PROJECT KA'EO

The Challenge to Preserve Cultural Landscapes in Modern Makena

A land famous with the Chiefs from the distant past

Photo credit: Sean Lester

Researched and Written by Lucienne de Naie

with Maps and Appendices

Researched and Written by Theresa Donham, MA

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Maui Tomorrow President Emeritus, Ron Sturtz (left), viewing the lands of Ka'eo with Makena Resort staff. 2003
Photo credit: Marcia Godinez

This volume is dedicated to the memory of two great champions of Hawaii's lands, waters and people.

Ronald Paul Sturtz of
Paeahu, Maui
1945-2007

John Kelly Jr.of Honolulu
1919-2007

Aloha 'oe

This book is also dedicated to the ancestors of the Kukahiko family and the other Hawaiian families of Honua'ula. This report honors their memories and their love of Ka'eo and the encompassing ahupua'a.

Project Ka'eo Acknowledgements

"Ideally, historic sites should not be held in private ownership. Rather, the properties should be held in trust in perpetuity for the descendents of the indigenous people and regarded as national treasures."

"One of the most important issues for a new Hawaiian nation would be the drafting of a law asserting national ownership of archaeological and cultural artifacts, similar to models of indigenous cultural resource management found in other parts of the world."
Introduction to *Pana O'ahu* by J. Mikilani Ho, 1999: xxx.

The need to create a bridge between Maui's past and future is one of the challenges facing a rapidly developing island. It is also the unspoken subject of this study. It is the hope of all who have contributed to this work that by better understanding the deeper context of the monuments that remain of Maui's past, present and future generations of all races will learn much about our own connections with the land, with the greater universe and with our fellow human beings.

For the past decade I have been among those whose have pursued an ever deepening interest in Hawaiian history of all eras. When I was asked to contribute research on the history of the ancient and modern lands of Ka'eo and Honua'ula for this study, I was both honored and humbled.

As a non-Hawaiian, there is much I have to learn about traditions, customs and subtleties of language. However, as a very respected Maui kupuna, Rene Sylva has said:
"More better you try do something. If you do nothing, we already know what happens."

This study is the beginning of what I hope to be a lifelong learning project. Of course any work of this scope is bound to overlook important material or have inconsistencies that could be improved. I apologize in advance for any such oversights and welcome comments, corrections and additions of others that can be added to this growing body of knowledge.

I am very grateful to the Trustees of the Office of Hawaiian Affairs, for supporting this project. I am equally grateful to two very dedicated women: Theresa Donham, whose archaeological research and expertise has provided the maps and the scholarship which form the foundation of this work and Maile Lu'uwai, a seventh generation descendent of the Ka'eo lands whose patience, management and inspiration has made this project possible.

This research effort is indebted to the historical sections of several previously prepared reports, which included significant information about the Ka'eo region. These include Marion Kelly's "Background History of Alanui Aupuni, Honua'ula, Maui" (1987); Theresa Donham's "Archaeological Survey and Testing of the North Yard Area of Keawala'i Church" (1997), "Archaeological Inventory Survey of Development Parcel H-1", (2006) by the same author and Kepa Maly's "Cultural Study of the Ka'eo-Makena Area" (2006). The authors appreciate the opportunity to turn to these sources to enhance this study

I wish to dedicate this work to a woman who has contributed greatly to our understanding of the history and culture of the lands we love. Marion Kelly, anthropologist, author and researcher long with the Bishop Museum's Anthropology Department, and more currently with University of Hawaii Ethnic Studies Department. Ms. Kelly has combined her scholarly and scientific training with a deep insight into Hawaiian cultural values and practices. She was among the early pioneers in her field to offer the public and policy makers a body of knowledge about Hawaiian cultural resources based on solid research and the invaluable contribution of living cultural practitioners. Her writings have offered us all a timeless body of knowledge from which to deepen our understanding and advocacy of Hawaii's host culture.

Thanks to interviewees Sam Ka'ai, Lesley Bruce, Doreen Labatt & 'ohana, Richard Bordner, Leiohu Ryder, Ed Lindsey, Mr. And Mrs. Ernest Chang, Rudy "Boogie' Luuwai, Nancy Chun, Akoni Akana , Jeffrey Munoz, Kathy Davenport, Kapa Oliveira and Nanea Thompson. My research would have been impossible without the assistance of Desoto Brown and Bishop museum archives section staff, Bailey House Museum staff, Kepa Maly and my dear life partner Daniel Grantham.

After many years of reviewing the available research, there are some important shifts that must be made in our efforts to pass the legacy of Hawaii's history on to future generations. This becomes very clear from a chorus of voices from the native Hawaiian community. It is not enough that cultural preservation is conducted like a beauty contest, where only the most attractive examples of our history are left to remain as touchstones for future generations. It is not enough to let a few *heiau*, preserved as forgotten features on golf courses or among the landscaping of luxury condos, be all that remains of a millennium of life in our lands. It is not enough to let Hawaiian history and the significance of cultural landscapes be defined mostly by non-Hawaiians. Cultural preservation laws and policies in Hawaii offer only a beginning process; much more is needed to raise the bar and allow our historic and cultural sites to serve as the basis for a living Kanaka Maoli culture.

Preface

"In Hawaiian culture, natural and cultural resources are the same."
Kepa Maly, He Mo'olelo Aina o Ka'eo Me Kahi Aina a a'e Ma Honua'ula o Maui, 2006:8

Native Hawaiian mo'olelo (oral traditions) describe the birth of the Hawaiian islands and the presence of all life forms on them as a complex genealogical record. This genealogy reaches beyond human, animal and sea life forms. It also describes the emergence and inter-relationships of what the Western viewpoint would consider the natural environment: the coral reefs, the valleys, the mountain peaks, the lava plains, stars in the heaven, the kula (flat plains) as well as natural forces such as wind, rain and clouds.

In *kanaka maoli* traditions, many of these natural forms and forces are personified as gods, goddesses and heroic deities whose actions are intimately connected to all other life forms, including humans. This reflected the view held in traditional Hawaiian communities that the natural world and the cultural world were one.

How did it all begin? It is said through legends that *Haumea-nui-hanau-wa-wa* (Great Haumea-Born Time and Time Again), who is also called *Papa*, gave birth to the Hawaiian islands themselves. Maui, the second largest of the Hawaiian islands, was also the second born of these island children (Maly, 2006:8).

We know of these legends through the efforts of a few mid-19th century authors such as Judge Abraham Fornander, who interviewed a number of kupuna (elders) of his time and recorded their stories. These stories reveal the extent that God beings or forces of nature entwined into every aspect of the Hawaiian society.

For example, the *kalo* (taro plant) is a primary food source of the traditional Hawaiian diet. It is said to have originated as Haloa, the firstborn of Mother goddess, *Papa* and father God, *Wakea*. *Haloa is* viewed as the progenitor of the Hawaiian race. (Malo, 1951: 3, 242-243; Beckwith, 1970) *Haloa* emerged not as a child, but as a shapeless mass and was buried in the earth. From his grave grew the life-sustaining *kalo* plant.

Early archeologists in Hawaii depended very much on gathering information, legends and stories from local residents. Archaeology has matured as a science

over the past half century. Sites are measured. Artifacts are carefully excavated, weighed, sorted, labeled and recorded. Some are sent to laboratories to be dated. Findings are compared with previous research efforts in the vicinity.

A rigorous discipline supports the search to understand what remains of Maui's earlier settlements. However, modern archaeological studies often view the remains of kanaka maoli cultural sites many centuries after their active use. That passage of time can mean that portions of sites are destroyed or altered, limiting the ability of researchers to understand their functions or use unless substantial artifacts are present.

Sadly, such disturbance of sites has often led to their long-term value being seen as very limited and not worthy of preservation. The emerging recognition of the vital link between natural and cultural resources can help form a bridge of understanding between the ancient world view of *kanaka maoli* and the research methods of modern archaeologists.

An example of this is the research done ten years apart at a very unassuming C-shaped rock structure, a few miles south of Ka'eo, in the ahupua'a of Palau'ea. This experience provides a good example of how limiting research by cultural perspective can also limit the collection of important information. The archaeological team of Bordner and Davis noted the great difference in artifacts recovered from the same site during excavations conducted in 1970 and their own excavations in 1980. The main difference seemed to be where the scientists chose to look. Their conclusions state:

"The general assumption in the past has been that excavation of the interior of a structure, since it most likely served as a shelter, would be likely to yield the greatest amount of material. " the researchers went on to describe their findings: "…the greatest amount of material may be at the entrance, and external to the enclosed area of the C-shape." "...It also indicates that a possible cultural bias, in the form of the western concept of enclosed spaces defining areas of use, may be operating in such a way so as to skew the research and results." (Bordner & Davis, 1980: D-22-23)

As Marion Kelly commented in her Forward to *Pana O'ahu:*

"It is still a struggle to convince members of the innumerable councils and commissions that Kanaka Maoli have rights to wahi pana (celebrated places) that were the sites of their traditional religious structures, and that those who claim to "own" those sites have something less than full allodial title. An environmental impact statement requires

only that the "landowner" reveal the presence of historical sites and the impact his development may have on them, What happens subsequently is a process that is often flawed, a process in which politically advantaged non-Kanaka Maoli make the final decisions.

I have seen a beautiful heiau completely surrounded by a golf course, with foreign players hitting their golf balls over and sometimes into the site."

While archaeology has grown in its utilization of technical tools, it is equally important to find a way to deepen our understanding of the intimate connections prevailing among the forces of nature, the land and the people of Hawaii in ancient times. As more Kanaka Maoli are welcomed into the fields of anthropology and archaeology, it will likely become more common to incorporate into our research perspective the intangible and spiritual values that motivated earlier Hawaiians to create those very sites. Only then will the remains of the Kanaka Maoli culture - the stone shrines and villages, farming terraces, pathways, plants, tools and ornaments be viewed with a true sense of their importance and meaning.

Introduction

Project Purpose and Objectives

"…the planning consultant recommends that an exhaustive archaeological investigation precede any significant attempt materially to change the present physical makeup of land use in Makena. Only those particular land uses thoroughly compatible with the results of that investigation should be permitted or, certainly, promoted."

Kihei-Makena Civic Plan, P. 81 adopted in 1970 by the County of Maui Board of Supervisors

The modern Maui resort community known today as Makena has a rich history to offer to the people of Hawaii and beyond. In former times, the scenic coastal area known as Makena was composed of at least four adjoining traditional land divisions (*ahupua'a*): Papa'anui, Ka'eo, Mo'oloa, and Onau. These land divisions are still listed on the US Geological Service maps of the area, but most are not aware of the stories that connect to these older names.

Over the past 30 years, numerous studies of the archaeological, historical and biological resources of this area have been conducted to meet permitting requirements for golf course, resort and home construction. A number of these studies have concluded that the traditional land division of Ka'eo was likely the most densely populated and farmed of all the currently inhabited South Maui coastal areas.

Past planning documents and policies show a community interest and intention to value South Maui's past, particularly in the Makena/Ka'eo area. In spite of this, the majority of archaeological reviews done throughout the historically significant Ka'eo area appear to have been either hurried, fragmented or unsupported by adequate ethnological research.

This is part of a more systemic problem that affects preservation efforts for Hawaii's historic heritage. Hawaii has laws that mandate certain steps be followed in the historic review process. In the view of some, these laws are a bare minimum of what should be required if a community expects to make sound decisions about its historic resources. To others, current laws are more than adequate, and it's lack of staffing, heavy workloads and inconsistent county oversight that have lead to very cursory review of new construction

in historic areas. Another big factor remains: archaeologists can recommend preservation for sites, but the state and county have the responsibility of ensuring the landowner's compliance. A rushed research process and inconsistent oversight often leads those entrusted with the preservation of our cultural sites to reach a conclusion that the area surveyed holds little of value for future generations and can therefore be significantly altered, with little loss.

This study is an attempt to link the many fragments of Ka'eo's history, captured in diverse available sources, and present a fuller view of the region's significance. It is our hope that through this effort several important goals will be achieved.

Project Ka'eo Goals

(1) A deeper knowledge of Hawaii's history will be revealed to pass on to the beneficiaries of the OHA trust and all the citizens of Hawaii.

(2) This study may serve as a potential model of more appropriate scope of archaeological review for other areas of Maui and Hawaii, a model that reconnects sites on lands now under diverse ownership back into a more natural and complete cultural landscape,

(3) This study will inspire a collaborative effort among archaeologists, planners, policy makers and community members to use the tools available under current historic preservation rules to significantly expand the scope of cultural preservation choices for Ka'eo and its surrounding lands.

(4) This study, given time and staffing constraints, is just a beginning. It is hoped that it will lead to comprehensive cultural landscape studies for Ka'eo and other historically significant areas of South Maui, as they face tremendous growth pressures. It is vital that future preservation decisions are based upon the depth of knowledge that the cultural landscape model provides. Standards for such studies have been defined by the 1994 Hawaii Department of Land and Natural Resources cultural landscape task force report. (see Appendix)

(5) Designation and management of Historic or Cultural Overlay Districts in Ka'eo and other portions of Maui where significant cultural landscapes still remain.

Study Area:

Ka'eo is an *ahupua'a* (traditional Hawaiian land management division which covers a wedge shaped section from offshore reefs to mountain slopes) in the traditional Hawaiian *moku* (district) of Honua'ula.

During pre-contact times (prior to 1778) the *moku* of Honua'ula included the Southeastern portion of the island of Maui from the coastal bay of Keawakapu (modern day South Kihei area) to the rocky shoreline of Kanaloa point, seven miles south of Keoneoio (La Perouse) Bay. The *moku* of Honua'ula extended inland to what is now the southeastern face of Haleakala National Park and included the upland regions of Ulupalakua and Kanaio. It also included the Island of Kaho'olawe a few miles away across the 'Alalakeiki channel. (fig. 2)

Honua'ula was a legal-judicial district throughout the nineteen century. In modern times, Honua'ula has been joined with portions of the traditional moku of Kula, Hamakuapoko and Hamakualoa to form Maui County's Makawao land management district. (fig. 6)

The ancient *ahupua'a* of Ka'eo, which lies on Maui's sunny *Kona* (leeward) coast, is framed by the distinctive volcanic cinder cone of Pu'u Olai. Ka'eo has sandy beach coves, rocky tide pools, several natural landings, coastal wetlands and stands of native wili wili forest spread across a rugged coastal plain. Land values in Ka'eo and the adjoining areas of modern day Makena have reached the multimillion dollar range, yet these same lands hold another treasure: the remains of hundreds of cultural and historic sites. (figs. 3 & 4)

Researchers and scholars have offered a variety of views on the exact boundaries of the *ahupua'a* of Ka'eo. Archaeologist Ross Cordy, former head of the Bishop Museum research staff, created a map in his 1978 review of the area where he set "estimated borders for the *ahupua'a*" noting that he had "carefully reviewed data that suggests border locations."(Cordy, 1978: 3)

Cordy's map, (fig. 7) based upon various land court award descriptions of parcels in the Makena area and other accounts, locates the coastal boundary of Ka'eo as beginning in Makena Bay, north of Apuakehau Point. From there Cordy adopts almost exactly the same *ahupua'a* boundaries shown on the old maps: following the mauka (inland) ridge line passing through Pu'u Oanapuka and Pu'u Ke'eke'ehia to Pu'u Ka'eo. It shows the land division's southern coastal boundary roughly bisecting the cinder cone of Pu'u Ola'i,

continuing mauka through the inland ahupua'a of Mohopilo and passing south of the school site and cemetery in Ulupalakua to the region of its namesake peak, Pu'u Ka'eo, above Ulupalakua. (Cordy, 1978: fig. 1))

While there are a variety of views on the issue of Ka'eo's traditional boundaries (Maly, Haun, Kelly, et al), the supporting Land Commission documents from lands awarded in the mid-nineteenth century are somewhat ambiguous on this subject. To offer the broadest view possible, this project will use Cordy's proposed boundaries for its discussions of the *ahupua'a* of Ka'eo. Under this view, the traditional land divisions of Maluaka, Mo'oiki and Mohopili, which are referenced on US Geological Survey maps as being separate land divisions south of Ka'eo, are included as *ili*, or smaller regional land sections within the Ka'eo *ahupua'a*. Our study area coincides with these boundaries. (fig. 7)

Discussion of Methodology:

This study is an attempt to consolidate key information about the Ka'eo region contained in dozens of technical archaeological research documents. These include archaeological reconnaissance reports, inventory surveys, data recovery (or salvage) reports and preservation plans that have been generated during development review of various parcels of land in Ka'eo.

This analysis of the historically important Ka'eo region will examine patterns of settlement, land use and activities from the shore to the uplands to offer a more comprehensive historical view of the region through four specific eras, spanning a thousand years. A section will also be included on suggested strategies to improve cultural preservation efforts in the region. (See conclusion.)

Information from past archaeological reviews has been used to create a series of new maps for this report. These maps provide a combined view of cultural sites previously recorded in Ka'eo and the surrounding lands of Makena, not available before this time.
(see figs. 1-5)

In addition, the research from nearly a dozen past reviews of individual areas of Ka'eo has been woven together into a narrative of traditional life in the region, in language understandable to the average reader. This is combined with useful information, charts and maps from a wide variety of other research materials available from the Bishop Museum archives, local libraries, private collections and individual informant interviews.

Legends, chants and traditional tales of the region collected by contemporary cultural practitioners and archivists of the nineteenth century will also be woven into the narrative. Sources for materials cited will be given by author and page (where appropriate) in the text, with a complete bibliography included.

Scope and Organization of Study:
It is the intent of this study to collate and integrate existing research of the area's cultural sites, through scholarly review. Since all lands involved in the study area are currently under private ownership this work did not involve any new fieldwork on any of the sites or land areas.

In this sense, our objective was to bring a fresh perspective to existing data collected over the past 30 years and identify significant gaps in that data that should be addressed in future studies.

The Project Ka'eo study collates modern research and archival materials concerning the Ka'eo Study area into four broad historical eras. Each era examines common features: Population, Vegetation, Historic Settlement Patterns, Roads and Trails, Ceremonial and Civic Sites and Historic or Legendary Figures. This narrative is supported by photos, maps, and charts both in the body of the text and in the Appendices section.

One of the main contributions of the Project Ka'eo Study is a Chronology of Archaeology researched and compiled by archaeologist Theresa Donham. This Chronology not only summarizes, but analyzes over 30 years of archaeological review in the Honua'ula region, including Ka'eo. This will be found in Appendix I.

Also in the Appendices Section are useful compilations of all previously recorded radiocarbon dates for the Project Ka'eo Study area, a similar compilation of portable artifacts discovered during the past thirty years of archaeological research. Five new maps were created for this report by Ms. Donham. These maps are the first to combine all of Ka'eo's 532 previously recorded sites and their 962 features into one viewable image. Several of these maps are also available in ARCview/GIS format with additional information layers for the use of researchers, policy makers and planners.

A variety of other useful research and reference material will also be found in the Appendices section.

Historical Overview

The Project Ka'eo study examines an exciting era of Hawaii's history spanning around one thousand years (c. AD 1,000 to 2,000) While the earliest dateable artifacts place habitation in the Hawaiian islands back nearly 2,000 years, none of the work yet done in the Honua'ula region of Maui has revealed remains of that era. Dates from one site in the region, including two sites in Ka'eo, show evidence of human habitation from around 1,000 AD, and it is in this era that Project Ka'eo will begin its story.

Legends set a millennium or more ago tell us that waves of seafaring Polynesian explorers settled the Kona (leeward) and *Ko'olau* (windward) coasts of all the major Hawaiian Islands. These brave pioneers came from various areas in the South Pacific. They brought key plant and animal species with them for food, medicine and fiber and utilized native species of plants, birds and aquatic life for food, shelter, clothing, ornament and tools in their new home.

Of the period from 1200 to 1400 AD, tales begin to emerge about the construction of roads, temples, fishponds and other edifices requiring coordinated community efforts throughout the Hawaiian Islands. These were often attributed to a powerful chief or ruling dynasty.

From 1400 to the late 1700's was a time when armies were built and dispatched by legendary ruling chiefs. This era culminated with the eventual victory and dominance of the Kamehameha dynasty, whose family ties connected the islands of Maui and Hawaii. The tradition of constructing large edifices appears to have bloomed during this era, with many temples and fortresses built to insure military success and large scale agricultural and aquaculture complexes providing the food for specialized classes of warriors, weapon makers and canoe builders who served a regional chief. The first stories describing a formalized system of traditional land district boundaries on Maui emerged from this era as well, connected to the rule of Ka'anapali Chief Kaka'alaneo in the 1400's.

In the late eighteenth and early nineteenth century, contact and trade with seafarers, merchants, travelers and missionaries from various nations became commonplace in the Hawaiian Islands and the tools, foods, plants, animals, materials, ideas and religions of those other cultures were introduced into the lives of Hawaii's inhabitants. Cultural and historic sites which have use dating from 1778 to the present era are therefore characterized as "post contact" and often contain artifacts of both traditional and imported origin.

Kamehameha and his kin ruled all the islands for nearly a century (c. 1795 to 1893), integrating many customs from western monarchies into Hawaiian culture before the Hawaiian lands were overtaken by western domination.

During this time, a Land Commission system was instituted to offer lands held by the government (ie, ruling chief Kamehameha III at that time) to those who proved their family's interest in lands described in a Land Commission Award (LCA). Others, including many of the same Hawaiians who requested LCAs, simply purchased a fee simple interest through the Kingdom's Department of the Interior. This period, (the Great Mahele-AD 1848 on) resulted in large areas of land being either leased or sold to non-Hawaiians and precipitated the shift from a rural subsistence and trade economy to a plantation-oriented commercial economy. In 1893, the ruling monarchy was forcibly removed by American-dominated business interests, who set up a " Republic," annexed a few years later to the United States.

In the first fifty years that followed annexation (1900 to1950) the fate of Hawaii's natural and cultural resources was often decided by the needs of the outsiders who came to own the lands: large ranches, sugar and pineapple plantations, an import-based economy, and the military preparations and training triggered by World War II. Ancient fishponds became harbors, streams were diverted from traditional kalo terraces to water sugar fields and mills and cultural remains were bulldozed to build roads, airfields and military training areas.

The most modern era in Hawaii's history (1950 to the present) features an economy directed towards tourism, real estate investment, military activities and the remnants of plantation era land uses. With the destruction of a great deal of the physical evidence of Hawaii's history has come an awakening to the need to protect and care for what still remains.

As shall be seen in the chapters that follow, the lands of Ka'eo (Makena) and Honua'ula played an influential part in each of these eras. The residents of Ka'eo possessed prime access to the famed fishing grounds surrounding Kaho'olawe and Molokini and the rocky southeast Maui coast. They also had excellent access to Southeast Haleakala's native forests, which began at much lower elevations in the era from AD 1300 to the beginning of the nineteenth century.

Ka'eo residents made use of these upland forests for house and canoe building materials, fibers, food and medicine. Ka'eo's sandy loam soil and

higher rainfall levels made for good farming lands from the coast to the upper elevations during much of its history, Large coconut groves, extensive stands of versatile wili wili trees, coastal and inland marshes, favorable winds and several excellent landing areas were all part of the natural assets that made Ka'eo valuable in each phase of Hawaiian history.

A 1974 Hawaii State Historical Division review delineated a 40 hectare (approximately 100 acre) coastal portion of Ka'eo that was rich with cultural sites. This was designated the "Makena Complex." An additional complex of historic and pre-contact (before 1778) sites was also noted in Ka'eo around the present day Keawala'i church. Both these areas of Ka'eo were listed as worthy of protection and care in the area's most recent land use planning document (Kihei-Makena Community Plan- adopted in 1998.)

These identified cultural resources and hundreds of others that surround Pu'u Ola'i in Ka'eo deserve to be protected, cared for and enjoyed as part of a rich cultural landscape that is Ka'eo's legacy for the people of Maui. This is what was envisioned for the Ka'eo area when it was first approved for resort development in 1970. This is what has been suggested in the many policies of the Kihei-Makena community Plan. This what the people of Hawaii and the millions who visit our shores deserve.

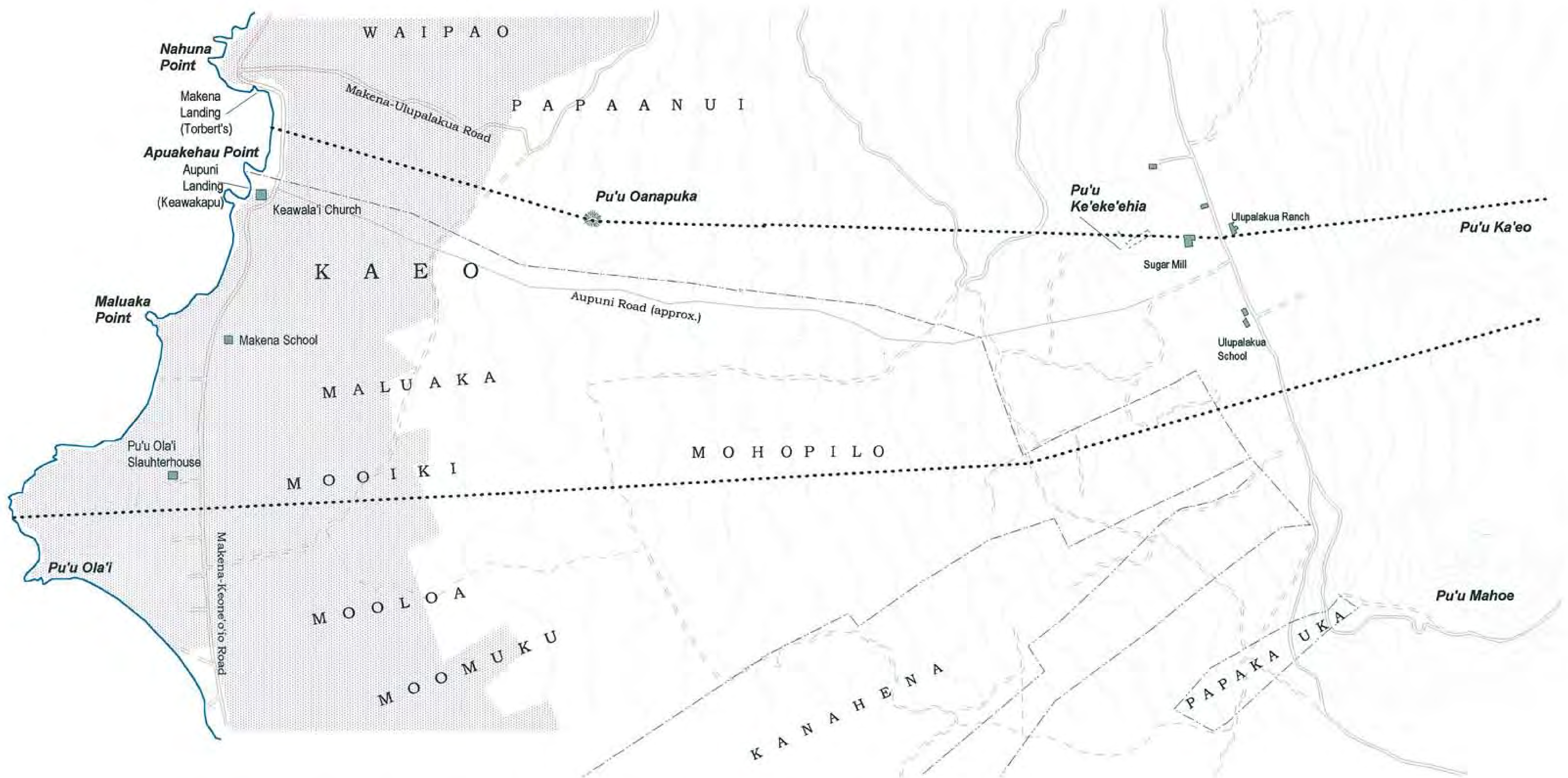


Figure 1. Study Area as defined by possible pre-contact boundary of Ka'eo Ahupua'a (shown as dotted black lines). Shaded coastal zone indicates extent of archaeological surveys.

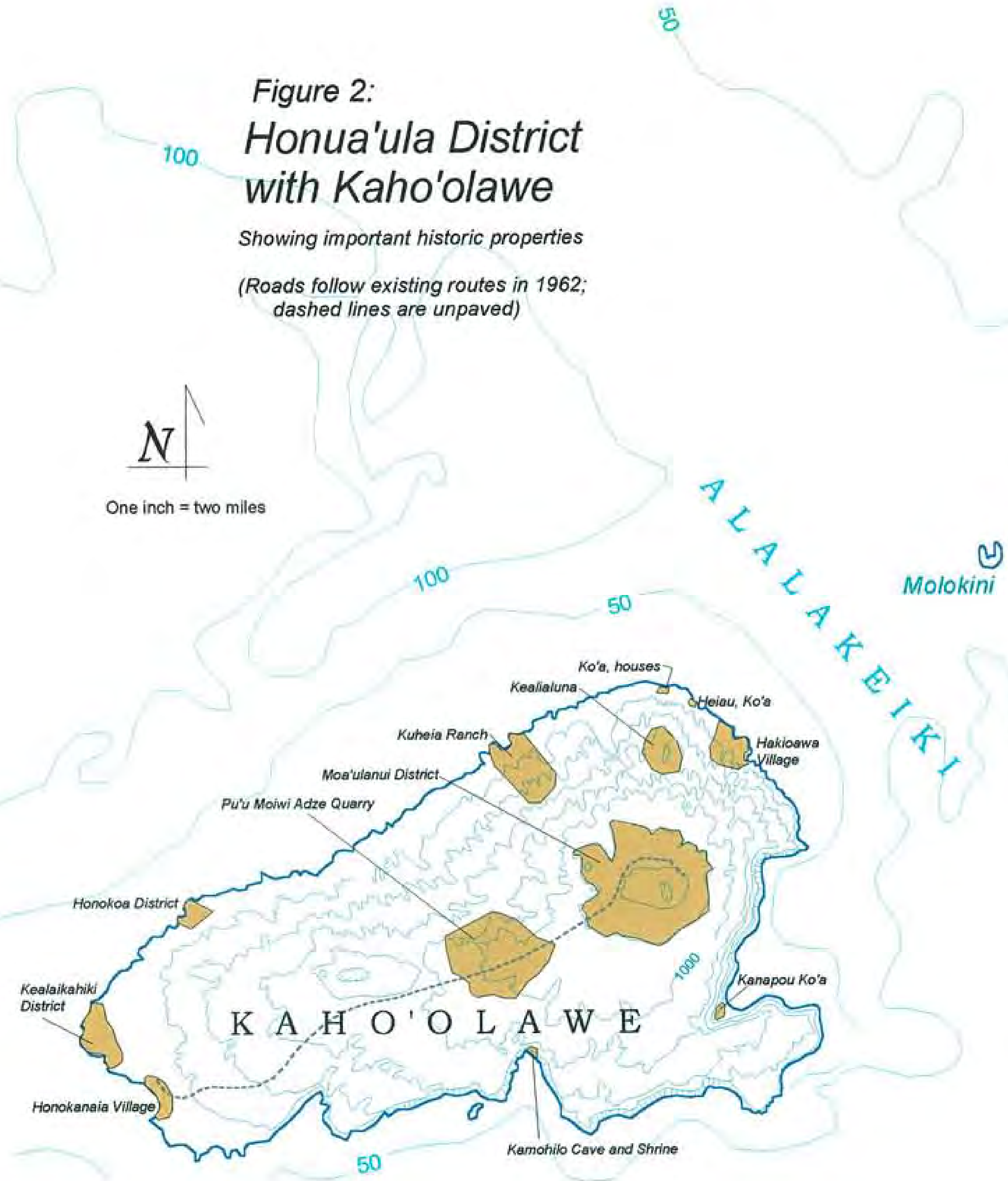
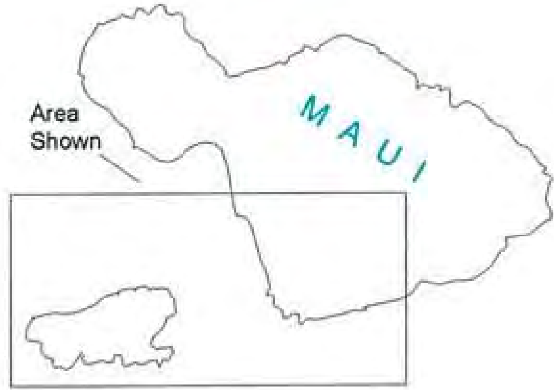


Figure 2:
Honua'ula District
with Kaho'olawe
Showing important historic properties
(Roads follow existing routes in 1962; dashed lines are unpaved)
N
One inch = two miles
ALALAKEIKI
CHANNEL
Molokini
KAHO'OLAWE
Ko'a, houses
Kealialuna
Heiau, Ko'a
Kuheia Ranch
Hakioawa Village
Moa'ulanui District
Pu'u Moiwi Adze Quarry
Honokoa District
Kealaikahiki District
Kanapou Ko'a
Honokanaia Village
Kamohilo Cave and Shrine
KULA
HONUA'ULA
KAHIKINUI
Keawakapu
Wailea Point Complex
Palauea Landing
Palauea Heiau
Halo Point Ko'a
Po'olenalena Complex
Kalihi-Waipao Complex
Nahuna Ko'a
Makena Landing
Keawala'i Church
Makena Complex
Pohakunahana Heiau
Pu'u Ke'eke'ehia Heiau
Ulupalakua Ranch
Site 1916
Kalani Heiau
Site 1969
Pu'u Ola'i Heiau
Mo'oiki Heiau
Mo'oloa Heiau
Pa'ako Point Ko'a
Koula Heiau
Kanahena Landing
Ka Lua O Lapa
Pu'u Naio Cave
Maonakala Village
Papahuiokane Heiau
Keone'o'io Village
Hoapili Trail (accessible for hiking)
Kaunauhane
Kamanamana Village
Alaha Village
Waiakapuhi Village
Waiailio Village
Kanaloa Point
100
50
10
1000
2000
3000
5000
8000



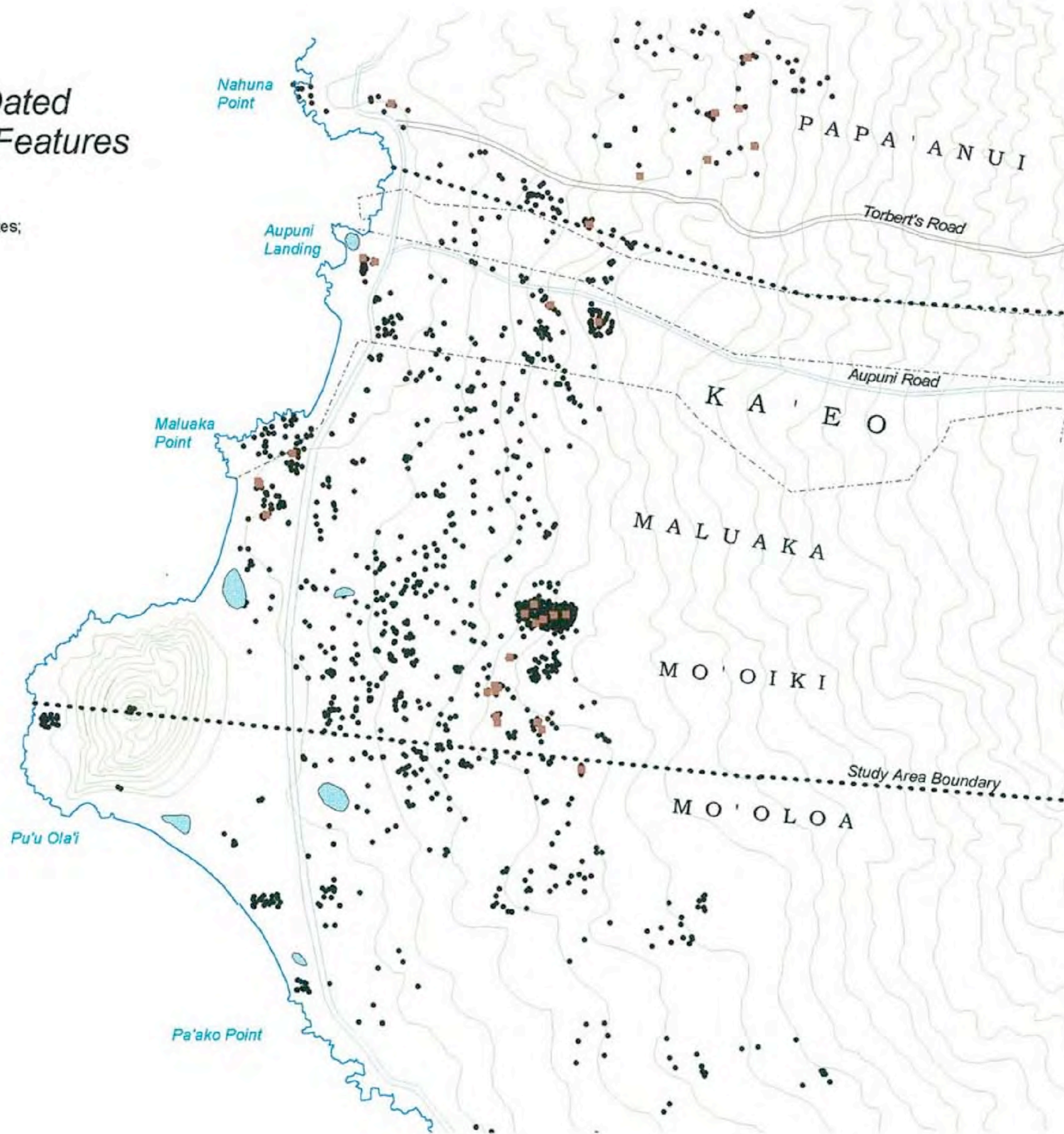
Area Shown
MAUI

Figure 3: Distribution of Dated Archaeological Features

Sixty-eight radiocarbon dating samples from 33 features at 21 sites; collected 1974-2006

(Hydration rind dates not shown due to accuracy problems)

N



- Recorded archaeological feature

■ Feature with radiocarbon date

Traditional fishponds

Figure 4: Distribution of Archaeological Features by Formal and Functional Categories

Based on archaeological studies in and around Ka'eo study area, 1974-2006
(See Appendix for list of sources)

- Enclosure (235)
- Clearing, pit or mound (162)
- Terrace (134)
- Boundary wall, long wall (95)
- Short wall (80)
- Cave (77)
- C-shape or U-shape wall (74)
- Platform (68)
- Historic structure (16)
- Burial (18)
- Heiau, shrine or ko'a (10)
- Well (6)
- Church Cemetery (1)

Total tabulated features: 976

Fishponds
(6, 1 recorded as site)

Agricultural areas,
features not enumerated (12)

Makena Complex

PAPA'ANUI

Study Area

KA'EO

MALUAKA

MO'OIKI

Study Area

MO'OLOA

MO'OMUKU

One inch = approximately 460 feet

Figure 5. Nineteenth Century Land Ownership

Based on Government Survey Map
Reg. No. 894, W.D. Alexander 1866-1879;
F.S. Dodge 1881; E.D. Baldwin 1888;
copied by Walter E. Wall; and Territorial Survey
Map Reg. No.1763 traced by H.E. Newton 1975

Boundary Walls, archaeological sites

Ahupua'a LCA to Mahoe

Government land sale grants

Land Commission Awards

Fishponds

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View from 1000 to 1400

Early Settlement of Ka'eo

"And where the cold 'Ukiu wind bears down, glowing red (driving the dust) is Honua'ula, where the winds begin to die."

"Where the wind dies upon the kula (plains) is the sub-region of Makena and Kula, where the mists are seen creeping along the plain. This is a land famous with the Chiefs from the distant past."

From the tale of Ka-miki, who is asked to name the districts of the island of Maui. This legend is set in the 13th century AD. Translated by Kepa Maly from a 1916 newspaper article. (Maly, 2006:46)

Overview

Ka'eo, like most other areas of Hawai'i, had successive waves of settlers, conquests and rulers across the past millennium. Based on legends and family histories of local residents, it also had deep connections to the islands of Hawai'iand Kaho'olawe, places that are prominent in Hawai'i's earliest voyaging legends.

Only about two-dozen of the 1,000 known cultural sites in the Ka'eo study have had carbon dating done as of the time of this study (2006-07). Based upon this limited data, it has been theorized by earlier archeological studies that the Ka'eo study area was only lightly inhabited during the era from AD 1000-1400, and had no habitation before. Was this really the case? Another site in Honua'ula, near the Kea Lani hotel shoreline in Palau'ea, yielded a cultural deposit that was dated to the eighth or ninth century AD. (Donham, 1990:26) Before this subsurface discovery, Palau'ea settlement was regularly linked to the era between AD 1400-1700. (Kirch, 1971)

It appears certain that Ka'eo was once a land of much more abundant freshwater resources, more accessible forests and a greater variety of native plant and bird life. As more data emerges, it is likely that a more accurate picture of life in Ka'eo during these legendary times will emerge. Was this a "land famous with Chiefs from the distant past"? If so, it is possible that only fragments of that history may still survive, making it difficult to know about

the earliest settlement patterns without turning to more technologically advanced research methods. If the larger patterns of Ka'eo's cultural landscape continue to be cursorily researched and recorded, then evaluated as "insignificant" and destroyed, the opportunity to understand the area's authentic history will be lost.

Ka'eo's earliest history is unquestionably tied to the importance of *Pu'u Ola'i* (fig. 8 & 34), the iconic reddish cinder cone that watches over the Makena shoreline. *Pu'u Ola'i* has its origin in the legendary battle between the volcano goddess Pele and the local *mo'o* (supernatural lizard) goddess Pu'uoinaina. (See **Historical or Legendary Figures** section of this chapter) The tale has several variations including those reported by Beckwith (1970: 189) and Fornander (1918-19:V:514-519).

Ka'eo is also home to a number of traditional Hawai'ian fishponds, most adapted from natural wetlands along the shore. Three of these are shown in old maps in the Ka'eo study area, and several more were shown just to the south of Pu'u Ola'i.

Do these ponds pre-date AD 1400's? None of them has been dated in any way, but if future paleo-environmental studies are done in the Ka'eo study area, such knowledge could possibly be gained.

The Honua'ula lands are also tied to the legend of the great voyaging chief, *Mo'ikeha*, who sailed to *Kahiki* (Tahiti) after the devastation of his homelands in *Waipio Valley* on the island of Hawai'i. One of *Mo'ikeha's* voyaging companions, a chief named *Honua'ula*, is said to have given the Maui district its name when he asked to be put ashore there. (Fornander, 1969:52)
(see **Historical or Legendary Figures** section of this chapter)

Donham refers to this event as likely being somewhere between AD 1200-1400 and states that Fornander "implies here that Honua'ula became chief of the district" which bore his name. (Donham, 1998:8) If Honua'ula had a chief in this era, it is likely to have had a population to govern.

Cultural deposits that date earlier than the first millennium (Donham, 1990:26) up to the 1400's (Donham, 2006:10) have been found at several locations in the district of Honua'ula, including a number of sites in the Ka'eo study area. Given the area's superior access to ocean resources, even the minimal archival records available indicate that a population center existed in the Ka'eo study area during the early part of the second millennium AD.

Population

Nineteenth century historian Kamakau said: "In ancient times, the land was covered with people. From the summits of the mountains to the shore are to be found the remains of their cultivated fields and the sites of their houses." (Kamakau: 1961: 235)

In his extensive research study on the Ka'eo area, Kepa Maly has suggested that the settlement and population expansion of the Hawai'ian Islands are directly connected with resource management. Early Hawai'ian communities were based upon a world view that formed a sustainable relationship between the people, their *akua* (Gods), *'aina* (land), *kai* (ocean), *wai* (water) and their '*ohana* (family). (Maly, 2006:xx)

Any view of Ka'eo's history must address the interweaving of these factors in order to give modern day planners a true foundation on which to make decisions regarding cultural significance and preservation.

Based upon this cultural view, the earliest population levels of Ka'eo would have been linked to availability of food from the sea and the land and fresh water resources, as well as the influence of spiritual forces and familial ties. The presence of trade resources such as dried sea salt, volcanic glass and canoe building materials as well as safe landing areas and favorable currents would all be part of the mix of conditions to determine the extent of population.

In this regard, Ka'eo, with its legendary roots, protected landing areas, higher rainfall, arable soils, nearby forests and proximity to extensive reefs, tide pools and the resource rich islands of *Kaho'olawe* and *Molokini* was a favorable place for settlement. The South Maui coast had renowned fisheries. Maui kupuna like Edwin "Ned" Lindsey, who was part of a family known for their fishing skills, told his children that the place name "Makena" (one translation is "abundant") referred to the abundance of the area's fisheries. Long time Makena residents, such as the Kukahiko family members, pronounce the name "Makena" without the stress on the first "a", meaning instead a "dirge or lament for the dead". Ashdown (1970) also noted this as one possible meaning of the name, referring to mid-19th century residents of the area gathering at Makena Landing harbor to mourn for the many family members who succumbed to newly introduced diseases after Western contact. The name Makena, according to the Changs and other Kukahiko family members, was only used to refer to the landing area. (Maly 2006, interview with Sam Chang.)

Native forests in the Honua'ula region once thrived at much lower elevations.
With greater forest cover, in earlier eras, there was also a greater chance of water availability at both upper and lower elevations. From recent research, in lands to both the south and north or Ka'eo, the Montane dry forest line would have begun around 2,300 ft- on present day Ulupalakua Ranch lands in the Ka'eo *ahupua'a*. This middle level of forest would have been an important resource zone for the region's residents, providing wood, fiber, food and medicine and allowing the survival of a larger population base. Extensive lower elevation dry land forest is likely to have occupied the lands between the 1600 ft and 2300 ft elevation based upon remnants found in present times. (Dixon, Conte et al, 2000 p. 296-7-277)

As a comparison, the equally lava strewn *Kona* seacoast of Hawai'i island was known for its extensive population in this same era. Some of the earliest dated native Hawai'ian artifacts were found at *Ka Lae* (South Point) along the south shore of Hawai'i. Artifacts from the era pre-dating AD 1400 have been found in subsurface deposits on the present day grounds of Keawala'i church in Ka'eo and at several other cultural sites in the area.

What is known is that resources were available and Hawai'ians lived here. If the traditional chant referring to the lands of Kula and Makena being famous with "chiefs of the distant past" is a reflection of the importance of both areas, it is possible that a significant population once called these places home.

Vegetation

The legendary era of Honua'ula's history, prior to 1400 AD, can be known through songs and stories, artifacts and in more recent times, through paleo-environmental studies in adjoining regions.

Such studies were undertaken over the last 10 years in two Hawai'ian Homelands areas lying just north and south of the Honua'ula district. The studies indicate that although mid-elevation native forests in the Honua'ula region are now highly fragmented, in the centuries before the introduction of grazing animals, invasive insects and plants, they were vast and widespread.

Currently, lower elevation dry land forest sections populated by wiliwili trees and other native understory plants still remain in the Ka'eo study area. But

the higher elevation native forest areas that remain in the greater Honua'ula district are mostly in elevations above 4,000 feet.

Researchers believe that in the era from AD 1300 to 1800 native forests in southeast Maui areas like Honua'ula began much lower- around the 2,300 to 2,800 foot elevation. These views are based upon analysis of bird and snail remains, common species represented in paleo-environmental studies of Honua'ula's neighboring *moku* (district) of *Kahikinui*. (Dixon, Conte et al, 2000: 269-277)

The Dixon/Conte study done for the Hawai'ian Homelands described the contrast between present day vegetation and that of earlier eras.

"The present landscape of Kahikinui (average rainfall 10-40 inches/year), however, bears little resemblance to what it may have looked like during the pre-contact era. The Kahikinui project area bears little resemblance to what it may have looked like in the past, since it is currently comprised of invasive plants that are grazed upon by historically introduced animals."
(Dixon, Conte et al, 2000, p. 263)

Paleo-environmental analyses in Kahikinui, for example, indicated a widespread presence of native fan palms (prichardia/*loulu*) at the study elevations between 2300 and 2900 ft. (Ibid. 282-283). This plant was commonly used for roof thatching of traditional Hawai'ian *hale* in areas of lower rainfall. Present day Kahikinui is an expanse of dry, windy lava fields, overgrown by invasive lantana bushes, and other introduced grasses and shrubs. *Loulu* palms in Kahikinui now exist primarily in remnants of native dry land forest, at much lower elevations.

None of the numerous landowner-financed studies of Honua'ula have included paleo-environmental studies. However, it is reasonable to assume that the profound shift in biological and hydrological conditions indicated by the Hawai'ian Homelands studies would have also been the case in Honua'ula.

Residents of the twelfth and thirteen century are likely to have seen many of the same native shoreline plants still found today: plants like *naupaka kahaka'i pohuehue, nanea, pohinahina, aki'aki, pa'uohi'iaka, iliahi'ole, 'akoko* and *'aweoweo*. The *'ilima*, and *ma'o* (native cotton plants) that are found along the rocky shorelines today could have also been present.

Culturally useful plants such as *hala* trees, *hame ʻolapa* and *olopua* with an understory of the shrubs *nehe, ʻaʻaliʻi, ulei, hoawa* and *ʻakoko* would have provided the ancient inhabitants of Ka'eo with material to weave mats and construct fish traps, medicines, dyes for their bark cloth and potions to stun fish. *Pili* grass and *Kawelu* grasses, useful for thatching pre-contact homes were also likely to have been found on the lava strewn slopes above Ka'eo. In the upper elevations, *koa, ʻohia lehua* and *ʻiliahi* (sandalwood) would have flourished.

Many gulch areas within one-mile inland of the coast were likely devoted to farming of sweet potatoes and possibly dry land taro variety's. Along the ridges native *wiliwili, lama, naio, halapepe* and *ilie'e* would have grown, providing wood for dwellings, canoe fittings and ceremonial purposes.

Much will remain a mystery until Honua'ula has its own paleo-environmental research. The research in nearby Kahikinui was able to "reconstruct the paleo-environment of Kahikinui from the identification and analysis of midden, protein residue, land snails, pollen, phytoliths (mineralized plant matter), charcoal and macro-botanical specimens. Fauna identified in the midden, land snail assemblage, and protein residue analysis revealed the different kinds of animals which were present in the ecosystem of pre-contact Kahikinui" As for plants, the study stated that "All of the plant taxa identified in the charcoal, pollen and phytolith assemblage, and those inferred from the land snail habitats, were indigenous or endemic with the exception of Kukui." (Dixon, Conte et al 2000 p. 291)

The *Kukui* (candlenut tree) is considered a useful species introduced to Hawai'i by early settlers. Did the lands of Ka'eo and Honua'ula also have groves of coconut and *kukui* trees brought by the first settlers? Were there areas, where *wauke* (used to make the Hawai'ian's pounded bark cloth), *noni* (a common medicinal plant still found in Ka'eo) and other plants important for economic or medicinal purposes were grown? Traditions mention many of these plants in the Ka'eo region of Honua'ula. The place name of *ʻOanapuka (ʻoana* is a small taro), a hill above Makena landing, may have come from these earlier, legendary times.

What is certain is that only native plants and the useful food, fiber and medicinal plants brought by successive waves of Polynesian settlers filled the landscape of Ka'eo during this era. As paleo-environmental studies are done, much more may be revealed.

Historic Events & Settlement Patterns

"Given that the favored habitation areas were re-used and rebuilt rather continuously from AD 1100 and after, it would be difficult to actually date the beginning of walled Kauhale compounds in Honua'ula. What is currently available for observation are the sites that were not re-occupied and redesigned for subsequent use. Accurate interpretation of the cultural sequence in Honua'ula requires full recognition of the limitations posed by the continued and rather intense land use that has occurred in this region." (Donham, 2006:10)

When did the first settlers arrive along the coast of Honua'ula and settle its favored areas such as Ka'eo? As Donham has observed, this is not always easy to determine, since many of the archaeological sites that would provide this information have been extensively used and re-adapted over succeeding eras of history.

Over the past millennium, lands of the Ka'eo study area have also been subject to various natural events: fires, storms, floods, hurricanes, earthquakes and tidal waves, which have interacted with their natural and human-built features. Only with the evolution of research techniques and the patient continuation of archaeological and ethnographic inquiry will the deepest knowledge of Ka'eo's early past be revealed.

Common sense tells us that the Ka'eo lands presented many desirable features in ancient times: coastal springs, sea salt collection and drying areas, good fishing and shoreline gathering, nearby forests for canoe building, housing and tool materials, sheltered harbors, planting areas with sandy loam soil and the protection of venerable spirit guardians such as the *mo'o* goddess *Pu'uoinaina* and the shark guardian *Kamohoali'i.*

Early Agricultural Settlements

Advancing one view of the area's history are archaeologists like Donham and researchers like Maly who see regular use and re-use of the Ka'eo lands has spanned a millennium or perhaps longer. Indeed one of the two earliest radiocarbon dates in Ka'eo (State historic site 1941, feature 24, dated between AD 1000-1200) is located in an inland agricultural/habitation complex that spans seven centuries of use.

Another view consistently offered in the archaeological studies commissioned by landowners in the region is that Ka'eo lands, like other dry, leeward

portions of the islands, were occupied only on a seasonal basis and had little significant land use or occupation until the 14th century (Kirch 1985). Others built on this view to suggest that after the ahupua'a system defined specific land management areas c. 1300's), the localized settlements that revolved around family ties were transformed by later waves of settlers from more densely occupied areas. (Dye 1989, Hommon 1976).

Proponents of this view refer to the radiocarbon dates (61 samples documented by 2006) for the Makena/Ka'eo area. These demonstrated that the major settlement in this region and Kahikinui, both considered only "marginally productive zones," began in the mid-16th century. The suggest that this was fuelled by an ever increasing population and the need for new farming and food production areas to support the growing class of rulers. (Kirch 1985). This view was also strongly supported in a recent biocomplexity study involving pre-contact agricultural use of dryland areas of Kahikinui, Maui and Kohala (island of Hawai'i) funded by the National Science Foundation (Kirch, Vitousek, et, al, 2004)

This study concluded that:
"Substrates young enough to support sufficiently fertile soils were confined to the younger volcanoes, primarily on the Island of Hawai'i and Haleakala Volcano on Maui." – and:

"…prior to European contact, Hawai'ians had expanded dryland agriculture to cover all of the sites in which intensification was feasible, thus reaching at least the geographic limits to such dryland intensification, if not absolute limits of productivity."

Viewing this finding in a historical context, Kirch et al suggested links between the "highly aggressive, territorially expansionist strategies of the Hawai'i and Maui Island polities in the centuries immediately prior to European contact (c, AD 1600-1700).." and the fact that by that same era, the last limits of expansion into productive agricultural lands had been reached on both islands. (Kirch 1984; Vitousek et al. 2004).

Archaeologist Richard Bordner also weighed in on the Honua'ula/Kahikinui settlement debate in his 1995 study of the Kanaio area.

Bordner suggested that the earlier (Kirch 1985) models regarding early (AD 200-600) windward side settlement and late (AD 1300-1600) leeward area settlement of Maui were "both overly simplistic and biased heavily towards

the highly visible lo'i agricultural systems." (Bordner, 1995:61)

Bordner referred to a range of dry land crops that could have flourished in the region based upon descriptions in Handy and Handy (1972). He concluded that evidence of these crops has been overlooked since "they do not leave as visible of indicators the retaining walls, leveled areas, and irrigation systems common to *lo'i* systems, the result has been a tendency to downplay their significance."

Further influencing the lack of any importance ascribed to Honua'ula's agricultural traditions was the fact that from the early post contact era (AD 1830) agricultural use in the Ka'eo and Honua'ula region was dominated by the demand for crops that could be sold or traded to the western ships such as sweet potato and Irish potatoes, rather than the local varieties of yam or dry land taro. This resulted in little knowledge of traditional agricultural patterns surviving into contemporary times for researchers to refer to. (Bordner, 1995:61)

The greater availability of rain and groundwater resources in Leeward Maui during ancient times has been demonstrated in Kahikinui by the presence of paleo-environmental land snail remains at elevations (2300-2900 ft) where they currently do not have habitat zone. These indicate that the "paleo-environment of Kahikinui was more damp and wooded between AD1300-1450." (Dixon, Conte, et al, 2000

Wetter conditions were also likely for neighboring Honua'ula, making farming conditions more attractive in earlier eras. An abundance of easily harvested *limu* (sea vegetables), an important protein source in the traditional Hawai'ian diet, would have helped feed the local population, but leave no presence in midden or other archaeological evidence. It is well described in oral literature that *limu* was gathered and eaten by traditional Hawai'ian coastal communities.

Other researchers (Spluggs & Anderson, 1995:9) doubt the current accepted range of settlement dates across Polynesian is completely accurate, suggesting that the earliest settlement anywhere in Hawai'i is likely between AD 600-800. This is based upon the observation that when charcoal remains are carbon-dated, the original wood may have been collected from the shoreline as drift wood, placing it's origin in a different locale and its lifespan considerably earlier than its actual use by local inhabitants.

Their article in Antiquity Magazine, based upon carbon-dated samples from

across Hawai'i and other Polynesian islands, also questions the assumption that leeward areas were passed over by early settlers:
"The assertion that leeward zones were occupied later than the wetter windward areas is open to dispute, however, more benign climate, productive and sheltered fisheries, perhaps a greater variety of avian fauna occurring in more open situations where hunting was easier and ease of clearing dry forests for agriculture might well have made particular leeward areas most attractive as early settlements." (Spluggs & Anderson, 1995:2) **p, p.**

Were the lands of Ka'eo explored and settled by the earliest Polynesian voyagers? Could the lands of Ka'eo have supported significant populations prior to AD 1300? None of these questions have yet been definitively answered, but many clues remain to explore through paleobotany, more intensive field analyses, oral interviews and ethnographic research.

The Age of Voyaging:

*"In the 19th century, Hawai'ian scholars Kamakau and Kepelino attributed the discovery of Hawai'i to a fisherman named Hawai'iloa. He is said to have discovered the islands during a long fishing trip from a homeland in the west called Ka 'Aina kai melemelea Kane ("Land of the yellow sea of Kane"); the Big Island was named after him while Kaua'i, O'ahu, and Maui were named after his children." (*Kawaharada, 1999:1)

Hawai'ian literature scholar, Dennis Kawaharada, went on to describe the legend of *Hawai'i'loa* as first settler.

"After replenishing his supplies, Hawai'iloa returned home and brought his wife and his children back to Hawai'i, again using the fixed stars as guides. The Hawai'ian people are all descended from him."

The prevailing scientific research theories also link the earliest settlement of the Hawai'ian Islands to voyagers from other Polynesian lands. Much has been written about early Polynesian settlement patterns between *Kahiki* (the legendary name for areas in the South Pacific where the progenitors of Hawai'i lived in an earlier time) and the various islands.

Over the years, research on various Hawai'ian islands has pushed back the dates of this voyaging era, with some concluding that such voyages had already begun by AD 400 and continued regularly through the 13th century or longer (Cordy, 2000.) As discussed above in the *Early Agricultural Settlement* section, this theoretical time frame is still being debated, however, abundant

legends do confirm that Polynesian voyagers did visit and populate the Hawai'ian Islands "in antiquity." The term *Kahiki* is generally thought to refer to two groups of islands in the South Pacific: the Marquesas and the Society Islands (Tahiti.) (Emory, 1982: 16-18)

That Polynesians could travel these great distances in the first millennium AD was a remarkable achievement considering that their vessels were *"built with tools of stone, bone, and coral."* The Polynesians used the materials that nature provided.

"Canoe hulls were dug out from tree trunks with adzes or made from planks sewn together with a cordage of coconut fiber twisted into strands and braided for strength. Cracks and seams were sealed with coconut fibers and sap from breadfruit or other trees. An outrigger was attached to a single hull for greater stability on the ocean; two hulls were lashed together with crossbeams and a deck added between the hulls to create double canoes capable of voyaging long distances" (Kawaharada, 1999:1)

These swift-moving vessels were limited in their storage capacity compared to European vessels of the era, yet the early voyagers were able to transport with them the basic implements, plants and animals which were necessary to sustain their culture.

"The canoes were navigated without instruments by expert seafarers who depended on their observations of the ocean and sky and traditional knowledge of the patterns of nature for clues to the direction and location of islands." (Ibid)

Their sailing range was extraordinary for the times.

"The canoes were paddled when there was no wind and sailed when there was; the sails were woven from coconut or pandanus leaves. These vessels were seaworthy enough to make voyages of over 2,000 miles along the longest sea roads of Polynesia, such as the one between Hawai'i and Tahiti." (Ibid)

It has been the common conclusion of most archaeological researchers over the past several decades that the earliest settlements were clustered along the lush windward (Ko'olau shores) of the major Hawai'ian Islands. However, the practicalities of navigation have lead many to believe that the south shore of the island of Hawai'i was the first to be settled, since it was the first landfall that Polynesian voyagers would have encountered.

Thousands of artifacts dating back to some of Hawai'i's earliest habitation eras (AD 200-500.) were found in caves along the arid coast of South Point

(Ka Lae) on the island of Hawai'i. (Emory, 1969) Archaeological evidence also points to substantial early settlements along other portions of Hawai'i's *kona* coast. Kaho'olawe Island, off the coast of Ka'eo is also mentioned in early voyaging tales and several sites there have carbon dates with readings predating AD. 1000. (Spluggs & Anderson, 1995:8)

The Kona shores of all the Hawai'ian islands, while usually more limited in fresh water, offered safer fishing on a year-round basis and, under earlier climate conditions, many also have had enough rainfall to sustain a sizeable amount of agriculture. If archaeological remains are any indication, Ka'eo was one such place where both agriculture and fishing were possible along with convenient access to the resources found in upland forested areas.

It is likely, because of its proximity to Hawai'i Island, favorable wind conditions, long coastline with sandy beaches and several inviting bays, that the Honua'ula district, including Ka'eo, received voyagers from these early excursions. Perhaps this is why it was described in the ancient (AD 1200-1300) name chant of *Ka-miki* as being *"a land famous with the Chiefs from the distant past."*

Legends connect the nearby island of *Kaho'olawe* with the great voyager *Mo'ikeha* and his crew. Honua'ula's neighboring district, *Kahikinui*, would appear from its name to have been strongly connected to the ancient voyagers from *Kahiki.*

Maly, in his recent cultural study of the Ka'eo area, refers to the fact that *Kahikinui* "is named because from afar on the ocean, it resembled a larger form of *Kahiki*, the ancestral homeland." (Kihei, et al., 1915, Maly translator, 2006: 8)

Early Settlement Locations

It is theorized in many of the previous archaeological reviews of the Ka'eo lands that as population pressures grew in the wetter regions of Maui, families or clans expanded into the drier, more leeward lands like those of Honua'ula (Haun, et al., 2004). Others take the view that different groups of settlers may have chosen various locales for settlement around the same time era, based on their own individual preferences for the resources available.

Donham is one of the researchers to advance this more dispersed view of early settlement patterns, based in part, upon her extensive research in the

Honua'ula region. (See **Previous Archaeological Research** section in Appendix I). Some researchers suggest a model where the lands of Makena (Ka'eo) were the first to be settled in the Honua'ula's region- around AD 1200. (Cordy & Athens, 1985 and Gosser et al, 1996:437). Donham suggests that a review of available cultural site dates would place early settlements in Honua'ula in the Palau'ea/ Keauhou *ahupua'a* as well as Ka'eo/ Makena. (Donham, 2006:9)

Whether the lands of Honua'ula supported earlier settlements (prior to AD 1000) or were settled as a result of population growth and expansion (post AD 1000) is a topic that still bears additional research. Archaeological records and legends do place verifiable settlement patterns in Ka'eo and other areas of Honua'ula beginning around AD 1100. (Donham, 2006:10)

Only a limited number of settlement sites in the Ka'eo area (22 samples) have had specific dating done through charcoal samples sent to laboratories. There are two areas of Ka'eo that have layers of cultural deposits with verified occupation dates prior to AD 1350. Two other sites, both overhang rock shelters, produced radiocarbon readings that predated AD 1400 when they were tested in the late 1980's, however, they were not referred to in later studies, so it is uncertain if these dates were later found to be inaccurate. (Charvet-Pond, Pantaleo, 1989: 21)

One of the early era sites is on the grounds of Keawala'i Church (state historic site 1854). This 18th century church (fig. 9) sits on land adjacent to a traditional canoe landing area and *'Apuakehau* fishpond (see discussion in Chapter III 1700-1899). A cultural layer there, which included fragments of charred turtle bone, was dated between AD 1265-1310). The site includes a rich selection of cultural materials spanning 800 years of use.

The second area is inland located in a rough area of the Makena golf course, on a parcel originally claimed by a Royal Patent Land Grant to Samuela. (See fig. 5)

A pre-contact walled habitation and agricultural complex (state historic site 1941, feature 24) had a cultural layer in one rock mound structure which was dated to AD 1014-1199. (Donham, 2006:10 citing Gosser et al, 1996:353) Twenty-four of the 26 structures (features) that make up this *kauhale* complex will be preserved, however the oldest portion of the site, feature 24, was destroyed by golf course construction in the mid 1990's. Site 1941 spans nearly a quarter acre and is located around the 170 ft elevation, mauka of *Pu'u Ola'i* and several of the area's traditional fishpond areas.

Permanent vs. Temporary Habitation Sites

One of the two Ka'eo cultural site areas, which had material dating from around the 12th century, was categorized as having a "temporary habitation" use. Both of these earliest dated Ka'eo sites reflected a wide range of habitation dates. The categories "permanent" or "temporary" are commonly used in the archaeological review process to help evaluate the "significance" of cultural sites. However, in truth, the distinction may not be based on much more than the size or shape of the site or the variety of cultural materials found in one shallow excavation trench. (Cordy, 1981:61) Even using a combination of these factors, as has been suggested by Cordy, has resulted in sites being labeled "temporary" and of little "significance" by one archaeological survey, only to be re-examined by a second effort and found to contain pre-contact human remains, a significant cultural layer or previously undiscovered inter-connected features.

It is also recorded in ethnographic studies such as Kirch & Sahlin's *Anahulu* (1992), that it was not unusual for both Hawai'ian adults and children to have access to a variety of residences, depending on the season, their task or their position in the family. Thus, it could be said that the sense of a cultural site being more "significant" (and therefore, more suitable for preservation) simply because the researcher believes it was occupied for a longer period of time may need to be re-evaluated as based upon cultural bias and not serving as a useful criteria of the sites worth for historic preservation or research.

Davis & Bordner in their 1980 report of the Palau'ea section of the Makena Alanui road alignment commented upon a similar situation. They re- analyzed two simple C-shaped structures last excavated in 1970 (state historic site 1028, features 12 & 13) and found that a *"possible cultural bias, in the form of the western concept of enclosed spaces defining areas of use, may be operating in such a way so as to skew the research and results."* (Davis & Bordner, 1980:Appendix D-22) By excavating on the structure's outside, a rich cultural layer was uncovered.

Both scientific evidence and traditional lore indicate that the lands of Ka'eo were settled early in the second millennium. The debate over how much or little of Ka'eo's cultural remains deserve to be protected should not center on whether researchers judge them to be permanent or temporary.

The long and legendary connection of the island of Kaho'olawe to the great voyaging stories of *Mo'ikeha*, the goddess *Haumea* and others also makes it likely that Ka'eo and the other safe harbor areas of Honua'ula were favored

by the waves of explorers and colonists who sailed to Hawai'i from Polynesia. The significance of Ka'eo's lands in Hawai'i's history is clear. The details remain to be discovered.

Roads and Trails

It is the pattern in traditional Hawai'ian settlements from earliest times for coastal trails and paths to connect natural canoe landing sites with each other. Coastal settlements on all of the islands were clustered around the landings. From there, pathways connected coastal villages with nearby fishponds, upland agricultural and forest areas and ceremonial sites. Bordner described this pattern in his discussion of the *ahupua'a* of Kanaio in the southern portion of Honua'ula district:

"The coastal communities were linked by the Pi'ilani Trail, and both had trails heading mauka to Kanaio proper. The trails which run from the coast to mauka Kanaio connect a series of isolated kipuka within older lava flows with well-developed soils, all of which appear to have been used as planting areas." (Bordner, 1995: 65)

It is difficult within the limits of our current technology, to date the construction of most trails, unless they have been described in chant or song that relates to other historic events. We do know from historic accounts (Fornander; Kamakau; Malo. etc.) that a rock-lined or paved trail system (*Ke Ala Loa, Ala Kahiko* or the King's Highway) was established circumnavigating much of the island of Maui during the Pi'ilani dynasty (c. AD late 1400-1500's)

It is probable that Pi'ilani's efforts improved upon traditional footpaths that had been established during Maui's earlier settlement era (AD 1100-1400. With that as a guideline, the lands of Ka'eo are likely to have had mauka-makai (mountains to the coast) trails leading from each major canoe landing. A number of present day bays or beach sites in the Ka'eo study area such as Makena Landing, Keawala'i Bay, Maluaka/ Naupaka beach, Oneuli ("dark sands") beach and possibly Pu'u Ola'i beach ("little beach") are probable canoe landings from earliest settlement times.

Several undated mauka-makai trail fragments of pahoehoe lava slabs have been documented in the Ka'eo study area by past archaeological surveys, but were not very specifically described. (Bordner & Cox, 1982:16, 21; Gosser, 1996:229; Cordy & Athens, 1985: 19) All appear to be in areas that could have led to shoreline areas where canoe landings would have been feasible.

Gulches as Pathways

In the early Ka'eo settlement era, prior to AD 1400, it is also likely that natural mauka-makai gulches were utilized as pathways between the shore, inland planting areas and the lower reaches of the forest zone. Reviews of lands in Kahikinui (southeast of Honua'ula district) and Waiohuli (in Kula District, northeast of Honua'ula) and Kanaio have suggested that early mauka settlements date from AD 1300 on. (Dixon, Conte, et al, 2000:293; Bordner, 1995) Thus a system of trails would have existed to connect coastal and inland villages within the region and facilitate trade. Many gulches in the dry Kula district have been found to have temporary cave shelters, petroglyphs and other evidence that they were used as mauka-makai pathways.

A map from Ross Cordy's 1978 Makena Golf Course archaeological inventory survey indicates a natural gulch or gully along the south edge of what is now the Maui Prince hotel grounds. (Cordy, 1978:49) (fig. 10)

Cordy described the area thus: "two large gulches are major terrain features, gradually sloping towards the shore. He describes this unnamed gulch as "running down to the coast between the 7th and 8th and 1st and 9 holes.." (fig. 10) (Cordy, 1978:2-3) It is not mentioned how far inland the gulch continued mauka past the golf course boundary, but it is likely it did.

Cordy recorded eleven different cultural site areas along this short section (c. one-half mile) of gulch. Seven were habitation sites and four were agricultural areas. The cultural site nearest the coast (B8-227) consisted of three pebble-paved traditional *hale* (house site) foundations and included a shrine area with coral offerings and the remains of traditional tools for manufacture of fishing gear. At one time, this general area, now the grounds of the Makena Prince Hotel, was said to have extensive coconut groves, connected with the large Kalani heiau, a quarter mile immediately north. (Kelly, 1985: 58-9)

This collection of hale platforms was clustered at the mouth of the unnamed gulch, just a little inland of old Makena Road. Two of the three house sites sat on a low, sandy bluff commanding a fine view of the oceans and Maluaka Beach. By the early 1800's the house sites were protected by an extension of the *aupuni* (government) wall that had been extended along the edge of the bluff overlooking our unnamed gulch. The wall was constructed during the time of Kamehameha III to offer Honua'ula's coastal inhabitants protection from ravaging cattle when they became a nuisance during the early 1800's.

Unfortunately, Cordy was under time restraints when he conducted his 1978 survey and excavations of a portion of Ka'eo's coastal plain. He was obliged to complete his review of over 70 sites, and hand in a report before further golf course construction could proceed. This may be why he only excavated one small area of one of the three platforms along the gulch. It was a rich find. The B8-227 habitation complex yielded the largest collection of traditional Hawai'ian artifacts and the most midden (remains of shell fish, animal bones and other food-related debris) of any of the 73 sites in Cordy's golf course survey. No dates of use can be specified for this intriguing site. No charcoal samples were analyzed. Only volcanic glass samples were sent for dating, a technique that has since been abandoned as being unreliable. (Cordy, 1978:22, 81)

Who lived at this desirable coastal home site? Was it a fishing family who traded dried fish and sea salt with upland farmers? Was it a well-born family, able to claim a high status housing location? Public records of land transactions from the great Mahele (see Chapter III of this study) show that this parcel of land (and a sizeable portion of Ka'eo) was purchased from the Hawai'ian Kingdom by Linton Torbert in the 1850's as part of his holdings that later became Ulupalakua Ranch.

There was no mention of specific native claims to this Ka'eo habitation site in the record. However, Torbert's deed promised to honor any native land claims in his Royal Patent Grant lands, so families may have seen little need to press claims for their long ties to this favored location.

A great windstorm in August 1871 (possibly a hurricane) "destroyed all the native houses by the shore" which could have ended occupation at this site. All further chance of learning more about this long ago fisherman and his family was lost when the gulch and many of its related sites were replaced by the Makena Golf Course and the swimming pool and grounds of Maui Prince Hotel. (Ashdown, in Clark, 1974:IV-109, quoting a letter from Capt. Makee)

Many questions remain unanswered about this gulch and the cultural remains that are spaced along it. Did pathways in or along the gulch connect these sites? Did the gulch have intermittent flows? No further research was ever done before the area was bulldozed into the rolling fairways of the Makena golf course.

