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**A Walk Through History: Pedestrian Survey Along  
the Old Government Beach Road, Honalo to  
Honua'ino, North Kona, Hawai'i, Volume I**

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## Summary

This research report presents the results of a 1998 UH Hilo Archaeological Field School in Kona, Hawai'i, conducted along a nearly two-mile stretch of the Old Government Beach Road (State Site # 50-10-37-10290, hereinafter abbreviated to 10290), and passing through the *ahupua`a* of Honalo, Mā`ihi 1-2, Kuamo`o 1-3, Kawanui 1-2, Lehu`ula 1-2, and Honua`ino 1-2 (TMKs Zone 7, Section 9, Plats 5, 6, and 12). Seventeen sites adjacent to the road were also added to the State Inventory:

State #	Name	Ahupua`a	Tax Map Key
22395	Jeremiah Martin Homestead	Honua`ino 2	7-09-06:3
22396	Kāināliu early twentieth century residential complex	Honua`ino 2	7-09-06:13-14
22397	Well and Associated Watering Trough	Honua`ino 1	7-09-06:12
22398	Ka`ona's Crypt and Church	Lehu`ula 2	7-09-06:12
22399	Petroglyph Field	Lehu`ula	adjacent to 7-09-06-11 on road
22400	Village Complex (prehistoric/early hist)	Lehu`ula 1	7-09-06-19
22401	Burial Complex	Lehu`ula 1	7-09-06-10
22402	Dispersed Agric./Residential Complex	Kawanui 2	7-09-06-25
22403	Kawanui 1-2 Village	Kawanui 1-2	7-09-05:2 to 06:25
22404	Makai Side-Trail	Kuamo`o	7-09-05:3
22405	Kuamo`o Roadside Domestic Site	Kuamo`o	adjacent to 7-09-05:3 (on road)
22406	Kuamo`o Burials	Kuamo`o	7-09-05:3
22407	Corral and Watering Site	Kua`mo`o	7-09-05:3
22408	Kekuaokalani and Mānono's Last Stand	Mā`ihi 2	7-09-05:4
22409	Abandoned Shack	Mā`ihi 2	7-09-05:4
22410	Enclosure/ <i>Pāhale</i>	Mā`ihi 1	7-09-05:75
22411	Honalo Complex, <i>Makai</i>	Honalo	7-09-05:09

Previously inventoried sites discussed herein include Stokes's `Ukanipō Heiau (3803), Pū`o`a Heiau (3804), Waipuhi (Reinecke's [1930] site 76), Kekuaokalani Heiau (3806), and the Honalo Archaeological Complex (4161).

## **Acknowledgments**

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Since the trail runs along a remote section of the Kona coast, it would have been nearly impossible to commute to the site. The Thompson family was kind enough to provide us a yard to camp in by the trail, and use of their facilities. Other land owners generously allowed us access to their properties along the trail, particularly Patricia Grant, Humphrey Hilton, and Allen Wall. Others who are knowledgeable about the area also took the time to come down to our base camp to give presentations, including Jean Greenwell and Richard Stevens. Informal conversations with other long-term residents, particularly Billy Paris and Tony Jose, proved most informative. Kepā Maly, of *Kumu Pono* Associates, also kindly shared many insights from his extended research on the region. Many of the details on *Māhele* documents presented herein are the result of his work, and that of his associates (Maly and Smith 1999).

What really made this project successful was the meticulous survey work of the field school participants. Special thanks goes to Bill Hoffman, who served as a survey crew-chief, and who often took nearly half of the students under his supervision for the day. Other participants included Tanya Barela, Sheila Bordier, Morgan Frazier, Rick Gmirkin, Keith Hopkins, and Kelley Linn. Lastly, food can make or break a field school, and Ed Blackiston volunteered his time to cook great meals, and treated us with music and his own vivacious personality. Other *Na Ala Hele* personnel--particularly Rodney Oshiro--helped make this project possible, and assisted in arranging camp logistics.

Lastly, the work of preparing over 100 field maps for publication required a great deal of time and effort. In addition to the primary authors, UH Hilo students Karen Crowell, Derek Robinson, Morgan Frazier, and Rick Gmirkin all contributed a considerable amount of volunteer and work-study time in the preparation of the maps. Thanks to you all.

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## Introduction

In the following pages, we discuss an archaeological survey of a two-mile section of the "Old Government Beach Road" in North Kona (Figure 1). The road section begins at the southwestern edge of the Kuamo'o Battle burial ground (also known as Lekeleke) near the termination of Ali'i Drive, and proceeds southward through a dozen *ahupua'a* (traditional Hawaiian land divisions). From the northern boundary in the *ahupua'a* of Honalo (just south of Keauhou 2), the Old Government Beach Road passes through Mā'ihī 1-2, Kuamo'o 1-3, Kawanui 1-2, Lehu'ula 1-2, and Honua'ino 1-2, where our survey ended at the northern boundary of the Oceanside 1250 property, but the road continued into Oceanside 1250.

We have several goals in this report. First, we hope to provide a summary of the history surrounding the Old Government Beach Road. While we may learn a little bit about the road and the people who used it from published texts, these sources are generally skewed towards major events and well-known people; in historical texts, roads are usually an afterthought, as are the small details about the daily lives of the people who lived along them. Popular historical events can be romantic, enchanting, and of great interest in the telling of history, but they are not the whole story (Braudel 1972). In addition to documenting the physical remains of major historical events in North Kona, we hope that this report will help preserve some of the less dramatic (but no less significant) aspects of Hawai'i's past.

What happens when we begin to wonder about common events in one small corner of the Kingdom? There has been frustratingly little historical attention given to these places in published texts. You can read fragments of their stories in the context of remarkable events such as the passing through of *Ali'i* (chiefs), missionaries, or explorers, or perhaps as the location of a great battle. Even in these accounts, however, there is a distinct and misleading feeling of vacancy--odd in what was once such a highly populated land (Stannard 1989). Even if historical recognition is given to Hawaiian commoners, or *maka'āinana*, they often become voiceless observers of history, rather than people who had a history of their own.

As has been demonstrated in numerous unpublished cultural resource assessments and a few published sources (Kame'eleihiwa 1992; Sahlins 1992), a great deal of archival information exists in Hawai'i that is germane to daily life in ancient rural Hawai'i, and is one major source of information on Hawai'i's past. But, only rarely does this information make it into published histories--the implication being that it is boring, or that it is irrelevant to what we need to know about Hawaiian history.

A second source of information on past communities along the trail resides in the oral traditions passed on by long-term Hawai'i residents. This area of research is so crucial and extensive, that it was beyond the scope of what the field school could accomplish during the summer survey, and *Na Ala Hele* has initiated a separate study of the oral history that should serve as a complement to this report (Maly in prep), and previous oral history projects conducted in the region (Maly and Smith 1999; Paris 1970).

It should be remembered, however, that oral history is carried on by the survivors of history. Given the rapid depopulation of Hawai'i in the nineteenth century, there were entire families and communities that left no descendants to pass along their traditions. Although oral traditions are rightfully lauded as a way to circumvent colonial histories and re-instill a respect





for the knowledge carried in the minds of our elders, it should be recognized that this source is not a panacea to interpreting the past. As Billy Paris (a long time resident of Kāināliu, with a deep family history in the area) said to Kepā Maly when looking at all the ancient remains of house platforms in the area:

...I often wondered from the signs in that guinea grass, you can see old house sites and what have you, what had happened here. Why was the evidence of the Hawaiian population that is exhibited here, and out there [pointing south], Honua`ino and Hōkūkano, why were there so few families. `Cause I only knew about 17 families in this area (Paris, in Maly and Smith 1999, B-II:24)

As demonstrated in Billy Paris's observations of too many house sites for 17 families, a third source of information regarding the people of old are the cultural remains still visible on the modern landscape. Clearly, there are plenty of these sites in the region (e.g. Hammatt et al. 1997; Tomonari-Tuggle 1985; Reinecke 1930).

Sometimes when looking for ways to understand the people of old, it helps to think in terms of people of today. In dozens of little communities ringing the island of Hawai`i, anyone can tell you, there is one foolproof way of finding out about a town. Just set yourself down at a comfortable spot on main street and relax. Before long you are going to catch a glimpse of everyone and everything passing into and out of town. We propose that the same principle can be applied to understanding people of the past. Even if the people have long since disappeared, perhaps the Old Government Beach Road can still be persuaded to tell its story. While some information does come from written texts and oral tradition, a great deal more information can be found along the remnants of the road.

In researching the Old Government Beach Road, we wanted to reestablish its importance in the lives of the people who once lived along it. In order to do this, we had to develop some understanding of how it came to be. Who built it, why was it built, and how it was used? With such an understanding, the simple act of walking along the road takes on new meaning. As one hiker and researcher of Big Island trails likes to point out, the road becomes a vector to the past, connecting the modern pedestrian with all the others who set their feet along the same path (Richard Stevens, personal communication 1998). Ultimately, the reasons why any of us are traveling along that path today are tied to the events of Hawai`i's past. By actually walking the road and carefully recording details about past human activities along it, one can see how the road was part of a community, and how the things left there are filled with our collective history. Although some information on the road comes from texts and modern oral traditions, we have derived a great deal of additional information from "*hulikoehana*" (literally, studying what remains from work, or archaeology).

Our final goal pertains to the community's legal and ethical roles in caring for cultural relics in our modern landscape. Our purpose transcends a simple curiosity regarding Hawaiian history. The Old Government Beach Road is under the stewardship of the State Division of Forestry and Wildlife, *Na Ala Hele* program. The program's mission is to identify and develop roads and trails in Hawai`i for public access. In this process, *Na Ala Hele* has an obligation to consider the effects of their undertakings on historic properties and burial sites (Chapter 6E and

Chapter 343 of Hawai'i Revised Statutes). In order to assist *Na Ala Hele* in this important endeavor for the public good, we conducted our UH Hilo archaeological field school as volunteers rather than paid consultants. Through this collaboration, we hope to assist the community in making informed decisions about how to manage the historic road, and the adjacent historic sites, that may be affected by continued, or increased public traffic.

This is no simple issue. Public access to state lands is a deeply felt right in our community, and the trail is a public route. Yet, as we demonstrate herein, the trail system is a fragile bit of Hawai'i's past, with cultural remains, including *heiau*, graves, and ancient village sites. If the state simply encourages more public access to the trail, it is quite likely that uninformed or malicious individuals will damage the cultural sites along the trail by artifact collecting, violation of sepulchre, through vandalism, or by finding a remote spot on a *heiau* to go to the bathroom. In fact, we are fully aware that this report may be used by unscrupulous individuals for the wrong purposes. Nevertheless, as developments such as the "Oceanside 1250" project occur along the coast, doing nothing will certainly result in damage to these sites. Doing nothing will save us nothing for the future, and the sites would slowly and quietly be damaged through negligence. It is our hope that positive community action will outweigh the negative effects of increased public visibility, and encourage more active stewardship of this area by the state and community. To this end, we depart slightly from the technical writing style of most cultural resource assessment reports, hopefully creating a somewhat more readable narrative, with the intent of encouraging greater public interest in the contents of this document.

## The Physical Setting

It takes a bold imagination to comprehend what the arid Kona coast looked like before Western contact. The preponderance of plant and animal species along the Old Government Beach Road today were introduced after 1778 (Figure 2). During the weeks that we surveyed the trail, mosquitoes (subfamily Culicinae) bit our ankles and nighttime swarms of cockroaches (particularly *Periplaneta americana* and *P. australasiae*) flew into our faces and hair to the point that we stopped trying to swat them off. Cattle (*Bos taurus*) grazed on introduced grasses (such as buffelgrass, or *Cenchrus ciliaris*) and wild basil (*Ocimum* spp.) in the sparse shade of thorny *kiawe* (*Prosopis pallida*) trees and *koa haole* (*Leucaena leucocephala*). Mongooses (*Herpestes auropunctatus*) scampered about, and a few dead ones were shortly thereafter scavenged by a population of feral cats (*Felis catus*). None of these species were in Hawai'i before Western contact, yet they have all taken prominent niches in the Kona ecosystem. Nevertheless, there are small areas along the trail where species that ancient Polynesians brought to Hawai'i still thrive. For example, coconut (*niu*, or *Cocos nucifera*) groves and *kukui* (*Aleurites moluccana*) trees could be seen penetrating the canopy of *kiawe* and *koa haole* in the area known as Kāināliu.

And then there is the sea. The ocean is never far from the road--a quarter of a mile to the west at the most. It teems with the plant and animal life so central to past and present residents along the coast. Almost daily, we passed a man on the trail who would in a few hours collect a bundle of opihi to sell in the Kona market. We also passed fathers and sons who had favorite fishing spots tucked along the remote coast. Although access to the water is often limited due to cliffs and rocky shorelines, the ocean is an ever present entity, accessible to those familiar with the right spots to reach it.



Figure 2. View south along the road in Lehu'ula 1 showing the sparse kiawe and haole koa overstory.

The two-mile segment of the Old Government Beach Road crosses several *ʻaʻā* and *pāhoehoe* flows on the leeward shield of Hualālai Volcano. The northern quarter of the survey area consists of nearly bare lava flows, with small pockets of friable ash, sand, and gravel in depressions, called "Kainaliu very stony silty clay loam" by the Natural Resource Conservation Service (formerly Soil Conservation Service). This minuscule soil development has allowed numerous invasive plant species, particularly kiawe and koa haole, to establish a limited canopy over the surface. Towards Māʻihi Bay, a shallow soil consisting of volcanic ash in the Waiaha series, with numerous *pāhoehoe* outcrops, predominates (Land Study Bureau 1965). This in turn is replaced by a greater degree of exposed *pāhoehoe* as one proceeds south, although a thick koa haole over-story is still present. Near the southern terminus of the trail section, one drops onto a level coastal terrace at the old coastal village site of Kāināliu in the ahupuaʻa of Honuaʻino. Ashy soils here remain shallow to moderate in depth, with some bedrock outcrops, but support old growth kiawe up to a meter in diameter, as well as numerous coconut trees.

## Historical Background

### Land Use and Ancient Hawaiian Trails in Kona

As the Polynesian settlers of Hawaiʻi spread across the various islands, they developed an intimate knowledge of the landscape on which they lived. Hawaiians had a wonderful cultural tradition of naming places (Pukui, Elbert, and Mookini 1974) and collecting resources from various environmental zones, and consequently it is not surprising that they built paths to reach these places. In addition to naming places, Hawaiians had names for different kinds of trails:

Narrow bare places that stretch the length and the breadth of the land are called alanui or kuamoʻo roads. One that extends all around the land, or island, is called an alaloo, highway or [poetically] he ala o Puna, "a road to Puna." An alanui that cuts across country is an ala ʻoki, shortcut; one that ascends a pali ladderwise (hana haka) is an ala ʻilili; one along the side of a pali is an ala pili pali; one along the very top of a pali is an alanui kakaʻi pali. A "thread of a trail" (wahi alanui makoli iki) that clings to a pali is called ke alanui iki a ke kahuna, "the narrow precarious path of the Kahuna," or ke ala a ka manu, "the trail of the birds". An alanui that goes through a stream is an alaʻau.

In going along a road, where it rises is a piʻina, an ascent; where it goes downward is an ihona, a descent. A dip in the roadway is called an ʻalu and a bend is called an uakeʻe; the top of a steep ascent is a hoʻoku, and the bottom of a steep decline is a kuhoho or a kumomole. A trail with a cliff on each side is a kunihinihi; one that goes up and down across valleys is called a lehulehu or kawahawaha or ʻalualua; a stony roadway is an alanui ʻaʻa. A clear place like the road itself is an alanui puʻuhonua; a resting place along a long road is a puʻu hoʻomaha or an ʻoʻiʻoʻina. Short pathways in gullies are called kaʻele waʻa (canoe hulls)

(Kamakau 1976:10).

Hawaiians designed their trails in accordance with their cultural patterns of settlement and livelihood. Many--but certainly not all--residences were near the sea, to take advantage of the veritable supermarket of resources such as fish, salt, shellfish and edible seaweed. Fisherman's trails ran along the shorelines of the pie-shaped political and economic land divisions (*ahupua'a*), and were vital to spotting what was on the way: friend or foe arriving by sea, schools of fish, or a storm. After years of searching for and documenting old trails, Russ Apple concluded that most coastal trails ran true as possible to the contours of the shoreline except where topography made the coastline impassable. In the latter case, the trail would detour inland near village sites (Apple 1994:6).

Fishing was an important source of protein, but fish occupied a small part of most Hawaiian diets. Most sustenance came from cultivated lands in fertile upland regions, thus any number of trails between sea and mountain were needed to allow people to travel and exchange goods between the coast and the uplands (Apple 1994:2). Prior to the mid-nineteenth century, people lived along and above what was to become the Old Government Beach Road in dispersed agricultural communities. Families cultivated small gardens of *'uala*, or sweet potato (*Ipomoea batatas*) and *wauke*, or paper mulberry (*Broussonetia papyrifera*) (Kelly 1983:73). Some farmed fields *mauka* (inland/above) their homes in wetter, more fertile, regions where they could grow *'ulu*, or breadfruit (*Artocarpus altilis*), *mai'a*, or banana (*Musa* varieties), and dryland *kalo* or taro (*Colocasia esculenta*), as well as other useful cultigens.

The fields these families tended were part of the "Kona Field System," an extensive agricultural complex which ran for eighteen miles through North and South Kona (including all of the *ahupua'a* along this section of the road). References to the Kona field system can be found in the journals of the earliest foreign travelers--including John Ledyard on Cook's voyage in 1779, and Archibald Menzies--surgeon for Vancouver in 1793--who rarely failed to comment on the luxurious plantations which ran *mauka* of the road between the 500 and 3,000 foot elevations (Kelly 1983:71; Kirch 1985:225-230; Maly and Smith 1999:13-19).

In 1793, Archibald Menzies wrote:

...we soon lost sight of the vessels, and entered their breadfruit plantations, the trees of which were a good distance apart, so as to give room to their boughs to spread out vigorously on all sides,...The space between these trees did not lay idle. It was chiefly planted with sweet potatoes and rows of cloth plant (*wauke*). As we advanced beyond the breadfruit plantation, the country became more and more fertile, being in a high state of cultivation. For several miles round us there was not a spot that would admit of it but what was with great labor and industry cleared of the loose stones and planted with esculent roots or some useful vegetable or other (Menzies 1920:74-76, in Maly and Smith 1999:16-17).

Physical remnants of the Kona Field System are preserved in many areas and can be readily detected on the ground, although it was aerial survey around Kealahou Bay that resulted in the first official report of the extensive stone and earth field boundaries that typify the system

(Soehren and Newman 1968). This field system could have supported a very large population in the *ahupua'a* through which it extended.

A trail in the upland field system typically traversed the cultivation areas at an approximate elevation of 1000 feet. Ideally all trails crossing an *ahupua'a* would join similar trails at the border of the neighboring *ahupua'a*, creating a circular trail around the island, thus facilitating inter-*ahupua'a* transport of goods, and both personal and official travel throughout the districts (Apple 1994:8). For example, Kamakau (1992:429) mentions a Kona chief named Ehu who built a road from the uplands of Kona into Ka'u, which was called "the way of Ehu" (Kealaehu).

Many of these traditional routes have been followed and modified in the process of upgrading the islands' infrastructure. Nevertheless, many of the ancient Hawaiian trails go to and through places that are no longer frequented, thus serving as reminders that today's wilderness areas were not always empty. The trail section that is the subject of this report maintains much of its integrity due to a paucity of modern land development. This is a phenomenon that apparently will not continue into the twenty-first century.

### Trails in relation to *ahupua'a*

Handy and Handy (1972) argue that with the exception of stone altars (*ahu*) located near the coast for ritualized tribute collection, there were no artificial demarcations of the limits of *ahupua'a*. "Only in the case of patches of cultivated land were boundaries artificial, and here it was not a matter of convention, but of accident. Irrigated patches were inevitably marked by either ditches or streams, or the earth or stone embankments of terraces; and the strips (*mo'o*) or dry arable land planted in dry taro or sweet potato were generally bounded by little ridges (*iwi*) or stone thrown up out of the fields" (Handy and Handy 1972:48). Nevertheless in North Kohala, Michael Kaschko (1973) found that *mauka-makai* trails correspond closely with *ahupua'a* boundaries, and hypothesized that "a particular class of trail functioned prehistorically in part as the boundary between specific land-social units" (1973:127).

Each *ahupua'a* had fixed (usually natural) boundaries and each had a name. Many *ahupua'a* were further subdivided into *'ili*, where families of commoners would live in dispersed settlements, working the land. It is the history of the commoners--not the chiefs--which is most consistent within any given *ahupua'a*. Claims to *ahupua'a* were given to lesser chiefs (*Ali'i 'ai ahupua'a*) by the ruling chief (*Ali'i 'ai moku*, or *Ali'i nui*), and frequently changed hands as new ruling chiefs gained control. This often resulted in *Ali'i 'ai ahupua'a* controlling certain *ahupua'a* although they lived elsewhere. This became even more common through inter-island warfare as chiefs loyal to Kamehameha were granted lands on conquered islands where they did not live. Similar patterns can be seen in North Kona in the early 1800s with the *ahupua'a* of Keauhou and Lehu'ula, that were controlled by Hoapili (the governor of Maui), and were bequeathed to Lot Kapuaiwa Kamehameha in 1842 (Kame'eleihiwa 1992:129-132).

Some testimony collected in the nineteenth century gives details on subsistence, land use, and chiefly tribute in this system. For example, there is the Boundary Certificate testimony given by a man named Keakaokawai in 1873:

I was born at Kealakekua a few years before the death of Kamehameha 1st[.] I

used to go on the mountain with my father collecting sandalwood and catching birds. His name was Kauluahi, an old bird catcher and kama`aina now dead. In olden times Keaumokunui the Ali`i nui of Keauhou claimed all the geese on Hookukano, Kealakekua, and other lands and used to divide the geese. The Uwao were left for Konohiki of these lands. The land was not the property of the Keauhou chief when my father and I divided the geese with the Keauhou Konohiki, but the Uwao we had to divide with the Konohiki of Hookukano and not with konohiki of Keauhou, unless we took the Uwao on Keauhou. (Boundary Certificate No. 161)

Such testimony reveals the complexities of the ahupua'a system and suggests a need not only for *mauka-makai* trails, but also coastal transportation routes, to redistribute resources across ahupua`a boundaries.

### **The role of trails in relation to Lono, the *Makahiki*, and the circuit of the *Akua Loa***

There are relatively few published myths and legends pertaining to this section of the Kona coast. The area lies between the more celebrated bays of Kealakekua to the south and Kailua to the north. As the Kona Field system demonstrates, however, the area between these two bays was not wilderness connected by an isolated coastal trail. Most relevant to the trail system is one of the four main Hawaiian male dieties, Lonomakua, and the annual *Makahiki* Festival in his honor. Lonomakua was the uncle of Pele, and he was associated with many aspects of the Hawaiian world, including dryland agriculture, thunder, lightening, and rain. Rain clouds were referred to in chants as "bodies (*kino*) of Lono." The sweet potato, whose cultivation on the semi-arid slopes of Kona was dependent upon the winter rains, was identified with Lono in his hog form as Kamapua'a (hog-child) (Handy and Pukui 1972:31-32).

Legends of the God Lono are mixed with stories of mortal chiefs who had the same name, some of which are said to have lived either in Keauhou (Beckwith 1970:117,215) or near Kealakekua Bay. One example can be found in the legend of the chief Lonoikamakahiki, who had a wife named Kaikilani`i o Puna (Sahlins 1995:104). Legends of the God Lono suggest he took a wife by the same name; and together they lived at Kealakekua Bay. Suspecting her of infidelity, Lonomakua beat Kaikilani`i to death, but later regretted it. He sailed off, but returned each year, and traveled around the island, initiating seasonal games in his dead wife's honor (Beckwith 1970:356-357). Lono's annual return coincides with the rise of Pleiades (also Huhui and Makali`i) over the eastern horizon at dusk (in late October or early November). His landing place at Kealakekua Bay is where Hikiau Heiau serves as his main temple (Handy and Pukui 1972:31-32; `I i 1959:72).

The four-lunar-month festival is a time of peace and festivity. Every year during the *Makahiki* festival, an image of Lonomakua, known as the *Akua Loa* (long-god), along with the *Akua Pa`ani* (god of play), would begin a clockwise circuit around the island beginning and ending at Hikiau Heiau. These images were carried along the beach road, and a *kapu* prohibited fishing, or going out to sea in canoes. The people living in each district would offer tribute to the *Akua Loa* when the image was placed on the boundary of each land district (`I i 1959: 72-77; Kamakau 1976:5; Sahlins 1981:19, 1995:28-29). Thus, although we cannot be certain that the



trail we see today is the exact route taken by the *Akua Loa*, it is certainly reasonable to assume that much of the present trail system includes, or is adjacent to, the path repeatedly taken by a Hawaiian God. As we will discuss in later sections, archaeological evidence suggests that the Old Government Beach Road was built upon the route of a more ancient road.

