass these largely abandoned coastal settlements and to establish this trail. By the 1880s, this trail was also largely abandoned because of even further depopulation in this region. Traffic instead shifted to the Upper Government Road (in the vicinity of modern day Highway 190) from Kailua-Kona northward to the Hu‘ehu‘e Ranch area and then down to the coast.

The Kailua-Kona to Keāhole segment of the trail runs straight for several miles, with stone bridges built to level the terrain. Another relatively straight alignment of this trail between Kīholo and Puakō is also preserved in the Waikoloa Beach and Mauna Lani Resort areas.

Historic sites are protected under state law. Violation could result in a \$10,000 fine. (Chapter 6E-11, Hawai‘i Revised Statutes)
 DLNR-SHPD (808) 692-0015

A second sign will be placed at the entry point to the trail along the south side of the primary access road. This sign will only contain identification information and read as follows:

Māmalahoa Trail
State Inventory of Historic Places
Site 50-10-27-2

This historic trail is for pedestrian use only.
 Vehicles use is prohibited.

Historic sites are protected under state law. Violation could result in a \$10,000 fine. (Chapter 6E-11, Hawai‘i Revised Statutes)
 DLNR-SHPD (808) 692-0015

EXISTING MAINTENANCE PROGRAM

The existing annual maintenance program carried out by Kealakehe Intermediate School and Protect Kohanaiki 'Ohana will continue to operate as specified in 1992. The following conditions of the original DLNR approval of the program will be reiterated to the participants: vegetation removal through hand clearing or poison, and no moving of stones or altering the trail kerbing. As an added measure NELHA will introduce a monitoring element into the annual maintenance program. Just prior to the annual maintenance event NELHA will photo document the portion of the trail to be cleaned and then photo document the trail just subsequent to the maintenance event. In this way a record will be kept as to any inadvertent alterations to the trail that may occur as a result of its maintenance.

IMPLEMENTATION OF PRESERVATION PLAN

NELHA plans to establish the preservation buffer and incorporate all requirements and restrictions associated with the preservation easement and buffer into the NELHA standard land management procedures immediately upon approval of this plan. NELHA will also contact the responsible parties associated with the trail maintenance program to ensure their compliance with preservation plan.

REFERENCES CITED

Rechtman, R.

2002 Archaeological Reconnaissance of an 83 acre parcel (TMK:3-7-3-9:22), 'O'oma 2nd Ahupua'a, North Kona District, Island of Hawai'i. Rechtman Consulting letter Report RC-01 54. Prepared for Helber Hastert & Fee Planners, Honolulu, HI.

Rechtman, R., and K. Maly

2003 Cultural Impact Assessment for the Proposed Development of TMK:3-7-3-9:22, 'O'oma 2nd Ahupua'a, North Kona District, Island of Hawai'i, 2 Volumes. Rechtman Consulting Report RC-01 54. Prepared for Helber Hastert & Fee, Honolulu.