Another Ka'eo gulch, about a half-mile inland of *Keawala'i* church and *Kalani heiau*, was bordered by a complex of agricultural and habitation sites. While

site dating was done with older, less reliable methods, some material dated from the year AD 1400 or even earlier. This cultural complex, (state historical site 1916, now destroyed) which included its own family shrine, was replaced by the Makena Resort water storage tank. (see fig. 11)

Did this gulch serve as a mauka-makai trail from earlier times? The 1985 archaeological inventory survey of the site referred to land boundary records from the Mahele (first division of land to private owners, 1847-54) that "clearly show that access to the farm sections of Makena were by 'ascending trails' which ran from the houses on the shore up through the fields." (Cordy & Athens, 1985: 19) The fascinating site 1916 had a house site, planting terraces, U-shaped shrine and a terrace with basalt shard artifacts scattered among its rocky layers. Were these connected to a craftsman or family of toolmakers somewhere between the 15th and 17th century who spent days there, forming adzes, chisels or other woodworking tools of fine grained stone in an outdoor workshop?

Did these ancient dwellers on the land walk the half mile to the shore to fish in the sheltered 'Apuakehau Bay? Did they bring offerings to the Kalani heiau during important community celebrations? Did they trade their stone tools to the canoe builders who passed by on their way to the forest to harvest logs? Unfortunately, the loss of traditional trails often means the loss of these stories that help to enrich our understanding of a region's history.

CEREMONIAL & CIVIC SITES

Heiau, Ko'a and Family Shrines

"The traditional accounts describing the development of religious centers or heiau location are limited in number, but generally reflect the statements made by Kamakau (1964), who notes that heiau went through evolutionary stages, from mu'a Lono or agricultural heiau to more significant heiau, finally moving to luakini or sacrificial heiau status (Kolb 1992, 1991). Most heiau did not complete the cycle, and given various political and religious factors, many heiau were demoted or completely abandoned." (Bordner, 1995:65)

The settlements which occupied the coastal lands of Ka'eo in the first part of the second millennium AD must have included at least simple heiau or places of worship. For Hawai'ians, such worship was a part of everyday life.

"There were no barriers between the spiritual and cultural world. The Hawai'ian was

never separated from his makers and ancestors because the gods and demigods showed themselves everywhere; in the sky, in the earth, and in the sea. They could move from one realm to another. " (Lindo et al, 1980)

Eight ceremonial sites in the Ka'eo study area have been either recorded by archaeologists or described in traditional accounts. (see fig. 2 for locations) In addition, a number of other sites have been suggested as ceremonial features, and later reassigned a more common function as "enclosure", "mound" or "agricultural terrace," for reasons that are often not explained in publicly available documents.

As Kehaunani Cachola-Abad states in the Introduction to *Pana O'ahu: Sacred Stones, Sacred Land: "Our current laws empower Western-trained archaeologists to determine which [sites] are heiau and to decide how they were used. This reliance on non- Hawai'ian archaeological evaluations of sites is not valid given the tremendous diversity in heiau forms and functions."* (Beckett, Singer, et al, 1999: xix)

Based upon the current body of archaeological and cultural review, four heiau and their related features have been described in the lands of Ka'eo:
Kalani, Pu'u Ola'i, Mo'oiki and *Ke'eke'ehia heiau.*

We don't know when most were built, since only one (*Kalani,* c. AD 1440) has been tested for datable material. Two are known from historical accounts, but have not been formally relocated. One, *Pu'u Ola'i Heiau*, is on public land. The rest are on private lands, each under different ownership.

Four *ko'a*, or fishing related shrines have also been described in Ka'eo: *Oneuli ko'a*, *Maluaka ko'a* (destroyed c. 1979), *Pu'u Ola'i ko'a* (not officially relocated) and the underwater shark cave shrine at the base of Pu'u Ola'i (known only to select families.) Of these, only a terrace of *Oneuli Ko'a* (state historic site 5711, feature 3 on the Dowling Keaka development in Maluaka) has been dated to c. AD 1440. The *ko'a* structure itself did not yield datable material, so it may pre or post-date the nearby terrace areas.

In addition, several specialized shrines were located in Ka'eo in both the coastal and inland areas (state historic sites 1969, feature 112; 1916 feature 9 and sites B8-125 inland and B8-227, feature 2 near the coast). (see fig. 10) None of these have had reliable dating. At least two of these family shrines have already been destroyed.

One shrine, a raised area with rounded upright stones and coral offerings in an inland agricultural complex, site 1916, was replaced by the Makena

Resort water storage tank in the 1990's. Feature 2 of site B8-227, a family shrine area with coral offerings, was part of one of the three pebble-paved traditional *hale* (house site) foundations recorded in 1978 on a sandy bluff along a gulch overlooking Maluaka Beach. (Cordy, 1978: 39, 75-76) Although it was spared during golf course construction, it appears that this site was bulldozed in the late 1980's as part of the construction of the Maui Prince Hotel swimming pool and grounds. (for more about these sites, see **Roads & Trails** section, earlier in this chapter)

The fate of shrine site B8-125 is not reported in current drafts (2005) of Makena Resort preservation plans. This simple rock cairn on a lava ridge looking ocean ward was strewn with coral offerings. (Haun, 1978: 44) It overlooked a complex of agricultural sites in a gulch a little below (mauka) the present day (2007) Makena Golf Course Clubhouse. (see fig. 12)

No report was given of dates for the charcoal found in excavations of the shrine. (Haun, 1978: 44-6) Was it constructed prior to AD 1400 or in AD 1600, as were other sites nearby? Was it used by one family or a small community? Did it function as a boundary marker between the land divisions of Maluaka and Mo'oiki? These questions were neither asked nor answered.

This shrine may have been destroyed when Makena golf course was constructed in the early 1980's. Or it could still remain in the area of the resort's land that is currently proposed for rezoning and development. Around 300 acres of the Makena Resort land has never been resurveyed by archaeologists since hurried initial reviews between 1974-1985, so the fate, and even location of many sites remains uncertain. (see fig. 13)

Respected archaeologist Kehaunani Cachola-Abad in her discussion of *"What is a Heiau,"* comments on these family shrines:

"Of special concern are the modest sites of the maka'ainana (the common people) which are often more vulnerable to vandalism and demolition than the large heiau. Their sites include fishing, agricultural, family and craft shrines, all of which may be harder to recognize than the more elaborate sites of their ali'i, who commanded great pools of labor." (Beckett, Singer, et al, 1999: xiv)

Kamakau describes one kind of shrine, the *Pohakuokane:*

"The Stone of Kane was called a p'uuhonua*, and 'a gate to heaven,'* puka no ka lani. *It was the* Kuahu *altar where men talked to the [family] gods; where men were freed from defilement and wrongdoing; a place at which to ask the gods for blessings. One,*

two, or three persons could go to their stone altar of Kane and make their offerings for freedom from defilement and wrongdoing. The stone of Kane was a stone pointed out by the god, not one just set up by men. The god indicated the stone, perhaps in a dream, or in a vision, or by leading someone to the spot." (Kamakau, 1964:33)

If ceremonial sites were subject to differing uses over time, as historian *Kamakau* has suggested in his writings, it would be expected that several of the ceremonial sites known today in Ka'eo could have been in use over the past 1,000 years. Without increasing the level of dedicated research, it will be difficult to know.

Traditional Fishponds

" Nowhere else in Polynesia were fishponds integrated into an extensive system of terracing and irrigation. This highly sophisticated water system united upland agriculture with lowland aquaculture, covering virtually the entire plain." (Beckett, Singer, et al, 1999:6)

The building of fishponds was another important civic work in the communities of old Hawai'i. Many traditional tales of fishpond construction correspond with chiefs of the 14th and 15th century AD. On Maui and the other islands, it was during that era that the *ahupua'a* and *moku* land divisions were formalized.

Part of the new rulership patterns introduced by West Maui Chief Kaka'alaneo (c. AD 1450) involved leadership in organizing public works like fishpond and heiau construction. In some cases, these public works involved not new construction, but the repair of structures built further back in antiquity. This may be the case for the fishponds of Honua'ula. Legends collected by Fornander tell us about a fifteenth-century Hawai'i Island chief:

"Kauholanuimahu succeeded his father Kahoukapu as Moi [High Chief] on the Big Island, but he resided a great deal of the time at Honua'ula on Maui where he exercised royal authority and among other useful works built the fish pond of Keone'o'io." (Fornander, 1919, VI-2:320) (for more about *Kauholanuimahu* see **Historic & Legendary Figures** section of this report and in Chapter II)

Keone'o'io, a natural bay (also known as La Perouse Bay) formed in the southern lee of Cape Kinau, is located a few miles south of Ka'eo. It has the remains of several pre-contact Hawai'ian villages along the shoreline. Fishpond construction on the shoreline along the bay would have required

a substantial body of laborers. This leads researchers to the conclusion that there was a population already established in the region that was available for such an effort. Ashdown suggests that Kauholanuimahu rebuilt and re-dedicated ponds in Honua'ula that already existed (prior to the 15th century.) (Ashdown, 1970: 50)

To date, there has been no testing done to determine the extent or dates of use of Ka'eo's three fishponds. It is possible that Ka'eo's earliest settlers utilized the several natural salt/fresh water ponds that were along the shore both north and south of Pu'u Ola'i to raise fish and even mollusks. This would have been possible without extensive modification at first, with community improvements like the stone retaining wall edging the inland boundary of the remaining Oneuli fishpond, coming later. (see fig. 16) As has been suggested above, inland spring and rain-fed fishponds could have also allowed a greater range of crops to have been cultivated along the pond banks. This could have been the case even on Maui's *kona* (leeward) coastal areas like Ka'eo, especially during past eras of greater forest cover and water availability.

Fishponds also played an important role in a community's spiritual practices. Fishponds, such as *Moku'ula* in Lahaina or *Uko'a*, the famed fishpond in Waialua on O'ahu's northwest coast, were said to have a female *mo'o* guardian living nearby. For *Moku'ula* this was *Kihawahine*. For *Uko'a* it was *Laniwai* or *Laniwahine*. For the five fishponds surrounding Pu'u Ola'i, the guardian *mo'o* is likely to have been Ka'eo's own guardian, *Pu'uoinaina*. Like many *mo'o*, Waialua's *Laniwahine* was said to travel from the pond each day through an underground passage to the sea to bathe. (Kamakau, 1991:122) *Pu'uoinaina* may have done the same. The *heiau* on the summit of Pu'u Ola'i may have been connected to her.

(NOTE: Only two of the five wetlands/fishpond areas shown on nineteen-century maps, are included in our Ka'eo study area.) (see fig. 2)

In ancient Hawai'i, each region had a *Makahiki* grounds, a common community space where feasts, dances, games and ritual celebrations were held. Accounts by nineteenth-century native Hawai'ian historians, like John Papa I'i have described the annual *Makahiki* celebrations in locations near both the community's major spiritual center (heiau) and its fishpond. (I'i, 1973)

The ocean fishpond at 'Apuakehau Bay (see fig. 14) near Keawala'i church in Ka'eo was constructed at a time unknown and maintained at least during

the 19th century. It has been suggested that it was connected to the presence of a chiefly compound that may have been located in the general area of the present day Keawala'i church. (see **Chapter III, Historical Figures** section)

Part of the archaeological testing done on Makena Resort lands located inland of Pu'u Ola'i revealed significant quantities of mollusk shells that appeared to be from an aquatic snail not commonly seen in earlier excavations. (Gosser, et al, 1996: 396) The authors theorized that in earlier eras (c. AD 1400) the shoreline ponds in the Makena area could have been considerably larger (older maps seem to indicate this) and local residents may have supplemented the abundance of fish, *limu* (sea vegetables) and other seafoods gathered from the shoreline with the snails grown and harvested from the pond. This would especially be true if the population of the area was growing and food was needed to share with visitors and trade with upslope neighbors.

HISTORICAL & LEGENDARY FIGURES

Gods, Heroes, and Legendary Chiefs

A NOTE ON DATES: Most historical figures in Hawai'i lived during a time before a written language. Genealogy chants were used by early historians to estimate the eras when the famous chiefs and legendary heroes lived, but not everyone could agree on the estimated span of years for each generation. Nineteenth century scholar and historian Abraham Fornander allowed 30 years for a generation, while twentieth century historian J.F.G.Stokes' method of calculation allowed 20 years. This report has derived information from various sources, which could be using either method, or another average. Any discrepancies in dates would be thus explained.

Who lived in or visited Ka'eo a thousand years ago or more? The standard sources for Hawai'ian history (David Malo, S.M. Kamakau, John Papa I'i, Martha Beckwith and Abraham Fornander) all have compiled accounts, both historical and legendary, which include references to Honua'ula and Ka'eo during the first part of the second millennium, AD. Family genealogies also yield important clues to events and people of these long ago times.

However, a recent work, "A Cultural-Historical Study of Ka'eo and other Lands in Honua'ula, the Island of Maui," completed by translator and cultural researcher Kepa Maly in 2006, has offered an even wider variety of resources due to the translation of documents heretofore only available in

the Hawai'ian language. In this effort, Maly, who will be widely quoted here, has confirmed a rich tradition and history for Ka'eo and Honua'ula spanning these early years in the pre-contact era.

Maly's research on *Mo'olelo maoli* (native Hawai'ian tales and legends) used tales captured in 19th century newspaper articles to provide views on many legendary and historic figures of the Honua'ula region. Some of the articles had previously been translated, and some were only recently translated for the first time, by Maly himself.

The Gods: Kane and Kanaloa

The authors of various newspaper articles refer to the Gods Kane and Kanaloa opening springs of water and creating fishponds at Honua'ula. (Nupepa Kuokoa, Jan. 12, 1865, translation Maly, 2006:20-21). It is said in these legends that *Kane* the elder and *Kanaloa*, the younger sibling, and their younger relative, *Kaneapu*a, "came from the foundations of *Kahiki* and dwelled here in Hawai'i."

There is at least one spring in Honua'ula district, lying immediately inland from Keone'o'io Bay that is attributed to Kane and Kanaloa. There are several fishponds nearby, as well, that were used in traditional times. However, in the broader tradition of Hawai'ian deities, it is common to attribute most traditional freshwater sources to an origin that involves these two Gods stabbing the Earth with their digging sticks and bringing forth fresh water for their *awa* (traditional Polynesian ceremonial beverage). Thus the traditional springs of Ka'eo, located near the shore, would have had their origins in this divine beginning. (Ibid)

The island that is today called *Kaho'olawe*, directly off the coast of Ka'eo, was once called *Kanaloa* after the God, because, according to legend, that is where these two ancient adventurers first landed. Other fishponds and springs along the coast of *Kahikinui* and all the way to the famed water of Kou at Kaupo are attributed to them (Maly translating Kamakau, 2006:22).

Where were the fresh water springs and ponds of ancient Ka'eo and how did they come to be? One traditional walled well is still visible along the Ka'eo shore, although it has been mostly filled with rocks. (see fig. 15) Ethnographic studies and oral history interviews, inviting local families to share their ancestral accounts, could greatly increase our knowledge of Ka'eo's past.

Pu'uoinaina, the Mo'o Guardian of Pu'u Ola'i

One of the most famous legends associated with the Ka'eo study area is that of the battle between the *mo'o* (supernatural lizard) goddess *Pu'uoinaina* (also known as *Inaina*) and the fire goddess *Pele.*

The story describes *Inaina* as a *mo'o* whose parents *Pu'u Hele* and *Pu'u O Kali* are also *mo'o* who assume the shape of hills (*pu'u* in Hawai'ian) overlooking the coastal lands of South Maui, north of the Ka'eo study area.

Pu'uoinaina, who could also assume the form of a beautiful woman, lived on the island of *Kaho'olawe*, a few miles off the shore of the Ka'eo lands. She was married to the two sons of Maui High Chief Hua's *kahuna*- Ka'akakai & Ka'anahua. On one of her travels to the land of her parents, near *Ma'alaea*, Maui, she met and took as her husband *Lohiau*, a handsome young man from Kaua'i who was also claimed by the goddess *Pele*. When *Pele* heard of this, she came to Maui and confronted *Inaina* in her *mo'o* form, off the coast of Ka'eo. In the battle, *Pu'uoinaina* was chopped in two by *Pele's* fiery fury and her tail became *Pu'u Ola'i* and her head, the islet of *Molokini*. (Beckworth, 1970:189) There are other versions of the story where *Pu'u Ola'i* is *Pu'uoinaina's* head and *Molokini* the tail. (for more on *Inaina* see **Historical and Legendary Figures** section of Chapter II)

Kamohoali'i, the Guardian Shark

Pele's elder brother, the shark deity *Kamohoali'i,* is associated with an underwater cave in the base of *Pu'u Ola'i*. A number of oral interviews done with families from Ka'eo/ Honua'ula refer to the importance of *Kamaohoali'i* as a family *'aumakua* (ancestral deity). One Ka'eo family reported a long tradition of accessing the cave and caring for the sharks which sheltered there. *Kamohoali'i*, who was described to ethnographic researchers as the "guardian shark of Honua'ula" (Thrum, 1922), also had cave shelters on the island of *Kaho'olawe* (*Kalua O Kamohoali'i*) and *Molokini.*

Oral traditions about other sites association with sharks in Ka'eo/Makena were shared by Uncle Leslie Kulolоio, a fisherman and cultural practitioner whose family have lived in the Makena area for many generations. Mr. Kulolоio explained that his extended family, the Kukahiko 'ohana recognizes sharks as an *aumakua*. In an oral interview in 1998 he described several "shark holes" where local families came regularly to offer food to the creatures who were considered part of their family network. The shark holes are usually found in rocky coastline area and can involve undersea caves or openings where the

shark can come close to shore to communicate with family members.
One of the shark holes reported by Mr. Kuloloio was near *Keawala'i* church. (Fredericksen, 1998: 13) This is also confirmed in other oral interviews with Ka'eo residents (Maly, 2006) A well-respected local fisherman, David Lono Sr., who lived near *Pu'u Ola'i,* cared for this shark hole until 1930's or 40's. A second shark hole was described by Kululoio along the rocky shore off Nahuna Pt. It was cared for by Mr Manuia during the same time period. Mr. Kuloloio did not believe that anyone was currently caring for the shark holes.

Heroes: Mo'ikeha and Honua'ula

Did Honua'ula get its name from a 14th century adventurer who came to start a new life in Hawai'i? A young ali'i named Honua'ula accompanied Tahitian High chief Mo'ikeha (c. AD 1300), who gathered a group of companions to sent sail for the islands of Hawai'i. It is clear in the story that when the adventurers arrived, the islands of Hawai'i already had a population to receive them. As the tale unfolds, Mo'ikeha's companions each ask to be dropped off at different locations, along the shore of various islands. Locations, like Cape Ha'eha'e in Puna, Makapu'u in O'ahu and Honua'ula in Maui, which now bear their names.
Different versions of the story have the voyagers stopping at different locations and leaving behind a crew member.

In Fornander's version, the stops are Hilo, Kohala, Hana, Kala'au Point on Molokai, O'ahu and the final destination of Wailua, Kauai.
(Fornander, 1969:52)

Kamakau had the voyagers embark at Punalu'u, Hawai'i, Lahaina, Maui, Kaulako'i, Moloka'i, and Wai'anae, O'ahu. Kalakaua's version includes stops directly at Cape Kumukahi and Kohala on Hawai'i, Honua'ula on Maui. Makapu'u and Maka'aoa and then landing on Kaua'i, near Kapa'a.

The legend implies that Honua'ula, after being dropped along the southeast Maui coast, comes to settle and rule over the district that bears his name. Part legend and part genealogical record, the tale has the companions establish themselves in their new homes and help found ruling families.

Later in the story, Mo'ikeha's son La'amaikahiki is said to have "introduced hula dancing, accompanied by the drum, to Hawai'i." He is said to have lived for a time in Kahikinui, but finding it too windy, he relocated to the island of Kaho'olawe.

This tale set in the 14th century illustrates one possible theory relating to the derivation of Honua'ula's name. It also would appear that during this early era, the land of Honua'ula already had a political structure and was considered one of the desirable locations for seafaring travelers. Honua'ula is listed as a destination along with Kohala, Puna, Makapu'u, Lahaina, Wailua and other centers of political, cultural and economic life in old Hawai'i.

Legendary Chiefs: 'Aikanaka

Although earlier studies have not referred to the presence of chiefly persons in Honua'ula or Ka'eo, Maly's comprehensive study concludes that Honua'ula was a place connected to the lives of ancient chiefs.

"Based on genealogical references, the association of ancient chiefs with the lands of Honua'ula predate 1000 A.D." (Maly, 2006: 22) Pre-eminent Hawai'ian scholar David Malo, who in the 1830s was also tied to the land of Ka'eo and other localities in Honua'ula, recorded events associated with the lives of various chiefs and their genealogies.

One such account from Malo, reported that the chief, 'Aikanaka, "died at Oneuli, Pu'u Ola'i, Honua'ula, and his bones were laid to rest at 'Iao." (Malo 1951:246). 'Aikanaka was chief of Koali & Mu'olea in Hana, Maui. He and his wife Hina had two sons, Puna and Hema, who are acknowledged as the ancestors of many of the great ruling chiefs of Maui, Kauai, O'ahu and Hawai'i Island. Barrere places 'Aikanaka in the "Heroic Period" of Hawai'ian Chiefs, predating the 12th century AD. (Barrere, 1975:3) Genealogical accounts of the Pi'ilani Dynasty suggest that 'Aikana and his wife Hinahanaiakamalama lived considerably earlier, placing them around AD 765.(Lam, 2007: *Official Genealogical Records, HRM Edmund Keli'i Nalikolauokalani Paki Silva, Jr.)*

Just what brought 'Aikanaka to Oneuli by Pu'u Ola'i was not included in the traditional tale. Not all versions even have him coming to Oneuli. But it is likely that Malo, a Maui native, was relaying a version of the tale that circulated among Maui folk.

Such ancient legends offer many clues to what modern archaeological research can discover in a region. If 'Aikanaka was a famous chief of antiquity, what were his ties to Pu'u Ola'i and Oneuli (the "dark sand" beach immediately north of Pu'u Ola'i? Would more knowledge of 'Aikanaka's adventures in the land of Ka'eo bring greater importance to the cultural sites that are being discovered in the area? Are there more chants of stories that refer to his travels and life that have yet to be translated?

The remnants of the traditional fishpond at Oneuli beach (now a wetlands and bird sanctuary) show only a modest sized area. But the pond could have been considerably larger and more important place in an earlier era of greater groundwater flows. The presence of this fishpond remnant and others nearby, also makes a case that this particular part of Ka'eo and Honua'ula had a chiefly establishment which may connect back to far earlier times, such as those of 'Aikanaka. (see fig. 16)

Then there is the question of which *Wahi Pana* (legendary places) of the Makena area were known over various time periods as *"Oneuli,"* and connected to this legend? It is assumed that *Oneuli* beach takes its name from the mix of dark cinders from Pu'u Ola'i cinder cone that form its beach (*one* means sand and *uli* is dark-colored, in one translation of this place name). But there are three traditional Hawai'ian ceremonial sites that all could have some connection to the place name *Oneuli.*

The first, a sizeable Hawai'ian heiau complex (State Historic site 1855) exists overlooking the Makena golf course, immediately inland of *Pu'u Ola'i* and *Oneuli* Beach. It has eleven different structures, but no formal name. It was first discovered by archaeological studies over 30 years ago but has never been tested for dateable material. (see fig. 17 for heiau site map)

Was *'Aikanaka* the chief who caused this terraced U-shaped *heiau* enclosure to be built in the days of antiquity? It is theorized that walled ceremonial structures were not constructed until the time of the legendary Hawai'i Island *kahuna, Pa'ao,* (c. 12th century) but this has not been conclusively proven. Even if the *heiau*-building era began after *'Aikanaka's* time, this site itself, a ridge with a commanding view of *Pu'u Ola'i* and *Hakioawa Bay* on *Kaho'olawe* island, may have been a *Wahi Pana*, held in reverence long before any edifice was constructed.

Or perhaps the chief was visiting the second probable site, a large heiau by Keawala'i church, when he expired? (see fig. 2) The one date obtained for this site is from AD1440 (Haun, 2003), but portions of it could have been used much earlier as earlier dates are found on neighboring parcels. (Donham, 1998). It is called *Kalani heiau* in contemporary records, but Inez Ashdown who lived in the Ka'eo area, referred to it in her *Ke Ala Loa O Maui* text and map by the name of *"Oneuli."* She also suggested (offering no source for the information) that it was a place to "hold burial ceremonies for the populace."(Ashdown, 1970:22) Later in her narrative she also referred to a special healing temple built of native lama wood in a sacred coconut grove *(Nahawale*) near *Oneuli heiau.* (Ashdown, 1970: 50)

No other historians have collected stories of this sacred grove or temple in Ka'eo. However, during research for this report, Mr. Rudolph "Boogie" Lu'uwai a *kama'aina* resident of Makena, offered to draw a map (see fig. 18) of features of the Makena coast he remembered from his youth (c. AD 1930-40). On the map he indicated a coastal well Ashdown had described in several of her writings. (see fig. 15) He wrote the name *"Nahawale"* along that section of the coast where the well was located, as an old place name for the area just north of *Oneul*i beach. Other, older kama'aina interviewed by Marion Kelly in 1985 (Kelly, 1987) described from their youth (c. AD 1918-26) the remains of a large coconut grove spreading across the lands that later became the Makena Prince hotel. These lands are just south of *"Kalani" heiau* and a few hundred feet mauka of the Nahawale well. Did this sacred temple once exist? Did 'Aikanaka come to the temple to seek healing?

Or was his visit connected to the third, smaller, ceremonial complex nearby? This rough platform, called *Oneuli (or Onouli) Ko'a* by Winslow Walker, lies about a quarter mile north of the legendary Pu'u Ola'i cinder cone. It was first recorded by Walker in his 1929 research tour of Maui, (Walker, 1931:103) and then overlooked for 70 years.

Walker's *Oneuli ko'a*, along with other remains of an ancient Hawai'ian fishing village, was located in a dense stand of kiawe forest. The shrine was not recorded by the state's 1973 surveys of the "Makena Complex" along the Ka'eo shoreline. This compact (c. 19'x18') shrine platform (SIHP 5711) with coral offerings sits on the edge of a gulch several hundred feet from the sea, facing out towards the ocean and Maluaka Pt. (see figs. 2 & 22) It was only recently rediscovered in a 2001 archaeological survey. A later review revealed a number of associated terraces connected to it, one dated to around AD 1400's. (Rotunno-Hazuka et al 2005; Donham 2006: 99-100)

The coconut grove, which according to interviews and old newspaper accounts, once flourished a century ago or more would have spanned an area in close proximity to both this shrine and the *"Kalani" heiau*. Such groves were a regular feature of important spiritual centers and the compounds of chiefs. Was the area of *Oneuli* once a legendary place of healing as Ashdown suggests? (Ashdown, 1972:50)

Did any of these ceremonial sites serve as a spiritual center for Ka'eo's earliest residents? Yet another temple was located on the summit of *Pu'u Ola'i* itself. Was the *heiau* of *Pu'u Ola'i* the first center of worship in Ka'eo? Modern science-based archaeology seeks definitive proof of the existence of

historical use. Are there times when the legends should be allowed to guide researchers to seek the deeper relationships between our own era and the far distant past, which may have few remains to mark its existence? This is a question that must be answered in Ka'eo and many other legendary lands of Hawai'i.

As is explained in the Preface of Pana O'ahu:
"Ambiguity surrounds heiau locations, names, and interpretations; those interested in them must develop a sort of ambiguity tolerance."
(Beckett, Singer, et al, 1999: xi)

Chapter II

View from 1400-1700

Building Community:
Population • Political Structure • Public Works

"Members of the ʻohana knew that life was interconnected. The ʻohana who farmed depended on the ʻohana that fished. Each depended on the other for survival." (Lindo & Mower, 1980)

Overview

The three centuries between AD 1400-1700 brought profound shifts in population, public works and political structure to the island of Maui and the lands of Honua'ula. The age of voyaging, characterized by archaeologists like Kirch as the "age of Colonization and Development" (Kirch, 1985:303) had seemingly ceased by the final years of the 14th century AD. Hawai'ian scholar, Dennis Kawaharada summed it up:

"The reason for the cessation of voyaging is not known. Perhaps the resources and energies of the Hawai'ian people went into developing their aina; and ties with families and gods on the islands to the south weakened." (Kawaharada, 1999)

By the end of this era, smaller family settlements had given way to larger villages, which paid tribute to a hierarchy of chiefs. Tales of great battles were part of these times, and there were many struggles among competing chiefdoms to gain control over adjoining lands and prized regions of neighboring islands. The dynastic families, who were to rule the Hawai'ian Islands, were now well-established, centuries after their voyaging ancestors arrived. By the end of this era, these families had consolidated their military and political power on all the major islands. From AD 1400 on, ruling dynasties exercised authority over virtually all the lands on Maui.

On the island of Maui, the first political subdivisions were set in place by the 15th century High Chief Kaka'alaneo, who ruled from Lahaina. He instituted an ahupua'a land division system during his reign. Kaka'alaneo, in turn, was the great uncle of the 16th century Maui High Chief Pi'ilani. Pi'ilani and his sons oversaw the construction of the majestic edifice of Pi'ilani Hale, Maui's

largest heiau, in Honoma'ele near Hana. Their dynasty also built roads for the chiefs and commoners to travel from village to village, district to district.

During the time of Kaka'alaneo, the lands of Honua'ula had their own High Chief, Kauhola-nui-mahu, who was deeply connected to both the islands of Maui and Hawai'i. Chief Kauhola was the great-grandfather of 'Umi-a-Liloa, a legendary 16th century High Chief of Hawai'i island. 'Umi was married to Pi'ikea, daughter of Maui's ruling Chief Pi'ilani.

'Umi, a famed warrior, helped his Maui brother-in-law, Kiha-a-Pi'ilani, challenge his brother Lono-a-Pi'ilani for rulership of Maui. During his time spent on the run from his brother Lono's forces, Kiha-a-Pi'ilani stayed in the Honua'ula area and built support there among the common people. After Kiha-a-Pi'ilani and 'Umi were victorious, Chief 'Umi sent his son 'Aikoko to live in Kiha-a-Pi'ilani's court, and spent time himself along Maui's leeward coast. Both Chief Kauhola and Chief 'Umi, who lived a century apart, are said to have built or restored fishponds in the coastal lands of Kula (Kihei) and Honua'ula.

As Maui was organized into distinct regions with concentrated populations, agricultural areas expanded in Ka'eo and the rest of Honua'ula. Because the spiritual practice of Hawai'ians connected deeply to their everyday activities, the construction of temples also flourished. Village life and the more formalized cycles of taxes and tribute demanded that pre-contact communities set aside common areas for games and ceremonies of the traditional *Makahiki* (new year's celebration held at the end of the autumn harvest cycle.) Both trade and warfare caused the population to travel from island to island and settle in different regions to build new communities. This brought new families to the Ka'eo lands.

Only a limited amount of carbon dating has been done over Ka'eo's hundreds of cultural sites. The results of this research, combined with traditional oral histories, indicates that these lands saw the construction of temples and fishponds, groves of useful plants and trees close to population centers, chiefly compounds, villages, roads and farms during this era of the great ruling families.

Population - *The Expansion Period*

"After the 14th century, the archaeological evidence reveals a dramatic expansion of population and food production in Hawai'i." (Kirch, 1985, 303-306)

Kirch and others have suggested that the years from AD 800 to 1778 be viewed along a continuum of broad activities shaping the development of Hawai'ian land and society. The era from 1100-1650 was labeled the *Expansion Period*. (Kirch, 1985: 303)

Barrere offered a less formal system based upon a genealogical framework of Hawai'ian chiefs. Her system began with the Cosmogonic (creation myth) Period; continued through the Heroic Period (first millennium AD voyagers and explorers); and the Settlement Period (early second millennium AD). The last era in Barrere's system included the time frame under discussion. Labeled the Dynastic Period (AD1300-1800), it described the great ruling families of all the islands who intertwined to shape the political, spiritual, cultural and economic life of Hawai'i Nei. (Barrere, 1975:3)

While we know this was a dynamic time for the settlement of lands throughout Hawai'i, there is little data on which to base the population of Ka'eo for this era. Only a limited number of habitation sites (under 50) have been dated in the Ka'eo study area.
The remains of one fishing village in Ka'eo referred to by archaeologists as the "Makena Complex" had four datable features when surveyed. All ranged between AD 1440 and1740, (Donham, 2006: 168-9) The large study of inland agricultural areas in Ka'eo had about 30 features dated between AD 1400 and 1699. (Gosser, et al, 1996: 342-347)

To find real history, it is necessary to look beyond physical structures. Many of the Honua'ula region's richest historic finds did not involve the remains of structures at all, but rather sub-surface layers of cultural deposits. In excavations of the tiny (less than 1 acre) Keawala'i churchyard in Ka'eo, Donham reported that:

"The subsurface resources represent a major part (c. 600 years) of the historic continuum of the site; the visible portion of the site represents the last 150 years." (Donham, 1998: 120)

Could Ka'eo's population have numbered 3, 000 or more before AD 1700?
Early researchers (Cordy, 1978) suggested that Ka'eo was the most heavily populated region of Honua'ula. Later research by Kirch (2006: 23) estimated the population growth of nearby Kahikinui district from archaeological remains as growing from "...*few score to between 3-4,000 persons*" between AD 1400 and European contact (AD 1778-9).

The number of cultural features per acre based upon already documented sites appears to be higher in Ka'eo that the surrounding ahupua'a. (Haun, 2000: 13) Other studies of the Makena area have also concluded that population density was greater here than in areas to the north. (Gosser, et al, 1996: 441), but a better effort to inventory the majority of the cultural sites in Ka'eo and surrounding ahupua'a would help confirm this theory.

One thousand acres of present day Ka'eo lands are currently proposed for development. Hundreds of those acres have only had cursory archaeological revenue, often 20 to 30 years ago.

Mo'oleo (traditional stories) of the Expansion Period tell of Chiefs building fishponds, roads, temples and other public works in Ka'eo. A chief's compound may have existed in the lands that now surround Keawala'i Church. All of these conditions and projects imply an available population to perform the labor. Even the importation of workers required a support structure. It seems safe to assume that much more of the settlement pattern present before AD 1700 remains to be discovered beneath the lands of Ka'eo.

Vegetation - *Expansion of Cultivated Crops*

"Along with population growth, the Expansion Period is characterized by extensive development and intensification of all aspects of production... In leeward areas, however, this period was a time of rapid agricultural expansion, as dryland forests and scrub were cleared and various kinds of field systems were laid out." (Bordner , 1995: 73)

Ka'eo, with its greater average rainfall, brackish ponds, soft soils and sunny days was a popular agricultural zone in the four-hundred years prior to Western contact.
It also is likely to have had favorable conditions for a substantial growth of native plants and shrubs, which covered the land before the era of intensive human settlement.

A cultural and archaeological review of several specific portions of the Makena area was completed in 1996 (Gosser, et al). Its authors concluded that *"the data also indicate that agriculture at Makena was relatively more intense than in Wailea and Kihei to the north."* (Dixon, et al in Gosser, 1996: 442)

This conclusion was, in part, based on the fact that *"month-to-month rainfall amounts are significantly different northward from Makena [Ka'eo] to Kihei. On the average, Makena receives rainfall during every month, while Wailea and Kihei may not*

receive rainfall during two to four months out of the year." In addition, rainfall in Makena was also greater even at the lower elevations (500ft) than the much higher elevations (2,500 ft) further north. (Ibid)

It is likely that fire was used to clear the *kula lands* (agricultural zone inland of the shore) of Ka'eo during various parts of this era. Native vegetation in these areas was replaced with cultivated plants such as sweet potato, yam, gourd vines, and dryland taro, as well as areas to confine domesticated animals, such as pigs.

Research done on adze quarries in Hawai'i indicated a sharp rise in quarrying activity around AD 1600. It was theorized that the expansion of chiefly rule created a demand for more logs to provide materials for canoes, house and temple building. At the same time, agricultural lands were being expanded into the forested areas. The researchers suggested that mining at the quarries increased to meet the demand for more adzes to log the trees of the mid-range forests before those forests were burned to open more cropland.
(Ohia Project, 1992)

Agricultural historian, E.S.C. Handy interviewed local residents and researched archival literature for his work, *Native Planters of Old Hawai'i*. About the Makena region, he observed: *"this was a notable area for sweet potato, which combined with the fishing must have supported a sizable population although it cannot be counted as one of the chief centers."* (Handy, Handy & Pukui, 1972: 272)

Full Scope of Ka'eo Agricultural Sites Still Unknown

The largest study yet done to carbon-date cultural features found on the Makena Resort lands (which included a portion of the Ka'eo study area) tested 18 agriculturally related sites. Fourteen of those were first used between AD 1400 - 1700. (Gosser, et al, 1996:342-350)

It is important to note that only a small portion of the hundreds of recorded agricultural features in Ka'eo and surrounding ahupua'a were tested in this study. Use of some agricultural areas could well have dated prior to the 15th century. House sites and shelters in the same study area had use dated to the 1300's AD. (Gosser, et al, 1996: 342-350)

Many agriculture areas, which were described as "ill-defined cleared areas" in the earliest Ka'eo cultural reviews were not even formally recorded, much less tested in any way. (Cordy, 1978) Dozens of rock mounds and low- walled

C-shaped structures which have been associated with traditional sweet potato cultivation in leeward areas of Maui and Hawai'i, were also present in the lands just mauka of the Maui Prince Hotel and Pu'u Ola'i. Many of these features and areas were obliterated in the construction of Makena Resort's South Golf course. Other features still await discovery. Twenty years after Cordy's survey, archeological review for a portion of the same area triggered by rezoning revealed 11 previously unrecorded cultural sites, including some agricultural features. (McIntosh, Pantaleo, Sinoto, 1998) This area had already been surveyed three times since Cordy's 1978 work, and yet more remained to be found.

Ka'eo's Lost Agricultural Village

It was not until 1985, a decade after the first of eight archaeological studies of the Ka'eo area began, that *"The first detailed map of an agricultural site in the Makena field system"* was done**.** This described State Historic Site 1916, documented by Cordy & Athens in their 1985 study. Cordy and Athens noted that Mahele land claim records gave the impression of a few scattered farm plot sections in Ka'eo, however, more careful research revealed *"it appears the whole mountain slope was subdivided into farm lands."* (Cordy & Athens, 1985:19)

The two-acre site complex of ancient terraces, habitation and work areas and a family shrine was about a half-mile inland of Keawala'i Church. It appeared to be near the boundary between two ahupua'a, Ka'eo and Papa'anui.

Site dates given for the village in the report spanned the era from AD 1300 to 1800. Unfortunately, these dates are not necessarily reliable, since they were not based on charcoal samples. Site 1916 was mapped, selectively excavated and tested, and then destroyed as part of site preparation for Makena Resort's water storage tank. It appeared that ancient mauka-makai trails and a possible ahupua'a boundary marker were also nearby (Cordy & Athens, 1985: 19)

It is ironic that it was nearly another decade (1993) until researchers realized several scattered sites about a half-mile inland of Pu'u Ola'i were also part of an extensive (4 acre) agricultural complex. (State Historic Site 1969-Gosser, et al, 1996:130). It is likely that Makena Resort and the majority of Ka'eo lands ha scores of ancient agricultural complexes. Until updated field work is done on these lands, the true extent of pre-contact agricultural activities in Ka'eo will remain unknown.

Vegetation Surrounding Village Sites

Larger concentrations of population also meant more room was needed for habitation structures and work areas. In this regard, the location of homesites and work platforms was typically found on the rocky ridges and knolls that were unsuitable for any agricultural use and therefore required less removal of native vegetation. (Cordy, 1978)

Cordy and researchers who followed (Haun, Gosser, et al) suggested that this pattern of building on rocky, marginal land, was typically found throughout Ka'eo and other Honua'ula ahupua'a, He theorized that it illustrated the great value placed upon agricultural lands. Common sense would also indicate that the area's gulches were likely to be subject to flooding during the large rainstorms, making the higher ground more suitable for the family's home site.

Studies done in the neighboring district of Kahikinui (at between 2300 and 3000 ft elevation) indicated that many home sites may have also had plants considered useful to the residents, such as *kukui* or *'akoko*, growing around or nearby their house sites during the Expansion Period. (Dixon, Conte, et al, 2000:288)

At lower and midrange elevations of Ka'eo this could have also included groves of *loulu* palm, coconut, *kukui*, pandanus (*hala*), *kou, naio* and other grasses, plants and shrubs used for household and medicinal purposes. Nearby were supplies of *pili* grass (used for traditional roof thatching), *wiliwili* (used for canoe-building) and various other dryland trees used for firewood.

Ponds and Vegetation Patterns

The presence of large inland pond areas just mauka of Pu'u Ola'i, was suggested by older maps and the presence of edible brackish water mollusks (snails) found in midden. (Dixon, Clark, Lebo, in Gosser et al, 1996: 396)

These authors state: *"Mollusk species capable of tolerating a wide range of saltwater concentrations, such as Isognomon californicum, Planaxis labiosa and Theodoxus neglectus, indicate that brackish water ponds, lagoons, or wells may have been exploited by native Hawai'ians in the Makena region."*

It is suggested by others that a wide range of useful plants could have flourished along the borders of such ponds and marshes, to support the

growing population of 15th - 16th century Ka'eo. (Donham, 1998: 15) Such plants could have included banana, coconut (used for food, oil and fiber) *wauke* (used to make bark cloth for clothing), *kukui* (oil burned for lamplight), *makaloa* grass (used for mats) and dryland taro. Traditions mention many of these plants in the Ka'eo region of Honua'ula.

A 1996 federal study of the Honua'ula cultural resources listed 37 ponds of various sizes currently remaining in the Honua'ula district. (Trettin, et al, 1996: 20-21) Many of these are likely to have been used for fishponds as well.
Not surprisingly, home site clusters in Ka'eo are also found in areas associated with such ponds, springs and wells, and fishponds. (see fig. 4)

Historic Settlement Patterns - *Farming and Fishing*

"The Expansion Period witnessed major changes in settlement pattern and architecture. Whereas during the preceding Colonization and Developmental Periods settlements tended to be small, nucleated clusters of dwellings located in ecologically favorable spots, a pattern of truly dispersed residence now began to develop rapidly... "(Bordner, 1995: 71)

The fifteenth and sixteenth-century inhabitants of Ka'eo found a land of coastal wetlands and springs. There was easy shoreline gathering of limu and tidepool dwelling creatures. The coastal plains still had bird life and the nearby forests were full of useful plants. Accessible shorelines with wide, sandy beach landings were framed by teeming reefs, abundant deep-water fisheries and seasonal visits of *akule* (big-eyed scad) schools. Scarce volcanic glass was found in the upper volcanic lands and the finest basalt stone for tool-making was available on nearby Kaho'olawe Island.

Both fishing villages and agricultural centers were established in Ka'eo prior to this era. The expansion period brought both additional villages and growth of existing villages. Skilled crafts people shaped fishing gear, canoes, agricultural tools, personal ornament and food utensils. Residents processed plants and sea life into food, clothing, shelter and medicine. Ka'eo area is known for its *pa'akai* (dried sea salt), dried *akule* (scad fish) and sweet potatoes. Ka'eo's safe harbors and well–developed mauka-makai trails would have made it easy for these and other desirable resources to become the basis of a lively commerce in trade goods. All of this is suggested by cultural remains and artifacts as well as traditional stories of the area.

Traditional stories tell us that the three centuries between AD 1400 -1700 also saw the repair of older community resources such as trails, fishponds, springs, heiau and ko'a, as well as the construction of new ones. All these activities in the Ka'eo settlement were undoubtedly influenced by the introduction of the ahupua'a system that divided the land into distinct units, each managed for the chiefly class by an appointed *konohiki.* In many places on Maui, heiau and fishponds were constructed or improved during this era. The few ceremonial structures in Ka'eo and neighboring lands that have been dated, show use in this time period. Much more can be confirmed by future efforts to date more sites.

Traditional Landings

Settlements in this era depended upon travel and trade conducted by canoe or by foot. Sheltered canoe landing that had fresh water sources were at the center of many settlements. The two main landing places in Honua'ula have traditionally been Ka'eo (Keawakapu Bay or Makena Landing) and Keone'o'io, a few miles further south. The sandy beach areas of Maluaka and Oneuli, both just south of Keawakapu Cove are also likely to have been used as landing areas. Many historic accounts speak of canoe landings made at "Honua'ula." This generic term is likely to mean either one of the landing sites in Ka'eo or Keone'o'io bay.

The Honua'ula coast further south towards Kahikinui was known for its rough and windy waters, in ancient times as it is today Still, this area has extensive evidence of habitation as well, and the dating that has been done there marks a settlement pattern that is roughly equivalent to that found in Ka'eo and Keone'o'io. (Kirch and Vitousek, 2004)

From the *mo'olelo* (traditional stories) and archaeological testing that has been done, it is fair to say that Honua'ula and Ka'eo were a place with a sheltered landings, that supported a well-developed community of fishing and farming activities as well as a likely history of canoe building.

The Honua'ula region, although not often mentioned in connection with wars, appears to have engaged in a lively trade relationship, both with other coastal regions further south and north (Kaupo and Hana, and Lahaina and Ka'anapali) as well as inland farming communities in the Kula region and the islands of Hawai'i, Moloka'i and Kaho'olawe.

Villages of Ka'eo

As mentioned earlier, (**Population** section of this Chapter) a substantial number of the few cultural sites that have been reliably dated in Ka'eo indicate use during the years between AD 1400 -1700. These include housesite complexes (*kauhale*), agricultural features, work areas and ceremonial sites in both coastal and inland portions of the land. Many of the previously documented sites are clustered in the Ka'eo area between Keawala'i church and Pu'u Ola'i. (see fig. 3) It is likely that there were several villages or concentrations of settlement in Ka'eo, possibly oriented to resources like agricultural areas, fishponds and wells or springs.

While village sites vary, common features include trails, a fishpond, agricultural terraces and planting mounds, clusters of house sites and shelters, storage areas, work platforms, canoe houses and enclosure walls, as well as specialized structures such as a *mua*, (men's eating house) heiau or other ceremonial sites.

Ka'eo has a good representation of all of these types of features, except canoe houses. In 1978, a possible *mua* was recorded by Haun. (Site Ma- B8-140) The large structure was located on a ridge, about 50 meters inland of old Makena Road and Pu'u Ola'i. Haun tentatively interpreted it as a *mua*, because of the large amount of cultural remains. Nearly 1000 grams of midden and numerous parts of tools, fish hooks and other artifacts were found there. (Haun, 1978:68) Even though site B8-141 contained the most midden and artifacts of any of the 11 excavated, Haun noted that the site: "was not completely excavated and still had very good research potential. If destruction is necessary, further excavation is necessary to salvage all significant data." (Haun, 1978:88)

Haun believed the possible *mua* structure dated from the AD 1500-1600 era, (Haun, 1978: 84) although he used a dating technology (hydration-rind dates from basaltic glass) that was later found unreliable. A few charcoal samples were taken of the site for carbon dating, but no results were given in Haun's final report.

Was site B8-140 a *mua*? If so, this men's house would have been at the center of ancient village life. This possible *mua* site does not appear to have had any further testing reported in archaeological studies since 1978. Although Makena Resort submitted a Draft Cultural Resource Management Plan for approximately 1000 acres of land in 2005, the fate of this pre-contact site and many others, was never discussed.

This site was a short distance inland of a known fishpond at *Oneuli* Beach (see fig. 16) Another small pond area was shown just inland of the *mua* site on 19th century maps. Remains of a number of house sites, agricultural and work areas were found within walking distance and many more sites in the vicinity could have once been there before their stones were salvaged for ranching walls.

There has been little study done to determine the residential centers of Ka'eo and its neighboring ahupua'a of Papa'anui (north) and Mo'oloa (south). It is likely that the area around the fishponds surrounding Pu'u Ola'i was one of Ka'eo's 15th to 18th century settlement areas. Another was the extensive agricultural complex (SIHP site 1969) about half a mile inland of the *mua* site. A third area centered around Keawakapu Bay, 'Apuakehau fishpond and Kalani heiau. Several others could have also existed.

An ahupua'a like Ka'eo with several ceremonial centers could be expected to have a *pu'u honua* or place of refuge. Ashdown referred to such a place existing in a "sacred coconut grove" near Kalani heiau and Keawala'i church. No others have made this reference, but given the proximity of the Heiau, it is a topic worth further research. As is noted in the Ceremonial and Civic Sites section of this report, the coconut grove actually did exist as of early 20th century reports and furthermore, it was located on "government land," meaning land under the jurisdiction of the royal family.

It has been suggested by some (Pantaleo, Gosser, et al, 1996: 437) that Ka'eo sites did not appear to be as clustered into traditional ahupua'a patterns as were sites recorded in other locales. One conclusion was that Ka'eo's ceremonial, habitation and farming sites were established in an earlier time, before the imposition of formal ahupua'a boundaries.

Haun, however, in his much earlier study of the Ka'eo area just northwest of Gosser's study area suggested that "*Distinct clusters of sites are present that are comparable to Site B11-2 at Palauea* (NOTE: this site has a *mua* and a cluster of other structures). He continued and noted; "Fourteen similar clusters (see fig. 12) are identifiable in the survey area." (Haun, 1978: 86)

Both theories deserve additional research, however, first a complete inventory and actual evaluation of sites in the Ka'eo area must be done from an *ahupua'a viewpoint*, from the mountains-to-the-sea. This also must include the lands of all property holders. Haun, in his analysis of 85 sites in the south golf course impact zone recommended that future testing of his hypothesis "should also

include an entire ahupua'a as opposed to the small slice of the traditional land division represented by the survey area." (Ibid)

Until the Project Ka'eo study was proposed, no researcher had thoroughly mapped the entirety of Ka'eo's recorded sites in an ahupua'a view format. (see fig. 4) Instead, Ka'eo's extensive collection of cultural sites have been viewed in fragments. The inventory of sites is far from complete. The relationship among the sites is often artificial- imposed by land boundaries of the Makena Golf Course , not the Ka'eo ahupua'a. To have a clear picture of Ka'eo's history and the appropriate management of it's cultural sites, the ahupua'a view must be restored.

Origins of the Ahupua'a System

"There was an old Hawai'ian proverb that said, 'You are a chief because of your people.' The 'aina did not belong to the chief; he was caretaker of the land that belonged to the gods." (Lindo & Mower, 1980)

It is theorized that prior to the influence of waves of settlers from Tahiti, most settlements in Hawai'i were smaller and organized around extended family units.
This was described in firsthand in oral histories, such as *Tales from the Night Rainbow*: "The early ones [settlements before Tahitian colonizers] had no kings, no great war lords, no armies and no system of laws." (Lee and Willis, 1990:20)

Kirch described a similar pattern throughout Polynesia prior to the 12th century. (Kirch, 2006: 2) Bordner, suggested this was true for the Honua'ula area in his analysis of settlement patterns in Kanaio:

"According to oral tradition it was during this period [c. 15th century] that the system of formal land division and social control was developed. Why the shift occurred from the traditional Polynesian pattern to the much more formalized land control based on abstract bounded areas - that of the moku, ahupua'a and 'ili -- is still a source of discussion. " (Bordner, 1995)

The ahupua'a land division system made good sense in terms of ecological management, but it also placed specific demands upon those lands. Under a wise chief, those demands could be met. But after western contact, the system of tribute grew to burden the land and the people. Control of the ahupua'a lands, which included fishing rights, was hereditary and also subject to the

Moi or ruling Chief of the island. Kirch and Sahlins describe the system in their ethnographic study of the ahupua'a of *Anahulu* on *O'ahu*:

"…on the death of the lord of the land, all dependent rights revert to his or her successor for redistribution, which usually consists of a reconfirmation of previous holdings. The reciprocal is likewise traditional: the successor of a deceased holder has to be confirmed by the superior lord of the land in order to come into possession." (Kirch and Sahlins, 1992: 1:4 8)

It is suggested by archaeologists and historical researchers that this shift in land management to the ahupua'a system was probably developed over a period of time. Though it is not always discussed, the more formal divisions might have been based upon natural land divisions, such as ridges, gulches, streams or lava flows, observed by earlier waves of settlers.

Bordner suggests that choices of land district boundaries may have included attempts to equalize the available resource zones of each ahupua'a:

*Though the ahupua'a concept is credited to the kahuna (priest or religious specialist) named Pa'ao (Sahlins 1992), the actual definition of the concept must have taken some time, as each ahupua'a was supposed to be roughly equivalent to its neighbors in resource base. Given the tremendous diversity in agricultural and aquaculture capabilities even within short distances in Hawai'i a great deal of care must have been taken in defining these boundaries, especially as there are no extent records of ahupua'a having been modified, moved or deleted. (*Bordner, 1995: 73)

It is a fact however, that certain resources such as volcanic glass, fine-grained basalt for adz making and certain woods and plants are only found in specific regions and not in every ahupua'a. Kirch suggests that these resources were desired by the ali'i nui (High Chief) and such lands were often kept as his own**.** (Kirch, 2006: 14)

Within each ahupua'a there were also more desirable lands, which were economically more valued. Kirch and Sahlins suggest that this was the case with the shorelines which were "..generally preferred for chiefly residence. Here were the most extensive wet taro lands, offshore and onshore fish ponds, as well as access to the sea and the fishing and surfing that in Hawai'i were sports of kings. " (Kirch and Sahlin, 1992:19)

Social Implications

The social aspects of this essentially feudal land management system are also subject to a wide variety of views. On the one hand is the idealized concept

that saw those who worked upon the land (maka'ainana) as a respected part of the society hierarchy. Lindo and Mower described this view in their 1980 work, *Polynesian Seafaring Heritage*:

"The maka'ainana (commoner) lived on the 'aina (land) of the ali'i. (noble or chief) The ali'i knew they could not survive without the maka'ainana, upon whom they depended for food and well-being. If an ali'i treated his tenant unfairly, the tenant could leave and become a tenant of another ali'i." (Lindo & Mower, 1980)

This view was probably derived from nineteenth-century historians, such as Malo and Kamakau. According to these accounts, the common people in a given area had access to many of the resources from the uplands to the oceans as long as they, in-kind, offered sufficient tribute to the chief and took responsibility for caring for the natural environment (Malo, 1951: 63-67; Kamakau, 1961: 372-377).

The historians describe the lives of the natives as centered around cultivating crops, tool making, processing fiber for cordage and clothing, raising animals and giving a portion of the goods they created to the chiefs of the areas where they lived. (Malo, 1951: 63-67; Kamakau, 1961: 372-377).

Other modern researchers see the more formalized system as tending to solidify control of the many by the few. Kirch observed: that under the transition to the ahupua'a system:

"...commoners no longer exercised their rights to residential and agricultural land by virtue of genealogical connections to a social group." Kirch's view was that the hereditary connections to the land were replaced by a tenant-landlord relationship that *"...had to be constantly renewed through payment of both tribute and labor to their chiefly overlords."* (Kirch, 2006:16-17)

Ahupua'a Management Hierarchy

David Malo and others also described the stratified system of managers (*konohiki*), who enforced both civil law and apportionment of resources in a given area. The *konohiki* (generally a lesser chief who acted as a landlord for a more distant ruler) were overseen by a more powerful chief, (*ali'i-'ai-ahupua'a),* who had the responsibility for the resources of the entire *ahupua'a.*

Above this level of management was the ali'i-'ai-moku (chief who claimed the abundance of the entire district). Under this system, the resources of

each ahupua'a supported not just those who lived directly on the land, but also those who were by heredity or skill of arms the rulers of regional land divisions or entire islands.

In later years, as Western culture created desires within the chiefly class for goods that could only be obtained by trade, the system of natural resource management deteriorated into one of extreme resource exploitation demanded by chiefs, who, in turn, were exploited by Western traders demanding more and more of the area's resources.

A well-known example of this is the sandalwood trade of the early 1800's. The demand for the fragrant wood not only devastated the sandalwood forests, but caused great hardship among the common people who were forced to work long hours in high elevations and abandon the day-to-day practices that sustained their families and communities. (this is discussed in Chapter III)

Ahupua'a Boundaries

"The ahupua'a boundaries were defined by stone cairns (ahu) which were both boundary designators and also focal points for ceremonies reinforcing the legitimate authority of the high chief of the district (rituals conducted during the Makahiki cycle). Certain religious sites (heiau) were also placed so as to define the ahupua'a boundaries." (Bordner, 1995)

There are no records to indicate that Maui had a system of traditional land division prior to the reign of chief *Kaka'alaneo* (c. AD 1500) who is said to have divided Maui into 11 or 12 major districts or *moku-o-loko* as well as smaller subdivisions of *ahupua'a*. (Malo, 1951: 16). These traditional districts were recognized until the beginning of the 20th century. As noted earlier, the district and ahupua'a boundaries also extended beyond the land into the sea to include, fishponds, reefs and fisheries.
A nineteenth-century European visitor to Hawai'i's Royal Court observed:

*"The land and the surrounding sea, for fishing purposes, have been divided up among the native court grandees and other deserving persons."(*Kirch & Sahlins, 1992:49)

Honua'ula was one of these *moku* along with Lahaina, Ka'anapali, Kula, Wailuku, Hamakuapoko, Hamakualoa, Ko'olau, Hana, Kipahulu, Kaupo and Kahikinui. Many authors on Hawai'ian cultural practices have described the divisions, and Kepa Maly in his 2006 study of Ka'eo, has given a good synopsis:

"The large districts (*moku-o-loko*) and subregions (*'okana and kalana*) were further divided into manageable units of land and were tended to by the *maka'ainana* (people of the land). Of all the land divisions, perhaps the most significant management unit was the *ahupua'a*. "

Nineteenth-century historians Malo and Kamakau described how ahupua'a under the traditional system were further divided into smaller units generally running in a mauka-makai (from the mountain to the sea) direction and such boundaries were often marked by stone wall alignments. (Malo, 1951: 63-67; Kamakau, 1961: 372-377).

"*Ahupua'a* are subdivisions of land that were usually marked by an altar with an image or representation of a pig placed upon it (thus the name *ahu—pua'a* or pig-altar.) In their configuration, the *ahupua'a* may generally be compared to wedge-shaped pieces of land that radiate out from the center of the island, extending to the ocean fisheries fronting the land unit. Their boundaries are defined by topographic or geological features such as pu'u (hills), ridges, gullies, valleys, craters, or areas of a particular vegetation growth." (Maly 2006: 9, based on Malo, 1951: 16-18; and Lyons, 1875)."

ROADS & TRAILS

Origins of Pi'ilani Trail "(King's Highway"/ "Ke Ala Loa")

"Here are the deeds that will make your name famous to the generations in the future… you and the people will restore the heiau of Honua'ula just mauka of the hill of Ka'uiki …[in Hana town, Ka'uiki hill forms the Eastern side of Hana's Harbor] …after this you will begin to pave the road from Pihele at Hana as far as Ko'olau at the forest of O'opuloa, as well as all the other bad places on the roads of Maui."

(Words of 'Umi-a-Liloa , High Chief of Hawai'i Island to his brother-in-law Kiha-a-Pi'ilani, upon Kiha assuming reign over Maui Island. Moses Manu, July 12, 1884 article translated by Sterling in Sites of Maui, 1998)

(Note: it is likely that the place name "O'opuloa" in this story refers to the same area which is called *O'opuola* on 20th century maps- the stream and gulch that serves as the dividing line between the two traditional moku of Ko'olau and Hamakualoa in East Maui.)

Growing Need for Roads

Maui Chiefs Pi'ilani and his son, Kiha-a-Pi'ilani reigned at a time (c. AD

1500's) when the high chiefs of all islands were consolidating their power. The more formalized system of land division that was introduced on Maui about a century earlier (AD 1400's) lead to the creation of a more demanding system requiring each ahupua'a to offer their share of taxes to the *Moi* (High Chief over the entire island) as well as local land managers (*konohiki*). (see *Ahupua'a System* in **Historic Settlement Patterns** section, this chapter)

The collection of goods for taxes involved a yearly procession of the chiefs and priests lead by a carved image of the god *Lonomakua,* God of agriculture, to each of the *moku* (Districts). This ritual was connected with the yearly *Makahiki* Festival (c. November-January), a time of peace, games, lifting of restrictions, prayers, rituals and thanksgiving- celebrated throughout the Hawai'ian Islands.

The creation of better roads and trails would have given the Chief /Chiefess of the island, their messengers (*kukini*), priests, soldiers and land managers better access all the districts to fetch and deliver goods, collect their taxes, put down rebellions and conduct traditional rituals. Chiefs were often transported overland by litter (*manele)* borne by retainers. Stone paved roads also made for a smoother, safer ride for the Chief. (Fleming, 1933: 8-10)

Ke Ala Loa in Ka'eo

Ka'eo and Honua'ula were rich fishing grounds with established settlements and trade goods to offer by the time of the Pi'ilani dynasty. They would have been linked to west Maui and Hana, not just by sea, but also by *Ke Ala Loa*, the Pi'ilani Trail. The building of *Ke Ala Loa* in Ka'eo lands is not specifically described in the nineteenth-century Maui histories. Ke Ala Loa required less "construction" in the sandier lands of Ka'eo, but it is possible that portions were delineated by rock borders, as was done on the flatter lands of west Maui. (Fleming, 1933:6)

The *Old Makena Road*, which passes through the coastal settlements of the Honua'ula region was referred to by early twentieth-century kama'aina residents as *Ke Ala Loa* (the long or great road) and *Ke Ala Kuhiko*. (the ancient road) (Kelly, 1987) An upper road, also referred to as Pi'ilani Highway (modern Kula Hwy), passes through the upslope settlements of Keokea and Waiohuli in the Kula District and Ulupalakua and Kanaio in the Honua'ula District. Legends indicate that this road/trail also existed for many centuries before western contact.

The Old Makena Road passes directly by the imposing physical landmark and spiritual center of Pu'u Ola'i, It passes along four or more inland and coastal fishponds and numerous heiau sites and habitations. Most of these features were either already present or constructed during the same era when *Pi'ilani Trail/ Ke Ala Loa* was being built and/or improved. The portion of *Ke Ala Loa* that circled the coastal part of southeast Maui would have had every reason to directly connect to these important community resources, making the current road alignment a good fit for the route of the legendary 16th century road. In the early 1800's under the Kamehameha dynasty, this same alignment of Makena Road was designated and maintained as the *Ala 'Aupuni* (Government Road.)

Ka'eo also had a well-used collection of mauka-makai trails during this era. Some of these appear, from clusters of cultural sites recorded, to have been located along ahupua'a boundaries. (Cordy & Athens, 1985:19) This alignment was described as a common practice by nineteenth century scholar, Kamakau:

"It was common for *mauka-makai* trails to be developed paralleling the *ahupua'a* boundary lines, though there were apparently few if any restrictions that existed about actually crossing the boundary." (Kamakau 1976; 1964; Handy and Handy 1972; Handy, 1940).

The Pi'ilani Dynasty: Building Ke Ala Loa

In some versions of the building of *Ke Ala Loa*, Kiha-a-Pi'ilani's father, Chief *Pi'ilani*, is said to have begun the road improvements during his reign (early 1500's) and is given credit for completing the sections of the road in west Maui. Kiha is said to have taken 'Umi's advice and improved the roads in east Maui, continuing his father's legacy. (Kelly, 1987: Appendix A-4 quoting Charles Keau)

Some accounts attribute the entire work to Kiha-a-Pi'ilani. (Fleming, 1933:6) It is more likely, however, that such a project, estimated to traverse 138 miles of Maui's coast, (Ibid: 3) would have spanned two generations of effort.

Not all versions of the story agree as to who built which sections of road. Ashdown, attributes the east Maui trail sections to Pi'ilani and the west Maui sections to his son Kiha-a- Pi'ilani. The west Maui beginnings of the trail under Pi'ilani the elder, make more sense.

Pi'ilani's family ties to the west Maui area were deep. Pi'ilani married his first cousin and lived by the sea in what is now Lahaina, near the sacred *Mokuhinia* Pond (site of *Moku'ula*, currently being restored in *Malu-O-Lele* Park). His great-grandfather, Kakae, (c. AD 1400's) was co-regent of the Lahaina region along with Pi'ilani's more famous uncle, Chief Kaka'alaneo.

If it was first begun in west Maui, Pi'ilani's Trail would have connected the celebrated *"Bays acquired by Pi'ilani"* (*Hono-a-Pi'ilani*). This referred to the six great bays along the wetter northwest coast of Maui: Honokowai, Honokeana, Honokahua, Honolua, Honokohau and Hononana. These lands were all ruled over by Pi'ilani and his improvements to the road allowed greater trade and, therefore, brought prosperity to the region and its Chief. The modern day road along west Maui's coast still bears the name *HonoaPi'ilani Highway.*

Since the elder Pi'ilani's reign is credited with uniting rule over both east and west Maui, it is likely that some level of road existed between the two kingdoms, predating even his time. His son and immediate successor, Lono-a-Pi'ilani, whose rule was challenged and eventually overthrown by younger son, Kiha, is also likely to have contributed road improvements, although the historical record does not allude to it directly.

Chief Kiha-a-Pi'ilani

Kiha-a-Pi'ilani "...kept the peace and order in the country, encouraged agriculture, and improved and caused to be paved the difficult and often dangerous roads over the Pali's of Kaupo, Hana, and Ko'olau, a stupendous work for those times, the remains of which may still be seen in many places, and are pointed out as the Kipapa [pavements] of Kiha-a-Pi'ilani"
(Fornander, 1969:2:206)

Kiha-a-Pi'ilani was born on O'ahu island and raised there in the care of his mother's brother. He later married into one of the chiefly families of Hana. He is much more likely to have initiated the east Maui trail improvements than was his father. The starting point of the road improvements recommended to Kiha by 'Umi happened to be in the area of Hana where Kiha's wife's family ruled.
Kelly, in her 1985-87 study of Old Makena–Keone'o'io Rd also known as *Ke Ala Loa* and *Ke Ala Kahiko* suggested that *Kiha-a-Pi'ilani*, after overthrowing the regime of his older brother "…*must have felt a great deal of pressure to gain the confidence of the people of Maui, over whom he purported to rule*." (Kelly, 1987:19) Her narrative concluded:

"Kiha-a-Pi'ilani took the advice of 'Umi-a-Liloa and decided to do something substantial for the good of all the people. The project he undertook was to upgrade the roads, particularly those that were dangerous." (Kelly, 1987:18)

Kelly suggested Kiha's choice of road improvements were designed to help him fulfill two strategic objectives:

"it would make traveling easier for the people, and it would provide him with access to all parts of his kingdom should any dissident group take action against his rule." (Kelly, 1987: 19)

Road Construction Techniques

"The name of Kiha-a-Pi'ilani is preserved locally about the island of Maui for the famous paved road about the island with the building of which he oppressed the people. Men are said to have stood in line and passed the stones from seashore to upland." Fornander 1916, 2: 97-99, 206-207;

Fleming reported that the stones were gathered by both commoners and ali'i and *"artfully put into position"* and the trail was *"paved with flat, hard beach stones. In open country, each side of the trail was flanked with large field boulders solidly sunk into the ground and standing above the center from one to five feet…"* (Fleming, 1933:4-6)

CEREMONIAL & CIVIC SITES

"There are truly no features that all heiau share. The consistent feature of heiau comes from the Hawai'ian cultural view of them as places of worship where mana is concentrated and transferred through religious practices." (Cachola-Abad, 1996:12-14)

The Expansion Period was a time of great public works on Maui and the other Hawai'ian islands. The building of fishponds, roads and heiau were all projects made possible through the cooperation of large groups of people. It is likely that the majority of the eight ceremonial sites that have been formally identified in the Ka'eo area were constructed or rededicated in the 300-year span between AD 1400 and 1700.
Kirch and Vitousek, who did extensive archaeological studies in southeast Maui, characterized this era:

"For Maui Island, two formerly independent chiefdoms were brought under the control of a single leader during the reign of Pi'ilani, ca. A.D. 1570-1600. His grandson Kamalalawalu (ca. A.D. 1610-1630) extended the Maui polity

by taking over the nearby islands of Lana'i and Kaho'olawe" (Kirch and Vitousek, 2004)

Kirch and Vitousek in the work above noted that the conquering of Lana'i and Kaho'olawe more than doubled the land area ruled over by the Pi'ilani dynasty. They pointed to research done on Hawai'i Island (Abad 2000) that demonstrated the same expansion through annexation of neighboring kingdoms. Their observations concluded that a wave of temple building that began in the mid-17th century AD indicated the growing importance of the ruling dynasties of both islands:

"Accordingly, the temples provide tangible archaeological evidence of the speed with which a fundamental sociopolitical transition occurred in proto-historic *[AD 1650-1778]* Hawai'i." (Ibid)

Ka'eo and Kaho'olawe

The addition of the sacred island of Kaho'olawe to the lands of Maui Chief Kamalalawalu has intriguing implications for temple building in Ka'eo. The Ka'eo area is the nearest land to Kaho'olawe, and has a long history of association with the mysterious island. It is possible that Kamalalawalu, who is generally thought to have ruled from Hana, appointed a *konohiki* to manage the Kaho'olawe lands. Such managers were often trusted relatives or lesser chiefs. In this case, the *konohiki* may have been based in the Ka'eo area, giving him or her convenient access to the newly acquired lands.

It is also possible that Chief Kamalalawalu's retainers made regular expeditions from Ka'eo and other locations in Honua'ula to Kaho'olawe to gather valuable resources, such as basalt for tools, or to participate in traditional ceremonies. Such expeditions could have required the construction or re-dedication of a heiau to insure that proper protocol preceded those who journeyed to the sacred island.

Researchers theorize that Kaho'olawe in this period had only a small permanent population, but was highly valued for its excellent fishing grounds, adze-mining quarry and as a navigational training and spiritual center. The importance of the adze quarry must be mentioned here.

The growth of war fleets, building of temples and other chiefly activities that accelerated in the 15th, 16th and 17th century all required large logs. The harvest of these logs, in turn, required large *ko'i*, adzes shaped out of fine-

grained basalt. These were patiently formed by skilled craftsmen from basalt chunks available only from a few select locations in the islands, including Kaho'olawe.

Carbon dating done at the adze quarry at Mauna Kea on Hawai'i Island indicated that around AD 1600 *"there was extensive use of these areas to make large ko'i (*adzes*). These ko'i were used to harvest large trees before new forest areas were burned."* (Ohi'a Project, 1992).

Pu'u Moiwi on Kaho'olawe had the second-largest adze quarry in all the islands, which was likely to have been actively used during this period. Its presence on Kaho'olawe also made the island a prized possession for a ruler to control.

Basalt fragments from the Pu'u Moiwi quarry have been found among the artifacts in village sites on the Hawai'ian Homelands of Waiohuli and Keokea in upper Kula. (Kolb et al, 1997) It is probable that the Kaho'olawe adze material was a valuable commodity, traded widely throughout the islands. While sailing canoes accessed Kaho'olawe from east and west Maui and other islands, the currents between Kaho'olawe and the Honua'ula shore were often the most reliable, making it a likely trade center.

Did Kamalalawalu commemorate his annexation and rule over the Island of Kaho'olawe by building or rededicating heiau on either the island itself, or the nearby shores of Ka'eo? No one has yet posed this research question. Donham's research established the presence of habitation areas with cultural remains associated with "high status" individuals hidden beneath the earth in the Keawala'i churchyard. (Donham, 1998:120-21)

She suggested that with 'Apuakehau fishpond and Kalani heiau nearby, the entire area could have functioned as a chiefly compound utilized by Maui's 18th century high chiefess Kalola. (see **Historical Figures**, chapter III) Kalola's father, the legendary Maui warrior Chief Kekaulike, (c. AD 1700) was part of the Pi'ilani dynasty. His father was the great-great-grandson of Kamalalawalu. Donham's excavations indicated that the coastal lands surrounding the present day church were used for around a thousand years, and most extensively during the 300 years when the Pi'ilani dynasty ruled Maui.

Chiefly families often established compounds in several locations and spent time traveling to other districts and islands as well. Pi'ilani was known

to have had compounds in Lahaina and Hana. Both regions have ancient connections to supernatural *mo'o* goddesses, as does the Ka'eo area. The mo'o Kiha-wahine was an ancestral guardian, who watched over the Pi'ilani family. *Mo'o* are said to reside in fresh or brackish ponds, like the ones so prevalent in Ka'eo. The traditional place names surrounding Pu'u Ola'i - *Mo'oiki, Mo'oloa, Mo'omuku* all suggest the importance of the *mo'o* legends to the region.

Did Pi'ilani or his successors have a "getaway" in Ka'eo that has been "forgotten" by history? Was there a royal compound established with local kinfolk, at a site which already had its own fishpond, spring, sheltered landing, nearby heiau complex and walled gardens? A chiefly compound needed to have an ample food supply. Could nearby fishponds surrounding Pu'u Ola'i have supplied that abundance?

Was the royal retreat surrounded by a coconut grove bordering a wide, white sand beach? Is this where ancient trails converged and the people of Ka'eo gathered for the ceremonies and celebrations of the Makahiki season, bringing a portion of their crops and handiwork to their King?

Was the carved image of Lonomakua carried along Ke Ala Loa to the thick walled Kalani heiau? Did the high-born women gather a short distance away at the Hale o Papa (women's heiau) to welcome the new season of life? Were the dwellings of priests and *konohiki* nearby? Did the place name Keawakapu, given to the sheltered landing, literally translate to mean a bay "*awa*" that is "*kapu*"- sacred, forbidden or consecrated to the use of the divinely descended chiefs? Did this traditional place name refer to the sacred lineage of those who used the landing across from the Kalani heiau?