### **From Timeless Gods to Transient Mortals: Cultural Changes and the Battle of Kuamo`o**

So far, we have constructed a model of a dispersed community of agriculturalists and fishermen, who used trails to visit and exchange goods. People and gods would also use a coastal trail every year in a ritualized system of tribute associated with the *Makahiki* festival. These patterns, based upon Hawaiian cultural traditions, are good for providing a general snapshot of ancient Hawaiian life, but fall short of bringing the history of the North Kona coast to life, and make the early Hawaiian history of the area seem timeless. In some ways, viewing Hawaiian culture at this level seems similar to the portrayal of the social habits of ants, where each individual has an understood role similar to others, but individuals by themselves are insignificant, and consideration of historical changes in social habits are not even an issue. By the 1800s, we start to get a sharper and more fluid picture--one that comes with many names, thoughts, emotions and conflicts, giving this portion of the Kona coast a unique history filled with readily apparent cultural changes. A wonderful example of this can be seen in the Battle of Kuamo`o in 1819.

After the arrival of the Cook expedition to Kona in 1779, and the cascading effects of foreign mercantilism and disease that took hold in the following decades, cultural changes were drastic. By the time of King Kamehameha I's death in 1819 and the last days of the Hawaiian *kapu* system, the religious scene in Kona was increasingly bizarre. *Kapu*, or sacredness, pervaded every aspect of Hawaiian culture from chiefly status, to gender roles, to food consumption. By 1819, high chiefesses were agitating against the system. *Haoles* (foreigners) were running amok, eating whatever they pleased with whomever they pleased, whenever they pleased. In this chaos, chiefs were struggling to find new ways to redefine their world. For example, in 1819 Kalanimōkū (Prime Minister under Kamehameha) had himself baptized as Pope over all the islands by a French priest at Kawaihae (Kamakau 1992:225).

Things finally came to a head when King Liholiho's mother Keōpūolani and the Kuhina Nui, Ka'ahumanu, initiated a *Kapu coup de etat* at Kailua. The two women organized a feast of free-eating, and pressured the young King (Liholiho) to partake in it. This was in effect an official government sanction ending the entire *Kapu* system. Not everyone was happy with this turn of events, however. Kekuaokalani, Liholiho's cousin and second in line for the throne, left Kailua in protest and sailed to Ka'awaloa where the *kāhuna* (priests) and warriors of that place encouraged him to rebel (Kamakau 1992:226). Kamehameha I had been the custodian of the war god Kūka'ilimoku when he had usurped other chiefs in his rise to power after the death of Kalaniopu'u. Following Kamehameha I's death, Kekuaokalani had become the custodian of Kūka'ilimoku, and more than anyone, he had the proper *mana* to put a stop to the heresy being committed at Kailua.

The momentous events that transpired over the next several days were written down by various people, and have become the stuff of history (Bingham 1849:74-76; Dibble 1909:131-

136; Ellis 1963:77-79; Kamakau 1992:226-229; Pogue 1978:105-109; Thurston 1921:33). First, *Ali'i* from Liholiho's retinue, including Hoapili, Nāihe, and Keōpūolani, took canoes to Ka'awaloa to encourage Kekuaokalani to come to Kailua in peace. Although Kekuaokalani's supporters appeared to make canoes ready for a peaceful voyage north, rumors of plots to kill Hoapili and Keōpūolani circulated during the night, and by the following morning, Kekuaokalani appeared before Hoapili dressed for battle. Keōpūolani sailed back to Kailua, where she convinced Kalanimōkū to send troops southward. In the meantime, most agree that Kekuaokalani's forces were marching north over land, carrying the God of War, Kūka'ilimoku, with them.

The route they took would have been along or near the Old Government Beach Road. Although Hawaiian populations were on the decline, the coast was still thickly populated in this era, and many would have witnessed their procession. What must the people have thought as they saw the *Ali'i* on the march, carrying with them the god of war? Were they frightened and confused? In an atmosphere thick with anxiety and anticipation, it was likely that they knew what was going on, and that what happened next would be of utmost significance to the future of their world.

Meanwhile, the well armed government troops, in full battle regalia, had marched south to Keauhou where they set up camp (Kamakau 1992:227,228). After an initial skirmish at Lekeleke where a few of Kalanimōkū's men died, the two sides met near the shore at Kuamo'o. The rebel troops were outgunned by the King's forces, who were reinforced with American arms and ammunition and swivel guns mounted on double canoes (Day 1984:75). Kekuaokalani offered sacrifices before the battle, and wore his feathered cape, while his war god was "paraded" into battle (Bingham 1849:76). In the ensuing conflict, Kekuaokalani was killed by a musket-ball shot into his left breast, and his wife Mānono died shortly thereafter from a musket-ball that hit her in the left temple (Ellis 1963:78).

The following excerpt is taken from an interview of an elderly Hawaiian woman, Ka'aha'āina-a-ka-haku, whose grandmother, Kualoha, was a prophetess in Mā'ihi, and witnessed the battle.

Ku-aloha was living when Kekuaokalani and his wife Manono incited war [upon] Liholiho's ai noa (free eating) after the ai kapu (tabu eating) ended; [Kekuaokalani and Mānono] and the god Kukailimoku were at Kuamo'o, Kona Hawaii.

There at Ma'ihi is the puuhonua Kuaiaku. From its top can be seen the seashore of Kuamo'o. Kualoha saw the people fleeing in every direction from the battle at the seashore; she went to the top of this Pu'u Kuaiaku and called to the people coming, "E, don't go to the hills or the forests or you will die; come with me. This is your refuge, and you will escape through me." The people turned back at her (Kualoha's) call...When the people were assembled Kualoha said, "Auhea oukou, get ready food and fish; cook a lot of food-taro, sweet potatoes, yams, [and] kalua many pigs against hunger."

From where Kualoha was, she could see the canoes from everywhere coming up

to the seas of Kuamoo and Ma`ihi. In the evening the warriors came up to Maihi and came to where Kualoha was seen... After the death of the chief Kekuaokalani, his body was mistreated. In the darkness of night certain of his own people came and took the body away, and hid it well...The burial place has never been found. He died at Na-hau-o-Ma`ihi (Mary K. Pukui, in Maly and Smith 1999:29).

Ka`aha's account gives a feeling of the chaos and violence of this battle, which must have affected the lives of many families living along the beach trail in Kuamo'o and Mā`ihi. There could very well have been civilian casualties. This account is also interesting, because it gives evidence of a *pu`uhonua* (place of refuge) located in Mā`ihi.

Furthermore, Ka`aha places the spot where Kekuaokalani died by the "hau of Mā`ihi." Information collected as early as the 1820s suggests that the location where Kekuaokalani and Mānono died is immediately adjacent to the Beach Road on the boundary between Mā`ihi and Kuamo`o, and that a rock cairn marks the location (Ellis 1963:79). Toketa, a Tahitian Missionary, wrote in 1822 that the site was "in a hollow near the path" (Barrere and Sahlins 1979:32). Another mid-nineteenth century traveler was also shown the spot where they died (Perkins 1854:187).

More contradictory evidence exists regarding the actual graves of Kekuaokalani and Mānono. Ka`aha, clearly states that the bodies were buried in secret. This conflicts with information presented by Ellis, stating "A few yards nearer the sea [than the place where Kekuaokalani and Mānono died], an oblong pile of stones, in the form of a tomb, about ten feet long and six wide, was raised over the grave in which they were both interred" (Ellis 1963:79). In the early 1900s, Henry Kinney mentioned graves associated with the battle in the same area, but didn't refer directly to Kekuaokalani, when he wrote "the graves of the slain are still to be seen. On the site stands a small village, with a windmill (Kinney 1913:61)."

Other contradictory information exists regarding the burials in Lekeleke. Some of the fallen rebel soldiers are reportedly buried in Kuamo`o, and the victorious government troops who died in battle are supposedly interred in the Lekeleke burial ground which borders the road in the ahupua'a of Keauhou 2 (Maly and Smith 1999:12). Whenever the Lekeleke tombs were built, they required a great deal of labor, and perhaps the residents of the area were assigned to help bury the dead.

From speaking to residents of the area in 1823, William Ellis gathered the following details about features in Lekeleke:

The natives pointed out to us the place where the king's troops, led on by Karaimoku, were first attacked by the idolatrous party [Lekeleke]. We saw several small heaps of stones, which our guide informed us were the graves of those who, during the conflict, had fallen there.

We were then shewn the spot on which the king's troops formed a line from the sea-shore towards the mountains, and drove the opposing party before them to a rising ground, where a stone fence, about breast high, enabled the enemy to defend themselves for some time, but from which they were at length driven by a

party of Karaimoku's warriors.

The small tumuli increased in number as we passed along, until we came to a place called Tuamoo. Here Kekuaokalani made his last stand... (Ellis 1963:77-78).

From Ellis's first-hand account, the use of the diminutive word "several" leads one to expect that Lekeleke only contained a few burials, representing the first victims from the initial skirmish in Lekeleke. This is a far-cry from the numerous burial mounds visible today. The opinion of some current residents is that many of the burials at Lekeleke are plague victims of the nineteenth century, associated with a quarantine station at Keauhou Bay (Marc Smith, personal communication 2000). Nevertheless, as early as 1930, John Reinecke made a relatively detailed map of the burial ground, and described it thus:

Site 6. Area covered with burial platforms. See inset. These platforms, supposed to have been erected for the loyal warriors in the battle with Kekuaokalani, appear to have been all erected at the same time. [Here Reinecke places a footnote stating "perhaps for warriors on both sides."] ...Arranged in a sort of theatre at the foot of a high, gloomy lava slope, facing a lonely coast against which the booming waves shutter themselves in spray a hundred feet high, they form a right fitting monument to the last of Hawaii's primitive warriors.

The plan, while indicating the tangle of platforms, does not show their relative height nor the way in which they are terraced on the slope of the cliff. Some are almost flush with the surface of the a-a; in their case, the a-a seems to have been dug up to admit the body of the warrior, and the location of his grave shown by smoothing the surface above him rather than by the building of a real platform. Other sites, however, are marked by large, imposing platforms. These may cover the bodies of chiefs or of several men...Most of the platforms are built up of a facing of large a-a stones filled in with medium or small a-a stones. Careful labor seems [sic] to have been expended in most cases, and crumbling seems due chiefly to the nature of the a-a. One noticeable feature is the way in which smaller platforms are built almost in the form of lanais, about the larger and higher ones: another is twin and triple platforms (Reinecke 1930 IV:1).

### **Tours, Trails, and Toilsome Work of the Mid-Nineteenth Century**

With the end of the *Kapu* system in 1819, and the arrival of missionaries in 1820, many fundamental changes in Hawaiian lifestyles were underway that would eventually change the nature of trails and roads in the Hawaiian Kingdom. Horses were first introduced to Hawai'i in 1803 on the *Lelia Byrd*, when a stallion and two mares in foal were landed near Kealakekua Bay (Henke 1929:5; Tomich 1986:110). At first, primarily chiefs, and, to a lesser extent, missionaries used horses, and the popularity of horses varied from island to island (Apple

1965:33; Tomich 1986:111-113; Kamakau 1992:268). In Kona, the missionary Lucy Thurston wrote "horses were very scarce in those days [1820s], owned only by the first-class of chiefs" (Thurston 1921:227). Governor Kuakini loaned Lucy Thurston a horse to ride on, but there were no gates large enough to accommodate the horse, and Lucy Thurston's Hawaiian servants had to disassemble and reassemble a wall in order for her to take her ride (Thurston 1921:227-228).

Both chiefs and missionaries had vested interests in horses, not simply for their status and novelty, but for their ability to reach distant communities. High level chiefs and chiefesses frequently toured through various districts to express their aloha for the people, maintain their popularity, and forward their own causes. In 1834, Governor Kuakini took such a tour of Hawai'i Island, usually riding on horseback, but being carried in a chair over the more difficult parts. He was attended by 600 people, which Sarah Lyman wrote were "enough to breed a famine" wherever they went (Lyman 1979:65).

As early as 1830 the missionary Hiram Bingham, accompanied by the Hawaiian scholar John Papa 'Ōi, and others, took a tour of Hawai'i Island on horseback. The trails described by Bingham were still footpaths of lava, and the horses appear to have been un-shod:

The horse of my associate, John Ii, trying to avoid hurting his feet on the bare lava, would persist in stepping upon the grass and low shrubbery, beside the iron pathway, occasionally thrusting a foot into a hole or crevice in the rocks, to the no small inconvenience and danger both to the horse and his rider (Bingham 1849:385).

Approaching Ka'awaloa from an interior trail, Bingham also wrote "Our road was not macadamized, but Peleized" (Bingham 1849:397), and Bingham had been thrown from his horse three times in one day due to the uneven terrain. In the immediate vicinity of Ka'awaloa, the trail was still a narrow foot-path, which Bingham and 'Ōi's party traveled along "in Indian file" (Bingham 1849:398). In Hilo in 1835, the missionary Titus Coan still traveled on foot, despite a large horse population on the island. In the 1870s, Isabella Bird explained that one reason that Titus Coan traveled on foot was that "horses were only regarded as wild animals in those days" (Bird 1986:176). Another reason was probably also due to the extremely rough terrain and stream crossings in Coan's district, although Isabella Bird managed it on horse and mule.

In 1832, Sarah Lyman had noted of the Hilo area that there were no roads, "excepting foot paths with rank grass on each side" (Lyman 1979:46), but by 1836 she described a three to four mile section of road leaving Hilo "made of logs, hewn so that it was as white and clean as a floor" (Lyman 1979:92). This is one of the first recorded major alterations of a trail on Hawai'i Island in the historical era, and these planks were in all likelihood from a saw-mill built eight miles from Hilo in 1833. The road to the mill also sported the first ox-drawn cart in the Hilo area by 1835 (Lyman 1979:59,74). Nevertheless, road improvements around Hawai'i Island remained uncommon. In a letter to a friend in 1857, Sarah Lyman wrote "You enquire if we have Rail Roads in this country. We have not even carriage roads on this island and traveling on horseback is toilsome work. Public improvements are carried forward at a snail's pace just for the want of Yankee Energy" (Lyman 1979:138).

By 1836, some improvements to road systems were under way in Kona (as well as Hilo).

under the impetus of Governor Kuakini and resident missionaries. In September of 1836, the French Consul to the Philippines, Theodore Barrot, while visiting Ka'awaloa, commented on the roads of Kona, and remarked on how laws recently passed by the chiefs to discourage adultery (known as *Moekolohe*, or "mischievous sleeping") greatly increased the amount of manual labor available for monumental feats of construction.

The distance between upper Kaawaloa and lower Kaawaloa is about three miles. There is a very good road between the two places, leading up the side of the mountain. This road is due to the missionaries, who resorted to a singular expedient to accomplish the object. They caused a law to be enacted, by which every person, man or woman, convicted of adultery, should pay a fine of fifteen dollars (seventy-five francs), or in case of nonpayment, should labor on the roads four months. The plan of the missionaries has been so much encouraged by the people, that this road has been completed in less than two years, and that another road from Kaawaloa to Kailua (large town), a distance of about twenty-five miles, is almost finished; and so thanks to the amorous propensities of the Hawaiians, we accomplished, very easily, the three miles which we had to pass over (Barrot 1978:8).

It is interesting to think that the people who made Barrots' journey so pleasant were in all probability the same ones who helped improve sections of the Old Government Road focused on in this study.

Nevertheless, public roads were not always built and maintained by government labor in this era. In some cases, road construction and maintenance were simply volunteer efforts. A missionary stationed at Ka'awaloa, Cochran Forbes, wrote (somewhat in contradiction to Barrot's 1836 account) that he was responsible for organizing labor for new roads in Ka'awaloa in the late 1830s and early 1840s (Forbes 1984:66,128). For example, the following quotation from his journal is from May 11, 1843:

This morning spent nearly 3 hours with the people of the village clearing the stones from the road through the village & up to the village. They turned out very unanimously and worked hard till the work was done, so that we now have a good road from the chh. Down to the beach at K. It is strange we have no authorities to take hold of public works altho' the law makes provision for such works. I have to see it done myself or it will not be done. Next week I must collect the people from above and mend the road on the pali. It is scarcely passable. If Kapiolani were living she would have such works done (Forbes 1984:128).

By 1845 it was the Minister of the Interior (based in Honolulu) who technically managed the construction of roads, but it was the governor of each island who had the power to design roads and organize the labor to build them (Kuykendall 1953:23-26; Lass 1997:18). In 1846, near the beginning of this period, a visitor to Hawai'i Island named Chester Lyman took a tour of Kona on horse and donkey, and clearly described traveling along the road in the area of our

survey:

Thurs. [Dec] 10th [1846] Ascertaining that the Keoua w'd touch here [Kealakekua] & at Kailua today, Mr. Forbes & myself started this morning at 8 1/3 for the latter place, which on the whole I was not sorry for as it gave me an opportunity to pass for a few miles through a new region of country & especially, by the old crater on the coast [Pu'u Ohau]. The road, which is most of the way a very fair one for horses, passes just in the rear of this hill, which is apparently 300ft. High & 60 or 80 rods in diameter. Just south of the hill is the village of Nawawa, on the N side of it that of Hokukanu [Hokukano] & a little beyond Kainaliu where we saw our vessel the Keoua putting in for passengers, this being the Capt's residence. He is a deacon of Mr Thurston's Church. About half way between the hill & Keauhou we passed the battle ground [Kuamo'o] where the forces of Liholiho under Kalaimoku [or Kalanimōkū] obtained the victory over the rebel forces under Kekuokalani [Kekuaokalani] & decided the fate of Idolatry in 1819. Some intelligent lads pointed out the spot where Kekuokalani was killed, & where the bones of the slain were deposited. It is a rough region of Lava & would be a poor place for a battle for any but Hawaiians (Lyman 1924:142-143).

This quotation is rich in details on the area, some of which will be discussed in following sections. What is most important to recognize here is that by 1846, Lyman considered most of this road in "very fair" condition for horses. Nevertheless, between June of 1847 and March of 1848, Lt. Governor Kapeau of Hawai'i proposed and initiated work on a "highway" between Kailua and Ka'awaloa (AH Interior Department letters June 26, 1847 and March 29, 1848 Kapeau to Minister of the Interior).

On Hawai'i Island starting in 1849, and running for several years thereafter, the government used prison labor from Hawai'i Island and O'ahu to construct the "Judd Trail" running from Kailua up to the saddle between Mauna Kea and Mauna Loa. Although the intention was to take the road all the way to Hilo, the project only progressed twelve miles outside of Kailua before being abandoned (Kuykendall 1953:25-26). Given the enormous labor effort expended on this trail between 1849 and the early 1850s, it is likely that any attempts to improve the "very fair" horse road between Keauhou and Ka'awaloa would have been limited to the small local labor pool. The Road Supervisor in North Kona at this time was named Kinimaka (Pat Thiele, personal communication).

Until 1856, road supervisors were elected by the taxpayers of each district. These same taxpayers were either responsible for paying taxes in money or in public labor. The Minister of the Interior began appointing supervisors after 1856 when it was found that the taxpayers tended to select the supervisor who would be the least demanding (Apple 1965:68-69; Kuykendall 1953:26).

Through the late 1850s, and into the 1860s a series of men held the post of Road Supervisor in North Kona, including a Mr. Taylor, C. (Charles?) Hall, and J. P. Travis (Pat Thiele, personal communication). Throughout most of the 1870s, a man named J. W. Smith was

appointed road supervisor for all of North Kona (AH Interior Dept. Bk. 12:127,282,493; Bk 13:59,321; Bk 14:258; Bk 15:69), and the documents in the Interior Department Files of the Hawai'i Archives clearly indicate that road building and maintenance in Kona were continual projects rather than isolated events. Between 1873 and 1879, J. W. Smith (not to be confused with the Road Supervisor Joseph Smith in Kohala) earned an annual salary between \$180.00 and \$220.00 per year for continually managing road maintenance and road improvement projects in North Kona. A letter from the Minister of the Interior to J. W. Smith dated January 13, 1879 (AH Interior Department Bk. 15:483), suggests that Smith was using hired help rather than prison labor at that time. Smith was given a budget of \$3.00 per day to pay for all of his laborers.

In 1882, a man named Charles N. Arnold was appointed "Road Supervisor in Chief" for all of Hawai'i Island (AH Interior Department Bk 21:154), but this position did not replace the district supervisors. Other Road supervisors in the area of North Kona in the 1880s included J. G. Hoapili in 1883 (AH Interior Department Bk 22:302), and J. K. Nahale in 1886 and 1887 (AH Interior Department BK 28:404; Bk. 30:266).

After Nahale resigned his position as Road Supervisor for North Kona in August of 1887, other men petitioned the Minister of Interior to take his job, including G. McDougall and A. Sunter (AH Interior Department Bk 32:52,267), suggesting that the position was coveted. Nevertheless, in 1887 road boards of three members each replaced the road supervisors. Labor for the government roads continued to come from various pools of Hawaiian citizenry, including hired laborers, prisoners, citizens paying their taxes through labor, and citizens laboring in lieu of paying fines for minor infractions (Apple 1965:45,47-48).

From his studies of trail and road systems around Hawai'i, Russell Apple (1965; 1994:36) proposed a trail typology that he also felt could be used to roughly date the period when a trail was constructed. These types are summarized here:

Type A: single file foot trails and were built before the introduction of horses to the Hawaiian islands. Characteristically they are quite windy and follow the contours of the coastline if located on coast (fisherman's trails). Over `a`ā, stepping stones were often placed in the path, and there may be ahu (rock cairns) to mark trails.

Type A-B: usually a type A trail modified to accommodate horses by widening, (terrain permitting) and the addition of kerbstones. Chiefs ordered stepping stones thrown out of type A-B trails when they found that their horses would slip on them. They can sometimes still be seen lying where they were tossed on the side of the trail.

Type B: newly built trails constructed for horse use (proper width for horses) and built in a straight line between two points. Type B trails were always inland of type A or A-B trails. A-B and B trails were built under the direction of chiefs between 1820 and 1840 (Apple 1965:64).

Type C: trails were constructed between 1841 and 1918 (Apple 1965:64). They were new trails which permitted two horses to be ridden side by side or to pass one another. Built in as straight of a line as possible, type C roads often cut off coastal or peninsular communities. They are characterized by the planting of bushes or trees as boundaries and the presence of man-placed



kerbstones. The surface of type C roads are "macadamized" where they pass over a'a and *pāhoehoe* (solidified by packing and leveling small rocks on the surface).

Type D: type C trails modified to accommodate carts. Often feature parallel ruts made by cart wheels with iron rims.

Russell Apple's typology provides a good general classification of Hawaiian trails and roads, but exceptions to the typology are numerous. For instance, Pat Thiele reports that many trails may have had waterworn stepping stones removed, yet lack the addition of kerbstones, thus suggesting that kerbstone trails should not equate with horse-traffic. As we will discuss, the section of road that is the subject of this study will not fit neatly into any of Apple's categories.

Road width also remains an important issue, especially in regard to State claims of easements along old roads. More than one document in Interior Department files addresses this issue (AH Interior Department letter Kapeau to Minister of Interior, December 20, 1849, and Minister of Interior to Thomas F. Mullis, March 5, 1878, Bk 15:37). In particular, the Minister of the Interior's letter to Mullis (Supervisor in the Waipio Area) states that there was no law or regulation on road width, although he does suggest appropriate widths for a carriage road.

### **Population & Decline in North Kona**

As the Hawaiian Monarchy was channeling government controlled labor into public works such as road improvements by the 1840s, the pool of public labor was plummeting. The 1800s brought a severe population decline to North Kona. Certainly, many factors contributed to this decline. In the early 1800s in addition to disease and infertility, sandalwood collecting had led to shortages of food and abandonment of marginal coastal regions. James Ely wrote from the Ka'awaloa mission station in 1827 that "a general scarcity for provisions seems to prevail throughout this island. The people have had such a fever here for getting sandalwood that I think this may be considered the cause here" (Ely n.d.).

Another factor affecting Kona in the 1800s were droughts and fires. In October of 1825, Artemus Bishop wrote of a sustained drought in Kona, forcing many inhabitants to abandon the area (Bishop n.d.). In 1846, Chester Lyman visited Kona and rode a donkey from Kailua-Kona to Kealahou. He found a small church congregation at Kealahou Bay of only 100 people in a church built to hold 2,500, and he wrote "one reason of the smallness of the congregation appears to have been the dispersion of the people in consequence of the great famine which has prevailed on this side of the Island for a year past. There has been continual drought during that time, reducing every vegetable substance to tinder, in consequence of which, the whole country was overrun by fire" (Lyman 1924:121).