All these physical features existed, as part of Ka'eo's history. Kalani heiau has been dated to the mid-1400's AD. Future research is needed to reveal the rest of the story.

Heiau of Ka'eo in Relationship to Kaho'olawe

The historic event of Kaho'olawe coming formally under the rule of Maui's High Chief could very well have had an effect on the construction, use or modification of 17th century ceremonial sites in the Ka'eo ahupua'a. It is also possible that the association between ceremonial sites in Ka'eo and those on the eastern coast of Kaho'olawe had been longstanding, significantly predating the AD 1400-1700 era.

For almost a thousand years, there have been regular voyages back and forth between the two islands. Hundreds of petroglyphs found on Kaho'olawe have been tentatively dated between AD 1000-1700. (Stasack, et al, 1994; 2004: 4) These symbolic shapes, pecked or etched into smooth rock faces, are associated with travelers leaving messages for future sojourners. Their presence indicates the likelihood of many visitors to the island over a long period of time.

It has been well established that Kaho'olawe, regarded in modern times as a worthless, barren bombing practice site, held deep spiritual significance for earlier generations of Hawai'ians. The island of Kaho'olawe was considered part of the moku (district) of Honua'ula under the traditional land divisions of Maui. (See fig 2) It is thought that Kaho'olawe's many ceremonial sites were visited by those dwelling on other islands, especially the residents of Honua'ula. In modern times, many families with ties to the Ka'eo area helped reclaim the lands of Kaho'olawe from military use and are working now for its restoration.

HEIAU OF KA'EO

Ka'eo's four historically known heiau and four ko'a, or fishing shrines, all had commanding views of Kaho'olawe. (see fig 2) All occupy high places facing towards the sea. Such view alignments are believed by Hawai'ian cultural practitioners to be an important feature of the *mana* or spiritual energy attributed to ceremonial sites.

Pu'u Ke'eke'ehia Heiau (also called Hale Pue'o) *no date available*

A high-elevation heiau in Ka'eo (c. 1,800 ft elevation). The heiau on Pu'u Ke'eke'ehia (Mausoleum Hill) is shown on old maps and referred to in nineteenth-century newspaper stories, but it has not been officially "relocated," mapped and dated. It is clearly and simply labeled as "heiau" on a Mahele-era (1850) Royal Patent Grant 234 survey map showing the proposed Ulupalakua plantation road. (see fig. 19) (Maly, 2006:163)

A 1872 newspaper account of Ulupalakua by native Hawai'ian correspondent J. Kealohapau'ole also describes the heiau:

"On the North stands a hill, Ke'eke'ehia, on whose summit was a heiau built in remote times. The sounds of the Drum can be heard from it on the nights of Kane and Lono." (J. Kealohapau'ole, Ka Nupepa Kuakoa, Oct.19, 1872)

Inez Ashdown, who spent a portion of her childhood in Ulupalakua, recalled riding her pony to the top of Ke'eke'ehia hill and sitting among the ruins of the heiau which were still visible there (c. 1912-14). Ashdown said her Hawai'ian informants gave the name Hale Pue'o, to the site and said she was told it was temple associated with *"judicial decrees where in ancient times the people 'trampled on' evil or evil orders."* She herself noted that many pueo (native Hawai'ian owls) frequented the heiau area. (Ashdown, 1971:44)
(NOTE: the Hawai'ian Dictionary does not list a spelling for *pueo* that includes the okina between the last two letters as Ashdown does in her book. So it is unclear if this is a typo or a version of the word she obtained through native Hawai'ian speaking informants)

Winslow Walker in his 1929 tour of Maui heiau sites for Bishop Museum, recorded several other heiau in the surrounding hills of Ulupalakua from informant's accounts and Thrum's earlier tours, but only relocated one on Pu'u Ka'eo. in the Ka'eo study area.

Several other heiau or prominent sites were said to be located on Pu'u Mahoe and other surrounding hills. Kealohapau'ole's account goes on to describe sites on Pu'u Mahoe: which is located in Ka'eo's neighboring ahupua'a of Kanaio.

"On the north and east are the hills Nakalalua and Pu'u Mahoe. On the latter stood the palm (loulu) thatched houses of [the god] Kane and others. On the seaward side of this hill stood Kukona-ka-hale, a house that was famed in the time of the very ancient chiefs. When it was seen from Wailuku, it was as large as a church. Its site is still visited today. According to my guess it is over four chains (chain=66 ft) in length on every side."

The heiau on Ke'eke'ehia in Ulupalakua has an alignment with all three of the lower elevation temples in Ka'eo study area.

Pu'u Ola'i Heiau *no date available*

This heiau, too, has been referred to in traditional stories but not positively identified. Several stone structures still do exist on the top portion of Pu'u Ola'i but it is not confirmed which may be the heiau that was referred to by kama'aina residents. It is possible that subsurface excavations would reveal much more about the pu'u summit and its past use. Given its association with the mo'o goddess Inaina, Pu'u Ola'i could have had very early use as a ceremonial site.

Kalani Heiau (may also be known as *One'uli Heiau*) *c. AD 1420-1460*

Located on private land near Keawala'i church. A nearby knoll on the same property is believed to have been a Hale o Papa (women's heiau). Kalani heiau (see fig. 20) has one terrace with a carbon-date of AD 1440. (Haun, 2003) Ashdown suggested in her work that the heiau was constructed by the 15th century Chief Kauholanuimahu who reigned in Honua'ula in the mid-1400's AD. (Ashdown, 1971:50) (For a more detailed discussion of Kauholanuimahu, see **Historic Figures** section in this chapter.)

If Kalani heiau was established during the Expansion Period, was it one part of a larger ceremonial and habitation complex that was replaced in the early 1800's by Keawala'i church? It was very common for the Hawai'ian missionary churches to be constructed on the sites of former or existing heiau.

Bordner refers to the site of the Kanaio church in Honua'ula, a sister church to Keawala'i in Makena/Ka'eo:

"There are no records to indicate the logic which led to the church being placed where it is, but the location next to the dense cluster of heiau of major importance (the Pamano group), which included traditional education, cannot be by accident. The policy throughout Hawai'i, as elsewhere, was to place churches on top or next to traditional religious structures to "prove" the superiority of the Christian ethic." (Buck, 1993; Bordner, 1995: 79)

Kalani heiau was originally L-shaped, as are a number of the heiau in Honua'ula (Palau'ea, and Pa'alua heiau, for example). Some researchers have suggested that the "notched" or L-shaped heiau are dedicated to Lono the patron of agriculture and are associated with rituals for an abundance of crops.

The Kalani heiau walls are currently in a very disturbed state and a wall, associated with cattle ranching, runs across the main platform . It is possible that portions of the walls were purposely disassembled after the "old gods" were abandoned in favor of Christianity. Kalani heiau also appears to connect to an elaborate series of walls and enclosures on the property immediately adjoining it to the southwest. These are being dismissed as "ranching walls" in archaeological inventory studies commissioned by the investment group who wishes to develop the property. (Dega, et al, 2002) This conclusion is being questioned by some citizens and the State Historic Preservation staff has been requested to ask for further review. (2007)

Local residents report a Huaka'i Po (pathway where spirits pass at night) which begins at the shore across from the heiau. The pathway passes through the adjoining property with the "ranching" walls, past the heiau and continues up the hill to Ulupalakua, perhaps to the site of the heiau on Pu'u Ke'eke'ehia, which is directly inland of Kalani Heiau. (for more discussion of Kalani heiau's history, see **Historical Figures** section in this chapter)

"Mo'oiki" Heiau *no date available*

(Note: no traditional name has been yet attributed to this site, so it is called by the place name where it is located.)

Mo'oiki heiau is located on a long ridge behind Pu'u Ola'i. There are eleven separate features to the complex and several other enclosures nearby that are probably also related to it. The heiau is U-shaped with open terraces on the makai side. (see fig. 17)

The heiau is positioned on the ridge in a spot which allows a dramatic view of Kahao'olawe, unblocked by the prominent shape of Pu'u Ola'i. This relationship between the heiau site and Kaho'olawe Island in the distance is very compelling. (see fig. 21) Few have visited the site, but one cultural practitioner who has, believes the heiau complex is aligned with similar features on the shore of Kaho'olawe.

A line drawn from Ke'eke'ehia/Hale Pueo Heiau in Ulupalakua to the Mo'oiki heiau would continue out to connect both Ka'eo sites to the temple at Hakioawa village on the island of Kaho'olawe. Is there a significance to this alignment? Would signal fires from the sites help guide canoes by night? Is there a spiritual connection among the three ceremonial structures? This is a topic worthy of future study.

Fishing Ko'a and Ku'ula in Ka'eo

Besides the four heiau identified in the Ka'eo study area, four probable ceremonial sites have also been described by researchers or local informants as *ko'a* or *ku'ula (*fishing shrines). Coastal *ko'a* or *ku'ula* such as these were used by fishing communities in several ways. Ko'a were used as visual markers to help locate traditional fishing grounds when at sea. This was knowledge passed down in fishing families, from generation to generation.

Some *ko'a* were used as places to *kilo,* or observe, weather patterns, ocean currents or the presence of incoming schools of fish such as akule or opelu.

Ko'a used as observation platforms were believed by some practitioners to also be centers of instruction in fishing knowledge, both practical and spiritual. These ko'a are usually larger than the small shoreline markers.

Ko'a were also places for families to ask blessings for their fishing expeditions and give thanks for their success. Some sites had a special upright figure ("a fishgod" representing *Ku'ula-kai*) which was kept in an enclosed protective structure within the walled ko'a site and brought out during ceremonies. (Walker, 1931) Upright *Ku'ula* stones were also commonly found in such sites, but as Cachola-Abad observed, wide variations in the appearance of ceremonial sites were the norm.

Ku'ula-kai was the patron of all fishermen. He was a legendary fisherman of Hana who learned the many ways of the sea and is credited with passing on both his technical expertise and spiritual understanding as a legacy for succeeding generations of fishermen. He is also said to have constructed the first fishponds and also imparted his energy (*mana*) to particular stones that have been placed in bays and shorelines around the islands to "attract" fish. These underwater sites are also regarded as "*Ku'ula,"* or fishing shrines.

Oneuli Ko'a or Onipa'a Heiau? *c. AD 1400-1440*

Only one of Ka'eo's four ko'a has been formally identified and researched. This research dates use of a portion of the site to AD 1420. (Donham, 2006:168) The ko'a sits on the crest of a deep gulch, overlooking the tidepools of Ka Lae Loa, a few hundred feet away. (*Note: Ka Lae Loa is called Maluaka Pt. on modern maps*.) The ko'a site was visited and recorded in 1929 by Bishop Museum archaeologist Winslow M. Walker. He referred to it as "*Oneuli Ko'a*" and described it as:

"*...located below the school [Makena School] and about 100 feet back from the shore. It is a rough platform 13 by 14 ft and 5 ft high at the front. A low wall surrounds it on three sides. "(*Walker, ms, 1931) The ko'a was in an area that was later (1973) identified by State archaeological review as the "Makena Complex, " a portion of coastal Ka'eo, between Keawala'i church and Pu'u Ola'i which had scores of undocumented cultural remains.

The Oneuli ko'a site was then overlooked for around 70 years. It was not re-recorded even though the "Makena Complex" land was resurveyed four times in the early 1970's, after Ulupalakua Ranch sold 1000 acres of Makena to Seibu-Makena Resort. Surveys of the area were done by Clark, 1974; Haun,

1978; Cordy 1978 and Rodgers-Jourdane, 1979 over a five year span, but the ko'a was not mentioned although several other nearby sites were recorded.

Dr. Boyd Dixon, who served as chief archaeologist for the Maui office of the State Historic Preservation Division (SHPD) during the late 1990's wrote a 1998 memo to Makena Resort's archaeological team, headed by Aki Sinoto, The memo indicated that Dixon had come across what appeared to be a ko'a that should be investigated in the undeveloped lands mauka of the Makena golf course's oceanfront fairway (hole 17) in Ka'eo. (SHPD Correspondence, June 2, 1998)

No record of any response to Dixon's suggestion by Sinoto or the Makena Resort staff was found in SHPD files. The ko'a site was then "re-discovered" in a 2001 survey, but not associated with Walker's original description. (Rotunno-Hazuka, et al, 2001) Nor was any reference to Dixon's comments made in the description of the ko'a site when it was documented in the 2001 archaeological survey report authored by the Makena Resort team of Rotunno-Hazuka, Sinoto and Pantaleo.

More recent research (Donham, 2006) has suggested that Walker's description is a good fit for the rediscovered ko'a site. (see fig. 22) Donham's research also revealed a series of seven previously unrecorded terraces surrounding the coral strewn ko'a platform. This could lead to the conclusion that it is more accurately categorized as a heiau, rather than a ko'a, but that's a decision best left to cultural practitioners.

During Donham's research, one terrace of *Oneuli Ko'a* (state historic site 5711, feature 3) was dated to c. AD 1420. The *ko'a* platform structure itself (site 5711, feature 1) did not yield datable material, so it may pre or post date the nearby terrace areas. The ko'a site is located on land that is proposed for 71 luxury condominiums (the Dowling Keaka condo development in Maluaka) and it will be preserved as a landscape feature with a buffer zone. The remaining sites that surrounded it have been destroyed, with the exception of a burial area on the same property a little further north.

Although the *Oneuli Ko'a* site appeared to be "lost" to researchers for the last 70 years, it matches the location of a heiau site mentioned thirty-five years ago by the late Inez Ashdown. Ashdown, a historian and onetime Ka'eo resident, reported in her collection of local stories that a heiau called Onipa'a ("standing firm") was once found in this same area. (Ashdown, 1971:50)

Ashdown's map included in her book (*Ke Alaloa O Maui*) showed a heiau named "*Oneuli*" across from Keawala'i church, a sacred coconut grove called "Nahawale" that was just south of the Oneuli heiau, and, at the south end of the coconut grove, a second heiau, called "*Onipa'a*." (see fig. 23) Ashdown credited a 15th century Chief Kauhola-nui-mahu, with either building or rededicating both heiau. (see **Historical Figures** section: Kauhola-nui-mahu in this chapter for more details)

Through material collated during the Project Ka'eo research, it is now known that the heiau known as "Kalani " by Keawala'i church and the one called "Oneuli ko'a " near the old Makena school both had cultural deposits (charcoal) that dated to the time of Kauhola-nui-mahu. While this is no proof that he was responsible for their construction or improvements, it does lend credibility to Ashdown's informants.

It has also been established that a sizeable coconut grove existed in the area between the two ceremonial sites, with portions still seen in the early part of the 20th century (Kelly, 1985: 58-59) It should be noted here that until a land swap in 1972, the northern portion of the Maui Prince Hotel site fronting Naupaka or Maluaka beach had been "government land" for many centuries and likely held the coconut grove that was managed by the chief's *konohiki*. Current interviews also confirm the existence of the place name *Nahawale* associated with the same land section, along the coast. (Rudy "Boogie" Lu'uwai, Personal communication, 2007 see map, fig. 18)

With this information available, it seems logical to acknowledge that there could have been another traditional name of *Onipa'a* used for this ko'a or heiau site that was part of an ancient fishing village in Ka'eo first identified in 1973 as the "Makena Complex."

Maluaka Ko'a / Kilauea Ko'a or Kilo i'a Ko'a? - site destroyed c. 1979

One possible *ko'a* site was located along a shoreline fishing trail, a little south of the old Baldwin Family Beach Cottage in Ka'eo. The fishing shrine was described by *kama'aina* residents as being used by their *kupuna* (elders) up to the 1960's. It was also mentioned in 1929 to Winslow Walker in his tour of Makena. Walker concluded from his informants, accurately or not, that it had been "destroyed." His unpublished manuscript stated that a "small heiau, probably a ko'a, formerly stood on a rocky point now occupied by the Baldwin cottage at Makena at the spot known as Kilauea in Ka'eo. "*(Walker, 1931)*

(Note: *The Baldwin family owned Ulupalakua Ranch from 1922 - 1963. They had a beach cottage located at the south end of Maluaka/Naupaka beach, roughly where the Maluaka Beach Park is today.* (see fig. 18)

Fifty years later (1978), Bishop Museum archaeologist Alan Haun, under contract to Makena Resort, recorded a cultural site complex in Ka'eo on a high knoll along the shore. His rough maps show a low-walled pebble-paved platform in the fairway of the Makena Golf course's 17th hole, a little south of the site formerly occupied by the Baldwin cottage. (see fig. 10, map from Cordy of B8-7)

Haun in his field notes and final report did not seem aware of the former existence of either the old Makena school or the Baldwin cottage in his survey area, nor did he refer to the Makena Complex or Walker's description of *Kilauea*, or a former fishing shrine. Haun labeled the complex of about a dozen cultural sites, including the possible ko'a, with one site number: Ma-B8-7. The ko'a and a surrounding wall were labeled "site Ma-B8-7, features 2 and 9" in the Bishop Museum fieldwork of the area. (see fig. 24)

Archaeologist Ross Cordy reviewed cultural sites on the proposed Makena golf course later that same year (1978). His survey broke up Haun's complex of twelve Ka'eo sites and assigned separate site numbers to various structures and areas. In Cordy's report, things got more confusing. He assigned the 18ft by 25 ft possible ko'a platform the former site complex number, Ma-B8-7. The usual practice was to assign each site a SIHP number (State Inventory of Historic Places). The SIHP number 1853, was given to a number of the other features surrounding the platform, but it is unclear if this permanent site number was applied to the possible ko'a platform as well.

It is possible, that although state law requires all cultural sites to be recorded, this substantial site may have never had a permanent state number before it was destroyed. The result is that it has quietly disappeared from our history. Cordy was under pressure to review an additional 100 acres of Ka'eo lands (present day Makena Resort south golf course) and did little to re-evaluate Haun's work on the oceanfront sites. (Cordy, 1978) He later expressed concerns and regrets on the manner in which the fieldwork in this phase of Makena Resort review was rushed. (Cordy, undated letter, Bishop Museum files) (for more on this topic see Chapter IV)

Neither Haun nor Cordy referred to the coastal area they surveyed as part of the Makena Complex, recommended by the state for further research.

Neither researcher made any reference to Walker's earlier information about Kilauea ko'a, nor its location in the area. Neither reported interviewing any of the local residents about the sites they were interpreting.

The first interviews of Ka'eo residents for Makena Resort studies were done by Marion Kelly in 1985, as a result of legal pressure by local residents. No further resident interviews were done until another landowner commissioned Kepa Maly's ethnographic research in 2005-2006. Several of Maly's informants reported traditional use of a fishing shrine near the old Baldwin cottage before it was destroyed. (Maly, 2006)

Haun's final report (1978) declared the low-walled, pebble-paved platform on a knoll overlooking the sea to be an "historic housesite." It had been hurriedly excavated, pronounced "no longer significant" and then destroyed around 1979 or 1980, along with many other remains of this ancient fishing village. Only a few years after it was identified, the first portion of the Makena Complex and its history was replaced by Makena Resort's spectacular ocean front fairway.

Was there a "*Kilauea*" Ko'a?

It has not been suggested by others, but it is possible that Walkers's informants, when they gave him the name of the spot where the ko'a was located as "Kilauea", were actually describing a place used for the purpose of "Kilo i'a." " Kilo i'a" is defined as "one who observes fish movements from a high place and directs others to act." (Pukui and Elbert, 1971: 152) Such a person utilized specific places traditionally used as fish "lookouts." The two words are pronounced differently in Hawai'ian, but are relatively similar sounding.

In oral interviews of Makena residents conducted by Marian Kelly in 1985, a location on the summit of Pu'u Ola'i and a rock near Makena landing were both described as being places where a *kilo* (observer) traveled to spot the incoming fish. The residents also mentioned a third "lookout" point used to observe the akule runs as being the "sand dunes of Naupaka Beach." (Kelly, 1987: 39). Since this probable ko'a site has been destroyed, its exact location can not be precisely determined, but from various descriptions it appears to be very near what is known as *Naupak*a or *Maluak*a beach in Ka'eo, in the general area referred to by Kelly's informants. Was the "housesite" platform, which once sat on a high knoll actually the *ko'a* Walker thought to be destroyed? Was it used by local residents to spot fish and perform other

traditional fishing practices? For the moment, its history is buried beneath the Makena golf course.

Pu'u Ola'i Ko'a - *no date available*

Ashdown described a fishing ko'a at the base of Pu'u Ola'i where she was taken by horseback by her *kahu* (caretaker- the cowboy assigned to look after her as a child when she rode the lands.) (Ashdown, 1970) A number of possible structures that could have functioned as ko'a are still located along the rocky perimeter of Pu'u Ola'i on state park lands. The specific ko'a site has not been formally identified and the area has had some modification for WWII military activities since Ashdown visited as a child. As the state park develops a Cultural Resource Management Plan, this ko'a and the reported heiau site in the summit of the cinder cone are likely to be better identified, protected and researched.

Pu'u Ola'i Cave - *no date available*

This was described as an underwater "shark cave" shrine at the base of Pu'u Ola'i (known only to select families.) It was seen as a sacred place for specific families to communicate with their shark *aumakua* (ancestral family guardian). (Ashdown, 1970) The cave has been described by various informants in oral interviews. These included some whose relatives visited the cave shrine in more modern times to meet with the sharks that sheltered there. (Maly, 2006) Many families in the Ka'eo and Honua'ula region consider sharks to be family guardians. (Thrum, 1922) This sacred site is an important part of the area's history and likely connects through stories and chants to similar shark cave shrines on the islet of Molokini and Kalua O Kamohoali'i on Kaho'olawe. Donham notes that *"during the nineteenth and early twentieth centuries, Kalua O Kamohoali'i was watched over by residents of Honua'ula."* (Donham, 1998:12).

Fishponds - *no dates available*

*"Fishponds of all sort not only beautify any area but a land with many fishponds was called a 'fat land' (aina momona)." (*Kamakau, 1991).

Traditions say that the very first Hawai'ian fishpond or "loko i'a" was constructed in Hana at Leho'ula. Ponds, which allowed a ready supply of fish to be available regardless of the weather conditions, were historically built under the direction of chiefs. Often, the ponds were *kapu* or forbidden

to commoners and only the chief or chiefly family members were allowed to partake of the fish raised there.

This system was described by a traditional practitioner in Hana;

"Traditionally, Hana was a residence for the chiefs and this is evident by the profusion of ponds built in the district. The high chiefs and priests enjoyed the bounty of the ponds. Since the chiefs' needs were met in part by the ponds, the general populace had greater use of the sea."(Hana Cultural Center Newsletter, 2006)

For ponds built in the ocean, the seaward wall was massive. Pond walls were made of stacked rocks, which also provided additional gathering areas for other favored marine food sources, such as lobsters.

It is reported that the labor of an entire district was required to build the larger ancient ponds and certain types of stones sometimes had to be brought from other parts of the island. Kamehameha the Great (c. AD 1790's) is said to have rebuilt many fishponds on Maui. Traditional stories recount that over 10,000 east Maui men and women worked for months to restore the Haneo'o fishpond in Hana. Some fishponds were said to have originated as projects of supernatural beings such as Menehune.

This legend is explained another way by a traditionally trained chanter from an ancient family line, Kaili'ohe Kame'ekua of Moloka'i. This view describes the older settlers of the Hawai'ian islands, a peaceful, tribal society who predated the Tahitian voyagers by many centuries, as retreating to the upper valleys for several generations after the Tahitian conquest of the coastal lands. This view of history suggests that in the 13th and 14th century, the older wave of inhabitants would come out at night to help their indentured brethren accomplish the large tasks, such as fishpond building, required of the maka'ainana (common people) by their overlords and conquerors, the Ali'i chiefs. (Lee and Willis, 1990: 23-24)

Inland fishponds, such as those found around Pu'u Ola'i in Ka'eo were also a common feature in ancient villages. Many were associated with the compounds of ruling chiefs and their priests. Some ponds had shrines built nearby to honor the *mo'o* goddesses like Kihawahine who inhabited the pond waters and were believed to watch over their abundance. A 1996 cultural survey commissioned by the federal government listed thirteen individual ponds and a concentration of 24 additional ponds clustered on Cape Kinau that all still exist in the Honua'ula region. (Trettin, et al, 1996: p. 20-21)

This is a remarkable number for just one District. Although most of these ponds were naturally formed, many, like those of Ka'eo, have been utilized as fishponds over the centuries.

Ka'eo Fishponds in the 15th or 16th Centuries

Early (c. AD 1880's) maps of the Makena/Ka'eo area show four ponds around Pu'u Ola'i, although not all are shown on the same map.

A 1885 Hawai'ian Government Survey Map (W.D. Alexander & S.E. Bishop) appears to indicate pond areas both mauka (inland) and makai (seaward) of the Makena-Keone'o'io Rd just north of Pu'u Ola'i. (see fig. 25) A remnant of a small pond still exists along the shore in the same location, but a much larger pond area could have been present there with the availability of more groundwater in the years between AD 1400 and 1700. A similar inland pond area was indicated on the same map on the south side of Pu'u Ola'i, mauka of where a seasonal wetland remains today.

It is possible that Ka'eo and its surrounding lands once had several much larger inland pond areas? Such ponds have been described as occurring along the Kihei shoreline, further north of Honua'ula before the deforestation of the upper slopes of Haleakala. As mentioned earlier, archaeological studies done on sites inland of Pu'u Ola'i yielded substantial quantities of shell midden (remains from ancient meal preparation) of a variety of mollusk which would have lived in marshy, ponded areas, rather than coastal tidepools. The authors of this research theorized that such ponds may have existed in the general Makena or Honua'ula area during the fifteenth or sixteenth century (Dixon, et al in Gosser, 1996: 396)

No paleo-environmental analysis (researching far older biological conditions by microscopic analysis of pollen, seeds, thin charcoal slices and other biological residues in an area) has yet been done of any Makena lands. Such research has been done on Hawai'ian Home Lands sites further south and north at higher elevations. This research has shown that what are today the arid, rocky landscapes of Waiohuli, Keokea and Kahikinui with their minimal rainfall, had a much wetter climate in the era from AD 1300 to 1800. Samples of pollen, charcoal, seeds and other paleo-remains show that more available water supported a robust variety of native montane and dryland forest species.

In order to understand Ka'eo's ancient history it is necessary to know more about its food resources: fishponds, marshes and agricultural areas through the use of 21st century tools.

HISTORICAL & LEGENDARY FIGURES

The three hundred years between AD 1400 and 1700 in Maui was a time dominated by the rule of dynastic chiefs like Kaka'alaneo, Pi'ilani, Kiha-a-Pi'ilani and Kamalalawalu. Each of them is famous for deeds or decisions that had a lasting effect on the lands of Ka'eo and Honua'ula. These deeds will be discussed here along with some theories of other possible connections these legendary figures may have had to the Ka'eo study area. Brief biographies of each of these Maui rulers will also be given here.

More commentary on Chiefs Pi'ilani, Kiha-a-Pi'ilani and Kamawalu is in the **Roads and Trails** and **Ceremonial and Civic Sites** sections of this chapter. Chief *Kauhola-nui-mahu* is also discussed earlier in the **Ceremonial and Civic Sites** sections of this chapter.

Legendary Chiefs:

Kauhola-nui-mahu (c. mid AD 1400)

"Kauhola-nui-mahu succeeded his father Kahoukapu as Moi on the Big Island but he resided a great deal of the time at Honua'ula on Maui where he exercised royal authority and among other useful works built the fish pond of Keone'o'io" (Fornander, 1918-19, VI-2: 320*)*
One of the most intriguing historical figures associated with the Honua'ula area is the Hawai'i Island Chieftain Kauhola-nui-mahu (c. AD 1450). Fornander tells a tale of this Hawai'i Island ruler, who spent considerable time residing at Honua'ula, and attributes to him the *loko i'a* (fishpond) that was constructed in Keone'o'io. Fornander also refers to Kauhola's wife, Neula, as being from a Maui family with ties to Honua'ula, but leading a revolt against him back on the island of Hawai'i that caused him to return and spend his last days there. (Ibid: 321)

Who was *Kauhola-nui-mahu (Kauhola* for short*)* He was the son of a high-born big island Chief, *Kahoukapu*. He was also the grandfather of *Liloa*, the chief who ruled over the fertile and *kapu* (sacred) lands of Waipio Valley on Hawai'i's windward coast. *Kauhola*'s great-grandson, High Chief *Umi,* (c. AD 1540) was a fierce warrior and ruler over *Waipio Valley* and *Hilo* districts. Umi is the center of many Hawai'ian legends that have been passed down into our own time.

Umi's line, which descended from *Kauhola*, were the keepers of *Ku-ka-ili-moku*, the War God stone totem that was eventually inherited by *Kamehameha*

the Great. Kamehameha was related to *Umi* through his father. According to legend, that same War God gave *Kamehameha* a certain advantage in his efforts as a general, to be the first to conquer, unite and rule over all of the Hawai'ian islands.

As the grandfather and great-grandfather of some of Hawai'i's most famous leaders, there are, surprisingly few references to *Kauhola* from traditional historians. The late Inez McPhee Ashdown (Maui County's historian for a number of years) was an early 20th-century resident of the Honua'ula area. She collected stories from local residents and offered considerably more details of Kauhola's life and times, but did not offer specific sources for her information. (Ashdown, 1970: 22-3, 50)

We know *Kauhola* was a contemporary of the storied 15th century chief *Kaka'alaneo* in Lahaina. (Malo, 1951: 246) Under *Kaka'alaneo* the *ahupua'a* system was first established on Maui and many temples were built or rededicated. Both Fornander and Ashdown refer to the fact that *Kauhola* "exercised royal authority" in *Keone'o'io.* Is it possible that he had a hereditary claim to the land, as Ashdown suggests, and that led to his involvement in the building of fishponds and *heiau* in the Honua'ula region? Fornander's description, as well, infers that Kauhola was responsible for additional "good works" beyond the fishpond. It is also possible that some of Ashdown's informants included descendents of this line of chiefs.

Ashdown described Kauhola's mother, *La'akapu*, as being "Maui's noted chiefess" who dwelt in her lands of Keone'o'io and married *Kahoukapu*, a High Chief of Hawai'i Island. Other sources (Fornander, 1918-19, VI-2: 320) describe Kauhola's mother being descended from Kila, a son of the legendary voyager, Mo'ikeha and grandson of Mauweke. In the ambiguous world of pre-contact Hawai'ian oral history, both descriptions could have been true.

In Fornander, circumstances of Kauhola's birth are not specifically addressed. In Ashdown's version of the tale, *La'akapu*, unhappy that she cannot bear children, journeyed from her family home in Keone'o'io to visit the "noted foreign priest Pa'ao at Mo'okini heiau in Kohala on Hawai'i." Ashdown then has *La'akapu* returning to Maui to give birth to her only son, naming him "*Ka-uho-lama-hu*" and "bequeathed to him all her family lands and treasures including the twin fishponds" (of Keone'o'io.) (Ashdown, 1970:22, 24) No explanation is made of the alternative derivation of the child's name from the spelling used in Fornander *Kauhola-nui-mahu*, but it appears that Ashdown's version simply removes the "nui" segment of the name and rearranges it into an alternative set of Hawai'ian words. She describes Kauhola as "a sacred

light shedding blessings over his realm and his people on both Hawai'i and Maui." (Ashdown, 1970:50)

(NOTE: *Although Pa'ao is said to have voyaged to Hawai'i in the late 12th century, he also is reputed to have had the "power" to live hundreds of years. It is therefore common to see him associated with miraculous works or other feats in the 14th, 15th century and beyond. Such inconsistencies are unlikely to have troubled Ashdown's informants.)*

In Fornander's version of the story, *La'akapu* also has a second husband, *Kanalukapu*. They were ancestors of the famous *Mahi* clan of Hawai'i. *Kauhola-nui-mahu* also had a brother: *Hilo-a-La'akapu,* who invaded O'ahu with two other chiefs and was defeated and slain. (Fornander 1918-19,VI-2: 321)

Like Fornander, Ashdown credits Kauhola with the building or rebuilding and re-dedication of the fishponds of Keone'o'io. (Ashdown, 1970:50) These ponds still exist, protected as anchialine ponds in the Natural Area Reserve on Maui's Cape Kinau, although they have been diminished in size by intervening lava flows over the centuries. In some of her unpublished writings, Ashdown suggests that Chief Kauhola may have also been responsible for construction or repairs to other fishponds in the Honua'ula region. Fornander speaks of the chief's "other useful works," which could include construction or repairs of other fishponds or heiau.

Ashdown does not list Kauhola's building projects, but his efforts could have included fishponds like the one at *'Apuakehau* Point in Ka'eo, *Paniaka* fishpond south of *Pu'u Ola'i* in *Mo'oloa* or the fishpond on *Oneuli Beach* immediately north of *Pu'u Ola'i*. (Ashdown, collected writings, 1953-1969, Bailey House Museum) Additional archaeological, ethnographic and paleo-environmental studies of the known fishpond areas of Honua'ula could reveal much about their origins.

Kauhola-nui-mahu as 15th Century Heiau Builder

Ashdown further suggests that Kauhola was involved with the building or re-dedication of two specific heiau in Ka'eo, *Oneuli* (which she also spells as *Onouli* in some of her references) and *Onipa'a.* (Ashdown, 1970: 50, 67)

Winslow Walker in his 1929 survey of Maui heiau, recorded and named two temple sites in Ka'eo. (This was discussed earlier above in the **Ceremonial & Civic Sites** Section) It is possible that Walker and Ashdown's local informants were describing the same sites by different names.

Walker appears to have relied upon Stoke's (c. 1916) sources, who referred to the heiau site by Keawala'i church by the name "*Kalani.*" Walker was not specific in his notes, but he may have had local guides who referred to the stone platform makai of the old Makena school as "Oneuli" or "Onouli." He may have called it that because it overlooked *Oneuli* (dark sands) beach. Ashdown's sources used the names "Oneuli"/ "Onouli" for the heiau by the church and "Onipa'a" to refer to the site further south by the school. It is also possible that either Ashdown or Walker did not clearly understand or accurately record the information they gathered on the *heiau* names.

Such confusion is understandable. To date, very little archaeological research in the Ka'eo/Makena era has included the human element: oral histories, ethnographic and genealogical research, that could help broaden the understanding of the actual traditional names and Hawai'ian uses of the numerous physical sites that have been discovered. The first major ethnographic research of the area was completed by Maly in 2006. Only a few of his informants even knew of the existence of *Kalani heiau* and none had specific details about its name. (Maly, 2006)

Neither of these *heiau* names are directly acknowledged in any of the area's modern archaeological reviews as being associated with the reign of this 15th century chief. However, it appears likely that Ashdown's reference to the existence of both sites from earlier times is accurate. This is all the more remarkable since the second site was "lost" to modern archaeological discovery from Walker's initial 1929 identification until it was "rediscovered" seventy years later in 2001 and re-associated with Walker's site description five years after that. There is also a growing body of knowledge that can help reveal more about the time frame both sites were constructed and used.

Heiau Dates from AD 1400's

The two heiau names offered by Ashdown, could easily be applied, from her descriptions and maps, to the two existing sites in Ka'eo. One of those sites (State Historic Site 5711, *Oneuli ko'a* or *heiau)* even has a dated feature that relates to Kauhola's era (AD 1420) (Donham, 2006: 99,100) The other, (State Historic Site 196) *Kalani Heiau*, has also had one area dated to c. AD 1440. (Haun, 2003)

It is also known that the lands surrounding *Kalani heiau* site had settlements in the time of *Kauhola.* Studies done at Keawala'i church grounds, which are only a few hundred yards west of the *Kalani heiau* site have yielded a

rich collection of cultural material indicating occupation of the area from AD 900-1100 on, with a large cultural layer dating to AD 1465-1645. (Donham, 1998:26) Another small parcel just south of the Kalani heiau, the former home of George Ferreira, also had cultural deposits dating to AD 1410-1660. (Yeomans & McGerty, 2000)

Ashdown's *Ke Ala Loa o Maui*, a collection of historic information published in 1970, included maps documenting various sites listed in the book. These maps showed *Oneuli heiau* located inland of Keawala'i church, where Ka'eo's largest ceremonial structure, Kalani heiau stands. (see site map fig. 23) *Onipa'a heiau* was indicated on the map as a little further south. (Ashdown, 1970:80) This is the same basic relationship found between two of the area's recorded heiau locations: site 196 *("Kalani" heiau*) stands a little inland from the old Makena Rd and *Keawala'i* church, and site 5711 ("Oneuli" ko'a or heiau), a little seaward of Old Makena Rd. about a quarter mile further south of *"Kalani" heiau.*

Local anthropologist and historical researcher Lesley Bruce, who drafted the maps for Ms. Ashdown's book, indicated that the maps were intended to show only the relationships of the various sites and their general locations, in order to avoid sensitive sites being over run by the curious. (Lesley Bruce, personal communication with the author, 2006)

Ashdown describes *One-uli heiau* (also known as *One-Lau'ena,* according to her account) as standing "a few yards beyond *Keawala'i* church" This description accurately fits the "*Kalani" heiau*, located on a parcel of private land a short distance mauka of the church. Ashdown goes on to note that "around the *heiau* stood the homes of the priests, chief and villagers." As noted above, archeological excavations have found habitation sites, from the fifteenth century and earlier, across the road from the *heiau* and on the properties to the south.

It is not made clear in the narrative, whether Ashdown's informants indicated if this cluster of dwellings associated with the *heiau* existed at the time of Chief *Kauhola* or had been established earlier or later. Ashdown only commented that "although the area remained part of a large village in the Honua'ula District, the ancient chiefs and customs were discarded for a new order." (Ashdown, 1970:50)

As Ashdown had suggested in 1970, long before modern studies were available, there was a settlement in the immediate area surrounding the

Kalani/Oneuli heiau site. Now that archaeological remains do indicate this was the case, there are more questions to be answered. Donham's review of the Keawala'i churchyard excavations, for example, suggested that the area was likely to have been occupied by "high status" individuals, based upon the nature of some of the artifacts unearthed. (Donham, 1998: 123)

Ashdown's map also indicated that the *One-uli* and *Onipa'a* temple sites were separated by a "sacred coconut grove" Ashdown refers to as "*Nahawale.*" (See discussion in **Chapter I Historic & Legendary Figures** under Chief '*Aikanaka*.) As has been discussed in Chapter I, historical accounts and oral histories confirm an extensive grove was located between the two heiau sites.

Whether this grove had the sacred and prized *niu hiwa* species of coconut tree; whether it was considered a *pu'u honua* ("place of refuge") or had a healing temple in earlier times- all other possibilities suggested by Ashdown- are questions that remain to be researched.

Because Ashdown did not attribute her additions to Kauhola's story to any historical source, her writings are often dismissed as local folktales or the product of her own imagination. However, in her private correspondence, she makes a number of references to the fact that her long family relationships with many of the kupuna (elders) of the Ulupalakua and coastal Ka'eo region brought her a wealth of stories shared with her from the time she was a small child, traveling the land by horseback.

In her private writings, Ashdown confided that many Hawai'ian people did not feel comfortable having their family tales, and the deep personal meanings they held, distributed publicly or acknowledged as originating from family members. Thus her sources often remained nameless.

Maly's recent cultural study of Ka'eo (2006) has brought to light much additional information about the area and about the families who have traditionally lived there over the centuries. Maly's work included much needed archival research as well as in-depth oral interviews.

Of interest to researchers, the interviews confirmed some of the same place names, cultural practices and historic events concerning Ka'eo/Makena that Ashdown had referred to in her 1970 book. Some of this, including variations on place names, and historic figures, was information that had not been taken seriously by more scholarly sources.

Considering these factors, some of the historical references that are now found only in Ashdown's work probably bear further research. Mysteries could be solved and some of Ashdown's "tales" may be verifiable as deeper levels of Maui's history are uncovered. The life and reign of Chief Kauhola, the public works that may have emerged from that era is one such worthy research topic.

Ashdown's writings offer an expanded view of Kauhola-nui-mahu's involvement with the Honua'ula region. It is one worth considering. The good Chief may have presided over a noteworthy era of beneficial public works. He may well have descendents who reside in the area many centuries after his own time. Future research should help answer important questions about Chief Kauhola, his life and works in Honua'ula.

Chief Pi'ilani *(c. early AD 1500)* and his Children

"..through his good and wise government, and through his connection with the reigning chief families of O'ahu and Hawai'i, [he] brought Maui up to a political consideration in the group which it had never enjoyed before… During Pi'ilani's reign, and perhaps that of his father, the Hana chiefs acknowledged suzerainty of the Moi [King] of Maui…" (Fornander, 1880:87)

In a later work, the historian Fornander referred to the Maui Chief Pi'ilani as ***"…****a great ali'i who integrated both windward and leeward sides of that island, perhaps for the first time, and who also brought Lana'i Island and at least part of Moloka'i Island under his dominion."* (Fornander 1917:214-15).

As described earlier, Pi'ilani was descended, through his father, from the ruling dynasty of Lahaina High Chief Kaka'alaneo. As Maui's High Chief, Pi'ilani is credited with the building (or at least the initiation of the building) of Hana's Pi'ilanihale Heiau. This massive, terraced lava rock structure overlooked the rugged windward coast. Pi'ilanihale (the "house of Pi'ilani") is believed to be the largest ancient place of worship in Hawai'i, and perhaps in all of Polynesia. His equally renown son, Kiha-a-Pi'ilani, completed his father's "Kings Highway" which circled Maui. (see **Roads and Trails** section of this chapter for more details)

Chief Pi'ilani married his first cousin, *La'ie-lohelohe*, and their union produced four children, who have all found a place in Maui's history. Pi'ilani and La'ie-lohelohe's two sons, *Lono* and *Kiha,* have been mentioned earlier and are

discussed below. His two daughters are equally famous. One, *Pi'ikea*, was one of the most influential wives of the legendary Hawai'i Island warrior chief *Umi*.

Pi'ikea's Daughter

Chiefess *La'ieikawai* was a niece of Kiha-a-Pi'ilani, the daughter of his sister, Pi'ikea and Chief Umi. Accounts of her life were recorded in Hawai'ian language newspapers of the mid-19th century. A description is given of her suitor, the Chief *'Aiwohikupua*, who visited Honua'ula. This chief took up residence at Keone'o'io in Honua'ula, waiting for the ocean to calm before his canoe fleet could cross back over to Hawai'i Island. The story tells of the fleet's journey from Mala at Lahaina to Keone'o'io where Chief 'Aiwohikupua and his crew remained for a month. From Honua'ula, they sailed to the Kona coast of Hawai'i.

Stories like this illustrate the importance of wind patterns and safe landing places to each region. As the traditional chant of Kamiki (Chapter I of this report) demonstrates, Honua'ula was known from early times as a place where the winds died, allowing calmer seas for the ocean crossing to Hawai'i and the lands beyond.
The fact that canoe fleets could stay for a month, indicates an established structure was in place in the region to provide food, lodging and appropriate treatment for chiefly visitors.

Chief Pi'ilani's other daughter, *Kihawahine*, is a legendary being whose influence expanded, over the centuries, beyond the island of Maui.

Kihawahine: Mo'o Goddess

"It was believed that if a Mo'o Guardian was properly nurtured, she would respond in like manner- if not she would cause great harm. The metaphor underlying this philosophy was respect for the land- for it was the ancients' careful understanding of land management that continues to insure prosperity for the future generations."
(Jensen, Lucia & Natalie, 2005:159)

Pi'ilani and La'ielohelohe's other daughter was named *Kala'aiheana*. She is said to have been born in the latter part of the 16th century on the royal birthing stone, Pohaku Hauola, near Makila beach "in the area of the royal lo'i (taro fields) known as 'Apuakehau in central Lahaina." (Ashdown, notes, 1975) She was recognized at birth to be part of the sacred *mo'o* line.

The princess was transformed into a mo'o when she died, and she was thenceforth given the name *Kihawahine Mokuhinia Kalama'ula*. One of her best known homes was Loko Mokuhinia, the fishpond associated with her family (currently planned for restoration in Malu'ulu-o-Lele Park in Lahaina). (Klieger, 1998: 9) She is also associated with many other ponds on Maui including Mauoni pond (twin pond to Kanaha pond, now filled in to form Kahului industrial area) (Ibid); Loko i'e i'e pond in Kalepolepo Kihei; Haneo'o pond in Hamoa, Hana (Beckwith, 1976:126) and ponds in Waihe'e, Hamakualoa and likely, Honua'ula.

The concept of *mo'o* has been used in other sections of this study and is intimately connected with the lands of Ka'eo, since they are watched over by the *Mo'o Inaina*. Ka'eo also has its own 'Apuakehau pond, adjacent to Keawala'i church. Place names often give important clues to activities or individuals associated with a locale. Kihawahine could have been regarded as the guardian of this fishpond and others in Ka'eo/Makena area.

The Jensens in their study of powerful women in Hawai'i's history (*Daughters of Haumea*, 2005) comment on the little understood meaning of the *mo'o* concept in our contemporary times:

"The Maoli [indigenous Hawai'ians] believe the reptilian totem to be the oldest among the pantheon of Polynesian totems- the Female Principle an essential part of the structure. Unfortunately, during the course of time, comprehension of the Mo'o totem deteriorated, resulting in its being shrouded in a thickly layered cocoon of myth and fantasy, its esoteric nature no longer understood by the people it served- the knowledge having slowly been bred out during the transitional years."(Ibid: 158)

The process of Kihawahine's transformation is described by researchers associated with the restoration activities of *Mokuhinia* pond and the sacred island of *Moku'ula.*

"*Kihawahine descended from Mo'oinanea, and had a "double mo'o lineage through both her parents. After her death she was deified. At her death she was dedicated to the goddess Kalamainu'u ('the enlightened one at the highest point') and transformed into a mo'o goddess."(*From Klieger/ Friends of Moku'ula website)

The derivation of Kihawahine's name is also discussed:

*"Mo'o is the Hawai'ian word for lizard. A "*kiha*" means "spurting breath" and the name was given by a kahuna to a newborn child of spiritual significance that was*

recognized as a vessel for the mana. The ritual associated with the making of a mo'o goddess (they were usually female) was practiced until the kapu laws were done away with in 1819. "(Ibid)

Although she is regarded as the sacred *aumakua* (guardian spirit) of the *Pi'ilani* family, *Kihawahine* was featured in *mo'olelo* (traditional stories) not only on Maui, but other islands as well. Klieger's research, stated that:

"Of all the mo'o gods, Kihawahine had the greatest number of worshippers and was revered by both royalty and commoners. Legends tell of Kihawahine traveling throughout the Hawai'ian Islands, the only lizard goddess to do so."(Manu, 1884-85 articles))
Kihawahine is also associated with ponds on Moloka'i, Kaua'i, Lanai, Hawai'i and Ni'ihau. *(Ibid)*

Tales From the Night Rainbow, is a collection of family stories from the early 1800's, gathered in Moloka'i. *Kaili'ohe Kame'ekua*, a family matriarch, born in 1816, recalls being given the sacred name of *Kihawahine* in an 1828 ceremony. Her family *'aumakua* was the *Mo'o Kiko*, who lived near a heiau in *Kapualei* (*Kapulei*), Moloka'i. This area has a large number of coastal fishponds and a strong place name association with *mo'o*. *Kame'ekua's* paternal family line also traced their descent to "Kihawahine of Hana." Kame'ekua described *Kihawahine* as a force for peace:

"Kiha Wahine, my father's ancestor, had taught that wars will solve nothing. She felt that only when men sit together as brothers can differences be resolved."

Kame'ekua also described a burial house that was made for Kihawahine, in the land of Haneo'o, Hana, where the mo'o had lived. (Lee and Willis, 1990: 43-47, 67-68)

The legacy of Kihawahine spanned the centuries from her own time (mid-sixteenth century AD) into the Kamehameha dynasty of the nineteenth century and beyond. Kamehameha the Great married the Maui High Chiefess *Keopuolani*, the highest born descendent of the *Pi'ilani* line. By doing so he insured that his progeny would inherit not only her status, but also her personal *'aumakua, Kihawahine*.

Kamehameha already had his own powerful ceremonial totem, the war god, *Kuka'ilimoku,* whose *mana* had been handed down from the family of *Kauhola-nui-mahu* and *Umi* to their ancestor Kamehameha the Great. With his marriage to *Keopuolani,* the Hawai'i Island chief also linked the two powerful spiritual forces into one cause. Klieger suggested that:

"*Kihawahine was arguably King Kamehameha's most cherished god. In her name he conquered the islands. The conqueror had the powerful war god, Kuka'ilimoku as his "land snatcher," but Kihawahine was one of his "land holders." She represented legitimate authority through eons of sanctified ancestors… Her carved image wrapped in yellow kapa was the only female goddess carried in Kamehameha's makahiki (seasonal tax collecting) procession*. "(Klieger,1998: 21)

Kame'ekua, whose grandfather, Moloka'i Chief and seer *Kaiakea*, was a trusted advisor of Kamehameha I, shared a similar tale:

"Kamehameha I had an image made to represent her [Kihawahine] and had it carried with him where ever he went. He took her color of yellow as his own and pledged to her that if he united all the islands that the glory would be hers and peace would reign in the land. He made Ulu-ma-hei-hei Hoapili of Maui her guardian and it was Hoapili who cared for the image that was carried with the king."(Lee and Willis, 1990:68)

Kihawahine's First Ancestor: Mo'oinanea

It was mentioned earlier that *Kihawahine's* lineage included a venerable supernatural ancestor, *Mo'oinanea*. One genealogical account of the Pi'ilani line, refers to the "sacred goddess, "Ke-ao-mele-mele, "who "comes from Kealohilani "[a house the mo'o built- literally: the shining land] to "bless the Hawai'ian archipelago for the arrival of the great enchanted goddess Mo'oinanea, divine family, and sacred attendants."(Lam, 2007: *Official Genealogical Records, HRM Edmund Keli'i Nalikolauokalani Paki Silva, Jr.)*

In the accounts of Hawai'ian legends collected by scholars like Beckwith and Westervelt, *Ke-ao-mele-mele*, daughter of the divine progenitors, *Hina* and *Ku*, was described as a "maiden of the golden clouds". *Ke-ao-mele-mele (ao* is the Hawai'ian word for cloud) was raised in the far away lands by the powerful mo'o prophetess, Mo'oinanea and gifted with her great magic power as the "heir of all the divine islands."(Westervelt, edited version, 1987: 148-50)

In these legends, Mo'oinanea is portrayed as an all-knowing guardian who directs the activities of the divine children of Hina and Ku from the far way lands. She claims and raises several children from the sacred union of the deities Hina and Ku. (Ibid: 143-49) The tale then states that "later, Mo'oinanea came with many dragons (mo'o)to watch over the islands." She landed on western O'ahu, at Waialua, "so that place became the home of the dragons." Her old land disappeared and is "now known as the Hidden

Land of Kane." (Ibid: 161-63) She is claimed as a sacred ancestor by many, including Maui's King Kaka'alaneo and the Pi'ilani dynasty.

Klieger suggests that Mo'oinanea "arrived from Kahiki, (probably Tahiti) with the Ku and Hina families of Gods. She had always been associated with the royal Polynesian lineages ..was the ancestor of the 'Ulu/Hema lineage of Maui" and "...appears to have been the highest ranking of the mo'o, perhaps the prototype in Hawai'ian religion."(Klieger. 1998:8)

It would appear from the traditional tales that Mo'oinanea lived in the far away land of Nu'umealani, where none but the gods could go, before bringing the mo'o ("dragons") and their extraordinary powers to the Hawai'ian Islands. In genealogical records, she was associated with a time far earlier than the second millennium. (Lam, 2007: *Official Genealogical Records, HRM Edmund Keli'i Nalikolauokalani Paki Silva, Jr.)*

It is theorized by some cultural practitioners that the names *Mo'oinanea* and *Pu'uoinaina*, the *mo'o* goddess associated with *Pu'u Ola'i* in the *Ka'eo area,* are actually name variations describing the same ancient supernatural being, who was an ancestor of the Pi'ilani dynasty. (personal communication, 2007, with kumu hula Akoni Akana, executive Director, Friends of Moku'ula.)

The similar name could be a mere coincidence. Pu'uoinaina of the Honua'ula lands was said to be the offspring of two mo'o living on Maui, (Beckwith, recounting from Fornander) and associated with Pele, but such mythic inconsistencies and variations become more common the further back in antiquity the stories originate.

On the other hand, the *Mo'o* goddess *Inaina (*or *Pu'uoinaina)* is associated with the oldest creation myths in Ka'eo- those concerning the origin of Pu'u Ola'i . She is also known as the guardian of the ancient and sacred island of *Kaho'olawe.* Was she a descendent of Mo'oinanea or another manifestation of the same mythic force? Is she also an ancestor of Kihawahine?

Is it a coincidence that the nineteenth century chief, Pikanele, who was a relative and close friend of Governor Hoapili was once the konohiki of Ka'eo? Is it a coincidence that Governor Hoapili was the last official royal guardian of the mo'o goddess Kihawahine? Is it a coincidence that Pikanele had a residence immediately adjacent to the 'Apuakehau fishpond in Ka'eo? (Maly, 2006: ?) Is it a coincidence that Pikanele and Hoapili both also had residences immediately adjacent to Mokuhinia fish pond, in Lahaina, the legendary

home of Mo'oinainea's descendent, Kihawahine? Is it a coincidence that a carved tooth, which appeared to represent the head of a reptilian form, was found in the excavation of Pikanele's house lot? (Klieger, 1998: 13, 62)

It is well known that High Chiefs had a series of courts and compounds from which they ruled. Did the ancient goddess Inaina, who watched over Ka'eo's ponds and its most prominent geological feature, also offer a sanctuary for the ancient lineages who ruled as the Pi'ilani dynasty? (see **Historic and Legendary Figures** section, Chapter I and Chapter III)

Kihapi'ilani

Pi'ilani's son, *Kiha-a-Pi'ilani*, is the subject of an extensive collection of tales, some associated with the *Honua'ula* region. Kiha-a-Pi'ilani and the powerful Hawai'i island chief, Umi , were contemporaries and, in fact, were brothers-in-law. Kiha's sister, *Pi'ikea*, was one of Umi's favorite wives. In Kamakau's account, Kiha was abused by his older brother, *Lono-a-Pi'ilani*, who had inherited the chiefship of Maui upon the death of their father. After confronting his brother, Kiha was afraid for his life from his brother's rage and fled in secret to Moloka'i and then Lana'i.

Kamakau continues Kiha's journey, explaining how "from Lana'i he sailed and landed at *Kapoli* in *Ma'alaea*, and from thence, to the upland of Honua'ula. He was seen, and the matter was reported to *Lono-a-Pi'ilani*, the enemy who greatly desired his death." (Kamakau, 1961)

Escaping several times, Kiha and his wife eventually settled on the boundary of Honua'ula and Kula at a place named Ke'eke'e where they lived with farmers in great poverty. Maps from post-contact times do not show a place name of "Ke'eke'e" in the general vicinity of Kula/Honua'ula (modern-day Keokea/Ulupalakua). However, there is one prominent local place with a similar name, Pu'u Ke'eke'ehia, that had a large heiau site on it, from reports of 19th century correspondence to Hawai'ian language newspapers. Ke'eke'ehia is best known in our historic era as the hill across from Ulupalakua Ranch headquarters, which overlooks the mausoleum of the ranch's founder, Capt. James Makee.

Later, Kiha and his wife moved further north, close to the boundary of Kula and Makawao (probably present-day Pukalani), always staying close to humble farming villages.

Kiha-a-Piʻilani— "following the strategy used so successfully by his brother-in-law ʻUmi on Hawaiʻi Island— built up his support with the common people in the vast dry-farming lands of *Honuaʻula* and *Kula* districts." Kirch, (2004:19)

The tales of *Kiha-a-Pi'ilani's* journeys reveal that, in the 16th century, there were well-established farming communities in the inland portions of Ka'eo. However, these were still viewed as remote lands due to the fact that travel by foot was slow and the country itself was rugged.

During the long reign of Kiha-a-Pi'ilani, his brother-in-law, Umi-a-Liloa, who was older than him, came to his final days. Umi had an adopted son, a devoted companion of many battles, by the name of *Koi*. Koi, according to traditional tales, *"staid over at Keone'o'io, Honua'ula [Maui] where he found a wife and begat children."* Koi was in Honua'ula at the time that his beloved chief, Umi, lay dying on Hawai'i Island. (Fornander, 1916-19: V: .232)
In Fornander's accounts, when Koi heard of Umi's impending death, he returned to Hawai'i and, with the help of other relatives, created a series of diversions so that he could obtain his friend's remains and spirit them safely away to their final resting place, which is still unknown up until our own times.

It is of critical importance in the Hawai'ian view of death, that the remains of a high-born chief be placed in a remote and secret place where they cannot be disturbed or desecrated by those who may still be living and wish him harm. It was common that those who were responsible for depositing the remains in a secret location often chose remote caves or high cliffs and ended their own lives shortly after completing their sacred duty to their beloved ruler.

The story of Koi that has come down to us, however, has a slightly different turn of events. Koi's assistant, a brother-in-law in some versions, is the one who never returns once the mission is complete, and Koi, himself, returns to his life in Honua'ula. One version of the story Fornander collected stated that: "*It is said that Koi brought the bones of Umi-aloa to Maui, and they have been searched for without success."* (Fornander, 1916-19:V: 234) Umi is reported in traditional legends to have built an elaborate memorial tomb with monumental slabs of hewn stone on his native island. Does he rest near there or in the sheer pali's of his family's traditional stronghold of Waipio Valley? Or, do the steep gulches or lava tube caves of Honua'ula secretly guard the remains of this famous ruler?

Kamalalawalu, son of Kihapi'ilani

Kamalalawalu continued the legendary rule of Pi'ilani's dynasty. Like his father and grandfather, he was known as an able ruler, held in high regard by his people. Fornander wrote: *"He enjoyed a long and prosperous reign until its close, when his sun set in blood and disaster…."* (Fornander, 1880:207) In spite of Kamalalawalu being vanquished in battle, the chief secured a lasting fame among Maui's people. Fornander described it thus:

"His reputation stood deservedly high among his contemporaries and with posterity for good management of his resources, just government of his people, and a liberal and magnificent court according to the ideas of those times, and in recognition of all [of] which his name was associated with that of his island, and Maui has ever been known in song and saga as Maui-a-Kama… Maui probably never stood higher, politically, among the sister kingdoms of the group than during the life of Kamalalawalu." (Fornander, 1880:207)

Kamalalawalu's mother *Kumaka* was a chiefess of the Hana District and it is reported that Kamalalawalu held his court there. The legend of *Kalae-hina* who is sent to Hana by a Hawai'i Island chief to kill Kamalalawalu, the Chief of Maui, is recounted by Fornander, who describes the scene:

"At Kauiki in Hana the chief [Kamalalawalu] is found holding competitive sports and Kalae-hina enters the games. When the chief sees how strong the new champion is he runs away and hides at Wai-anapanapa. " (Fornander, 1916-19: 5: 198-211)

As mentioned earlier in the **Ceremonial Sites** section of this chapter, it was possible that Kamalalawalu established or rededicated a compound in Honua'ula in order to better manage his newly acquired lands of Kaho'olawe. The gentler winds and currents of the natural harbors of Ka'eo and Keone'o'io would have positioned them as preferred trading ports with Kaho'olawe Island over the rough water Hana region where Kamalalawalu had his court.

There are also a number of tales chronicling the great chief's untimely end. Having secured Lana'i and Kaho'olawe, Kama was determined to conquer Hawai'i Island. Kamalawalu sent his son Kauhiakama to scout the Big Island's Kona Coast. The young man returned to report a sparsely occupied land, devoid of warriors. He tells his father:

"I proceeded from Kawaihae through Kona to Ka'u, all the way not

meeting many people. That is the most desolate place, composed of nothing but clinkers. Kohala is de-populated, the people are only at the beach." (Fornander, 1916-19: 5: 330)

Kamalawalu was given positive auguries by his many spiritual advisors, who were afraid to reveal the true omens they saw. The Maui chief was forewarned by the renowned Moloka'i prophet and seer, Lanikaula who warned him that he had been duped by the Hawai'i chiefs into underestimating their strength, since during he day the people were all gone fishing or to the uplands and "during the evening he would have surely seen the large population of Kona, because it is the largest district of Hawai'i." (Fornander, 1916-19: 5: 338)

Lanikaula beseeched Kama to turn back by delivering a prophecy concerning the disastrous outcome of the battle. The Maui war fleet was ready to sail and Kamalalawalu was boarding his canoe, as the prophecy was recited. According to the traditional accounts, the overly confident chief Kamalalawalu vowed that upon his return from battle, he would burn the respected seer alive for his impudence. (Ibid)
Kama fought two battles on Hawai'i and in the second he was captured, blinded and then killed. His son, *Kauhi-a-Kama,* and Kauhi's sons and grandsons, all heirs to the Pi'ilani dynasty, held onto much of their lands on Maui and continued to rule. Kama's great, great, great-grandson was Maui's famous warrior Chief *Kekaulike*. *Kekaulike*'s grand-daughter, *Keopuolani* married Kamehameha the Great and bore his heirs.

The fragments of Maui's history that remain tell us that Pi'ilani dynasty were associated strongly with the lands of Lahaina and Hana and with the mo'o Kihawahine. Is it possible that they also had long connections to the lands of Ka'eo and Kaho'olawe that have been forgotten in history? These could have been based on the area's legendary spiritual significance, common mo'o traditions, sheltered harbors, relatively abundant food and good access to both Kaho'olawe and West Maui. It is a question worth exploring.

Chapter III: View from 1700 to 1899

Conquest/ Commerce/ Western Contact

"The people of the Hawai'ian Islands at the time of Capt. Cook's visit (1778) were a prospering people, having populated all the main islands and developed a way of life that supported a large population. Some writers estimate a pre-contact population (statewide) of 120,000, others prefer 200,000 to 300,000 (Schmitt 1968:42 in Kelly,1987:28) Still others (Stannard, 1989) make a substantial case for a population of 500,000 or more." Marion Kelly

Overview

The period from 1700 to 1900 in Maui brought a level of change unknown in past eras. There were sequential wars, which brought an end to Maui's autonomy and its ruling Pi'ilani dynasty. In the brief span of one century (1795 to 1893), Maui experienced the unification of all the Hawai'ian islands under Kamehameha the Great, as well as the overthrow of his dynasty by outside business interests.

During the same era, Maui 's people had contact with foreign nations bringing new religions, trade goods and technologies and waves of unknown diseases that decimated the native population.

The old religion and kapu system of Hawai'i was overthrown and Christianity firmly established in its place. Land ownership shifted, in just over a decade (1846-1856), from traditional management and use to a private ownership model.

In the early 1800's, the lands of Honua'ula and Ka'eo were redistributed to Hawai'i island chiefs faithful to the conqueror, Kamehameha I. Many individual land claims made during the great Mahele (1846-1848) by commoners and nobles alike were rejected, leaving families who couldn't afford to purchase Government Land Grants landless and displaced. Those lucky enough to have land risked being driven from their small family farms by herds of wild cattle that overran crops and tumbled structures.

Large tracts of government and privately-held lands were sold off to foreigners (1840's-1880's) who set up sugar plantations, cattle ranches, harbors, stores or other enterprises requiring employees. The Gold Rush in California and the US Civil War both created new markets for Hawai'ian crops that made large plantations profitable. The Reciprocity Treaty giving Hawai'ian sugar

a favored status in the United States brought that crop into prominence as a business investment. "Useful" imported plants were introduced by new settlers. They often escaped to overwhelm native species and decimate vital watershed plants. Cycles of drought followed and loss of watershed capacity dried up natural springs and groundwater supplies.

The new religion brought new laws and hundreds were arrested, fined or put to work on prison labor gangs building roads. The once sacred island of Kaho'olawe was denuded by wild goats and sheep and converted into a men's prison colony from 1832 to 1853

Declining native populations led to the import of laborers from Asia, Europe and even other Pacific islands. Intermarriage led to a very racially diverse population.

By the end of this two hundred year span, the natural and cultural landscape of Honua'ula and Ka'eo had changed greatly. The old heiau were abandoned or shunned. Travel by horse had replaced travel by foot or canoe. Few lands still belonged to Hawai'ian families; and Honua'ula population levels had declined from several thousand to several hundred.

The traditional occupations of fishing and farming still existed among some families in the Ka'eo/ Makena region, but it became better known for its newer features: Keawakapu Church (established 1830's); Capt. Makee's Rose Ranch in Ulupalakua (1850's); and Maui's second busiest harbor (Makena Bay– 1850-1880's).

Population

"...how many people inhabited an area tells you something about the entire social system of that area. The Hawai'ians had to have had a sophisticated system of social organization and resource distribution to have taken care of that many people."
David Stannard, 1989 interview, Honolulu magazine

As mentioned above, the era from the beginning of the 18th century to the mid-19th century brought great changes to the Hawai'ian islands, as regular contact began with other nations. Foreign explorers, merchants and whaling expeditions introduced new foods, armaments, tools and materials to these remote islands. They also brought new diseases, which had a profound effect on the island's population.
Early estimates, made by 18th century explorers, set Hawai'i's pre-contact

population levels between 100,000 and 300,000, or about 10 to 30 percent of present day inhabitants. University of Hawai'i professor, David Stannard, however, empirically disputed these widely repeated population figures in his controversial 1989 book, *Before the Horror: The Population of Hawai'i on the Eve of Western Contact.*

Stannard's research is sobering. His projected population figure of 860,000 or more for eighteen-century pre-contact (before 1778) Hawai'i has become accepted by many. (Honolulu Magazine, 1989 interview).

Stannard contends that the Hawai'ian islands lost around 95% of their native population within a century after western contact, with less than 50,000 ethnic Hawai'ians remaining by the late 1800's.

Stannard attributed this occurrence to "a horrible bacteriological assault" –foreign diseases, spread by contact with foreign visitors. He noted that Hawai'ians, as a race, had lived in isolation from diseases prevalent in Europe and Asia for 2000 years and had no immunities to them. (Ibid)

This exposure he explained "...destroyed the Hawai'ians who simply had no defenses to diseases like syphilis and tuberculosis, not to mention diseases like mumps and measles ..." (Ibid)

Stannard contended that just as the Black Death plagues had a profound effect on European societies, the introduction of foreign diseases forever changed life in Hawai'i

"...not so much because of the great numbers that died, but because of the social, religious and cultural effects." (Ibid)

Population Decline

One of the early documented outbreaks of foreign diseases was the 1804 epidemic (probably cholera or typhoid), which struck in O'ahu. Ke'eaumoku, father of Queen Ka'ahumanu, died in the epidemic and it sickened so many that it prevented Kamehameha's large fleet of war canoes from launching a planned attack on Kaua'i, the last island he had not conquered. (Seiden, 2004, 122-3)

More societal upheaval resulted from the sudden death of the young prince Liholiho and his half-sister, and favorite wife, Kamamalu. Both succumbed

to measles while on a state visit to London in 1824, only four years after the prince had been crowned King Kamehameha the Second. (Seiden, 2004: 21)

Syphilis began to make its ravages known in Maui and the rest of the Hawai'ian islands shortly after the first western ships visited in the late eighteenth-century. (Barrere, 1975:18) A series of infectious epidemics struck all the islands in 1848 - 49 (measles, whooping cough, dysentery, and influenza). In 1853, a smallpox epidemic had lasting demographic effects in O'ahu, (Kirch & Sahlins, 1992:107) but missionaries and doctors in Maui were given credit for minimizing deaths through "heroic work". (Barrere, 1975:56 citing Greer, 1966:315)

Still, rural areas, such as Ka'eo were often hardest hit by these pandemics. One of the stories told by kupuna of the Ka'eo/Makena area is that the name Makena is actually derived from the term Kamakena, referring to the wailing death dirge of Ka'eo residents mourning their many relatives who were lost to the waves of epidemics between the 1840's and 1860's. (Maly, 2006, an interview with Robert Kalani: 252).

Kirch & Sahlins noted this trend in their history of Waialua on O'ahu's northwestern coast:
"In the years 1831 - 60, the population of O'ahu as a whole declined over 28 percent (from 29,755 to 21, 275), while other islands were decreasing on the order of 40 to 50 percent, and rural O'ahu in particular nearly 60 percent." (Kirch & Sahlins, 1992: 107)

While epidemics claimed many lives, Ka'eo's population also was diminished by another aspect of contact with the outer world. The lure of experiencing places beyond the Hawai'ian islands tempted thousands of young men to become seamen on foreign ships. This was noted by Rev J. S. Green of Makawao in his 1846 letter to the editor of the *Polynesian* as having an influence on the populations of young, educated native men.

Green expressed alarm that "…so at the present, not a few of the most promising young men from Kula, Honua'ula and Wailuku have gone to sea." Green's letter implied that he feared most of these men would never return to their families or their homeland.
(Maly, 2006:18)

Population in Ka'eo

The first census data from the Hawai'ian islands for which we have records dates from 1831 and was done by missionaries visiting the various regions where schools and churches were located. The results of the 1831-32 census showed a population of 3,340 people in Honua'ula, In 1832, Honua'ula was the fourth most populated region of Maui, with only Lahaina, Hamakualoa and Hana having larger populations. This was the era before plantations and ranches were established in Honua'ula, so the population was likely involved in traditional farming and fishing activities. (Schmitt, 1973: 18, 38).

Based upon church and school records of the era, It is likely that the majority of those Honua'ula residents who were counted in the 1831-32 census lived between the coastal areas that are now Wailea and Keone'o'io. Ka'eo would have been a center of that population, based upon remains of habitation structures from the era. By the end of the nineteenth century, it would appear that the population of Ka'eo, mauka and makai, was less than 300. It is reported that 150 attended the rededication of Keawakapu church in Ka'eo in August of 1908.
(Maly, 2006:71. citing Rev. R.B. Dodge's 1908 Report included in Annual Station Reports and Minutes– Hawai'ian Evangelical Association).

Early Population Views

French sea captain J.F.G. de La Perouse visited Keone'o'io Bay, about five miles south of the Ka'eo area, in May 1786. His crew was greeted by around 120 people and he described a scene of very small villages of around ten to twenty dwellings each. (Barrere, 1975: 18, citing La Perouse's Journal). This has led many researchers to conclude that the entire coastal area of Honua'ula, including Kae'o, had very little population during this era, and even earlier.

Ross Cordy, an archaeologist who was Field Director of the Bishop Museum's Department of Anthropology, did a review of the history and cultural sites of a small portion of Ka'eo for Makena Resort golf course construction in 1978. He postulated 30 individuals living in the area of Ka'eo he surveyed during a "peak period" of 1700-1725, with a "gradual build-up and decline after this peak."
(Cordy, 1978:56) Cordy's report set 1800-1825 population estimates as 25 for this same area, described as "only a small portion of Ka'eo ahupua'a." He, however, did qualify his conclusions to say the surveyed portion was only a

small sample and "may not be representative of former cultural patters of the area." (Cordy 1978:56, 2) Later surveys placed peak populations in the 17th century. (Gosser, et al: 1996)

A similar view of low population was given of Hawai'i's Kona coast near Kealakekua by Archibald Menzies, visiting the kona area between 1792 and 1794 with Capt. George Vancouver, He described the stretch of coastline south of Kealakekua Bay as "a dreary naked barren waste" broken only by a few coconut groves near the villages. (Rhodes, 2001: IV)

However, this Western view of Hawai'ian settlement patterns was not always accurate, lacking a Hawai'ian cultural perspective on what resources made lands desirable for habitation. This was evidenced by an observation made by the Rev. William Ellis of the London Mission Society, visiting the Hawai'ian Islands in 1823 and 1824, who was quoted in an 1863 report.

"The population of this part of Puna (between Kealakomu and Punana [on the island of Hawai'i]), though somewhat numerous, did not appear to possess the means of subsistence in any great variety or abundance; and we have often been surprised to find the desolate coasts more thickly inhabited than some of the more fertile tracts of the interior; a circumstance we can only account for, by supposing that the facilities which the former afford for fishing, induced the natives to prefer them as places of abode; for they find that where the coast is low, the adjacent water is usually shallow." (Kelly, 1987: 32).

Population of traditional societies is dependent upon access to food, fresh water and useful plants. Without updated reviews of the Ka'eo study area that include paleo-environmental studies, vital data will be missing to give accurate population estimates during the pre-contact era.

Population Reports from Church Records, 1833-1899

Rev. J.S. Green, who served in Maui, told of his visit to Honua'ula in his 1833 report to the Wailuku Missionary Station:
"The field committed to my care embraces the entire part of the island called East Maui. Number of inhabitants according to the late census, 23,764." (Donham, 1998: 26)

It is likely that Rev. Green's reference to "East Maui" was an area that included all of the communities surrounding the Haleakala volcano, which would be the present-day communities of Haiku, Hamakuapoko, Ke'anae, Wailuanui, Nahiku, Hana, Kipahulu, Kaupo, Kahikinui, Makena, Wailea, Kihei, Makawao, Kula and Pa'ia.

From the beginning of the Christian era on Maui, Ka'eo/Makena appears to have served as a spiritual center for southeast Maui. The Church there is variously described as "Honua'ula," "Keawakapu" or "Makena" church. (Note: in 1944 it was given its present name of Keawala'i Church). Honua'ula was described as the "big Church of the region with two 'apana' or branch churches" in a 1909 correspondence from Church administrator, Rev. R.B. Dodge. (Maly, 2006:73, quoting Dodge in a 1909 letter included in Annual Station Reports and Minutes– Hawai'ian Evangelical Association) It is somewhat confusing in that correspondence from the early 20th century also referred to the Congregational church in Kanaio as the "Honua'ula" church. (Bordner, 1996)

In the summer of 1834 Rev. Green traveled through the Honua'ula region, preaching to a crowd of nearly 2,000 people who gathered at the Keawakapu church in Makena.