Other factors affecting population in Kona during this period would include the departure of Liholiho's entourage in 1820, and the departure of Hawaiians on whaling ships (Cordy et al. 1991; Day 1955:134; Johnston 1995:181). Furthermore, the establishment of mission stations in areas such as Ka'awaloa and Kailua-Kona, resulted in more nucleated settlements, especially during the "Great Awakening" of the late 1830s when many Hawaiians converted to Christianity (Ehlke 1986).

The first systematic census of Hawai'i's population, taken in 1831, placed what was

already a greatly diminished population in North Kona at 6,649 people. During the brief subsequent period leading to the 1835 census, that number had been reduced again by a full 10% to 5,957, which was considerably worse than the overall rate of 3.6% population decline in the Islands (Schmitt 1973:15,31-32). The most alarming aspect of these figures, however, was that there were nearly twice as many adults as there were children in North Kona, prompting Artemus Bishop to write "*Ina paha pela ka emi ana o kanaka e hiki mai ana mahope, e pau loa auanei na kanaka o hawaii nei a neoneo wale ka aina!!*" ("If perhaps the people who come after are diminished at the same rate, the people of Hawai'i will be finished and the land will be empty!!") (From *Ke Kumu Hawaii*, Jan. 20, 1836:6, in Schmitt 1973:31).

The Native Hawaiian population did continue to decline. In 1850, Coote (1883:114) estimated the Kealahou Bay area had a residential population of only 100 people, while more than 800 had lived there in 1836 (Schmitt 1973:29). By 1878, the Native Hawaiian population of the entire archipelago was less than 50,000 (Stannard 1989:45-46).

In terms of the trails and roads, then, the ultimate result by the 1840s would have been that the North Kona area could have relied on a small local labor force, largely living in nucleated settlements around mission stations, but intervening areas would have been sorely pressed to provide labor to build roads through their recently depopulated *ahupua`a*. Given that major attempts to improve the Old Government Beach Road in the area covered by this survey did not occur until 1860, government mandates to build the road would have been difficult--if not oppressive--to fulfill without outside assistance.

### **Later Nineteenth Century Land-Use Patterns**

With the decline in population in north Kona, much of the Kona field system was no longer devoted to subsistence agriculture, but two economic industries--coffee cultivation and ranching--soon took hold in the dryland agricultural belt. Each of these industries are summarized below in relation to their effects on the coastal communities and trail systems.

#### ***Coffee***

In Hilo in 1829, the missionary Joseph Goodrich was growing coffee in his garden (Stewart 1831:65), and as early as 1830, the missionary Samuel Ruggles was growing coffee at Kuapehu above Kealahou Bay in conjunction with Nāihe and Kapi`olani (Bingham 1849:400). Hiram Bingham wrote that the coffee at Kuapehu was being grown along with grapes, figs, guavas, pomegranates, oranges, cotton, and mulberry, and all "on a small scale, which is the most that can be said, as yet, of these articles at the Sandwich Islands" (Bingham 1849:400). Nevertheless, soon after 1830, other foreign residents and chiefs got involved, including Governor Kuakini, who tried to raise coffee in Kāināliu, near the southern end of the section of trail discussed here (Johnston 1995:241; Mitchell and Melrose 1978:4). Governor Kuakini, a consummate consumer of foreign novelties, had been living in a framed house shipped from America as early as 1823, and was drinking coffee and tea daily (Bingham 1849:199; Thurston 1921:24).

Although today's "coffee belt" is in the upland regions of Kona, as late as the turn of the century many thought that the best elevations for planting coffee were below 1200 feet, as is made clear in the following commentary published in a San Francisco magazine by the manager

of the Hawaiian Tea and Coffee Company, Charles D. Miller:

The general impression in this district [Kona] is that coffee should be planted at a low elevation, say 1200 ft and under. With all due respect to those who hold such opinions, I must say I cannot agree with them . . . In my opinion, coffee will give better results if planted say between twelve hundred and two thousand feet, and will be less susceptible to blight... Approximately, the coffee belt may be placed at forty miles long by two and a half miles wide, an area of fifty thousand acres (Miller 1895:672).

Most coffee plantations in Kona between 1836 and 1855 were the result of foreign initiatives (Goto 1982:115), but were not entirely successful, since many trees that were planted in the open soon died. Nevertheless, the coffee that was produced was noted for its fine quality, and between 1860 and 1885, Hawaiians took over the industry on a smaller scale, and cultivated patches of coffee under the shade of *kukui* trees. A North Kona coffee merchant named John Gaspar has left us with a first-hand account pertaining to early coffee production in North Kona. It demonstrates residential patterns, and the use of *mauka-makai* trails between the coffee cultivation areas and the coast:

When I arrived here 65 years ago [around 1872], there were many patches of coffee both in North and South Kona. They were growing under the *kukui* trees and were not planted regularly. The systematic method of planting was made after the Japanese came to Kona.

In those days, Kanakas were the only coffee planters. They lived down on the beach and went up to the coffee patches only to pick coffee. Coffee trees grew wild without being hoed or pruned, and as they grew under the *kukui* shade, there was not enough sunlight for any weeds to grow.

There were only horse trails in those days. The Kanakas used to pack the coffee on their back from the patches to the beach to dry. Many had horses so that was another way of packing. Very little care was given in the preparation of the coffee. I made the first coffee mill at Napoopoo. I used to buy the coffee from them but never paid cash. We always exchanged parchment coffee with merchandise. This was a profitable business. Everybody who dealt with the natives made money. Kanakas used to work for a quarter a day (Gaspar, in Goto 1982:115).

Thus, the mid-nineteenth century saw the re-use of the Kona field system by Native Hawaiians, but on a much smaller scale. Given that the farmers lived along the coast, *mauka-makai* trails would have remained important connections between the cultivation areas and the coastal residential areas, but the significance of a beach road remains less clear.

One may then expect that Native Hawaiians living along the coast by the trail may have

been involved in producing coffee as a cottage industry. Goto also provides information on how the coffee was processed in these small scale endeavors, and some of the tools that may be associated with coffee processing:

An interesting description of the preparation of coffee about 1880 was related by John G. Machado. He reported that a large percentage of coffee was dried unpulped. However, if they desired to remove the pulp, the cherry coffee was usually spread thinly on a poi board and by jerking a round smooth stone about the size of an ordinary coconut over them from one end of the board to the other, the pulp was removed without much difficulty. The pulped coffee was dried without being washed or fermented to remove the parchment skin; the dried parchment was next subjected to pounding in a wooden or stone container with a long cylindrical stone 14 inches long and three inches across at the base with a slightly narrowed end where it was held by two hands. If the amount of coffee was large, a specially prepared foot operating device, commonly used in the oriental countries for pounding rice was used. The Hawaiians called this device kimo laiki. It was simply a large wooden hammer, supported by a beam and operated by foot. The parchment coffee was placed in a large wooden or stone bowl, made specially for this purpose. Machado smilingly related that the coffee thus prepared was very poor quality as most of the beans were broken by the heavy pounding (Goto 1982:116).

Some foreign producers remained in the coffee business throughout this era, including Chinese merchants and laborers, as well as Western growers such as H. N. Greenwell, whose coffee was noted throughout the California markets for its fine quality (Goto 1982:115,119). By the beginning of the twentieth century, the reputation of Kona coffee once again attracted other large scale foreign plantations (Miller 1895). As the plantations moved to higher elevations, they encompassed much of the area of the original Kona Field system, which typically occupied elevations between 500 feet and 3,000 feet. Rather than using *poi* boards and stone and wooden pounders, the large-scale operations purchased mechanized pulpers, peelers and separators in Honolulu (Miller 1895:674-675).

### ***Ranching***

The history of ranching in Hawai'i also has early roots along the North Kona section of the Old Government Beach Road, and is the main use of the land surrounding the trail today. In 1793 and 1794, the British explorer George Vancouver left some cattle at Kealahakua Bay (Brennan 1978:15-19; Tomich 1986:140; Vancouver 1798(2):120,127,147), both as a gift to the chiefs, and to encourage the establishment of cattle herds in the islands to provision visiting ships. In the upland area of Kāināliu, Kamehameha ordered the construction of a stone paddock to hold the cattle. One account from 1880 suggested this wall encompassed an area of 486 acres and had walls four miles long (Bowser 1880:550-551; Hammatt et al. 1997 [Introduction]:58).

Kamehameha also put a ten-year *kapu* on the slaughter of cattle at Vancouver's recommendation (Brennan 1978:15-24), and by 1801, Amasa Delano noted that cattle had

become abundant on the Big Island (Delano 1817). Many had escaped and were running wild. As the wild herds roamed the mountain sides, they caused considerable destruction to gardens (Day 1955:173), and were not readily available to provision ships. By 1819, Louis de Freycinet still felt that it would be difficult to provision a ship with beef (Freycinet 1978:52). In the 1820s, many of the cattle were roaming wild in the uplands between Waimea and Mauna Kea, and "bullock hunters" such as John P. Parker made their living in the service of the monarchy by hunting the animals with guns and traps (Brennan 1978:43-45; Ellis 1963:291; Wellmon 1970).

Cattle created economic opportunities, but they also created many problems. As the sandalwood in the islands was cut down, trade in beef, hide, and tallow replaced some of the former industry, and perpetuated a pattern of using *mauka-makai* trails to bring the islands' produce from the upland regions to the shores. This was one of the main reasons that Governor Kuakini built a carriage road from the port at Kawaihae to Waimea in 1830 (Brennan 1978:44). In 1832, Kauikeaouli (Kamehameha III), recruited vaqueros from California, to train Hawaiians in horsemanship and ranching methods (Brennan 1978:51). Nevertheless, the presence of large numbers of wild cattle wreaked havoc on dryland crops in the upland regions. Since wire fencing did not yet exist (the first patents on barbed-wire were given in 1867 [see Glover 1986]), farmers had to intensify and elaborate on more traditional methods of building stone walls around their crops and their communities to keep the cattle out. This pattern is clearly visible in the Waimea region (Kelly 1974:44), as it is in North Kona (Kelly 1983:75,76; 'Ōi 1959:111).

The "Great Wall" or "Kuakini Wall" in Kona is associated with livestock control. Chiefs before Kuakini built portions of it, but Governor Kuakini is given credit for improving the wall and extending it from Kailua Bay beyond Kahalu'u Bay. Although there is a break in the wall by Keauhou, a similar wall extends from Keauhou 2 all the way to South Kona, but sometimes skipping over rough *`a`ā* flows (Maly and Smith 1999:I,19). Since these wall segments are less than a mile from shore, they would have done little to protect the Kona Field System from cattle grazing in the upland mountain slopes, but they still would have provided some protection to the coastal communities (Kelly 1983:75-76).

After the *Māhele* from 1846-1855 (discussed below), when land and cattle came under private ownership, the necessity of controlling herds by building boundaries between properties became all the more important. In North Kona, one can see how coffee, cattle, and subsistence agriculture would not mix well without controlled grazing. Today, ranching remains one of the predominant uses of the land immediately around the Old Government Beach Road, and many of the walls and gates along the trail serve the important purpose of controlling cattle herds. Now instead of keeping cattle away from the coastal communities, the Great Wall often serves to keep cattle along the coast. The intensification of wall construction below the Great Wall for the purpose of controlling cattle on privately owned land most likely began in the mid-nineteenth century, and is a likely source of many of the walls seen along the Old Government Beach Road today.

### **Information from the *Māhele* 1846-1855**

Between 1846 and 1855, the Hawaiian Monarchy took a series of steps to divide land in the Hawaiian Islands into a system of private (fee simple) ownership, whereas before 1846, all

land was usufruct, or ultimately owned by the King (Sahlins 1992:9). In this process, Hawaiian commoners and resident foreigners were allowed to claim house lots as well as farming land that they had kept in cultivation for an extended period. Given that the bureaucratic hurdles for filing a claim included making a written claim, and having two witnesses provide sworn testimony before the Board of Commissioners to Quite Land Titles in the Hawaiian Islands, only around 10,000 commoners received claims (Sahlins 1992:9). These claims have become known as *kuleana* (literally, "rights").

Recently, *kuleana* information from the *Māhele* has been compiled by others for all the areas immediately surrounding this section of the Old Government Beach Road (Figure 3). In the Oceanside 1250 development, Hammatt et al. (1997:36) summarized the *kuleana* claims, and noted that they included lands farmed for taro, sweet potato, irish potato, coffee, gourds, banana, hala, and oranges. Also, Kepā Maly and Helen Wong Smith (1999) summarized all the *kuleana* claims for the *ahupua`a* between Keauhou 2 and Ka`awaloa in association for a proposed highway bypass project for the Māmalahoa highway. Instead of republishing that entire text here, we summarize the mid-nineteenth century *Māhele* information compiled by Maly and Smith, in combination with other historical information pertaining to each *ahupua`a* along the road section.

### *Honalo*

The only known translation for Honalo comes from local oral tradition, suggesting that the name means to "conceal" (Reinecke 1930:1; Maly and Smith 1999:25). Maly and Smith (1999:25-26) identified twelve *kuleana* in Honalo from an 1885 map of Keauhou 2 (Hawai'i Government Survey), whereas the rest of the *ahupua`a* was government land. The government had also issued six land grants in Honalo by 1891. Of these awards and grants, several are in the immediate vicinity of the trail (see Figure 3):

1. Government Land Grant #1595, dated September 1853 to John Travis, containing 175 acres.
2. Royal Patent Grant #3724/L.C.A.#9918, dated Jan.31 1853-to Lumihai a *pāhale* (house lot enclosed by a wall) on the *makai* side of the road, containing 3/10 acre, and a 2 7/10 acre parcel in the *mauka* section of Honalo.
3. Royal Patent Grant #3725/L.C.A.#7960:2, dated Jan 31, 1853- to Kahalio-a *pāhale* on the *makai* side of the road, containing 4/10 acre. Bordering the *pāhale* of Lumihai, and a *mauka kuleana* of 3 acres.
4. Royal Patent Grant #7958 dated Jan 31, 1853- to Keliinohokaha- a *pāhale* on the *makai* side of the road containing 0.46 acres, and a *mauka kuleana* of 1.13 acre.
5. Royal Patent Grant #3726/L.C.A. 8575:2; L.C.A. 7962, dated Jan 31, 1853-to Kaiahauli- a *pāhale* on the *makai* side of the road containing .07 acres and a *mauka kuleana* of 1.75 acre.

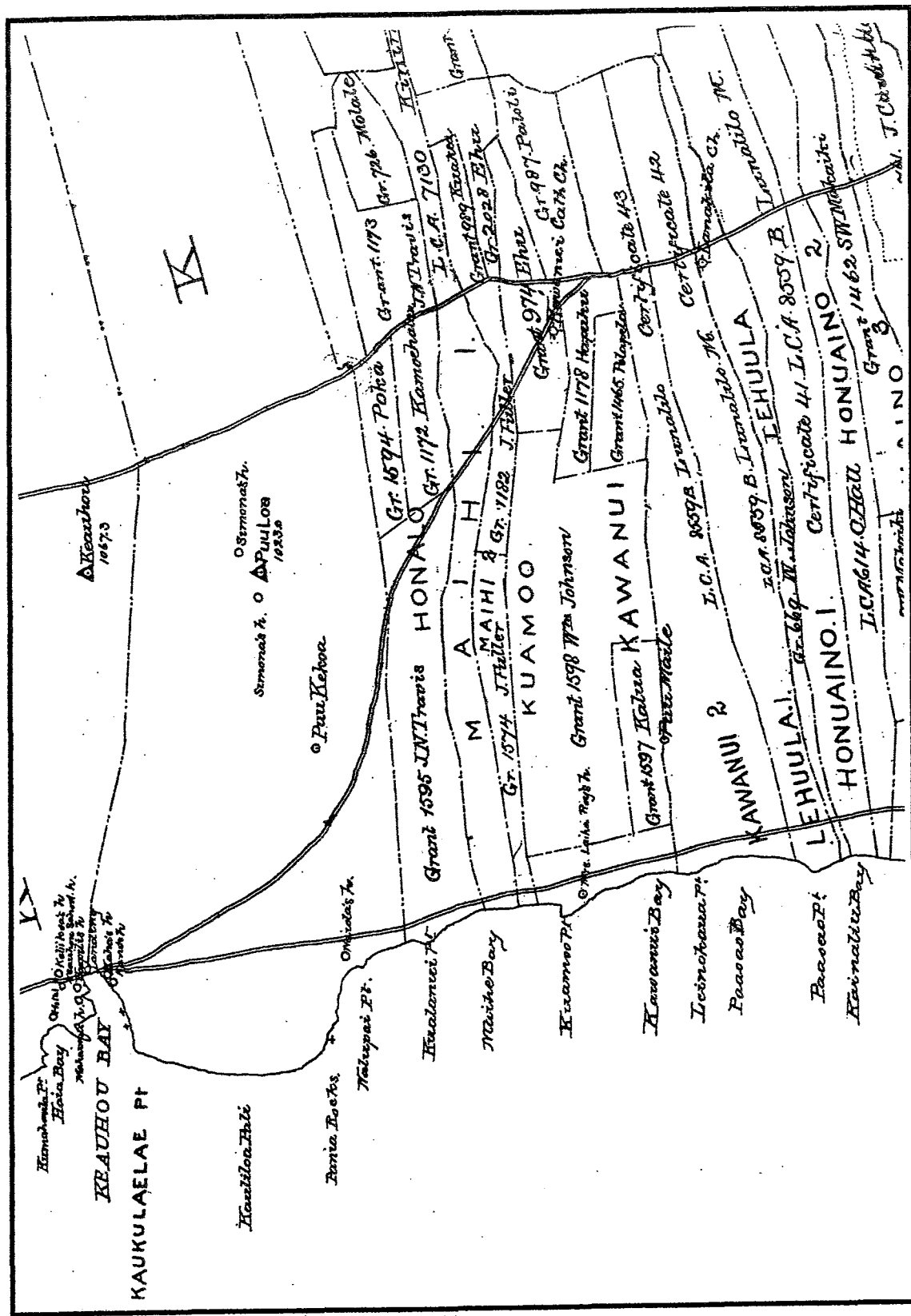


Figure 3. Section of an 1891 Map by J.S. Emerson (Register Map #1281, State Survey Office), showing various Land Grants Along the Old Government Beach Road.

6). L.C.A. 7978, a 1.2 acre award to Poka including a lot just *mauka* of the road.

7). L.C.A. 7979, a 0.3 acre award to Pinao just *mauka* of the road.

These awards show the significance of the road as a boundary marker by the early 1850s. If in fact any roads were built along new routes, it would have greatly affected the people who had small L.C.A.s *makai* of the road. The awards also show the continued presence of a small coastal community in Honalo that maintained connections to upland cultivation areas. We also know that the people mentioned in the Honalo land awards were only the heads of households, and other families may not have filed claims. One additional name for a Honalo resident comes from J.F.G. Stokes, who spoke to a man named Kealohakahalio, born in 1836, who informed him about *heiau* in the area (Stokes, in Maly and Smith 1999:28).

Despite the continuation of some traditional land use patterns, the *Māhele* testimony also shows divergent patterns. Grant# 1595 is a good example of the vast tracts that were taken over by one person for non-traditional uses such as ranching (see Figure 3).

### ***Mā'ihī 1-2***

Maly and Smith (1999:26), recorded disparate translations/pronunciations of Mā'ihī. The Paris family, who own the *ahupua'a*, pronounce it "Mai-hi." Pukui, Elbert and Mo'okini (1974:138) suggest the name comes from the wind goddess Ma'ihī'ala kapu a lono (fragrant sacred child of Lono), while Reinecke (1930:1) was told the name meant "stripped, peeled." Maly and Smith also noted that a canoe-landing is on the boundary between Mā'ihī 1 and Mā'ihī 2. The same landing is also important in the lore of 'Umi as a location where he chased a Kona chief into the sea. Fishing rights for these *ahupua'a* also extend the *ahupua'a* out to sea.

Although Maly and Smith (1999:30) documented awards and exchanges between the chiefess Miriam Kekau'onohi, the King, and a chief named Kinimaka (possibly the Kona road supervisor in 1849-1850), none of these *Ali'i* appear to have been in residence at Mā'ihī. Kinimaka ultimately commuted the land back to the government in exchange for fee simple land elsewhere in Kona. In subsequent years, several grants were issued to J. Fuller (1574; 1182), Ehu (2028); Kuakea (989); and W. Johnson (2342 1/2). All of these grants were in the upland portions of Mā'ihī, and they ranged in size from 25.5 acres (Kuakea's) to 125.75 acres (W. Johnson) (Maly and Smith 1999:30).

### ***Kuamo'o & Kawanui***

Kuamo'o means either "a narrow path," or literally "backbone," and Kawanui means "Big leaping [diving] place." (Pukui et al. 1974:99,119). As was discussed above, Kuamo'o has a special place in Hawaiian history since it was the location of Kekuaokalani's last stand against the breaking of the *'ai kapu*. We discuss Kuamo'o and Kawanui 1 together because along the Old Government Beach Road, a man named William Johnson received all this land in a grant (#1652) encompassing 49 acres around the trail, including all lands *makai* of the Great Wall. The grant cost Johnson \$12.75.

The map attached to this grant shows nine unidentified structures just *mauka* of the road on the border of Kawanui 1 and 2 (Figure 4). Reference is also made to "Hoolapa's house" in the





boundary measurements for Johnson's parcel. A small residential complex has recently been located in the uplands of Kuamo'o (Site 21247 in Robins et al 1999), but there is no reference to this in the *Māhele* documents.

### *Lehu`ula 1 and 2*

A literal translation of Lehu`ula is "red ashes" (Pukui et al. 1974:131), and this may have to do with the iron-oxides in the volcanic flows of this area along the coast. The majority of Lehu`ula 1 (or Lehu`ula nui) was awarded to William Lunailo (L.C.A.#8559-b), but *kuleana* awards also were given to people named Kahoulua, Pepehu, and Aa, containing a combined area of only 1.77 acres (Maly and Smith 1999:35). The entire *ahupua'a* of Lehu`ula 2 was sold to William Johnson for the sum of \$283 (Royal Patent #669, Sept. 2, 1851).

Of the small claims made by native Hawaiians, Kahoula only claimed a house lot in Lehu`ula 1. Pepehu claimed a house lot in Lehu`ula 2, but also claimed four taro *kīhāpai* (gardens) and two coffee *kīhāpai* in Lehu`ula 1. Thus, Pepehu's lifestyle clearly represents one of native subsistence transformed by the addition of a coffee cash-crop.

### *Honua`ino 1 and 2*

Honua`ino, which literally translates as "badlands" (Pukui et al. 1974:51) because it is supposedly the only area along the coast without a canoe landing, however there is local oral tradition suggesting this is not so (Paris, in Maly and Smith 1999:37). Probably the most important village cluster along this section of the road was located in Honua`ino in a village known as Kāināliu. Kāināliu continued to the south through Honua`ino 3 and 4, which are to the south of the trail section covered in this report. In more recent times, the name Kāināliu has been applied to an upland village, and the coastal village was largely abandoned (Maly and Smith 1999:37). Modern spellings often drop the *Kahakō* (macrons) in Kāināliu (Pukui et al. 1974:69).

Honua`ino 1 was awarded almost entirely to Lunailo (L.C.A.# 8559:B), but there were three small *kuleana* awards given to others in upland areas. Honua`ino 2, was granted almost entirely to Charles Hall, although he did have native tenants (AH Royal Patent #1098/L.C.A.#614, dated April 3, 1850).

A 4.7 acre *kuleana* bounded by a wall 360 ft. by 720 ft. was also granted to Jeremiah Martin just *mauka* of the government road, for which Martin paid \$5.00 (L.C.A. #3659, Feb. 5, 1853). A rough sketch accompanying Royal Patent #1098, Dec. 1, 1847 also indicates that two structures were within Martin's house lot (Figure 5). Jean Greenwell, long-time resident in the Kāināliu area suggests that the structures were behind the coconut grove that is visible there today (Personal Communication, Jean Greenwell 7/26/98).

The lot was bordered to the west by the government road, to the north by Charles Hall's cart road, to the east by Charles Hall's land, and to the south by the *ahupua'a* of Honua`ino 3 (L.C.A. 3659). Martin had originally acquired the house lot from Samuel Rice in 1827 or 1828 (John G. Munn, Foreign Testimony 672.8; Foreign Register 172.2, Claim 3659). Rice, who generally lived in Kailua-Kona (Lyman 1924:135-136), had apparently been granted land in Honua`ino well before the *Māhele*, and had allowed Martin to settle there. Martin was a sailor from Antigua who arrived in the islands in 1824 (Jean Greenwell, personal communication, July

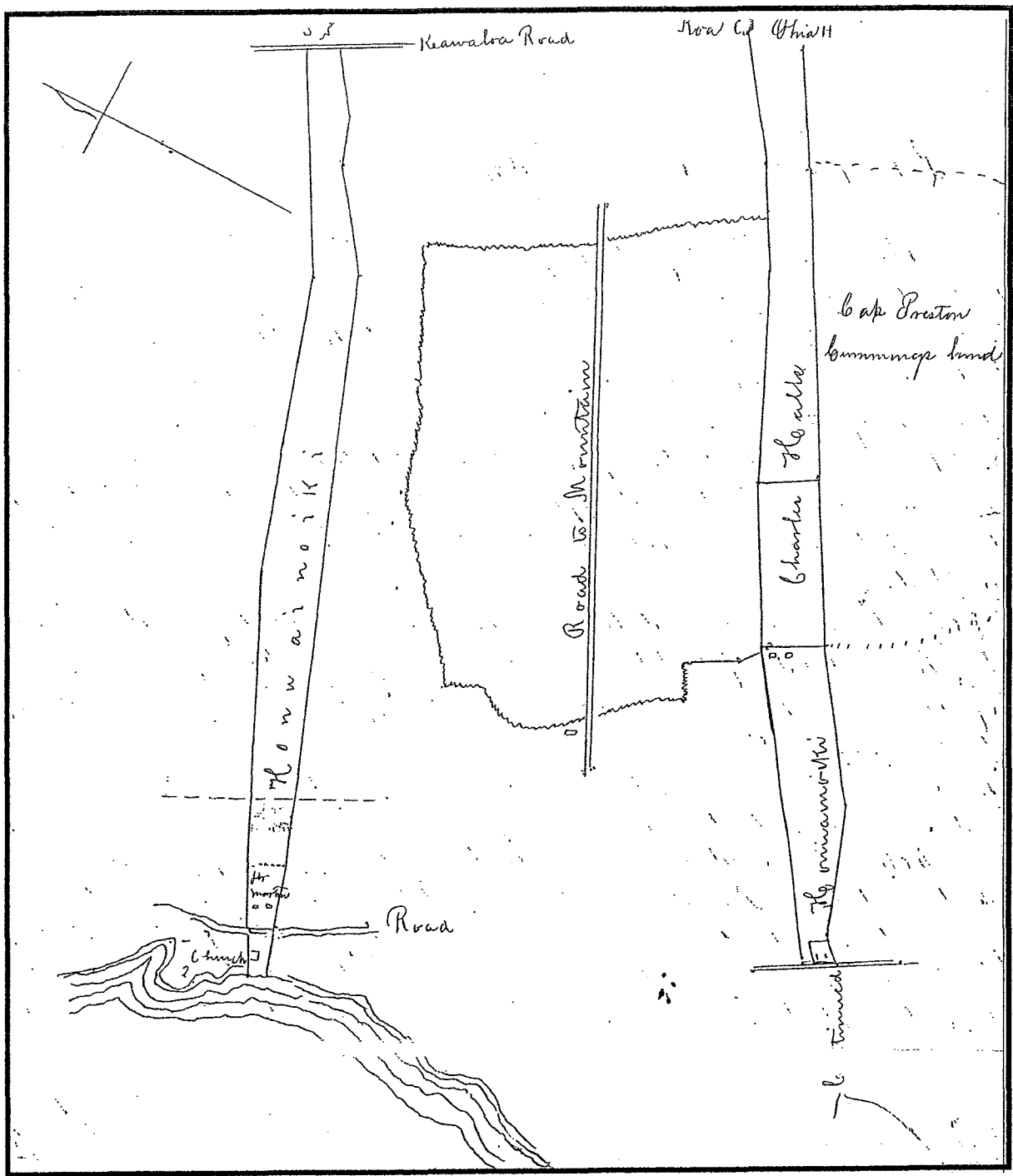


Figure 5. Sketch accompanying Royal Patent #1098 (December 1847) showing the road, enclosures, and various structures in the area of Honua'ino. Note the two structures mauka of the road in Jeremiah Martin's lot, and the church makai of the road.

26, 1998). Like Rice, he was initially "intemperate" upon coming to the islands, but later became quite pious, as we discuss below.

### **Tales of Coastal Kāināliu**

The village of Kāināliu in Honua`ino is not representative of the settlement pattern of the entire coast. It appears to have been a small nucleated settlement in the nineteenth century with several foreign residents, but it also had a more ancient Hawaiian history. Kamakau mentioned that King Kalani`ōpu`u moved to Kāināliu after the death of Captain Cook (Kamakau 1992:105). William Ellis in 1823 was immediately greeted by about 150 people upon landing there, suggesting that the village was relatively large for that time (Ellis 1963:129; Hammatt et al. 1997(1):32). Hammatt et al. concluded from mid-nineteenth century Land Commission Award testimony, that the coastal village of Kāināliu extended south through Hokukano, creating one large settlement, arbitrarily divided by *ahupua`a* boundaries (Hammatt et al. 1997(1):63). In fact, all mid-nineteenth century house lots that Hammatt et al. identified in Oceanside 1250 property were in either Kāināliu and Hokukano, or Nawa`awa`a, south of Pu`u Ohau (Hammatt et al. 1997(1):284).

To get a better impression of this village cluster and the people who lived there, we can turn to some of the written accounts of people who lived in Kāināliu and the upland areas of Honua`ino. But again, these historical accounts focus more on foreign residents and uncommon events. Thus, we only glean tangential information on the Hawaiian community at that time.

### **Jeremiah Martin**

One of the better known residents of Kāināliu at the time of the *Māhele* is Jeremiah Martin. In the *Māhele* documents for Charles Hall's claim in Honua`ino, Hall refers to a church in Kāināliu on the *makai* side of the government road, which he also calls "J. Martin's church" (Royal Patent #1098, Dec. 1, 1847). An extract from a traveler's book by Chester Lyman in 1846 helps explain this:

We soon found ourselves pleasantly accommodated for a native vessel. The Keoua is one of the largest of these vessels, some 120 tons, has a small house on deck, furnished with a comfortable matrass [sic] for sleeping & has with all a very clever Capt. Capt Martin is Eng [lish] by birth, his father having been the son of a Scotch planter in the West Indies & his mother the slave of his grandfather. By her his father had other children & took good care of them while in the W [est] I [ndies]. He afterwards married in Scotland & when this son of his finding his way thither, presented himself the father utterly disowned him as is usual in such cases. He became a sailor & deserted at the Islands many years ago. He was formerly intemperate, & for a year or more totally blind. He recovered however, reformed, became pious & is now one of Mr Thurston's deacons. He by his own means & by his influence built a church in the place where he lived 8 or 10 miles S. of Kailua [Kāināliu], & preached in it himself. He proves himself a consistent active Xn [Christian], has prayers on board his vessel morn. & eve. & on the

Sabbath reads a sermon or gives a religious address. He is very accommodating and kind to passengers & always gives up his own house on deck to foreigners (Lyman 1924:147-148).

As we previously mentioned, *Māhele* documents indicate that Jeremiah Martin had acquired his property in Kāināliu around 1827 or 1828 from Samuel Rice. Samuel Rice had been a heavy-drinking blacksmith living in Kailua. The missionary Lucy Thurston claimed that Rice was forced to remain in the islands by Kamehameha I in the late 1700s or early 1800s, and thus became depressed and turned to drink. After the arrival of the missionaries, Rice sobered-up and became an active member of the Christian community (Lyman 1924:135-136; Thurston 1921:218-220). This helps explain why Samuel Rice gave Jeremiah Martin land to live on. Rice and Martin were peas of the same pod--foreigners who had wallowed in drunkenness, only to become pious in later years.

In his piety, Jeremiah Martin went so far as to start a church in Kāināliu. The church was located just *makai* of the government road below Martin's house (Figure 5). The fact that Martin kept a church begs one to ask "who filled it?" These would have been the less visible, but no less significant residents of Kāināliu. Martin's undertaking was certainly welcomed by the protestant missionaries, since Kāināliu was a long way from the nearest mission stations at Kailua-Kona and Kealahou Bay.

The missionaries were probably all the more anxious to establish a Protestant church in the area because of the threat of Catholicism, which was viewed by the protestant missionaries with great horror. Most of Cochran Forbes's journal over the summer of 1842 was devoted to keeping a tally of how many people in his district had either succumbed to the evils of "popery" or converted to protestant Christianity (Forbes 1984:103-114). A Spanish bullock hunter named Palekika who had taken on the role of a Catholic missionary, other Catholic priests and converts, and a self-proclaimed embodiment of Jesus Christ were all competing with Forbes for followers in the area around Kealahou Bay.

Thus Martin's strong protestant influence in Kāināliu connected the area with the dominant world views in the main population centers. Although Martin was pious, he was not meek, as one of his letters demonstrates (AH Interior Dept. Records, Misc. file, Letter to Gov. John Adams from Jeremiah Martin, Nov. 18, 1842). In the letter, Martin confronts Governor Kuakini about a watch belonging to him, that was reported to be in the hands of the governor:

Kailua Nov. the 18, 1842

RH Gov J.Adams

Sir i have takeing the oportunity of writing you a few lines to inform you a bouth my wach i did write to Mr.Fay (?) concerning my wach and he says that he gave it to you i should like to know what had become of it sir will you be so good as to send me some intelligence a bouth it for he says i must ask you for it i do not like to loose it for i payd Mr S Rice 40 Dollars for it sir if you do know any thing a bouth it i wish that you will send me an answer so that i shall know what has realy become of it I delivered Cap William Beckle in the schooner Kalalaia 52000 1/2

shingles for you and likewise 1110 feet of lumber and this time to Capt. Kaina  
3108 feet put all the lumber together it comes to fore Thousand two hundred and  
Eighteen feet No more at preasant but i am in hopes that these few lines will find  
you enjoying good helth

I still remain yours  
Jeremiah Martin

From all the grammatical errors and spelling errors, the letter is revealing of Martin's early years as a common sailor. Nevertheless, besides being assertive, Martin clearly continued to make a successful living in shipping, although he was apparently serving as master of a ship owned by someone else in 1842. While Charles Lyman mentioned that Martin was the captain of the vessel *Keoua* in 1846, this was a recent development. Martin bought the *Keoua* from the Hawaiian government on August 10, 1846 for \$3,500.00. He only paid \$1000 at the time, but paid the remainder in full two years later (AH Deeds, Misc, Wills, Vessels Bk.1:149-151). Martin also took an oath in 1846, becoming a naturalized citizen of Hawai'i. By June of 1849, he was granted a passport and headed to California on the Barque *Mary*, possibly for the Gold Rush. Martin appears to have married at least twice and both times to fairly high ranking *Ali'i* women.

### ***Charles Hall***

Jeremiah Martin had a neighbor who lived at higher elevations, Charles Hall. Hall was also connected to Samuel Rice through his marriage to Rice's eldest daughter. This explains how Hall became a large land owner in Honua'ino. With the exception of Jeremiah Martin's Kāināliu church lot and house lot, Hall controlled all the remaining land in Honua'ino iki, cultivating coffee, and had done so since 1839. From what we know of Hall's wife, we can assume that Hall also led a pious family:

Some 4 or 5 miles beyond Keauhou I reached Mr. Hall's place where he has an extensive coffee plantation. His thatched house or rather houses is pleasantly located among beautiful shade trees, among them the Pride of India, Kukui, &c &c. He has many thousand coffee trees & after 5 years is beginning to find it profitable.

He has a native wife & a family of several children.

His wife is a daughter of Mr Rice of Kailua. Mr R[ice] was formerly intemperate & his family was left to go to ruin. This daughter was particularly vicious. On his reformation from intemperance he set about the reformation & discipline of his family. This daughter, before he could bring her to submission to his authority he was obliged to keep chained by the ankle in his house for some 3 months; at last she gave up & the effect on her subsequent life was very salutary (Lyman 1924:135-136).

Chester Lyman's account can be compared to that offered by Kailua-Kona missionary Lucy Thurston when she wrote her memoirs in the later nineteenth century:

He [Rice] had an only child, a daughter, approaching womanhood. Her type of character was similar to the young in those years, under very little more control than the wild goats of the mountain. In two respects she differed. She was smarter and proportionately more mischievous. He went into his own shop and made an iron ring in which to incase her ankle. He then chained her to the post standing in the middle of his thatched house, reaching from the ground to the ridge-pole. After being thus confined for three weeks, her ankle became chafed and swollen. She promised fair. He pitied and released her. She immediately left his premises, went straight to a neighboring outhouse, and secreted herself in a barrel. He sought and found her, and, with an unwavering purpose, secured her as before. With a persistence allied to that of Grant's on a broader scale, he now kept her chained to that post three additional months. The battle was won. The daughter had learned to fear, to obey, and to love her father. She then came under his guidance, the instruction and influence of the missionaries, as had never been thought of before. She married, became a faithful wife, a devoted mother, and a humble Christian (Thurston 1921:218-219).

Given the size of Hall's plantation, it can safely be assumed that some of the residents of Kāināliu were people who worked for him. Although some of these people were most likely native Hawaiian, other ethnic groups were in the area. This is particularly clear in the case of Chinese laborers employed in 1847 in the uplands of Honuaʻino 2 on a coffee plantation by Captain Preston Cummings (Royal Patent Grant 1098).

### ***The Competition for Salvation: Kaʻona, and the End of the World in 1868***

From the accounts provided above, one can see how by the 1840s the North Kona coastal communities had experienced several religious movements built around Christian themes (at least Protestant and Catholic). Much of that proselyting was filled with an evangelical fervor. If one places these events in the context of the rapidly diminishing populations, difficult working conditions, three changes in ruling monarchs between 1854 and 1864, the aftermath of the Gold Rush, the end of the whaling era, and stories of Civil War in the United States, one can begin to grasp how the future seemed quite uncertain by the mid-1860s. An account in a Hawaiian language newspaper (Kamakau, *Ke Au Okoa*, in Greenwell 1987:69) suggests that the Kāināliu population had drifted into "drunkenness and rowdiness" by the mid 1860s, although the same situation is not reflected in English newspapers.

These conditions set the stage for one of the more notorious revitalization movements involving this section of the Kona coast--the tale of Kaʻona's cult (Kodama 1974; Greenwell 1987; Paris 1926; Parke 1891:99-106). Kaʻona had been a resident of Kāināliu in his youth, but left to go to the mission school at Lahainaluna, Maui. The missionary John D. Paris wrote that Kaʻona was "a superior man, educated, and of more than ordinary ability" (Paris, in Paris 1926:50), and had read Mormon and Islamic doctrines as well as Protestant ones. Following the

*Māhele*, Ka'ona was employed as a surveyor in Ka'u, Hawai'i, and on O'ahu, but his survey methods supposedly involved the use of only a rope and a telescope, prompting another surveyor to write "His [Ka'ona's] surveys are worthless, and I trust that you will heed them as such. A deed made out from one of his surveys would be invalid for want of certainty in description" (William L. Lee, Ka'u, letter to Keoni Ana, 20 Sept. 1851, AH Interior Department Letter File, in Greenwell 1987:74).

Following his work as a surveyor, he became a police magistrate in Maui and O'ahu. On O'ahu, however, Ka'ona began to show signs of bizarre behavior, which led to his commitment in an asylum for several weeks. Most notably, when a neighbor of Ka'ona's died, he took possession of the body, intending to bring the neighbor back to life. He kept the body in its coffin for several days while the decomposing flesh made the room rank, and he sat on the coffin while the deputy sheriff demanded that Ka'ona release the body (Greenwell 1987:67-68). Kodama (1974:1) suggests that Ka'ona was inspired by the nineteenth century apocalyptic prophet, William Miller, who based his predictions for the end of the world on the Book of Daniel. As Ka'ona began to prophesize on O'ahu, he attracted a following of several hundred people (Kodama 1974:1).

After the episode with his neighbor's dead body, Ka'ona only spent a brief time in the asylum, and shortly thereafter he went to North Kona, where he reportedly had many relatives living between Hokukano and Honalo (Greenwell 1987:68; Paris 1926:50). Upon his arrival, he asked the resident missionary in the uplands, John D. Paris, if he could store bibles that he had brought with him in the new partially constructed Lanakila church. Paris consented, but soon it became apparent that Ka'ona had greater ambitions for the church. He was developing his own following, made up of many of his relatives, and they took possession of Paris's church.

He [Ka'ona] and his concubine claimed the leadership as divinely inspired prophets of the Lord. All who became his followers were to form a community, live in common, wear a white badge on their hats, and have a Hawaiian Bible as a sword hung by their side. They sang, chanted some of the Psalms of David, preached, prophesied, prayed, ate and slept in the new house where the Bibles had been deposited. When requested to vacate said church building, he and his large family and adherents claimed the property and refused to go, until an order of ejectment came from the Governess, Ruth, from Hilo (Paris 1926:50-51).

Like William Miller, Ka'ona's prophesies were apocalyptic, and one of Ka'ona's prophesies claimed that a lava flow would cover all the land except for Lehu'ula, where the church stood (Greenwell 1987:68). Even though his followers had been evicted from the church itself, they built thatched houses and put up tents on land just several hundred yards from the church (Paris 1926:51). This group apparently had the effect of moving much of the population around the Old Government Beach Road to the uplands, since Abraham Fornander, then serving as Inspector General of the Department of Public Instruction, found only 13 scholars in the Kāināliu school, which Fornander suggested was diminished by 30 pupils due to Ka'ona opening his own school (Fornander, in Greenwell 1987:68).

At some point, Ka'ona and his followers made a decision to move back down to the coast



in the immediate vicinity of the Old Government Beach Road Trail. John Paris said:

There they built a number of grass houses, erected a flag, and held their meetings, religious and political. . . he and his adherents were claiming, cultivating and appropriating to themselves the products of the lands leased and owned by others. When Sheriff Neville finally read the notice of ejectment and gave Kaona a copy of it, the rebel spat on the paper, tore it in pieces and stamped upon it. Affirming that he was amenable to no power on earth, he ordered the sheriff to leave forthwith and never dare assume authority over him (Paris 1926:51).

Ka'ona was arrested again, and briefly taken back to Honolulu, but returned to the North Kona coast by March of 1868 (Kodama 1974:5). He and his followers remained along the beach road for several months, during which time the great earthquake of 1868 occurred, which Ka'ona prophesied signalled the end of the world, and everyone would be destroyed except his followers (Paris 1926:52).

The land on which Ka'ona and his followers were staying belonged to Lunalilo, but was being leased by a Scot named William F. Roy. Roy had married the widow of William Johnson two years earlier at Lanakila Church. Fearing that his house would be burned and that his family was in danger, Roy fled with his wife and children (Greenwell 1987:70-71), while attempts to evict Ka'ona and his followers continued. Ka'ona had threatened violence if there were further attempts to remove him and his followers. The Rev. John D. Paris described what he recalled of the following events:

He [Neville], in company with his deputy and a number of makais, rode to the encampment, they were beset by a posse of fierce fanatics armed with clubs and stones, and lassoes and yelling like Indians, "Kill the haole!" The sheriff was struck in the head by a stone and felled from his horse. The others, except for one native makai [Kamai] who was dragged from his horse and killed, made their escape, several of them severely wounded. It was a terrific scene. Hearing that the sheriff was still struggling, Kaona made a glowing speech, praising the assassins in the highest terms and promising the highest seat in heaven to any one who would finish the work. Thereupon bloody volunteers rushed forward and beat out his brains with clubs.

Then after anthems of praise, Kaona harangued his followers to fire the houses and kill all the haoles, heretics and enemies of Jehovah. In the evening the foreigners organized and armed themselves to protect the community, the magistrate of South Kona calling for volunteers to protect life and property. Dr. L.H. Gulick spent the night with Mr. Logan and others guarding the Lanakila church and the paths leading to the main road.

Meantime, the Deputy Governor at Hilo was notified and hastened by forced marches with a little army, reaching Kona via Kau, in three days [this equates to

40 miles per day from Hilo to North Kona, suggesting a good road system by 1868]. Going with his soldiers, armed to the teeth, directly to the encampment, he called for Kaona and the leaders of the rebellion. At first the old Prophet, as he was called, refused to show himself, or to come forth. But after being assured that he would not be fired upon, he finally gave himself up and ordered his followers resist no longer (Paris 1926:52-54).

In the final attempt to remove Ka'ona after the deaths had occurred, over two-hundred men had been sent from O'ahu, and another fifty men had marched from Ka'u to Kona, gathering more reinforcements along the way (Greenwell 1987:71-72). This mass mobilization is reminiscent of the events following the 1824 rebellion on Kaua'i following King Kaumuali'i's death, and the 1819 rebellion led by Kekuaokalani. Like the earlier events, an individual and his followers were perceived as a threat to the new dominant ideologies of the monarchy, both in terms of their unorthodox religious beliefs, and their dis-respect for the new systems of land tenure and government.

Ka'ona had gathered several hundred followers during this movement, but the O'ahu magistrate, William Cooper Parke, reported only sixty-six men and twelve women who were arrested at the time of the final confrontation. Another 222 members were released (Kodama 1974:11). Nevertheless, the overall effect was that hundreds of people moved out of the area. Ka'ona, with his charismatic presence, spoke in his own defense at the trial, and the future king, David Kalakaua was appointed as one of Ka'ona's defense attorneys. Ka'ona was convicted of manslaughter in the second degree, however, and sentenced to ten years hard labor. But when Kalakaua became King in 1874, he immediately issued Ka'ona a pardon (Greenwell 1987:72-73).

Although some of Ka'ona's followers had been taken to O'ahu following the 1868 confrontation, others remained in Kona all along. After Ka'ona's release, the group continued to solicit the Ministry of the Interior for land, although no evidence of a lease has been found (Greenwell 1987:73). Ka'ona did, however, manage to establish his own church in the area. A letter written as "Report of the Committee" in 1879 for West Hawai'i churches states for the churches of Konawaena (Central Kona) that "There are two Protestant church buildings, 1 Episcopal, 1 Roman Catholic and 1 of Kaona--a total of five" (Churches of Hawaii, Kona 1876-1885, Folder 1, Hawaiian Mission Childrens Society Library). Ka'ona apparently died in Kāināliu in 1883 (Paris 1926:54). In a separate article, Jean Greenwell mentions that the remains of Ka'ona's church along the coast and an empty tomb associated with him are visible near the trail (Greenwell n.d.).

In terms of the effect of these events on Kāināliu as a whole, Jean Greenwell wrote "the population of Kāināliu beach never regained its former numbers, and in time the main road near the beach running from Kailua south stopped at Keauhou and turned inland" (Greenwell 1987:73). Although all accounts agree that the events surrounding Ka'ona in 1868 resulted in greater isolation of coastal Kāināliu, the road from Keauhou to Kainaliu was clearly less frequented well before 1868 than the inland road from Keauhou to Ka'awaloa (Cheever 1851:34,35; Hill 1856:218,219; Lyman 1846:135; Perkins 1854:191).

### *The 1870s, and Georges Phillippe Trousseau in Kāināliu*

Trousseau was a man who spent part of his colorful life near the beach not more than an eighth of a mile south of the section of road discussed in this study, and he was responsible for several events that shaped the nature of the Beach Road's history (Greenwell 1991:121-145). He was born in Paris in 1833 to a prominent family, and trained to be a doctor, but his gambling practices ruined his marriage and his ties with his family. After his father's death in France, Trousseau left for Australia, and eventually arrived in Honolulu in 1872. The story of his scandalous past (gambling away his fortune, leaving his wife, etc.) spread around Honolulu in the 1880s when a friend of his father's published a book casting Georges in a poor light. Trousseau acknowledged most of what was written about him, and said "you will understand that had I not, as well as many in this underworld, a skeleton in my closet, I would not be in Honolulu..." (Greenwell 1991:132).

Despite his past, Trousseau gained positions of prominence in Honolulu, primarily through his medical skills. He became Port Physician, he was an associate of the Board of Health, he served as personal physician to several of the monarchs, and he was a leading figure in developing strategies to deal with the problem of leprosy (Hansen's Disease).

By 1875, he had also become involved in the ranching business on Mauna Loa. Trousseau bought land and livestock from Charles Wall, and between 1875 and 1879, he left most of his medical practice behind to actively follow ranching on the Big Island. He also met a woman named Makanoë, and her husband Kaaëpa, who apparently lived in the area of Kāināliu and were members of Lanakila Church in the uplands. Trousseau formed a strong bond with the two, and became a second husband to Makanoë, apparently with the full agreement of Kaaëpa. While this arrangement was not uncommon in Hawaiian tradition (*punalua*), and our phrase for this type of relationship in English comes from the French (*menage a trois*), the protestant missionaries were not amused, and excommunicated Makanoë from the church.

During this arrangement, Trousseau lived with Makanoë and Kaaëpa along the beach in Kāināliu, and made some road improvements in the area.