Green gave church membership statistics for Maui in 1834 that showed Honua'ula church (Keawakapu in Ka'eo, Makena) had the third largest congregation (215 members) among the 12 churches listed for Maui island. Only Hamakualoa (Haiku to Huelo, with 409 members) and Wailuku (253) had a larger congregation.
(Maly, 2006:59, citing J.S. Green's letters in *Ka Lama* newspaper August 1834).

Green commented on the land and population of Honua'ula in his letters published in the Christian newspaper *Ka Lama*:

"Honua'ula is a dry land. It is rocky and inhospitable along the coast, but there are many people." (Ibid).

Church membership at the Ka'eo church in 1861 was listed as 269 in a report sent in by its Assistant Pastor, S.W. Nueku. This was only a small drop from the 298 members reported for 1857. (Maly, 2006:65 quoting from a May 1861 Report in Annual Station Reports and Minutes– Hawai'ian Evangelical Association).

By that time there were also branch church stations in Kanaio, Hoiu, Auwahi, Keone'o'io and Kanahena. By the 1870's the upper part of Ka'eo (Ulupalakua) appears to have had its own meeting space and congregation, but it shared a common minister with other churches in the Honua'ula District- Keawakapu (Keawala'i in Makena), Keone'o'io, Kanahena, Kanaio and Palau'ea.

Reports from early 1900's list only four churches: Keawakapu (in Ka'eo), Kanaio, Ulupalakua and Keone'o'io. The Ka'eo church continued to be regarded as the Mother Church.

War and its Effects on Maui's Population

Historical accounts of the 1700s collected by 19th century historians such as Kamakau and Fornander tell of a constant series of wars fought among the chiefs from the islands of O'ahu, Hawai'i and Maui. Maui's high chief, Kekaulike, was descended from the legendary Pi'ilani line. He ruled over the entire island of Maui, including Honua'ula and Ka'eo. In the early decades of the 18th century, he attempted an invasion of Hawai'i island, but was repulsed. He regrouped to Kaupo to launch another attack, but unexpectedly took ill and died in 1736. (Kamakau,1961:69)

After Kekaulike's death, a period of civil war (1736-39) between his sons– Kamehamehanui and Ka-uhi-ai-moku-a-kama and their respective supporters from O'ahu and Hawai'i islands ensued. This three-year conflict resulted in the deaths of thousands and thousands of Maui warriors as well as non-combatants. This war and others also resulted in disruption of food and water supplies, especially in the stream valleys of West Maui, and the local populations in Maui suffered from hunger and thirst.(Kamakau: 1961: 73-75).

Kamehamehanui triumphed over his half-brother, but soon faced an invasion by Hawai'i island chief Kalaniopu'u, who captured the east Maui districts of Hana and Kipahulu. Kamehamehanui made several unsuccessful attempts to reclaim East Maui. He died c. 1760's and was succeeded by his younger brother Kahekili. Kahekili's sister, Kalola was Maui's highest ranking chiefess and also the wife of his rival, Hawai'i chief, Kalaniopu'u. The two brother-in-laws were at war constantly for most of five years (c. 1775-1779 which claimed many lives during the remainder of the eighteenth century. (Kamakau, 1961:84-91)

Around the time of Kalaniopu'u death in 1782, Kahekili launched a new attack and took back Hana. (Fornander, 1880: 215-217). Then the aging Maui Chief led a successful invasion of the island of O'ahu, where his purge of local ruling families "is still remembered as particularly brutal", (Pana O'ahu, 1998: Preface xiii) and spent much of his last decade as its ruling chief. The final wars of conquest by Kalaniopu'u's nephew, Kamehameha I (1790 to 1795) also slaughtered hundreds of Maui's people and ended the island's sovereignty. (Fornanader,1880:348).

Changes in Land Use and Introduction of Cattle

The introduction of cattle, goats and other livestock was first documented on Maui in 1793 when Capt Vancouver left some goats with Maui Chief Kahekili. (Vancouver, 1801: 3:334).Cattle were introduced to the island of Hawai'i the same year and by early 1800's began to spread to other islands. Wild cattle and goats, along with deforestation of the uplands for sandalwood, appeared to have its affect on the productivity of the lands of Honua'ula by the 1830's.

One early account (1836) by Naleipuleho, a native of Honua'ula, observes that "Honua'ula is a land of famines." He attributes this to the fact that the foods grown there: sweet potatoes and taro "do not last." This would imply that either the growing season is short or the yield of crops is too little to support the existing population. Naleipuleho also mentions the shortage of drinking water. He notes that there are "two places of residency. Along the shore and in the mid-uplands of the land… where the fresh water is a great distance from them in caves" He notes that along the shore people are "blessed to be near the drinking water and fish, but ..having to travel far for their other foods." (Maly, 2006:14 translation from Ke Kumu Hawai'i, 1836:48)

By the 1840's roaming herds of cattle were also driving subsistence farmers from their lands and the government built an extensive wall just inland from the Ka'eo coast (c.1830's) to keep cattle out of house lots and garden farm plots along the shore and Old Makena Rd. (see fig. 5 for location of government wall.)

When Kamehameha III toured Maui in early 1846 it was reported in *The Polynesian* newspaper that "on some parts of Maui the cattle have done much mischief by trespassing on the plantations, and driving the owners from their little farms. Two districts have in consequence been deserted. " (Maly, 2006:16, quoting *The Polynesian*. 1846.)

Commercial Trade Goods

The introduction of a commercial economy and barter for goods launched the sandalwood trade in the early part of the 19th century. Kings and chiefs forced commoners off their own farms into the cold, rainy higher elevations to work long hours harvesting the prized wood. Many of those workers died prematurely from overwork, exposure to foreign diseases and lack of adequate food as the sandalwood trade became the main source of revenue

for Hawai'ian chiefs from 1805 until the supply was exhausted in the 1820's. (Rhodes, 2001:V)

The upper slopes of Ka'eo and Honua'ula were once covered with sandalwood and it is theorized that the destruction of the sandalwood and koa forests in the early 19th century lead to later droughts, diminished rainfall and a lack of available groundwater in the region. (Ashdown, personal communication regarding conditions in Ulupalakua, 1977)

Population Loss: Its Effect on Hawai'ian Society

The combined factors of war, out-migration, changing land utilization patterns and the exploitative sandalwood trade had an marked effect upon Hawai'ian population levels. But it appears that the devastation of new diseases and the secondary effects they had on reproductive rates, was the greatest factor leading to the downward spiral of native Hawai'ian population throughout the Hawai'ian islands.

The outer islands were especially hard hit. Census figures from 1836 population counts in Honua'ula already showed an alarming drop of 42% from 1832 statistics. (Schmitt, 1973:18, 38). This trend continued through the rest of the 19th century and prompted public concerns by the ruling monarchs and even the Hawai'ian legislature.

Eventually, declines in the native population, coupled with a shift away from traditional Hawai'ian land use to a western private property system, resulted in huge shifts in land ownership.

Kelly cites this period of the Mahele ("dividing of land") of 1848 and the Kuleana Act of 1850 as affecting the ability of many families to grow traditional crops. She suggests that the "great majority of Hawai'ians who were otherwise eligible, were not awarded land" in the Mahele process. Kelly further characterizes: "They (those not awarded land) represent between 70 and 75% of the total male population in 1850. " This was certainly true of Ka'eo, where a great many Native claims were not awarded and instead, the lands were sold to foreigners. (Klieger in Gosser, et al. 1996)

The epidemics of the period also caused many families to dwindle down to just a few members, not enough to carry on traditional practices of cultivation. Land was abandoned, sold or traded and many families left the countryside for urban areas, or were forced to move to other communities or even other islands where extended family members could take them in.

Vegetation

"Hahai no ka ua i ka ulu la'au (Rain always follows the forest)." (Hawai'ian proverb)

The same profound impacts experienced by Native Hawai'ian populations during this era were also evident in the natural landscape. Land deeds of the time (1840's-1850's) refer to a number of native and Hawai'ian introduced "canoe plants" on lands of Ka'eo such as wiliwili, kou, olapa, wauke, coconut palms and hala, but during this period of contact with outside nations, the entire landscape of Ka'eo and the rest of Maui began a radical alteration.

Well-meaning settlers and missionaries brought over hundreds of "useful" plants, such as the algoraba (kiawe) tree as well as grazing herds that had been unknown in the Hawai'ian islands up until this time. The wild herds of goats, cows and sheep foraged on native plants and limited their opportunities to reproduce and thrive in areas such as Honua'ula and Ka'eo. Only the toughest of native plants (such as the thorned wiliwili and hala) were able to fend off the increasing herds of grazing animals.

While native plants were being eaten away, new plants, introduced for fodder, such as kiawe, buffel grass and koa haole, began to establish themselves and eventually they came to dominate the coastal landscapes of Honua'ula and Ka'eo. Other plants, which were introduced for commercial purposes, such as kiawe, prickly pear cactus, tobacco and sisal, also became established in the early 1800s after the arrival of the missionaries and other foreigners. (Maly, 2006:60 citing article in Ke Kumu Hawai'i by I. Naleipuleho, 1836)

Hawai'ians of the Ka'eo area had utilized gulches and cleared other areas to plant sweet potatoes and dryland taro in earlier eras. In the 1840s, many of these same lands were rededicated to the growth of a new cash crop, Irish potatoes, when the demands of California Gold Rush miners made shipment from Hawai'ian ports practical. (Barrere,1975:45-46). Eventually, so much land on Maui was being cleared for the *uala haole* (foreign potato) that by 1850, the island's governor (John Young Kanehoa) *"forbade further planting of Irish potatoes on unoccupied lands."* (Barrere, 1975:32) Historical records also show government land in Ka'eo being leased for a variety of crops, including potatoes, dryland taro, sugar cane, melons and corn.
(Kelly, 1987)

Some of the introduced crops were not directed so much for export, as for local cottage industries. The sisal plants that still dot the Honua'ula landscape were once grown and processed for their fibre, which was formed into rope and twine. Cultivation of prickly pear cactus was specifically noted on some Mahele land grant descriptions in Ka'eo.

Evidently, its popularity may have been enhanced by the fact that it was used by some Honua'ula residents to brew alcohol. The process was described in an 1864 newspaper article by the itinerant minister, Timoteo:
"The cactus juice is mixed with water and worked with the hand in a calabash. It is left to stand for three days to ferment. On the fourth day it is drunk, as it has become an intoxicant. Therefore intoxication is common in Honua'ula and other places. Be on the watch you policemen and you church officials, to put an end to the great fire burning at Keone'o'io and Kanahena." **(**Timoteo, Nupepa Kukoa, Sept. 24, 1864: Cactus drinking at Keone'o'io)

Historic Events & Settlement Patterns 1700-1899

In the 1700 and 1800's the lands of Ka'eo were actively farmed and inhabited by a substantial population, based upon our present knowledge of archaeological sites and their dates. (Gosser et al,1996) The presence of a number of ko'a (fishing shrines) recorded by archaeologists along the Ka'eo coast and on the eastern shore of the island of Kaho'olawe facing Ka'eo indicate the area's traditional importance as a fishing ground. (Kelly, 1987:39) (Fig 2 map of Kaho'olawe and Honua'ula). Several local fishponds also appear to have been valued and used during this period, and were listed on maps.

During this era, traditional subsistence farming, land management and land ownership were profoundly affected by the Great Mahele– a dividing of lands in the mid-nineteenth century which created the legal framework for private property ownership. Fishing was less affected by the Great Mahele and changing taxation laws than farming. (Dohham, 1998:13) It appears that control of Ka'eo's 'Apuakehau fishpond was also disputed in land claims during the mid-nineteenth century. (Maly, 2006:164 from Hawai'i State archives, Dept. of the Interior, 1850)

Eighteenth-Century Wars

While battles raged throughout much of Maui, history does not record Honua'ula and Ka'eo or the nearby island of Kaho'olawe as being involved

in a great majority of the warfare. Little research has been done as to any factors that would have influenced this historic pattern.
The Honua'ula coast offered calm landing places for both local inhabitants and invaders from other islands and there were occasional battles fought. Kamakau describes the 1776 invasion by Hawai'i Island chief Kalaniopu'u's forces who:

"…landed at Keone'o'io, their double canoes extending to Makena at Honua'ula. There, they ravaged the countryside and many of the people of Honua'ula fled to the bush.." (Kamakau, 1961:85).

Kalaniopu'u was soundly defeated by Maui Chief Kahekili at Wailuku during that invasion, but he was in Hana in November of 1778 when Capt. James Cook visited east Maui. Cook's journal notes that Chief Kalaniopu'u boarded the ship and presented gifts, and that included in his retinue was the chief's nephew, Kamehameha. (Beaglehole1967, 1:476)

Royal Chiefs in Honua'ula

Historical accounts mention the Honua'ula region again in 1785. Fornander tells of a minor chief, appointed over the district by Maui ruling chief Kahekili, abusing the people of Kula and Honua'ula. A rebellion followed in 1785, while Kahekili was living on O'ahu. Kahekili's son, Kalanikupule, returned to Maui to restore order and remove the offending administrator, but local justice had already prevailed and the man was dead.

It is interesting to note that according to historians, Kalanikupule was accompanied on this mission by a royal party. This included several warrior companions (his brother and uncle), his aunt, High chiefess Kalola, her newest husband Ka'opuiki (her former husband, Hawai'i Chief Kalaniopu'u, had died c. 1782), her two high-born daughters and her three or four year-old granddaughter, Keopuolani (Maui's most sacred ali'i of this era.) (Kamakau,1961:142, 144; Fornander, 1880:2:214, 228).

Neither Kamakau or Fornander are specific about how long the royal party visited Maui or where they stayed during that visit. But history does place Kalanikupule and his fighting men successfully fending off another Hawai'ian island invasion of Hana the next year (1786) and a few years later (1790) mentions that Kalola is living in Honua'ula with her husband Ka'opuiki. (Kamakau.1961:145)

It appears that the use of the place name "Honua'ula" during the 18th and 19th century, usually refers to the area of Makena Bay and Ka'eo. This leads to the possibility that the high Chiefess actually spent some period of time living somewhere in Ka'eo/Makena, possibly with her daughters and granddaughter, as well, to keep them safe. The sheltered landing of Keawakapu Bay in Ka'eo (site of the 'Apuakehau fish pond and the present day Keawala'i Church) may take its name Ke-awa-kapu ("Bay that is Kapu or sacred and reserved for those of high rank") from the long standing use by ali'i families of the area.

History tells us that Kalola died on Moloka'i not long after Kamehameha's forces defeated her nephew Kalanikupule's army in the 'Iao Valley (c. 1790). (Fornander, 1880, 2:237-238) In 1794, her younger brother Kahekili, Maui Chief and conqueror of O'ahu, died in Waikiki.

After the decisive battle of Nu'uanu, O'ahu, in 1795, Kahekili's long time adversary, Kamehameha ruled the islands of O'ahu, Hawai'i, Maui, Moloka'i Kaho'olawe, & Lana'i. (Fornander, 1880:348)

Foreign Contact

In 1786 when La Perouse's two ships anchored in Keone'o'io Bay, the ship's journal recounts that a chief came aboard and traded one of the ship's officers a red feathered cloak and helmet along with "upwards of a hundred hogs." This account would suggest that at the time a high-born ali'i, possibly of royal rank was living in the Honua'ula vicinity. (La Perouse, 1798:341-351).

Donham, in her review of the Keawala'i church site in Ka'eo suggests that the high chiefess Kalola may have perhaps resided in the area around the vicinity of the present day Keawala'i church, Kalani heiau and 'Apuakehau fishpond. (Donham, 1998:112, 121-123.) (For more about Kalola see **Historical Figures** section in this Chapter)

Kamakau recounted the story of a Kalola's husband being involved in the theft of a dinghy and the death of the ship's watchman, from a visiting ship called the *Eleanor*, moored at Honua'ula in February of 1790. Barrere surmises this to be Makena Bay. (Barrere, 1975:21)

After the *Eleanor* fired on the inhabitants of Honua'ula with its cannon, Kalola and Ka'opuiki departed for Olowalu village to warn the inhabitants that the angry crew of the *Eleanor*, was heading there to search for its dinghy.

The Olowalu residents, however, were eager to trade and the Eleanor opened fire on their canoes and a number were killed. This incident is recorded in history as the "Olowalu Massacre." (Kamakau, 1961:145)

Mahele 'Aina: The Dividing of Lands- 1845-1855

"As he had done on all conquered islands, Kamehameha I had divided the lands of Maui among his warrior chiefs." (Barrere, 1975:30)

It was a common practice in pre-contact Hawai'i for management of lands and the benefits of the resources they held to be changed, or at least reconsidered, with each shift in leadership. It can be argued that Kamehameha's successful conquest, by war or by treaty, of all the Hawai'ian islands by the early 1800's resulted in the most sweeping execution of this pattern of land transference yet seen in Hawai'ian history. The great Mahele (dividing of land into privately owned parcels), which followed a half-century later, not only completely transformed the kingdom's land tenure systems, but based opportunities for land ownership under this new systems on the most recent disposition of lands by Kamehameha I.

The extent to which these two major historical shifts in land ownership displaced families with longer historic ties to the lands of Honua'ula and Ka'eo is likely very great. With the displacement of families, the oral history that helps us understand the last millennium of Hawai'ian history in Ka'eo must be searched out from an ever-widening circle of informants.

Mahele Background

Laws affecting land tenure in Hawai'i were first discussed by King Kamehameha III, his chiefs and his foreign advisors in the 1830's. By the 1840's, it was decided that a division of lands could take place with one third of the lands being held by the King, one third by the government and one third remaining under the control of the chiefs who held land at that time. An exception on all lands was made for the *hoa'aina* - land tenants who grew subsistence crops and traded a portion of the crop and their labor for "rent." (Barrere, 1975:28).

Prior to this time, all lands and natural resources were held in trust by the high chiefs and their representatives (*ali'i ai ahupua'a* and *ali'i ai moku*). The common people were given use of the lands and of many of the resources (waters, fisheries, forests.) The chiefs, in turn, appointed land managers (*konohiki*) who were often lesser rank chiefs. (Maly, 2006: 78)

Between 1845 an 1848 a commission was set up to hear claims for land titles in Hawai'i, prior to lands being awarded. According to Barrere's research, landholders had two years (Feb. 1846 to Feb. 1848) to enter their respective claims, a period that was strictly enforced for the common people, but "... extended for the benefit of those lesser and higher chiefs who repeatedly failed to report their land holdings." (Barrere, 1975:28 from Indices 1929:53-54). Records of the Kingdom's Dept. of the Interior noted that the legislature had granted an one-year extension (to February, 1849) to hear and adjudicate claims since the "labors of the Land Commission had never been fully understood, nor the magnitude of the work assigned to them properly appreciated." (Minister of Interior Report, 1856:10-16 as reprinted in Maly, 2006:83)

The Great Mahele itself, the actual portioning out of lands between the king, his chosen chiefs and their chosen *konohiki*, was accomplished in a brief two-month span in early 1848. Assignments of land continued back and forth over several years among the king, 252 high-ranking *ali'i* and *konohiki*, the government and a number of foreign and native-born businessmen who sought leases or grants of large parcels of land. In 1849, the Hawai'ian legislature passed a *Kuleana Act* which set guidelines for *hoa'aina* (native tenants) to apply for fee-simple interest in *"kuleana'* lands. (Indices 1929:58-81)

13,514 of these LCA (Land Commission Awards) were made covering 30,000 acres of land. (Kuykendall, 1947:293-294). All LCA were numbered and most are still found on present day maps, although the original owners may not currently hold title. In comparison, one-million acres were kept by the king and the chiefs and the government received one-and-a-half million acres each. (Kuykendall, 1947:294) The majority of Sub-Commissioners who ruled on the claims from the various outlying regions, were drawn from "gentlemen connected with the American Mission."

Mahele Era in Ka'eo: The Spoils of Conquest

The Mahele was offered as a solution to bring greater opportunity to the common people, but as noted above, it had the affect of entrenching a new set of landowners in many locations including Honua'ula and Ka'eo. Between 1845 and 1900, lands in our Ka'eo study area were claimed and counterclaimed by a variety of native *ali'i* and foreign entrepreneurs. (see fig. 5) In the process, there were major shifts not only in the occupancy and ownership of the land but also in its predominant use.

The situation in Honua'ula was not unique for these times, as both chiefs and commoners from Hawai'i island who had fought with Kamehameha I moved to new lands as their victor's reward.
The 19th century historian Kamakau suggests the trend began during the last days of Kahekili:

"Land irregularities arose during the time of the wars of Kahekili and Kamehameha (1790's). The land belonging to the old chiefs was given to strange chiefs and that of old residents on the land to their companies of soldiers, leaving the old settled families destitute. During that period they left the lands of their birth and settled on other lands."
(Kamakau 1961: 376 - 377)

During previous eras of constant conquest by neighboring chiefs (1400-1700 AD), rulership over lands was often awarded as the spoils of war by the victor. This is described by Kirch & Sahlins in their in-depth history of O'ahu's Waialua region. Many families, however, remained rooted to specific family lands for many generations while the ali'i were more affected by the shift in political fortunes of one regime or the other. With the dynasty of Kamehameha, that changed. (Kirch & Sahlins, 1998:50)

Nineteenth century author and historian John Papa I'i described this shift in his native O'ahu:

"Kamehameha colonized O'ahu with thousands of chiefs, lesser chiefs and Maka'ainana from Hawai'i, settling them around the island to pacify the local population and to reward loyal service."
(I'i, 1993: 68-69)

Kirch and Sahlin describe the early 19th century era after Kamehameha's conquest as having "introduced a new ruling class with unusual demands on the common O'ahu cultivators" in their study of the coastal fishing and farming center of Waialua (leeward O'ahu).

Their research indicated that the retired foot soldiers of Kamehameha's armies were also "potential competitors for farming lands" and were "displacing true O'ahuans on certain of the better bottomlands of the Anahulu River. The descendents of Hawai'i warriors would claim such lands in the Mahele a half century later." (Kirch & Sahlins, 1998:51)

Many of the individual Mahele land claims recorded in Ka'eo and throughout Honua'ula trace their authority "from the time of Kamehameha I." This could infer that those who farmed and fished the lands prior to that time may have relocated elsewhere and were not considered to have a claim.
It appears that the majority of the chiefs and *konohiki* who applied for lands under the Mahele on Maui, had been accorded their claims on such lands not by long ancestral ties to the region, but by loyalty to the conquering chief, Kamehameha I, half a century earlier. (Barrere, 1975:30)

Mahele Land Awards in Ka'eo Study Area

"The Mahele disengaged the land from the traditional matrix of sociopolitical rights and obligations between chiefs and commoners. Land had become a commodity– bought, sold and traded without much consideration for traditional tenant right. Such was to be the case for many of the lands of Wailea and Makena on Maui."
(Klieger, in Gosser, et al, 1996: 23)

Mahele records gave impression of a few scattered farm plot sections in Ka'eo, however, more careful research reveals "it appears the whole mountain slope was subdivided into farm lands." (Cordy & Athens, 1985:19) (see fig. 26)

In truth, very few LCA (Land Commission Awards) were granted in our study area. 27 claims were made (some for multiple parcels spanning a variety of ahupua'a) and less than half of those were actually awarded.
(Donham, 2006:12 and Klieger in Gosser et al, 1996)

The pattern seen in other lands of a preference for coastal residence was noted by Cordy in his review of Mahele records for the Ka'eo study area. He commented that all the awards he reviewed had "house plots on the shore. The farm parcels were in sections scattered inland. A number were awarded in Ka'eo, Mohopili, Mo'oiki at the 200-400' elev. (about .5 to 1.0 miles inland)." (Cordy & Athens, 1985:19)
Once the Mahele land grant claims were settled by the kingdom from 1846 to c.1850, portions of the lands awarded to the government or the king in the Mahele were then sold to others under Royal Patent Grants made possible under one section of the Kuleana Act passed in 1850. (see fig. 5)

As these grants were issued to both natives and foreigners in the 10-year span between 1845 and 1855, land use and ownership patterns changed dramatically in Ka'eo.

It is not clear if chiefly families with long standing ties to Honua'ula lands, were able to pursue their interests during the Mahele. Cordy & Athens suggest that "high chiefs clearly did not reside in this area. Kamehameha I awarded the Kula and Honua'ula ahupua'a to high chiefs who resided elsewhere—when on Maui, usually in Lahaina." (Cordy & Athens, 1985:13)
However, other researchers have concluded that Kamehameha awarded lands to his own high chiefs, regardless of the traditional chiefly families of the area on other islands. These loyal supporters often did not choose to reside on the lands they owned. Since this was a broader pattern, it would not seem reasonable to conclude that the King's distribution of land in Honua'ula proved that the area had no ruling chiefs of its own, without a considerable amount of ethnographic research to verify such a theory.

Land grants in the Honua'ula area had been made gradually over time during the reign of King Kamehameha III to various families who petitioned the king. It is true that most, if not all of these claims appear to have been to individuals who had been loyal supporters of Kamehameha I and had been promised lands on Maui to reward their support during the times of conquest. Kamehameha II and III generally honored those claims. (Kirch and Sahlin, 1992: 45).

Approximately twenty other Hawai'ian families also purchased lands through the Royal Patent Grant process in the Ka'eo study area, most it seems, motivated by the chance to grow cash crops of Irish or sweet potatoes. (Maly, 2006) During the Mahele, the king offered high chiefs the alternative of commuting (returning) a portion of their lands to the government, or making a cash payment. (Cordy & Athens, 1985:13 citing Indices, 1929:37-38, 68) In Honua'ula, most chose to return a portion (or in some cases, all) their lands to the government, perhaps pressured by the fact that the Kingdom had foreign buyers willing to purchase them.

This appears to be the case with Mahoe, a chief connected to the royal family, who was awarded half of approximately 1,000 acres of government land in the Ka'eo area. He had claimed *konohiki* rights over the entire ahupua'a and several additional parcels in other parts of Honua'ula, but signed an agreement in 1848 in which he received one half of Ka'eo (514 acres) and allowed the king to keep possession of the other half.

Mahoe's land claim was contested by his father-in-law, another ali'i named Pikanele, (see **Historical Figures** section for details) and not immediately confirmed by the government's Board of Commissioners. In 1852, the claim

was decided in Mahoe's favor and he obtained a Royal Patent Grant (no. 835) for the 514 acres, which included 'Apuakehau fishpond and rights to the fishery in Ka'eo. The Government almost immediately sold the remaining half of Ka'eo lands to L.L. Torbert for a plantation (Royal Patent Grant No.234 see fig. 27)

Large Plantations in Ka'eo

Between 1845 and 1848 L.L. Torbert, a sea captain married into a native Hawai'ian family, (see **Historical Figures** Section) and his partner, William Sloan Wilcox, negotiated for several Royal Patent Grants of government land in Honua'ula. One of these was Royal Patent No 120 that contained roughly 2,087 acres and included a sizable portion of our Ka'eo study area. He paid one thousand-six-hundred dollars. He also purchased Royal Patent No. 234, which consisted of 1,986 acres that ran from the shores of Makena to present day Po'olenalena and inland to include all of present day Ulupalakua. This land grant included the entire ahupua'a of Papa'anui, Waipao and Kalihi, all immediately north of Ka'eo as well as half of the traditional ahupua'a of Ka'eo. (Fredericksen, 1998: 12)

Torbert and Wilcox secured a separate parcel (R.P. No. 223-66 acres) for a mauka-makai road from the present day Makena Landing to Ulupalakua. (See **Roads and Trails** Section and fig. 19) In his grant he pledged to respect native house lots, cultivated lands, wells and water. (Maly, 2006:152, 156, 160-161– from Hawai'i State Archives, Interior Department Lands records).

Torbert tried to include the Keone'o'io fishpond area in his grant application, but it was turned down. Oral interviews with kama'aina families indicated that the Kapohakimohewa family had been caring for those ponds in the later part of the 19th century, but Torbert appeared to make requests for as much useful land and coastal sites as he could discover in Honua'ula. (Maly, 2006:179, 186) His Royal Patent 233 claim included the Makena Landing area, however, "the sea, the port, and the rights of the natives to be reserved along with the landing place and sixty fathoms of land from High water mark." (Maly, 2006: 164, citing Hawai'i State Archives, Interior Department letter, Feb 1850)

Torbert built a long stone wall along the southern boundary of his Grant to separate it from Mahoe's adjoining land to the south. (see fig. 5) By 1855, Mahoe and his wife had sold around one-fifth (100 acres) of their Ka'eo land grant to Torbert for three-hundred dollars. (Ibid:168) In 1868, they conveyed

a small parcel to the American Board of Commissioners for Foreign Missions, that was occupied by Keawakapu/Makena church. (see **Ceremonial Sites** Section)
In 1872, after the death of his wife, Mahoe who was living in Kanahena, Honua'ula at the time, conveyed the remaining portion of his original Ka'eo lands and the fishery rights to his three daughters– Kali, Puhipuhi and Hopoe, none of whom lived in Ka'eo at the time. (Ibid: 168)

Mahoe died in the mid-1870's and by 1880, his daughters had leased 141 acres of their Ka'eo lands and fishery rights to J. Kapohakimohewa, another local landowner in the region, and a noted fisherman. Between 1880 and 1910, a succession of Ulupalakua Ranch owners acquired a majority interest (7/12th) in the remaining 400 acres of Mahoe's land from his grandchildren. By 1935, the majority of the Ka'eo lands claimed by Mahoe were in the hands of Ulupalakua Ranch.

Torbert's Plantation to Ulupalakua Ranch

Meanwhile, by 1854, Torbert and his partner had to look for additional capital to keep their Ulupalakua Plantation (also called Torbert's Plantation) afloat. James Makee, another former sea captain, acquired a small interest in the plantation lands in 1854. By 1858, Torbert turned over the rest of the holdings to Makee, who created the famed *Rose Ranch* plantation and sugar mill on Ka'eo lands from Makena Landing to Ulupalakua. (see **Historical Figures** Section)

Makee passed on a portion of his interest in the lands to his son, Parker, in 1878, a year before his death. By 1883, sugar farming and processing in the area had proven unprofitable, due in part to frequent droughts, and the plantation was converted into a cattle ranch. In 1886, the lands again passed into new management as Makee's eight remaining heirs conveyed their shares of the ranch lands to Charles Makee's father-in-law, James Dowsett. (Thrum, 1926, & 1927)

Between 1886 and his death in 1898, Dowsett expanded the Ranch lands by buying up small LCAs from native owners and leasing additional lands from the government. When Dowsett died, his daughter Phoebe, married to James Makee's son, Charles Makee, consolidated the various interests in the ranch. When her husband Charles died, she remarried to James Raymond and their family managed the ranch from 1900 until 1923, when it was purchased by Frank Fowler Baldwin and supervised by his son, Edward. By this time,

the Ulupalakua ranch owned around 28,000 acres, spanning the coastal and uplands from present day Kamaole to Kahikinui. They leased another 35,000 acres of land from the government.

Eventually, Ulupalakua Ranch would own the majority of the lands in the Ka'eo study area, as well as lands to the south and the north, which a century later were transformed into the resort centers of Wailea and Makena.

Ka'eo Villages

"*During these last years of the Maui polity [1700's], Honua'ula appears to have contained 16 ahupua'a, communities whose lands extended from the reef into Haleakala's forest. And, as in the prehistoric period, Honua'ula still seems to have been a political backwater with low population densities,"* (Cordy and Athens, 1985:9).

Mahele records show several clusters of coastal dwellings in the Makena area c. 1850. (see fig. 27) One of these clusters, of around 10 houses, was surrounding Keawakapu/ Keawala'i church in Ka'eo. (Cordy & Athens, 1985:13)

Post-Mahele Village Life

It was not uncommon in the transitional times of the mid-1800's for the wealthiest or most important residents to have wooden framed western-style homes surrounded by a cluster of traditional stone and thatch dwellings. Whether this was the case in Ka'eo is not clear, although there are descriptions in church records of natives having "clean, well-kept houses" in Honua'ula. (Barrere,1975:58 citing Fornander's 1865 report)

By the mid- nineteenth century on, village life in Ka'eo centered around Keawakapu Church and school, Rose Ranch and the busy Makena Landing harbor. Most residents wore clothes made from cotton, used tools made from iron, glass and pottery containers and involved themselves, at least partially, in the cash economy. Some of the young people left Ka'eo to seek education or employment in the urban centers of Lahaina or Wailuku or even Honolulu.

Many of the traditional occupations of village life, such as tool making, stone and thatch house construction or processing fibers for cordage, were likely to have become less common. With the coming of Christianity, ceremonial sites ceased to be publicly valued or utilized and traditional games, art and music forms were reshaped to fit the new religion.

Traditional fishing and gathering practices, salt making and raising animals along with the planting of sweet potatoes and other crops did continue, but loss of population to introduced diseases is likely to have limited the scope of some of these efforts compared to earlier times.

18th Century View

From archaeological remains, it is likely that by the early 1700's villages in Ka'eo were clustered around the various springs and canoe landings and in the vicinity of the traditional north-south and east-west roads and trails.

Past archaeological review in the area has identified site clusters and complexes. However, most reviews have shown little interest in linking a broader range of features, such as ponds, trails, groves, boundary markers, community common areas and gardens into a larger view of a functioning community in earlier times.

18th Century Fishing Village

The natural setting of Ka'eo had many features found in other successful pre-contact fishing villages in Hawai'i . There were good canoe landings, near shore reefs and tidepools, an abundant supply of limu (seaweed), fishponds to provide food for the chiefly class and groves of coconut trees to offer shade and fiber for nets and fishing lines.

Extensive coconut groves are noted in old land records and historical accounts near all three coastal heiau sites (Kalani Heiau, Oneuli heiau and Mo'oiki heiau) in the Ka'eo study area. (Klieger in Gosser et al, 1996:35; Kelly, 1987) The trees offered drinking water in times of drought, food and tempting bait for fish hooks from their mature fruit and dozens of other useful products. The majority of ceremonial sites in the Ka'eo study area, whether heiau complexes, family shrines or fishing ko'a have not been dated. At the present time, it isn't possible to determine if they were built during a common era, or emerged from different times under diverse rulership.

An old lithograph in John Papa I'i's recollections of 19th century life in O'ahu shows a scene by Dampier of a series of fishponds ringed with coconuts along the O'ahu coast. (I'i, 1959: 25) Before the deforestation of the East Maui slopes in the early 1800's, a cluster of similar ponds, surrounded by coconut groves, other trees and grasses could have spread around Pu'u Ola'i. Paths would

have connected the ponds with dozens of platforms, enclosures and terraces that are likely the remains of thatch-roofed house sites and work areas and farm plots. The trails would have connected the family habitation clusters with water sources, heiau and canoe landings and more major roads.

Everyday life took place among these hundreds of rock-formed sites. Here enclosed house sites were surrounded by low platforms which served as work areas for those preparing food, making cordage or nets, carving canoes or crafting fishing gear (probably shaded by kou or milo trees). Other structures served as planting terraces, pathways, wells, imu (earthen ovens), storage rooms for fishing gear and nets, and community gathering areas.

The area now occupied by Keawala'i church also had extensive habitation and use in earlier eras, Based upon recovered artifacts at the site, and its relationship to nearby heiau and fishpond, Donham suggests that it could have been the compound of a "high status individual" such as a local ruling family or have a served as one of the varied residences of one of Maui's chiefly dynasties. (Donham, 1998: 119-121)

18th Century Farming Villages

The middle and upper lands of Ka'eo were also important. They provided access to forest products needed for farming implements like strong digging sticks (o'o), wood for tools, house building and canoe construction, kukui nuts for oil and upland crops such as kalo, wauke or bananas. It is possible that some craft persons chose to live at a further distance from the coast to lessen the walking time between their dwelling and the upland sources of materials they needed for their craft or tool making.

Several agricultural village sites, which showed evidence of occupation from at least the 15th century until the late 19th century, have been uncovered during archaeological review of Makena Resort infrastructure and golf course development in the Ka'eo study area. (Cordy &Athens, 1985 and Gosser, et al, 1996) All of these also had extensive groves of *wili wili* trees, a native species related to the balsa tree that was valued for canoe building and other uses.

One of these villages (site B8-1916), located approximately .5 mile above Kalani heiau and Keawala'i church, spanned almost 2 acres along 3 ridges and several gulches and illustrated the pattern seen again and again in Honua'ula farming sites. Habitations and work areas were built on rocky

(non-farmable) outcroppings overlooking gulches that could be terraced and planted. This village complex was also surrounded by the remains of other small house sites, shelters and planting areas to the southwest. It was excavated, mapped and destroyed to build the Makena Resort water tank. (see fig. 11)

About ten years later, another even larger agricultural village (B8-1969) site was discovered, also at around the 200-400 ft elevation, inland from Oneuli beach and fishpond. Oral interviews indicate that some traditional Ka'eo families specialized in farming or fishing while others were craftsmen.

Based upon this structure, it is likely that farming villages of Ka'eo were permanently occupied by various families over time, although the popular notion among some archaeologists is that farmers lived at the coast and only visited their farms temporarily during planting season.

Substantial pre-contact agricultural villages existed both north (Waiohuli) and south (Kahikinui) of Ka'eo at upper elevations (c. 2,000 ft) (Dixon, Conte, et al, 2000). It is possible that future archaeological review will reveal remains of upper villages in the unsurveyed area between the midlands of Ka'eo (c. 400 ft elevation) and Ulupalakua.

It is also possible that during the time of peace and resettlement that followed Kamehameha's conquest of Maui and O'ahu (1790s), places like Ka'eo experienced not only an influx of new settlers from other islands, but a transformation in land use patterns brought about by the new settlers, who may have utilized lands at higher elevations.

Kirch & Sahlins' research showed this to be the case in O'ahu's upper agricultural valleys. They suggest that expansion of permanent habitation into these upper areas could actually be "…dated (by Carbon 14 testing) almost precisely to 1804, when Hawai'i Island warriors were settled in the O'ahu backcountry (*kua'aina*). Before that, throughout the prehistoric and earliest historic periods, the whole valley (Anahulu) remained used for cultivation, but not habitation." (Kirch and Sahlins, 1992:52)

Many of these same victorious warriors laid claim to the Maui lands of Honua'ula. Did this affect patterns of land use that could be linked to the post-conquest era?

On O'ahu there was at least one very noticeable shift in habitation patterns. There in the leeward Waialua lands, rock shelters, previously occupied only seasonally, were transformed into permanent housing near agricultural terraces where "Around the middle of the eighteenth century, certain shelters as far as six kilometers inland saw the beginnings of permanent occupation." (Kirch 1989).

Similar rock overhangs and cave shelter sites are common in the upper elevations of Ka'eo/ Makena area with 77 sites recorded during previous archaeological surveys. (see fig. 4) While some of these have had testing done, many have been only lightly surveyed, due to the fact that they are such a common feature. Many of these shelters are found near agricultural terraced areas.

The most repeated interpretation of these sites in current research is that of "temporary habitations," dating from the post-contact era (1778 on). These two factors add up to the conclusion that sites like this have little to offer us in terms of the area's history, but based on Kirch's work on O'ahu, they may indeed have much more of a story to tell us about a pivotal era in Maui's past.

A Mobile Population

Kirch & Sahlins describe a "multilocal" pattern of residence in their study of Waialua, and noted that it was common in the post contact period for an individual to spend time living among different branches of his or her extended family. (Kirch/Sahlins, 1992:206)

While such in-depth research has only begun to be done about the social and habitation patterns of families in the Ka'eo area, it seems likely from both archaeological remains and the ethnographic information that has been gathered that there was a good deal of migration involved among the families in coastal Ka'eo and Honua'ula and those of the uplands. This was clearly seen in the church records of the pre-Mahele times and was very apparent during the ranching /farming era of Rose Ranch (later Ulupalakua Ranch) in the upper elevations of Ka'eo.

If a mobile population was a common feature of Hawai'ian culture, it could be useful to re-examine current assumptions used by historic preservation professionals that give greater value to the "permanence" of particular sites or features. A better view could be to evaluate sites based upon their relationships to a larger community framework (i.e. cultural landscape).

Taxes During the Reign of Kamehameha I

"At the taking over of the rule by Kamehameha troubles arose. The country as a whole benefited by the uniting of the government under one head, but most of the chiefs and landlords under Kamehameha oppressed the commoners and took away their lands, thus forcing the people who had owned the land to become slaves.... Taxes were laid upon all holdings whether large or small and were constantly being added to, for there were many landlords and under landlords who demanded tribute... The uniting of the land had brought about excessive taxation.... 'Even the smallest patches are taxed' ... was a familiar saying." (Kamakau 1961: 231 - 232).

From the late 1790s on, Maui was governed from the various capitals of the Kamehameha dynasty. This meant that several levels of taxes were collected locally by *konohiki* (land managers and their subordinates). It would appear that the goods collected became a type of status symbol for the ruling chiefs, another sign of the great power they held over the land.

Native historian John Papa 'I'i, a member of the court of King Kamehameha II, described this system.

"The greatest chiefs had storehouses in the charge of stewards so-called ('a'i pu'upu'u), men of some standing who supervised the disposition of provisions and other wealth." 'I'i went on to describe the 'two or three' storehouses that Kamehameha I maintained near his residence in Kailua, Kona (Hawai'i) in 1812:

"In the storehouses were piled bundles of surplus pa'u [women's barkcloth skirts], malos [men's loincloths] and tapa sheets. These had been given to the chiefs as *makahiki* taxes (annual taxes collected during the winter *Makahiki* festival) that were presented to the gods when they made a circuit of the island every twelfth month. Because the profit received from these taxes on the land was so large, combined with the king's personal shares from his other lands, goods were piled in great heaps."
('I'i 1959: 121; cf. Malo 1951: 145 - 46, 195).

Kirch and Sahlins noted how the kingdom's tax system became a growing burden as the hierarchy of rulership became more complex. With multiple portions of their produce or products going to the various levels of rulers who held authority over the land, commoners faced increasing hardship as Maui transitioned into a market economy. An early 19th century traveler, Shemelin, described condition of farmer's lives as "wretched" and "onerous," for "the

king will sometimes, regardless of circumstances, take as much as two-thirds of the taro and potatoes he has grown"
(Kirch and Sahlins, 1992: 50, quoting from Barratt 1987:100).
From Kingdom of Hawai'i records it would appear that a number of Kamehameha family members were the overlords of lands in our Ka'eo study area prior to the Mahele land divisions. In such cases, Honua'ula residents of the early 19th century would have paid their taxes to these Hawai'i Island chiefs.

Mo'oiki, which is the southern portion of our Ka'eo study area, was under the control of high chiefess Miriam Kekau'onohi (Kamehameha the Great's granddaughter) in the early 1840's. She was serving as Governor of Kaua'i at the time (Klieger in Gosser, et al, 1996:35, citing Hawai'ian Kingdom Interior Dept. letters, 1854:2:478).

Pikanele was a chief who claimed the island of Molokini as well as large tracts of lands in Ka'eo. Mohopilo and Waipao, mentions that the land was given to him by Maui Gov. Hoapili in 1840, who received it from the King. (Maly, 2006: 89- from Native Register, Vol 2:190-191 and Kamakau, 1961:350-351.)

Prison Labor

New laws, influenced by the Christian missionaries, were implemented by Governor Hoapili (also known as Ulu-maheihei or Hoapilikane) who served as Maui's governor from 1823-1840. These laws made many acts such as drinking alcohol, adultery and theft punishable by high fines or, in lieu of the fines, hard labor. For a time, the practice of Catholicism was also a punishable offense under laws prohibiting "idol worship."

"In 1834, in default of a fine of money or property, the punishment was imprisonment for four months, or a sentence of hard labor for an equal length of time. Under this last provision, government roads and walls were built and maintained all over the islands." (Kelly, 1987:93)

This included the Hoapili Trail, (see fig. 28) which traversed rugged lava fields from Manawainui Gulch in Kaupo to Keone'o'io in Honua'ula and continued on through the sandier areas of Makena to Waimaha'iha'i (site of modern day Kihei library). (Kelly, 1987:93 from Cheever, 1851:138-139; Barrere, M.S.: 127).

The Aupuni (Government) Roads and walls in Ka'eo were also completed during the era of Gov. Hoapili using prisoners for labor. (Maly, 2006: 159)

In addition to this new court system, the king and ruling chiefs also exercised their dominion to conscript labor for their own personal projects.
Rev. J.S. Green, in a 1838 letter from Wailuku, observed that Hoapilikane, Maui's governor under the brief reign of King Kamehameha II and a portion of the reign of Kamehameha III,

"…is now ordering people from Honua'ula, one of our outstations, away from home, 20 miles to dig fishponds. They have been here by the fifties to request food."

(Maly, 2006:61, quoting from A.B.C.F.M. Houghton Collection, Harvard).

It would be assumed from this quote that the fishponds in question may have been in the Wailuku/Paukukalo area and that the Honua'ula residents described were from Ka'eo, since church and school records of the 1830's established it as the main population center of Honua'ula district. The Makena church was referred to in many church records as "Honua'ula."

Kaho'olawe Prison Colony c. 1830-1853

After Kamehameha's death, his queen Ka'ahumanu, the kingdom's *Kuhina Nui*, ("prime minister") became a Christian convert and issued her "Edict of 1829" banishing followers of the Catholic religion to Kaho'olawe. It is not clear whether the penal colony on Kaho'olawe had already been established before the edict, but records show it used for male prisoners from the early 1830's until 1853. Women prisoners were sent to the island of Lana'i. Typical crimes listed in kingdom records were rebellion, theft, divorce, breaking marriage vows, murder, and prostitution. Headquarters for the penal colony was located at Kaulana Bay on Kaho'olawe's northern shore. (Kaho'olawe Island Conveyance Commission website, 1991).

Prisoners on Kaho'olawe often ran short of food. There are accounts of desperate prisoners in the 1840's swimming from the penal colony to Molokini islet and then, after resting, several miles more to the Ka'eo/Makena shore where they stole coconuts from the groves near Keawala'i church, canoes, taro and other foodstuffs from the lands of Honua'ula. (Ashdown, 1979:57)

Ka'eo Fishing Practices 1700-1899

On the south coast of East Maui, from Kula to Ulupalakua, a consistently dry and lava strewn country, Makena and Keone'o'io were notable for good fishing: this brought many people to live by the shore and inland." (Handy & Handy, 1972:272)

The area of Ka'eo/Makena and Honua'ula is often referred to by 19th century historians and writers as a place of abundant fisheries. (Kelly, in Clark, 1985:16, referring to articles by A.D. Kahaulelio) This recognition went beyond the island of Maui– laws that were part of the 1839 Hawai'ian Kingdom Constitution addressed the regulation of important fisheries and specifically mentioned, "on Maui, the kuleku of Honua'ula." (Sterling, 1998:216 citing Jordan & Evermann report on Fisheries in Cobb, 361-362.)

Historians believe that Honua'ula residents also fished the waters surrounding Molokini and Kaho'olawe and a large number of pre-contact he'e (octopus) lures have been found by underwater archaeologists in waters between the Ka'eo/Makena shore and the islands of Kaho'olawe and Molokini. (Donham, personal discussion, 2006)

Fishing Village Life

Kelly, in her historical review of Makena describes it as "primarily a fishing community" in pre-contact times (before 1778) but added that Makena also supplied fish "and other products of the sea" to a wide geographic area in post contact period (c. 19th century) as well. (Kelly, in Clark, 1985:11)

Dried fish was a regular trade good item for residents of Ka'eo/ Makena and a means of earning money when the cash economy prevailed. Salt for preserving fish was gathered from shallow basins along the rocky shoreline of Oneuli (just north of Pu'u Ola'i). (Sterling, 1998:5, 213; Maly, 2006: appendix A-243 interview with R. Kalani) Salt was also gathered to be traded or sold to uplanders. (Maly, 2006) In early times, fish were often arrayed on rock mounds to dry in the hot sun. Many such *ahu* or mounds are found on coastal lands in Honua'ula which could have been used for this purpose or the drying of fishing nets.

Archaeological excavations of habitations and work areas along the shore and in nearby inland areas show much evidence of the fishing craft being practiced during this era. Fishhooks and fish hook blanks, files made from

sea urchin spines and coral "abraders" (hand sanding tools used to shape wood or bone), bits of volcanic glass to cut fibers for fish lines and nets, shell and stone lures for octopus and formed "breadloaf" sinkers for deep water fishing have all been found in 18th century sites in the Ka'eo study area. (Haun, 1978, Cordy, 1978 el al)

One of the most commonly described practices associated with Ka'eo/Makena is the community fishing technique of *hukilau*. *Hukilau* fishing involves several villagers in canoes setting a succession of long nets across sandy, shallow bottomed areas like Makena Bay, where large schools of akule fish (big eyed scad) headed during their spawning season.(see fig. 29) As the fish are herded closer and closer to shore, the whole community joins in to pull the catch in, with all sharing in the bounty. (Kelly, in Clark, 1985:11)

20th century informants interviewed by Marion Kelly in 1985 reported a rich knowledge of fishing sites and practices specific to various shoreline and deeper ocean sites off Ka'eo and other Honua'ula locales. These had been gathered from their parents and grandparents who lived farmed and fished in 19th century Ka'eo. (Kelly, in Clark, 1985:35-40)

Fishponds

The Ka'eo study area has two fishponds with pre-contact and perhaps historic (post 1778) use. It is likely, based on older map sketches, that several additional ponds existed just inland of the shoreline surrounding Pu'u Ola'i and their location is noted in figures 2 and 3.

It appears that Apuakehau fishpond, located a few hundred yards seaward of Kalani heiau, was actively used at least during a portion of this era, since it was disputed in land claims during the mid-nineteenth century. (Maly, 2006) In August of 1871, a severe windstorm or hurricane hit the Ka'eo shore and descriptions noted that "all the native houses along the shore were destroyed." (Ashdown in Clark, 1974: IV-109 quoting a letter from Capt. Makee)

This storm could have also damaged 'Apuakehau pond and affected its original capacity to contain fish. However, earlier in the same century it was viewed as a valuable resource. As noted in an earlier section (***Mahele***), Mahoe, the *konohiki* of Ka'eo, insisted that he have specific fisheries rights (which included the right to claim fish from 'Apuakehau pond) along with

holding land title in the area.
The Kapohakimohewa family, who came to own land on the coast just south of ʻApuakehau fish pond, acquired fishing rights for the ahupuaʻa of Kaʻeo from heirs of the *konohiki,* Mahoe in the late nineteenth-century (1880). (Maly, 2006:180) Kaʻeo resident David J. Kapohakimohewa (c. 1860-1920ʻs) is said to have cared for the fishponds of Keoneʻoʻio. (Maly, 2006:179 & Interviews, A-186). Other 20th century informants indicated they and their elders often fished in the area of the ʻApuakehau pond. (Maly, 2006: appendix various interviews)

Fishing Shrines

Specific shrines associated with fishponds were described in the mid 1800ʻs by John Papa Iʻi as *ʻaoa*, "a place where offerings were made to the gods for whatever concerned the ponds." Iʻi described such a pond (in present day Kakaʻako in Honolulu) which was surrounded by coconut trees and featured a houses for the gods, such as the moʻo goddess Kihawahine, who was traditionally believed to live in and watch over the ponds. (Iʻi, 1959:26, 91) It is possible that such shrines may have once existed in association with either the fishpond in Oneʻuli or the one at ʻApuakehau since there is a strong legendary association between the *moʻo Inaina* and Puʻu Olaʻi crater, which overlooks the Oneʻuli pond.

Shark Traditions

Many Kaʻeo families, such as the Kukahiko and Lonokailua ʻohana have a tradition of an ancestral association with the sharks that frequent the area of Makena landing, Puʻu Olaʻi and the shores of Honuaʻula. Family members report being aided by sharks, who helped guide fish into their nets or acted as protectors during dangerous conditions at sea.

A special underwater cave in Puʻu Olaʻi was referred to by Ashdown as a gathering place for sharks, in her collection of local historic tales. (Ashdown, 1970) Members of local Makena fishing families also report that their kupuna regularly visited the same cave to care for the sharks. (Maly, 2006:A-237) A similar cave dedicated to the shark deity Kamohoaliʻi is also located on the island of Kahoʻolawe, a place where many generations of Honuaʻula dwellers also visited and fished.

Ashdown also described the Kanahena heiau (Walker site 195) a few miles south of Kaʻeo, as a place where ceremonies were conducted by families

who wished to prepare a deceased relative to be offered at sea. (see fig. 2) Tradition held, that if this offering was greeted by the appearance of sharks with markings similar to the family's traditional tapa pattern, it was a sign that the recently deceased "had become a 'sea guardian'" for the family. (Ashdown, 1970:19)
Oral interviews conducted for this study found native Hawai'ians who offered family traditions regarding deceased family members and sharks at Kanahena that mirror Ashdown's account, but did not want them publicly discussed.

Roads and Trails & Other Public Works- 1700-1899

"Main modes of transportation in ancient times were walking and canoeing. The people of old had well developed trail systems with primary mauka-makai routes and lateral coastal routes. Often, main mauka-makai routes would intersect with primary coastal trails at canoe landings."

Dana Naone Hall- testimony to Maui County Cultural Resources Committee May 2, 2002 p. 37 of minutes

Harbors

Traditional Hawai'ian settlements in Ka'eo study area were connected to the outside world by ocean travel. It was common during the division of lands (1845-1855) for land claims to mention canoe landings in deeds as a valued attribute of the property. (Klieger, 1996:32)

As the Hawai'ian economy shifted from a subsistence model to one based upon cash and commerce, the need for harbors grew more important. Historical documents indicate that in the 19th century steamship landings were utilized at various points along the Honua'ula coast.

These included Palauea, and Keawanui (near present day Makena Surf condos), both north of Ka'eo/Makena; 'Apuakehau Bay (Keawala'i Church) and Makena Landing in Ka'eo; and Kanahena and Keone'o'io landings, south of Ka'eo. By the 1860's Makena Landing was the main port for the entire region, and the second busiest port (after Lahaina) on Maui. (Kelly, 1985:27)

By the 1870's, improvements at Makena Landing were being funded by public appropriations, such as one passed in 1877 by the Kingdom's

Legislature allotting $1,000 for the Makena breakwater, on the condition that Rose Ranch owner Makee pay for any improvements beyond that amount himself. The legislature pledged an additional $1,500 for the project on the condition that "Makena Landing will become a public landing." (Maly, 2006:200 citing Hawai'i State Archives, Interior Department Book 14:247)

It is possible that entrepreneurs of the day also planned other landing areas. L.L. Torbert, original founder of Ulupalakua Ranch) asked for and was awarded sandy beachfront land at Oneloa and Maluaka in his 1850 Grant, which he possibly saw as being of future use for shipping crops.

Prior to 1850, nearly all the inter-island sailing vessels were owned by chiefs and were widely used by Hawai'ian travelers. (Thomas, 1983:57) In his history of inter-island shipping, Thomas noted:

"The native Hawai'ian's love of going "a-voyaging" meant good revenue for the owners of the coasters, who charged from fifty cents to a dollar for passage. Prior to 1865, the only limit as to the number of passengers carried on interisland ships was the number that could be crammed on board." (Thomas, 1983:31)

Mauka-Makai Roads

Aupuni Road c. 1830's

In this era, roads and harbors were strategically interlinked. The earliest maps of the region (c. 1840's- fig. 27) depict an 'Aupuni (government) road from the upper trail, (the road from Makawao to the village of Ulupalakua), to the coast. This trail ended at 'Apuakehau Bay in Ka'eo, (present-day site of Keawala'i Church.) 'Apuakehau point has the remains of a fishpond that was valued by residents of the region and the Bay, which is also known as Keawakapu (connoting its possible connection to high ranking chiefs or spiritual leaders) served as an important canoe landing and traditional center over many centuries.

References to the mauka-makai Aupuni Rd, in Ka'eo indicate that it was built by convict labor gangs, likely during the rule of Maui Gov. Hoapili (1824-1840). (Kelly, 1987) Ka'eo residents used the 'aupuni road to travel and trade with the uplands of Ulupalakua, but it appears from public records, that upkeep was sporadic. By 1847 the 'Aupuni road was described by a government official as "in miserable condition and no one will turn on to repair it." (Maly, 2006: 159 citing G.M Robinson report of Nov. 1847 in Royal

Patent Grant No. 120)
This 19th century road coincidently passed nearby Ke'eke'ehia Heiau (see fig. 19) in upper Ka'eo and Kalani heiau in coastal Ka'eo. (see fig. 2) This raises the question that the "road" may have been constructed over an earlier foot trail that connected the local population with both these ceremonial sites during the 17th and 18th century, or it may have replaced an earlier trail with a slightly different alignment. The 'Aupuni road is sketched in on several old land deeds and this study has attempted to relocate its route on modern-day maps. (see fig. 2)

Modern day Ka'eo residents were aware of an east-west trail that emerged at the coast a little south of the old 'aupuni road alignment, which they believed connected the Kalani heiau with the upper lands of Ka'eo. (Maly, 2006:A-232, Robert Kalani interview.)

Torbert's Road c. 1850

In the late 1840's a new entrepreneur, Linton Torbert (also called *Hulipahu*) approached the King to purchase a large track of land for a plantation in Ka'eo. Torbert also proposed the construction of a new road, to replace the rough 'Aupuni road, His road was completed in the early 1850s and connected his Ulupalakua sugar plantation and farmlands, with the newly established steamship landing in Makena Bay (present-day Makena Landing).

Between 1847 and 1850, Torbert was awarded several Royal Patents for over 5,000-acres of government lands in Ka'eo and other ahupua'a. The Makena landing area was included in one grant of 66-acres of land Torbert purchased in 1850 from the royal government for his new road. (See **Ka'eo during the Mahele section**) Torbert needed to establish his own landing at Makena since the land surrounding the government landing at 'Apuakehau Bay and the earlier 'Aupuni Rd had been awarded to a prominent Hawai'ian, Mahoe during the Mahele.

Torbert's road was described in a 1847 government report submitted by G.M. Robertson, who was Secretary of the Interior Department of the Kingdom of Hawai'i during the time of Kamehameha III in the 1840s.

"Mr. Torbert pointed out to me the track of the new Road he intended to make for his own use, between the Sugar Mill and Beach, and for which he wished to procure a charter. It will take considerable labor to make the Road and a deal of care to keep it in repair. I think that any man who will make a

road in such a place and keep it in repair well deserves to enjoy the exclusive benefit of it except for foot passengers. The road on which I road from the beach to Mr. Torbert's house was made by him and was used by everybody, for this reason that the former road (the east-west 'aupuni road) made by the pa'ahao (prisoners), is in miserable condition and no one will turn on to repair it." (Maly, 2006: 155, quoting from Royal Patent Grant Packet, No. 120)

Torbert's road, which eventually became known as the Ulupalakua Road or the Makena-Ulupalakua Road, served as a focal point for the community long after Torbert himself was forced to give up his interest in the Makena Harbor and ranch lands between Ulupalakua and the shore.

By 1856, Torbert was in bankruptcy and his interests were eventually purchased by Captain James Makee. In the late 1890s, a small store, Tong Lee store, was established by two Chinese men in a building they leased from the Kukahiko family at the end of Torbert's road, by Makena landing. This store was later leased to Chang Ying, also called Chang A'ana, and his wife, Harriet Kukahiko (Chang). She was a grand-daughter of John and Kamaka Kukahiko. In the early twentieth century, the Chang store was relocated to a building uphill of its original location, just above the junction of the Ulupalakua Road and the old Makena road leading to Kihei and Keone'o'io.

Although Torbert's route to Makena landing became the major east-west route in Ka'eo during the mid- 19th century on, the intersection of the old "aupuni road and the Makena coastal road, which aligned with Kalani heiau, Keawakapu Church and school and the old canoe landing at 'Apuakehau bay, also continued to function as an important community center into the early days of the 20th century.

Makena-Ulupalakua Road Improvements

By the late 1880s, residents and landowners in the area were asking L.A. Thurston, Minister of the Interior Department to

"…lay out the new road from Ulupalakua to Makena. The old road (Torbert's Road of 1850's) needs repairing, but we would much prefer making a new one…" (Maly, 2006: 207, quoting from Hawai'i State Archives, Interior Department communication to L.A. Thurston, Minister of the Interior, 1889)

By 1896, residents of Makena and Ulupalakua so desired a better road that they forwarded a petition to James A. King, Minister of the Interior of the new Republic of Hawai'i , signed by 106 individuals who stated:

"…we, your petitioners, do most respectfully and humbly make request that the New Kula-Makena Road be built according to the survey made by Mr. W.W. Brunner."

Among the family names listed on the petition were many of the prominent Makena families of the time: J. Poepoe, J. Kukahiko, R.A. Wilcox, J. Uweloa, J. Kapohakimohiwa, local judge, J.M. Napulou and others. At issue was the route of the road, which had received a $10,000 appropriation from the 1896 Legislature. Kula residents wanted the road to head more directly there from Makena while Ulupalakua Ranch wanted to take a longer route, which would provide better access to ranch lands.

Hoapili's Coastal Road

Hoapili, was a close associate of Kamehameha I. He was appointed in 1823 to be Maui's governor. As governor, Hoapili also acted as a judge and it was said in newspaper articles of the time, "only he had the power to punish or to free, perhaps, the transgressor."

Under his leadership, construction of an improved road from Honua'ula to Kaupo was begun, using the labor of prisoners. (see *Prison Labor* under **Historic Events & Settlement Patterns)**

An earlier trail traversed these same lands, attributed to Kiha Pi'ilani's road building efforts (c. 1500's). Hoapili's coastal road ran across lava fields along the shore and then continued along the sandy shores to Ma'alaea Bay. While earlier trails followed the natural terrain, Hoapili's road took a straighter course and was engineered with substantial rockwork to span gulches and minimize steep slopes. (see fig. 30)

Coastal roads and trails were important links to canoe landing areas, since canoes were widely used to travel from one side of the island to another and to visit other islands. Hoapili's road, although improved enough to allow horse and oxen cart travel, also helped connect many popular canoe landing areas in the Honua'ula District, including Ka'eo, Kanahena, Keone'o'io, Keauhou (Chang's beach) and Palau'ea. These sites were also utilized as steamship

landings during the mid 19th century.
From a description, written in 1865, it appears that *Hoapili's Road* suffered for lack of maintenance as Hawai'ian population of the Honua'ula area declined. The article stated

"…along this road was many stony beds, … it was a good road when Hoapili traveled it (Hoapili died in 1840). Along the road, many people traveled, but in this time, there are not many people who travel it, for it is in disrepair." (Nupepa Kuokoa, May 18, 1864: 4, by W. Kealoha, translated by Maly, 2006)

It appeared that Thurston was regularly besieged by Maui government officials with requests for road repairs. Honua'ula resident William Wilcox wrote to the minister in December, 1888,

"I don't wish to trouble you with our small matter, we have supervisors and we have Road Boards, but we have no Roads. The last time the Beach road was repaired according to the oldest inhabitant was in Mr. L.L. Torbert's time, some 35 years ago from Makena to Kamaole. The road is so bad that carts can hardly get along." (Maly, 2006: 207, quoting from Hawai'i State Archives, Interior Department correspondence, Dec. 9, 1888)

Upper Roads

Under Hoapili's management, an Upper Road that connected Ulupalakua with Kaupo and Kipahulu was also improved. This roadway also dated from much earlier times, most likely as part of the Pi'ilani Road (*King's Highway*, c, 1500's) The upper road is shown on maps from the 1880s, but it appears from communications dated June 9, 1866, that this road had substantial work done on it in order to improve access between Ulupalakua and the communities along the Hana Coast (Maly, 2006)

Nineteenth Century Road Repairs

It appears from kingdom records that some government roadwork was done by means of natives giving their labor in the form of a "road tax." H.W. Daniels, Maui road supervisor, reported to the kingdom's Interior Department in 1876 that he had:

"…about 40 natives not yet worked and their road tax for this year, which will be available to assist the tradesmen while at work."

(Maly, 2006: 205, quoting from Interior Department report, July 4, 1876.)
Records indicate that a serviceable road connecting Kipahulu and Kaupo with Ulupalakua was completed by 1871. The section from Ulupalakua to Kaupo is described as: "…very good except one gulch, which is washed out a little." However, the road from Ulupalakua to the coast at Kalepolepo, site of the Kihei landing, was described in 1880s communication as:
"in very bad order, and full of loose stones and holes. I do not think it has been worked for five years. Nine miles of it is in bad condition."

The forerunner of the present day Kula highway, the upper road from Makawao to Ulupalakua was described through Kula as being "…full of loose stones and holes and wants working very bad (sic)."
(Maly, 2006: 206, quoting from Hawai'i State Archives, Interior Department).

Other Public Works in Ka'eo

A government-owned storehouse and landing were also constructed on 'Apuakehau Bay and are pictured in the earliest maps of the region. (see fig. 27) It is possible that these were connected with a short-lived sugar business venture launched by King Kamehameha III in 1841. The King, who had his capitol in Lahaina at the time, entered into a partnership with several Americans to plant and process sugar cane on government lands in the upper portion of Ka'eo. (Cordy & Athens, 1985:13 citing Sterling, 1965:9-10) The landing is shown on old maps on the north arm of the Bay. The storehouse was likely damaged during a hurricane recorded in 1871. (Barrere, 1975:76, Thrum, 127:36))

Makena Lighthouse

Makena had its own lighthouse on Nahuna Point (North point of Makena Bay, just north of Ka'eo study area), which had been established by Wilders Steamship Company. The Hawai'ian government had established its own beacon on Kanahena Point, roughly three miles south of Makena Landing. Communications about the two stations resulted in confusion from the far-away bureaucrats in their offices in Honolulu. The keepers of both lights lived in the village of Makena, which added to the confusion. John Kukahiko, who lived near Makena landing, was the lighthouse keeper for the private Makena lamp until his death in 1902. Complaints to the government that the "lighthouse at Makena" had not been lit prompted a reply from a local resident, "Makena is where Kukahiko…is taking care of the lamp…this lamp

which is located at Kanahena is the one which this foreigner is not looking after properly" (Dean, 1991: 67-68, quoting letters to the U.S. Department of the Interior). A navigational beacon appears to also have been lit on the top of Pu'u Ola'i during the steamship era, according to oral interviews with local residents. (Maly, 2006: interview with R. Kalani)

'Aupuni Wall

Other public works projects during the time of Gov. Hoapili and Kamehameha III include Ka'eo's 'aupuni wall, which is pictured on the same maps (see fig. 27). The introduction of cattle to Honua'ula led to the need for this rock wall to protect the homes and gardens of coastal dwellers from the foraging beasts. Significant sections of this historic wall still exist in Ka'eo on private lands and are worthy of preservation.

Makena Post Office 1888 - c.1918

It appears that Makena had a post office for a period of time (most likely associated with the era of regular steam ship visits to Makena landing harbor). A website on Maui post office sites states:

"Thus, at the start of 1880, Maui had eight post offices: Lahaina, Makawao, Wailuku, Olowalu, Kahului, Ulupalakua, Hana and Haiku. In the economic boom years following the Reciprocity Treaty, offices on Maui proliferated as the population and economy expanded. In quick succession, new offices were opened all over East Maui: Hamakuapoko (1882), Spreckelsville (1883), Huelo (1884), Hamoa (1885) and Makena (1888). (Post Office in paradise website, 2006. No specific public record source is given for the information)

An obituary in the Maui News of July 21, 1906 notes the passing of John M. Napulou, postmaster of Makena, on July 12, 1906. Napulou is also described as a former District Judge of Honua'ula. (Maly, 2006:179). A 1908 church correspondence refers to Makena being the name of the "port and the post office.." (see p. 52, *Keawakapu/Keawala'i Church Section*)

In 1985 interviews with local residents of Ka'eo area, anthropologist and author Marion Kelly described residents of Ulupalakua arriving in Makena on Friday night (c. 1916-18) to stay overnight and pick up the family mail from the weekly delivery to Makena. It is possible that the Ulupalakua Post office had closed during that period. Families would wait until Saturday afternoon for the mail carrier, who started out in Wailuku earlier in the day,

to make his way through Kihei to Makena. (Kelly, 1985: 16) Later maps (USGS, 1925) indicate that Makena's postal service was being handled by a post office in Ulupalakua.

Some informants mentioned to archaeologist Rose Schilt that a post office was located near the north-western corner of the Garcia property. (see fig. 40) It appears from old maps that the 'aupuni (Government) road, constructed by the Hawai'ian kingdom in the 1830's between 'Apuakehau Bay and Ulupalakua, ran immediately north of the Garcia land, which is located, across (mauka) from Keawala'i church and 'Apuakehau Bay in Makena. (Schilt, 1979) However, none of the maps reviewed for this study had a Makena post office site indicated.

In an interview with Kepa Maly (2005), Jimmy Kapokakimohewa mentions a store, run by his grandfather, David Kapokakimohewa (c. early 20th century), being located across the road from the Kapokakimohewa home on land later acquired by the Garcia family. Jimmy's father, James Olelo Kapokakimohewa, delivered fresh poi to the store, riding to and from Kula by horseback. (Maly, 2006, Appendix A:156, 171)

As the described location of the store and the post office seem similar, it is possible that a structure, which served as both, once existed in that vicinity. Napulou, the postmaster at the turn of the century, had purchased an interest in the Mahoe family land in 1899, and storekeeper David Kapohakimohewa had purchased an interest in the same land from several of Mahoe's grandchildren between 1908 and 1909.

The Mahoe land at that time could have included the land adjacent to the juncture of the old 'Aupuni Road and Old Makena Rd. However, in the deed for this transaction in the Bureau of Conveyances only mentioned "an undivided interest" and not a specific location for the property being acquired by Napulou. (Maly, 2006: 179) Schilt in 1979 her reconnaissance of the Garcia land, did find a number of artifacts from the 1850-1900 period (pottery, glass etc) on the northwestern side of the Garcia parcel in the general area described by informants as the post office site. (Schilt, 1979)

Mrs. Nancy Bak Chun who lived in Makena with her grandparents, the Lonokailua family, in the years between 1920 and the early 1940's, recalled that residents went to the Chang store by Makena Landing to pick up mail. (Interview with author, 2007) It is likely that any Makena Post office which may have existed in the 1880's could have closed by the mid-1920's when

Makena had less importance as a shipping port.

Walls Marking Torbert & Mahoe Land Grants

Extensive rock walls, constructed in the mid 19th century, appear to have marked the boundaries of a number of land grants in Ka'eo. The two land landowners of the region during the 1800's, L.L. Torbert/Ulupalakua Ranch and Hawai'ian konohiki, Mahoe, each appeared to have had such walls marking their north-south boundaries.

The wall separating the north of Mahoe's land from the south of Torbert's grant (see fig. 4 and 5) is particularly well described in deeds, up until the early 20th century. For example, Mahoe's heirs describe the family lands that they are selling to Ulupalakua Ranch as "lying on the South side of the wall known as 'Torbert's Wall.'" (Maly, 2006:183-184 citing deed of 1909 between John Sniffen, husband of one of Mahoe's daughters, and J.H. & Phoebe Raymond, owners of Ulupalakua Ranch.)

The wall on the south boundary of Mahoe's land is not as widely referred to, however, it is possible that a 900 ft long segment of east-west wall that was recorded in Cordy's 1978 survey of Ka'eo as site B8 -169 (Cordy, 1978:66) is a portion of Mahoe's Grant 835 boundary wall. An upper portion of what appears to be the same boundary wall (recorded as site B8-152 by Cordy & Athens in 1985) was described as continuing east beyond the survey area of the Ka'eo water tank site. (see fig. 4 and 5)

This wall, which was connected to events and people important to Hawai'i's history was determined to be "of doubtful value, considering the information already available," in it's archeological review. Since the archaeologists decided that "further investigation is therefore, not recommended," the lower portion of the wall was destroyed during construction of Makena Resort's South golf course. (Cordy & Athens, 1985: Waterline and Access Road Reconnaissance:3)

A little to the north of the possible Mahoe boundary wall was a 150 ft long section of wall that roughly followed the southern boundary of Torbert's original Ka'eo land grant. This wall and an adjacent *ahu* (stone cairn, often used as a marker), which was thought by archaeologists to be a possible ahupua'a boundary marker, were both destroyed during construction of an access road to the Makena Resort water tank in the late 1980's. (Ibid)

Ceremonial and Civic Sites

Changing Spiritual Practices

Eighteen-century Hawai'i was swept by battles and conquests. The ruling chiefs of that era built and rededicated numerous temples to seek favor with their war gods, but times of war also required places of peace. None of Ka'eo's ceremonial sites has been directly linked with the war dedication practices of this era. Kalani, Ka'eo's largest heiau was described as a luakini (temple for human sacrifice) to Stokes (AD c. 1916-18) however, other research did not confirm that function. What is certain, is that little is yet known about the majority of these sites in terms of their dates of use.

A substantial amount of cultural deposits that have been dated in Ka'eo show a concentrated population occupied its lands between the end of the seventeenth century and the early 1800's. This likely did include some habitation by chiefly persons who would have also utilized the area's ceremonial sites. (Donham, 1998:119)

As has been theorized in earlier chapters, the lands of Ka'eo, Kaho'olawe and other portions of Honua'ula may have had long ties to members of the Pi'ilani dynasty. If this was true, some of Ka'eo's ceremonial centers may have had traditional use by chiefs of this line for purposes not of war, but of healing or sacred communion with powerful spiritual forces. These are matters not usually discussed in written historical accounts of the time. Most of Hawai'i's early historians were either Westerners, who viewed Hawai'ian traditions through their own cultural bias, or native Hawai'ians who were recent Christian converts, and tactfully avoided references to many of the old ways which could have conflicted with Christian beliefs.