A road was constructed which ran from Kanahāha, a sheep station on Mauna Loa, to the beach at Kainaliu. This old cart road is used by jeeps today and is known as the Trousseau Trail. At Kanahāha there was a wool press. The wool was baled there and transported by cart to Kainaliu Beach from where it was shipped. At Kainaliu Trousseau had an attractive thatched roof house built on a stone platform. Roof iron later replaced the thatch, and the house stood for many years eventually serving as a storehouse for honey (Greenwell 1991:127)

Early in 1879, Trousseau sold all of his businesses and most of his land in Kona to Henry N. Greenwell, but kept his house in Kāināliu, which he later gave to Makanoë (Greenwell 1991:128). The following two years, he invested in a sugar plantation in Kukuihaele, above Waipi'o Valley, and moved there with Makanoë. In a history of the plantation at Kukuihaele, Nancy Hedemann wrote

A new mill manager had been appointed. Dr. Georges Trousseau was now

completely established in residence with his mistress, an attractive Hawaiian lady named Makanoe. . . . Makanoe was a charming educated woman, who was still married to a Hawaiian and had been recently excommunicated from the church in Kona. However, she and Dr. Trousseau were a devoted pair and provided many enjoyable hours of companionship (Hedemann 1994:201).

By May 1882, however, Trousseau had reestablished his medical practice in Honolulu. It was Dr. Trousseau that diagnosed Father Damien as finally having contracted leprosy at the Leper treatment center in Kalihi (Greenwell 1991:130).

Trousseau died at the age of 61 in 1894, he left all of his property--which did not amount to a lot--to Makanoe who eventually moved to live with one of her daughters, Hanna Kaaepa in Salt Lake city. Makanoe's other two children, Emilia and George Kaaepa, were lepers and resided at Kalaupapa on Moloka'i (Greenwell 1991:141).

### **Present Land Use along the Trail**

Today, if one walked the nearly two-mile stretch of trail, there would only be a slim chance of seeing another person along it, although as we mentioned in the introduction, an occasional opihi picker, fisherman, or hiker may be encountered. Since the survey work was completed in 1998, however, property surveys have taken place along the Keauhou end of the trail and some adjacent ground has been cleared in Honalo. In the process, the surveyors sprayed their quintessential paint on walls and rocks around the road. In May of 2000, we also observed that someone had moved stones and placed stone circles around trees along the trail in Mā'ihī, and built a gate with a *kapu* sign (Figure 6) over a breach in the wall, creating what was in their minds a landscape beautification project near an abandoned shack.

Nevertheless, one is much more likely to come across cows grazing along the edge of the road, and if you happen to encounter any of the ranchers who use the area, one of their primary concerns will be that you close the gates along the trail behind you, to keep the cattle where they are supposed to be.

As it was for much of the nineteenth century, most cultural activity is in the vicinity of Kāināliu, where there are several houses along the beach that belong to families that have lived in the area for many generations. These houses generally are recent, although some are on old foundations, and serve as temporary vacation homes, since access to them is over a long 4-wheel drive road, and electricity comes only from solar power and generators. The dilapidated remains of pump houses that once supplied water from springs, defunct pipe-lines, and abandoned shacks in the area attest to the greater use of this area in former days.

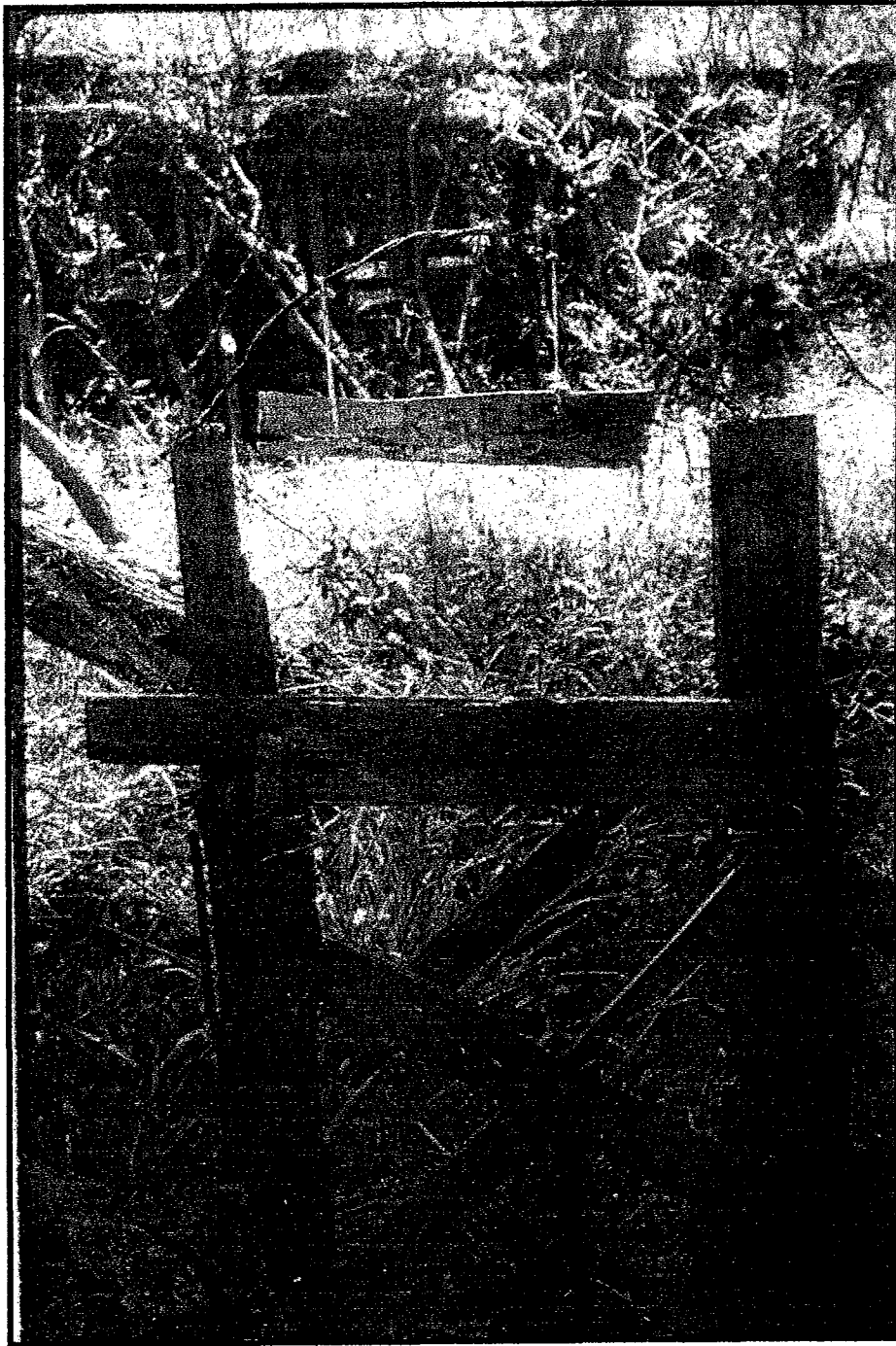


Figure 6. Recently constructed gate and sign in Mā'ihī 2 adjacent to the road. An abandoned shack (Site 22409) is visible in the background.

## Previous Archaeological Research (Oh where, oh where, is `Ūkanipō . . .?)

Because of some of the historical information presented above, and due to previous archaeological survey work (mostly in the early 1900s), we anticipated the presence of certain physical remnants of human activity along the trail. Below is a summary of sites expected near the road, drawn largely from *Māhele* documents, and the survey work of Stokes (Stokes and Dye 1991) and Reinecke (1930). Stokes, working through the Bishop Museum, focused only on *heiau*, and thus provided few details on the context in which these monumental ritual structures exist.

In 1929 and 1930, John Reinecke of the Bishop Museum walked along almost all of the Kona coast from Kawaihae through South Kona, and took notes on all kinds of sites where the vegetation allowed. His survey notes were organized into various geographical sections, and placed in a typescript manuscript (Reinecke 1930), including field maps of variable scale and quality. He included the sites he surveyed between Honua`ino and Honalo in a section entitled "The Hawaiian Remains on the Shores of the Lands from Onouli to Honalo." Unfortunately, the maps of this section included in the manuscript are limited to handwritten points plotted on a 1:12,000 U.S.G.S. map, and several maps of the same *heiau* recorded by Stokes two decades earlier. Reinecke makes reference to other plan maps in the area, and these may still exist at the Bishop Museum. In general, however, Reinecke described some of the difficulty he experienced in attempting to survey this area:

It is doubtful if more than half of the remains on the immediate beach, not to speak of those mauka of the government trail, have been noted and mapped. The rainfall of this section is heavy enough, and the soil rich enough, to cause a dense vegetation of cactus, lantana, and algarroba [kiawe], as well as lesser weeds. In most places this growth [sic] is impenetrable except along the donkey and cattle paths. One may easily pass by a fairly large platform at a distance of twenty feet without seeing it; while many ruins, once sighted, are measured only with the greatest difficulty, or not at all. For the same reason, it is hard to estimate distances between sites.

The area mauka of the government trail, as far as the lands once cultivated by the sugar plantation, probably bears few house sites, but is littered with small mounds and platforms, some of them boundary marks, many of them grave mounds (*puoa*), and some apparently of no practical use whatever.

Many sites are indicated now only by rocks scattered about the surface, having suffered (1) by the larger stones having been used in the numerous modern stone

walls, (2) from erosion, (3) from growth of vegetation on them, and (4) especially from the ravages of the live stock grazing on them (Reinecke 1930 V:1).

As we discuss below, three other archaeological surveys were completed along the *makai* side of the road in Honalo in the early 1980s (Ahlo 1981; Soehren 1980a; 1980b). Recently, Maly and Smith (1999) have summarized some of this information, and this report relies heavily on their research with the addition of several other sources.

## **Keauhou 2**

1) Lekeleke Burial Ground (discussed above)

## **Honalo**

In the early 1900s, Stokes wrote of Kualanui Heiau in Honalo between the road and the coast (Stokes and Dye 1991:86). Reinecke also noted several sites in Honalo (Reinecke's site numbers 77-86), including Kualanui Heiau (Site 3808), a *hōlua* slide (Site 1753), and nearby house sites and graves. Several of the house sites mentioned by Reinecke, he describes as "modern," apparently meaning in some cases that the remains of a thatch superstructure were still visible, or that the site was still occupied (Reinecke 1930 V:10-11).

Brief surveys of coastal parcels in Honalo in the early 1980s (Ahlo 1981; Soehren 1980a; 1980b) provide ample evidence of other sites in the vicinity, including graves (Sites 1749; 1750; 1751-B; 1752; 1753-A; 1754-A; 7710; 7711; 7712; 7713; 7714; 7715; 7716; 7718; 7719; 7721; Soehren's 1980a site 4), house platforms (1751-A; 1754; 1755; 7709; 7717; 7723; Ahlo's Feature "A"; Soehren's 1980a sites 1, 2, 3, 5, and 6), a historical well (site 7724), and a possible fishing shrine (7720) between the Government Road and the coast. Many of these sites contained multiple graves and house platforms, and the total recorded in the three surveys from the 1980s consisted of 27 probable grave platforms, and 15 house platforms. The overall area has been dubbed the "Honalo Complex," and had been given the state designation of 10-37-4161 prior to the 1980s surveys. The locations of sites surveyed in the 1980s within this complex, can be seen on Soehren's and Ahlo's maps (Appendix 1, Composite Map 5). Several of the more prominent sites are discussed below:

1) Site 3808 Kualanui Heiau (Stokes and Dye 1991:86) is on a flat between the government road and the sea. Stokes, however, found no local history pertaining to it. Fornander (Vol. 4:588 in Pukui et al., 1974:48) mention it as well (see also Maly and Smith 1999:25). Soehren (1980b) found that the *heiau* was near two house sites (1751-A, and 7709), that he suggests might have been occupied by kahuna, and that many graves were in the immediate vicinity of the *heiau*. He states:

The number of graves in the immediate vicinity, most of which appear to be post-contact (after 1778), may reflect the sanctity attributed to the heiau or its environs. The possibility that interments may have been made in the heiau itself must also be considered, although its surface has been extensively torn up, some parts remain undisturbed. The destruction may have resulted from the defeat of

Kekuaokalani nearby and the resultant order by the victorious Kaahumanu to demolish the pagan temples throughout the kingdom (Soehren 1980b:6).

2) Site 1753, a *hōlua* slide (Reinecke 1930 V:10,11) comes within 100 feet of the shore from 1000 ft in the upland sections of Honalo and Mā'ihī. It is reported to be loosely built 12-15 ft wide and 2 feet high. Soehren (1980b:3,7) mapped the coastal portion of the slide (Site 1753), and noted that it was considerably disturbed by ranching, but consisted of many "wave-tossed boulders" (Soehren 1980b:3).

3) Site 1754, consisting of the abutting *pāhale* of Lumihai (discussed above [Royal Patent Grant #3724/L.C.A.#9918]), and Kahalio (discussed above [Royal Patent Grant #3725/L.C.A.#7960:2]), on the *makai* side of the road. When Soehren (1980b:3) surveyed this area, he found nearby house platforms and stone fences "corresponding only roughly to the boundaries of Land Commission Awards 7960:2 and 9918:2." In this area, he found walls that he felt were very recent, a small cattle loading chute, a concrete watering trough, the remains of a wooden water tank, and fencing.

4). Keliinohokaha's *pāhale* (discussed above [Royal Patent Grant #7958] on the *makai* side of the road.

5). Site 7723: Kaiahauli's *pāhale* (discussed above [Royal Patent Grant #3726/L.C.A. 8575:2; L.C.A. 7962]) on the *makai* side of the road. Soehren (1980b:5) surveyed this L.C.A. parcel, and reported that it contained a well preserved house platform, surrounded by others further to the south that appeared contemporaneous. Soehren wrote:

Whether the tenants of the latter failed to apply, were denied their claims, or there were no survivors of the family to file a claim is not known. All the houselots, however, can be presumed to date from at least 1850 and most were probably occupied long before 1778. Some appear not to have been abandoned until this century. There are no nearby house lots to the north owing to the roughness of the lava (Soehren 1980b:5).

The land parcel immediately to the south of site 7723 was surveyed by Ahlo (1981). He found a thin scatter of shell, old ceramics, bottle glass, and urchin spines around a 16 x 12 m terrace paved with *a`ā* and coral (Feature A). A broken cowrie lure on the surface of the platform still had an unfaded shell, and a fire-pit on the platform showed recent use. These observations corresponded with the landowner's knowledge that the platform contained a house in the early 1900s (Ahlo 1981:2).

6) Poka's L.C.A. (7978) just *mauka* of the road.

7) Pinao's L.C.A. (7979) just *mauka* of the road.



## Mā`ihi 1-2

1) Mā`ihi Heiau in Mā`ihi 1, has dimensions of 120 x 145 ft (Thrum 1908:43-46) and is located 500 feet east of the government road (Stokes and Dye 1991:86).

No local history was obtained on Hawai`i, but in later correspondence, it was ascertained that the heiau was built by Kamehameha and the god Kuka`ilimoku was worshipped there. The size and appearance of the place suggest a heiau of importance, but the situation seems unsuitable for human sacrifice, which the worship of Kuka`ilimoku, the god of war, would demand (Stokes and Dye 1991:86).

2) Kekuaokalani Heiau in Mā`ihi 2, adjoining the government beach road, between 300 and 500 feet from the sea (Stokes and Dye 1991:86). The site was being used to dry fishing nets at the time of Stokes's survey in the early 1900s, but no local history on the *heiau* was available. Stokes suggested that it may have been hastily constructed around the time of the battle of Kuamo`o (Stokes and Dye 1991:89).

3) A cave in the shoreline of Mā`ihi reported by Mr. Kahalioumi of Keauhou to be the haunt of the shark god, "Uukanipo" (Reinecke's site 71; 1930 V:9).

4) Near the gate in the wall between Kuamo`o and Mā`ihi 2 is where Kekuaokalani and Mānono reportedly died (Reinecke's site 72; 1930 V:9). As was previously mentioned, several nineteenth century sources point out the same location, and suggest that it was marked by a built platform. Reinecke found a stone platform close to this spot on a *pāhoehoe* knob measuring 16 x 12 feet (Reinecke 1930 V:9), which he considers "barely possibly a fishing heiau."

5) On the *mauka* side of the Kuamo`o/Mā`ihi 2 gate, Reinecke wrote that the U.S.G.S. map incorrectly placed a house at that location, but there were the remains of older house platforms (Reinecke's site 73) in the same area (Reinecke 1930 V:9).

6) By a windmill in Mā`ihi 2 associated with a brackish well (which Reinecke describes as "modern and deep") is a 125 foot long lava flow resembling the tail of an eel, that is known as Waipuhi. (Reinecke's site 76; 1930 V:10).

7) Several house sites above Waipuhi, described by Reinecke as "unmistakably such as were inhabited by the poorest Hawaiians" (Reinecke's site 75; 1930 V:10). He gives dimensions for nine of these ranging from 9 x 11 feet, to 17 x 13 feet, and also notes that a *papamū* (*kōnane* game stone, much like checkers) is located by one of them.

8) Canoe landing on the boundary of Mā`ihi 1 and 2 called Leinakalua (Maly and Smith 1999:28).

9) An *`ōpelu* fishing station marker near Leinakalua (Maly and Smith 1999:28).

10) The house of Kailikini near the shore in Mā`ihi with an associated bathing place (Boundary Commission Testimony Aug. 8, 1873, in Maly and Smith 1999:28).

### **Kuamo`o**

1) Lonohelomoa Heiau: 200-300 feet east of the Government Road (Stokes and Dye 1991:89). The Battle of Kuamo`o in 1819 was reportedly fought between this *heiau* and Kekuaokalani Heiau in Mā`ihi 2, but Stokes could not gather any local history on the *heiau* itself. Reinecke's crude locational map indicates the *heiau* is approximately 100 meters south of the Mā`ihi/Kuamo`o boundary wall. Maly and Smith (1999:31) paraphrase Reinecke's text in such a way as to suggest that Lonohelomoa Heiau is on the boundary, but Reinecke's full text (also cited in a different location by Maly and Smith 1999:29) actually states the following:

At the gate in the wall between Kuamo`o and Maihi 2, or very near it, according to Mr. Johnson of Kainaliu, the rebel Kekuaokalani and his wife were killed in the great battle, which terminated about LONOHELEMOA HEIAU (Reinecke 1930 V:9).

2) Mrs. Roy's House. A small house site is located on an 1891 map of this section of the Kona Coast, and labeled "Mrs. Laiha Roy's House" (J. Emerson, Reg. Map 1281), most likely related to the William F. Roy who owned land along the road in the 1860s (see discussion of Ka`ona above). In 1930 Reinecke still mentioned "Roy's House" in the same general vicinity (Reinecke 1930 V:8).

3) Slightly *mauka* of the road, and south of Lonohelomoa, Reinecke described several mounds and house sites (Reinecke's sites 58 and 59; 1930 V:8).

### **Kawanui**

1) Pū`o`a Heiau is located between the government road and the sea. Stokes drew a map of the site, but offered no interpretation. Reinecke (1930) suggested that it was a fishing *heiau*. From Stokes's map, the site is clearly more substantial than a fishing shrine, however.

2) Mauka of Pū`o`a Heiau, Reinecke described other platforms, mounds, and house sites (Site 57) beginning on the *mauka* side of the road near Pūo`a Heiau, and proceeding north/northeast.

2) Awa ka Lepa is a canoe landing at Kawanui (Maly and Smith 200:32). Henry Lyman wrote of this bay on April 27, 1852 that "The harbor is not very great, and cannot be used when there is much wind, but it is a good place to keep canoes. Sampson wishes to make a pigpen of it, and tear down the canoe houses..." (AH Interior Dept. File, in Maly and Smith 1999:33).

3) A residential complex is depicted on a map accompanying William Johnson's land grant in 1854 (#1652) in Kawanui 1 and 2. Six house sites are depicted *mauka* of the government road in Kawanui 1, a seventh house straddles the boundary of Kawanui 1 and 2, and two more houses are

depicted in Kawanui 2. The house straddling the boundary probably belongs to a man named Ho'olapa, as is mentioned in the boundary description for the grant. Other houses most likely belong to Molale (LCA 10292:2) and Kahaleola (LCA 7399:2).

### Lehu'ula

1) 'Ukanipō, 'Ūkanipō, or Uukanipō Heiau.

Stokes in his early 1900s survey of "Hawaii Island Heiau" placed the shark heiau of "Ukanipō" or "Uukanipō" in Lehu'ula, about 300 feet *mauka* of the Government Road (Stokes and Dye 1991:93). Maly and Smith (1999) use yet another spelling, "'Ūkanipō," which follows more easily explained Hawaiian word-roots. Recently, archaeologists working in the Oceanside 1250 project have offered an alternative interpretation of where the shark *heiau* is located. Hammatt et al. (1999:80-81) argue that a walled enclosure (site# 16786) that is 2,324 meters square on a bluff above the coast in the *ahupua'a* of Ke'eke'e, may be 'Ūkanipō. They primarily base this argument upon its much larger size, and their inference from the description in William Ellis's journal that 'Ūkanipō is south of Hokukano.

At the beginning of a section entitled "A burial Tomb and Shark Heiau," Ellis wrote "A little further on [travelling south from Hokukano] we examined a buoa (tomb) of a celebrated priest..." (Ellis 1963:82). Several paragraphs later, Ellis wrote "On the top of a high mountain, in the neighborhood, stood the remains of an old heiau, dedicated to Ukanipo, a shark, to which, we were informed, all the people along the coast, for a considerable distance, used to repair, at stated times, with abundant offerings" (Ellis 1963:82). Since Ellis had seen a tomb south of Hokukano, Hammatt et al. argue that 'Ūkanipō should also be south of Hokukano.

Hammatt et al. admit that this is not conclusive evidence. In his quick tour of the island, Ellis may have never seen the *heiau*; he may have only been told about it. His use of the phrase "in the neighborhood" could easily mean that the *heiau* might be north of Hokukano rather than south of it, and Ellis wasn't certain exactly where to include the information in his text. Thus, Ellis does not conclusively state that 'Ūkanipō is to the south of Hokukano. The is also the issue of the cave associated with 'Ūkanipō further to the north in Mā'ihi (discussed above). One is then left to consider the difference in size (280 square meters in Lehu'ula vs 2,320 square meters in Ke'eke'e), and decide if that is enough of a justification to conclude that information collected in the early 1900s was erroneous.

2) Reinecke describes a large domestic complex just *mauka* of the government road in his discussion of 'Ūkanipō (site 47, which he could not reach due to bee hives kept there), that he plots in Lehu'ula, but he suggests the complex runs into the *ahupua'a* to the north and south as well:

The entire section of Honuaino, Lehuula, and Kawanui above the government trail, on the coarse lava of the steep slope, is covered with traces of ruins; walls old and new, pens, house platforms, puoa or grave mounds, and nondescript platforms, heaps, and fills in depressions. Probably there are two or three hundred sites here, could one identify them. Unfortunately the slope is very thickly

overgrown and entirely impracticable to survey (Reinecke 1930 V:6).

3) Reinecke's site 48, by "Mr. Johnson's house on Pā'ao'ao Point (Reinecke 1930 V:6). This complex includes a canoe landing, pens, and a group of small platforms, mounds, and filled areas that he describes as "typical of the close, confused order of many of the remains on this coast."

### **Honua'ino**

1) Jeremiah Martin Homestead (LCA 3659) and Church (discussed above).

2) Kaona's Coastal Church and Tomb (discussed above). Reinecke (1930 V:6) also mentions "the foundation of a large building running parallel to the beach, probably a church; by its N. end a modern tomb plastered with native cement" (Reinecke 1930 V:6).

3) Reinecke's Site 45, which he describes thus:

The area about the three houses in Honuaino 2-4. These houses all stand in built-up platform-like yards. By two of them are windmills, marked W on the map. In front of the middle one, where the sand gives way to the beach lava, are brackish pools. The strip between the southernmost house and the house in Hokukano is littered with many old walls and scattered stones, but with only two sites which can be identified as house sites. Back on the northern one is a roughly built but well preserved platform, about 29X29X2. On the pahoehoe, in the path which runs on the S. side of the site, is a papamu, rather faint, 11x12 holes.

Just south of the southernmost house is a heap of large stones, very rough, 24X25x5 [ft.] or a little larger. In the yard of the middle house is a salt pan stone, probably in recent use, very carefully hollowed out, 18x12x1/2-1". Near the south windmill is another, rough and irregular, 17x17x1-1/2". Five hut sites *mauka* of N. house.

All the section back of the houses is full of stone walls and scattered stones; but old sites probably have been erased by use of stones in modern walls and by animals grazing (Reinecke 1930 V:6).

## ***Na Ala Hele and the 1998 UH Hilo Field School***

In the fall of 1997, Pat Thiele at the Division of Forestry and Wildlife contacted Professor Peter Mills with the idea of conducting an archaeological survey along the trail. The course ran for four weeks from July 6 to July 31. The first week was spent in Hilo covering basic aspects of archaeological field survey and background research. Beginning on Monday, July 13, 1998 the class stayed in the field each Monday through Friday until July 31. Our survey methods and results are described below.

## Survey Methods (technical stuff)

Our survey methods were based upon tape-and-compass mapping, with the addition of elevational data generated from a Topcon (tm) autolevel. Garmin 48 (tm) global positioning system (GPS) data were also collected (using the Old Hawaiian Datum) for various reference points along the trail in May 2000 using a Garmin (tm) 48 GPS device. This was subsequent to the cessation of Department of Defense scrambling of GPS signals, and allowed us to map several additional features. A Point of Beginning (POB) was established at the southern end of our survey area in the center of the trail. This point was originally established as "Trail 1+100," and marked with a painted nail driven into a stone for the Oceanside 1250 survey. Beginning at that point and proceeding northward, we used a Brunton (tm) pocket transit set on a tripod, in combination with a Silva Ranger (tm) compass backshot to record center points along the trail. All bearings were taken from Magnetic North (MN) and all distances were recorded in meters. Each tape-and-compass reading collected during the survey was assigned a unique reading number (R#) on standard forms. The temporary reference points that we established through this process along the center of the trail section were then used as sub-data to map other features along the trail. These reference points were also checked against GPS data, and the degree of error was found to be negligible at the scale of 7.5 minute U.S.G.S. map renderings. Along the side of the trail, we also placed various sub-data on nails labeled with flagging tape that we hid under loose rocks. These locations were recorded on our field maps and left in the field when we completed the project, although they are not visible while hiking the trail.

While some members of the team were collecting tape-and-compass data, other members began drafting maps in the field on graph paper at a scale of 1:200 (1cm=2m). Although there are many modern survey tools that are more sophisticated than tape-and-compass used, the quality of our maps were based upon careful measurement in combination with the artistic work provided by our field cartographers. Ultimately, this combination provides much more detail than any map that relies solely upon point-to-point survey data. As the cartography lagged behind the survey work, the cartographic teams conducted their initial work at the base-camp in Kāināliu, and then took the draft maps to the field to check and augment their renderings.

Maps along the trail were numbered sequentially from Map 1 in the south to Map 49 in the north, with the exception of Maps 16 and 17, which were used to correct small gaps in the overall series between Maps 9 and 13. Maps directly to the east or west of the main trail were designated by appending an "E" or "W" to the map number corresponding to the closest map along the trail. Back at UH Hilo after the completion of the field work, all of these maps were scanned into a computer, and used as templates to draft publishable maps in Corel (tm) Draw 8.0 (Appendix 1). The maps drafted in the lab did not include the locations of hidden sub-data placed along the trail or many reading numbers for various points along walls and features, but otherwise included all information found on the original maps. All these maps were eventually combined into one master-file that can be viewed at various scales.

Other tasks included the collection of elevational data for the trail itself, photographic documentation, and the systematic collection of information on all walls and gates adjoining the trail. Cross-sections of the trail were also drafted at locations chosen by the survey team that

demonstrated the diversity of form in the trail itself (Appendix 2). Gates and walls immediately adjacent to the road were also numbered (generally following a south to north progression) and are labeled on the maps. Other walls and gates not immediately adjacent to the road were included on our maps where appropriate. All numbered walls and gates are described in detail in Appendices 3 and 4 respectively. So that we did not duplicate our efforts, walls and gates were not given separate feature designations such as those we used for enclosures, platforms, and other kinds of features along the road.

The most limiting factor in the survey besides time was property access. Although we wrote to all property owners along the trail asking permission to access their property adjoining the trail for the purpose of non-destructive survey, only a few property owners granted us permission to do so, most notably Humphrey Hilton, Allen Wall and Patricia Wilson. Elsewhere along the trail, our access was limited to the trail itself. Nevertheless, in several locations along the trail, various cultural features could be clearly seen from the public right-of-way, and these features were mapped through triangulation and/or estimated distances. The survey data in Honalo collected in the early 1980s (Ahlo 1981; Soehren 1980a, 1980b) was also combined with our base map to provide a composite map of sites between the trail and the coast in that area.

## Results of the Pedestrian Survey

### The Old Government Beach Road (Site 10290)

The Old Government Beach Road varies considerably in visibility, construction methods, width, and integrity from location to location. Maps of the road at various scales are provided in Appendix 1, and cross-sections of the road are provided in Appendix 2. A brief narrative about the road is provided below, as one would see it hiking northward from Honua`ino to Honalo.

At the southern end of the road section in Honua`ino, there are no remaining traces of a road foundation at all (e.g. Map 1), other than the gates (Gates 1 and 2), so we established a location for the trail based upon the shortest distance between the gates. In Honua`ino, the ground is nearly level, and present-day dirt roads may correspond to the location of the old road.

Passing northward through Gate 2 (Map 3), physical remnants of the road remain sparse, but several potential kerbstones, and an intentionally filled edge of a *pāhoehoe* flow (Maps 3 and 4) suggest the route of the nineteenth century road. The stones placed along the slightly undulating edge of the *pāhoehoe* flow are particularly interesting, because they would have served little purpose in terms of facilitating traffic along the trail. They only served to make a straight line out of an undulating bit of nature. It is in such minuscule details that we can begin to see the symbolic import of nineteenth century road-building in the Hawaiian Kingdom--civilization loves a straight line. Other nearby stones that appear to be kerbstones were set there in the recent past (Don Gatewood, personal communication 1998).

Passing through Gate 3 (Map 5), one leaves Honua`ino and enters Lehu`ula. At the same time, one leaves the coastal flat of Kāināliu, and proceeds up a rising flow of *pāhoehoe*. This section of the road still serves as beach access for 4-wheel drive vehicles that have come down from *mauka-makai* access roads, and the road is bounded on the *makai* side by Wall 8, which also serves as a boundary for the residential properties between the road and the coast. The 4-

wheel drive beach access separates from the Old Government Beach Road between Walls 8 and 10, and the old road proceeds up a barren *pāhoehoe* flow just *mauka* of Wall 10. The trail seems particularly narrow at this point, but Billy Paris explained the reason for this to our crew. In 1929 a large earthquake at Hualālai shook the wall down, and it was rebuilt in a slightly different place, by placing it on the Old Government Road itself, because the road provided a good foundation for the wall.

At R# 23 (Map 9), Wall 10 ends next to two old survey spikes set into a *pāhoehoe* flow, at the peak of a rise in the road. From this point and proceeding northward, the road displays extensive fill and terracing on its *makai* side as the road traverses perpendicular to a *mauka-makai* slope. A more loosely built alignment of stones marks the *mauka* boundary of the road. This basic road structure continues through Lehu'ula and into Kawanui as the road passes up and down small hillocks on the coastal slope. At several locations in this stretch, substantial amounts of fill have been brought in to make the road level (e.g., see area just north of R#33, Map 13).

The area between R#37 and R#39 (Maps 14 and 15) provides a good example of the extensive presence of waterworn boulders along the edge of the road. After passing over a rise at R#37 and beginning a gradual descent (Map #15), the current path of the road appears to have been altered by earth-moving equipment (such as a bulldozer) sometime in the mid-twentieth century. This is reflected particularly by the absence of old growth trees adjacent to the trail, and a greater degree of jumbled rocks adjacent to the trail, although there are some low intact road terraces in the area. In one section of bulldozed road between R #47 and R #49 (Maps 20 and 21), the original road bed appears to run parallel to the bulldozer path to the *makai* side. The last obvious signs of bulldozer modifications are near Wall 16 (Map 21). Local ranchers are reported to have cut roads in the area with bulldozers from the 1940s through the 1960s (Paris, in Maly and Smith I:5).

Between R#53 and R#59 (Maps 23, 24, and 25), the road passes up a small rise, and is demarcated more by loose rubble than intact road-bed facings. Nevertheless, several gates (Gates 6, 7, and 8; Maps 24 and 25) clearly demarcate the location of the road, as it passes over the boundary of Kawanui 2, and into Kawanui 1. Descending from R#59, the trail crosses an area affected by ocean storm surge (Map 26), and there are no intact remnants of the road over this approximately 20 meter section. Several waterworn stones, however, appear to have been recently placed on the road over the jagged *`a`ā* substrate within the storm surge zone.

Ascending from the wash-out (Maps 27, 28, and 29), kerbstones are once again visible in short alignments interspersed by loose rubble, particularly on the *makai* side of the road. Near R#69 (Map 30), the *makai* edge of the road is demarcated by a partially collapsed wall (Wall 25). Wall 25 continues northward for approximately 110 meters, where it meets a side trail, proceeding *makai* from the Government Beach Road (Map #32). This side trail reportedly leads to a residential complex along the coast that we did not have permission to access. Also from this point on the *mauka* side of the road, there is a well-built wall (Wall 27), heading north through Kuamo'o. The *makai* side of the trail is marked by filled terracing and rubble that transforms into a partially collapsed wall (Wall 29) near Gate 9 (Map 36).

North of Gate 9, the road is enclosed by two parallel and widely spaced walls (Walls 29 and 31). Although there are a few kerbstone alignments in this section, the road surface is generally rough and bare *pāhoehoe* with numerous small steps and outcrops that would make

carriage traffic impossible with the road in its current state. Descending towards R#85 (Map 38) the *makai* wall (Wall #29) fades into rubble, and the *mauka* wall is replaced by hogwire fencing (Fence #8). This area has been heavily affected by cattle, and still serves as a watering site and corral (Map #38 and 39).

Passing through Gate #14, one crosses the Kuamo`o/Mā`ihi boundary. Here, the road ascends a small rise over *pāhoehoe* bedrock with few cultural modifications (Map #39), until one descends slightly to a cluster of large kerbstones set on both sides of the road (Map #40). These kerbstone alignments are barely 2 meters apart, leaving too little room for anything other than a small horse-drawn cart (at best). The kerbstones appear to be placed so that the road surface will not wash out from run-off in an intermittent drainage running perpendicular to the road.

Shortly thereafter, one passes through Gate 15 (Map 42) and enters Honalo. In Honalo, the trail is generally well demarcated by parallel walls and terraces, leaving a space of approximately 4 meters in width for the road. Several portions of the road in Honalo are substantially filled and terraced to create a level road. This general pattern continues through the Honalo Complex (discussed above), until one reaches a cement ramp (R#113, Map 49) marking the end of our survey area.

### ***Discussion of the Road's Architecture***

The details of the road's architecture suggest a long history of road construction and modification, probably beginning in the prehistoric period, and continuing throughout the twentieth century. The common presence of waterworn boulders along the side of the trail is one of the most telling signs of ancient road construction along this right-of-way. In almost all instances, these boulders are loosely positioned rather than set in place as kerbstones. Since most coastal access along the road is limited by cliffs, and waterworn boulders are not commonly found in all locations along the coast, the presence of these boulders reflects intentional and intensive labor in past road-building efforts. The nearly continuous presence of waterworn boulders has been traced from Ka`awaloa to Keauhou, and possibly continues further than that (Pat Thiele, personal communication).

The difficulty of simply getting so many large waterworn to the road does not seem to make sense at first, given their loose and haphazard positioning along the trail margins. Nevertheless, oral traditions come to the rescue:

[The Old Government Beach Road] was for foot traffic and donkeys, horses, and things of that nature. You know, many of those trails were paved with `alā [dense basalt] stones, the steppingstones. But they caused the lio, especially shod horses...they'd trip on 'em and everything. And in many places, those stones are thrown on the side. ... In our area, in many places, the trail between Kāināliu Beach and Mā`ihi, especially where we used to use, you'll see most of those round stones on the side. They were purposefully removed (William Paris, in Maly and Smith 1999 II:7).

As we discussed above, Russ Apple also reached the same conclusion about waterworn stones in association with his type "A-B" trails (Apple 1965; 1994:36). Unlike Apple's type A-B trails



however, this road does not closely follow the contours of the coast, and appears to be built largely in a straight line. Thus, the waterworn stones would seem to reflect the presence of a substantial and straight road, designed for foot traffic, before the common use of draft animals in the 1830s. This raises the question of whether or not Hawaiian chiefs had begun constructing substantial foot-traffic roads in straight lines before the historical era. Given the prehistoric sites along the trail, the ethnohistory of the *Makahiki*, and the monumental effort involved in hauling thousands of waterworn cobbles up from the shore, there is every reason to believe that this road had been in place since prehistoric times, and was an important part of the prehistoric cultural landscape in North Kona.

Waterworn stones "tossed" (if such a diminutive word can be used for 200 lb. boulders) to the sides of the road reflect historical era modifications, as we assume other features do, such as terraces and kerbstones. Due largely to extensive filling and terracing along most of the road, one could pull a carriage over it in the majority of places. Road fill-and-terracing would not have been necessary for horses, but would have been a pre-requisite for a carriage road. Nevertheless, considering the weakest links in the road today, various factors would restrict it to horse, mule, and donkey traffic at most. If the road was ever used as a thoroughfare for carriages, two main factors would have to be different from the current state of the road:

1) Several of the ascents and descents over barren *pāhoehoe* are too rough to pull a carriage over, and no remnant signs of kerbing and fill are visible in some of those sections. This factor, more than any other, suggests that this section of the road was never accessible to carriages. Although the nineteenth century workers may have been slowly working to transform a horse road into a carriage road, this goal may have never been realized.

2) Many of the gates along the road are too narrow to accommodate more than a draft animal's width. This could be a historical development intentionally designed to keep motorized vehicles out of the area, since many gates constrict the road-width to a much greater degree than the general right-of-way between parallel sets of boundary walls (e.g. Gate 15, Map 42, Figure 7). Maintaining this aspect of the current road may be one of the most important factors in limiting damage to the road and the sites around it.

The gates, in and of themselves, are important cultural elements of the road (Appendix 3). Although any of us may pass through a gate today without thinking much about it, each gate required at least a day's effort on someone's part to haul the materials in, and to construct it. These gates elucidate important aspects of grazing patterns and property lines along the road, and provide information on twentieth century modifications to the road. Most of the current gates were clearly constructed in the twentieth century, and include machine hardware parts for hinges and locks, as well as galvanized wire and milled wood. Nevertheless, with the exception of one galvanized metal gate (Gate 16, Map 43) used to access a private property to the side of the road, each gate was uniquely hand-made from wood, nails, screws, wire, latches, and hinges.

Since these gates mainly exist to provide public access through grazing paddocks, the ranchers who built them have in some cases incorporated designs to minimize the chance that a gate will be left open by a careless hiker. For example, Gates 8 and 14 are designed with stone

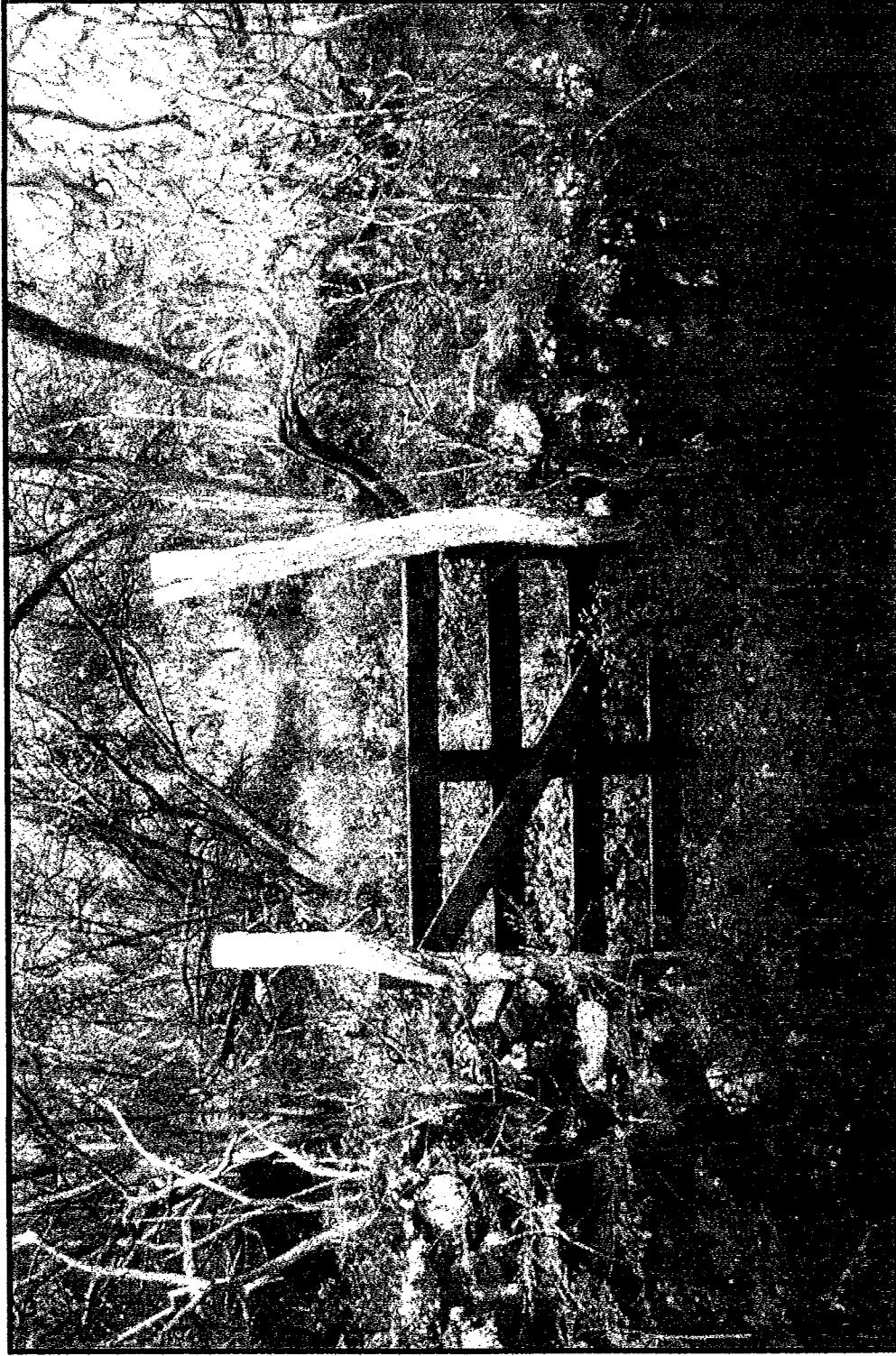


Figure 7. Gate 15 at the border of Honalo and Mā'ihī 1 (view south). Both the adjacent walls and the gate appear constructed to limit vehicular traffic on the road.

and galvanized wire counter-weights that pull the gates closed (Figure 8). As the gates close, the stone counter-weights simultaneously come to rest on the ground, limiting unnecessary stress on the counter-weights' anchors. These gate designs are a version of one used in Colonial American gardens, where chains and cannonballs were used to automatically shut the gate. When speaking with Tony Jose, a rancher leasing land in the area, he said he built the gate specifically to deal with careless hikers, and that he had learned the gate design from his father (Tony Jose, personal communication 1998).

Finally, the walls adjacent to the road are often the most telling feature regarding previous property boundaries, and areas retained for public right-of-ways. Almost all the walls along the road are constructed with a rubble core, generally of small 'a`ā clinker, which is generally assumed to be a historical era architectural form (e.g. Ladefoged 1991). Summaries of wall heights, stone content, and other information is provided in Appendix 4. Several wall segments immediately adjacent to the road lack a rubble core, suggesting that they may be of greater antiquity than other wall segments. In particular Wall 69 immediately across the road from Kekuaokalani Heiau is from blocks of *pāhoehoe* with no rubble core (Figure 9). This may be a remnant of another structure associated with the *heiau* before the ranch-era walls were built.

## Cultural Sites Near the Road

### Jeremiah Martin Homestead (Site 22395, Maps 1 and 2)

Besides the enclosures formed by Walls 1, 2, 3 and 5, there are no obvious structural remains of the Jeremiah Martin Homestead that are visible from the road. Due to cattle, many rocks from these walls have been scattered over the surface, and it is possible that a house platform may be found within the homestead area if access to the property is granted. There is a considerable amount of soil development in the area, supporting a coconut grove and old growth *kiawe*, which could retain archaeological material associated with Martin's house and church. Fragments of nineteenth century bottles were seen along existing 4-wheel drive roads (Map 2), indicating the potential of sub-surface trash piles associated with early historical occupation in the area. Given the soil development, and nearby springs in the coastal village of Kainaliu, it is more than likely that prehistoric sites exist in the same area.

### Kāināliu Early Twentieth Century Residential Complex (Site 22396, Maps 1W and 2W)

To the west of the road and the Jeremiah Martin Homestead are a series of structures associated with early twentieth century residences, and possibly earlier occupations. They include a privy and associated outhouse with a corrugated metal roof (Feature A, Map 1W), an abandoned shack with an associated lanai (Feature B, Map 1W), and an abandoned pump-house (Feature C, just west of Map 2W). The pump house site may be one of the windmill locations noted by Reinecke in 1930 in association with his Site 45 (Reinecke 1930 V:6). In general, this residential complex sits within an area which most likely includes numerous prehistoric features, some of which were described by Reinecke, but all of which were outside of our survey area.



Figure 8. Gate 14 at the Mā'ihī/Kuamo'o boundary. Note the counter-weight attached by galvanized wire to the gate and adjacent wall, designed to keep the gate shut, even if a careless hiker does not close the gate. A corral is just south of the gate (Site 22407).



Figure 9. Wall 69 on the mauka side of the road directly opposite Kekuaokalani heiau (Site 3806). Note the wall is composed entirely of pāhoehoe blocks, and lacks any rubble fill.

### **Well and Associated Watering Trough, Honua`ino (Site 22397, Maps 3W and 4)**

Immediately to the west of Wall 4 along the trail is a substantial well (Feature A, Map 3W) and an associated watering trough (Feature B, Map 4). Although the well was only inspected from the road right-of-way, it appears to be enclosed by a rectangular wall cemented with lime mortar, suggesting nineteenth century or early twentieth century construction. A corrugated metal roof has been placed over the well, but the sides to the enclosure remain open. At one point, the well appears to have supported a mechanized pump, which is no longer operational. Metal piping proceeds from the well to a wooden trough (Feature B) on the east side of Wall 4 by passing through the wall. Other features are visible further west, such as a large structure with a corrugated metal roof and open sides, but could not be adequately described from the road.

### **Ka`ona's Crypt and Church Site (Site 22398, Map 5)**

Barely visible from the road in Lehu`ula 2 is a lime-plastered crypt north of Wall 7 and west of Wall 8 (Map 5). Other lime-mortared wall remnants are also visible adjacent to it that Billy Paris identifies as part of a church that Ka`ona (see previous discussion) reportedly began to construct. A lime-burning pit is also nearby (Paris, in Maly and Smith 1999 II:23). The crypt has an arched top, and appears to have been broken-open, or to have collapsed. Local tradition suggests that Ka`ona built the crypt for himself, but he was never buried there (Paris, in Maly and Smith 1999 II:23). As was previously mentioned, one early twentieth century account suggests that Sheriff Neville (who died at the hands of the Ka`onaites) was buried in Kāināliu (Kinney 1913:61), leaving open yet another interpretation for this crypt.

Similar burial crypts are common at various Hawai`i Island cemeteries from the latter half of the nineteenth century and early twentieth century, and one such crypt was excavated as part of a large cemetery relocation project in association with the construction of a new road in Keōpū (Han et al. 1986:105-108). In that case, the crypt was found to contain stones, and the actual burial was placed in a coffin below ground-level. One question regarding the oral history of the crypt in Kāināliu which is difficult to explain is how Ka`ona would have been placed in the crypt after it had been sealed with lime mortar. If rocks are visible filling this crypt, as in the case at Keōpū, it is possible that the idea that no one was buried there comes from seeing nothing but rock-fill through the broken arch. If so, it should still be considered possible that this crypt contains human remains.

This group of features closely matches Reinecke's brief description of his "Site 46" (Reinecke 1930 V:6), discussed previously.

### **Lehu`ula Petroglyph Field (Site 22399, Map 7)**

One of the most intriguing finds along the road was a cluster of petroglyphs on a small *pāhoehoe* outcrop within the area affected by foot traffic along the road (Figures 10 and 11; Map 7). All of the figures represented are traditional prehistoric motifs, particularly pohos (cupules), and anthropomorphic designs.