A few foreign explorers visited Honua'ula during the 1700's (see Historic Settlement Patterns section in this chapter), but village life in Ka'eo was little affected. It still revolved around traditional skills, materials, practices and patterns. Adults trained children and youth in the practical skills they needed to fish, farm and process food and fibre. Master teachers guided their pupils in the crafting of structures, canoes, tools, clothing, ornament and implements.

Some youth were sent to *halau* (schools) situated near *heiau* (temples). They learned from master teachers (*kahuna*) about healing, dance, chant, navigation, auguries, weather observation or dozens of other skills that

required years of patient training to perfect spiritual and physical mastery. About thirty years after the beginning of the nineteenth-century, this system changed. The old religion was made irrelevant after the death of Kamehameha I. Christian missionaries were given lands by the ruling chiefs for churches and schools. Adults and children flocked to the new schools, learning to read and write and studying Bible verses. By 1850, the Church and school had replaced the heiau and halau as the center of village and spiritual life for most of Ka'eo's residents. For some, the change meant that centuries of spiritual traditions could now only be followed in secret.

The observations of Kaili Kame'ekua (1816-1931), a traditional spiritual practitioner from Moloka'i, give an insight to this shift in traditions. Kame'ekua, who lived to be 115 years old, came from a family of learned seers. She began her spiritual studies at the age of 12 in a halau at Kapualei heiau on Moloka'i. Her education prepared her to be a chanter and keeper of the ancient *mo'olelo* and genealogical records.

Her children, who were all born after 1850, grew up in a very different world. She recounted to them that up until 1840, all the children of Moloka'i "*… started their years of training with a ritual of consecration at the heiau.*" But this practice changed over time so that "*….by the turn of the century [end of 19th century], going to the heiau- except by the very old- diminished.*" Kame'ekua noted that elders who visited the heiau openly brought shame to the younger Christian members of their families. (Lee and Willis, 1990: 54)

This pattern was probably much the same on Maui Island. Family histories do tell of at least one Ka'eo family who made traditional use of Kalani heiau in Ka'eo and maintained other cultural practices during the 1800's. Perhaps there were also a few others, but it was not discussed in public accounts of the time.

As discussed above, Christian missionaries and their converts operated the first schools and brought reading and writing to Hawai'ian communities like Ka'eo. It is not surprising then, that most of the written record of life in Ka'eo, from 1840 on, revolved around descriptions either the Ulupalakua plantation (Rose Ranch) or the Keawakapu/Keawala'i church. While all of Ka'eo's heiau were likely to have had community use during the 1700's, most appeared to be forgotten by the early part of the twentieth century. Their stories remained alive only in a few family histories and the mute evidence available from overgrown stone walls and terraces.

When Stokes ,(c. AD 1919) the first archaeologist to visit Honua'ula, sought information about local heiau, only the Pa'alua heiau at Keone'o'io was described as having had recent caretakers. Of course, it could have been that many local residents felt uncomfortable discussing such matters with an outsider and simply avoided answering Stokes' questions. Ashdown described the *paniolo* (cowboy) caretakers of her childhood as taking her to various shrines and temples in the Ka'eo region and throughout Maui during the same pre- WWI times.

She also described one paniolo, Kalani Paha'a, as a practicing *kahuna* (spiritual master or priest) in her writings (Ashdown, 1970) Paha'a's descendents who were interviewed for this study, were aware of his use of traditional heiau in the Kanaio area, and possibly also in Ka'eo, during the late 1800's and early twentieth century, confirming Ashdown's observations. (Personal communication with Lablatt ohana. April, 2006))

Keawala'i Church and Honua'ula School

Honua'ula-Keawakapu Church (later renamed Keawala'i Church) began its life as a meeting house in 1832 adjacent to Keawakapu Bay and the 'Apuakehau Fishpond in Ka'eo. A school site was also established on the same land around the same time.

"The schools generally served as both native churches and meeting houses – as at Keawakapu in Ka'eo – and were established in most populated ahupua'a around the island of Maui; native teachers and lay ministers were appointed to oversee their daily activities." (Maly, 2006: 209).

Records kept by David Malo indicate that by the spring of 1843, there were eight separate schools in the Honua'ula District, each with its own teachers, serving a total of 229 students. (Maly, 2006: 209).

The church and school were located on land that had been granted to the Mahoe family in the Mahele. They later deeded one approximately half-acre lot to the American Board of Commissioners for Foreign Missions for the church. In 1853, a separate lot was deeded by Mahoe for the church school. Records indicate that between 1857 and 1858 a stone church was constructed on the church site. (Ibid))

Keawala'i-Keawakapu Church

In 1998, Keawala'i Church commissioned an extensive archaeological review of their property in anticipation of the construction of an additional building on church grounds. Theresa Donham, the archaeologist hired, to do the archaeological survey and testing of the area, accessed old Hawai'i Evangelical Association records and compiled a very thorough history of the church. Her report referred to a 1908 article by R. B. Dodge describing the rededication of Keawakapu Church. In the article, Dodge quoted longtime local resident M.J. Kapohakimohewa, who stated that the church was founded in 1825 in a grass house, near the present site of the stone structure. (Donham, 1998:28, quoting Dodge, 1908, manuscript, Hawai'i Mission Children's Society Library).

Donham noted that there was not specific proof of the church beginning in 1825 by her study, but she was able to document the presence of a school in Honua'ula as of 1828. She based this on a travel log kept by the Reverends Green, Richards and Andrews which referred to "a large school place in Honua'ula." (Donham, 1998: 26, quoting from Barrere, 1975: 84).

Records show for certain that the church had a meeting house structure by 1837 and it appears to have been the first such church outstation established in the Honua'ula District. The likely reason for this was the access to the safe harbor conditions of Makena Bay and Keawakapu/'Apuakehau Bay.

Early reports by church administrators regarding "the outstation at Honuaula" described "a new native meeting house" having been built and noted that the house was well-filled on the Sabbath. A minister by the name of Bartimeus (Pua'aiki) is referred to as a minister at the early Honua'ula meeting house. According to Donham, Bartimeus spent his earlier days as an entertainer in the Royal Court of Princess Kamamalu (wife and half-sister of King Kamehameha II) . Bartimeus was converted to Christianity in 1820, and after studying, was licensed to preach in 1841. He was officially stationed at Honua'ula in 1843. (Donham, 1998: 27 with references to Barrere, 1975: 55)

In 1852, a communication from L.L. Torbert, owner of the large ranch in Ulupalakua, commented that: "the meeting house at this place has blown down. The natives wish me to help put it up. I am not disposed to take any trouble about it so long as we have no preacher. When we have a preacher

of our own….then we will have a good house, with a shingle roof & floor & seats." Torbert referred to a petition signed by 42 residents asking for the mission to send a new preacher. (Maly, 2006: 210, quoting from Hawai'i State Archives, Series 261).

By the mid-1850s, Evangelical Association records indicated that the Honua'ula District churches (Paeahu to Kanaio and Kahikinui and Auwahi to Manawainui) were organized into a separate church. Before this, they had been considered outstations of the main church in Wailuku. However, there was no resident pastor in Honua'ula in 1857, but the congregation raised funds for a meeting house as well as a teacher for the school. Church records indicate that a stone meeting house was built by the congregation between the years 1857 and 1858. It was noted that the church had 243 members. In addition, the parishioners raised separate funds for the church bell, which was installed in 1862. The stone church and bell established during the mid-1800s are still in use today by the congregation of Keawala'i Church.
(see fig. 9)

Factors in the surrounding community, such as the viability of the Makena-Ulupalakua Road, appeared to affect church attendance. Reports from the mid-1860s, 10 years after the construction of the new stone church, noted that the children's Sunday School had been closed and that there were two places for parishioners to assemble on the Sabbath. "…one by the sea and the other inland, because far away and bad is the road between the two church buildings."

It would be assumed that the original Honua'ula Church at Keawakapu drew families from the uplands of Ulupalakua and Kanaio when it first began, but the deteriorated condition of the mauka-makai road to the coast made it more convenient for upland residents to have their own meeting service rather than spend hours trying to negotiate the treacherous road to the coast. (Donham, 1998: 28, quoting from Pastor H. Manase, Honua'ula Station report, 1866)

In 1868, Mahoe and his wife officially divided off a .59-acre portion of their remaining 400 acres of Ka'eo lands and deeded it to the American Board of Commissioners for Foreign Missions. The commissioners officially purchased the property in 1864 for $80, but Mahoe donated $45 of this total. The parcel was later transferred to the Hawai'ian Evangelical Association.

On Aug. 9, 1871, a tropical storm or hurricane descended over the Honua'ula

area. Ulupalakua Ranch records indicated damage to ranch buildings and Thrum, in his Hawai'ian annual of 1926, described the wind as ripping the roof off the storehouse at Makena (the government storehouse which was located immediately north of the church) and…"swept all the native houses into the sea – all within six hours." (Donham, 1998: 29, quoting Thrum, 1926:36). Donham theorizes that roofs on the church and school are likely to have also suffered damage during this severe wind storm.

The church underwent repairs around 30 years later in 1906 under the supervision of R.B. Dodge. It was noted that repairs included the installation of a wooden floor. When the 1906 floor was replaced in 1994, a traditional floor covering of *'ili'ili* stones (small rounded beach pebbles) was found intact beneath the wooden layer.

A rededication ceremony was held in 1908 to commemorate building repairs being completed. Dodge wrote an article about the event in which in used the term 'Keawakapu Church' to describe the facility. According to Donham, by 1909, Dodge had "formally dropped Honua'ula as a name for the church and elected to use Makena, Keawakapu." Dodge's reasoning for this reflects the growth of Makena's importance in the region. He refers to the new name as being more appropriate…"because Makena is the port and post office and Keawakapu is the old historic name for the mother of all three (Honua'ula) churches." (Donham, 1998: 30, quoting from Dodge ms., on file in the Hawai'i Missionary Children's Society Library)

Donham's research into the evolution of the church's current name, Keawala'i, tracks it back to the early 1940s and in a letter written by George M. Kauaulalena to L. Dunston, which was dated from Honua'ula, Makena, July 31, 1944. In his letter, Kauaulalena wrote "this name Keawala'i is the new name of the first church of Honua'ula, Makena, Maui." (Ibid)

Honua'ula-Makena School c. 1840

In 1840, Kamehameha III enacted a law that required the maintenance and local support of the native schools as part of the Constitution of 1840. It required that in a village with 15 or more students, the parents were to organize and secure a teacher. Local school agents were appointed to distribute funds for teachers' pay and to acquire land for school sites. This law also allowed for the use of revenues and work of the "Poalua" (days that common people pledge to labor for the King on his lands) to be used in support of the schools. School records were kept by the mission stations, but, by the late 1840s,

government representatives also kept records of school expenditures, lists of teachers, etc., which were researched by Maly for his cultural-historical study of Ka'eo and vicinity. (Kepa Maly, 2006: 209, citing from Kingdom Constitution of 1840 and Kuykendall and Day, 1970)

Ka'eo's school and church was a center for the entire Honua'ula District, and in 1852, a separate school lot was surveyed and set aside by Mahoe adjacent to the church site. About fifty years later, a new Makena school was established on a lot about a half-a-mile south of the original site, in Maluaka. This Maluaka location served as the community's school from the early 1900s through the late 1920s. Both this site and the site at Keawakapu/ 'Aupuakehau Bay went by the name of Makena School, causing some confusion.

It would appear that the present-day church site had some use as a schoolroom. When its floor was replaced in 1994, archaeologists discovered many bits of slate, pencils, buttons and other artifacts, which appear to have been a result of students using the space for a school before the site moved further south. (Donham, 1998:16) Schools were also built further south at Kanahena and Keone'o'io and in the uplands of Ulupalakua and Kanaio. A structure found on private land (SIHP 4504 on TMK: 2-1-07:71) north of Ka'eo in the ahupua'a of Waipa'o is also thought to have possibly served as a school house during the 1800's. (Fredericksen and Fredericksen, 1998a:36)

By the 1850s, supervision of the schools and been taken over by the kingdom government and Maly, in his research, includes a number of communications among local residents, the Superintendent of Public Education and other state officials. One of the interesting facts to emerge from this is that the second Makena School, which was established on a 2-acre lot, where the Maluaka Beach parking lot is today, seemed to create a great deal of confusion in its time. At first, the Department of Education purchased a lot for the school that was considerably inland of coastal Ka'eo/Makena (just below Pu'u Ke'eke'ehia) in Ulupalakua, but nothing was ever built on this lot.

Instead, the school was constructed in 1904 on the 2-acre Maluaka lot which was conveniently located just mauka of the Old Makena Road and a few hundred yards from the shore. (see fig. 31) In 1910 state officials discovered that the land on which the school was built was owned by an individual who had not granted the state any use of it, P. E. R. Strouch. Strouch had purchased the land from the original grantee, Makahanohano, who had received a Royal Patent Grant on the land in the 1850s. (Maly, 2006: 214,

quoting from records in the Hawai'i State Archives, Series 261)
Strouch wanted $600 for his 30 acres, which included the school site, but an exchange of government land was proposed to him for the 2 acres. It is not noted how the matter was resolved, but the state continued to own this property until the 1980s when it was part of a trade of 63 acres of state owned land made by the state with Seibu/Makena Resort for 8 acres of beachfront land at Oneloa (present day Makena State Park). The majority of residents in Ka'eo and adjoining ahupua'a attended the Makena School for the first six grades up until the end of the 1920s. From 1930 on, Makena school children were obliged to go to the elementary school several miles away, uphill in Ulupalakua.

Ceremonial Sites: Kalani and Ke'eke'ehia Heiau & other Wahi Pana

"..because something is fragmented or you only have a portion of a site left, [the conclusion is] *that therefore the site is no longer significant. All of the work I have done in the past 20 years or so has been against that notion that because something is not completely whole as it once was, it's no longer significant."*

Dana Naone Hall, testimony to Maui County Council Public Works & Transportation Committee, July 2, 2001.

Ka'eo: a Place of Spiritual Strength & Peace

The specific history of Ka'eo's pre-contact spiritual practices and centers is not easily available, except by piecing together fragments from various sources. We know of the existence of at least four heiau and four ko'a, (Hawai'ian places for worship, teaching or ceremonies) in the Ka'eo study area, two of which (Kalani & Ke'eke'ehia heiau) have had some reported use as late as the 19th and early 20th century. It is almost assured that all had use in the 1700's as well. As discussed earlier, only two major ceremonial sites in Ka'eo study area have had any of their features carbon dated. Both of these tests indicated use from the mid-fifthteenth century (c. AD 1420-40).

None of these sites has come down to us undisturbed, and several (Ke'eke'ehia, Pu'u Ola'i heiau and ko'a) have not even been decisively relocated. As noted earlier, specific accounts pertaining to these spiritual sites are very limited in the publicly accessible research materials currently available. Therefore, it is necessary to rely on indirect sources such as traditional place names, old legends, and family stories to begin to establish the relationship among these spiritual centers and Ka'eo's earlier inhabitants. This has been discussed in

earlier chapters.

Place Names of Ka'eo

In the early days of the nineteenth century Ka'eo's landing area was referred to by the name *Keawakapu,* (interpreted as "kapu" or "sacred" harbor) signifying that the area had associations with individuals or activities (or, perhaps, both) of a high rank and spiritual nature. The nearby *Kalani* ("heavenly") *heiau* is just a few hundred yards inland from *Keawakapu* harbor. A possible earlier name for this site was *Oneuli (literally "dark sands")* but it is important to remember that the dark sands were from Pu'u Ola'i, a hill formed from the body of Mo'o goddess Inaina, and therefore, the name *Oneuli* may have had a hidden reference to the goddess. Ashdown suggests that "Oneuli" means "the land of mystery."

(Ashdown, 1970: 50) She also refers to the *Naha-wale* coconut grove near Keawala'i church and the heiau as deriving its name from the *Naha* or sacred *ni'au-pi'o* lineage of the Maui chiefs and serving as a *pu'uhonua* (place of refuge). (Ibid)

The Pi'ilani dynasty, who may have been associated with sites in Ka'eo, were famed for their long history of sacred marriages. In this traditional view, the most desirable of unions were those of high-born full, or half-brothers and sisters (*Naha*). Such marriages and the offspring they produced were thought to concentrate the mana or spiritual power of the family bloodline to produce god-like beings. Keopuolani, the sacred wife of Kamehameha the First and mother of his successive ruling sons, was the product of such a series of unions in the Pi'ilani dynasty. Does this assembly of place names refer to a richer and more complex historical significance to the Ka'eo lands that is missing from the common historical accounts? Only patient research will give us the answer.

The Transition of Spiritual Centers: from Heiau to Church

The Keawakapu/Keawala'i church site lies between the *Kalani/ Oneuli heiau* and the Keawakapu harbor. Archaeological review has indicated pre-contact use of the churchyard area from at least AD 1100 on, with a definite layer of use dating to the 18th and 19th century. (Donham, 1998: 119,120)

Donham notes that the "locations of heiau along the shoreline of South Maui were also the places selected for missionary stations" indicating that a potentially higher status was acknowledged for locations which had served as the spiritual centers of earlier times. She offered the examples of Kalepolepo,

Ka'eo, Kanahena and Keone'o'io as locations where missionary stations were established, not far from once prominent *heiau*. (Donham, 1998: 20) Bordner made the same point about the Kanaio church being adjacent to local heiau. (Bordner, 1996)

The Keawakapu/Keawala'i (Makena) church in Ka'eo, which claimed its original name from Keawakapu bay, exerted a powerful spiritual influence in its era. Keawakapu church attracted worshippers from afar and served as the "mother church' of the entire Honua'ula district. It is interesting to note that even in present times, Keawakapu/Keawala'i Church is one of the most popular missionary-era rural churches on Maui—once again attracting worshippers from other regions of Maui.

It is possible that the *Kalani/ Oneuli heiau* and the adjoining complex of features that once occupied the current church site, were an equally important center in a much earlier era. This is a topic, which Donham suggested in her 1998 study of Keawala'i Church grounds, and it is worthy of future research. (Donham, 1998: 121-123)

Oral testimony from Ka'eo/Makena area residents also suggests that an ancient roadway exists from just south of *Kalani heiau* to the uplands of Ulupalakua. Residents reported personal experiences of hearing and seeing *huaka'i po* ("night marchers") following this same path past the *heiau* on their spirit journey to the uplands. (Maly, 2006:A-226, 227)

Ke'eke'ehia Heiau/ Hale Pueo

Nineteenth century maps of the Ka'eo area show a *heiau* near the summit of *Pu'u Ke'eke'ehia*, in Ulupalakua, virtually due east of the *Kalani heiau* site. The *Ke'eke'ehia heiau* was described by 19th century correspondent, J. Kealohapau'ole, as *"a heiau built in remote times. The sounds of the Drum can be heard from it on the nights of Kane and Lono."* (J. Kealohapau'ole, newspaper Kuokoa, Oct. 19, 1872). It is possible that the pathway described by local residents once connected both *heiau* and other sites along the way. (See **Civic and Ceremonial Sites** section, Chapter II for more discussion of this topic)

Ashdown, in her commentaries about the upper lands of Ka'eo in Ulupalakua, describes the heiau located on the slopes of Pu'u Ke'eke'ehia as being a "place of refuge." (Ashdown, 1971: 44) Additional informant interviews could help determine if Ashdown's observations were corroborated by other

oral histories.

Kalani/ Oneuli Heiau

Kalani Heiau, itself, is a good-sized edifice whose original L-shaped outline has been eroded by time, or perhaps the efforts of zealous Christian converts wishing to dismantle the homes of the old gods. It appears to have had terraces descending from its west-facing wall. (Haun, 2000) Later research work on the site has suggested that a second enclosure nearby on the same site may have functioned as a Hale o Papa (women's temple.) (Haun, 2003; Donham, letter to SHPD, July, 14, 2003, SPHD files) An elaborate complex of walled sites on the neighboring parcel (TMK: 2-2-1-7:66), once part of Mahoe's land grant, and in modern times, the home place of the Lonokailua family, who were traditional Hawai'ian cultural practitioners, also deserve to have additional research done to determine their possible connections to the Kalani heiau complex. (Donham, personal communication, June, 2007) Currently these cultural remains are being interpreted as being associated with historic ranching and will be destroyed, with no further research. (Spear, 2002)

Kalani heiau stands obscured by heavy brush and trees on private land, mauka of old Makena Rd and Keawakapu /Keawala'i Church. (see fig. 20) As discussed earlier, a few local fishing families have reported the *heiau* being an important part of their spiritual practices over several generations. The *heiau* on Pu'u Ke'eke'ehia in Ulupalakua and the other ceremonial complexes in Ka'eo could have also been important spiritual centers held in high regard in earlier times, but forgotten by history, just like the nearby Island of Kaho'olawe. (See **Civic and Ceremonial Sites** section, Chapter II for more discussion of this topic)

Fishing Shrines

Ko'a, or fishing shrines, were an essential part of pre-contact fishing culture along the Honua'ula shore. Oral traditions connect many fish shrines in Maui, both on land and underwater, to the legendary Hana fisherman and demi-god, Ku'ula-kai and his sons. Shrines were used ceremonially to give thanks for the bounty of the ocean and safe journeys of fisherfolk. Some ko'a also served as navigational markers to help guide fishers to family fishing grounds while at sea. Underwater shrines are traditionally believed to have increased the abundance of fish in the area.

As discussed earlier, certain shrines were associated with reverence for the

shark *'aumakua* or *kumupa'a* (family gods and guardians) who watched over fishing families. Others may have functioned as part of the ceremonies surrounding local fishponds. I'i described shrines he referred to as *'aoa* near the fishponds, which once existed along the Honolulu shoreline.

Other cultural features in the Honua'ula area which related to fishing practices included canoe landings, ahu or mounds for drying fish, workshop areas for creating fishing implements and nets and several *kilo* (fish observation points) including a pohaku kilo i'a (fish spotting rock), which was identified by Marion Kelly, near Makena Bay. (Kelly, in Clark, 1985: 11)

Four *ko'a* have been described by local residents or by past archaeologists in the general Ka'eo study area. These include a shrine "at the base of Pu'u Ola'i," another is an underwater cave, along the flanks of Pu'u Ola'i, one at Onouli (Oneuli or Onipa'a) and another just south of Maluaka (Naupaka) beach. The three above-surface sites are likely to have been valuable landmarks to help locate specific fishing grounds during this era.

Of the four first identified in 1929-30, two have not been positively re-identified (Pu'u Ola'i). Another was interpreted as a "historic house site" and destroyed during golf course construction (Maluaka) and the fourth was neglected, overgrown and unidentified for seventy years and is now proposed to become a landscape feature in a condominium project (Oneuli or Onipa'a, SIHP site 5711). (see **Ceremonial and Civic Sites** section, Chapter II, for more about this topic)

Pu'u Ola'i and the Mo'o Goddess

The reverence accorded to the legendary landmark of Pu'u Ola'i is also an important part of the region's history and spiritual significance. Ancient tales attribute Pu'u Ola'i 's creation to an epic struggle between the *mo'o* goddess *Pu'u Inaina*, residing on the island of Kaho'olawe, and the Hawai'ian volcano goddess *Pele* (many *mo'o* are deified ancestors who become supernatural beings and appear as lizard or dragon-like creatures, or are able to take different forms).

Pu'u Ola'i is said to be the goddess's tail smote from her body after a battle with *Pele*, while her "head" became the nearby islet of Molokini. (Fornander:1916, 5:514) *Mo'o* have a long history of being associated with fresh water ponds and fishponds in traditional Hawai'ian tales. (I'i , 1959:91) Pu'u Ola'i has traditional fishponds to both the immediate north and south. Were there tales

of the *mo'o* goddess *Inaina* residing in the ponds and watching over them as the *mo'o Kihawahine* did at the pond of *Mokuhinia* in Lahaina? Ashdown has suggested so, but provided no specific source for her information. (Ashdown, 1970) Was there a shrine or *heiau* where offerings were left for *Inaina* or another *mo'o*?

Klieger describes known places of worship for the *mo'o* Kihawahine:

"…hale puaniu, the coconut flower temples associated with ali'i nui at the largest temple complexes; hale o Papa, temples for women built as an adjunct to the exclusively male heiau luakini; and smaller ko'a, which could be dedicated to mo'o guardians of freshwater fishponds as well as to the gods of saltwater fishing." (Klieger, 1998:14)
Several ceremonial sites in the lands of Ka'eo have possible connections to the guardian mo'o, but as yet, these remain undocumented.

As mentioned earlier, the fact that specific traditions concerning Ka'eo's ceremonial sites were not recorded by 19th century historians and cultural commentators such as Fornander, Malo or Kamakau may have been due more to reluctance of families to discuss their sacred ancestors with outsiders, than the lack of available tales. As discussed above and in earlier chapters, in Hawai'ian tradition, *mo'o* were often creatures, which guarded freshwater ponds. They also were seen as directly connected to certain families as *'aumakua* or *kumupa'a* –ancestors who continued to serve as family gods and spiritual protectors.

Maui's chiefly Pi'ilani family had as their *'aumakua* the famous *mo'o*, *Kihawahine*. *Inaina*, the *mo'o* associated with Pu'u Ola'i may also be a form of Kihawahine's ancestor Mo'oinanea, connected to the most ancient lineage of these supernatural beings. (personal discussion with *kumu* Akoni Akana, January, 2007)
Inaina may have been associated with the traditions of families who dwelt in Ka'eo a millennium ago or more. Families whose stories or chants currently remain "lost" to history. (for more discussion on *Mo'oinanea*, see **Historic and Legendary Figures** section of Chapter II)

Heiau of Ka'eo and Kaho'olawe: A Spiritual Connection?

It is interesting to note the connection between the island of Kaho'olawe and the Pu'u Ola'i area in the ancient legend of *Pele* and *Inaina*. The fact that a similar connection may also exist between *heiau* on Kaho'olawe island and the *heiau* complex in Mo'oiki was discussed in Chapter II. As mentioned,

the unnamed heiau complex (SIHP site no. 1855) is immediately behind Pu'u Ola'i, at the South end of the Ka'eo study area. There, on a ridge a few hundred feet mauka of old Makena Rd. is a U-shaped *heiau* with descending terraced platforms. It was originally surrounded by at least one-dozen other stone enclosures, platforms and terraces. This *heiau* is open to the west and situated at a spot with a dramatic view of the eastern end of Kaho'olawe Island where *Hakioawa heiau* is located. (see fig. 2 and 21) (for more discussion see: **Ceremonial and Civic Sites** section of Chapter II)

Mo'oiki Heiau Complex

The Mo'oiki ceremonial complex was not recorded by Winslow Walker in his 1929 Maui study. It was, however, known to at least one native Hawai'ian archaeological researcher, the late Charles Keau, who helped guide Bishop Museum Anthropology Department head Kenneth Emory around Maui sites in the early 1970's.

The first archaeological reconnaissance survey of Makena Resort lands, conducted by Stephen Clark in 1974, recorded this as yet unnamed complex as "site B8-9" and strongly recommended it for preservation and interpretation. (Clark, 1974) In 1978, archaeologist Alan Haun visited the same site before golf course construction began in the surrounding area. Haun's map showed the *heiau* complex as having 12 features and he suggested that additional enclosure and platform sites to the south and east may have also been connected to the complex. (Haun, 1978)

There is no indication of any further testing or work on this complex being done in subsequent archaeological review of Makena Resort lands since Haun's 1978 effort. No radio-carbon site dating has ever been done on the complex.

A site tour offered by the landowner in 2003 to members of concerned citizen groups showed the *heiau* and various site features being destabilized and overgrown by invasive shrubs. (see fig. 32) It appeared that the entire ridge where the ceremonial complex was located serves as a "rough" feature in the Makena golf course. It's connection to recorded sites on Kaho'olawe to the direct west, or *Pu'u Mahoe* or *Pu'u Ke'eke'ehia* to the East, has never been explored, although such alignments are not uncommon among pre-contact Hawai'ian ceremonial sites. (See **Civic and Ceremonial Sites** section, Chapter II for more discussion of this topic)

Temples of Lono

Several *heiau* found in the Honua'ula region exhibit a notched or L-shape. Some researchers interpret such structures as being agricultural (*mapele)* temples, dedicated to the Hawai'ian deity, *Lono*. L-shaped temples include *Kalani heiau* in Ka'eo, *Pa'alua heiau* in *Kalihi* (Keone'o'io) and one of the ceremonial structures in the coastal portion of Palau'ea (SIHP1029). Lono was described as the god of agriculture, fertility and peace. He, along with Ku, the god of war, was already revered in Hawai'i at the time the powerful priest *Pa'ao* arrived (c. AD 1145-1200) , bringing his gods of war and conquest from the far lands of *Kahiki.*

Kalani heiau has been various described as a *"luakini"* (sacrificial temple) (Stokes, 1919) and a "fishing temple." (Maly, 2006: A-226, 227) Ashdown described it as a place to "hold burial ceremonies for the populace." (Ashdown, 1970: 22) The one family interviewed thus far who indicated multi generational traditional use of the site, were involved in spiritual practices connected with fishing activities. They had no knowledge of any sacrificial use of the *heiau* passed down through their family traditions. It is possible that there was a traditional *makahiki* grounds which served as a gathering place for the entire Ka'eo *ahupua'a* near the *Kalani heiau,* and that the site had an earlier association with *Lono,* ruler of the *makahiki* season.

Ashdown referred to an *ulumaika* course (a form of "bowling," utilizing convex disc-shaped stones rolled along a smooth course) near the Makena church and such courses were often associated with *Makahiki* celebrations. (Ashdown, 1970:51) An *ulumaika* stone was found during archaeological review of a parcel near Makena Landing, a short walk away from the church/ *heiau* area. (SIHP 5123, Dega,Tome, 2002: 14)

The *Makahiki* festival which honors the god Lono, is held in the fall season (October-November to January) after the crops have been gathered. The Lono tradition was deeply connected to both the pig (*pua'a*) and the sweet potato *('uala*). Both of these agricultural activities were very widely practiced in the Ka'eo study area from the 15th century or earlier, up until the beginnings of the 20th century. It is possible that *Kalani heiau's* L-shape reflected it's original dedication to Lono and the importance of sweet potato cultivation and other agricultural activities in the community. (See **Historic and Settlement**

Patterns section, Chapter II for more discussion of this topic)
The surface lands of the once busy port area of Makena/ Ka'eo have been extensively disturbed by two centuries of livestock ranching, commerce, military activities and road building. Given these existing conditions, the area's deeper history is more likely to be revealed by careful subsurface research. Donham's archaeological work at Keawala'i church site, which revealed 5 additional intact subsurface features and hundreds of small artifacts, has greatly enriched our knowledge of life in Ka'eo over the past 800 years or more. (Donham, 1998)

HISTORICAL AND LEGENDARY FIGURES

The Pi'ilani Dynasty: Kahekili & Kalola- Battles of AD 1700

In the late 1770s, Maui and Hawai'i chiefs fought each other in a series of wars. *Kalaniopu'u,* the Hawai'i Island chief, raided the East Maui region of Kaupo, but his forces were repulsed around 1775. The next year, he landed a major army at Honua'ula and the district was plundered, according to accounts captured in oral history. *Kalaniopu'u's* forces then continued on to land in the Ma'alaea area and marched on to attack Wailuku. (Kamakau, 1961)

Outwitted by the forces of Maui *Chief Kahekili*, the Hawai'i warriors were beaten, leading to a temporary truce. Not easily deterred, *Kalaniopu'u* came back to Maui again in 1779, raiding Kaupo, Kaho'olawe and continuing along Maui's leeward coast to Lahaina and Lana'i. Longer battles took place in Hamakualoa and Ko'olau districts where his supporters held important lands in Hana and East Maui. *Kalaniopu'u* was married to *Kahekili*'s sister, the High Chiefess *Kalola,* but that relationship did little to dampen his desire for battle against the Maui forces. In this society of plural marriage, *Kalola*, it must be mentioned, had at least four other chiefly husbands as well.

Maui chief *Kahekili* took advantage of *Kalaniopu'u's* illness in 1781 and was able to re-take Hana and Kipahulu districts. *Kalaniopu'u* died in 1782 and eventually Kamehameha I arose to assume leadership of the Hawai'i Island forces in 1790. During these same years, *Kahekili* raided the island of O'ahu, which he was able to conquer in 1783. *Kahekili* divided up the rich lands of O'ahu and parceled them out to many of his closest warrior companions. *Kahekili* also wielded influence on the island of Kaua'i where his brother, *Ka'eo*, married into the ruling family.

Around 1785, while the chiefs of Maui and Hawai'i were not actively at war with each other, Kamehameha I sent a force, which attempted to take back Hana and Kipahulu. This force was defeated, but in 1790, Kamehameha returned and was able to defeat *Kahekili's* son, *Kalanikupule*, in two decisive battles. One of these took place in the region of Halehaku in the district of Hamakualoa and the other, more famous battle, in 'Iao Valley in Wailuku.

After this decisive victory on Maui by Kamehameha's forces, which included the use of Western-style armament such as cannons, a truce was arranged with *Kahekili*. Part of the truce included the marriage of Kamehameha to *Keopuolani,* who was his niece and the descendent of both the sacred lineages of Maui's Pi'ilani dynasty and Hawai'i Island's Umi dynasty.

While many historians regard the lands of Ka'eo and Honua'ula as rural backwaters, far removed from the great generals and armies that were writing Hawai'i's history before Western Contact, it is possible that they were seen in that time as a place of refuge.

Royal Chiefs in Honua'ula: The Chiefess Kalola c. AD 1710-1790

The *Ahupua'a* of Ka'eo may have been the residence of a variety of important chiefs and other historic figures over the past thousand years. Unfortunately, the oral history of those days is all that remains to give us clues of the people and places from the past. While the Hawai'ians had a strong tradition of *mo'olelo,* or oral storytelling, there was also a great deal of history and culture lost during the missionary era in the rush to embrace a new religion with new gods and customs.

One story has come down connecting a famous Hawai'ian chiefess of the 18th century with the lands of Honua'ula. The high-born chiefess *Kalola,* was the daughter of famed Maui chief *Kekaulike* and sister of his successor, *Kahekili.* She is a pivotal figure in Hawai'ian history, for it is two of her children who were the parents of Maui's highest born chiefess; Queen *Keopuolani,* who became the sacred wife of Kamehameha I.

Kalola married Hawai'i High Chief *Kalaniopu'u* in the mid 1700's and had a son, *Kiwalo.* From another marriage to *Kalaniopu'u's* half-brother *Keoua (father of Kamehameha I)*, she had a daughter*, Keku'iapoiwa*. When these two mated, their daughter, *Keopuolani* was regarded as possessing god-like qualities, and

carried the highest rank *(ni'aupi'o*) (Kamakau, 1969:263)
Kalola herself, was the highest-ranking Maui chiefess in her day and "probably carried the power" of her divine ancestor, the mo'o goddess, Kihawahine. (Klieger,1998:17). After the death of her powerful husband, *Kalaniopu'u* (uncle of Kamehameha I) in 1782, she returned to Maui and took a new husband, *Ka'opuiki*.
Historical accounts mention a royal visit to the Honua'ula region in 1785. Fornander tells of one of Kahekili's appointees, a minor chief who managed the lands of Kula and Honua'ula, abusing the people there. A rebellion followed in 1785, while Kahekili was living on O'ahu. Kahekili's son, Kalanikupule, returned to Maui to restore order and remove the offending administrator, but local justice had already prevailed and the man had been slain.

According to historians, Kalanikupule was accompanied on this mission by a royal party. This included several warrior companions (his brother and uncle), his aunt, High Chiefess Kalola, her newest husband Ka'opuiki, her two high-born daughters and her three or four year-old *ni'aupi'o* granddaughter, Ke'opu'olani (Maui's most sacred ali'i of this era.) (Kamakau, 1961:142-144; Fornander,1880:2:214, 228).

Neither Kamakau nor Fornander are specific about how long the royal party visits Maui or where they stay during that visit. But history does place Kalanikupule and his fighting men successfully fending off another Hawai'ian island invasion of Hana the next year (1786) and a few years later (1790) mentions that Kalola is living in Honua'ula with her husband Ka'opuiki. (Kamakau.1961:145)

One historical account (Kamakau, 1961:145) describes the pair as residing in Honua'ula, giving no specific location. Another places them at Olowalu (Fornander, 1969:232). Donham made a case for the fact that *Kalola* and her husband as *ali'i* were likely to have compounds in several places, and could have easily been transported in their canoe from the landing in Ka'eo to Olowalu. (Donham, 1998:12) Klieger describes the royal family of Pi'ilani's day (sixteenth century) as being mobile, and holding court in a number of locations. (Klieger, 1998)

It appears that the use of the place name "Honua'ula" during the 18th and 19th century, often referred to the area of Makena Bay and Ka'eo. This leads to the possibility that the high Chiefess actually spent some period of time living somewhere in Ka'eo/Makena, possibly with her daughters and granddaughter, as well, to keep them safe. The sheltered landing of

Keawakapu Bay in Ka'eo (site of the 'Apuakehau fish pond and the present day Keawala'i Church) may take its name Ke-awa-kapu ("Bay that is Kapu or sacred and reserved for those of high rank") from the long-standing use by ali'i families of the area.

Kamakau's account of Kalola has her and her daughters and grand-daughter (the divine princess, Keopuolani) escaping Kamehameha's forces (1790) by traveling from 'Iao Valley to Olowalu and then sailing for Moloka'i. There they resided for several years in Kalama'ula. (Kamakau, 1961:149) Klieger describes Kalama'ula as "a holy spot named after their 'aumakua mo'o, Kihawahine Mokuhinia Kalama'ula." (Klieger, 1998:19) This would tend to establish a pattern of royal family members taking up residence in places that offered spiritual protection as well as more worldly support.

History tells us that Kalola died on Moloka'i not long after Kamehameha's forces defeated her nephew, Kalanikupule's, army in Iao Valley (c. 1790). (Fornander, 1880, 2:237-238) In 1794, her younger brother Kahekili, Maui Chief and conqueror of O'ahu, died in Waikiki.

After the decisive battle of Nu'uanu, O'ahu, in 1795, Kahekili's long time adversary, Kamehameha ruled the islands of O'ahu, Hawai'i, Maui, Moloka'i Kaho'olawe, & Lana'i, with Kalola's grandaughter as his queen. (Fornander, 1880:348)

Kalola and Ka'opuiki in Honua'ula

Previous to Kamehameha's attack on Maui (c. AD 1790) Kalola and *Ka'opuiki* were connected with an infamous incident in Maui's history: the Olowalu Massacre. The massacre involved interaction between Maui natives and a ship, the *Eleanor* (some accounts use the name *Eleanora),* captained by Simon Metcalf, which landed at Honua'ula in 1790. Barrere suggests that this was Makena Bay (Barrere,1975:21).

As the story is told, *Kalola* and *Ka'opuiki* and their entourage joined others in greeting the foreign seafarers and offering trade goods, such as pigs, sweet potatoes and other foods. In the course of the trade, *Ka'opuiki* noticed the small rowboat, which the *Eleanor* had tied up at its stern. He returned with several men at night to capture the boat after he felt slighted and insulted by the ship's captain during the trade arrangements. A sailor guarding the boat was killed in the process and the Hawai'ians took the boat to another location, which was not specified, and burned it to recover the valuable iron

nails and keel, which were the main parts that interested them.
The story continues with the next port of call being Olowalu. *Ka'opuiki* and *Kalola* land in Olowalu with the iron remains of the boat and the body of the slain sailor. The *Eleanor's* crew discovered that some of the people who came to trade were from Olowalu and headed there to revenge themselves for their missing boat.

Kalola, sensing their intentions, declared a *kapu* that was unique to her family lineage: the *kapu* of the withering grass that forbade any of the villagers to make contact with the ship. The *kapu* lasted three days, but when it was lifted, the villagers were not convinced by *Kalola's* premonitions and headed eagerly out to the boats to trade again. The ship began firing its canons and small arms. More than 100 villagers were slaughtered before the remainder could retreat to shore.

This story is well told in the annals of Hawai'ian history and it is the *Eleanor* and her sister ship, the *Fair American* that actually provide the conquering chief Kamehameha I with two captive British seamen, Isaac Davis and John Young. Both these men served the future conqueror as technical advisors on European weaponry use, giving him a decided advantage in his battles.

The reference to *Kalola* and *Ka'opuiki's* residence in Honua'ula has been overlooked by most historians as an inconsequential detail in a story with a far more dramatic twist. When Donham did her work on the Keawala'i Church site, she proposed a very interesting theory:

Noting that the church site had evidence of previous structures and use, which predated the 13th century, (possibly as early as 1,000 AD) as well as "a landing, a fishpond, a *heiau* and numerous pre-contact era residential sites in the immediate area" Donham suggests that this is a very likely site for a chief's compound to have been located. She added that "….the landing name, *Keawakapu*, invokes affiliation with high status." (Donham, 1998:123)

Donham's excavations show the pre-contact use of the coastal area where Makena's historic Keawala'i church is located, dated from 1,000 AD on, with a substantial amount of use dating from the late 18th and early 19th century, when *Kalola* lived and "travelled to and from Honua'ula." (Donham. 1998: 119)

Donham suggested that a number of artifacts which were consistent with late 18th century use by a "high status person" were found during her research

into the old church site at a certain subsurface level. (Donham, 1998:119). She theorized that these objects, such as a well crafted bone pin, a polished shark's tooth and other pieces of cut and polished bone would have been possessed by a person of high rank and that their subsurface location indicated that the area north of the existing church building, was being used for permanent occupation before the church was built.
Donham suggested that this desirable ocean site may have held a residence used by *Kalola* and her chiefly family. (Donham, 1998:119)

It is likely that the high-born couple had a variety of companions and servants who always traveled with them, and wherever they dwelt would need to provide shelter and food to accommodate this support team. The presence of a small fishpond, *'Apuakehau*, immediately adjacent to the church site, also adds credibility to Donham's theory. Fishponds are almost always connected with the presence of a chief and a ruling hierarchy.

Of course, like any worthwhile mystery, questions remain to be answered. If *Kalola* and *Ka'opuiki* spent a period of time in Ka'eo in the late 18th century, was there a chiefly compound overlooking Keawakapu Bay that belonged to them or to family members or loyal supporters of Kahekili? Did they utilize the *'Apuakehau* fishpond and offer supplications at the nearby *Kalani heiau*? Was the Apuakehau fishpond watched over by the *mo'o* goddess *Kihawahine,* Kalola's sacred ancestor? Were there caretakers or a *kahuna* (priest) who resided in the area of the *heiau* during this era? Did the *konohiki* dwelling on *'Apuakehau* point (see next section) utilized in the early 1800's by *Pikanele* and others serve as part of a compound for a local ruling chief or chiefess? (for more discussion of Pikanele's housesite see his entry in this section)

A number of cultural sites have been recorded in the vicinity of the *Kalani heiau* itself that could have been associated with a village, which once surrounded it. Much yet remains to be discovered in Ka'eo. Some of the lands immediately east of the *heiau* (lands being proposed by Makena Resort for a commercial shopping area) were only quickly surveyed by archaeologists in 1979 and have not had any in-depth review since that time. (Jourdane, 1979)

It is quite possible that a chiefly compound was along the seashore in Ka'eo and was supplanted by the later construction of Keawakapu/Keawala'i Church and school in the 1830's. This was a time when the traditional *kapu* system was repudiated by high-ranking chiefesses *Ka'ahumanu* and *Ke'opuolani* and many traditional Hawai'ian *heiau* and their related structures were destroyed or disassembled to build churches. Wailehua heiau, a noted

Hawai'ian temple which had occupied the shore in Lahaina since the days of chief Kekaulike, was reportedly disassembled to gather stones to built a wall around Queen Ke'opuolani's tomb upon her death in the early nineteenth century. (Sterling, 1998:38.)

Konohiki of Ka'eo
Pikanele -served as konohiki from 1836-1852

In the early 1800's, a man of chiefly lineage named *Pikanele*, who was connected to Gov. Hoapili's household in Lahaina and was associated with the royal family of Kamehameha, (Kamakau, 1961, 302) was managing a number of lands in Honua'ula District. Pikanele was described as a *kaukau ali'i* or "lesser chief" who had "been given lands and a houselot in Honua'ula by [Gov.] Hoapili-kane, who had received them from Kaikio'ewa." (Barrere, 1975:32 citing Native testimony records in state archives, 2:75)

Kaikio'ewa is described by Klieger as a "kahuna (priest)" who was given the young prince Ka-lani-kau-i-ke-auoli (Kamehameha III) to raise in "a traditional manner as a divine Hawai'ian ali'i." Klieger relates about the prince: "*Until the age of five, he was guarded by Kaikio'ewa at O'oma, Kekaha, in North Kona, Hawai'i .*" (Klieger, 1998:24 based upon Kamakau, 1961:264)

Kaikio'ewa's relationship to Pikanele and Hoapili is not made specific in this discussion, but the fact that all three were associated with the lands surrounding the 'Apuakehau fishpond in Ka'eo would infer that it had some worth to all concerned for a variety of reasons, spiritual and material. Kaikio'ewa was a kahuna put in charge of the care and instruction of the Prince, who through his mother, Queen Keopuolani, was a direct descendent of the mo'o goddess Kihawahine. It is likely that lands the kahuna had an interest in would also have some relationship to Kihawahine and the fisheries she watched over.

The coastal settlement of O'oma on Hawai'i island, where Kaikio'ewa sheltered the Prince, is also a place of ponds and ceremonial complexes. Given their trusted positions, all three of these historical figures are likely to have had ties to the ancient line of Pi'ilani as well as the ruling Kamehameha dynasty.

Pikanele and Governor Hoapili

Pikanele may have been actually related to Ulumaheiheihoapili (Gov. Hoapili),

and been a member of an illustrious Maui clan. Klieger describes the lands of "the *Hoapili ma*" in Lahaina as including *"Kaihe'ekai and his cousin, the konohiki Pikanele."* (Klieger, 1998:63)

Hoapili was born in 1775 in Kailua, on the Island of Hawai'i . He served as Governor of Maui from 1826 until his death in 1840 (Maly, 2006: 204) Hoapili's father, chief Kamei'eiamoku, was one of a pair of kapu (sacred) twins who are pictured on the royal Hawai'ian coat of arms, having served as part of Kamehameha the Great's military forces. Kamehameha I had a close relationship with Hoapili's father, which continued to the son. (Klieger, 1998:63)

(Note: *Ma* is a Hawai'ian term meaning "and other associates" or in the case of ali'i, members of the Chief's retinue, which can often connote family.)

The deep trust between the King and Hoapili, his general's son was reflected in the fact that Hoapili, after he was widowed in 1826, was given the ceremonial honor of marrying, in succession, two of Kamehameha I's widows. After Kamehameha's death, Maui's highest born ali'i, Queen Keopuolani became Hoapili's wife. After her death, he married the chiefess Kaheiheimalia, Queen Ka'ahumanu's younger sister, and mother of the *kuhina nui* (regent) Princess Auhea Miriam Kekauluohi. Other honored positions were entrusted to Hoapili, as well. Kamakau describes him as accompanying Queen Keopuolani in 1819 after Kamehameha expired to hide the old chief's bones. (Kamakau, 1961: 211-215) Klieger describes him as the "...*last kahu [caretaker or guardian] of [the mo'o goddess] Kihawahine before the arrival of Christian missionaries*." (Klieger, 1998:17)

Hoapili was so close to Pikanele that he invited the lesser chief to accompany him to Honolulu and successfully negotiate with Hoapili's daughter, Liliha (by his first marriage to Kailikauoha, daughter of Maui's last King, Kahekili.) Liliha, who was the young widow of O'ahu Governor Boki, was involved in an 1830 uprising led by the sixteen-year-old King Kamehameha III after the death of the powerful *kuhina nui* (regent), Ka'ahumanu. The King's Rebellion, as it was called, was motivated, in part, by the Christianized ways being forced upon the younger ali'i. (Kamakau, 1961:336-351)

Pikanele's Land Claims in Ka'eo and Honua'ula

During the Mahele 1848-9, Pikanele claimed to be the *konohiki* (traditional appointed land manager) for the ahupua'a of both Paeahu (present day

Wailea) and Ka'eo (Makena) and claimed these lands along with lands in Mohopilo (upper lands of Ka'eo study area) and the island of Molokini. (Maly, 2006:83 citing Helu 473-b in Native Testimonies in the state archives.)

Pikanele claimed in his testimony to have inherited his *konohiki* rights in Ka'eo in 1836 from the previous caretaker, Pahuwai "when he was removed". Pahuwai had in turn, received them after the removal of Ihu, who had been appointed *konohiki* in earlier time (perhaps by Kamehameha I, c. 1800) (Maly, 2006:83)

Pikanele's son in law, Mahoe, also put in a claim for the Ka'eo lands and was eventually awarded one-half of Ka'eo (514 acres- Royal Patent Grant 835) in 1852.(Ibid) Pikanele was described by Klieger, in his research on the sacred island of Moku'ula (Lahaina), as "a prominent member of the church with [Gov.] Hoapili, David Malo and others." (Klieger, 1998: 65)

As a royal family retainer and a devout Christian, Pikanele may have gone against the traditionalists who supported King Kamehameha III in his efforts to consummate a traditional "sacred marriage" with his younger sister, Princess Nahienaena before her untimely death in 1836 at the age of 21. This traditional arrangement had become quite unacceptable under the new Christian-influenced laws of the Kingdom promulgated in the 1830's.

Pikanele's witness, for the land claims made in Ka'eo and other portions of Honua'ula, L. Ka'auwai, refers to a trial held in 1840 or 1841 where Pikanele was held responsible for "adulterous activities of certain parties" and as a result "the government took it" (the Ka'eo lands). Pikanele himself also refers to this court case as the reason his Mahele claims for Honua'ula lands were denied. **(**Maly, 2006:91-citing Native testimony, Helu 473-B, 2:135-136).

From his brief term as *konohiki* of Ka'eo, Pikanele had a house lot on the north arm of 'Apuakehau bay, seaward and north of 'Apuakehau fish pond and Keawakapu/Keawala'i church. In his testimony, Pikanele's witness tells that the *konohiki* "made a new enclosure" (Ibid)

Maly's research found specific reference to Pikanele's Ka'eo house location during oral testimonies of Makena residents as well as in old correspondence, and he included a current photo of the remains of the house foundation in his report. (see fig. 33)

It is possible that a portion of this dwelling had originally been constructed

much earlier than the time of Kamehameha's reign on Maui, and was associated with a kauhale or residential compound used by ruling families of the Ka'eo area, who were associated with the Pi'ilani dynasty.
Author's Note: No archaeological review has been done on this site, since it is on private land that has not applied for development permits.

Coincidently, early church correspondence (1837) regarding the "outstation in Honua'ula" (Keawakapu Church in Ka'eo/Makena) mentions a "Pikenini" who since becoming "*head of affairs there… the aspect of things has greatly changed for the better. A new native meeting house & (I think) 7 stone or doby school-houses have been built, all of which are daily occupied with school.*" (Maly, 2006:64) Given the extreme coincidence of the similar time frame and almost exact same location, it is possible that the "Pikenini" referred to by the missionary administrators in far off Wailuku was actually the "Pikanele" who claimed that he had been the manager in the Ka'eo ahupua'a from 1836 on. As a devoted church member and an ahupua'a manager, he would be expected to know how to get needed improvements made.

Pikanele appeared to be a person of some means. He is on record as purchasing a 26.5-acre farm lot in the upper elevation area of Palau'ea (modern day Kahekili Highway near Ulupalakua) in the 1850s for the sum of $282. (Barrere, 1975, 35-Table 2).

While Pikanele was not awarded *konohiki* rights to the *ahupua'a* of Ka'eo during the *Mahele* land court proceedings, he did end up with a Land Commission Award (LCA 3103/ Royal Patent 1729) along the northeast side of Loko o Mokuhinia (a sacred pond in Waine'e, Lahaina that surrounded the royal retreat island of Moku'ula.). He built a house on his land claim, which was in a section known as Pakala, on the Northwestern shore of the sizable freshwater pond.

Pakala also included the residences of Princess Nahi'ena'ena, as well as the high-born ali'i parents of Princess Bernice Pauahi Bishop, future King Lunalilo and future Queen Emma. All these surrounded the Royal compound of King Kamehameha III and the kapu island of Moku'ula. (Klieger, 1998:62-65) As mentioned earlier (Chapter II, Kihawahine) Mokuhinia was the legendary birthplace of the Pi'ilani family 'aumakua (spiritual guardian) mo'o Kihawahine.

The land held by Chief Pikanele was excavated, as part of the research done in the mid-1990's to learn more about the island of Moku'ula that

lay buried beneath a county park. Klieger reported that a "…small carved tooth excavated near the site of chief Pikanele's early nineteenth century residence looks very much like the head of a gecko. Could this be an image of Kihawahine?" (Klieger, 1998:12)

Mahoe 1852 -c.1875

Mahoe, who eventually was awarded *konohiki* ownership of one half of the lands of Ka'eo, including the rights to the fishery, appears to have lived from around the early 1800's until his death in c. 1875. Mahoe was part of a large family, which included a twin brother (*Mahoe* means "twin" in Hawai'ian), a sister and two additional brothers. (Maly, 2006:169-171) Mahoe and his family may have had deep roots in the Honua'ula region.

One of his brothers, Peipeoaonui, was described by Mahoe's father-in-law Pikanele (see above) as "an ancient dweller in the lands" of Pae'ahu ahupua'a (modern Wailea) in a statement to the Land Commission in 1853. (Barrere, 1975:A-60 from Hawai'i State Archives) Mahoe often referred to himself as being from Honua'ula, though documents show that he also lived in Lahaina and Wailuku.

Mahoe married Pikanele's daughter (also called "Pika-nele" in legal documents they signed.) An individual by the name of Mahoe is described as being a school teacher in Kanahena, Honua'ula c. AD 1840's, however, Kamakau goes on to say he visited the home of this same Mahoe in Lahaina and describes Mahoe's wife as being named Kealoha, which might indicate that the two Mahoe's were not the same person. (Kamakau,1961: 73) The konohiki Mahoe however, did describe himself in documents from the mid 1800's as a resident of Kanahena. This makes it possible that he was the same person described by Kamakau, and Mahoe's wife may have been known by the first name of Kealaoha during the era reported on by Kamakau. It is recorded that Mahoe and his wife deeded around .6 acre of land to the American Board of Commissioners for Foreign Missions in 1868 for the "Honua'ula (Keawala'i) Church". (Maly, 2006:167-168 from Hawai'i State Archives) In 1853, a separate lot was deeded by Mahoe and his wife for the church school.

Mahoe was challenged by plantation owner, James Makee, for Ka'eo ahupua'a the fishing rights. Makee had purchased a large section of the traditional Ka'eo lands from Linton Torbert when the later was forced to sell his Ulupalakua Ranch. Mahoe was able to hold on to the pond and his fishing

rights for Ka'eo and published a newspaper article declaring *kala* to be his "kapu" fish one year. (Maly, 2006:156) Although Mahoe was a Christian, he also seemed to have knowledge of the traditional ways and place a value on traditional resources.

Interestingly, *kala* (sturgeonfish or unicorn fish) has an association with traditional spiritual and healing practices. It is described as a "popular fish for offerings due to the pun on the word *'Kala'* which can mean to 'forgive.'" (Chun, 1994, footnotes to his translation of a 1867 report- *Must We Wait in Despair*: 155)

The *weke* fish was also described in Pukui & Elbert's Hawai'ian Dictionary as "popular offerings to the gods to turn away curses.." for the pun on the word "*weke*" which means to "free." (Pukui & Elbert, 1986) The *weke* is also found traditionally in the specific location of the 'Apuakehau fishpond in Ka'eo. (Interview with Ernest Chang, 2006)
Earlier use of the Ka'eo lands around 'Apuakehau/ Keawakapu Bay could have involved specific traditional Hawai'ian healing activities that utilized both these fish to help lift curses that impaired the health of patients. Specific knowledge of these days, still remains to be researched. Is it coincidental that the area's first Christian church, bringing a faith that taught the lifting of "sin" through forgiveness, also found a home in the same area?

Mahoe's fishery rights passed over to his three daughters and their families when he deeded the Ka'eo land to them in January 1872 after his wife, Pikanele's, death. He was married again, before his death in c. 1875, to a woman named Namakula and they lived in Wailuku, on land his nephew had provided. (Maly, 2006:168-171) (for further history on the lands of Mahoe in Ka'eo see Chapter IV, Settlement Section)

Nawaiki

Nawaiki was *konohiki* in the Makena area during the time of Kamehameha I. He was awarded Grant 1497 for 23.7 acres bordered by the aupuni (government) Rd to west and aupuni wall to east. He also claimed and was awarded a parcel in Mo'oiki, just mauka of Pu'u Ola'i, which included the ridge where Mo'oiki's major ceremonial complex is located (SIHP site 1855).

Nawaiki "retired" as *konohiki* in 1848. He also claimed and was awarded other lands in Honua'ula. One such parcel was LCA (5402-B) .20 ac. in Ka'eo. (Gosser, et al, 1996) This tiny oceanfront plot was perched between the rocky southern edge of Naupaka (Maluaka) Beach and the northern edge of the

Makena Resort golf course's oceanfront hole 18.
Archaeological Surveys of this portion of Ka'eo were done under great time pressures in 1978, just ahead of bulldozers shaping the new golf course. Nawaiki's former house lot had an area of midden, spread across the sandy earth, but no subsurface review was carried out before the area was transformed into a golf course. Nearby sites included Site B8-8 (SIHP 1854), a traditional walled well that still remains as a rough outline along the shoreline, and site B8-237 (old concrete house foundation on original 17th green- now 18th).

Nawaiki also had a .60-acre grant in the land of Keauhou a little south of Palau'ea ahupua'a, although it appears to be listed in the Mahele database with an incorrect number. According to statements filed in state archives during the great Mahele (1848-1952) Nawaiki gave up his land in Maluaka, Ka'eo, Maka'alua and Laeiki to plantation owner, Torbert. (Maly, 2006)

The Kukahiko 'Ohana

The Kukahiko's are one of the most widespread (approximately 1,000 descendents) and interconnected family groups in the Ka'eo region. They were descended from John Kukahiko and his first wife Kamaka Kuhaulua Kukahiko and his second wife Kalua Halulukahi Kukahiko.

Kamaka Kukahiko, according to family genealogies, was born in Honua'ula in 1843, the youngest of eight children in the Kuhaulua family. She was named for her mother, Kamaka Ka-uaua, whose parents were part of the influential Mahi clan of Hawai'i island.
(Interviews with descendents of Kalani Paha'a, 2006)

The family patriarch and matriarch- Keli'i-o-Nahuawai Ka-uaua and Kauai-o-Kalani Kanae were both born on the island of Hawai'i in the 1780s and emigrated to Honua'ula Maui in the early part of the 19th century. They and other faithful supporters of Kamehameha I were awarded lands in the Kanaio area. Many families connected with the villages of Ulupalakua, Kanaio and Makena today draw their lineage from these loyalists of the great warrior chief.

The Ka-uaua's five children (four daughters and a son) born in Honua'ula between 1808 and 1814, intermarried with other earlier and later residents of the Ka'eo region such as the Kukahiko and Makahanohano families. (Ibid)

Kamaka Kuhaulua met and married John Kukahiko in the 1850's. According to family history, John Kukahiko was "a man of Chiefly lineage, who in the Mahele, received the 'ili of Ka'alawai, at Waikiki, as his personal land." (Maly, 2006:36) In 1854, Kukahiko also claimed and received a fee-simple interest to Royal Patent Grant No. 1495, a parcel located at Mo'oiki, just inland of Pu'u Ola'i, between the base of the cinder cone and the old Makena Road. (Ibid) Note: on maps of land commission awards, the name "Kukahiko on Grant 1495 is misspelled as "Kukahaku." It is believed that he came to Makena from O'ahu around that same time.

Kukahiko is also noted as being the lighthouse keeper of Makena in 1859. (Dean, 1991:68) He was also the harbor master of Makena Landing (Fredericksen and Fredericksen, 1998a: 15, citing Dobyns,1988:18) Family records and public records agree that the Kukahiko's "purchased properties in and around the landing of Makena in 1883."

John and Kamaka Kukahiko had eight children: 3 sons and 5 daughters born in the 1850's and 1860's. The daughters were: Keolakai, Ha'eha'e, Moloa, Ka'aipuni and Ane (also referred to as Annie). The sons were: Mahele, Kauwekane (also known as John Kauwekane), & Kalehualuuwai (also referred to as John Lu'uwai).
John Kukahiko's relationship with Kalua Halulukahi Kukahiko produced four children: Halemano, Keanu, Ka'ahanui and Halelau. (Kukahiko Family Reunion Website, 2006)

John Kukahiko Sr. (b. 1834) grew to adulthood during the reign of Kamehameha III (AD 1825-1854) and Kamehameha IV (AD1854-1863). Family descendents describe Kukahiko Sr as being part of part of the "Ali'i Council" of his times and that the Kukahiko name referred to "speaking of old things and times," inferring that family members were valued among chiefs of old for their knowledge and council. (Minutes of testimony given by Laurie Chang, on behalf of the Chang family to Maui County Street Naming Commission 2/9/01: 2-3)

The Kukahiko children grew up in nineteenth-century Makena to become farmers, fishermen, paniolos, lighthouse keepers, and builders. One son, Ka'ahanui, moved to O'ahu and became a police officer. They helped build Keawala'i church and John Kukahiko Jr. (grandson of John Sr and Kamaka) served as minister in the 1950's). The family is still active in the church

community today.
Two of the Kukahiko girls Moloa (b.1865) and Ha'eha'e (b. 1860) worked as maids for Capt. Makee at his ranch in Ulupalakua. (author interview with Ernest Chang, 2006)
Ha'eha'e's daughter Keolakai (also known as Harriet or Hattie) married Chinese merchant A'ana Chang (also known as Chang Ying or Chang A'ana). Harriet's father was E.D. Baldwin, a well known surveyor, whose uncle's family came to own Ulupalakua Ranch. (Ernest Chang interview, 2006) According to family accounts, Ha'eha'e Kukahiko refused Baldwin's offer of marriage because she did not desire to always be travelling. She later married another local man. Her daughter Hattie, who had 16 children, founded the Chang branch of the Kukahiko family. Many of the Changs helped in the family store, raised livestock and farmed, while their cousins the Lu'uwai's, were noted as being the fishermen. (Ernest Chang, interview, 2006)

Captain James Makee: Rose Ranch 1856-1886
Born 1812, Woburn, Mass. - Died 1879, Honolulu

Captain James Makee was a 31 year-old, enterprising Yankee whaling ship captain, who first arrived in Hawai'i in 1843 through a near-tragic event. Makee, who was master of the whaling ship *Maine*, was attacked by a disgruntled crewman when his ship was off Lahaina. He sustained life-threatening injuries, and was forced to seek medical aid the next day in Honolulu. After he recovered from his injuries, he retired from seafaring and pursued business interests related to shipping.

By 1845, Makee was an established ship's chandler for the whaling industry and later a merchant ship investor. In the spring of 1846, Makee's wife, Catherine, and his young son left Boston and joined him in Honolulu. Makee had series of partnerships, some very brief, with other entrepreneurs eager to get in on the ground floor of business opportunities opening up in the Kingdom of Hawai'i . These partnerships provided supplies and sometimes capital to the whaling and merchant trade and, over a period of ten years, had various offices both in Honolulu and Lahaina, Maui. Makee's partnerships included Jones & Makee (1846); Makee, Anthon and Co. (later in 1846) and Bush, Makee & Co. (1847). In 1848, Charles Brewer II joined the Honolulu partnership. 1849 the Lahaina branch of Bush, Makee & Co. had "dissolved." By 1850, C. Brewer had withdrawn from the Makee, Anthon and Co. partnership, causing it to dissolve. It was reformed again a few months later, in 1851, as "Makee, Anthon and Co., Honolulu, O'ahu. Importers and Wholesaler Dealers in General Merchandise." (Thrum, 1927:27-39, included

in Barrere, 1975, Appendix:72)
Makee traveled widely searching for likely merchandise. Around 1850 his firm began importing house frames from Hong Kong and other British colonies. His offices in Honolulu occupied the "Makee block" a three story brick building on the corner of Queen and Ka'ahumanu Streets in Honolulu completed in 1854. (Ibid: 73)
The Makee home sat on two acres in Nu'uanu Valley across the road from Queen Emma's Summer Palace and was famed for its flowering gardens and lavish receptions honoring visiting celebrities. (Ibid:74)

In 1855, Makee was an assignee of L.L. Torbert's Trust deed for Torberts's Plantation lands in Ka'eo and Ulupalakua. Torbert's financial difficulties forced the sale of the plantation, which included around five thousand acres of land, a mill and assorted buildings, roads, livestock and a harbor (Makena Landing). Makee's former business partner C. Brewer purchased the Torbert holdings at foreclosure sale and later transferred the title to James Makee.

Captain Makee, his wife and children (eventually there would be two sons and six daughters) moved to Ulupalakua, Maui. They renamed the Torbert plantation "Rose Ranch" and established abundant gardens of fruit and flowers. They also planted "not less than 150,000 trees," mostly fast growing exotic species like eucalyptus and pines, imported from all over the world. (Ibid, 1926:81 in Barrere, 1975:81)

Makee pursued sugar farming with some success over the next 15 years, with over 1,000 acres under cultivation and a state-of-the-art processing mill. In an 1863 newspaper article, Makee's plantation and the Haiku Plantation were the two leading producers of sugar among the 8 plantations operating on Maui. (Maly, 2006: 34 citing Nupepa Kukoa, 11 April and 23 April, 1863; Maly translator)

News stories of the times observed that through leasing of government lands and adding to his own holdings, Makee had increased the expanse of Rose Ranch to 6,500 acres by 1861, five years after assuming ownership. (Hurst in Gosser et al, 1996:48 quoting Pacific Commercial Advertiser, 19 September, 1861:3)

The American Civil War years were good for the agricultural businesses of Hawai'i as they were able to supply crops such as sugar and cotton, normally procured from the Southern states. A Makee employee, Herman Augustus Holstein, grew cotton on plantation lands in Palauea during the civil war

(Maui News, Feb,17, 1934:1) and his sugar production was enough that he also generously donated 200 barrels of molasses to be sold for the charitable organizations that cared for the wounded solders. (Barrere, 1975:75 citing Thrum, 1927;31-32)
Makee and his family hosted King Kalakaua and his retinue in legendary style at Rose Ranch during the monarch's Royal Progress in 1874. Thrum, writing 1n 1927, noted that;
"Captain Makee spared no pains to accord the visitors a memorable welcome, with torch-bearing escorts, illuminated grounds, and cordial reception and entertainment, described as 'on a scale of princely hospitality,' for it included a large feast served under the spreading trees, and a ball in the evening to crown the notable event." (Ibid, 1927: 75-76)

Other visitors of the era were also given lavish hospitality by the Makee family. Guests were delivered to Makena landing by steamship and transported by oxcart or horse to the lushly landscaped ranch, which had become "a center of luxurious entertainment" by the 1870's. Accounts of the Makee's hospitality were legendary throughout the islands. (Ibid: 1926:82-86, Barrere, 1975: 79-81; 69, Sterling, 1965: 10-11)

Makee's enterprising nature also launched other business endeavors after the reciprocity treaty (1876) was passed, giving Hawai'ian sugar a preferred status in trade with the United States. 1n 1876 he and J.D. Spreckels purchased the Waihe'e sugar company and a few years later, Makee bought out Spreckel's interest, with his son, Parker N. Makee serving as manager. In 1877, only two years before his death, he partnered with King Kalakaua to launch Makee sugar plantation on the island of Kaua'i. (Ibid: 86-87)
Makee also served in many civic capacities throughout his life in Hawai'i and was known for his generosity. (Barrere,1975:75, citing Thrum, 1927: 34-35)

Failing health prompted James Makee to turn over management operations of Rose Ranch in Ulupalakua to his son, Charles B. Makee, with William Blaisedell as the head foreman. (Ibid)

The severe kona (leeward) wind and rainstorm of August, 1871 took a toll on the Ranch land and buildings. (Ibid:1927:82, Barrere: 1975: 79) Although the Ranch had large sugar crop yields in the summers of 1876 and 1877, a series of subsequent severe winter droughts devastated newly plantedcrops and led to an eventual decision to abandon sugar planting, with the last crop milled in I883. (Ibid, 1926:86-87, Barrere, 1975; 81)

Makee had been the first in Maui to bring in purebred dairy cattle and his butter was well received in the Hawai'ian market. During the 1878 drought, livestock and employees were relocated to Waihe'e Plantation, over 20 miles away. (Ibid; Ashdown, 1941, Na Hoku Hawai'i article, in Maly, 2006:42) After Makee's death in 1879, the Ranch began the conversion to beef cattle ranching. In 1886, about seven years after Makee's death, his eight heirs sold their combined interests in the Ranch to J. I Dowsett, Charles B. Makee's father-in-law for around $84,000. (Thrum, 1926: 86-87; Barrere: 1975: 81)

Linton L. Torbert: Ka'eo Land Grant Awardee 1845-1856

Born: 1816, Newton, Bucks County, Pennsylvania- Died: 1871, Honolulu
(Hurst, in Gosser et al, 1996:47 citing the Friend, 1 September 1871:69)

Linton Torbert, like James Makee, was an American seafarer who sought an opportunity to shift careers around age thirty. He was flamboyant, determined, opinionated and willing to take large risks to reap what he imagined to be huge profits in the new economy that was unfolding in the Hawai'ian Kingdom. Torbert, a native of Pennsylvania, where his family held some prominence, was said to have been married to a native Hawai'ian woman. He appeared in Ka'eo just as the Mahele was opening up huge areas of land.

Historic records show that Torbert, who was also referred to as *Hulipahu* (denoting the "second mate" on a ship) by local residents, competed aggressively with native Hawai'ian claimants for parcels throughout Honua'ula, and even for traditional fishing rights. (Maly, 2006: 162) He used borrowed funds to tempt cash-poor royalty into selling large acreages. He was able to purchase thousands of acres of land, even though some of it was also claimed by local families. (Maly, 2006) His motivation to acquire land has not been examined in historical documents, but perhaps it was driven by dreams of capitalizing on the Gold Rush potato boom and creating an empire in the quiet back country of south Maui.

Torbert did build a brief empire in Ka'eo with thousands of acres of land, his own road, harbor and town, all named after himself. His works shaped the region of Ka'eo for many years after he himself had gone. His schemes to acquire vast tracts of land, appear to have been chronically underfunded, which led to the need to exploit a number of Honua'ula's natural resources, such as forests and reefs, and sell their products for immediate gain. In the

brief span of a decade, his dreams of empire had come and gone.
It all began in May of 1845, when Torbert negotiated with the partnership of British ship Captain, Michael James (M.J.) Nowlein and Samuel Burrows for use of the lands leased by the pair in Ka'eo to grow sugar cane and other crops. Torbert offered the partners $800 a year for a six year lease. Nowlein and Burrows, were the first to attempt sugar cane cultivation in the Makena area, Beginning in 1841, they had partnered with King Kamehameha III's businesss agents, agreeing to set up a mill and grow sugar cane for the King on 50 acres of their leased lands in Honua'ula. (Hurst, in Gosser, et al, 1996:44-45)

Historic records indicate, that Torbert wasted little time in trying to push aside Nowlein and Burrows and assume direct ownership of the Makena/ Ulupalakua lands they leased. The government agent was supportive, since the King's cane lands appeared to be neglected. (Maly, 2006: 159) Sterling suggests that by October of 1845, Nowlein was contacted by the King's agent to inform him that the lease had been sold to Torbert. (Barrere, 1975: 69, citing Sterling, 1965:9) Maly's text puts such purchases in the 1848-1850 time frame, based upon letters in Royal Patent Grant packets in state archives. (Maly, 2006: 159-164)

In the summer of 1846. Torbert sold his schooner, *Clarion*, to a John Nowlein, possibly to raise funds for the land purchase. (Hurst, 1996:45; citing Bureau of Conveyances, State of Hawai'i 1846: Liber 2:30-32) Torbert appeared to have a gift for attracting investors. A few months later, in September 1846, Torbert and fellow entrepreneur, George Punchard, secured a one year loan of around $1,400 from Sherman Peck to be repaid from anticipated "plantation profits."