In J. Halley Cox's and Edward Stasack's early synthesis on Hawaiian petroglyphs (1970), they provide a few thoughts on petroglyphs near trails:

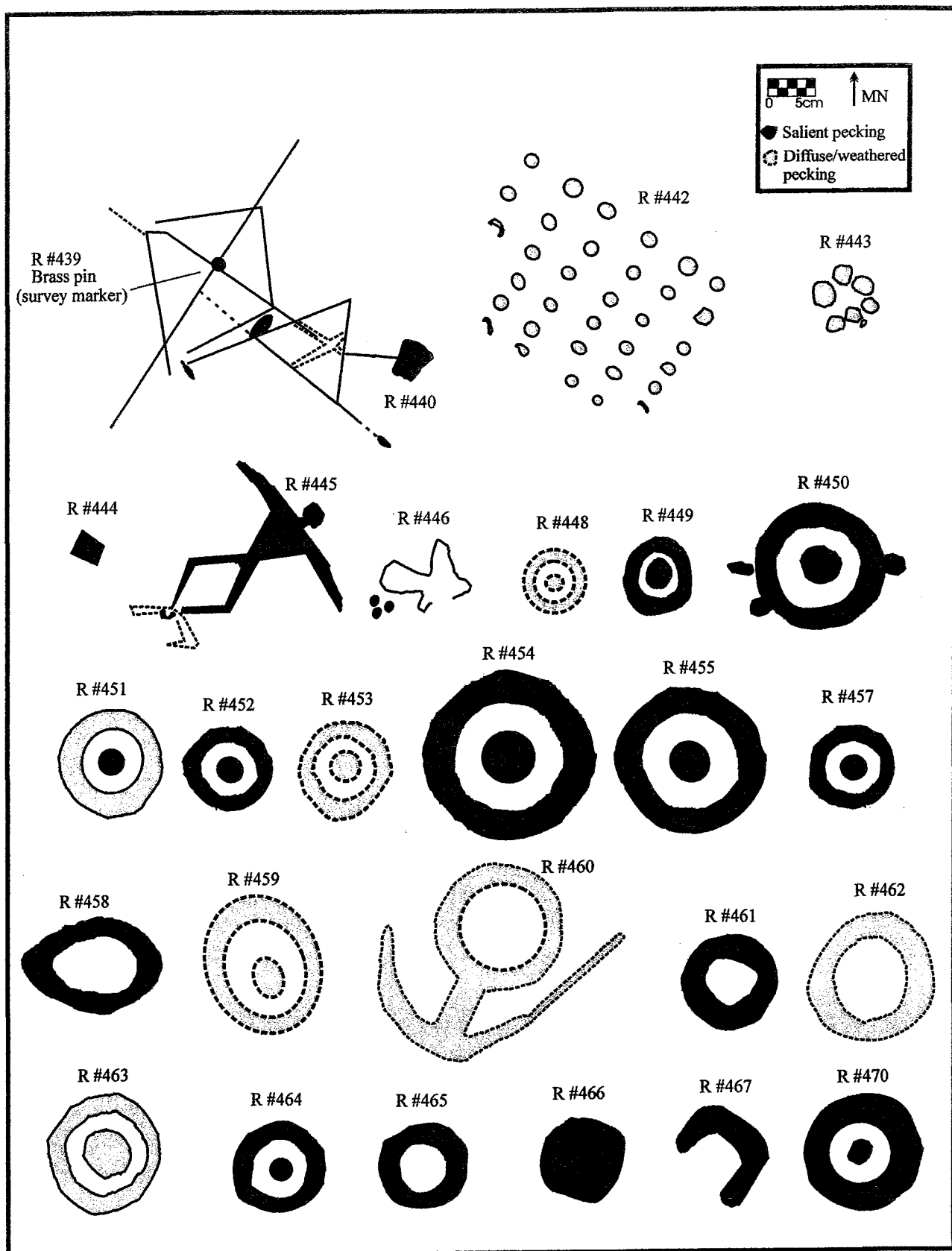


Figure 10. Lehu'ula Petroglyph Field (Site 22398). Note property marker (R#439) superimposed on an anthropomorphic figure (R#440).



Figure 11. Survey Marker superimposed on an anthropomorphic figurine near or on the boundary of Lehu`ula 1 and Lehu`ula 2, Site 22399.



Petroglyphs on trails. . . may have some connection with the makahiki activities. It was at the boundaries of the ahupua'a on the coastal trails that the pig-altars for the makahiki ceremony were located...

By no means are all boundaries marked by petroglyphs, and many petroglyphs do occur in patterns that seem unrelated to trails and boundaries; but it should be remembered that some of the present property lines may not be ancient boundaries, even though the names of ahupua'a and districts are ancient, and that in many areas the ancient trails are now not visible (Cox and Stasack 1970:28).

They go on to suggest that crossing some boundaries may have required the traveler (under the Kapu system) to make a petroglyph:

The larger "boundary" sites have dozens or even hundreds of Petroglyphs, far more than would be needed for land division or trail marks. They, therefore, must have functioned in other ways as well. Under the Kapu system, boundaries were inviolable. . . trespass was a serious offense. Passage from one ahupua'a to another was not taken lightly, and the crossing of a district boundary was an even more rare and auspicious event. To pose a possibility and a question: some ritualistic act may have been needed to insure the protection of one's 'aumakua in the foreign land. Could the petroglyphs be an aspect of such an event? (Cox and Stasack 1970:31).

In a more recent synthesis, Georgia Lee and Ed Stasack expand upon correlations between petroglyphs, boundaries and trails (Lee and Stasack 1999:13,14,21). In Lehu'ula, the concentration of numerous poho interspersed with anthropomorphic figures also occurs in association with a trail, and fits the pattern of some larger and better known petroglyph fields on Hawai'i Island, such as Pu'u Loa in Hawai'i Volcanoes National Park (Lee and Stasack 1999:83-104). The location of this field is also near the boundary of Lehu'ula 1 and Lehu'ula 2. In fact, one anthropomorphic figure that is slightly to the southwest of the main cluster is directly adjacent to a historical survey pin that may mark the *ahupua'a* boundary (Figure 11). Petroglyphs along *ahupua'a* boundaries are well documented in Puakō (Lee and Stasack 1999:13,14), where several petroglyph clusters follow the *ahupua'a* boundary. Since Lehu'ula 1 and Lehu'ula 2 are very narrow *ahupua'a*, and only one petroglyph cluster was located, it is difficult to use this isolated case to support the conclusion that petroglyph clusters are intentionally placed on *ahupua'a* boundaries.

#### **Lehu'ula 1 Village Complex (Site 22400, Maps 7, 8, 8E, 9, 9E, 10, 10E)**

Just *mauka* of the road and immediately north of the petroglyph cluster, a series of walled enclosures with apparent house platforms are visible adjacent to the road, corresponding to Reinecke's "Site 47" (Reinecke 1930 V:6). At the southern edge of the cluster, a probable burial

platform, composed of a low, rectangular faced platform filled with `a`ā gravel is apparent (Feature A, Map 7). Directly to the east of Feature A is a terraced platform (Feature B, Maps 7 and 8E) characteristic of Hawaiian house platforms, with a *papamū* sitting on the surface of the platform. Other small stone alignments surround the platform, suggesting the presence of other small, associated features. Immediately north of Features A and B is a complex of walls and pavements possibly forming another *pāhale* (Feature C, Map 8E). Several artifacts on the surface of Feature C including a porcelain ceramic sherd, and an iron kettle fragment suggest occupation of the site in the historical period. Between Feature C and the road, however, basalt debitage and an adze blank suggest prehistoric or early historical occupation of the site. Two similar *pāhale* are directly to the north of Feature C (Features D and E, Maps 9 and 9E). A cowrie shell *lūhe`e* (octopus lure) and a basalt hammerstone in association with Feature D reflect traditional Hawaiian fishing and tool manufacturing activities. Immediately to the north of Feature E is a small skylight in a lava tube, with stones set around the opening (Feature F), possibly to deter cattle from placing their foot in the hole. Just slightly further to the north is a small filled terrace (Feature G, Map 10E) possibly used as a house platform.

Features A through G represent a north-south transect through a much more complex site. Allen Wall granted us permission to investigate further to the east to `Ūkanipō Heiau (site 3803), and we found that the domestic complex continued *mauka* all the way to the *heiau* (approximately 100 meters), but these more distant domestic features were not surveyed. On the *makai* side of the road, where we had no permission to survey, we could see at least two large `a`ā terraces on the *makai* side of Wall 10 and south of Wall 12 (west of Map 8, south of Map 9). These terraces form the foundation for portions of Wall 12, and may be large old house platforms, or terracing associated with the nearby `Ūkanipō Heiau complex.

### **Stokes's and Thrum's `Ukanipō/ Uukanipō Heiau (Site 3803)**

With the gracious permission of Allen Wall, we proceeded *mauka* through site 22400 until we reached the structure identified by Stokes and Thrum as "'Ukanipō" or "Uukanipō" Heiau. Although the main enclosure is not large in terms of surface area, it is surrounded by impressive walls. On the interior, the walls measure over 3 meters in height in several locations. On the exterior, they incorporate the hillside slope, creating the impression of a structure that is several stories tall. Furthermore, it also became clear that the structure singled-out by Stokes and Thrum is only a part of a larger complex of monumental architecture. Most notably, just east of the main enclosure is a large platform filled with an `a`ā boulder paving, and containing other internal features such as a smaller raised platform and numerous pits in the `a`ā paving (Figure 12). This feature, in combination with the large `a`ā terraces below site 22400 alter the impression of Stokes's and Thrum's `Ukanipo Heiau as being a small, isolated ritual structure.

### **Lehu`ula 1 Burial Complex (Site 22401, Maps 9, 9W, 10W, 11, 11W)**

On the *makai* side of the road to the north of Wall 12 and proceeding to the boundary of Kawanui, are a series of features, most of which appear to be burial platforms (Features A-Z). The general layout of this site, and its location correspond to the "close, confused order" of features described by Reinecke *makai* of the road in Lehu`ula in his "Site 48" (Reinecke 1930 V:6). Interspersed with the burial platforms are several small agricultural terraces or house

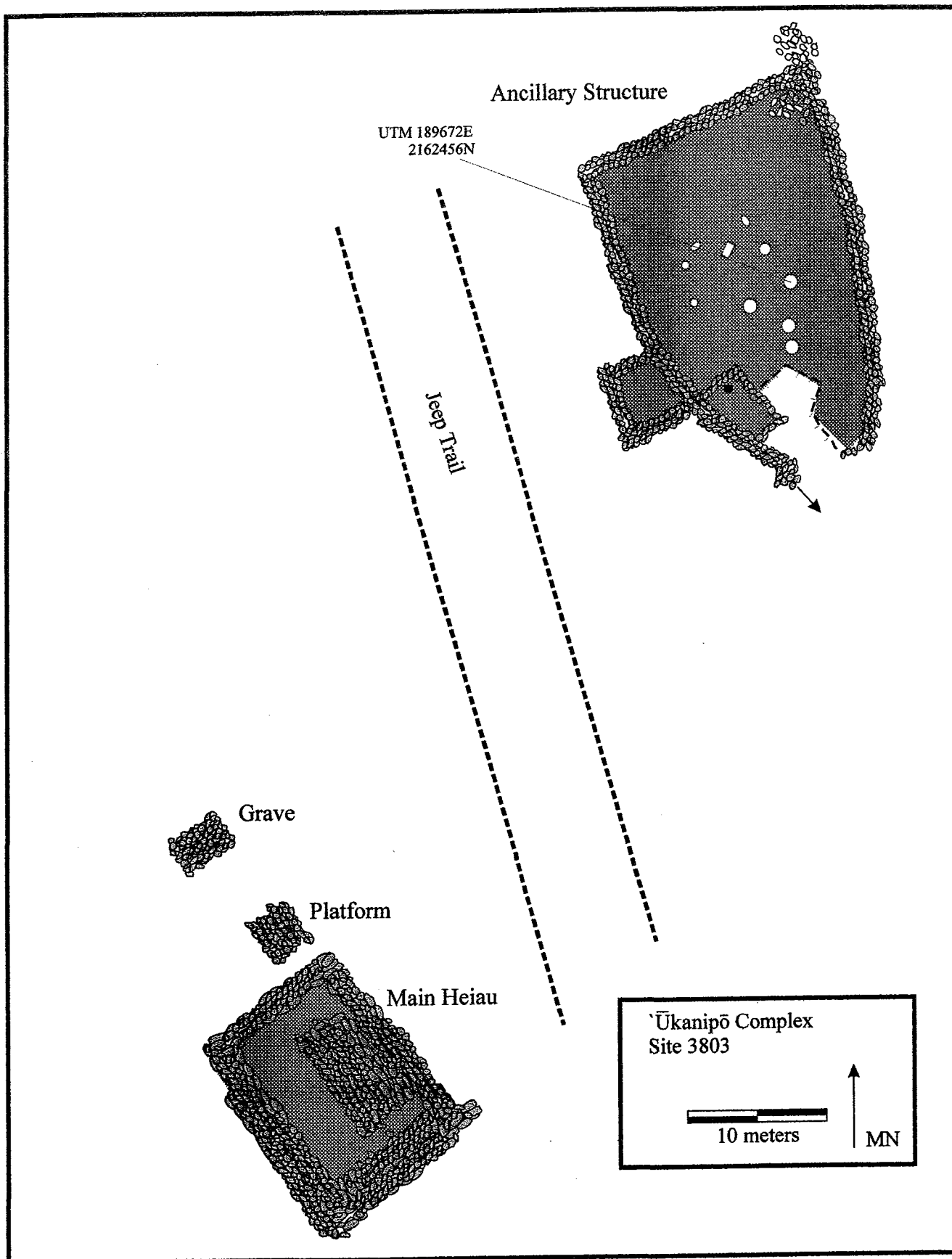


Figure 12. Stokes's 'Ūkanipō Heiau (Site 3803) showing an ancillary structure to the northeast not documented in Stokes.

platforms (Features AA-EE), a small lava-tube with an associated *papamū* (Feature FF), an isolated *papamū* (Feature GG), and three small modified outcrops (Features HH, II, and JJ). There are few to no historical artifacts directly associated with the probable burial platforms, and there are no signs that the site has been regularly visited any time in the recent past. The arrangement of the platforms suggests an aggregational construction style, with some being more centrally located than others. For example, Feature Q appears to have had other platforms placed around it at a later date. Furthermore, Feature M is both larger and taller (approximately 1.5 meters high) than other platforms that seem to be arranged around it.

Feature V is included in the list of possible burial platforms, although it is unlike the others, since it is a natural tumulus that has been heavily modified by stone facings and piles. The west side of the tumulus may have an opening that has been covered with stones.

The lava tube (Feature FF) can be entered from a skylight by the *papamu*, and crawling on one's belly, one can nearly reach the small tube opening to the southwest of the skylight, although that opening is too small to exit. Inside the tube was an extensive deposit of *kukui* endocarps. Given the extent of the *kukui*, it seems possible that they were brought in by rats rather than past human activity. Also in the tube are the remains of a dog that apparently died there in the distant past. Signs of cultural activity in the tube include the presence of two bamboo fishing poles of uncertain antiquity, and several pieces of shell visible in and under the ubiquitous scatter of *kukui*. A second tube also proceeds to the north of the skylight for at least 15 meters with a small side-branch to the east. There appears to be a small shelf built inside, and the floor has coral mixed with *kukui*, but no human remains were identified in the brief survey of the interior that we conducted.

### **Kawanui 2 Dispersed Agricultural/Residential Complex (Site 22402, Maps 13-22)**

As one enters Kawanui 2 from Lehu`ula, the characteristic of the lava flow changes from *pāhoehoe* to `a`ā. It is often difficult to determine where the volcanic flow is a natural mound and terrace, and where a flow has been modified by human activity. In several cases, however, clear indications of human modification to the ground surface are visible in the form of faced terraces, platforms, and well-defined pits. These features most likely represent remnants of the Kona Field System (Site 6601) and associated residential platforms. A brief summary of these features is provided below:

Feature A (Map 17): A long, low terrace between the road and ocean cliff, running parallel with the road, possibly agricultural or residential.

Feature B (Map 13): Small faced terrace adjacent to the Ocean cliff.

Feature C (Map 15): C-shaped enclosure built from mounded `a`ā between the road and the ocean cliff.

Feature D (Map 15): a natural mound of `a`ā adjacent to the road on the *makai* side has been faced with stones on the downward slope and leveled, possibly for a house platform.

Feature E (Map 15): a small depression in the `a`ā just west of feature D, that possibly served as a mulch-pit for planting.

Feature F (Map 19): an `a`ā terrace faced on two sides and adjacent to a large skylight providing access to the coast between the road and the ocean cliff. This appears to be a house platform.

Feature G (Map 19): a terrace adjacent to the road on the *makai* side and faced on two sides, possibly a house platform.

Feature H (Map 19E): a small faced terrace *mauka* of the road, apparently agricultural.

Features I, J, and K (Map 19 and 20E): a series of faced terraces *mauka* of the road, apparently agricultural.

Feature L (Map 20): a small terrace faced on three sides *makai* of the road, possibly a house platform or agricultural terrace.

Wall 14 (Map 20): is a low rubble wall containing many more waterworn stones than the other walls in the surrounding area. Although waterworn were individually mapped along the trail, no such effort was made in the case of this wall. This may be the remnants of a *hōlua* slide, but given our limited access away from the trail, it was difficult to determine if this was the case.

Feature M (Map 20): an `a`ā lobe adjacent to the road on the *makai* side which appears to have been leveled and marginally faced, possibly as an agricultural terrace or house platform.

Features N-T (Maps 20W and 21): small depressions in the `a`ā flow. Features N, O, and P are in a raised area of `a`ā that may be a constructed terrace, although it could also be the result of the undulating `a`ā flow.

Feature U (Map 22): A small enclosure adjacent to the road on the *makai* side, possibly a house platform.

### **Kawanui 1-2 Village (Site 22403, Maps 23, 23W, 24, 25, 25E, 26, and 27)**

Beginning near R #53 along the trail (Map 23) and heading north, one passes by numerous walls and fences directly adjacent to the trail indicative of past ranching and corralling activity in this area. A water-trough adjacent to Wall 18 (Map 24) further supports this activity. Nevertheless, clear evidence of domestic activity and historical residential sites is also apparent. Most notable in this regard is an abandoned shack visible *mauka* of the trail (east of Map 25E), but beyond the area that we had permission to survey. Features A (Map 23, 23W) and C (Map 25) are also walled enclosures that may have served as *pāhale* or corrals. Feature B (Map 25) is more characteristic of a small house platform. After heading north along the road over a section affected by storm surge (Map 26), more apparent domestic structures are visible on the *mauka*

side of the road (Map 27). Feature D, directly adjacent to the road, appears too small to be a house enclosure, and may be an animal holding pen of some sort.

One of the most interesting aspects of this site complex is that it matches the location marked on the map accompanying grant #1652 (Figure 4) showing a cluster of houses on the boundary of Kawanui 1 and 2. This would suggest that the area was occupied at least as early as the 1850s, and due to the abandoned shack, the site appears to have been occupied well into the 1900s.

#### **Pū`o`a Heiau (Site 3804, Map 28)**

Pū`o`a Heiau was mapped by Stokes in the early 1900s, and is still readily visible adjacent to the road today immediately *makai* of the road. The *heiau* itself (Feature A) is mostly covered in *kiawe*, which probably has served to limit human disturbance in the recent past. What is most notable, however, is that there are extensive areas of groomed `a`ā slopes (Features B, C, and D) adjacent to the *heiau* on the *mauka* side of the road (Maps 27, 28, 29). The terraces are constructed on a much larger scale relative to anything seen in Kawanui 2 adjacent to the trail. For this reason, we have chosen to include them as part of the Pū`o`a Heiau complex, rather than simply viewing them as agricultural features.

#### **Makai Trail (Site 22404, Map 32)**

Although other possible side trails are noted on the accompanying maps in the appendix, this particular trail, departing in a northwesterly direction from the road, is reported to connect to a residential complex along the coast in an area that we had no access to. The trail itself is worn *pāhoehoe* and shows no signs of intact kerbstones along the portion that we could observe.

#### **Kuamo`o Roadside Domestic Site (Site 22405, Maps 36 and 37)**

Along either side of the road near R# 83 is a scatter of early historical domestic refuse, including iron kettle fragments, ceramic sherds and glass. Possible wall remnants and small terraces, and a potential house platform (Feature A, Map 36) are also visible just *mauka* of the road in the same vicinity, suggesting that a historical residence may have been there at one time. One additional factor of interest at this location is that Wall 67 may have originally continued across the current path of the road at one time. Thus, it is possible that Wall 67 pre-dated the current right-of-way. Unfortunately, soil development here is very thin, and cattle have trampled many surface aspects of this site.

#### **Kuamo`o Burials (Site 22406 Map 38)**

Makai of the road in Kuamo`o is a hillside that slopes downward to the northeast. This area was on private property which we did not have access to, but several rectangular mounds were visible on the hillside that may be burials. Given the historical association of this area with the 1819 battle of Kuamo`o, it is possible that these mounds contain victims of the battle.

#### **Corral and Watering Site (Site 22407, Maps 38 and 39)**

In Kuamo`o near the boundary of Ma`ihi 2, the trail passes through a corral and watering site (Figure 13) formed by Gates 12, 13, and 14, Walls 33, 34, and 68, and Fence 9. In

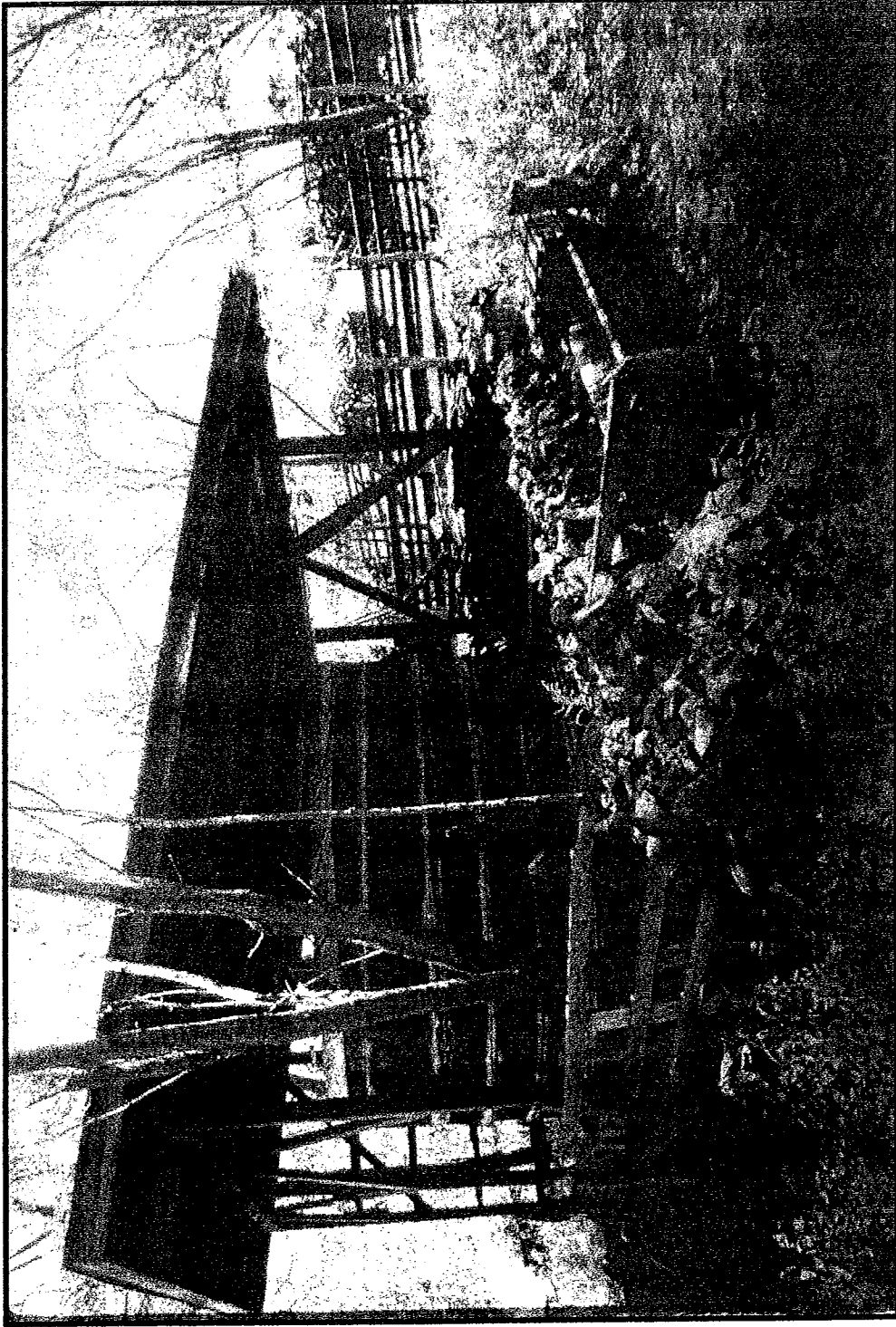


Figure 13. Catchment tank (Feature B) and wooden trough (feature A) in Site 22407 near the Kuamo`o/Mā`ihi boundary

association with the corral are a catchment tank (Feature B), a pump house (Feature D), and several watering troughs of various forms (Features A, C, and E). We had the opportunity to speak with Tony Jose, a rancher leasing the land, and who used the corral on a regular basis. The pump house taps into a spring that pumps brackish water. Tony Jose reports that some cows cannot survive on the water, but his herd has adapted to it (Tony Jose, personal communication 1998).

#### **Waipuhi (Reinecke's site 76, Map 39)**

Also just north of Gate 14 and adjacent to Wall 35 are several blades from an old windmill (Figure 14). Reinecke had noted a natural feature in the lava by a windmill that pumped water from a brackish water well in Mā`ihi 2. The natural feature, known as Waipuhi, was 125 feet long, and resembled the tail of an eel (Reinecke 1930 V:9). This general area is filled with small lava tubes that create serpentine forms on the surface of the ground. This factor, in combination with thick grass cover, prevented us from making any definitive identification of Waipuhi without some corroborating oral history. Since we did not positively identify the site, we did not assign a new site number. Nevertheless, our best bet would be somewhere close to the well in Site 22407.