A third business partner, George W. Macy was also included in the mix, possibly by investing additional funds in the venture. It appears from contracts preserved in government records, that the partners expected to reap immediate rewards from their newly leased plantation lands. Torbert agreed to "do all buying and selling with Punchard for 18 months, the plantation produce at Honua'ula to be delivered to Punchard for sale or delivery or order to J. Mellish and M. Calkin." (Ibid:28)

Punchard, for a 10% commission, was responsible for all produce and product sales and Macy agreed to work with Torbert for the six year length of the lease *"for our mutual benefit.." and to "…divide the proffits [sic] and losses of said farm…"* (Ibid: 27) The temperamental Torbert dissolved his partnership with Macy about a year-and-a-half later, in 1849 and paid his former partner $1,800 for

Macy's interest in the plantation. (Ibid: Liber 4:48)
Sterling noted in her 1965 presentation to the Maui Historical Society that "Torbert's ten years on the property were marked with turbulence, including murder and a later pardon, a smallpox epidemic, a challenge of his authority to marry couples, and financial entanglements through purchase of numerous additional parcels of land and agricultural ventures." (Barrere, 1975:68-69, Sterling, 1965:9-10)

Shortly after assuming the lease on the Ka'eo lands, Torbert was arrested on Maui for murdering a native Hawai'ian man by the name of Aki. Torbert suspected the man of injuring some of the plantation's cattle. Such incidents were common as cattle would roam at will and devastate the crops of local householders. The incident was written up in newspapers of the day and although Torbert was found guilty, his four-year sentence was commuted in lieu of a $200 fine. (Hurst, in Gosser, et al, citing The Polynesian, 28 February 1846b; 176)

In spite of this incident, Torbert continued to be a part of the civic process in his adopted home. He grew a wide variety of fruits and vegetables as well as the cash crop of Irish potatoes (popular for shipments to Gold Rush miners in California.) He was appointed in 1848 by the Kingdom government to assist John Richardson in surveying native land claims in Honua'ula (Hurst, in Gosser, et al; Kingdom of the Hawai'ian islands, Interior Department 1848: 2: 307-308). He was also commissioned to perform marriage ceremonies in Honua'ula district, (Ibid, 1849:2:392) although this was challenged by some in the community. (Barrere, 1975: 69, citing Sterling, 1965:10)

Torbert's demanding style, seemed to put him at odds with the local community. He reported to the Kingdom's Minister of the Interior, in a 1853 letter in his capacity as "Road Supervisor, Honua'ula District" his dissatisfaction with the work habits of the local population, who were required to serve a certain number of days on road repair crews to pay their "road tax". Torbert's letter complained: "*I am road luna under John Richardson, & I require the people to work 8 hours each day for 12 days. Consequently, almost all the people have gone out of my district to Kamaole & have got their certificates there & there are very few left to work in our district.*" (Maly, 2006: 203 from Hawai'i State Archives, Department of Interior, May 2, 1853)
Torbert's confrontive views seemed to extend to many aspects of community life in Ka'eo. In an April 1852 letter to R.A Armstrong, Minister of Public Instruction he complained about the church and school site, that the *"meeting house at this place has blown down"* (he did not specify whether it was the church

and school located in Makena or not, but it is likely.) Torbert opined that he was unwilling to help rebuild it until *"…we have a preacher of our own (a white man) then we will have a good house, with a shingle roof and floor & seats."* He concluded his letter with the threat that "If you can't do anything for us, why then the French [referring to French Catholic priests] and Mormons will." (Maly, 2006: 210, from Hawai'i State Archives, Series 261. Box 4, Folder 4)

The same communication referred to his problems with creditors;
"I don't know what creditors will do with me the first of June next. …although of choice I would keep on until times got better. If I fail in the plantation I feel very much as if I should not begin anything else." (Ibid)

Sometime in the late 1840's or early 1850's, Torbert drew a map of the Honua'ula area that is regarded as the first to document its existing features. (see fig. 27) The map's intent was to be part of Torbert's application for land grants from Kamehameha III to acquire the lands in Honua'ula he was currently leasing. It showed his proposed new road (predecessor of the Ulupalakua-Makena Road of the late nineteenth century) and landing area (Makena Landing)

In 1850, Torbert and his new partner William S. Wilcox, purchased one of two parcels they had been leasing. Royal Patent Grant No. 234, a nearly 2,000 acre tract which ran along the shore from 'Apaukehau bay to Po'olenalena and inland to the present day village of Ulupalakua was acquired for $1 an acre. (Ibid; DLNR, State of Hawai'i 1964:101)
It included the half of the acreage of the ahupua'a of Ka'eo and the entire ahupua'a of Papa'anui, Waipao and Kahili.

The day before his purchase of Grant 234 was secured, Hurst's research noted that the always cash-hungry Torbert *"...secured a $20,000 bond on Grant's 120, 223 and his half interest in Grant 234, two ahupua'a and his livestock and buildings at Koheo, Honua'ula from the agents of the American Board C.F.M."* (Ibid; Bureau of Conveyances, State of Hawai'i 1850: Liber: 4: 199-200)
(see fig. 19)

By 1851, Torbert, in order to avoid bankruptcy, was obliged to assign a trust deed for his many land holdings to A.P Everrett, to hold for the benefit of his creditors. Everrett, in turn, passed the trust deed over to Makee. Torbert continued to run the day-to-day affairs of the plantation. (Barrere, 1975: 69, citing Sterling, 1965:10)

By 1854, the Torbert-Wilcox plantation in Ka'eo had two-hundred and fifty acres planted in sugar cane in Honua'ula and was advertising "sugar, premium syrup, fat beef, hogs, sheep, Irish potatoes, new lard, turkies, [sic] firewood, charcoal and lime, put up and delivered to order" (Ibid, The Polynesian, 29 April 1854: 203)
But in 1855, Torbert's grand dream of making his fortune through his extensive plantation lands was on the brink of collapse. The Gold Rush boom demand for Hawai'ian products had subsided and the boom of the Civil War years had not yet begun. A shipment of goods to California, lost to spoilage in 1856, is said to have triggered the final collapse of Torbert's shaky financial empire. (Ibid: 47)

In June, 1855 James Makee was assigned the Torbert Plantation assets by the American Board C.F.M. (Ibid, Bureau of Conveyances, State of Hawai'i 1855: Liber: 6: 667) and on January 1856, eight land grants claimed by Torbert were assigned to C. Brewer II for public auction. (Ibid, Bureau of Conveyances, State of Hawai'i 1856: Liber: 7: 413) Public records show William Wilcox's portion of the Ka'eo lands (Grant 234) was transferred to Capt. James Makee in March of 1856. (Ibid, Bureau of Conveyances, State of Hawai'i 1856: Liber: 7: 399)

No references to Torbert's life are easily found after he gave up his Honua'ula plantation. His death, fifteen years later on August 17, 1871, at the age of 55 was reported in The Friend, a newspaper which was published monthly by Rev. Samuel Damon, in Honolulu and aimed at those involved in the whaling and shipping industry. (Hurst, in Gosser, et al, 1996:47 citing The Friend, 1 September, 1871:69) It is possible that the last years of his colorful life were spent connected with the seafaring trades.

Chapter IV : The Last Century

A View from 1900 to 2007

Ranching to Resorts: Ka'eo after Annexation of the Hawai'ian Kingdom

"It seems likely that, like Anahulu Valley (Kirch, 1979) the entire Makena coastline is a continuous archaeological site with surface structures representing only the more recent occupations." Dobyns, 1988: 127

Overview

Over the last one hundred and fifty years, Ka'eo/Makena, the land that was "famous with the Chiefs from the distant past" has been linked to the history of some of Maui's most influential families-the Wilcox, Makee and Baldwins. After the Hawai'ian Kingdom was overthrown (AD 1893) and the islands were annexed as a territory of the United States, the system of plantations and ranches controlling large regional tracts of land became firmly established on Maui, as on other islands.

By 1935, the Ulupalakua Ranch claimed ownership of the majority of the old land grant properties of Ka'eo and Honua'ula. The ranch, in turn, was under the ownership of one of Maui's most successful plantation dynasties, the Baldwin family. Ulupalakua Ranch owner, Frank Fowler Baldwin, also directed a consortium of agricultural and shipping companies founded by his father, H.P. Baldwin, including Maui's largest sugar and pineapple plantations.

Life in early twentieth century Ka'eo went on much as it had in the century before, although the population began a gradual decline. Families worked at the ranch, farmed, fished and raised pigs along the Makena shore. A slaughterhouse was in operation until 1929 and alfalfa feed lots fattened up beef for market. Small boats and outrigger canoes regularly set out to fish off Molokini islet or along the shore. Their catch was sold, bartered or dried for future use.

The whole community gathered, from Ulupalakua to Makena, from Kihei and Keone'o'io, for *hukilau* (community fish harvests) to share in the bounty when the *akule* ran.

The days before and after WWI also brought the first historical researchers to Ka'eo from the Bishop Museum in Honolulu. J.F.G Stokes toured the region

between 1916 and 1918 and interviewed residents about historic sites. He was followed by Winslow Walker in 1929. Thrum also researched and wrote about the area's history in the post WWI years.

In the early 1920's, Makena and Ulupalakua still had country schools and their own post offices. Cattle drives through the rugged uplands delivered market-bound beef to waiting steamers in Makena Harbor. Shipments of poultry, pork and local produce grown in Makena, Ulupalakua and Kula also made their way to the landing and goods from Honolulu arrived for the shelves of Chang's store nearby. Most travel to and from Makena was still by horseback, along dirt roads and trails, until near the outbreak of WWII.

Keawakapu/Honua'ula church, moved into the new century with a new floor (1908) and a new name: Keawala'i. Its service to the community continued unbroken from the heyday of ranching to the new resort economy.

Ka'eo's connection to Kaho'olawe continued throughout the twentieth century. First with a brave post-WWI effort by former Ulupalakua Ranch manager Angus MacPhee to replant the island and reclaim its denuded land from invasive goats. Then, by an impassioned crusade by native Hawai'ians, many with long ties to Ka'eo, to free the land from the ravages of a half-century of military bombing practice.

World War II changed the landscape and the lifestyle of Ka'eo, as many residents were obliged to leave. Their homes were destroyed to make space for military training exercises. Some families came home to Makena, after WWII, but the population continued to decline. Still many families returned to Makena to gather, even if they lived across the island or across the channel.

By the late 1950's the first Ulupalakua Ranch lands were sold to begin the master-planned Wailea Resort, just north of Makena. A decade later resort plans were also being made for the lands of Ka'eo. As the resort boom blossomed, the landscape of Ka'eo and Honua'ula changed markedly, over a short span of time. One of the first landmarks to be lost was the traditional dirt road from Makena to Kihei. It was gradually eliminated, section-by-section, and replaced by a modern road more inland (Wailea Alanui), which served as the entry way to the Wailea Resort hotels and condos.

Modern archaeological review in Honua'ula began in the 1960's with Kirch and others, first along the remote lava coasts south of Keone'o'io, and later at Palau'ea. (see Appendix I) Review of the Ka'eo lands began almost a decade

later, in 1974, with Stephen Clark's reconnaissance of 1,000 acres for Makena Golf Course. Clark and his four assistants covered an average of 71 acres per day. Their maps were so approximate that future researchers were unable to reliably relocate many the same sites. The lands of Ka'eo have had nearly 20 additional archaeological review studies since Clark's effort. These are reviewed and summarized in Appendix I.

The large size of the acreages involved and the rugged terrain, made early archaeological review work in Ka'eo and the rest of Honua'ula difficult and costly. The majority of Hawai'ian cultural sites along both sides of the old Makena road were given a quick review, and most were found unworthy to survive. Hundreds of burials were removed and relocated during Wailea resort construction. The people and places of Honua'ula's past were gradually replaced by golf courses, pools, tennis courts, hotel and condo buildings and tropical landscaping. The coastal kiawe tree thickets and their twisting fishing trails were obliterated and clusters of luxurious condos arose to dominate the sand dunes of one fishing cove after another.

The 1981 Kihei-Makena Community Plan set the tone for the transformation. It concluded that: *"Directing visitor growth to Wailea and Makena will consolidate facilities and discourage random development."* (Blackford, 2001: 43)
The majority of Makena's coastal lands were re-designated for resort development en masse in the 1971 Kihei Civic Development Plan. Then, civic leaders scrambled to bring in the water the arid coastline needed to support housing for future visitors . The prevailing wisdom was that South Maui's resort economy would be the lifesaver needed by Maui's people to replace the sagging agricultural plantations.

These decisions had an effect. Land prices in Makena soared over the past thirty years and most longtime local families were unable to meet the higher tax burden. From the 1980's on, many Makena families sold their properties and saw them transformed into large luxury homes or condos.

While the resort owners brought electricity and a more reliable water supply to Makena residents, not all were convinced that this was the best plan for Makena's future. A quarter-century of community opposition and activism followed the first proposed Makena developments. Citizen preservationists, led at the time by local Makena families, rallied around efforts to block the closure of Old Makena Road in Ka'eo. New landowners, Seibu, pushed for the closure as necessary for the construction of the Maui Prince Hotel and Golf Course (1978-87.)

Ongoing citizen advocacy efforts in the Honua'ula region have achieved a number of positive outcomes. They have resulted in more public parks and access, and the preservation of the 1,500 acre 'Ahihi-Kinau Natural Area Reserve (1973-1976) and the 155 acre State Park at Makena (1983-1995). Community sentiment is still running high to see additional preservation in this biologically and culturally rich area, where native turtles and monk seals shelter amid reefs and secluded coves and thousands of cultural sites hold untold stories of past centuries.

In June of 2007, 1,800 acres of land first acquired by Seibu/Makena Resort from Ulupalakua Ranch in the early 1970's was sold to a consortium of investors led by Maui developer, Everett Dowling. The Dowling partnership has proposed around 1,100 luxurious residences and an additional hotel or wellness center in the region, if their rezoning request is approved.

Will the new plans for Ka'eo's future include the level of archaeological and biological investigation necessary to determine the area's most significant historic and cultural features? Will the original intent of the Kihei Civic Plan, to preserve the vestiges of Makena's rich history, be honored? Is it possible to learn from the oversights of the past and create meaningful cultural landscapes in Makena for future generations to explore as a living university of *kanaka maoli* culture?

The next chapter of Ka'eo's history is just beginning to be written.

Population

Turn of the Century

At the beginning of the 20th century the permanent population of Ka'eo, from the seashore of Makena to the slopes of Ulupalakua, was a few hundred individuals. Most residents were descendents of longtime local Hawai'ian families or part of the 60 person workforce of the Raymond Ranch (formerly Rose Ranch) in Ulupalakua.

Keawakapu Church records provide a good indication of population trends in Makena. 1904 church publications reported church attendance as being around 30 individuals, mostly being made up of "children and grandchildren of Mrs. Kamaka Kukahiko." It appears that some Makena residents had left looking for paying work. It was reported that in the Makena congregation, "…the fathers were mostly away. Some had deserted their families." (The Friend, December 1904, quoted in Maly, 2006: 70)

A few years later, in 1908, church correspondence mentioned that 150 attended the Makena Church's rededication celebration after extensive repairs were completed. Even with their small congregation, resourceful Ka'eo residents had raised the impressive sum of $1,200 to fund the repairs. (Ibid, September, 1908, quoted in Maly, 2006:72)

By 1913, church records counted around 80 combined members of Ulupalakua and Keawakapu congregations, the two branches of the church which served the Ka'eo region. Not all who lived in the region were involved in the church, however. This was especially true for the majority of immigrant laborers. This fact would indicate that Ka'eo's population in those pre-WWI years was likely still around 150-200 individuals.

Samuel Ponopake Chang, who was born in Makena/Ka'eo in 1911, described the Makena village of his youth as having around a dozen families. Chang, like many others in his family who wanted a high school or college education, left his seaside village home as a teenager. Family members who pursued traditional pastimes of fishing, farming or ranching remained in Ka'eo. (Maly, 2006, A-955)
Life in Makena was rustic. Homes had no electricity, a limited water supply from local wells and no modern plumbing. Horses were used frequently for local transport up until WWII. Still, families loved this land where fruits of the sea were abundant and there was space to raise pigs and chickens and gardens and pass on Hawai'ian ways to the next generation.(Kelly, 1987)

By the 1930s, Maui Island's resident numbers had peaked at around 49,000 and began moving steadily downward. Makena's population remained small. Ulupalakua Ranch expanded its land holdings in Makena in 1935 and a ranching effort was launched on the island of Kaho'olawe in the 1920's, but Ka'eo's young people continued to leave for jobs or educational opportunities elsewhere.

When a new Government landing was constructed at Keawakapu, (present day Kihei boat ramp) steamship visits to Makena's once bustling harbor also became less frequent. Some older residents relocated to other parts of the island, places with better roads and services, but the little fishing community maintained its close ties with the uplands of Ulupalakua and the family members who had moved to other towns. There were regular weekend visits; family luau celebrations and, during *akule* season, community *hukilau* (fish harvests with large nets) (Kelly, 1987: interviews; Maly, 2006 Rudy Lu'uwai interview; Ernest Chang, personal interview: April, 2006)

While the Makena church remained alive, Makena School closed around 1930 and students were transported up the bumpy dirt road to join classes at Ulupalakua and later Keokea school. Postal services were also moved to Ulupalakua, as was voting.

Ernest Chang, younger brother of Samuel Chang, commented in his interview that waves of foreign diseases (perhaps the influenza epidemic of the 1918-1920 era) had reduced the community's population and led to the closing of the school. The late Helen Kuamo'o Peters (born 1908) was a Makena native interviewed by Marion Kelly in 1985. Aunty Helen told of quitting school at around age 10 (c. 1918.) She was needed to help her grandmother, Daisy Moloa Kukahiko Auweloa, raise her 16 cousins and younger siblings because two of her aunts and her mother had recently died (Kelly, 1987:?)

It appears that there were shifts in population back and forth between upper and lower Ka'eo throughout the early twentieth century. Robert Kalani grandparent's family, the Lono's, lived for many generations near Pu'u Ola'i and Oneuli beach. He recalled family stories of Ulupalakua ranch employees being encouraged to build houses on Ranch land in Makena near the ocean in the 1920s and 30's and have gardens on the land.

Kalani indicated that some of the lands behind his family's other Ka'eo homesite (a 1.5 acre piece the family traded for in the 1950's, across from Keawala'i church) were used by ranch employees for this purpose. Kalani told Maly:

"…all the Hawai'ians came in, because Mr. Baldwin at one time told them, you might as well come down here be close to the ocean because you know the property… Because the land up there weren't very good lands." Kalani also offered his view that many Hawai'ians may have chosen to live in the upper lands to avoid the threat of tidal waves. *"They weren't stupid, you know."* He stated. (Maly, 2006, vol II: 233 Robert Kalani interview)

The War Year

The December 1941 Japanese attack on Pearl Harbor in Honolulu, brought the entire state under martial law and turned Makena into a troop training area, off limits to the public.

Most families were forced to evacuate the coastal lands of Ka'eo/Makena during World War II (1942-1945). Some Makena residents joined family

in nearby Ulupalakua or Kula, but others left for military service, defense industry jobs and a life far from Maui.

After the war ended, some residents returned, although they were forced to rebuild, as their houses had been destroyed by the military. (Kelly, 1987) Records from the 1946 primary election indicated that there were 85 registered voters in the Honua'ula precinct which included Makena, Ulupalakua and Kanaio. (Ramil, 1984:106)

The 1950s saw a return of more Makena families and the addition of others, some with longtime ties to the area. Ulupalakua Ranch had doubled the size of its cattle herds since the 1920's, but in 1959, it also began the first of its large land sales to resort investors. In 1959, 1,500 acres of Ranch land in coastal Honua'ula was sold to sister company of Matson Navigation for a future resort complex.

After Ulupalakua Ranch owner Frank F. Baldwin's death in 1960, the whole ranch was sold to the Erdmans, a ranching family originally from Wyoming. (Hurst in Gosser et al, 1996: 52) In Ka'eo, population levels remained low. In the 1960's census, only around 1,000 residents reported living in all of South Maui, from Ma'alaea to Makena.

The Resort Era

In 1971, Maui County adopted the Kihei Civic Plan. It envisioned a large population residing between Ma'alaea and Makena within 20 years. The report proposed the expansion of visitor accommodations in the south Maui area from the 300 units then available, to over 11,000 units by 1990. Population for the Ma'alaea to Makena planning region was anticipated to rise from 1,010 in 1970 to 38,590 in 1990.

In 1981, a new Kihei-Makena Community Plan was adopted. It revised projected 1990 population figures downward for the region from 38,590 to 22, 900. (Kihei-Makena Community Plan, 1981: 11)

According to US Census data, neither plan proved accurate. The region's resident population did not reach the 22,000 person level until the year 2000. The 1990 census listed population for Kihei-Makena at 15, 365 and the "official count" of south Maui visitor units was 7,300. (County of Maui Socio-Economic Forecast Report. 2006: 54-56. 72)

Visitor counts likely made the daily *de facto* population of south Maui about one-third higher than census data, since the census population figures did not reflect daily visitor totals in the region. (State of Hawai'i DBEDT Report, 2006)

Some have theorized that both population counts and visitor accommodation uses of residential properties in Maui are regularly underestimated. Whether this is the case in south Maui or not, is a topic worthy of continued research. What is clear is that, even revised downward from original estimates, the 1980 to 2000 levels of population growth have presented many unresolved challenges for the region's present and future residents.

Based upon the "desired" population trends for Kihei-Makena presented in its studies, the 1971 Kihei Civic Plan gave its blessing to resort and condo development of more than a thousand acres of land in Ka'eo and thousands of additional acres in Kihei. Also included was the new master-planned "resort city" of Wailea, on 1,500 acres of former Ulupalakua Ranch land, just north of Makena. The new resort industry proposed for south Maui was seen as the best economic solution to replace the declining fortunes of sugar and pineapple production island-wide. Business and civic leaders enthused over the Plan's benefits to Maui's struggling economy, and down-played any negative effects.

But many Maui families depended upon the unpopulated shorelines of south Maui to supplement their food supply with fishing and gathering. They braved the narrow, rutted, dusty road to reach prized fishing spots, handed down for generations. From the 1920's on, the long sandy beaches and shaded groves of Ka'eo and Honua'ula functioned as informal wilderness campgrounds for working families, youth groups and churches. Some citizens privately compared the new plan to turn these lands into resorts as akin to a family selling off their prettiest daughter, in order to survive.

The main situation that stood in the way of south Maui's population expanding was the lack of potable water. 1n 1979, a large pipeline was constructed to bring water from the lush 'Iao Valley to the dry coastal plain. With water came real estate speculators and investors. By the mid-1970's, Makena's small community began to make headlines as the 1,000 acres of rezoned Ulupalakua Ranch lands surrounding Pu'u Ola'i were sold off to outside investors for resort development.

In the decade between 1980 and 1990, more lands in Ka'eo and to the north and south were given urban zoning designations. Resort construction began in Wailea around 1972, and moved south. The affects of the resort building boom on local population levels were not immediately seen, as golf courses, not hotels, were the first parts of the resort complexes to be constructed. But, by the mid- 1980's both visitors and new property owners quickly outnumbered the original residents. The new population of Wailea property owners were wealthy, and for the most part, from out of state. Many were part-time residents, unconnected to the existing community of south Maui or Makena. They relied upon their corporately-managed community association to represent their needs and interests in the community and before state and county agencies.

Makena community members watched as the wild coastal lands of Honua'ula were reshaped over a decade into the world famous destination resort of Wailea, an elegantly landscaped, self-contained world of beauty, wealth and privilege. Outside groups began to get concerned about Makena's future when a hotel and resort condos were proposed for the slopes of Pu'u Ola'i, in 1978.

The small Makena community, their extended families and various citizen organizations resisted the coming of the Maui Prince Hotel and the changes it would bring to their ancient seaside town. Their numbers were small, but their affect on preservation of public resources was significant. After numerous lawsuits were settled, the hotel was completed in 1987, bringing in a daily stream of workers and visitors.

The population changes in Makena have been much more gradual than those in Wailea, but they have continued to come. A number of luxury-oriented, oceanfront mansions have began to replace the modest residences that once comprised the quiet fishing village. The coastal portion of Ka'eo at Makena has been "branded" by the real estate industry as an exclusive gated resort community, geared toward wealthy non-residents and investors. Taxes have soared as Makena property valuations have risen to the multi-million dollar range.

As of 2007, Ka'eo's population is still small, but only a few Hawai'ian families still retain their traditional lands in the Makena section of Ka'eo. Most former residents interviewed by Maly and others cited high taxes and a loss of the traditional Makena community as their reasons for selling their land and moving elsewhere. In upper Ka'eo, the family-owned Ulupalakua

Ranch lands continue to be part of vineyards and pastures. The Ranch is also looking towards renewable energy production to help maintain operations.

Yet another round of community planning is underway on Maui, with the update of the County's 1990 General Plan. Most of the largest building projects long proposed for Makena lands, still await final approvals. Most have also faced strong community opposition from Maui residents who enjoy the area in its more natural state and want Makena's future population to include a mix of local residents and housing prices. .

The changing population demographic of Ka'eo has meant that a number of Makena properties are now only occupied part-time. The full-time population of Ka'eo/Makena, for the time being, remains small. 2006 records show 88 registered voters at the Makena precinct. This small population is overshadowed by a visitor population from resort areas near and far. This affects roads, beaches and public facilities that residents and visitors share. State Park at Makena, for example is the most used state park on Maui by both visitors and residents.
(DBEDT Report, 2004)

If proposed development plans unfold over the next decade at permitted density levels, over 1,400 luxury units and a new hotel would be replacing what still remains of the ancient fishing and farming villages of Ka'eo. Persistent water shortages, traffic burdened roads and lack of funding for public safety services has led some citizens to call for revisions to the forty year-old development plans for Makena. Future population levels will depend upon the outcome of those discussions.

VEGETATION

Vegetation patterns in the lands of Ka'eo were greatly altered over the first 100 years of Western contact. The second one-hundred years continued that trend with the clearing of land and introduction of new grasses, food crops, plants, trees, and wildlife**.** Changes in the vegetation cover on the nearby island of Kaho'olawe also had an impact on the Ka'eo lands.

Kaho'olawe

E.D. Tenney, Vice-President of Castle & Cooke and son-in-law of Rose Ranch owner, James Makee, urged the Hawai'i State legislature Committee on Agriculture and Forestry to invest in conservation efforts for the forests of all

the islands. In his March 8, 1909 speech, Tenney drew a comparison between the declining water resources of the Ulupalakua Ranch, and the loss of the forests of Kaho'olawe.

"The island of Kaho'olawe at the time that plantation was started [c. 1860] was covered, the top of the island was covered with a dense forest.. As the trade winds brought down their clouds laden with moisture, they would commence to gather over the island of Kaho'olawe in the early morning and the area of this cloud rack would increase back gradually across the channel over the lands of Ulupalakua and every afternoon almost without exception a fine rain fell upon that place. With the leasing of the island of Kaho'olawe for a sheep pasture and without taking any precautions to protect the forests, they gradually encroached upon it, until the forest was all killed. With the elimination of the forests on Kaho'olawe, this gathering of the clouds over the island and their backing up across the channel and over that portion of the island of Maui [i.e. Ka'eo] ceased and no rain fell at Ulupalakua for three and a half years."

("The Hawai'ian Forester and Agriculturalist", Vol VI, No. 3, March, 1909 edition Collected in the Hawai'ian Gazette, 1910 by Leopold Blackman)

By the turn of the century, much of the land in Ka'eo that was not actively cultivated had become thick with introduced kiawe trees and other introduced plants such as the panini cactus and lantana. Old-time residents like Samuel Chang mention that pili grass grew along the trail that led to Kihei c. 1920's in enough abundance that the young riders used it to graze their horses. (Maly, 2006, appendix A, Samuel Chang interview: 51.) Inez Ashdown recalled that in her early years in Ulupalakua (AD 1908-1910) there were considerable areas of native grasses: "In those days, our pastures were green acres covered mostly by Pili grass, Ma-nie-nie, and varieties of Mau-u." (Ashdown, 1971: 44) According to local residents surveyed by Kelly in 1985, by the 1970's pili grass had become far more sparse.

In the higher elevation of Ka'eo, Mr. Chang recalled his mother's homestead in Ulupalakua as being a "garden of Eden…. bananas grew, loquats grew, mangoes grew, mamonas grew, apples grew, oranges grew, rose apple and then guavas, then the vegetables." Mr. Chang explained that all this grew with no irrigation. "Kehau (natural dewfall), yes, that's all." (Maly, 2006, appendix A, Samuel Chang interview, 52.)

Maui News stories from the turn of the century mention that in Ulupalakua, on the former Rose Ranch lands "the persistent lantana is fast encroaching upon the grassy pasture lands." (Maui News, September 22, 1900:3)

Later in the 1920's it was observed on the same ranch lands that "obnoxious plants" such as "cactus and kahaole [haole koa?] were found in abundance." (Maui News December 4, 1926:S6)

In 1932 the Maui News noted that 500 acres of Ulupalakua Ranch lands were offered as tenant farms with farmers being asked to pay a "small commission on the crops" to the ranch. (Maui News, August 24,1932b:1)

Subsistence Farming

Makena native, Ernest Chang recalled Ulupalakua Ranch foreman Angus MacPhee was farming melons and other crops on a plot of land surrounding Pu'u Ola'i (lands now part of State Park at Makena). (Interview, April, 2006). Handy and Handy described a plot of sweet potatoes being grown (c. 1940's) in sandy soil adjacent to the old Makena school site, just south of today's Maui Prince Hotel.
The late Inez Ashdown, whose father was Ulupalakua Ranch foreman in the from 1908-10 and the 1920's, echoed Chang's recollections of upper Ka'eo (Ulupalakua) and commented on the visible changes in vegetation:

"I left Ulupalakua in 1925, the forests have receded for miles… while my father was manager of Ulupalakua in 1908 we needed no water pipes and troughs in the upper areas and midway to Makena. The dew was so heavy the cattle had sufficient water, except in drought years." (Ashdown, Nov 7, 1977 letter:1-2)

A church report from 1904 describes the Ulupalakua lands as a "region that invites the homesteader." The shoreline lands of Makena, in contrast, were described as a "forbidding" region …of heat and rocks." (The Friend, 1904 noted in Maly, 2006:70) This appeared to be, in part, the result of commercial firewood harvesting. A description of Makena Landing area from the 1860s commented that "…*all the good forest trees have been cut, leaving the land with nothing. There is nothing to shade the land*…" (Nupepa Kuokoa, March 26, 1863; Maly translator, 2006: 35)

Cash Crops

The rush to grow Irish and sweet potatoes for export had peaked in the 1870's but other potential cash crops were tried by small landowners. Tobacco, first introduced in 1812, was grown widely by many local residents from the 1830's on until the 20th century, along with the more traditional sweet potatoes, Irish potatoes and gourds. It was even grown commercially in the early 20th century (1908-1929.) (Maly, 2006, vol II, interviews) Missionary newspapers decried the fact that the *"cultivation of tobacco is foremost in Honua'ula of all the lands of Maui."* (Ke Kumu Hawai'i, 1836, translation by Maly, 2006: 60) Maly reported that Lonokailua family members in Ka'eo were growing tobacco for their own use until the 1970's. (Maly, 2006: Appendix A:249))

Several families grew alfalfa for cattle feed in the Honua'ula region. The Chang family grew alfalfa (and other crops) at their four-acre site in Keauhou (Pa'ipu) where there was a good well. John Kauwekane, one of the 10 children of John and Kamaka Kukahiko partnered with rancher Angus MacPhee to grow alfalfa in the sandy soil around Pu'u Ola'i to fatten beef cattle at MacPhee's feedlot operation. (Greig-Lee, 2002: C-7)

Prickly pear cactus were introduced and specifically cultivated by some families in Ka'eo, and large populations remain on undeveloped lands to this day. The sweet cactus fruit was gathered and used to feed pigs, according to Annie Wilmington, one of the Chang family, who lived at Makena Landing from 1907 to 1941. (Ibid: C-8) Various informants also recalled the cowboys and the fishermen enjoying homemade brew distilled from the juice of the red panini cactus, locally referred to as *red panini swipe*. No one could recall the more traditional awa root beverage being prepared, but a few recalled community gatherings where the cactus liquor was consumed. (Maly, 2006, Samuel Chang interview: A-57.)

Some of the plants that found their way into the Ka'eo area were not just invasive, they were potentially dangerous. Agricultural pioneer David T. Fleming introduced a wasp to *"parasitize the pamakani weed that was inundating the ranch's grazing lands and sickening the horses."* According to Fleming's granddaughter. (Star Bulletin, May 28, 2005) In gratitude, Ulupalakua Ranch manager Edward Baldwin, gave Fleming 18 acres just south of Ka'eo in Kanaio. There, in 1952, Fleming established Maui's first preserve for native dryland forest.

Native Forest

By the 1950's, only a small fragment of the lands of Ka'eo still had native dryland forest. Still in the fertile soils of Makena, many pockets of native plants survived. Archaeological surveys of Makena's north golf course done in 1982 referred to "dense stands of wiliwili trees" in areas proposed for future fairways. (Bordner and Cox, 1982: ?) In modern times, golf course greens and there landscaping are the latest introduced species to cover the lands of Ka'eo. By 2007, 95% of the original native dryland forest area on Maui had disappeared, and the wiliwili stands remaining in the Makena area now constitute the third largest population of that culturally valued native plant on Maui island. (Altenberg, 2005: ?)

Historic Events & Settlement Patterns 1900-2007

"….how vast must have been the obliteration of the works of the ancient Hawai'ians in the many thousands of acres which have been plowed under for agriculture and from grazing lands and how numerous must be the unrecorded remains."
Emory and Hommon (1972: 57) commenting on the 1966 survey of Kahikinui by archaeologists Chapman and Kirch

As mentioned earlier in the Population section, there were two settlement areas in Ka'eo at the beginning of the 20th century. One centered around Keawala'i Church and Makena landing and the other around Raymond's ranch headquarters (later known as Ulupalakua Ranch) in Ka'eo's upper lands. Many upland Ka'eo families were related to coastal residents by blood or marriage. There were also many family ties among Ka'eo residents and the families in nearby ahupua'a of Palau'ea, Keauhou and Kanaio. Ka'eo's coastal settlement centered around fishing and gathering from coastal waters, raising pigs and subsistence farming. The Raymond Ranch lands were devoted to cattle raising and some field crops. Individual farmers in the upper lands grew fruit, dryland taro, potatoes and other vegetables to trade for fish with their coastal neighbors, and this commerce continued well into the twentieth century.

Twentieth Century Land Ownership in Ka'eo

A half-century after the lands of Ka'eo and the surrounding ahupua'a were awarded to numerous Hawai'ian families during the mahele, the ownership patterns began a profound shift towards consolidation of smaller parcels into those of the largest landholder, Raymond-Ulupalakua Ranch. (see Fig 5 & 26- mahele era land grants) The first significant segments of lands to be transferred were those of the *konohiki*, Mahoe.

The Lands of Mahoe, Konohiki of Ka'eo

In the years after the Mahele (c. 1847-1855) half of the lands of Ka'eo, from the reefs to the uplands, were held by the konohiki Mahoe and his heirs. The remainder of Ka'eo was granted to L.L. Torbert, founder of the plantation that eventually became the Ulupalakua Ranch. In 1855, Torbert also purchased 100 of the 514 Ka'eo acres granted to Mahoe. These were likely to have been lands in the upper elevation. (for more about Torbert and Mahoe see Chapter III, **Historic Figures**)

Mahoe transferred his interest in the lands of Ka'eo to his three daughters shortly before his death in the 1870's. None of the daughters appeared to have lived in Ka'eo during their adult lives. In 1899, the widower of one of Mahoe's three daughters sold his late wife's interest in Ka'eo to the local postmaster, J.M Napulou. In the early years of the twentieth century, Mahoe's remaining lands in Ka'eo (around 340 acres) began to be sold by his heirs. The major portion of Mahoe's land grant (8/12 interest, approximately 276 acres) was sold to the Raymond ranch between 1908 and 1909 in three transactions.

During the same two-year span, two of Mahoe's grand-daughters sold their interests (approximately 70 acres) to David J. Kapohakimohewa, the son of another Makena land owning family. In 1880, Kapohakimohewa's father John had leased 141 acres of the Mahoe grant, including konohiki fishing rights, from Mahoe's three daughters. (Bureau of Conveyance records, translated by Maly, 2006: 179. 181-183) (For more about the Kapohakimohewa family see **Historical Figures** Section in this chapter).

Over the years, the Kapohakimohewa family had acquired around 630 acres of land surrounding Pu'u Ola'i, including portions of Ka'eo and the neighboring lands of Mo'oiki, Mo'oloa and Mo'omuku. (see figure ?) This land, which forms the majority of the current Makena Resort golf course, was exchanged to Ulupalakua ranch (then under ownership of Frank Baldwin and his son Edward) in 1935, by David J. Kapohakimohewa's widow, Julia.

In return, the Kapohakimohewa family received a little under three-and-a-half acres of oceanfront land contained in two parcels, one north and one south of Keawala'i church. The larger of these parcels surrounded two small Land Commission Awards already owned by the family. (Fig. 35) With this exchange, the majority of the lands of Ka'eo, were now owned by Ulupalakua Ranch. (Ibid, Liber 1331:309-324, translated by Maly, 2006, 181. 189-194)

Other Land Exchanges

As family patterns shifted in twentieth century Ka'eo and Honua'ula, so did land ownership. While most land transactions involved land landowners like Ulupalakua ranch adding smaller native tenant parcels to their holdings, some transactions actually enabled kanaka maoli families to own land in the region.

During the early 1900's, Makena residents John and Kamaka Kukahiko passed on their interests in their family lands to their 10 children and grandson, with the provision that the elder Kukahikos would continue to live on the land. In 1882, *Palupalu*, son of *mahele* land claimant *Kanakahou*, conveyed two parcels that were a half-mile inland from Pu'u Ola'i to the elder John Kukahiko for the sum of $65. These had been granted to *Palupalu's* father around four decades earlier by Kamehameha III. (Maly, 2006: 173)

The next year, 1883, family patriarch John Kukahiko, senior had purchased two parcels: 3 acres at Makena Landing and 4 acres further north in Pepeiaolepo in Keauhou ahupua'a from James Makee's widow in 1883. (Bureau of Conveyances, Liber 80:97, translated by Maly, 2006: 178)

The elder Kukahikos stipulated that: *"upon our death our properties shall be shared in joint tenancy by all of our children and our grandson. We make it known here that no one of them shall have the power to sell their interest in the land or buildings to any other. But if they desire to sell their interest, it must be to another one of them, who are named above. "* (Bureau of Conveyances, Liber 238: 217-18. translated by Maly, 2006: 180) A few of their descendents still live in the Honua'ula area on family land

In 1911, the Kukahiko Family granted a 20-year lease on the Tong Lee store to their granddaughter Hattie A'ana (Chang) and her husband. Chang A'ana. The store building was located on a portion of the 3 acre family parcel at Makena Landing. This was the first site of Makena's landmark Chang's store. The shopkeepers agreed to pay $4 a year rent and pay the land taxes on the three properties owned by the Kukahiko family. (Ibid, Liber 353: 323-325, Maly, 2006: 188-189)

In the mid 1950's Ulupalakua ranch offered to exchange two small pieces of land in Ka'eo immediately across the road from the larger of the two Kapohakimohewa parcels with two Hawai'ian families who had land claims further inland. (Ibid, Liber 3146: 344-347, Maly, 2006:195-197)

One five-acre parcel was given to the Garcia-Cockett family in exchange for 16–acres of land the family had claims to in upper Palau'ea through the original claimant, Kalama.

The other, 1.5-acre parcel was offered to the Lonokailua-Bak-Kalani-Awai family, in exchange for a five-and-half-acre parcel located around a mile inland of Pu'u Ola'i. Both of the Ranch parcels proposed for the exchange had extensive walls and other Hawai'ian cultural sites, including the *Kalani heiau*, previously noted in 1916 by the Bishop Museum's J.F.G. Stokes and again in a 1929 survey by museum anthropologist, Winslow Walker. (Stokes, field Notes, 1916: 33; Haun, 2003: 9) Stokes, in his field notes also has John Kauwekane's name and address noted. (Ibid) John Kauwekane Kukahiko, son of John Kukahiko, was close with fellow fisherman David Lono, who actually used the *Kalani Heiau* as part of his traditional fishing practices. It is possible that Kauwekane was Stokes' informant for the heiau location.

Other individual landowners, like Kauwekane, made their own exchanges with the ranch throughout the first half of the twentieth century.
It appears from an interview given by Kauwekane's grand-niece, Annie Wilmington, that the respected carpenter and fisherman was involved in several land transactions with the ranch over the 1920's. (Grieg-Lee, 2002, C:2-3)

RANCHING LIFE AT ULUPALAKUA IN THE PRE-RESORT ERA

Rose Ranch becomes Raymond Ranch 1901-1922

Ownership of Rose Ranch, in the uplands of Ka'eo had been passed to various members of Captain James Makee's extended family after his death in 1879. By 1900, the once famous ranch lands were described in the local newspaper:

"..one can look over a broad expanse of acres where once grew fields of sugar cane. The old mill is now a crumbling ruin. The roads are overgrown with roots and washed out by the rains of many years. The cottages are gone and the persistent lantana is fast encroaching upon the grassy pasture lands." (Maui News, September 22, 1900:3)

> Still, the ranch was described as having 1,500 head of cattle and around fifty horses when it was deeded to Makee's daughter-in-law, Phoebe Raymond, and her second husband, Dr. J.H Raymond in 1901. (Bureau of Conveyances, State of Hawai'i 1901: Liber 225:218-220)

Over the next several decades, Dr. Raymond's ranch grew from 26,000 acres owned in fee simple and 33,00 acres leased from the government to around 70,000 acres with 6,500 head of cattle, 400 acres of farm crops (corn and beans) and 60 employees. (Honolulu Star Bulletin, April 12, 1920: S1)

The Raymond's established a slaughter house and cold storage in 1905 at Keone'o'io Bay (La Perouse Bay) on several parcels adjacent to the steamship landing. This land was later purchased by several others, including the Carter family (c. 1960's) and a house and cottage built.

By 1915, Keone'o'io slaughterhouse was abandoned. The poor state of the mauka-makai roads from the landing to the upper ranch lands made transport of goods difficult. (Fredericksen, 1997) A new slaughterhouse was built in Makena in back of Pu'u Ola'i by early 1916, according to a May 1916 Maui News article. Elspeth Sterling's research on Ulupalakua Ranch indicated that a new slaughterhouse was built at Ulupalakua Ranch itself in 1929, which would have replaced those which were on the coast. By that time, the Ranch was shipping its beef from Kahului harbor. (Barrere, 1975, citing Sterling, 1965:11) Kahului Harbor was surrounded by facilities owned by the Baldwin family, who also owned Ulupalakua Ranch. The Keoneoio slaughterhouse appears to have been removed during WWII. (Fredericksen, 1997)

Raymond Ranch to Ulupalakua Ranch 1922 to 1963

In 1922, Frank Fowler Baldwin, son of sugar plantation pioneer Henry P. Baldwin, purchased controlling interest in the Raymond Ranch and its 22,000 acres of land. It was renamed Ulupalakua Ranch. Former ranch manager, Angus MacPhee had returned to manage the ranch for the Raymonds in 1921, just before it was sold to Baldwin. He managed the ranch until 1925, when Frank Baldwin's son Edward, became the head of ranching operations.

In a 1929 report by L.A, Henke of the University of Hawai'i, the ranch was described as "*extending along the sea for twenty-five miles and up the southwestern slope of Haleakala on Maui, has an area of approximately 63,000 acres, 28,000 of which are held in fee simple and the balance is government leased lands.*" (Henke, 1929:60 cited in Maly, 2006: 173)

The Maui News reported that by 1926 the ranch lands that once grew corn and other grains were replanted in grass to support the ranch's expanded heard of 5,000 head of cattle. (Maui News December 4, 1926:S6)

Ranching Activities of Angus MacPhee

Angus MacPhee, a skilled cattleman from Wyoming who settled in Hawai'i in the early years of the twentieth century with his wife and young daughter, played a pivotal role in ranching operations for the Baldwin family. He held management positions at Haleakala Ranch, Grove Farm and Ulupalakua Ranch.

According to personal recollections of Makena resident Ernest Chang, Angus MacPhee and his second wife lived for a time at Makena after he left the manager's post at Ulupalakua ranch. Chang recalled that Mr. MacPhee grew alfalfa, melons and squash and operated a feedlot for cattle near Pu'u Ola'i, around 1926. MacPhee's daughter, Inez Ashdown, also noted in her writings that her father *"resigned his job at Ulupalakua ranch and built a home and a feed lot at Pu'u Ola'i, Makena. He bought cattle from Ulupalakua Ranch [then under ownership of Edward Baldwin] and other ranchers who shipped out of Makena, fattened them and made a profit."* (Ashdown, 1979:59)

Baldwin Beach House in Ka'eo

It appears that for a time the MacPhee family lived in a beach house in Ka'eo while the ex-ranch manager got his house built and his feedlot established.

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The cottage, used by MacPhee and his family, was located in Ka'eo at the south end of Maluaka beach. Inez MacPhee Ashdown referred to the cottage several times in her writings and especially praised the delicious water that the family gathered from a natural shoreline spring nearby. (Ashdown, 1971)

According to local informants, the beach house was built in the early 1920's and was used by Ulupalakua ranch owners, employees and their guests. .It was referred to as the "Baldwin Cottage" or "Baldwin Beach house" by local residents, who because of the presence of the cottage, also used the name "Baldwin Beach" for what is today called Maluaka Beach (beach fronting the Maui Prince Hotel in Makena.) (see fig 18, sketch by Boogie Lu'uwai)

Ernest Chang, who was about 9 or 10 at the time, recalled that a young girl or woman (perhaps a guest at the cottage) had been drowned nearby, shortly after it was built. (E. Chang personal interview, 2006) Chang also recalled that MacPhee's wife was his teacher at the old Makena school c. 1925, but she left after that year. (Ibid)

The Baldwin Beach cottage, which was part of the Ulupalakua Ranch, was also referred to by Winslow Walker in his 1929 tour of Maui archeological sites. He described the site of a former heiau or fishing ko'a . This site was said to have been located nearby the cottage on a rocky outcrop that Walker was told was named *Kilauea Point*. (Walker, 1931) (the ko'a /heiau is discussed in Chapter III, **Ceremonial and Civic Sites**). Walker did not indicate whether the name *Kilauea* was a traditional place name for the point, or if the name might have had some connection with the steamship *Kilauea* which called regularly on the port of Makena during the later part of the nineteenth-century. (Maly, 2003, vol II-960) For more on Walker's survey of Honua'ula see **Ceremonial and Civic Sites** section in this chapter.

Given its location on the shore, the Baldwin Beach house was possibly impacted during the military activities of WWII. Inez Ashdown, in her writings of the 1970's appears to refer to it in the past tense. Kelly's informants in her 1985 interviews referred to a stone wall that once ran along the driveway of the Baldwin cottage and intersected with a wall along the seaward edge of the old Makena Road. (Kelly, 1987) It is said by some that the cottage occupied the site that is now the Maluaka Beach Park.

Ranching Water Supplies

According to Inez Ashdown's writings water supplies for the Ranch were problematic: *"In 1908 Dr. J.C Raymond and my father [the ranch manager at the time] worked hard to obtain water from the Kula pipeline. Ulupalakua never has had enough water from that pipeline during any drought."* Around 1910 Ulupalakua Ranch built several pipelines. Ashdown went on to describe that these were used to *"carry water from Polipoli and Auahi Springs, for the houses and home paddock trough."(Ashdown, Letter, 1977)*

Public records show that Dr. Raymond negotiated a lease with the Territorial Government in the summer of 1901 for *"a flowing spring known as Polipoli and the waters thereof.."* and a further license was granted to the Ranch the following year for a 640 acre tract of government land in the Government Reservation of Kamaole, (probably current Kula Forest Reserve) below the spring, for the purpose of *"developing water, carrying out and using same upon said lands… and for these purposes to construct and maintain…. reservoirs, dams, ditches, flumes, tunnels, pipelines and any and all works.."* (Bureau of Conveyances, Liber 333:276-303, cited in Maly, 2006:185-187)

However, as Ashdown observed earlier in this chapter, the general deforestation of Kaho'olawe and the slopes above Ka'eo led to more and more

severe disruption of the region's natural hydrological cycle. Lack of water and periodic hardships of drought are conditions that still face the modern day Ulupalakua Ranch. An historic partnership was formed in 2003 to unify 12 landowners (including Ulupalakua ranch) into an ambitious native koa tree reforestation project circling the southeastern slopes of Haleakala at around the 3,000 ft elevation. It is hoped that over the long term, these restoration efforts will result in increased precipitation and better retention of available moisture to result in more reliable ground water supplies for the Honua'ula and Kahikinui districts.

Village Life in Coastal Ka'eo: 1900-1960

The center of the Ka'eo/Makena community at the turn of the century was Keawala'i Church (then called Keawakapu), Makena Landing, and the Chang family store at the landing. As stated earlier, oral histories from members of the Chang, Kukahiko, Kapohakimohewa and DeLima families place the number of households in the area during the post WWI period at around 12. (Maly, 2003, vol II: 958)

Many families with connections to coastal Ka'eo lived in the uplands of Ulupalakua during this era, and there was a lively interchange among mauka-makai branches of the families during holidays, church events and when the *akule* (big-eyed scad) schools spawned in Makena Bay (spring to mid-summer). (Maly, 2003,vol II: 962; Kelly, 1987:36).

In 1985, Marion Kelly interviewed Esther Campbell, the daughter of the turn-of-the-century minister, the Rev. George Kaululena (also known as Tutu Makeha), who presided at the community church in Keone'o'io in the era before World War I. Kelly summarized Campbell's recollections of Ka'eo and adjoining coastal communities during the interview:

"Several of the communities continued to be inhabited with fisher families until just before World War II. Even after taking up residence in the upland communities of Ulupalakua, Kanaio, or Kanahena, the families continued to return to fish at the old fishing sites. Most often transportation was by car or truck, but sometimes by horse or mule, or even on foot"
(Kelly, 1987:36, Esther Campbell interview).

While western ways predominated in twentieth-century Ka'eo/ Makena, there were still those who followed the traditional Hawai'ian cultural practices. Robert Kalani, told of his grandfather Lonokailua:

"My grandfather took care of this road [Old Makena Road], and he was the only Hawai'ian that had a malo. From day in and day out, he wore malo. And when Prince Kuhio [c. 1900's] came down here and saw my grandfather in a malo, he was just like choked up to see a Hawai'ian that still had the malo." (Maly, 2006, Appendix A: 243)

Family life for the Kukahikos, Lonokailuas and other Ka'eo families – both in Ulupalakua and along the coast also revolved around many time-honored cultural practices. Families gathered traditional foods from the sea and knew the habits of all the sea creatures. They grew ipu vines. They used canoes to set nets for hukilau (community fish harvests) and to travel short distances along the coast to visit family or fish. (Maly, 2003, vol II: 964) The craft of netmaking was passed on from one generation to the next. Children learned responsibility by helping their families raise pigs for food and sale. Food crops were an important part of each family's livelihood. New crops were adapted to old methods. The Lonkailuas for example, who had many rock walls and mounds on their parcel of land next door to Kalani heiau, grew pumpkins and squash, as well as the more traditional sweet potatoes.

Robert Kalani described his grandparent's efforts: *"they get the dirt, the lepo, and put it in between the lava rocks in the stone wall and you throw the seed inside there and let them grow… And the vine is all over the stone wall."*

Several Ka'eo families, cared for sharks who were family *'aumakua*. The Lonokailuas also followed cultural protocol involving fishing practices at the nearby Kalani heiau (which adjoined the land they acquired in 1956 swap with Ulupalakua Ranch). Others offered their gratitude at the several fishing shrines that still dotted the coast. Lu'uwai Kukahiko was a famed kilo'ia or fish spotter, and he and his brother Kauwehane helped organize the seasonal hukilau where the whole community joined in to pull fish laden nets from the sea. Many families used ancient wells for their water supply, collected their own salt from the sea and dried fish for sale, trade or future use. (Maly, 2006, Appendix A- 238, 243; Kelly, 1987)

Of course music and dance was also a welcome part of community life with melodies and meles passed on from generation to generation.

During the 1920's and up to the 1970's young people of Makena still had many opportunities to learn traditional Hawai'ian skills from their elders, who were full of knowledge. David Lonokailua (1914-1980) was remembered by a number of Makena residents for his expertise in every aspect of fishing and

his willingness to pass on his knowledge to the next generation of Makena fisherman. (Maly, 2006) Sam Chang recalled his grandmother's brother, the skilled fisherman John Kauwekane (tutu Kapahu), taking him and his brother on ocean fishing trips and passing on fishing lore and skills. Chang reported that his uncle took them by canoe along the shore from their home near Makena landing, north to Pa'ipu (present day Eddie Chang Jr. family homestead, adjoining Po'olenalena Beach park.) (Maly, 2003, vol II: 964)

Many of the "aunties" were as knowledgeable as the "uncles" about fishing and gathering along the shoreline, and passed this knowledge to children and grandchildren. Other kama'aina interviewees described community members in the years before WWII who cared for traditional fishponds, like the Kaphakimohewa family. (Maly, 2006) Annie Wilmington described how such caretakers efforts were respected by others and, once a pond was claimed, only those who cared for it were allowed to harvest, sell or distribute the fish raised there. (Greig-Lee, 2002: C-4)

Fishing at Ka'eo/Makena

Marion Kelly interviewed a number of Makena residents who described the area's history as a fishing village. She summarized the remarks of Helen Peters Ferreira from their 1985 interview.

"Makena was known primarily as a fishing village from early times. It contained all the traditional elements of a Hawai'ian fishing community: a pohaku kilo (fish watching stone or observation point), a large heiau [Kalani heiau}, a ku'ula or ko'a shrine [Nahuna point}, and it is a place known for schools of akule entering the bay during spawning season" (Kelly, 1987: Helen Peters Ferreira interview: 39).

Kelly goes on to explain Ferreira's recollections of early 20th century *akule* fishing in Makena Bay.

"The kilo (fish spotter) watched for the first school akule for the season to come from the sea into the sandy bottom of the inshore waters of Honua'ula. He would station himself on the top of Pu'u Ola'i and survey the sea for that tell-tale dark spot. When the fish did come, the kilo would go off to inform the people in Makena that the "malahini had come." Helen Peters remembers seeing the dust flying from the horses' hooves along the road from Pu'u Ola'i as the kilo road his horse along the road."
(Kelly, 1987, Helen Peters Ferreira interview: 39).

Other Makena residents interviewed by Kepa Maly described the long Makena tradition of *hukilau* fishing in detail. *Hukilau* involves a community effort to place a series of nets across the bay during the akule spawning season (February through August). Whole families join in the effort, some working in boats at sea, and others in the shallow waters, to drive hoards of the akule (big-eyed scad) fish into the nets and then gradually close the nets and pull them, loaded with fish, to the shore. (see figure ? Boogie sketch)

This abundant harvest of fish is always shared with all who participate, down to the very youngest family member. In some cases, residents even described sharks who were loyal to particular family members helping drive the small fish into the nets. (Maly, 2003, vol II-960; Maly, 2006, Appendix A:228, 238).

Historically, Ka'eo had two fishponds that were referred to in historic maps and accounts : one at 'Apuakehau, just a little south of the landing, and the other just mauka of Oneuli Beach on the north side of Pu'u Ola'i. Remnants of both ponds still existed in the early 20th century. A number of residents who grew up during that era recalled seeing those remnants, but knew little about those specific ponds or their former use.

Annie Wilmington (nee Chang) described the system of caring for fishponds that was still going on in the early twentieth century in Keoneoio (La Perouse Bay) area:
"..they have ponds, and they own the pond. …you claim the pond, it's yours because you take care of that pond and that's where they raised the fish in the pond. Then this Niauhoe [the pond caretaker] …is what he used to do, and then he brings the mullet in to sell, and then get money to buy food." (Grieg-Lee, 2002:C-4)

Mrs. Wilmington continued her description of the privileges and responsibilities that the pond caretaker had:

"...he gives you the fish, but you can not go to his pond… cause they own the pond …he take care of the pond, …cause you have to take care of the pond all the time, clean and, I guess get new fish. I know my grandma would buy the fish from him." (Ibid)

One interviewee, Ernest Chang, did recall local fisherman David Lono (also called David Lonokailua), taking him and his brother fishing near the Apuakehau Fishpond as a young boy and described it as a great place to find weke fish (author interview with Ernest Chang, April, 2006).

The Mahoe family, who once owned hundreds of acres of land surrounding Keawala'i Church, including the site of the old fishpond, were involved in a series of claims and counterclaims to maintain exclusive fishing rights in this area over several decades of the 19th century. A half a century later, few community members even knew of the existence of the 'Apuakehau pond.

Members of the Kapohakimohewa family are said to have cared for some of the fishponds on Cape Kinau during the early 1900's. Now the former fishponds are part of the 'Ahihi-Kinau Natural Area Reserve, Marine Resource Conservation area where no fishing is allowed. The Lu'uwai family (descendents of Lu'uwai Kukahiko) have applied for and were given a special permit to practice traditional cultural fishing and gathering, on a limited basis in the Reserve. (Interview with Lu'uwai family members, 2006-2007)

As noted in earlier chapters, Honua'ula's volcanic coast has nearly forty natural ponds, many of which had historic use as fishponds. The best known remaining fishpond in Honua'ula is along the shore of Keoneoio Bay, four miles south of Makena. In 1916, Keoneoio was reported to have had a fishing village of about 11 families clustered around a Congregational Church. (Kelly, 1987, Esther Campbell interview: 36). The Keoneoio fishpond is attributed to a 15th century chief, Kauholamahunui. (Fornander,1880. Vol 2:71) (for more about fishponds see Chapter II and Chapter III, **Settlement Patterns**.)

Marie Olsen recalled stories about the Keone'o'io fishpond in her 1985 interview with Kelly.

"The wall of the fishpond at Keone'o'io was broken by a tsunami (probably the tsunami of 1906). Part of the wall is still visible. The pond was dredged at the time a slaughterhouse was constructed by Ulupalakua Ranch about 1916. The slaughterhouse was used by the ranch until about 1923," (Kelly, 1987, Marie Olsen interview: 36).
(Note: research done by Fredericksen (1997) indicated that the Keoneoio slaughterhouse was closed around 1916 and replaced by another constructed at Pu'u Ola'i. It is unclear which version of the story is more accurate.).

Longtime Keone'o'io resident Marie Olsen, described how the Keone'o'io residents raised potatoes, pumpkins and squash. "The village had a canoe house then, but it was bulldozed in recent years by the property owner" (Ibid).

Makena School in Maluaka 1904-c. 1930

Children in the village attended Makena School, which had been established in 1904 along the Old Makena Road a little mauka (inland) from Maluaka Point (also known as Kalaeloa). (see Fig 18) The school was constructed on a 2-acre lot which was conveniently located just mauka of the Old Makena Road and a few hundred yards from the shore. (see Fig 31) In 1910 state officials discovered that the land on which the school was built was owned by an individual who had not granted the state any use of it, P. E. R. Strouch. Strouch had purchased the land from the original grantee, Makahanohano, who had received a Royal Patent Grant on the land in the 1850s. (Maly, 2006: 214, quoting from records in the Hawai'i State Archives, Series 261)

Strouch wanted $600 for his 30 acres, which included the school site, but an exchange of government land was proposed to him for the 2 acres. It is not noted how the matter was resolved, but the state continued to own this property until the 1980s when it was part of a trade of 63 acres of state owned land made by the state with Seibu/Makena Resort for 8 acres of beachfront land at Oneloa (present day Makena State Park). Makena Resort sold several parcels in Maluaka, including the old Makena School site, to an investment partnership headed by Everett Dowling in 2005. In present days, a portion of the school site is used as a public parking lot for Maluaka Beach Park and the remainder is being constructed as a storm water retention basin for Dowling's Maluaka condominium project. A plaque will mark the school site and an oral history is being compiled of interviews of former Makena school students.

The majority of residents in Ka'eo and adjoining ahupua'a attended the Makena School for the first six grades up until the end of the 1920s. From 1930 on, Makena school children were obliged to go to the elementary school several miles away, uphill in Ulupalakua.

The school employed a number of local residents as teachers including Angus MacPhee's wife, one of the Chang brothers and Ida Kapohimohewa. (Ashdown, 1979; Ernest Chang, interview, 2006; Maly, 2006)

The one-room school included 1st through 5th grades only. Educational opportunities for students beyond this grade level were limited to living with relatives in Central or West Maui to attend Pu'unene or Lahaina schools or going off island. As a result, former students such as Sam Chang (born 1911 in Makena) observed that the majority of boys went to work for Ulupalakua

Ranch after completing 5th grade. (Maly, 2003,vol II). Some of the girls, such as Sam's cousin, Helen Peters Ferreira (Kelly, 1987: 38-39) were unable to go beyond the first few grades before their help was required at home to do chores or help raise younger siblings.

Students walked to school along the Old Makena Road and, according to recollections of former students Sam and Ernest Chang, they foraged for their lunches among the coconut trees and white prickly pear fruit. Students also grew large sweet potatoes in the sandy soil of the school lot . (Maly, 2006: appendix A, Sam Chang; author interview with Ernest Chang, 2006). Handy described a farmer using this same sandy lot in the late 1930's after the school had closed: "…another raises fine potatoes in a low flatland of white sand near the abandoned schoolhouse of Makena." ((Handy 1940:159)

"Roads between the communities were used to transport school children from their homes to the school at Ulupalakua after the Makena school was closed (circa 1930). Esther Campbell's father (Rev. Kaululena), Eddie Chang, Sr. and later, Abner De Lima, were the drivers responsible for transporting the students to and from school. When the students graduated, most young people moved to urban centers for jobs, or to continue their education" (Kelly, 1987, summarizing from Esther Campbell interview: 36).
By the 1950's, the Ulupalakua School too was closed, and Makena and Ulupalakua students were transported to elementary school in Kula.

Makena Stores and Commerce

The Chang family store in Makena was established in the early 1900s by the family patriarch, Chang A'ana, (also known as Ying Chang) a native of Canton who came to Hawai'i as a young boy, first settling in Kula. (Ernest Chang interview, 2006)

Chang family members recall riding by horseback to the store in Kihei along a sandy trail to fetch poi for the family business, which sold crackers, corned beef, canned cream, salted meat and staples such as flour, rice and poi. At the time, there was no electricity or refrigeration. (Kelly, 1987; Maly, 2006, Appendix A: 50)

The elder Chang also had a store in Kula. According to research conducted by Mark, interviewing elderly Chinese residents of Kula in the mid-1970s, "most of Kula's produce, poultry and beef were sent to two or three markets in Honolulu, Chinatown, including Wing Hong Yuen and Sing Loy. The

Chang family children reported that the family also raised its own pigs on the family land in Makena, with all the younger children involved in their care. (Ernest Chang interview, 2006) The two Honolulu stores supplied Kula's general stores with Chinese dry goods and staples such as rice, flour, sugar and canned milk." (Mark, 1975). It is likely that Chang's store may have sent and received goods with these same outlets since the shipments arrived at Makena Landing, just a few hundred feet from his store.

The Chang store also brought in fresh poi to the store. Mr. Sam Chang described the transaction in his 2005 interview with Kepa Maly:

"From Kihei there was a Chinese man, I forgot his name, who would bring the poi from Wailuku on a buggy and a horse (chuckles). Not a car, a buggy and a horse. I think was 18 pounds for a dollar. They made poi palaoa. We would take the poi home and they would mix the poi with flour to stretch it." Mr. Chang recalled that he or his brothers would ride by horseback to Kihei to pick up the poi once a week and that his family also grew sweet potatoes. (Maly, 2006, appendix A, Sam Chang interview: 51.)

In later years, after World War I, Mr. Chang drove a truck to Kihei or Wailuku to pick up the poi. (Maly, 2006, appendix A, Sam Chang interview: 50.)

It appears from other informant interviews that there was a second store in Makena during the pre- WWII era. It was run by David J. Kapohakimohewa, (1877-1929) who came to own a great deal of land in the Makena area. Jimmy Kapohakimohewa, grandson of David J. Kapohakimohewa, related that his father, James, (born c. 1905) used to deliver poi from Kula to his father's store in Makena, riding a horse. The Kapokakimohewa's store was located "across the road from the Garcia house on the mauka side" (Maly, 2006: Appendix, 161)

This description would place the store in the heart of the Ka'eo community, roughly in the area of the present-day public parking lot, across from Keawala'i church. A post office has been described in the same vicinity and it is possible that the two shared the same structure. A number of historic era artifacts (china and glass fragments, buttons and related items) were found during archaeological review of the Garcia property. (Schilt, 1979)

Water Sources

Makena residents reported water supplies being limited during the first half of the 20th century. In 1905, the Kula pipeline, which connected springs in

Olinda with the villages along the Kula Highway, was built during what was categorized as "the worst drought in Kula history." The pipeline was built by a "prominent Kula resident named Shim Mook, and labor was supplied by the men and women of the area." (Mark, D.M.L., "The Chinese in Kula: Recollections of a Farming Community in Old Hawai'i," 1975.)

Subsequent droughts followed in the Kula area during the 1910s and 1920s, causing a number of families to leave. It is likely that these same drought conditions affected residents of Ka'eo during this era.

A Honolulu Advertiser article pointed out the changes in the forested areas of Kula, which also had a similar effect on neighboring Honua'ula:

"*Before 1850, Kula was supplied with moisture naturally through the existence of a large forest. That forest was cut down when land was cleared in Kula [and Honua'ula] to open farm plots in 1850. This was in answer to the demand for food in California during the Gold Rush… by ranchers clearing for pasture.*

"Secondary result of clearing forest was destruction of existing fresh water ponds in Kihei on the Maaloaea (sic) Bay coast below Kula. When forest was cleared, water was free to rush down the mountains carrying the soil from Kula, and filling with mud, the ponds for which Kihei was once famous." (Kort, 1962, A: 15.)

The Kukahiko family specifically relied upon two natural *punawai* (springs). One was located a little north of Makena village on A'awa Bay (another name for the cove formed by Nahuna Point), in the land of Papa'anui.(see fig 37)

(NOTE: Papa'anui is the next traditional land division or ahupua'a north of Ka'eo and includes Makena Landing) Sam Chang described the shoreline spring:

"…there was a little well over there, it's amazing. In the morning when it goes low tide, the water goes out and you can drink it right on the ocean. It saved us, you know. Otherwise, we no more water…" (Maly, 2006, vol II: -960)

The other well was located about a mile further north on Chang family land in the ahupua'a of Keauhou, adjacent to what is today Po'olenalena Beach Park. This well was referred to as *Pa'ipu*, which was the specific name of the Chang's homeplace. Chang family members recall *ipu* or Hawai'ian gourds, and a variety of other crops, alfalfa, potatoes, melons and other vegetables being grown on the land since it first came into family hands in 1883. Nineteenth century land documents describing the lands at *Pa'ipu* also refer to grove of coconut trees and (Grieg-Lee, 2002: B-4, C-7)

Some families as well as the Makena School established water tanks or cisterns which captured rain to supply potable water needs.

Sometime after World War I, a pipe was brought down from Ulupalakua to Makena. Although, it appeared from various newspaper articles of the time that Ulupalakua's water supply was far from assured during times of little rain. Inez Ashdown refers to a *punawai* with cold, clear spring water descending from the slopes of Haleakala at Polipoli. Her descriptions place this well near the Baldwin Beach Cottage, a house her family occupied at the Ka'eo shoreline (described earlier in this Chapter.) (Ashdown, 1971: xx.)

Piecing together other oral accounts, it appears that this residence was actually owned by the Baldwin family as part of their holdings for Ulupalakua Ranch. Maly, 2006, Appendix A: 237)

From various corroborating accounts, the well she referred to is the same that was cataloged as site B8-8 during Alan Haun's 1978 archaeological survey of lands along Makena Point proposed for golf course construction. The Baldwin beach home was located a little mauka of the spring on land that is currently (2007) part of Maluaka Park, adjacent to the proposed Maluaka condominium project. The well, which lies along the ocean, and is of traditional walled construction, is currently filled up with cobbles, but its outline can be clearly observed. (Figure 15). (Haun, 1978; Donham, 2006:35; author interviews with Ashdown family friends, 2007)

Land Exchanges

A number of Makena families were offered an opportunity to exchange land with Ulupalakua Ranch to resolve claims where title to lands that were needed for ranch operations were unclear. According to an interview given by Kukahiko family descendent, Eddie Chang, Jr. in 2002, Ulupalakua Ranch made an concerted effort in 1926 to "clear up all their titles." Chang explained that among the ranch's 28,000 acres were a number of *kuleana* lands (lands granted to families during the Mahele) that had no metes and bounds description, only locations based upon physical features. *"In 1926, they [Ulupalakua Ranch] came out with something called a File Plan 248, and File Plan 248 made metes and bounds as you see now."* Chang noted that he had a copy of the ranch plan from his father, Edward Chang, Sr.'s files. (Greig-Lee, 222: B-4)

The Chang family participated in an exchange for 13 acres they had near the Ulupalakua School, receiving about the equivalent amount of land in the coastal area. According to Sam Chang, it was his mother, Harriet, who had a house on the Ulupalakua land for many years. Mr. Chang was not clear how his mother had obtained the land, but his interview revealed that her biological father was Erdmann Dwight Baldwin (E.D. Baldwin), a surveyor and engineer, who mapped the lands of Honua'ula in the1800's for the Kingdom Ministry of the Interior.

E.D. Baldwin and Ha'eha'e Kukahiko were about the same age, having been born in 1859 and 1860 respectively. They had a relationship in the early 1880's and their daughter Hattie was born in the mid 1880's. Baldwin's uncle was famed Maui sugar planter H.P. Baldwin. H.P. Baldwin's son, Frank, came to hold a controlling interest in the Ulupalakua ranch lands by 1922. It is possible that the lands were offered to Hattie Chang as a consideration from her father's family, although her mother eventually married another man. (Maly 2006, appendix A, Samuel Chang interview: 50).

Mrs Hattie Chang remarried after A'ana Chang's death to famous Maui cowboy Ikuwa Purdy, who had also been recently widowed. According to family members, they lived in Ulupalakua at his house. (Maly, 2006, Appendix A Sam Chang interview)

As described in the opening section of the settlement discussion, a number of other records on file in the Hawai'i State Archives indicate that local families conducted exchanges with Ulupalakua Ranch (owner of 28,000 acres in southeast Maui) during the early years of the 20th century. (Maly, 2006: appendix A, James Pohakimohewa interview: 169.)

The War Years (1940s)

By the end of the 1930s, Makena's population had continued to decline as young people left for jobs or educational opportunities elsewhere and older residents relocated to other parts of the island with better roads and services. (Kelly. 1987; Ernest Chang, interview, 2006)

Makena School had closed and students were transported up the bumpy dirt road to Ulupalakua. Postal services were also centered in Ulupalakua, as was voting. The coming of World War II, after the attack on Pearl Harbor in Honolulu, brought the entire state under martial law (Ramil, 1984:680). Maui's southern beaches from Ma'alaea to Makena were transformed into

military training zones for the duration of the war. Beaches were blockaded from public use with barbed wire fences. Cement pill boxes were constructed at strategic locations along the shore and fitted with artillery to prepare for any possible further invasions.

Makena became a training ground and military barracks were built in the area. (John Clark, 1980:39) Still, some typical activities did continue, especially if they supported the war effort. Ernest Chang, who was in his twenties during WWII returned to Makena to help raise hogs during the war years on family property at Makena Landing and also a little further north at A'awa Bay (Nahuna Pt. area) (Chang, Interview. 2006)

In Ka'eo/Makena, residents around the landing were evacuated and the majority of their homes were bulldozed. One of the 16 Chang children, Annie Leimomi Chang Wilmington, (Born 1907 in Makena) described the effects of the military takeover of Makena in a 2002 interview:

"When the war started coming, they told everybody from the beach they had to move. [People] were selling their houses… but they [the military] took [bulldozed] all the homes so we didn't get anything but fifty dollars for it." (Lee-Grieg, 2002. Appendix C- 8) Note: The Kukahiko property, where Annie lived her grandmother, was owned by the whole family and could not be easily sold.

Annie Chang went to Honolulu after the family lost their home at Makena Landing. She lived for a time with her great-uncle, Kaha'anui Kukahiko, who was a policeman in Honolulu. When she returned to Maui, it was to Ulupalakua, Her younger brothers were attending Ulupalakua School (Makena School had closed around 1930) and her mother, Hattie Chang, had remarried and had a house in Ulupalakua. (Ibid; Maly, 2006, Appendix A: 5)

According to local residents, the military also tore down the historic pier at Makena Landing and removed a portion of the hill overlooking Makena bay, to create a better landing area for amphibious vehicles. This affected the safety of future residences in the area since it allowed storm-generated waves to wash much higher up on the land than ever before. (Maly, 2006, Samuel Chang interview: Appendix A-95; Kelly, 1987)

The military changed many things about Makena. They bulldozed a wider road through from Ka'eo to their other training base in Kamaole, Kihei, knocking down the stone wall that had helped hold back the sand dunes

in the section of Ka'eo now occupied by the ground of the Maui Prince Hotel. (Kelly, 1987) In neighboring Mo'oloa, military units cleared the land surrounding Pu'u Ola'i with bulldozers, erected a Radio Range station and installed other military communications equipment. (Carpenter, Major and Yent,1999:18)

One of the most dramatic changes during the war years was the military takeover of Kaho'olawe. This island, which was important to local residents as a fishing grounds, and, in more ancient times, as a spiritual center, became a target for military bombing practice and invasions.

When the war ended, the MacPhee family and their partners requested the continuance of their lease on the island in hopes of resuming efforts to raise cattle and restore the lands. (Ashdown. 1979: 65-70) This was denied and the U.S. Navy continued using Kaho'olawe as a target practice island for military exercises until 1990. The bombing would eventually galvanize the Hawai'ian community and play a significant role in the Hawai'ian cultural and political renaissance. (KIRC website, 2006)

Other parts of Honua'ula were significantly transformed during the war era due to military training actions. Haloa (also known as Halo) Point, just north of Po'olenalena Beach, extended much further into the ocean prior to World War II. It was used as a demolition training site during maneuvers and the seaward section of the point was destroyed. (Clark, 1980: 40). A similar fate occurred a little further north at what is today called Mokapu Beach which fronts one of the Wailea resort hotels.

John R.K. Clark, who did considerable interviews with local residents researching his book, "The Beaches of Maui County," in the 1970s, described the destruction of Mokapu Island, another special place in coastal Honua'ula.

"Prior to World War II, Mokapu (Sacred Island) was a small rock island offshore from the beach. Seabirds such as kolea gathered on it in the evenings, and on the rocky point nearby. The birds would feed mauka in Kula during the day and then return to the shoreline for the night. The flocks were immense, making Mokapu a popular hunting area. During the war, however, the rock island was almost entirely destroyed by explosives detonated during combat demolition exercises. So little remains of Mokapu today that it is simply another rock among the others nearby." (Clark, 1980: 43.)

Ulua Beach (called Kaula'uo by old-time residents) was used for the amphibious landings to practice maneuvers for the invasion of Tarawa. After World War II, many local fishermen referred to the beach as "Little Tarawa" until Wailea Resort changed the name to Ulua Beach. The beach is well-known to visitors and residents since it fronts a portion of one of the early Wailea hotels. (Clark, 1980: 42).

A number of Ka'eo residents who worked as cowboys for Ulupalakua Ranch were part of the Maui Mounted Patrol, which assisted the armed forces as scouts and guides in the mountain ranch areas. Kula, Makawao, Ulupalakua and Kaupo each had a mounted patrol troop. The lands of Ulupalakua Ranch and Haleakala Ranch were used for troop training. Troop commanders were: Dwight H. Baldwin, Edward H.K. Baldwin, Robert von Tempsky and Richard A. Baldwin. (Tony Ramil, 1984, "Kalai'aina:" 71)

THE COMING OF RESORTS

Resort and Luxury Home Development (1970-Present Day)

The New Economy (1950-1970)

Life was slow in the village of Makena after the war. Members of some families were able to return to the beloved homes of their childhood, but dramatic changes that would drastically alter the way of life in Hawai'i, were being planned far-off in Honolulu – and Maui's leaders were at the helm.

Ulupalakua Ranch was positioning itself during this time to pare down their vast landholdings, as ranching operations became financially less viable. At the same time, the Legislature enacted Act 150, "for the purpose of providing a planned, coordinated program for developing the economic potential of the territory." The act noted that tourism presented "the greatest potential" for expanding the economy of the territory. Such purpose was to be achieved "through assuring that the development and the expansion of the tourist industry is integrated and coordinated with the general economic planning for the territory." (Ramil, 1984: 190-191)

Act 150 set up a general planning process for all the counties to guide construction of physical facilities, but to also "assist business, commerce, and industry in achieving maximum utilization of the economic resources of Hawai'i." (ibid)

Ramil's research indicated that Act 150 also involved substantial appropriations from the 1957 Territorial Legislature for capital improvement projects, including about $5 million for the County of Maui. Future Maui Mayor Elmer Cravalho chaired the House Finance Committee at the time and supported the opportunity to put infrastructure in place to allow tourism areas to be developed on Maui.

In April, 1957, with Act 150 on its way to being adopted by the Legislature, Pioneer Mill (a sugar plantation centered in west Maui) proposed a $36 million resort development on about 400 acres of land. Situated just north of Lahaina Town, in an area once popular with ancient Hawai'ian royalty, this development would later become known as Ka'anapali Resort.

Barely a month later, Matson Navigation announced its intention to purchase 1,500 acres of Honua'ula land from Ulupalakua Ranch. This was destined to become the master-planned Wailea Resort. The proposed Wailea project was described as having several significant drawbacks: no readily available water supply and a road which needed considerable improvement.

From Ulupalakua Ranch to Makena Resort

In 1963, after the death of ranch owner Frank Fowler Baldwin, Ulupalakua Ranch changed hands. At the time, it was the major landholder in Ka'eo, and all of Honua'ula district. According to the Ulupalakua ranch website, the Ranch now owns approximately 16,000 acres and leases an additional 2,000, but at one time encompassed around 40,000 acres, both owned and leased before "approximately 20,000 acres of leased land was turned back over to the State of Hawai'i Department of Hawai'ian Home Lands (1967) and the State of Hawai'i Department of Land and Natural Resources (1997). (Ulupalakua Ranch website homepage, 2007)

The new owners of Ulupalakua Ranch were the C, Pardee Erdman family, cattle ranchers from Wyoming. Less than a decade after they assumed ownership, they began looking for a buyer for their coastal lands in Makena. Eventually, the ranch came to be represented by local power broker Masaru "Pundy" Yokouchi of Valley Isle Realty. (Cooper and Daws, 1985: 294)

Mr. Yokouchi sought out and received some favorable interest in the Makena lands from the Japanese railroad conglomerate, Seibu. Negotiations between the two parties were begun in the late 1960s. The ranch needed a substantial (30 to 40 acre) oceanfront site with a white-sand beach in order to secure

the hotel deal with Seibu. The ranch's own holdings in the area of Maluaka Beach totaled only about 15 acres. The entire Maluaka Beach and a portion of the dune area immediately mauka of the shoreline was listed at that time as "government land" owned by the state of Hawai'i. (Maui News article, 1985)

According to local residents, the area behind the coastal dunes, and mauka of the old Makena Rd. was once the site of a substantial grove of coconut trees, possibly associated with the chiefly families who had built and utilized *Kalani heiau* nearby.
(Ashdown, 1971:50; Kelly, 1987)

Through Mr. Yokouchi's skillful guidance, Ulupalakua Ranch was able to get the six-acres of beach front land returned to their ownership through a special bill that quietly made its way through the Hawai'i State Legislature in 1968. Then, Mr. Yokouchi was able to broker a land exchange between the state and the ranch for the16-acre parcel of state land immediately adjacent to the Ranch's parcel at Maluaka Beach. These two parcels, when combined with the ranch's other parcel that adjoined them, presented an attractive resort site that met Seibu's needs. The Ulupalakua Ranch sold the potential hotel site for around $2.5 million. An additional 1,000 acres of Makena lands, which included portions of the ahupua'a of Papa'anui, Ka'eo, Mo'oiki, Mo'oloa, and Mo'omuku was finalized in 1973 for a price of around $7.5 million. (Maui News article, 1985)

Water Comes to Makena

According to research done by Antonio Ramil for his "Kalai'aina" history of Maui County, the territorial Legislature actually appropriated $750,000 for the installation of a waterline to Kihei in 1957. There was a stipulation on the funding, however, that the line would not be installed unless there was assurance of tourist development in the Kihei area. At that time, Maui County's Planning Director Robert O. Ohata did not see such development coming in the near future, so the appropriation lapsed. (Ramil, 1984: 190).

The matter of water for Makena/Wailea was revived again under Maui Mayor Elmer Cravalho in the 1970s. This time an appropriation of $4 million from the Legislature was obtained to help fund construction of an $11 million pipeline project from Central Maui to Wailea. The pipe was necessary to transport the underground waters of the Iao Aquifer to the arid coastal lands of Honua'ula. (de Naie, et al, 2005: W-8)

Wailea Development Corp. and Seibu, agreed to split the additional $7 million cost of the pipeline, with the stipulation that they would be paid back within 15 years out of hook up fees. (Ibid) The proposed pipeline to South Maui, which had a population of 1,500 in 1970, was controversial from the beginning. Cravalho insisted that this was the first step in setting up a new tourist-based economy for Maui island, as the plantation era was drawing to a conclusion.

Many local residents wanted to see the needs of existing households met first, especially in the Upcountry area where water quality was poor and shortages were frequent. Several court cases delayed implementation of the pipeline. Only the route of the pipeline was required to undergo any environmental review. The viability of the proposed wells that were the actual water sources for the system were exempted from any review, since they were being financed with private funds and were drilled on private lands. (CMJV Pipeline, EIS, 1975, Appendix)

The Central Maui Joint Venture Partnership (CMJV), which funded the 22-mile pipeline and the three new wells in Waiehu that were to serve it, signed a contract in 1975. The wells and pipeline were completed in 1979. The four partners in the CMJV -- Wailea Development Corp., A&B Properties, Seibu and C. Brewer/Wailuku Agribusiness – were each promised a portion of up to 20 million gallons of water a day anticipated in the new well systems in the Iao Aquifer. The county was promised half of the developed water (then estimated at around 36-40 mgd) for its own municipal uses.

One of the few who questioned the lack of environmental review of the project was noted hydrologist, Doak Cox, of the UH Environmental Center. Cox pointed out that the capacity of the ʻIao Aquifer was unlikely to be the 36 million gallons a day that officials were predicting. (CMJV Pipeline, EIS, 1975, Appendix)

Within a few years, it was evident that, even with additional wells, which eventually numbered 10, the ʻIao Aquifer could not sustainably produce more than 18 million gallons a day.

The Wailea Resort began its construction in 1972 and utilized a share of the water available from the Iao Aquifer. Other south and central Maui developments were also granted water meters during the boom times of the 1980s. Seibu, which faced stiff public opposition to every phase of its proposed plans, was the last to request water service from the new pipeline. By the late

1980's when the Makena Resort Hotel was being built, the limitations of the 'Iao-Waihe'e aquifer water supplies were public knowledge. As a result, Seibu's resort faced limited water supplies.

Of the original $11 million price tag for the joint venture pipeline, Seibu and Wailea Development Corp. put up $7 million between them: $2.5 million by Seibu and $4.5 million by Wailea Resort. County records show that both entities were paid back their respective shares in full in 1986. (County of Maui records, CMJV Dissolution Agreement, 1989) Seibu, however, because of its remote located, was obliged to in vest separately to bring water lines from the edge of Wailea resort to reach it's own lands.

Over the next 15 years, Makena Resort also drilled a series of brackish wells on their land to provide irrigation water for first one and then two golf courses. Currently, state records indicate that 10 wells have been drilled, although it appears that some of the wells have proven too high in chloride content and are not used. Records show an average of 2 million gallons a day of brackish water is used to irrigate nearly 500 acres of golf course lands in Ka'eo and neighboring ahupua'a. (State Commission on Water Resource Management database, 2003)

The source of any future water supplies for Makena Resort developments is not clear. The original Central Maui well system reached maximum capacity around 2003 and the state stepped in to help manage it. Additional groundwater sources are proposed in Waikapu and Kahului aquifers and surface water use is being discussed, but only projections of water supplies are available. A master study of central Maui water resources will be completed by US Geological Service Researchers in 2008, which includes an interactive computer model to help predict the affect of various water use scenarios. Maui County will complete an updated Water Use and Development Plan in 2008, identifying proposed water sources for the Central Maui system that serves South Maui.

Preserving Ka'eo's Ancient Past

Citizen efforts to preserve features that were direct links to Ka'eo's historic importance began around the time of Makena Resort's early rezoning request (1978). These concerns centered around the resort's plan to close a portion of Old Makena road, the traditional coastal route that linked the village of Makena with the lands to the north and south.

SPAM

Other citizen groups were concerned with protection of the broad white sand beaches and wooded dunes surrounding Pu'u Ola'i. They formed a broad based community advocacy group called SPAM (State Park at Makena) in the early 1980's. An ambitious wilderness park plan spanning miles of coastline from Pu'u Ola'i to Kanaloa Point, on the Honua'ula-Kahikinui border, was proposed by State planners in 1977, but never implemented.

After a fifteen-year citizen led effort, 155 acres of wooded oceanfront lands surrounding Pu'u Ola'i were under public ownership as the Makena-Pu'u Ola'i State Park. The acquisition efforts for park lands included a proposed land exchange between the State of Hawai'i and Seibu Corp for an eight-acre parcel on Oneloa beach owned by Makena Resort. An exchange was made between Seibu and the state for 63 acres of state lands in various locations, including a number of state owned parcels that were adjacent to Makena Resort properties. Part of the exchange involved the old Makena School site (TMK: 2-1-06:84). This two acres became part of the Makena Resort holdings in the late 1980's. Some of the leadership of SPAM continued efforts to protect natural and cultural resources by forming a new organization, Maui Tomorrow, in 1990.

'Ahihi-Kinau Natural Area Reserve

An earlier preservation effort in Honua'ula (1972) was spearheaded by UH researchers. They became concerned after the sale of Ulupalakua Ranch lands to the Seibu Corporation for the future development of Makena Resort. The biologists recognized the wealth of rare and unusual geological, biological, marine and cultural resources found on the recent lava flow areas just south of Pu'u Ola'i. They worked with then Governor Burns, the legislature and other prominent citizens towards the goal of creating a large preserve area to ensure that development would not continue south into these sensitive habitat lands.

These efforts resulted in the creation of the 1,500-acre 'Ahihi-Kinau Natural Area Reserve and the establishment of a Natural Area Reserve System (NARS) statewide to preserve state owned lands of exceptional biological and cultural value. 'Ahihi-Kinau, which took its name from the 'Ahihi Bay spanning Makena and lands south and Cape Kinau, the ancient lava flow between Kanahena and Keoneoio, was Hawai'i's first NARS site. Originally envisioned as part of a remote wilderness preserve spanning nine miles of

Honua'ula coastline, 'Ahihi Kinau, which includes ancient fishponds and legendary fishing grounds is now a protected marine reserve area where no motorized watercraft or removal of fish or sea life is allowed. It has become a popular visitor destination, accessed by thousands every month.

While the public was focused on saving Makena's road and shorelines, many were unaware that scores of worthwhile archaeological sites were being lost at the same time. A series of rushed archaeological reviews spanning the era from 1974 to 1982 resulted in "permission" being given to destroy many cultural sites located in the proposed golf course fairways and hotel grounds.

Makena Resort: The Race to Record Ka'eo's History

"*In the case of the Seibu golf course, there was no follow-through with recommendations regarding the research potential of numerous sites. Recognition of additional significance criteria often comes only when a concerted effort to find more information is made. If the effort is not put forth, the cultural or educational value of a site is often not recognized.*"
Donham, 2007,Appendix: 51 –2

In the years between its purchase of over 1,000 acres of Makena lands and the construction of the first of two Makena courses (1973-1979) the Seibu Corporation contracted with the Bishop Museum to conduct five archaeological research projects on their lands.

Clark 1974

Their first Bishop Museum team, headed by Stephen Clark, conducted a 14-day reconnaissance survey to map cultural site locations in 1974. Clark's five person team covered a daunting 71.4 acres of rugged terrain a day and recorded several hundred cultural features.

His team plotted only 113 of the over 250 sites located on a topo map of the area, and issued a brief (eight-page) report. This was included in Seibu's 1974 Environmental Impact Statement (EIS), completed to meet permitting requirements for the proposed Makena Resort golf course and future hotel.

Clark indicated in the EIS that his crew didn't have time to review some of the areas and concentrated on those which were proposed for most immediate construction activities. He recommended that a cultural site location survey (Phase I Survey) and recording be conducted in all development parcels, before any future construction. (Clark,1974:7)

As Donham observed in her analyses of archaeological review in Ka'eo, this recommendation *"was never implemented and it was four years before a Bishop Museum crew returned to the Makena resort area. By that time, the golf course was already under construction." (*Donham, Appendix, I:52)

This hurried approach to record sites only immediately before construction began was to be the norm for the first fifteen years of Makena Resort development.

Haun, March 1978

Clark's survey was followed by Haun's team in spring of 1978. This field work covered an area chosen because of immanent golf course construction. Once again, financial and time constraints forced the researchers to compress *"two major and distinct work phases (inventory survey and data recovery)… into one operation… which allowed for no outside review of the survey findings.."* (Donham, Appendix I:52)

As is shown by internal communications, Haun and other Bishop Museum researchers found many aspects of the project very challenging. These terse remarks are found in the field notes of Haun's team during their 1978 Intensive Archaeological Survey of Parcel II, the area directly mauka of Makena Road and Pu'u Ola'i

"*Parcel II was not completely surveyed by Clark. [Clark was the first to survey Makena Resort holdings in 1974, for the project's EIS] 50 sites total. Centerline cuts already begun. Sites already destroyed. We need to know what kind of sites were where. "* (Haun, field notes, 1978:1 from Bishop Museum files)

The field notes also contain a draft of an April 1, 1978 letter to a Seibu official. It explains the need to amend the original "scope of work" agreed to by the Bishop Museum archaeologists to include a new map of cultural sites in the review area, before the sites were destroyed. A new map was proposed for the following reasons:

"1) Locations for golf course holes 11-15 on maps provided by Seibu Hawai'i Inc do not match bulldozed centerlines [of golf course]"
"2) Bishop Museum reconnaissance survey was designed 'to determine the presence of any sites of historical of archaeological significance' [Clark ms. O12174:1] and did not include an accurate location of each site."

The author concluded: "*It is obvious that responsible recommendations for mitigation of adverse effects of golf course construction can not be drawn from such data.*" (Ibid: 1-2)

The draft was formalized into a letter and sent April 4, 1978, asking Makena resort owners, Seibu, for more time.

The proposed mapping would take up to three extra days of field work. Museum staff communicated privately that they were concerned that the landowner, Seibu would be reluctant to fund additional days of archaeological review. This appeared to be justified. A communication between Seibu and the Bishop Museum staff dated a few months earlier, in January, 1978, pertaining to the same Haun Survey and Salvage Excavations, noted that:

"As you [Seibu] requested at our meeting on January 16, [1978] we have reduced the time required for Phase I Intensive Survey from 15 to 12 working days in the field. The heiau [SIHP 1855] and surrounding site cluster will not be plane table mapped during the proposed project. Consequently, we have been able to reduce our total cost to $19, 800.00…" (Haun, Seibu Salvage file, Box 51, project 192, Bishop Museum correspondence, January 23, 1978)

It appears that after agreeing to a requested reduction in staff time, the Museum was reluctant to now come back and ask to be compensated for more field time, even though additional work was vitally needed. In a private communication, one archaeologist commented that "*Alan and the crew have all offered their weekends to complete what we know will be important work….*"

In their April 4, 1978 letter to Seibu, the Museum offered to:
"*in the interest of Hawai'ian archaeology, absorb any additional Phase I archaeological survey costs..* " if Seibu would consent to expand the scope of work to allow the extra field time. (Haun, field notes, 1978:1 from Bishop Museum files)

Beneath the formal communication between the museum researchers and the landowner, it is clear that the remains of Ka'eo's ancient villages were unlikely to have been given a very complete review before the beginning of resort construction.
Donham summed up the situation in her review of the archaeological research on the Seibu lands: "*In this situation, the golf course construction priorities were driving the archaeological work, as was the case in the adjacent Wailea golf course*. " (Donham, Appendix I:52)

The pattern persisted through much of the following years. Some significant sites were never even seen during the first five years of archaeological review--and only discovered decades later. Other sites were not so fortunate.

Field notes from Haun's team also observed: *"Seibu Hawai'i Inc.'s Preliminary Land Use Plan shows golf course holes 8, 9 and 10 in an area of parcel II (*see fig 10 Cordy's map*) not surveyed during archaeological renaissance survey. Specific recommendations for archaeological work prior to clearing and development include Phase I survey."* As noted above, the need for a proper Phase I survey of sites was recommended by Stephen Clark four years earlier. (Clark,1974:7)

"Brief onsite inspections of this area by our field team has revealed that extensive bulldozing has taken place. Unrecorded archaeological sites have already been damaged; others are in immediate danger of destruction should any further bulldozing take place." (undated field notes to Haun's, 1978 salvage survey of sites in Mo'oiki, Makena Golf Course, c. April 1978:3)

Comments by Kirch and Cordy

Archaeologists working on the early Makena Golf Course field studies were so concerned about the inadequate review being given the sites that they called in two additional archaeological consultants, Patrick Kirch and Ross Cordy, to evaluate the situation and help steer a clearer course.
Kirch commented that there were *"serious problems with the Seibu project…" one problem being that …sites originally located by Clark sometimes cannot be confidently re-located or re-indentified…"* (Kirch, April 2, 1978 letter to Museum staff concerning Haun's work in the Seibu, Maui project)

Cordy, who was working on a similar inventory survey and test excavations at the adjoining Makena Resort lands to the North (surrounding the current Makena Golf Course Club house and restaurant) made a number of constructive suggestions. He then confided that he "personally felt compromised" because field researchers were *"giving okay for construction to begin while test excavations are being done…"* Cordy expressed other concerns to his colleagues: *"I wonder whether we are violating the law (State or others) in allowing construction to proceed without action by the State Historic Preservation Office and the Historic Preservation Board."* (Cordy, undated letter c. April, 1978, entitled RECOMMENDATIONS, Bishop Museum Field notes files)

Loss of Ties to Ranching Era

Reviews of cultural sites in Honua'ula often include comments on sites or features as being "cattle walls" or for "animal control," or "associated with ranching activities." The system of categorizing remains by their association with the past 150 years of ranching history has developed into a shorthand for the concept that such sites have no historic value.

This was certainly the case when the Maui Prince Hotel site was being surveyed and mapped for cultural sites in 1979. Five rock wall remnants, which spanned from 50 to almost 200 ft in length were noted on the archaeological inventory maps as single dots. (Rodgers-Jourdane, 1979)

This lack of information on the location and orientation of the walls precluded any information being available to aid further research on the former habitation patterns of these lands once the walls were destroyed. Several of the walls were located on parcels that were not developed for many years. When later review was done on these parcels, researchers, lacking any accurate location, overlooked several wall segments that had been recorded in the earlier survey.

The basic assumption of historic walls and sites having little worth has led to the potential loss of historic landmarks that tell the story of those who lived in the Makena/Ka'eo area between AD1850 and WWII. Dismissed as unimportant are the simple shelters where the hardworking cowboys lived. The ranch era homes and stores, roads and horse trails, fishing paths and livestock walls, pens and trails are all viewed as "historic" and therefore expendable.

Sadly, it is just this "historic" era that is remembered by many of today's kupuna (elders) through their own life experiences and the stories of their parents and grandparents. When the physical remains of these times disappear from property after property the shared heritage of many Maui families also disappears.

Even sadder is the continual mischaracterization of important historic resources like Mahele-era Land Grant boundary walls or the historic ʻaupuni wall as "old cattle walls." Land Grant boundaries are often clearly marked on old maps and land records, making correlation with archaeological sites possible with just a small amount of research. The ʻaupuni wall is also noted on historic maps and in property deeds. How can Makena's history be told

if most traces of its legendary Hawai'ian Kingdom days are dismissed as unimportant and destroyed to build luxury investment properties?

The Makena Complex: Opportunities Lost

Preservation value of the sites in this survey area for public exhibition and/or long-term scientific work is also minimal. For public exhibition, either an undisturbed area with highly visible sites of high quality is necessary, or an individual site of unique quality that is not already preserved. The prehistoric sites in the survey have minimal exhibition value because the area has been altered by historic activities (both ranching and coastal housing) (Cordy,1978:60)

In 1973, State Historic Preservation Office researchers had identified an area of historical and cultural remains along the Ka'eo shoreline as the "Makena Complex." (see fig 4)The large habitation complex was assigned a number (SIHP Site 50-50-14-1266) by the State Historic Preservation Office.

Donham described the complex: *"The area of Site 1266 was recorded as a rectangular area that encompasses 3,600 feet (1.9 km) of shoreline between the north base of Pu'u Ola'i and the north end of Maluaka Beach, and between the shoreline and Makena-Keone'o'io Road. Scaled maps of the sites and features within the complex area were not produced at the time of Connolly's survey; rather formal feature types were enumerated as follows: walls (numerous, mostly associated with ranching), enclosures (16+), one burial in a wall, platforms (3+), and a pit."* Donham, Appendix I:11)

Although the complex was seen as worthy of future research, the same area was not reviewed in greater depth as a whole in subsequent studies. The concept of the Makena Complex, describing a pre-and post-contact fishing village along the Makena shore, seemed to be forgotten.

Perhaps this was because the Makena Complex included desirable ocean front lands slated to become the Makena Prince Hotel and golf course, and later, small luxury housing developments. A comprehensive study of Makena's history was recommended in the 1971 Kihei Civic Development Plan in order to *"place strict development controls in Makena, with special emphasis placed on the conservation of Makena's historic sites.."* (Kihei Civic Plan, 1971) Instead, a piecemeal series of archaeological studies were done on several separate portions of the Makena Complex. These were based not on ancient land use patterns, but upon the boundaries of various modern development projects proposed for the area.

This approach effectively sundered a potential cultural landscape into smaller portions that were not seen or evaluated in relationship to each other. These separate components and the inland farming sites that surrounded them were systematically devalued and a number of intriguing and potentially very worthwhile sites were destroyed.

Several factors contributed to this loss of ancient sites. The lands purchased by Seibu were extremely rugged and overgrown; it was difficult for the Bishop Museum archaeologists, contracted to provide reconnaissance surveys and inventories of the sites, to adequately locate them on maps. Even if sites were located, little was usually known about their significance and relationship to Makena's long history. It was not until 1985 that the first oral interviews of residents were done, after citizen groups pushed for this step to be taken.

This was one of the oversights that severely limited responsible preservation of potentially significant sites in the coastal lands of Ka'eo that were identified as the "Makena Complex." The lack of interviews with local informants was a likely factor in the loss of a possible coastal fishing shrine located along the old 17th hole of the Makena Golf Course overlooking Maluaka Point and the ocean. This possible shrine is discussed in the Ceremonial Sites section of this Chapter. It was located seaward of the Maluaka Condominium project now being constructed along the Makena Golf Course (see fig 41)

The Makena complex presented researchers with the remains of a shoreline fishing village whose use spanned a number of centuries.
As noted by Cordy's quote above, archeological researchers consistently dismissed any value this collection of sites and features might have to reveal its stories of Ka'eo's ancient past.

The earlier researchers seemed more concerned about an area's "exhibition value" to future tourists, than the relevance sites might have had to longtime local residents. Local residents had considerable firsthand knowledge of a number of the cultural sites that were discovered in the Makena Complex, but they were rarely consulted to help determine a site's significance. Another good example of this was the traditional shoreline well (fig 15) discovered in Haun's 1978 survey. It was well known to local residents, but it's history and function was virtually ignored by the archaeological researchers from Honolulu.

Inez Ashdown had described this same well that served the Old Baldwin cottage in her collected writings on file at the Bishop Museum:

"We used that well filled by the Wai Pee-poli Spring, which comes underground from up around Poli-poli, so the old folks claim," she wrote. (Ashdown, Collected notes, 1977, on file in Bishop Museum)

Ashdown also left other specific and general descriptions of the Makena Complex sites in the area surrounding her family's former home.

"Any number of sites exist in this area, some on private lands such as the properties of the Changs, the Garcia(s), and the Seibu lands." (Ashdown, AR-1 6-28 Historic Sites, Priority Sites List for Maui, 5-24-76.) Her c. 1950's typewritten list of Maui sites that should be considered for preservation, noted a human burial present on TMK 2-1-06:56 Archaeological excavations on the Dowling Maluaka Condo project planned for that Makena Complex parcel did reveal a human burial that had been overlooked by four previous archeological review teams. (Donham, 2006)

Between 1974 and 1982, over one hundred features were identified as part of the Makena Complex. By 2005, when research for this study was begun, scores of these sites had been destroyed during the construction of the Maui Prince Hotel and Makena Resort Golf Course, the Dowling Maluaka Condominium Project and the Black Sands luxury home development on the former Lonokailua-Bak land overlooking Oneuli pond. Most of these lands had received only minimal archaeological review.

What remains of the Makena Complex? The original area defined by the state researchers was virtually all seaward of old Makena Road. Practically speaking, it is likely that the coastal village existed over the past seven centuries on both sides of the traditional road. Scores of sites still remain in undeveloped lands just mauka of the Old Makena Road. Lands surrounding Kalani heiau need to be very carefully reviewed as they are threatened by development. The coastal area defined by the old 'aupuni wall of the 1840's (see fig 2) along with the remaining portions of this significant wall itself, should be viewed as an important historical district, and undergo continuing research. Subsurface remains found through excavations of already developed lands, could play an important part in understanding the area's history.

With many of Makena's old families gone, it will take a new generation of citizen advocates to ensure that what remains is not so easily lost.

Ka'eo in the New Millennium: the Sale of Makena Resort

The construction of the Maui prince Hotel, the Makena North and South golf course, Makena resort water tank, roads, Clubhouse and tennis courts each had various levels of archaeological review before construction activities took place. As noted above, the amount of time and funding available for this review was often limited. Makena Resort alone owns1,300 acres proposed for future development. Roughly a quarter of these lands were only quickly reviewed 20 to thirty years ago, and not revisited since.

Developments proposed on adjacent properties under different ownership often did minimal cultural review, confined to the boundaries of the respective parcel, to avoid higher costs. Any new sites discovered were not viewed as part of a greater cultural pattern that included all lands in the vicinity. Historic remains of 18th –century land grant boundary walls and the old 'Aupuni (Government) walls and roads, which all provide valuable clues to Ka'eo's history, have been systematically labeled "cattle" walls and allowed to be destroyed. Donham discusses this practice at greater length in Appendix I where she comments on:

"The common practice of referring to these and many other land grant boundaries in the region as 'cattle walls' (Bath 1983: 14) or as being associated with 'ranching' is misleading and negates the presence of many 19th century private land holdings by Native Hawai'ians in the region. " (Donham, Appendix I)

In 2004 Makena resort sold off several prime parcels of their lands to an investment partnership headed by Maui developer Everett Dowling. Cultural review of the smaller of the properties (TMK: 2-1-06: 37 and 56 in Maluaka) (see fig 4) faced the same limits on time and funds found during many other Honua'ula site review. As described in the **Ceremonial Sites** section, citizen concerns over inadequate cultural site review on this project led to much needed additional research being done on the property and discovery of additional features and a pre-contact burial.

Unfortunately, only two remnants of Hawai'ian culture will remain on this proposed gated beach club condominium project. Three sites were recommended for "in situ" preservation, but only the Oneuli ko'a complex (SIHP 5711) and a burial site were left intact. The third potential preservation site, a solidly built 20 by 40 ft stone walled structure near the Oneuli ko'a site, was slated for destruction simply because there was no way to prove its age. (see fig 42)

After the Maluaka project demonstrated the need for higher standards of cultural research in the Makena area, citizens also questioned the entire Cultural Resources Management Plan being proposed by Makena Resort for their remaining lands. The Plan did not acknowledge the need to survey hundreds of acres that had last been quickly recorded over twenty to thirty years ago, with no subsequent update. No action was taken by state or county agencies on acceptance of the resort's Cultural Resources Management Plan.

In 2006, Seibu announced that their Makena Resort Lands would be for sale.

In June of 2007, 1,800 acres of land first acquired by Seibu/Makena Resort from Ulupalakua Ranch in the early 1970's was sold to a consortium of investors led by Maui developer, Everett Dowling. The Dowling partnership has proposed around 1,100 luxurious residences and an additional hotel or wellness center in the region, if their rezoning request is approved. They are also discussing the possibility of rebuilding the existing Maui Prince Hotel. There were no plans discussed to include affordable housing on any of the 1,800 acres.

The next phase of Makena's history will be shaped by a new group of influential investors and much is unknown about the transition.

Most poignant of all, the transition of the lands of Makena from ranching and small family holdings to luxury investment properties for wealthy mainlanders has made it more difficult for the people who hold the family histories to remain connected to the land. The changing property values have caused family after family to sell off their traditional lands when they could no longer afford the tax burden.

If the people all leave the land of Makena, will the stories that are such an essential part of Ka'eo's legacy for future generations survive?

Kupuna Sam Chang (b.1911), in a recent interview with historian Kepa Maly, described the situation faced by his family in Makena. "The original owners of Makena lands are gone, they lost the land. Because they build the expensive hotels, and when you own the land, you cannot pay the same tax, you pau." (Maly, 2006, oral history interviews, appendix A: 32)

Roads and Trails & Other Public Works- 1900-2007

"So it is that Hawai'ian and other Kama'aina strive to retain their sanity by seeking the ancient hallowed places and walking in the footsteps of the Ali'i along the Alaloa o Maui." **(**Ashdown 1971: 6)

From Ranch Roads and Fishing Trails to Resort Parkways 1900-1980

From 1900 to the beginning of WWII Ka'eo had two main public roads in use. One was the Old Makena-Keone'o'io Road (also called the Ala Kahiko or Ala Loa) a narrow dirt road that traveled, mostly along the coast, from Keone'o'io north to Makena and then continued on to Kalama Park in Kihei. The other was the Ulupalakua-Makena Road, a bumpy, unpaved track that connected the village of Ulupalakua, and Ulupalakua Ranch, with Makena Landing.

The shoreline of Ka'eo and Honua'ula was also crisscrossed with a variety of fishing trails used by local residents. The Ulupalakua Ranch, too, had a variety of mauka-makai trails and roads that were used to access ranch lands, and to some extent may have followed older trails, traditionally used by local residents. Makena residents born in the years between 1900 and 1918 recalled the cattle being driven down to Makena landing along old trails, to be swum out to waiting ships and markets in Honolulu. (Maly, 2006: A-58)

At the beginning of the resort era (1970) residents and visitors to south Maui braved a dirt road from the old Azeka store in Kihei (near Lipoa St.) all the way to Makena and Keone'o'io. Some portions of the road were so narrow that only one vehicle at a time could get by. One section of Makena road had a hand lettered sign: "Caution: Moon Surface Ahead" (c. 1980's) to advise motorists of the rocky, rough unpaved road surface.

By the beginning of the last decade of the twentieth century, the legendary Ulupalakua to Makena Road, used everyone from Royalty to local schoolchildren, had been closed to public use. The Old Makena coastal road had also largely disappeared from the maps, replaced by luxury hotel grounds, pools and landscaping. Maps of the time showed only the new inland roads, the broad, tree-lined, resort roads- Wailea Alanui and Makena Alanui. These were public roads, constructed by Wailea and Makena Resort owners as convenient accesses to their resort properties. By 1990, the Makena-Keone'o'io Road and the communities it had connected for many centuries, remained intact in only a few short segments, with the longest continuous length remaining between Makena State Park and Keone'o'io Bay.

As Makena Ranch lands were sold to new owners, the remaining portions of the Old Makena Road were gradually paved. By the late-1990's, Old Makena Road was paved all the way from the Wailea resorts, to Keone'o'io/ La Perouse Bay. By 2005, 20% of Maui's two million visitors a year visited the once remote Keone'o'io Bay. (Friends of Keone'o'io survey, 2005) By the same year, Makena State Park was found in a Hawai'i Tourism Authority Survey to be the most visited State park on Maui, by both residents and visitors. (Hawai'i DBEDT, Survey by SMS Research, 2006)

Wartime Road Building 1942-1945

When the US Armed Forces took over Maui's south shore, as a defense zone and training ground during WWII, construction battalions built or improved a number of roads in Honua'ula. Kama'aina residents such as Eddie Chang Jr describe how, during the war, troops realigned portions of the old Makena Road through his family's home place *Pa'ipu* in Keauhou (known in present times as Po'olenalena.) (Greig-Lee, 2002) Chang and others recounted that the military construction crews also widened and, in some cases realigned, the existing road from Makena landing to their training base near today's Kamaole Park in Kihei, making it wide enough to accommodate trucks and cars. (Ibid; Kelly, 1987) Various Chang family members noted that in prewar times, Old Makena Road was only wide enough to serve as a horseback trail. (Ibid; Maly, 2006: A-50))

Citizen Efforts to Preserve Old Makena Road

Both the proposed Ka'anapali and Wailea resort projects required the abandonment of public roadways that had long traditional use. These coastal routes most likely evolved from the 16th century trail system put in place by Maui's great chief Kihapi'ilani. Both proposed resort developments offered to construct newer, modern roads farther inland and transfer these to the government.

While some West and South Maui residents objected to the loss of their traditional roads and the fishing access they offered, both proposals were approved within a short amount of time by the Maui County Board of Supervisors. (Ramil, 1984: 190). The application to close the old Ka'anapali roads was granted in 1957; the Wailea closures were approved in the 1970s.

But a very different reaction occurred in 1982 when Seibu proposed closure of the Old Makena Road that passed in front of their future hotel site along

Maluaka Beach in Ka'eo. By now, Native Hawai'ians had seen the destruction that large-scale development and tourism was having on their culture, heritage and lifestyle. The Hawai'ian community, united in trying to stop the bombing of nearby Kaho'olawe, came to the defense of the Old Makena Road when they saw that it, too, was being threatened.

To many, the ownership changes from ranch to resort were profound. Longtime Makena families began to lose access to some of the fishing sites along Old Makena Road in Ka'eo with the coming of the new owners. In testimony given to the Maui County Planning Commission in 1986, Leslie Kuloloio, whose family lived in Makena, described what he experienced:

"Naupaka Beach [Naupaka is another name for Maluaka Beach] is a good fishing place that was used by my kupuna. We were never blocked from using the connecting trails or the pu'uone, sand dunes, until the late 1960s and 1970s when the new owners [Makena Resort] tried to keep us out." (Maui County Planning Commission minutes, March 18, 1986, quoted in Kelly, 1986, appendix A: 6.)

Charley Pili Keau, Maui's first Native Hawai'ian archaeologist, emphasized the link between Old Makena Road and the ancient villages along its route.

"Many fishing villages are connected by the ancient road," said Keau, who then went on to name each village and describe the heiaus associated with them. He then *concluded "why are we reasonably certain that the ancient road runs along in front of the Seibu Prince Hotel, by the big sand dune? The Kalani Heiau, which is right next to the hotel, is just mauka of the existing road. There are exceptions, but most of the heiau in that area are just mauka of the ancient road. Also, I have been told by kupuna, like Uncle Sam Po, that the road was there before the county (circa: 1905) started to maintain it, so we do know that the existing road wasn't located there by the county."* (Maui Planning Commission minutes, March 18, 1986, quoted by Kelly, 1987.)

Many other representatives of old-time Makena families testified in a similar fashion when the Maui Planning Commission met to approve or deny the proposed closure of a large section of Old Makena in front of the Seibu hotel site (Maui Prince Hotel).

When the dispute over road closure first surfaced, the debate appeared to pivot around a key question: Was the Old Makena Road simply a local trail used for the last century or was it part of a far more ancient islandwide trail system established by *Kihapi'ilani* sometime in the 1500s?

On one side were many of Maui's respected cultural leaders, local kupuna and anthropologist Marion Kelly, who had prepared an extensive study of the road. Kelly felt the road would qualify for the National Register of Historic Places.

"In the cases of the Alanui Aupuni (roads constructed from Kaupo through Makena during the reign of Gov. Hoapili, 1823-1840) and the Alaloa [the ancient coastal road circling the island of Maui built under the direction of Chief Kihapi'ilani, circa 1500s], rich traditions put them into pre-contact times [before 1778]. Both roads have much to recommend them as culturally significant and important sites." (Kelly, 1987: 66.)

On the other side were consultants hired by the owners of the Maui Prince Hotel/Seibu. One of these, former Bishop Museum staffer Edward Joesting, concluded from a review of old road repair records that *"the roads of Makena were of little significance in the mid-1800s"* and only gained importance after the establishment of Ulupalakua Ranch. (Edward Joesting, letter to Seibu attorney Eric Maehara, March 17, 1986.)

In Joesting's view, the ancient Pi'ilani Highway (circa 1500s) was limited to an upper trail passing through Ulupalakua which then descended to join a coastal road in Kaupo. According to his research, Pi'ilani *Highway "followed an upper trail and was not a part of the seaside road which ran through Makena."* (ibid.)

Joesting's comment letter was used by Seibu to persuade Maui County government officials that there was no definitive route determined for these older trails and, therefore, they could not qualify with any certainty for historic preservation. Based on this view, relocation of Old Makena Road would do no harm to the history or culture of the area.

It appeared that the county government supported Seibu's request to eliminate the Old Makena Road segment in front of the hotel. Citizens saw legal action as the only way to make their voices heard.

The controversy generated eight lawsuits and a years-long campaign by a variety of residents and citizen groups. At the forefront of legal efforts was the citizens' group *Hui Alanui O Makena,* whose determined research and persistence resulted in a 1987 landmark settlement with Seibu that preserved the Old Makena Road as a cobblestoned walking path throughout the entire frontage of the Maui Prince Hotel. This was the only instance of the *Alaloa,* or traditional road, being preserved in front of a major resort in Honua'ula.

A public access parking lot, picnic grounds and restrooms at Maluaka Beach were also part of the settlement. County planners had been willing to settle for a public drop-off area at the north end of the beach and a parking lot and restrooms even further north. Citizens active in this issue felt the county park plans were very inadequate and would result in a restriction of public access.

Only because of the dedicated efforts by public-spirited groups, was additional beach access secured in the traditional fishing lands of Ka'eo. So, unlike the old coastal roads through Ka'anapali and Wailea, which have completely disappeared, Old Makena Road/Coastal Trail is today preserved as a walking path through the Makena Resort lands.

The mauka-makai road from Makena Landing to Ulupalakua was part of the same Makena Resort development approval process as the Old Makena Road.A significant portion of the road went through the 1,000 plus acres purchased by Seibu Corp. from Ulupalakua Ranch, although it appears that the ranch retained an easement for the road.

Seibu consultants let Maui County planners know that the resort preferred to see the road closed. By the 1980's, Makena Resort was already planning to construct a second golf course to the north, including the lands above Makena Landing. Maui County was offered an easement by Ululpalakua ranch for the Old Ulupalakua Road as it was called, since the route was regularly used by upcountry and Makena residents. The County elected not to accept the easement, since it would have involved responsibility for the road's upkeep and maintenance. The steep dirt road was closed to public use in the late 1980's, but is still accessible to those who have permission to enter from Ulupalakua Ranch.

OTHER PUBLIC WORKS IN KA'EO

Makena Lighthouse

Makena had its own lighthouse on Nahuna Point, which had been established by Wilders Steamship Company in 1886. The Hawai'ian government had established its own beacon in Kanahena at Mokuha, on the edge of Cape Kinau, roughly three miles south of Makena Landing. (see Fig. 26)) Communications about the two stations resulted in confusion from the far-away bureaucrats in their offices in Honolulu. The keepers of both lights lived in the village of Makena, which added to the confusion. John

Kukahiko, who lived near the landing, was the lighthouse keeper for the private Makena lamp. Complaints to the government that the "lighthouse at Makena" had not been lit prompted a reply from a local resident, "Makena is where Kukahiko… is taking care of the lamp… this lamp which is located at Kanahena is the one which this foreigner is not looking after properly" (Dean, 1991: 67-68, quoting letters to the U.S. Department of the Interior).

The lighthouse keeper from Kanahena had his own problems and addressed a letter to the government asking for a raise in pay, saying that "the overwhelming growth of lantana" made it difficult for his horses to be pastured and he had to pay for separate pasture land at Ulupalakua Ranch. He explained that the horses were necessary to travel the three-mile journey to the lighthouse over the rugged lava flow. Both lights were taken out of service in 1918 and replaced with a government light on even more remote Hanamanioa Point (above five miles southeast of Makena on the southeastern point of La Perouse Bay). This light is still in service (Ibid)

Makena Landing

Regular steamship service came to Makena Landing up until the early 1920s and the livestock from Ulupalakua Ranch was regularly shipped from the harbor to other ports. (Maly, 2006, appendix A, Samuel Chang interview: 58.) Sam Chang described a holding pen for the cattle which was located across Old Makena Road from what is now the public restrooms. Residents refer to that section of bay near the cattle holding pen as "papipi" (literally: "fence for the cows" = cattle pen), indicating it was the place where the cattle were shipped out. The cattle were herded by paniolo down the old road from Ulupalakua to Makena Landing and stored in the pen.

Ships would remain about half a mile out while receiving the cattle. According to Mr. Chang, skilled cowboys would *"take each cow and tow the rope to a boat. Then they would tie it there. Then the boat would be rowed out to the Humu'ula (name of the anchored ship)."* The animals were wrapped in slings and winched up to the deck of the waiting ship. The process of shipping the cattle out was serious work for the cowboys, but also provided entertainment for the children and other residents of the little village. (Maly, 2003, Vol II: 961)

The Gold Rush in California had triggered a great demand for Hawai'i-grown produce in the mid part of the 19th century and Makena Landing served as a point of shipment for the Irish potatoes, corn, beans, onions, cabbages, sweet potatoes and even wheat and cotton grown in the region.

D.M. L. Mark, 1975, who interviewed a number of older Chinese residents in Kula, as part of studies for the Kula Highway improvements reported:

"When the corn, potatoes and other crops were harvested, they were packed and transported on mule teams or wagons to Kahului and Makena harbors, and were then shipped to Honolulu. Those who lived in the southern districts of Keokea and Kamaole usually brought their produce to the Makena Landing." (Mark, 1975)

The late Annie Wilmington who lived at Makena landing from her birth in 1907 until 1941, observed the importance of Makena Harbor during her childhood (c. 1914-25) in a 2002 interview:
"Main port. Kahului wasn't. Makena was, the boats came to Makena… and when the Honolulu people came, they came to Makena and went back [into Maui] by horse, or ….they would stop at Kihei too." (Grieg-Lee, 2002, Appendix C-2)

Residents from Ulupalakua and the other coastal regions of Honua'ula depended upon boat service from Makena Landing for visits with family members on other islands. Very little mention is made of use of canoes for longer trips along the coast during this era. A number of private sampans or other sailing craft are referred to operating from the landing. Some were used to transport local residents to fishing grounds off Molokini or other coastal waters. When Angus MacPhee and his partners established ranching activities on Kaho'olawe around 1919, they had a ship bring fresh water to the island once a month from Makena Landing. (Ashdown, 1979)

CEREMONIAL & CIVIC SITES IN TWENTIETH CENTURY KA'EO

Keawala'i Church

Keawala'i Church, which overlooks the ocean on Makena Bay, has been the most utilized ceremonial site in Ka'eo during the twentieth century. Keawala'i/ Keawakapu Church records indicated that the stone church at Makena, built in the 1850's, was repaired between 1906-1908 and rededicated in August of 1908. Church records from 1909 indicate three churches in the district (which is referred to in those records as Makena). These include one church at Kanaio, one at Keawakapu (Keawala'i) and one at Ulupalakua. At that time, no pastors were listed for any of the three churches although Moses Lutera was listed as the pastor of Keawala'i Church in records from 1905 to 1907.

A rededication ceremony was held in 1908 to commemorate building repairs being completed. Dodge wrote an article about the event in which he used the term 'Keawakapu Church' to describe the facility. According to Donham, by 1909, Dodge had "formally dropped Honua'ula as a name for the church and elected to use Makena, Keawakapu." Dodge's reasoning for this reflects the growth of Makena's importance in the region. He refers to the new name as being more appropriate… "because Makena is the port and post office and Keawakapu is the old historic name for the mother of all three (Honua'ula) churches." (Donham, 1998: 30, quoting from Dodge ms., on file in the Hawai'i Missionary Children's Society Library)

Donham's research into the evolution of the church's current name, Keawala'i, tracks it back to the early 1940s and in a letter written by George M. Kauaulalena to L. Dunston, which was dated from Honua'ula, Makena, July 31, 1944. In his letter, Kauaulalena wrote "this name Keawala'i is the new name of the first church of Honua'ula, Makena, Maui." (Ibid)

Most old-time Makena residents interviewed had many memories of the social life they enjoyed through Keawala'i Church in the years between WWI and WWII. Marion Kelly recounts the recollections of Helen Peters Ferreira in a 1985 interview:

"When Helen Peters Ferreira was a youngster (circa 1918), living with her grandmother, Moloa (Auweloa), and helping to raise her cousins and siblings, the primary method of transportation was by horse or donkey. Grandmother Moloa sent her grandchildren to Kihei with large horses to transport her friends to Makena for the church gatherings (ho'ike). Philip Chang, Eddie's brother, also took horses to Kihei to help transport the tutu ladies on Saturday, in time for the church concert and Sunday services, and returned to Kihei on Sunday afternoon." (Kelly, 1987: 38-39)

Visits to the church at Keoneoio were made when a ho'ike (gathering of congregations from all the area churches) was held there, or to Kanaio or Ulupalakua or Kihei. They also sometimes crowded into a horse-drawn, two-wheeled buggy to go from Kihei to Wailuku.

Sometimes they hired a taxi to take them to Lahaina to go shopping, usually for special foods such as opelu and breadfruit or cloth for a muumuu which they sewed on a treadle Singer sewing machine or materials for making hats. Money to hire the taxi came from selling fish, mostly akule, caught at Makena. (Ibid)

Keawala'i Church continued to have a devoted congregation during the post war years. Its sister church in Keone'o'io appears to have disbanded by the early 1920's and the Kanaio branch, which remained active considerably later, was considered for closure and sale by the governing board that oversees Congregational church properties.

Keawala'i church celebrated its 175th anniversary in 2007and has an active and growing congregation which includes new and old residents of Makena and other communities in Maui. The Church and its grounds are a centerpiece of the area's history. The Keawala'i congregation has also agreed (2006) to act as the caretakers of the nearby Kalani heiau and Hale Papa sites.

Early Archaeological Investigations in Ka'eo

Ka'eo's pre-contact ceremonial sites originated from the 15th century, or possibly earlier. It was not until the early twentieth century that any attempt was made by western researchers to gather information about their locations and former or present use.
As noted earlier, Bishop Museum researchers J.F.G Stokes (1916) and Winslow Walker (1929) were the first archaeologists to visit the Makena area and formally record historic and cultural sites in Ka'eo and Honua'ula.

Stokes visited several Honua'ula sites in person and relied on local informants for additional information. Based upon this information, he reported a heiau located on the summit of Pu'u Ola'i, the Kalani heiau near Keawala'i Church and a heiau at Nanahu (Nahuna) Pt. (northern arm of Makena Bay. (see fig 2)

Walker built upon information gathered by Stokes' and Thrum's earlier research. He did not mention the heiau on Pu'u Ola'i referred to by Stokes, but Walker visited a number of sites in person, including Koula Heiau (Site 195) in Kanahena and Kalani Heiau (Site 196) in Ka'eo. He recorded a new site: Pohakunahana Heiau (Site 197) north of Makena Landing. Both Kalani Heiau and Pohakunahana heiau have had additional research done in recent years as part of development proposals.

Walker investigated heiau in the upper regions of Ka'eo, as well, and relocated one of the five heiau there which had been recorded by Thrum in his conversations with local residents. This was possibly called Pu'eo heiau, located on Pu'u Ka'eo, across from Ulupalakua school. Walker reported the heiau on Pu'u Ke'eke'ehia as being "destroyed", but it is not clear if he actually visited it.

Walker also described ko'a (fishing shrines), fishponds, village sites and other features in his unpublished manuscript. His descriptions of ko'a included two in the Ka'eo study area. Onouli (or Oneuli) ko'a near Makena School and Kilauea ko'a at Maluaka Beach (reported as destroyed). Onouli ko'a, part of the Makena complex, was not relocated for another 70 years. Walker also reclassified the stone platform at Nahuna Pt as a ko'a and reported that Makena once has a small fishpond (likely Apuakehau), which was "now totally destroyed by the surf" (Walker 1931:299)

Walker recorded 230 heiau sites throughout the island of Maui and these were later incorporated into the first modern numbering system for cultural sites, the State Inventory of Historic Places (SIHP) when it was established in the early 1970's. For more on Stokes and Walker's research, see Appendix I.

As extensive a Walker survey of Maui was, many worthwhile sites were overlooked. In the Makena area, Walker's informants did not mention the heiau complex (SIHP 1855) later discovered in Mo'oiki, behind Pu'u Ola'i. Nor was he informed about Oneuli fishpond or the other fishponds located further north in what is now Makena State Park. Armine von Tempsky, mentioned a fishing ko'a "at the base of Pu'u Ola'i" that was recognized as important and used by local fishermen she knew as a child growing up in a ranching family. (Sterling:1998) This site, also, was not referred to by Stokes, Thrum or Walker.

Ka'eo's Traditional Ceremonial Sites in the 20th Century

Only four ceremonial sites in the Ka'eo study area had any reported traditional use during the twentieth century. Kalani Heiau, the fishing shrine (Kilau'ea?) near the Baldwin cottage along the Maluaka shore, "Pu'eo" heiau in Ulupalakua and the reported fishing shrine at the base of Pu'u Ola'i. Additional research could reveal more about any use of the Oneuli ko'a, a heiau on the summit of Pu'u Ola'i and the Mo'okini heiau complex.

Kalani Heiau (Walker site 196)

It was Stokes, during his two-week tour of Maui, who was first told about the Kalani Heiau "in the Land of Ka'eo" and noted its location as "inland." Stokes did not appear to have personally attempted to visit the site.

Walker, although he visited the heiau location on his 1929 tour, referred to it as a "shapeless pile of rocks" and seems to have simply repeated Stokes' description of informant's descriptions of drums heard on certain nights and possible use as a place of sacrifice. It did not appear that any one lived on the land when Stokes (1916) or Walker (1929) visited, although it was part of Mahoe's original 514 acre Ka'eo land grant. Torbert's 1840's map does not refer to the heiau (which was set back several hundred yards inland from the Old Makena Road), but does note "Ma'aweiki's House" in the same vicinity. (see fig 27)

Ma'aweiki, a Hawai'i Island native, who first applied for land in Ka'eo in the 1830's, eventually was awarded a small house lot adjacent to the Kalani Heiau. Stokes makes no reference to any of Ma'aweiki's descendents living on the land, approximately 70 years later during the early twentieth-century. The parcel was under the ownership of Raymond Ranch (Ulupalakua Ranch) from around 1910 on when Mahoe's grandchildren sold their remaining shares of the Ka'eo lands claimed by their grandfather. (see Settlement Patterns section of this Chapter)

Mahoe's land grant respected the "rights of native tenants" who had separate claims. Two claimants, Ma'aweiki and Kalili, each were awarded a small house lot during the Mahele on a larger five-acre parcel across from Keawala'i church, that was later (1956) traded to the Garcia family. The land contained the remains of a number of cultural sites including Kalani heiau and a possible *Hale Papa* (women's heiau.)

The Lonokailua and Bak families, who received the adjoining 1.5 acres of land in a similar trade, reported using the heiau for their cultural practices. Family members also reported the presence of a pathway used by spirits ("night marchers") that led from the ocean through their property past the Kalani heiau and up to Ulupalakua.(for more about the history of Kalani heiau see Ceremonial Sites section of Chapter II and III.)

Kalani heiau was roughly mapped during the 1973 state archaeological survey which gave it a "marginal" classification in terms of its preservation potential. In 1979, the Bishop Museum's Schilt conducted a reconnaissance survey and prepared a map of the site. (see fig. 40) Schilt did not concur with earlier evaluations of the site she commented in her report:

"Given the limited time and attention inherent in the earlier surveys, the variations in descriptive impressions, condition and size of the heiau are not surprising. The extensive

damage affected by people, their animals, and other natural processes is unmistakable. However, we do not concur with Walker's description of the site as a 'shapeless pile of rocks,' or with the State marginal status designation. Much evidence of this former structure is visible and certainly other evidence could be determined archaeologically. "

Schilt also observed*: "Further, the architectural style [of Kalani heiau], combining as it does natural features of the hill into the context of planned design elements, hold the potential to contribute to our understanding of the stylistic development of heiau construction and how such development may (or may not) relate to social change. Thus we recommend that this archaeological site be preserved and protected as much as possible from further damage."* (Schilt 1979: 7, 8)

No additional work occurred at the Kalani heiau site until 2000, when the Garcia family initiated plans to condominiumize and sell the property. During this subsequent fieldwork, one portion of the heiau site was dated to around the 15th century. Other sites were recorded on the property, and prompted by citizens, the state historic office requested additional fieldwork on a platform located on a knoll overlooking the heiau site (SIHP Site 5036 Feature AA**)**. This was eventually recommended for preservation as a possible *Hale Papa* or women's heiau associated with the site complex. (Donham, Appendix)

In 2005, the Garcia's commissioned Kepa Maly of Kumupono Associates to research and write a comprehensive cultural history of their own land and the Ka'eo region. The effort included substantial archival research as well as in depth interviews with local families and greatly benefited the understanding of the area's history.

The land adjoining the Kalani heiau to the south west (TMK - 2-1-07:66) also has a collection of enclosures and walls that have been dismissed as animal pens, but need further research to determine their relationship to the heiau and establish accurate boundaries for the site. The site, the former home of fisherman David Lono and his family, is proposed for 4 condominiums.

The question remains how Stokes first got his information about the Kalani heiau, since he did not personally visit the very overgrown site. One possible source was John Kauwekane Kukahiko (also known as *Kapahu*.) Stokes' field notebook which has been preserved by the Bishop Museum includes Kauwekane's name and PO Box in Makena. Kauwekane (b.1857-d. 1946) was born and raised in Makena and helped repair Keawala'i Church.

Stokes was told about or shown sites in Kanahena/Keoneoio, where family stories indicate that Kauwekane lived during the years before 1920, when Stokes visited the area. Kauwekane was a well-known fisherman and also spent time with good friend and fellow fisherman David Lonokailua (Maly, 2006:A-56) David Lonokailua (also referred to as David Lono Kailua) and his family have been described by other family members as traditional fishermen, who used the Kalani heiau as part of their fishing practice.

Did Kauwekane show Stokes the heiau, or describe it for him? Inez MacPhee Ashdown also knew about the heiau, although she referred to it as "Oneuli." She suggested that the area surrounding the heiau was once occupied by a village that included the dwellings of a district chief and temple priests and was associated with a sacred coconut grove. (Ashdown, 1970:50)

Ashdown, too, is likely to have known Kauwekane. He worked with her father Angus MacPhee at their alfalfa farm and feed lot near Pu'u Ola'i, as was discussed earlier. David Lono's brother-in-law, Edward Kalani, also worked at the alfalfa farm. Did Ashdown and Stokes both pass on information about the heiau site that they had received from members of the Kukahiko and Lono/ Lonokailua/Kalani family?

Interestingly enough, Stokes also had the cryptic notes: "Ihuole" and "Pikanele" written, and then crossed out, on the same page of his notes where he had entered brief description: "Kalani Heiau" and the words "sacrifice?" and "drums."

Ihuole and Pikanele, who were discussed in Chapter III, were both early nineteenth-century *konohiki* (land managers) of Ka'eo. Robert Kalani, nephew of David Lono, told Kepa Maly that the Lonokailua family was related to Ihuole. This family connection was reflected in the fact that a portion of the Lonokailua family land in Makena, adjoining the fishpond at Oneuli beach, was originally granted to Ihuole during the Mahele. As a member of the chiefly class, Ihuole could have chosen the fishpond area as a desirable housesite, or he could have had some connection to a mo'o guardian who may have been associated with the pond.

Pikanele, as was discussed earlier, was known to have had a housesite (see fig. 33) near the 'Apuakehau fishpond, a few hundred yards seaward from the Kalani heiau. Stokes gave no indication in the written report of his Maui survey (published in Thrum's Annual, 1918) of why he had noted the references to Ihuole and Pikanele.

Maluaka Fishing Shrine near Old Baldwin Cottage (Kilauea Ko'a?)

A walled platform, which *kama'aina* reported using as a fishing shrine, was part of the Makena Complex site discussed earlier. Although it had active ceremonial use by several families in the 20th century, it was reported as being destroyed during the construction of the Makena Golf course. There is some confusion about the exact location of the site referred to by the various local informants, so this conclusion is not completely verified, but the topic deserves more complete research.

We do know that prior to construction of hole 17 in the original Makena Course, a pebble-paved platform sat on a small knoll with an expansive view of the waters between Ka'eo's shore and Kaho'olawe. Several local residents referred to a fishing shrine being located in the same general area, (see fig 41) from their memories of childhood fishing experiences. These recollections were recorded in 2005 interviews by Kepa Maly, more than twenty-five years after the platform structure had been demolished. (Maly, 2006:45)

Although these same individuals interviewed by Maly were all alive and available in the late 1970s, they were not consulted about whether they had knowledge of the walled platform being an historic dwelling or a shrine. Nor was anyone interviewed about any of the other ancient features located on the proposed golf course lands.

Walker's informants in 1929 had referred to a "Kilauea" ko'a site near the Old Baldwin cottage, which had been destroyed by the time of Walker's survey. Several of Maly's informants referred to their kupuna using a fishing shrine in the vicinity of the Baldwin cottage in the years between 1930 and the 1960's, after the time of Walker's visit. It is possible that Walker was mistaken about the either the destruction or location of the ko'a site, or that his informants were describing an entirely different site that had been destroyed at an earlier time.

Maly described one conversation he had about the ko'a site. "*Naupaka Bay fronts the land of Maluaka. The southern end of the beach (before Pu'u Ola'i), marked by a lava flow is where the Baldwin cottage was located – thus the location of the ko'a, Kilauea.*" (Maly, 2006: 45, quoting a personal communication with Sam Garcia, Aug. 2, 2005.)

When Alan Haun surveyed the shoreline just south of Maluaka beach he found a low-walled platform amid a collection of other rock walled enclosures

and platforms, old rock-lined wells, and a number of midden scatters from former habitation sites. (see fig 24 for Haun's diagram and fig 41 for the site location in modern times) These were all part of the Makena Complex/ village site identified a few years before. A number of the remains also seemed to correlate to old land grants from the mid-1800's that were listed on maps and deeds in state archives. Although these research resources and local informants were all available, Haun's rushed Bishop Museum research crew did not have time to relate the sites found to the identities of former inhabitants and unearth the area's deeper history.

Was the low-walled platform, surrounded by a protective wall a house site or a shrine? It was labeled Bishop Museum site B8-7, features 2 and 9. and interpreted as a "historic house site" (c. 1880's to WWII) by Bishop Museum archaeologist Alan Haun and his crew. (Fig 24) (Haun, 1978:22-25)

Haun was under tremendous time pressures to survey and excavate all the sites in the golf course area and, as noted above, had to propose a time extension of his fieldwork. The site B8-7 platform was in an "impact zone" area, the centerline of the proposed ocean front golf course green. If it had been located in a proposed golf course "rough," it would likely still be standing. But its location, sealed its fate.

After some test excavations and measurements had been completed, golf course construction proceeded and the platform was destroyed. No photos of the original structure were published in Haun's report (1978). Haun concluded that his crew's hurried excavations "recovered enough significant information… to constitute appropriate mitigative action for these sites." (Ibid: 88)

Donham, in her reviews included as an Appendix to this study, suggests that the Maluaka site could have been one of the four house sites described by a nineteenth century Makena landowner named Kahaleoka'ia (LCA 5147:7) on Maluaka Point. (Donham, Appendix 1) This Land Commission Award is still identified on 20th century tax maps. (see fig 38 and 39)

In his land court claim documents, Kahaleoka'ia called this area "*Papakahiula.*" He described it in his land claim application as a "houselot with four houses."

A walled compound with 5 structures in the same area of Maluaka Pt is also indicated on Torbert's c. 1850 map of the Ka'eo area. (see fig 27, 38, 41) The

lot granted to Kahaleoka'ia in January, 1848 was only listed as being .5 acre, and as noted in Donham's research on the adjoining parcel, "this compound as depicted on the map appears to be greater than the area that was awarded to Kahaleoka'ia. " (Donham, 2006:15)

Other LCA records had inaccuracies in location, spelling of place and claimant names, and it is possible that size of award may have been also inaccurate, with matters adjusted later.

One meaning of the name Ka-hale-o-ka-'ia is the "House of the Fish." Was the platform on a knoll a part of Kahaleoka'ia's homestead? If so, were there four houses and a fishing shrine, a "house for the fish god? "

Kahaleoka'ia's LCA parcel is pictured on modern maps as an oblong shape along the shoreline at Maluaka Point. (See Fig 39- Tax map 2-1-06, parcel 58) A grouping of cultural remains surrounded by a partial wall was noted in the same area in Haun's 1978 study and sketched on a map in his report. (Figure 38 shows Haun's map and Torbert's map of the same area)

Alan Haun's 1978 sketch of the site (given the number B8-7 in his report) showed the area near Maluaka Point surrounded by a 3-sided wall open on the ocean side. Imbedded in the western wall (nearest the sea) is a circular walled feature that appears to be a well. (Fig 24) Several other walled areas are shown nearby and it is possible that one larger walled compound once surrounded them all as Torbert's c. 1850's map seemed to illustrate.

It is not uncommon for sites in Honua'ula to have multiple eras of occupation and use. The pebble-paved platform Haun surveyed had limited pre-contact artifacts. Does that mean it had no use before the historic era? Could it have had an earlier ceremonial function that may have left few domestic artifacts, and then been adapted as a dwelling later in times? Was it used by the military during WWII? Such instances of multiple use were noted in nearby Wailea where a shoreline site that had been adapted for military use, eventually revealed a cultural deposit dating to the 14th century as well as multiple pre-contact burials. (Rosendahl and Haun 1987: 29, 49).

Pu'u Ola'i Ko'a

There are a number of low-walled platforms along the rugged shoreline of Pu'u Ola'i cinder cone that could have served as fishing shrines. Oral interviews with local fishermen whose families have accessed the Pu'u Ola'i

fishery could reveal much information useful to the area's history, including the location of the ko'a site described by Armine von Tempksi.

Pueo Heiau in Ulupalakua:

Pueo heiau was described as being on a hill referred to as Ke'eke'ehia by Ashdown. She indicated that she was shown the heiau and told of its significance by ranch cowboys. (Ashdown, 1970: 44) It would appear that the site Ashdown described as "Pueo heiau" from her childhood recollections (c. 1912) was on Pu'u Ke'eke'ehia, located below (seaward) of the Ulupalakua-Kaupo Road, not the Pu'u Ka'eo site visited by Walker, above the road. Both had known heiau sites documented in the nineteenth century.

Walker relocated the heiau he believed was called "Pu'eo" on Pu'u Ka'eo above Ulupalakua School, from Thrum's earlier descriptions He described it in 1929 as being:
"a platform 48 x 95 feet, and 3 feet high, that was partially destroyed and later used as a house site. " (Walker 1931:270). Thrum's informants led him to classify it as a heiau that had sacrificial use. Ashdown's description of the heiau she called "Pu'eo" did not include a specific size but she indicated that she was informed that it was used "to deliver judicial decrees."

Ashdown also referred to an Ulupalakua Ranch cowhand, Kalani Paha'a who was a practicing *kahuna* (traditional Hawai'ian priest.) Paha'a, who had married into the Ka'ua'ua family of Kanaio, was described by his modern day descendents who were interviewed for this report, as having cared for various heiau around the Kanaio-Ulupalakua area. (Interview with descendents of Kalani Paha'a, April 2006) Paha'a also is thought to have accompanied early archaeological researchers. He is pictured on his horse , alongside one of the last traditional grass covered hale along the Kanaio shoreline, on the cover of Elspeth Sterling's Sites of Maui research report. (Ibid)

Although Walker reported the heiau on Pu'u Ke'eke'ehia as being destroyed by the time of his 1929 visit, this has not yet been confirmed or denied by modern archaeological research. As noted in the ceremonial Sites section of Chapter II, the heiau was pictured on 18th century maps (see fig 19) and referred to by late eighteen-century newspaper accounts. It is likely that the heiau on both Pu'u Ka'eo (Prospect Hill) and Pu'u Ke'eke'ehia (also called Mausoleum Hill due to Capt. Makee's tomb being located at its base) had some use by traditional practitioners in the twentieth-century and deserve modern protection efforts.

Heiau of Kaho'olawe

A number of ceremonial sites on Kaho'olawe have had regular ceremonial use as part of the ongoing restoration efforts on that island since the mid-1980's. It appears from Ashdown's earlier accounts that some fishers also utilized ceremonial sites on the island before it was taken over by the military in 1941.(Ashdown, 1979)

Oneuli/ Onouli Ko'a or heiau (Onipa'a heiau?) (see fig 22)

As noted earlier and in Chapter III (Ceremonial Sites) Oneuli ko'a was first visited and described by Winslow Walker in 1929, and then remained basically unrecognized during the next 70 years. The State's 1973 Archaeological Inventory Survey probably included the site in its generic description of the "16 platforms" found in the Makena Complex. It is unfortunate that there was such a hurried early effort between 1974 and 1979 to record Makena Complex sites on Lands slated for Makena Golf course construction. Walker left a reasonably accurate description of the site as:

"...located below the school about 100 feet back from the shore. It is a rough platform 13 by 14 feet and 5 feet high at the front. A low wall surrounds it on three sides. Blocks of Aa, iliili, and a few pebbles and coral fragments were found in its construction." (Walker 1931:103).

But the surveys done by Clark (1974), Haun (1978), Cordy (1978) and Rodgers-Jourdane (1979) all failed to mention its existence or attempt to relocate it. A 2001 survey of the parcel it was located on, mapped the site and noted it as a "possible shrine."(Rotunno-Hazuka, Pantaleo and Sinoto, 2003) Citizen groups challenged the adequacy of the entire archaeological review on the 11-acre parcel (TMK: 2-1-06: 37 and 56) that was one of the last undeveloped portions of the lands originally identified as the Makena Complex (SIHP 1266).

As a result of that challenge, additional archaeological review was requested by State Historic Preservation Office and performed during 2006.The report of that effort greatly expanded our knowledge of the Oneouli/Oneuli/Onipa'a ko'a site by revealing that the platform (SIHP 5711, feature 1) had a number of associated terraces used for habitation or ceremonial purposes. (see fig 31) (Donham, 2006) Several dateable charcoal samples were found at the terraces indicating that there was use of the site area as early as the 15th century. Several additional sites and numerous new features of previously recorded

sites were also documented on the two parcels, including a pre-contact burial. (Ibid) The burial site and ko'a complex will become landscape features in the luxury Maluaka Beach Club condominium project that is under construction on the site. (see fig 41) For more on this area, see Appendix I of this report)

Did the Oneuli ko'a have traditional use during the last century? It seems likely that it could have, since Walker's informants may have been involved with its use.
Did the ko'a have any association with the nearby Oneuli fishpond? Did the gulch the ko'a overlooked once lead to a shoreline marsh area that changed over the centuries into a dark sand (oneuli means "dark sand") and waterworn pebble beach? Was the extent of the fishpond once much larger, spreading a few hundred yards further north of Pu'u Ola'i' along the shoreline to the gulch overlooked by Oneuli ko'a?

No researcher proposed these topics when the Lonokailua-Kalani-Bak family sold their property overlooking Oneuli fishpond. Only a brief archaeological review was done before the majority of sites on their six-acre parcels were replaced by luxury mansions. Only a portion of the ancient fishpond wall and seven family burials remain to tell the history of those who lived, farmed and fished at Oneuli, in the shadow of Pu'u Ola'i. (see fig 16)

Mo'okini Heiau

On a ridge behind Pu'u Ola'i a complex of stone enclosures, walls, platforms and terraces remain to mark a ceremonial complex that was not recorded by early researchers Thrum, Stokes or Walker.
The Mo'oiki heiau complex was not officially recorded until Stephen Clark and his Bishop Museum team did their two-week long 1974 reconnaissance Survey of the Makena Resort lands. The 11 features of the heiau complex (see figs 17 & 32) were assigned a number under both the Bishop Museum and state system (Site B8-9, SIHP 1855.)

The Mo'oiki heiau complex was the only one among over one hundred Makena sites listed in Clark's report that was evaluated as "A," indicating a site of high value. Preservation was recommended for the U-shaped heiau and some of its surrounding sites. Clark's comments below give a hint of what the early resort archaeological evaluations were using to guide their preservation recommendations:
"This site will make a beautiful historic place of interest, indeed a tourist attraction. Preservation of this heiau will be of benefit in furthering knowledge

of the local cultural heritage. Since it is located on a high knoll, it should not interfere with any planned development in the area. "(Clark 1974:8)

As the photos in figure 32 demonstrate, the site now lies forgotten and overgrown in a rough area of the Makena Golf Course. It has been consistently recommended for preservation in every subsequent Makena Resort review, but it has had never had any dating done. Several surrounding sites that are likely to have been part of the original ceremonial complex, were mapped and excavated during Haun's 1978 Makena Resort field work.

The salvage work at these sites yielded artifacts and possibly dateable charcoal, but no report was ever issued on the dates that might have been obtained. Only the unreliable volcanic glass flake dating results were ever published. (Haun, 1978) The salvage work was underwritten by Makena Resort owners with the understanding that the sites so documented would be in the golf course "impact zone" and would then be destroyed. (Ibid) Due to the poor coordination of information among subsequent studies of Makena Resort lands, it is not clear if some portions of the excavated sites surrounding the Mo'oiki heiau may still remain.

The Mo'oiki heiau, as discussed in earlier chapters, offers an outstanding vista of Pu'u Ola'i and the historically significant eastern end of the island of Kaho'olawe that enhances its significance. (see fig 21) The complex and surrounding sites were last hurriedly reviewed by Haun's crew thirty years ago, and undoubtably, many additional cultural features could have been overlooked.

The entire area surrounding the Mo'oiki heiau and Pu'u Ola'i has numerous documented cultural sites (see fig 3) but deserves a thoroughly updated archaeological review and consideration for a study to determine its eligibility for preservation as a Cultural Landscape under State Historic guidelines.

Other Civic Sites in Twentieth Century Ka'eo

Makena & Ulupalakua Post Offices

It appears that Makena had its own post office at the turn of the century that was located roughly across from Keawala'i Church on land that is now the Garcia property. This is also the approximate route of the original mauka-makai *aupuni* (government) road that is shown on maps from the 1840s and 1850s. (see fig. 2) It's unclear if this road was still being utilized in any form by the early twentieth century.