#### **Site of Kekuaokalani's and Mānono's Last Stand (Site 22408, Reinecke's Site 72, Map 39)**

Gate 14 at the northern end of Tony Jose's corral and/or Wall 36 heading east from the road directly north of gate 14 most likely represent the traditional boundary between Kuamo`o and Mā`ihi. If so, this is the area where Kekuaokalani and Mānono reportedly died, and where Reinecke found a stone platform on a *pāhoehoe* knob measuring 16 x 12 feet (Reinecke 1930 V:9). Due to our limited property access, we were unable to identify any such platform, although local residents suggest that a marker for Kekuaokalani's "grave" still exists.

#### **Mā`ihi 2 Abandoned Shack (Site 22409, east of Map 39)**

Readily visible about 50 meters east of the road at R #89 is a small abandoned shack. This was beyond the area that we had permission to survey. As we noted in an earlier section, someone has made several recent modifications to the site by building a bench into Wall 37, and bringing coral from the beach to use as fill below some plantings.

#### **Mā`ihi 1 Enclosure (Site 22410, Map 41)**

On the *mauka* side of the road in Mā`ihi 1 are a series of rubble-filled wall segments that form paddocks or enclosures next to the road. Although we did not explore the opposite sides of the wall on foot, it appears that at least one house platform is visible within one of the enclosed areas, suggesting that it may have been a *pāhale*.

#### **Kekuaokalani Heiau (Site 3806, Map 41)**

A large enclosed platform was clearly visible adjacent to the *makai* side of the road in Mā`ihi that closely matches the dimensions of the structure described as Kekuaokalani Heiau by





Figure 14. Windmill blades lying adjacent to the wall of the Mā'ihī/Kuamo'o boundary. Reinecke mentioned a windmill here in reference to an eel-like form (Waipuhi) in the lava.

Stokes (Stokes and Dye 1991:86, 89). The structure is immediately adjacent to the road, as Stokes noted, and still appears in good repair. It is surrounded by scatters of traditional Hawaiian midden and historical materials (see Map 41). Furthermore, the structure is built with solid stone walls, lacking rubble fill. Given these factors, there is little doubt that the structure in Kekuaokalani Heiau. Nevertheless, it appears from land survey maps of the parcels immediately surrounding it to be in Mā`ihi 1, rather than Mā`ihi 2, as Stokes noted. As noted elsewhere in the report, a small wall segment (Wall 69) that does not have a rubble core is on the *mauka* side of the road by the *heiau*, and may actually be a remnant of a larger complex associated with the *heiau*.

#### **Honalo Complex Makai of Road (Site 4161, with various internal numbers, Composite Map 5)**

In a previous section, we have presented the results of surveys in the 1980s describing graves, house platforms, a *hōlua* slide, a *heiau*, and other features *makai* of the road within the boundaries of what has been called the "Honalo Complex" (See Appendix I, Composite Map 5, Site 4161). Several of these structures identified by Soehren (1980a; 1980b) and Ahlo (1981) were readily visible immediately adjacent to the road, particularly the house platform and enclosing wall associated with L.C.A. 8575:2 (Kaiahauli's *pāhale*, site 7723), which still appears intact. Kualanui Heiau (Site 3808) is not visible from the road, and would only be accessible by descending over rough `a`ā flow.

The *hōlua* slide (Site 1753) is not visible from the road as such, although there is a larger concentration of waterworn stones along the road where the *hōlua* should be. The road and the more recent jeep trail to the west of the road have cut through the *hōlua*. A natural ridge in the `a`ā flow is visible on both sides of the road, and appears to correspond with the path of the slide.

Unfortunately, almost the entire area surveyed by Ahlo (1981) has been leveled by heavy earth-moving equipment since the time that our survey was completed in 1998. A small house platform at the northwest corner of the parcel appears to be partially intact, although the rest of the parcel has had up to 15 feet of lava flow removed to create a level surface.

#### **Honalo Complex Mauka of Road (Site 22411, Maps 42,43, 44, 44W, 45, 46, 46E)**

As one passes through gate 15 in Mā`ihi and enters Honalo, the amount of historical midden adjacent to the road increases markedly. Much of this material seems to be associated with sites on the *mauka* side of the road. Wall 71 (Map 42) separates the road from a raised area of *pāhoehoe* flow which appears to be a house platform. This location closely corresponds with LCA 7979 to Pinao (Feature A, site 22411). Slightly further to the north is a collapsed tumulus (Feature B), approximately 1.5 meters deep with a level floor and small overhangs, creating a sheltered area. Modern trash can be seen from the road in the depression, and older deposits are most likely within the depression. The collapsed tumulus should be a natural trap for trash and sediment throughout the years, and could provide more stratification than other features in the area, but the site is also very exposed to any traveler on the trail, and may have been disturbed in the past.

Directly to the north of Feature B is the area associated with LCA 7978. Although a Wall

46 separates the road from this LCA, no obvious features were visible within the LCA from the road. Another 15 meters north of LCA 7978, a small enclosure (Feature C) measuring approximately 6 x 7 meters abuts the *mauka* side of the trail. A nearly identical enclosure is another 5 meters to the north of Feature C (Feature D). Further off the trail, but still quite visible from the road are two stone features, whose dimensions and locations are approximated on Map 46 E (Features E and F). These may be a house enclosure and associated grave.

## Management Issues

The Old Government Beach Road and the sites along it are much like an outdoor museum, displaying remnants of numerous important episodes of Hawai'i's cultural past from the period before Cook's arrival through the twentieth century. In addition, the numerous house platforms, graves, and agricultural features provide testimony to the past existence of many people who spent their daily lives there, and who were eventually buried within the cultural landscape that was the center of their lives. When we refer to the area as a museum, it is not to suggest that the area is not used today, or that it should not be used. Our intent is simply to reflect upon the numerous attributes of the area that have survived from bygone days, and to encourage others to respect those attributes as valuable aspects of our modern landscape.

In our fast-paced world, trails are often seen simply as a mechanism to get from one place at one end of a road to another place at the other end. If one was unaware of the history of the Old Government Beach Road and the sites along it, it would be easy to fall into thinking that the coast and road should be developed to speed one's passage from Keauhou to the new Oceanside 1250 development at the other end. Within that perspective, anything that could be done to speed up the process would be for the public good (widening roads, paving them, providing motorized access, etc). In the case of the Old Government Beach Road, such a perspective would ultimately destroy much of the historical value of the road, and the landscape surrounding it. Anyone who uses the road today with that perspective, would generally have a hot, frustrating experience as they stop to open gates (and hopefully close the gates behind them), and make certain that they don't sprain their ankle on a loose rock or uneven terrain.

Those who value the trail in its present condition most likely do so for other reasons, particularly to get from the over-developed sections of the Kona Coast into a quieter space, where the Island's history has been minimally affected by modern development. Hiking the trail, opening and closing gates, walking past the spot where Kekuaokalani and Mānono fell, seeing the form of a serpent in a lava flow, looking for faint petroglyphs in a small outcrop, passing the remains of Ka'ona's church, and waving to a rancher become the intent of the venture. Such places where treks back through a rich Hawaiian history can be taken unencumbered by paved roads and cars are becoming all the more difficult to find.

Several factors make this section of the road more special than what one would find elsewhere on the Island. First, as we have just discussed, property owners along the road have so far kept twentieth century developments to a minimum. Secondly, physical remnants from different time periods in Hawaiian history, such as the *Makahiki*, the Battle of Kuamo'o, Ka'ona's Revitalization movement, and various ranching sites, collectively create a tangible

monument to the major transformations in Hawaiian culture from pre-Cook days to the present. Unlike most other areas, many of the remains of earlier events have not been overwhelmed by later development.

Nevertheless, property owners do have the right to develop their land, and history shows that profit motivation will take precedence in most cases over historical preservation. It is our hope, however, that this report will help land managers and property owners recognize how this district is filled with sites of cultural value (both singly and as a district) worthy of our preservation efforts.

Finally, some of the sites along the road contain small artifacts that might attract the attention of a passer-by. Although the artifacts we saw are of little to no monetary value, the cumulative effect of a hiker walking off with a broken piece of an adze, a small ceramic sherd, or a fragment of old bottle glass, will slowly erode our ability to interpret these sites in terms of how and when they were used, and greatly encumber our ability to learn about the lifestyles of people along the coast throughout the past. For this reason, we hope that this survey is only one small step in the ongoing process of documenting and learning about the cultural history of the North Kona coast. Given that the State, by law, is responsible for protecting the significant cultural heritage found along the trail, we hope that this report will call attention for the need for funding within the Trails and Access Program to hire archaeologists, cultural historians, and trail monitors, who can further efforts in *kulikoehana* (archaeology, or studying what remains from past work) along the hundreds of miles of early trail systems managed by *Na Ala Hele*.

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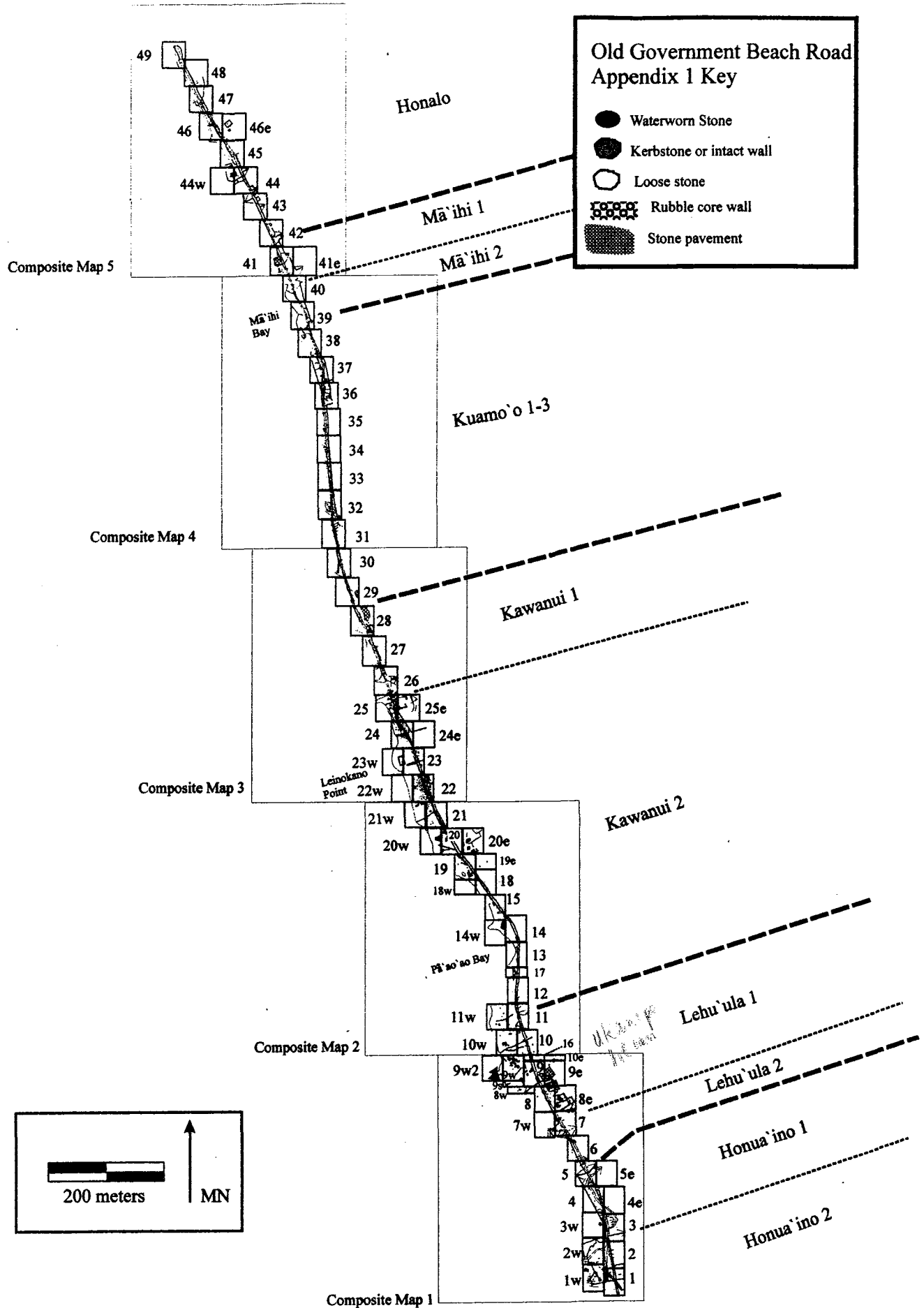
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Appendix 1  
Plan Maps  
(Composite and 1:200)









Lehu'ula 1  
Burial Complex  
Site 22401

To 'Ūkanipō  
Site 3803

Lehu'ula 1 Village  
Complex  
Site 22400

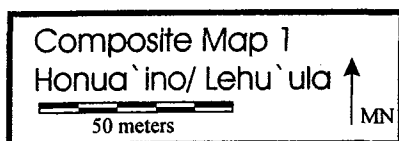
Petroglyph Field  
Site 22399

Ka'ona's Crypt  
and Church  
Site 22398

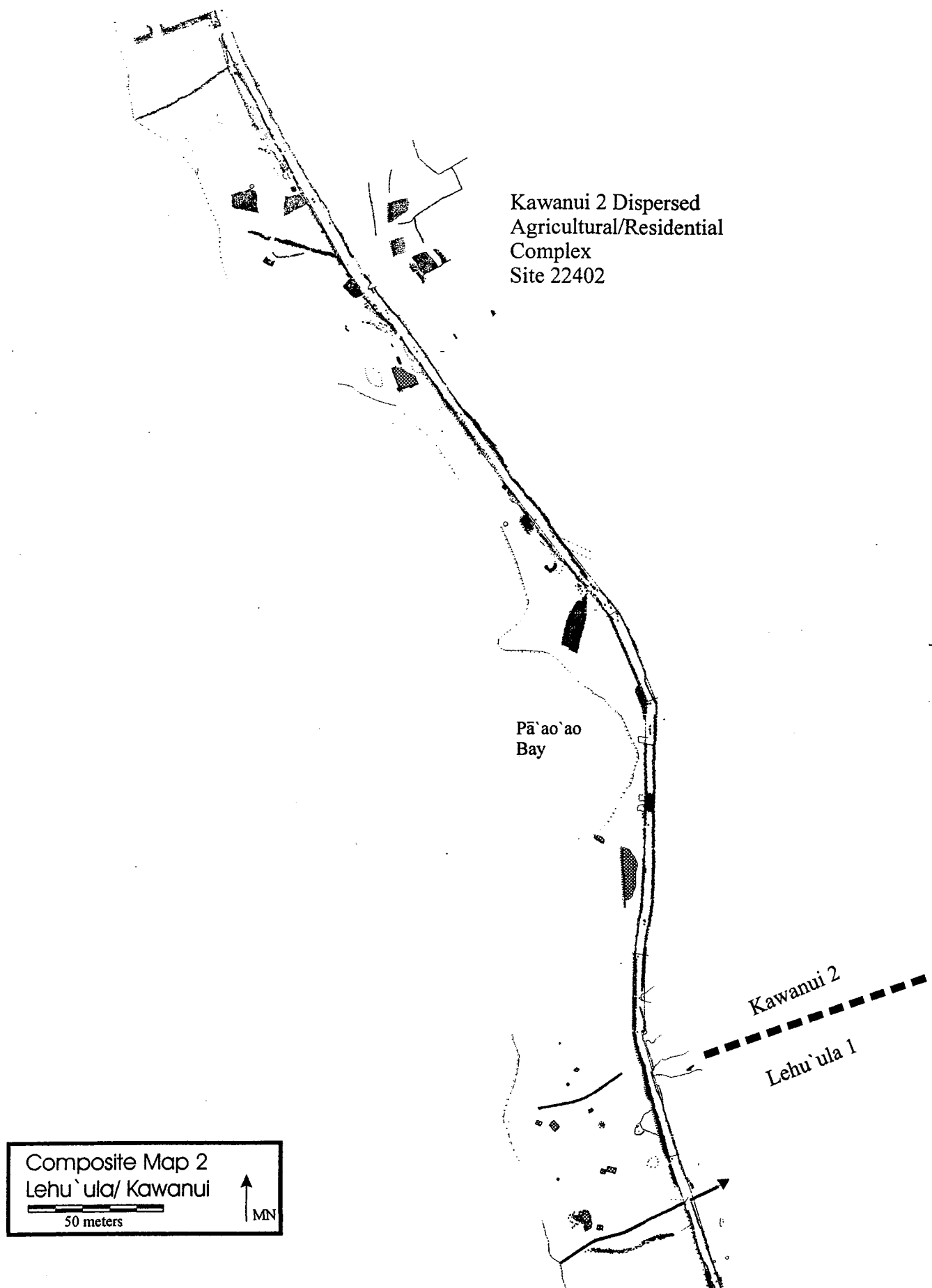
Well and  
Watering Trough  
Site 22397

Jeremiah Martin  
Homestead  
Site 22395

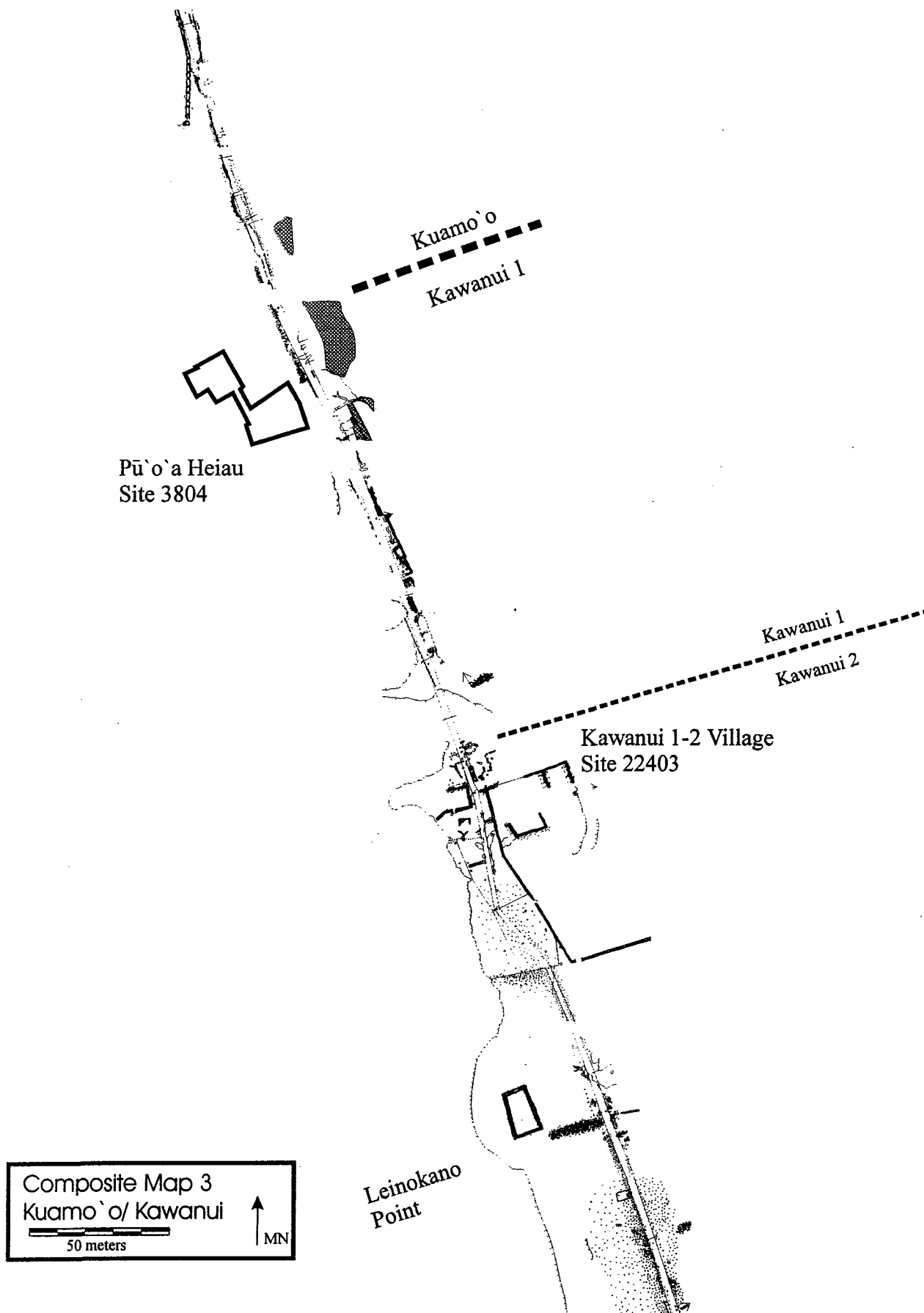
Kāināliu  
Residential Complex  
Site 22396



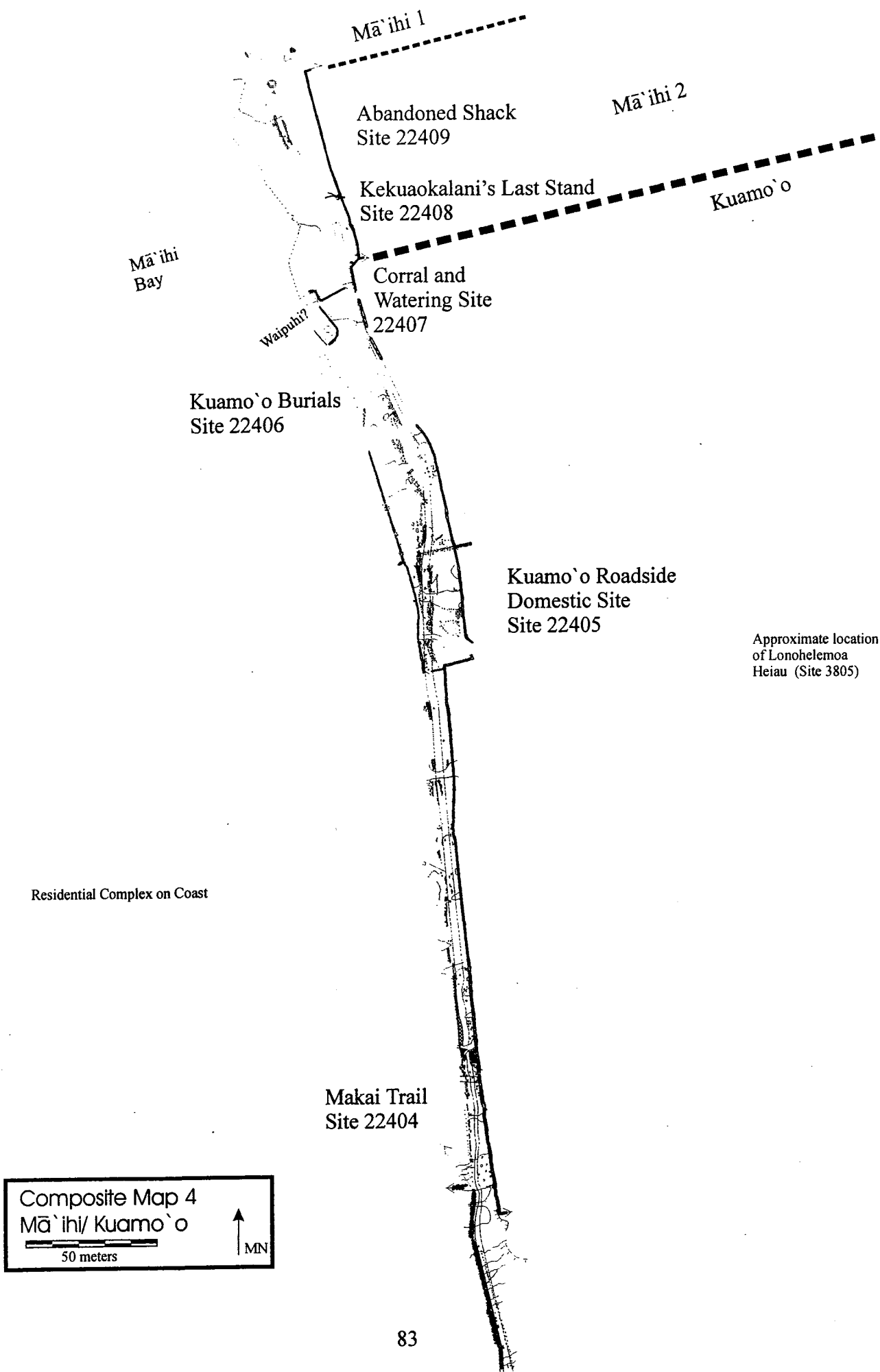
















### Cement Ramp to Keauhou/Lekeleke