Residents interviewed speak of the lands across from Keawala'i Church as being very overgrown with kiawe and not accessible during their childhoods in the 1920s. (Maly, 2006, vol II, Samuel Chang interview; Ernest Chang interview, 2006). Donham refers to the lands along one side of the Garcia property that "contains the traces of the old road bed and the site of the Makena Post Office." (Donham, 2007: 90. Appendix I: of this study)

At some point (likely in the 1930's) the Makena Post Office was closed and mail for Makena's residents arrived at the Ulupalakua Post Office. The Ulupalakua Post Office was open from 1859-1900, according to a research website on Maui Post Offices. Bishop Museum archaeologist Stokes field notes refer to local informant J. Kauwekane as having a Makena Post office address in 1916. (Stokes, from archives in Bishop Museum, 1916, p. 31) Interviews with residents who lived in Makena in the 1920's describe the mail arriving in Makena and Ulupalakua residents coming down to await the delivery, so it appears that the service still was located there at that time.

HISTORICAL FIGURES

Angus MacPhee and Family

Angus MacPhee, a skilled cattleman from Wyoming who settled in Hawai'i in the early years of the twentieth century with his wife and young daughter, played a pivotal role in ranching operations for the Baldwin family. He held management positions at Haleakala Ranch, Grove Farm and Ulupalakua Ranch.

According to personal recollections of Makena resident Ernest Chang, Angus MacPhee and his second wife lived for a time at Makena after he left the manager's post at Ulupalakua ranch. Chang recalled that Mr. MacPhee grew alfalfa, grew melons and squash and operated a feedlot for cattle near Pu'u Ola'i, around 1926.

MacPhee's daughter, Inez Ashdown, also noted in her writings that her father "resigned his job at Ulupalakua ranch and built a home and a feed lot at Pu'u Ola'i, Makena. He bought cattle from Ulupalakua Ranch [then under ownership of Edward Baldwin] and other ranchers who shipped out of Makena, fattened them and made a profit." (Ashdown, 1979:59)

Informants such as Boogie Lu'uwai also refer to an alfalfa field by Pu'u Ola'i that MacPhee maintained. One of the Chang family, Annie Wilmington,

recollected that her great-uncle Kauwekane Kukahiko (also known as John Kauwekane or Tutu Kapahu) worked with MacPhee in the alfalfa growing business.

Kauwekane had a piece of land just mauka of Pu'u Ola'i that he had secured in a trade with Ulupalakua Ranch (likely in the 1920's.) Mrs. Wilmington recalled that this is where both men worked growing alfalfa to fatten up the cows. It is possible that Kauwekane leased the land to MacPhee, because his family reports him living in this location up until the war years, long after MacPhee's feedlot had closed. *"(*Grieg-Lee, 2002: C-2 –3)

Mrs. Wilmington described Kauwekane, who was a skilled carpenter as well as a fisherman, as having "bought" a house there by Pu'u Ola'i, living there with his wife, Lepeka, and their adopted daughter Caroline. She further stated that *"he was one man that all the bankers went to because he had money….he sold his cows, that's where he got his money from, he had cows."* (Grieg-Lee, 2002: C-5) Ashdown mentions her father, Angus, building a home there near the alfalfa field as well. Robert Kalani mentioned in his interview with Maly that his father worked at the alfalfa feed lot with MacPhee and Kauwekane. (Maly, 2006, Appendix)

Neither Ashdown nor Wilmington mention the slaughter house by Pu'u Ola'i that is documented in Ranch records and other sources. (Kelly, 1987) It may be that by the time MacPhee and Kauwekane had their feedlot (c. 1926 to 1930's) the Pu'u Ola'i slaughter house had ceased operations.

There is a historic site south of the first Makena State Park parking lot that was documented during the 1999 Makena Park survey. The survey report describes the site (SIHP 4660) as remains of a "concrete slab laid atop a stone and mortar platform foundation" where "concrete walls were constructed atop the slab. The meat hooks on several walls suggest that this was a slaughterhouse." (Yent, et al, 1999: 21-23)

The military activities of WWII wiped out many historic remains in coastal Ka'eo. Correlation of any existing historic site remains and the specific location of the 1920's feed lot and the home sites of Kauwekane and MacPhee families would need to be determined through old records and more discussions with family members.

A 1999 archeological survey of Makena State Park noted remains of a possible historic house site (SIHP 4663) in state Park lands a little south of

the proposed security officer dwelling, just south of Pu'u Ola'i. (Yent , et al, 1999:21-26) The Ulupalakua Ranch held the majority of land in that area, prior to the state acquiring it for a beach park. It is possible that this historic site may be part of one of these two early twentieth-century homesteads. (See fig. 36, Map of historic sites in Makena State Park)

It should be possible to determine which parcel in the vicinity of Pu'u Ola'i may have been the home of the Kauwekane and MacPhee families and their feedlot. Although many of both MacPhee's and Kauwekane's family members are still living in Maui, no additional interviews have been done to determine if historic sites present in Makena State Park are part of the life story of these two key figures in Makena history.

Lonokailua Family

The Lono family (who also went by the surname of Lonokailua) were renown for their traditional fishing knowledge. The family lived along the shore in close proximity to Pu'u Ola'i, overlooking the remains of the Oneuli fishpond, on several Land Grant parcels.

In the 1950's, the Lonokailua family traded 5.5 acres of family land (Royal Patent Grant No. 1230, that was awarded to Nunu) to Ulupalakua Ranch. This parcel was located in the upper lands above Pu'u Ola'i. In return the family received a small parcel of land in Ka'eo (TMK:2-1-07:66) immediately southwest of Kalani heiau and just a few steps across the old Makena Road from the north end of Maluaka Beach.

The Lonos were related to a number of other Makena families by either blood or marriage. One of the family patriarchs Lono Kailua was related to Ihuole, the chief appointed as Ka'eo's konohiki (traditional land manager) during the last days of Kamehameha the Great. (See **Historical Figures,** Chapter III)

Lono's wife, Rebecca, who was also said to be very knowledgeable of traditional fishing practices, was descended from Makena's Kai'ali'ili family on her mother's side. Rebecca's mother's first marriage was to Ka'ilipalauli according to an interview with her great-grandson, Robert Kalani. They had eight children together, including Kalani's grandmother, Rebecca. After her first husband died, Mrs Ka'ilipalauli married Mahele Kukahiko, one of John and Kamaka Kukahiko's sons and they had seven more children together.
Becky Ka'ilipalauli Lonokailua (Robert Kalani's grandmother) was descended from her mother's first marriage, but was also close to her step-family the Kukahikos.

Rebecca Lonokailua's husband, Lono appeared from family stories to keep up traditional Hawaiian customs. His grandson mentioned that he customarily wore a malo (traditional garment worn by Hawaiian men**.)** As related earlier, Lono Kailua helped keep the old Makena road in repair and a family story recounts that Lono Kailua was attired in his malo one day, working on the road when Hawaiian Prince Kuhio visited Makena and was moved to see that the old Hawaiian traditions still lived there. Maly, 206:A-243) Both Rebecca and her husband Lono were said to have the ability to call to the sharks to help bring fish into the family's nets. (Maly, 2006: 228)

Lono and Rebecca had a number of children in the late nineteenth and early twentieth century. Their next to youngest child, son David Lono (1914-1980) lived on his parent's land near Oneuli fishpond until his house burned down (c. 1950's) (Maly, 2006:222)The Lono's daughter Fannie married Edward Kalani, whom she met when she worked in Pa'ia. They are the parents of kumu hula Robert Kalani, who was interviewed by Kepa Maly in his 2006 Ka'eo history research project. (Maly, 2006)

The Lono's daughter Rebecca (Becky) married into the Bak family. They had fifteen children, 4 boys and 11 girls. Her husband worked for Haiku Pineapple Co., and lived for a time in Huelo, then Haiku and finally Hali'imaile, where Mr. Bak worked for Maui Land & Pine. Her father worked for Haiku pineapple company.

Another daughter, Rose Lono Awai, lived with her husband Charlie near Keone'o'io. The Lono's son Henry was also respected as a fisherman. A number of the Lono family were known for their sensitivity to spiritual forces that were once part of everyday life in Hawaii's earlier times. Rebecca Bak's daughter, Nancy told a story of her aunt Rose warning the family to dispose of a certain rock Mr. Bak had brought home to add to his landscaping, if they wanted their son to recover from a mysterious illness. They followed her advice and the young man quickly improved. Robert Kalani told of an ancient pathway that passed through the family's land across from Maluaka Beach. His grandparents, aunts and uncles taught him to respect the presence of the path that the "old folks used to go home" to the mountain lands.

The Lono family moved to their new land in Ka'eo after the fire at their Oneuli land, but one of the houses on that lot also burned down over the years. Makena had no electricity in those days, and kerosene lanterns were regularly used for light, which may have increased the fire danger.

Interviews with a number of Makena residents shared stories of going fishing with David Lono in the years between 1930 and 1970. It was said the Mr. Lono (Uncle David as he was called by many) knew the fishing haunts of the Makena shoreline so well that he could leave his house, even at night, and come back in a short time with enough lobsters for dinner. He also grew melons and sweet potatoes and kept pigs.

David Lono Kailua was good friends with fellow fisherman, John Kauwekane Kukahiko. In the 1920's on, Kauwekane and his family lived nearby behind Pu'u Ola'i. As mentioned earlier, Lono looked after the shark who sheltered in a cave/shrine in Pu'u Ola'i and also used Kalani Heiau for spiritual practices associated with traditional fishing protocol. He, along with Kauwekane, was also a possible informant for the Bishop Museum's Stokes when the archaeologist researched Hawaiian cultural sites in Honua'ula.

The Lonokailua land near Oneuli beach adjoined a parcel that had been granted to "Kukahiko." Thrum reported (c. 1916) sweet potatoes being grown in the sandy soil near Pu'u Ola'i. Kukahiko family members refer to their "uncle" growing sweet potato's near Pu'u Ola'i. This was probably Uncle David Lono or one of the Kukahiko family, (perhaps Mahele Kukahiko, Becky Ka'ilipalauli Lonokailua's stepfather, or one of her step brothers.) The sandy loam also made for favorable conditions for family burials, and several family cemeteries were present on the site.

The Kukahiko lot was part of a larger six-acre site overlooking the remains of a pre-contact fishpond on the shore just north of Pu'u Ola'i. (see fig. 16) Unfortunately, escalating taxes forced the forty surviving members of the Bak-Lonokailua-Awai-Kalani family to sell the six-acre parcel and their smaller homesite in Ka'eo in 2004 to luxury home developers. (Maly, 2006:239)

The remains of various historic house sites on the Oneuli land were mapped and then destroyed during massive construction. No oral interviews were done with family members or local informants to determine the specific historical connections to remains found on the land. Only the family burials were preserved, although family members have expressed concerns that agreements to keep the burials in specific locations on the land, were not followed. (Maly, 241)

Project Ka'eo Conclusions

A New Era for Ka'eo

"There are discernible trends in how the archaeology of Honua'ula was perceived and dealt with in the resort context. Prior to 1980, cultural resource management had not settled into the National Register evaluation formula (described in Appendix III?), and there were no locally established guidelines for determining site significance or assessing impacts. Each archaeologist therefore devised her or his own system, resulting in relatively inconsistent and confusing standards. The Bishop Museum reports from the 1970s and early 1980s reflect a period of experimentation in site assessment that was also occurring throughout the country. In addition, there was a lack of permit review standards by the county and state, and there were no requirements for the completion of studies prior to the issuance of grading permits. Consequently, a considerable amount of field work was conducted after sites had already been impacted by grubbing and grading." Donham, Appendix I

As the analysis above confirms, a review of past efforts to evaluate and preserve the ancient remains of Ka'eo's history reveals the need for a more effective approach. This would need to be coordinated among County and State agencies, present day landowners, lineal descendents of traditional landholders and interested citizen groups.

How can this be accomplished? The first question to be asked: is Ka'eo's history worthy of greater preservation efforts?

To best answer that question, the significance of Ka'eo's cultural resources must not be viewed in the context of their comparison to remote and pristine locations on Maui or other islands. Rather, it would be more accurate to view these collected remains as a valuable legacy for present and future generations because of their location. The known sites of Ka'eo represent a rich cultural landscape reflecting legendary places, historic figures, habitation, work and worship sites, spanning seven or more centuries ..all located in a region that is easily accessible to students, community members and former and future residents of the area.

The second question to be asked: do we have enough information with current research efforts and methods to accurately evaluate the significance of Ka'eo's cultural sites?

Project Ka'eo research efforts have revealed a number of important research topics that would greatly aid in evaluation of the area's cultural resources. Two important research topics include more knowledge about the extent and location of the inland marshes and ponds that once surrounded Pu'u Ola'i; and the concept of a chiefly compound having once been located in Ka'eo lands surrounding the Kalani heiau and Keawala'i Church. Both of these research topics would benefit from paleo-botantical research, rigorous subsurface excavation and more extensive archival research and oral interviews.

The presence of large marsh areas would have made cultivation of useful plants and foodstuffs more possible and could lend greater understanding of the ceremonial and habitation clusters already discovered in the Pu'u Ola'i area. It could possibly lead to even greater discoveries. Research into the area surrounding Kalani heiau is imperative because a resort shopping area is proposed for the lands behind the heiau and extensive building is also proposed for the lands immediately adjacent to the south. What is more, the Maui Prince Hotel, whose grounds were the suggested site of a "sacred coconut grove" associated with the chiefly compound, may be demolished and rebuilt, providing an excellent opportunity to conduct further research with more modern methods.

The third question to be asked: will present plans for preservation of less than twenty of the hundreds of cultural sites scattered in Ka'eo and surrounding ahupua'a, create a viable legacy for future generations?

Current Cultural Resource Management plans for the large Makena Resort holdings have little interconnection to preservation efforts on any of the adjoining lands under diverse ownership. The resort's research efforts in the culturally rich lands surrounding Pu'u Ola'i are twenty to thirty years old, were rushed and never actually fully completed. The significance evaluation of the cultural sites involved was made by contract archaeologists with little or no input from lineal descendents of the kanaka maoli whose ancestors inhabited these lands. In short, any Cultural Management Plan being presented under these circumstances, is quiet premature.

Improving Cultural Preservation and Educational Efforts in Ka'eo

What actions can be taken to improve cultural preservation and educational efforts in Ka'eo?

1. A complete Archaeological inventory Survey (AIS) needs to be undertaken of both previously recorded sites and areas where sites

were only marginally explored on the Makena Resort lands and surrounding properties under private ownership. Financial support, when needed, should be sought for this effort.

2. Paleo-environmental studies need to be completed on Makena Resort lands as a condition to any future development, to fill in needed background on the region's pre-contact flora and fauna conditions and the presence and extent of former fresh water resources and aquaculture areas. This paleo-environmental information was very useful in the preservation planning efforts at Hawai'ian Homelands in Waiohuli and Kahikinui.

3. A formal Cultural Landscape Study should be commissioned and undertaken for the area from Papa'anui (Makena Landing) to Cape Kinau which includes both public and private lands. If review of this large an area is not possible, at the very least the area from Ka'eo to Mo'omuku ahupua'a, should be considered because of the immanent development pressures it faces.(see Appendix III for guidelines to Cultural Landscape Studies set by State and Federal agencies.) Management of this cultural landscape needs to be a community effort guided by Hawai'ian cultural practitioners and involving multi-generations in both research and maintenance of these legacy sites;

4. Pending completion of the Cultural Landscape Study, the area surrounding Kalani Heiau and Keawala'i Church, from the ocean to above Makena Alanui road and the lands surrounding Pu'u Ola'i from the ocean to the 400 ft elevation should be placed in an Historic Overlay District, with boundaries determined by community input through the General and Community Plan update process. This should include plans to preserve a greater representation of historic whaling and ranching era sites as well as pre-contact remains. The need for such districts in Honua'ula was discussed in the 1998 Kihei-Makena Community Plan.

5. Land use management actions and decisions in Ka'eo and Honua'ula need to support the idea of an ahupua'a-based cultural landscape management area. To implement this goal, State and County agencies and policy makers having jurisdiction over cultural preservation decisions in Ka'eo and the surrounding lands of Honua'ula the region need to have access to accurate maps, complete inventory surveys and

adequate subsurface research information as well as a consultation process with interested lineal descendents to incorporate in their evaluation process.

Viewing Ka'eo as Cultural Landscape

The legendary lands of Ka'eo/Makena are at a crossroads. Makena was envisioned as a place where ancient Hawai'ian history and modern resort development would blend into a vibrant community, rich with educational opportunities to appreciate and learn from the region's heritage sites.

The current approach in the Ka'eo lands is to set aside a few chosen cultural sites as representative of the entire cultural landscape which once surrounded them. These sites are often selected on the basis of their convenience to proposed development plans, rather than any connection to the long term history or native families of the area. In order to transition from this limited approach to one that will fulfill the vision that launched the modern Makena community, a new approach is needed. The emerging concept of cultural resource preservation planning based upon a Cultural Landscape perspective offers just that option.

What is a Cultural Landscape Study?

The lands of Ka'eo are a good candidate for a Cultural Landscape.
In this model, a cultural landscape study includes:

1. identification of a historic context of a landscape through historical and archival research.
2. identification and mapping of the boundaries and physical components of the landscape
3. recording of community history, traditions and insights through interviews, visits, and resident-guided field trips
4. description of historical trends and existing conditions
5. assessment of integrity and significance of cultural features
6. recommendations applicable to economic activity, land use, design and preservation of cultural resources

The study research is designed to gather information needed to evaluate the potential Cultural Landscape using the four standard criteria established under the National Historic Preservation Act and the fifth criteria established under the Hawai'i State Historic Preservation Division to evaluate a region's

significance as a cultural landscape... (see Appendix III for a discussion of these criteria)

Cultural Landscape Management Model Compared to Current Preservation Methods in Ka'eo:

How would a Cultural Landscape Management Model (CLMM) compare to current cultural preservation methods being offered to decide the future of Ka'eo's heritage sites.? There are significant differences. First, the Cultural Landscape approach is based upon a ahupua'a view, the same system that was present when the many of the cultural sites in Ka'eo were first constructed.

CLMM Objective: Integrate historic and archival records for entire ahupua'a into significance evaluation of sites.

Current plan: Based on outdated studies hurriedly completed in many areas with no further review and no informant interviews or significant archival research to connect knowledge of sites' traditional use with mapped features of sites.

CLMM Objective: Comprehensive mapping of cultural landscape boundaries and review of all sites in the context of this boundary area.

Current plan: Based on function of sites rather than connection to place, sites chosen for preservation are scattered with no apparent inter-relationship.

CLMM Objective: Site significance takes into account community history, traditions and insights through interviews, visits, and resident-guided field trips

Current plan: Includes one ethnographic study forced by citizen groups in 1980s. All subsequent preservation decisions based on excavations and whether site locations can be out of path of development rather than cultural history of area.

CLMM Objective: Clear description of historical trends and existing conditions including preservation goals of adopted planning documents such as the Kihei Civic Development Plan and the Kihei-Makena Community Plan of 1998.

Current plan: Ignores strongly worded guidelines for significant amounts of cultural site preservation specified in both Kihei Civic Plan and Kihei-Makena Community Plan, and emphasizes zoning and land-use entitlements based on decisions of 40 years ago when limited information on site locations was available.

CLMM Objective: An assessment of cultural sites based on a broader range of information than just physical appearance or amount of recovered artifacts, simplistic views which could overlook features with important historical or cultural significance.

Current plan: Many sites have had limited review of their potential significance in the rush to survey and develop huge amounts of property, partly attributable to the large work load of the reviewing arm of the State Historic Preservation Office

.

CLMM Objective: Integrate a variety of factors, economic activity, land use, design and preservation of cultural resources into planning decisions.

Current plan: Emphasis placed on highest economic gain from land currently occupied by cultural sites with preservation an afterthought to meet the bare minimum of legal requirements.

As this quick assessment demonstrates, actions must be taken if the hundreds of Ka'eo sites still remaining, and those yet undiscovered, are to have a meaningful story to tell our children's children. The largest section of Ka'eo lands, over a thousand acres from the mountain slopes to the sea, is now under new ownership. Will there be one place in Honua'ula where the people and places connected with hundreds of generations of *kanaka maoli* can remain as a living heritage for present and future generations? Ka'eo /Makena, the "land famous with ancient Chiefs", still has that possibility and is worthy of efforts to find a better way.

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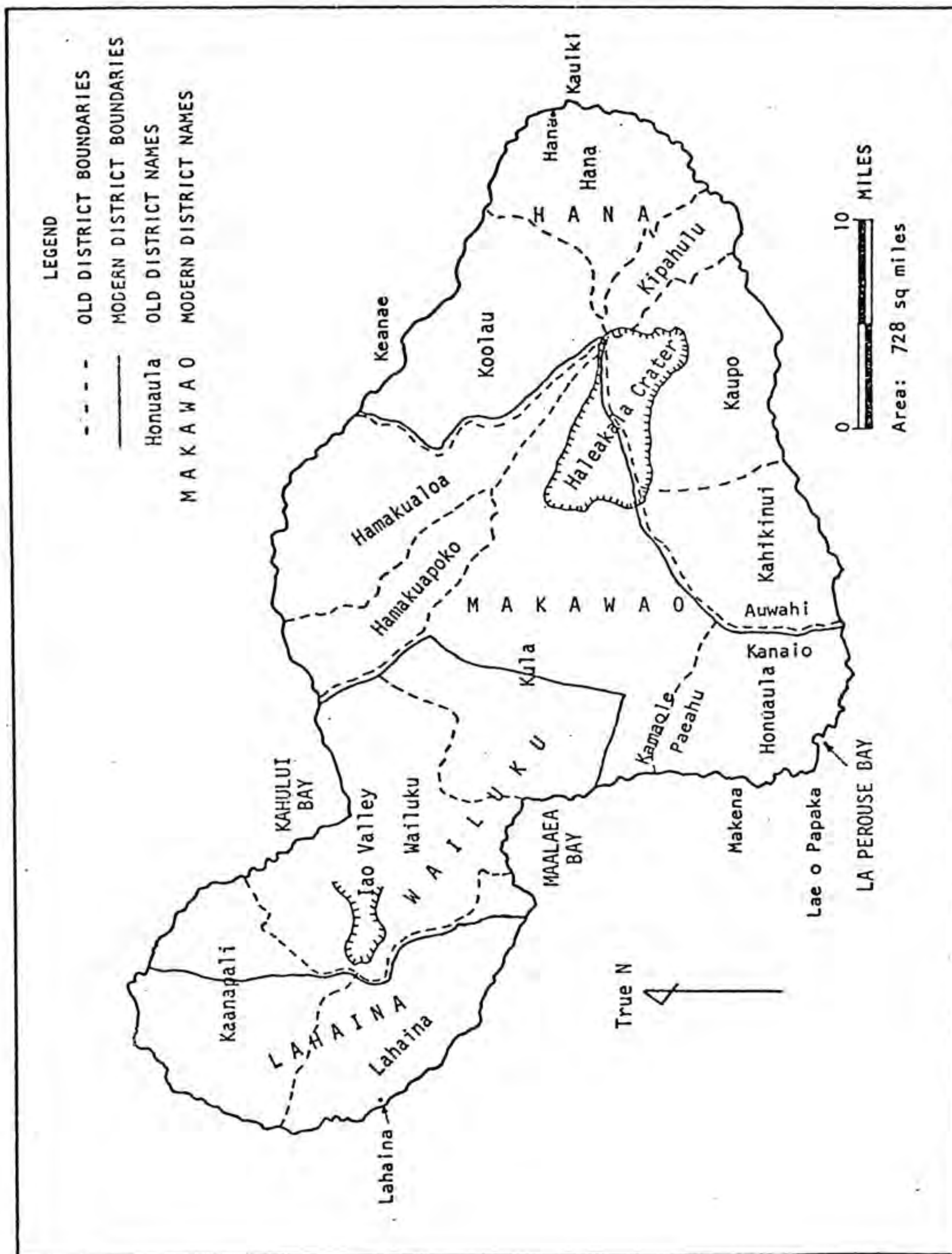


Figure 6 Modern and ancient districts of Maui Island from Barrere, 1975:31

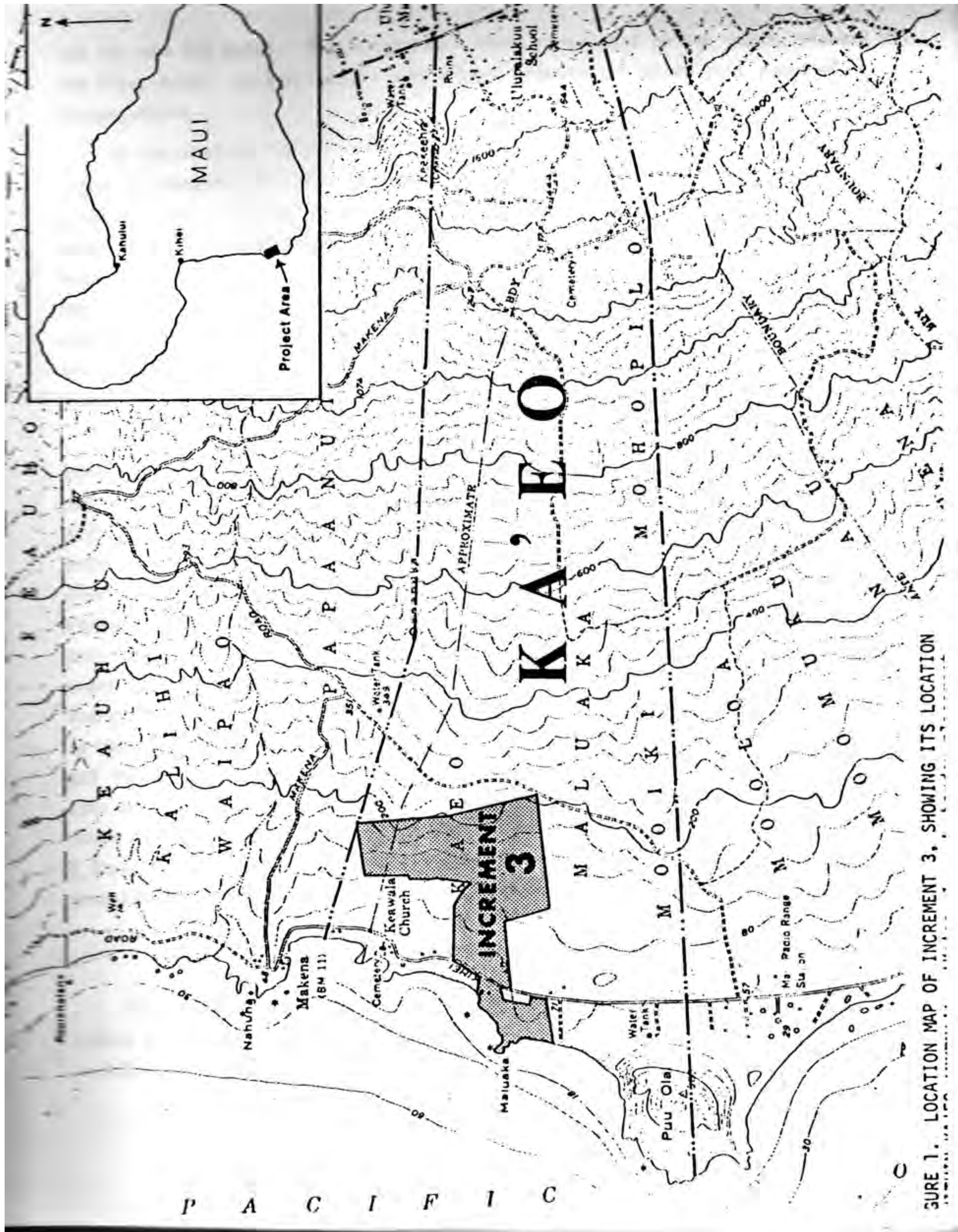


Figure 7 Cordy's map of suggested boundaries for ahupua'a of Ka'eo. (Cordy, 1978:3)

Figure 8 Pu'u Ola'i cinder cone and surrounding ponds-aerial view. photo. by Sean Lester, 2004.

Figure 9 Keawala'i Church, Ka'eo (also called Keawakapu or Honua'ula or Makena church) by Natasha Hiwahiwa Chang, native of Makena. Painted November of 2006.

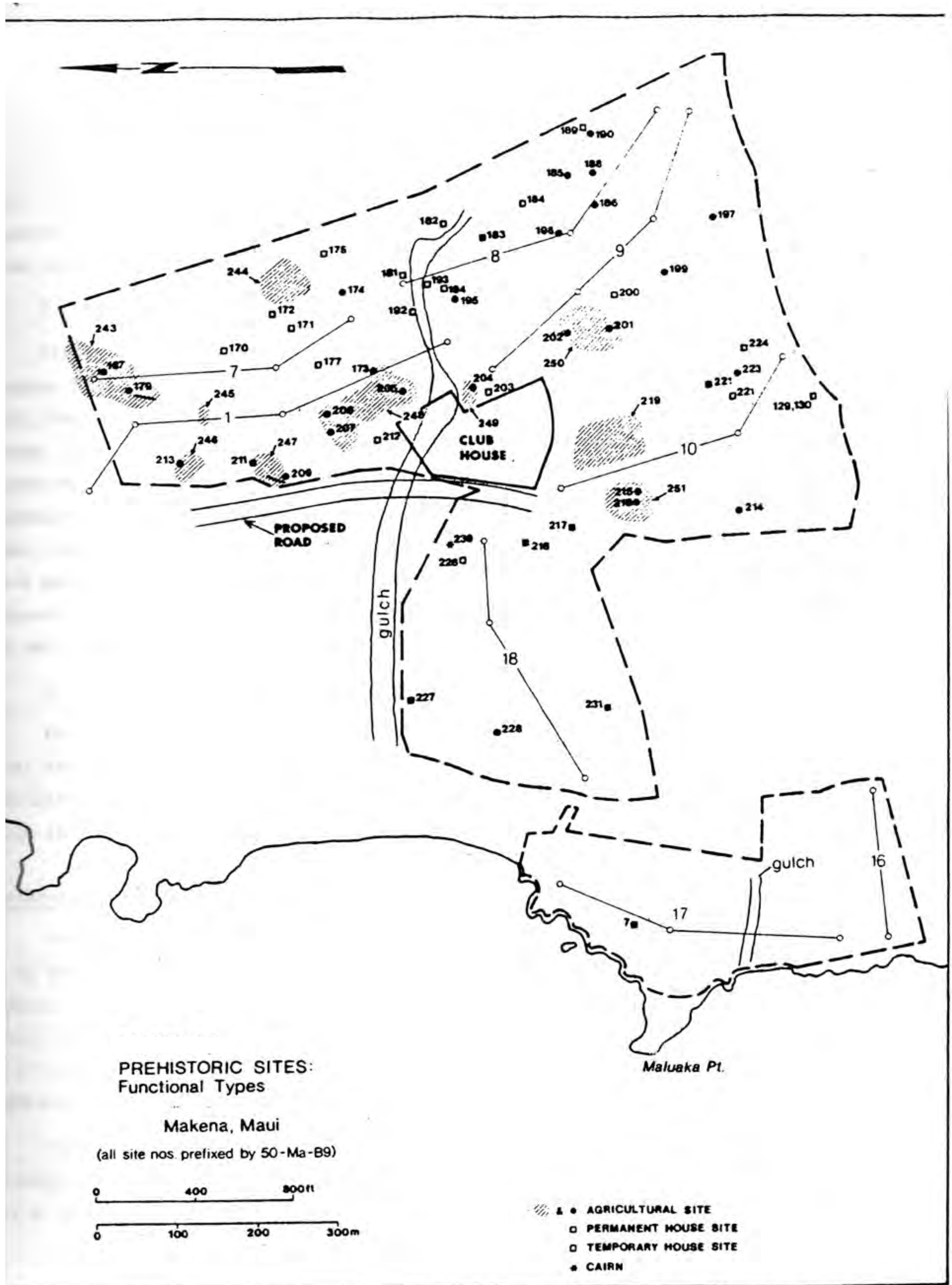


FIGURE 10 CORDY'S MAP OF KA'EO CULTURAL SITES, PRE-GOLF COURSE CONSTRUCTION (1978: 49)

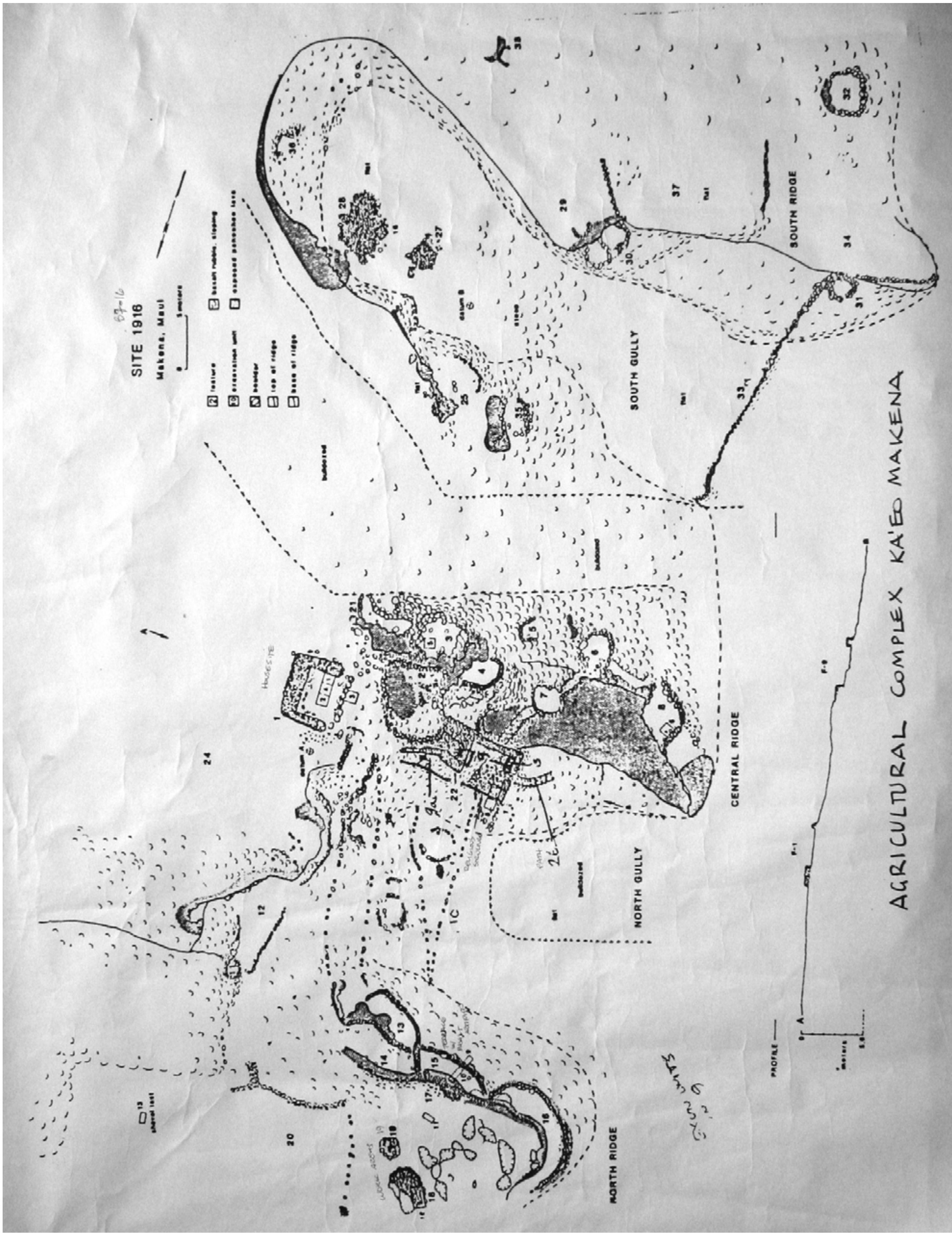


FIGURE 11 MAP OF KA'EO AG COMPLEX (SIHP 1916) DESTROYED C. 1989 (CORDY & ATHENS, 1985)

Figure 12 Haun's 1978 map showing approximate location of shrine site B8-125 (just below circled number 10), a possible mua (B8-140) and clusters of other sites

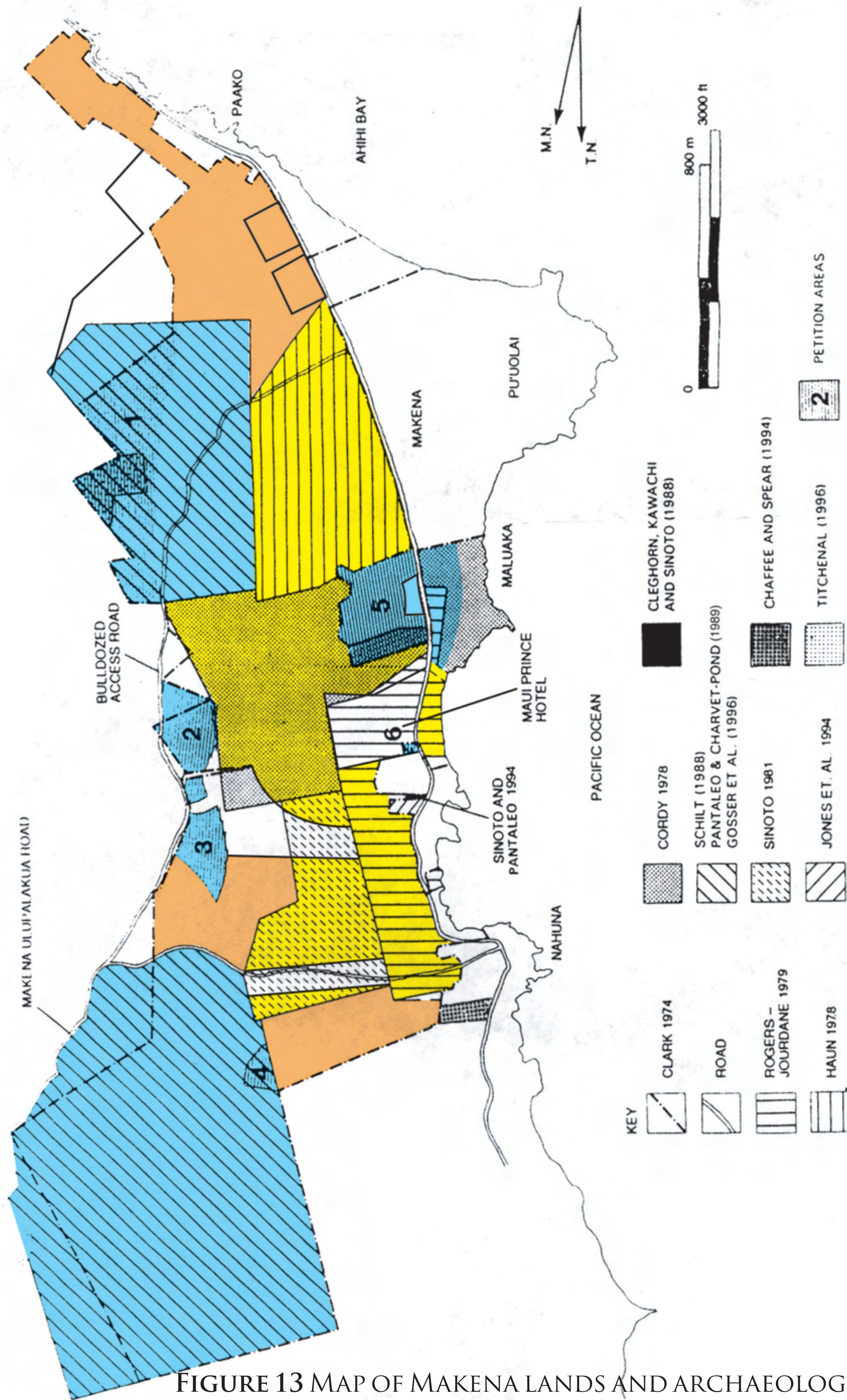


Figure 13 Map of Makena lands and archaeological survey dates, adapted to illustrate lands last surveyed between 1974 and 1985. (Areas in Yellow) and those survey from 1996 on (Areas in Blue) (after Fig 2 in Gosser et al, 1996:57)

Figure 14 ‘Apuakehau Pt. with remains of ‘Apuakehau fishpond in foreground, Ka‘eo, 2006.

Figure 15 Remains of traditional rock-lined shoreline well in Ka'eo study area and existing shoreline well in Kanaio, Honua'ula, both photos, 2006.

Figure 16 Remains of Oneuli fishpond overlooked by Pu'u Ola'i--note remnant of retaining wall along inland side of pond. 2005

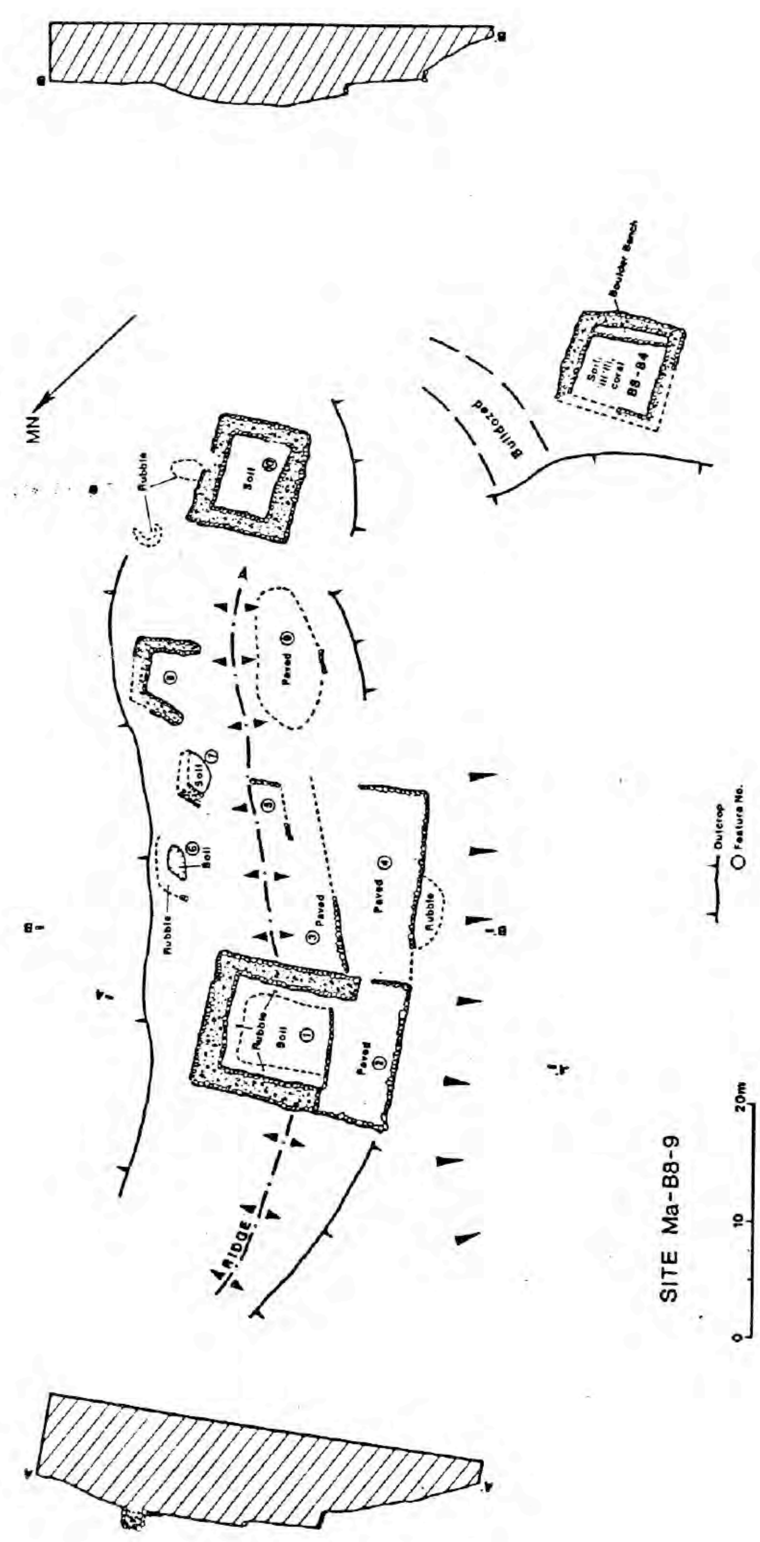


Figure 17 Haun's 1978 site map of the Mo'oiki heiau complex (SIHP 1855) just inland of Pu'u Ola'i in vicinity of Oneuli beach)

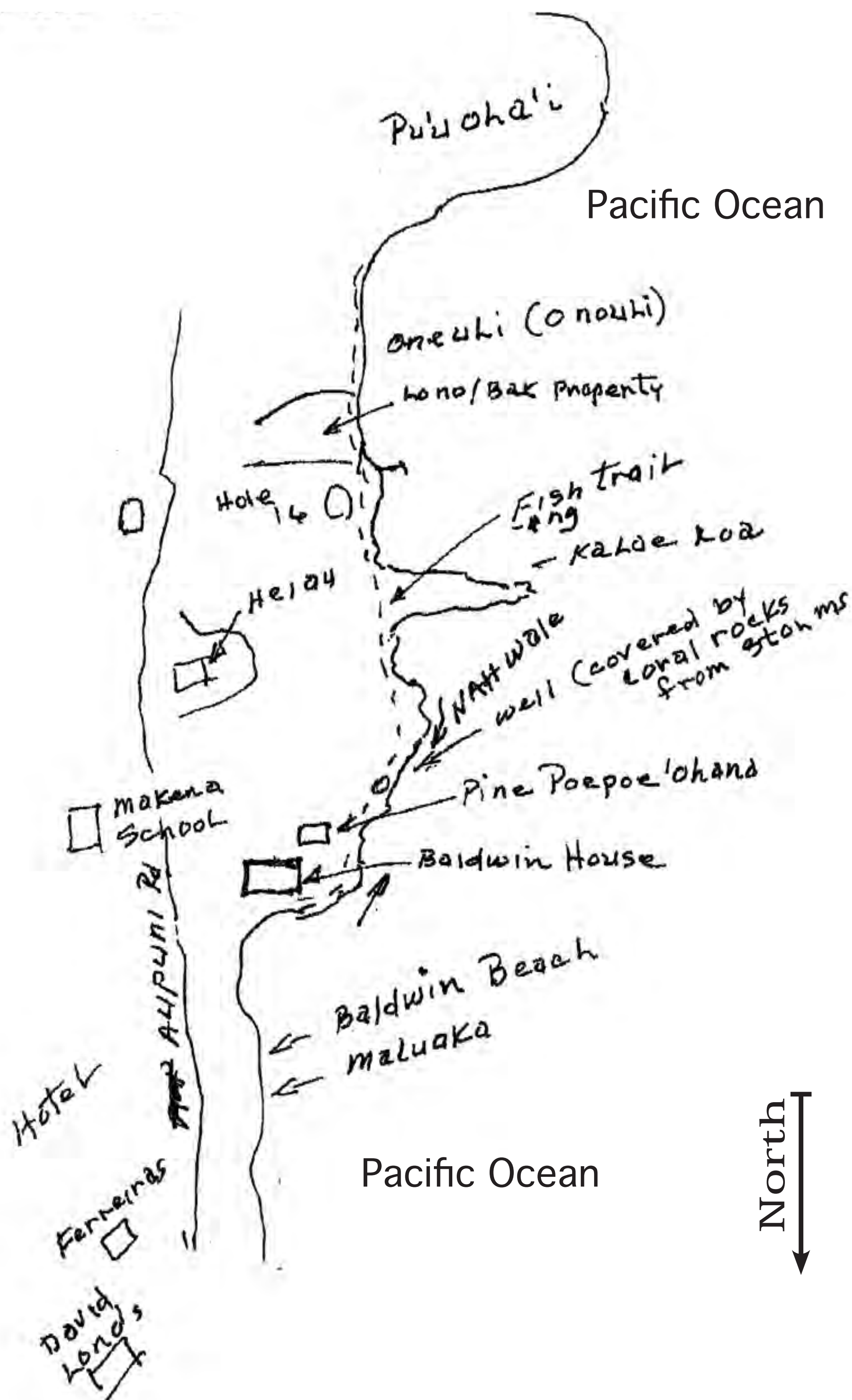


Figure 18 Rudolph "Boogie" Luuwai's 2007 Map of features along Ka'eo coast c. 1930's-1940's showing location of Makena School, well, fishing shrine, Nahawale, etc.

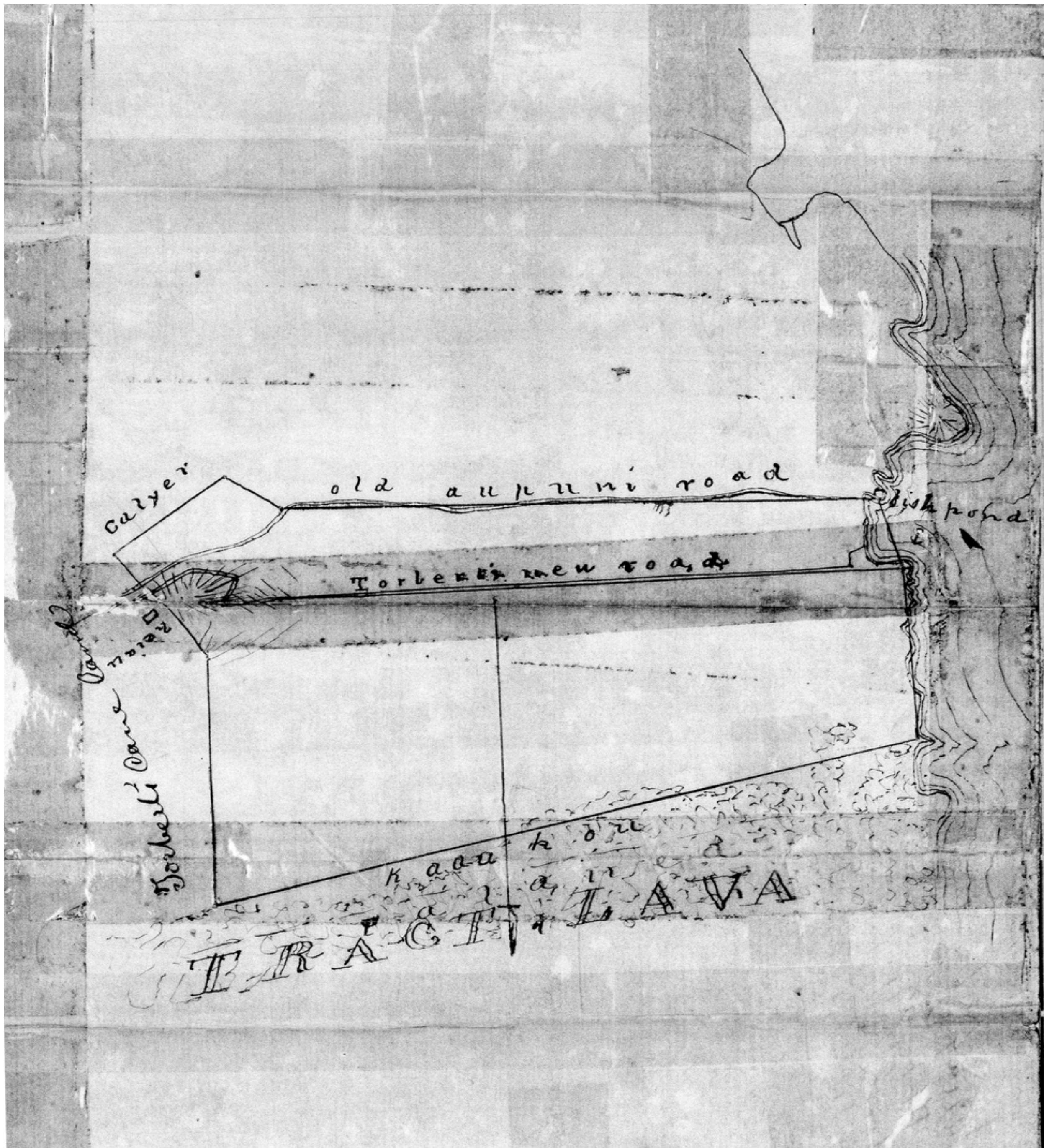


Figure 19 Torbert's1850 Map of his proposed road to Makena Landing, (Royal Patent Grant No. 234) showing a heiau on Pu'u Ke'eke'ehia (reproduced with permission from Kumupono, Associates, from Maly, 2006, fig 7:163)

Figure 20 Kalani heiau in Ka'eo. (Photo KPA-N1734, Aug. 23, 2005) by Kepa Maly, (reproduced with permission from Kumupono, Associates from Maly, 2006)

Figure 21 View from SIHP 1855 (Mo'oiki Heiau complex) towards Kaho'olawe. Pu'u Ola'i is in mid-ground. Photo used by permission of Marcia Godinez, 2003.

Figure 22 Fishing shrine (ko'a) SIHP 5711 described by W. Walker as Oneuli or Onouli ko'a and by Ashdown as "Onipa'a" heiau located on site of Maluaka Beach Club gated condominium project.

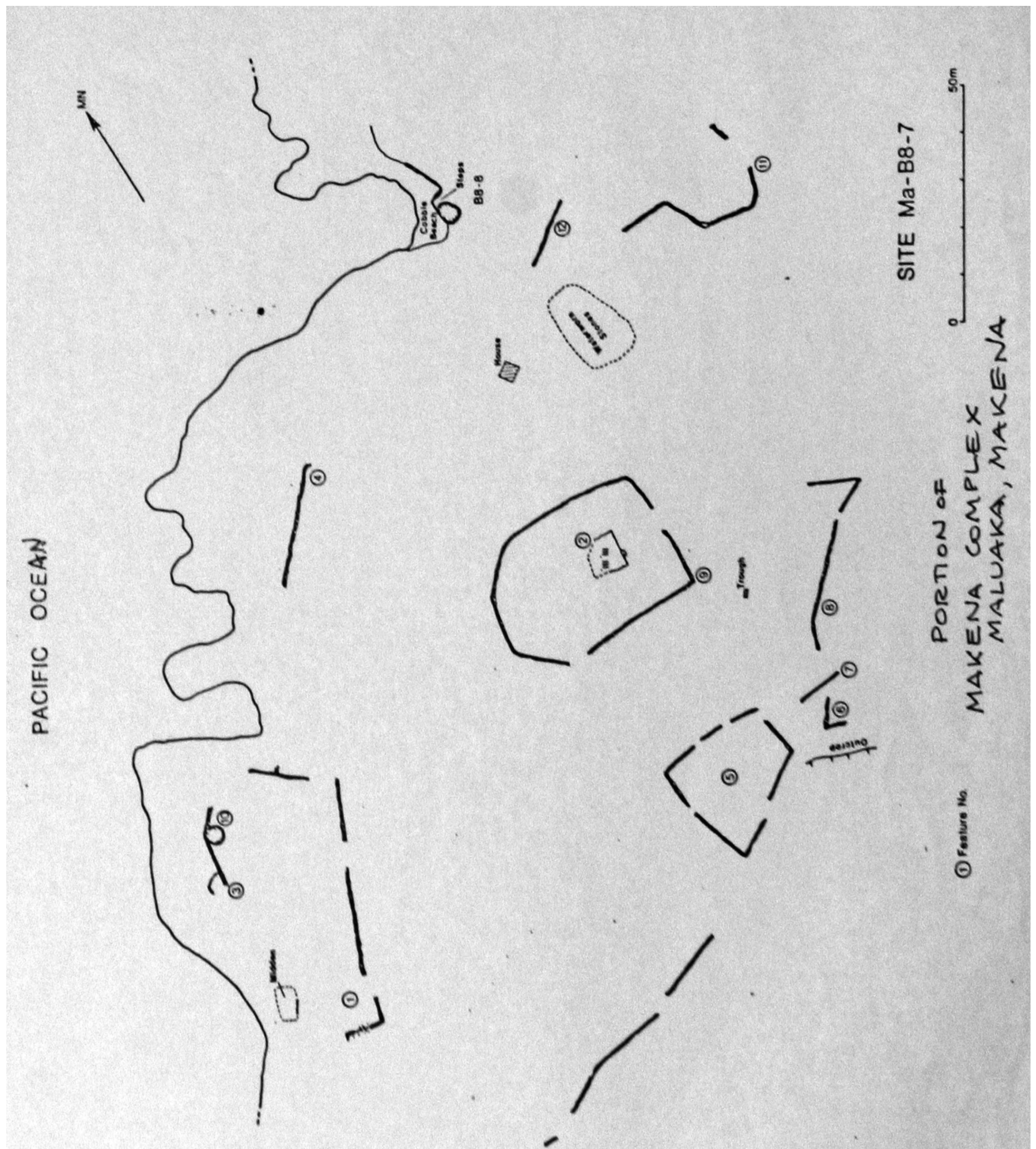


Figure 24 Haun's 1978 map of a portion of the Makena Complex in Ka'eo, including site B8-7. Features 2 & 9, a possible ko'a (fishing shrine) located in future Makena golf course fairway and a collection of other features that may have been part of Kahaleoka'ia's house lot.

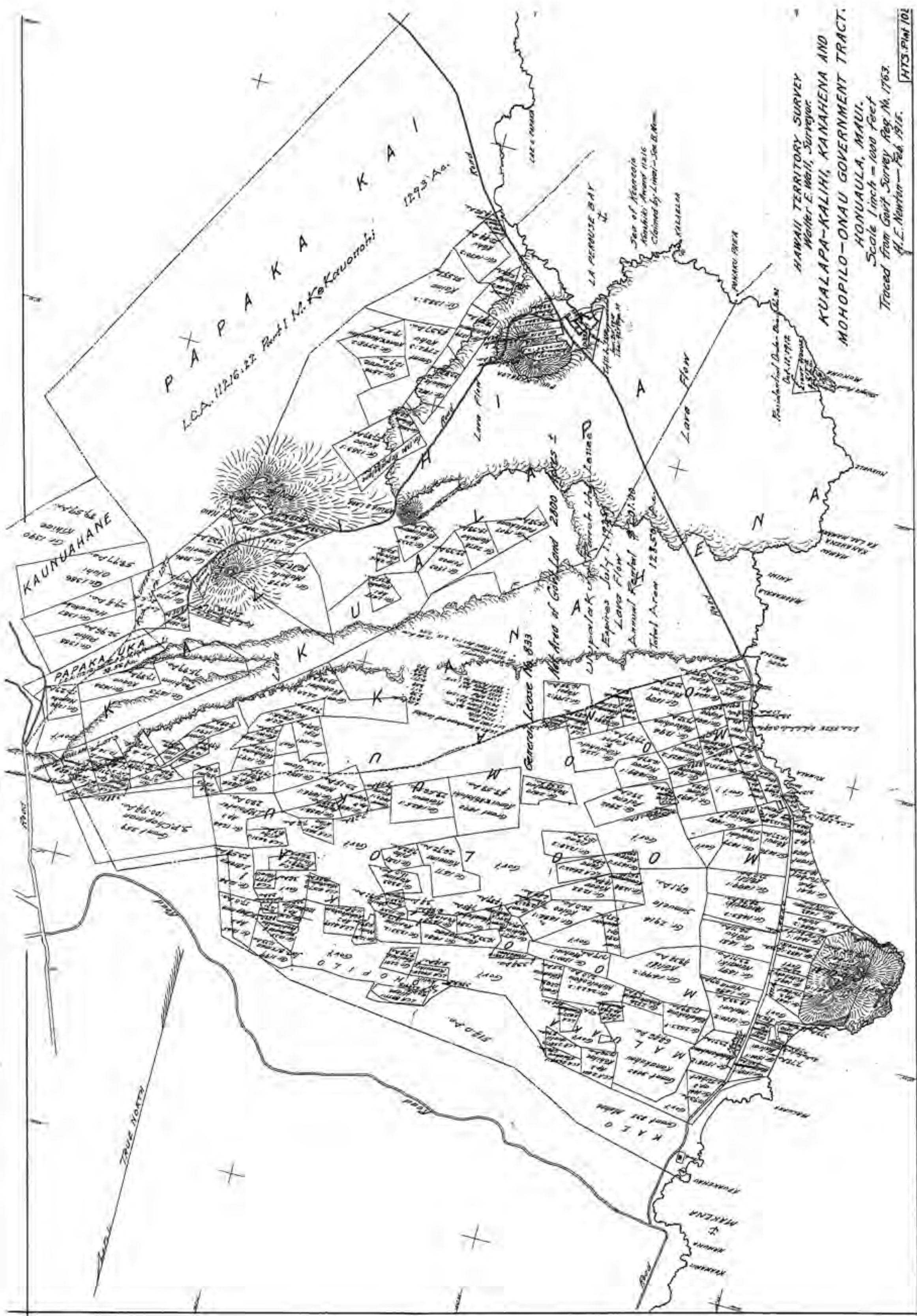
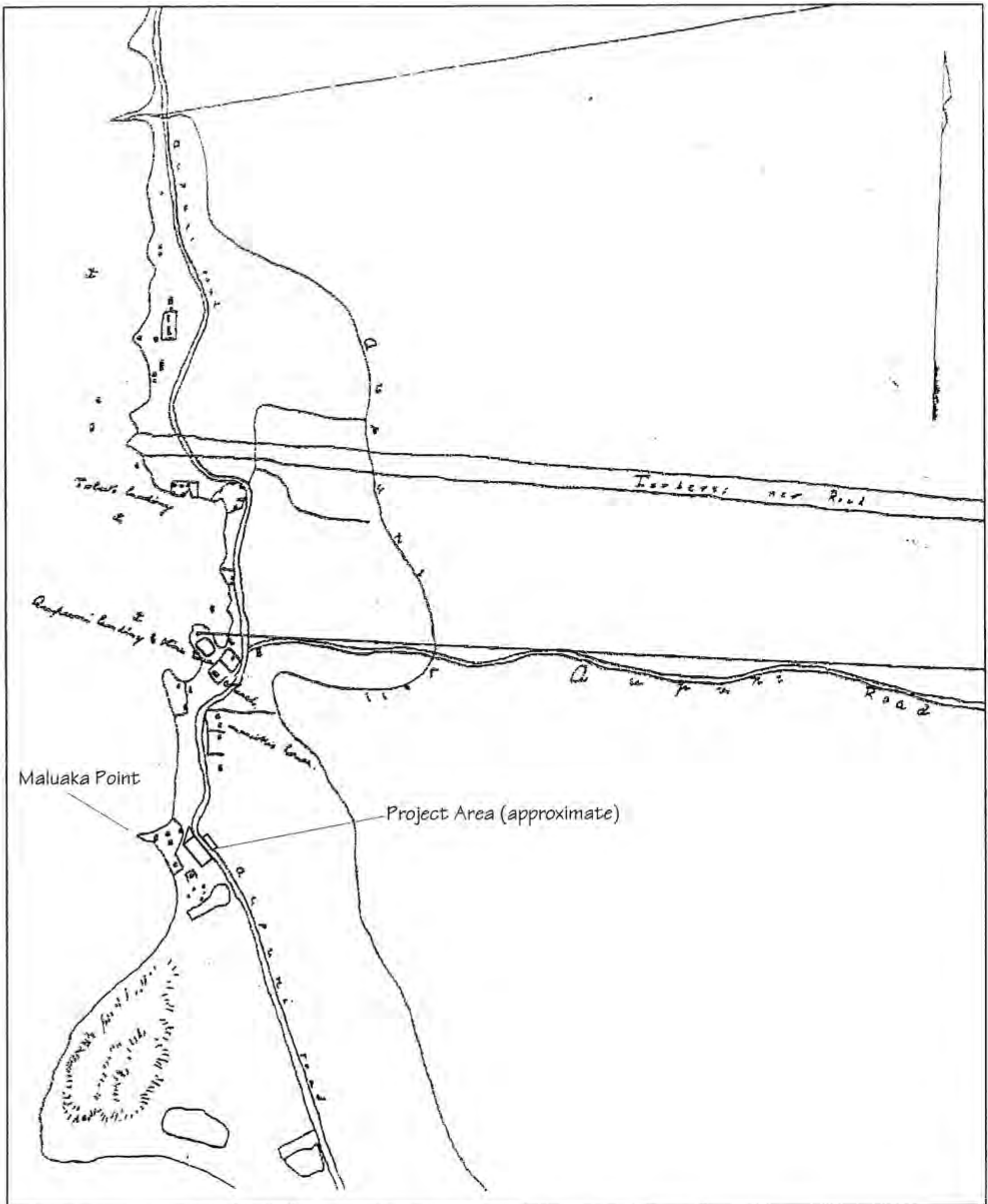


FIGURE 26 1915 TERRITORIAL SURVEY MAP BY WALTER WALL OF HONUA'ULA AREA SHOWING LAND GRANTS.



A portion of Torbert's Map (Reg. No. 1202); added text is in blue)

FIGURE 27 L.L. TORBERT'S MAP FOR ROYAL PATENT NO, 234 (C. 1840'S) FOR LANDS IN KA'EO. MAP SHOWS 'AUPUNI (GOVT.) ROAD, WALL AND LANDING)

Figure 28 Section of Hoapili trail (c. 1824-1834) built under Gov Hoapili as a horse and cart route over the lands of Kula, Honua'ula, Kahikinui and Kaupo.2002.

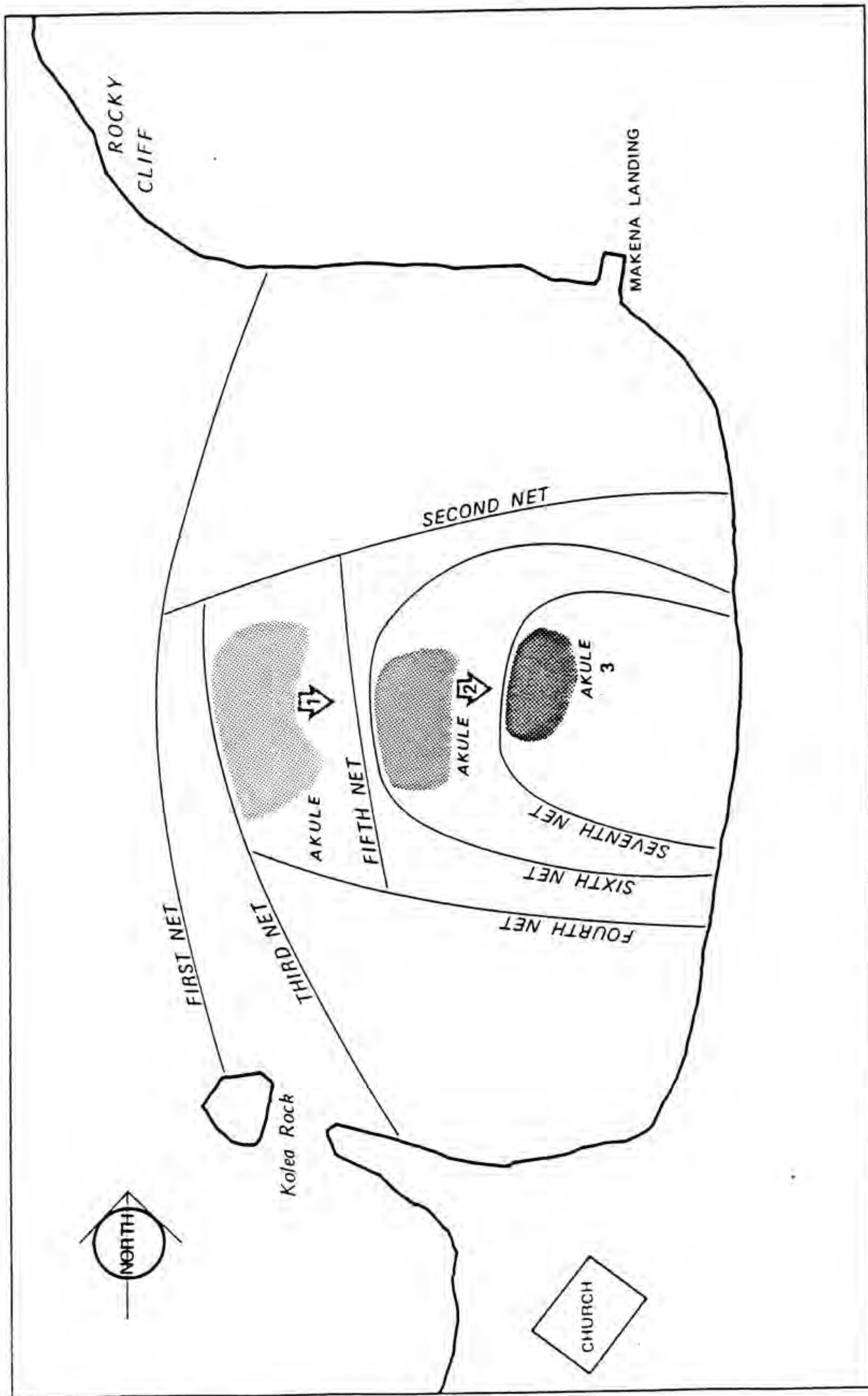


FIGURE 29 DIAGRAM OF HUKILAU FISHING NET PATTERNS IN MAKENA BAY (FROM KELLY, 1985: 14)

Figure 30 Hoapili trail still spans rugged lava flows in Honua'ula as it did in the 1840's. 2006.

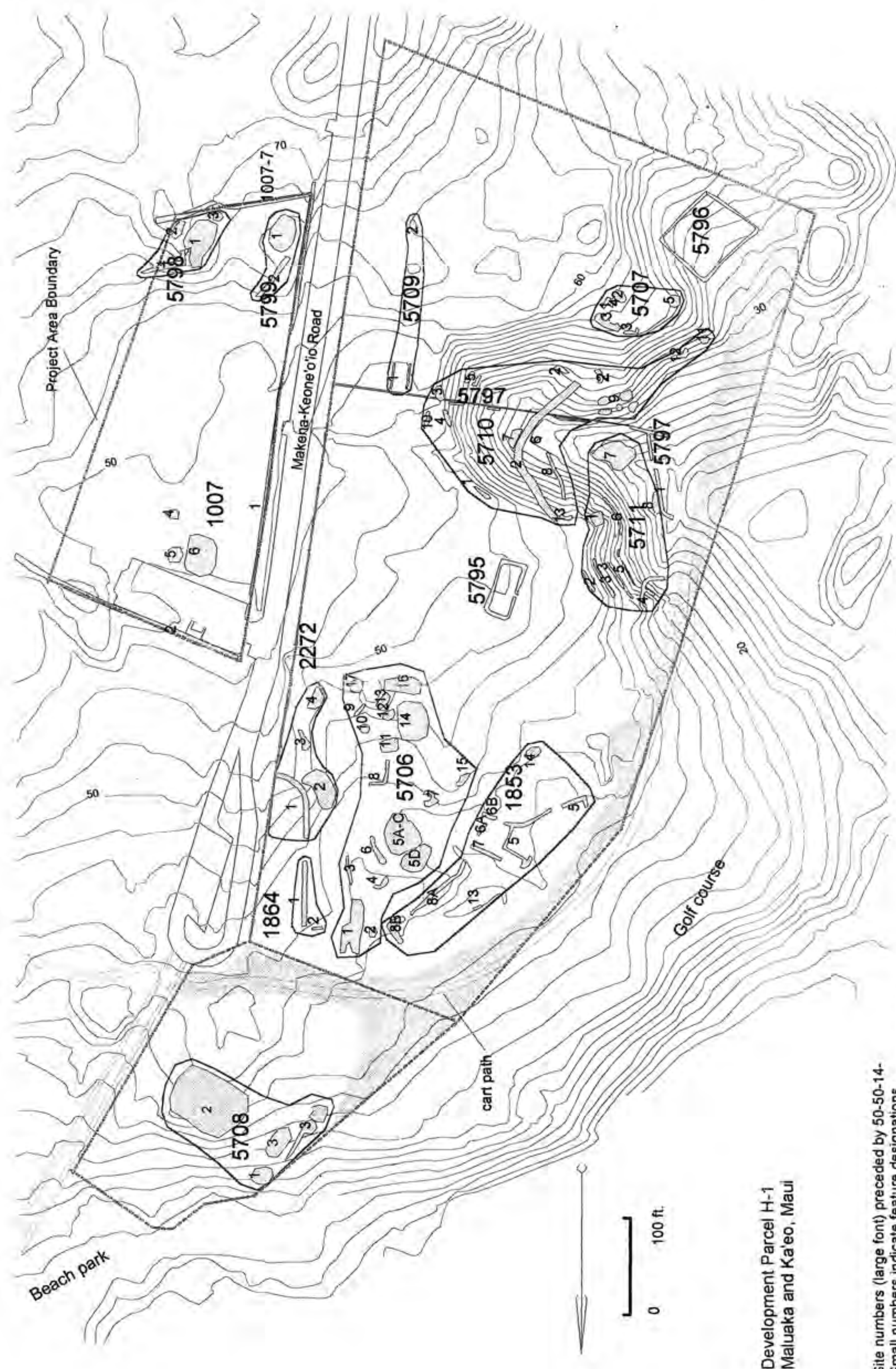


Figure 31 Donham's 2006 map of Ka'eo sites that were part of the Makena Complex identified in 1973. Map also includes location of Old Makena School site, just south of Maui Prince Hotel.

Figure 32 Several features of Mo'oiki Heiau complex (SIHP 1855) looking east (c.2003)

Figure 33 Kepa Maly's scholarship connected this ruin with a land claim made by one of Ka'eo's early konohiki, Pikanele. This foundation is likely the remains of Pikanele's house on 'Apuakehau Bay in Ka'eo (c. 1830's) (used by permission from Kupono Associates, Maly, 2006, Appendix A: 43, photo KPA-N1777)

Figure 34 Pu'u Olai, legendary home of the mo'o Pu'uoinaina. Photo used by permission of Jan Welda Fleetham. 2006.

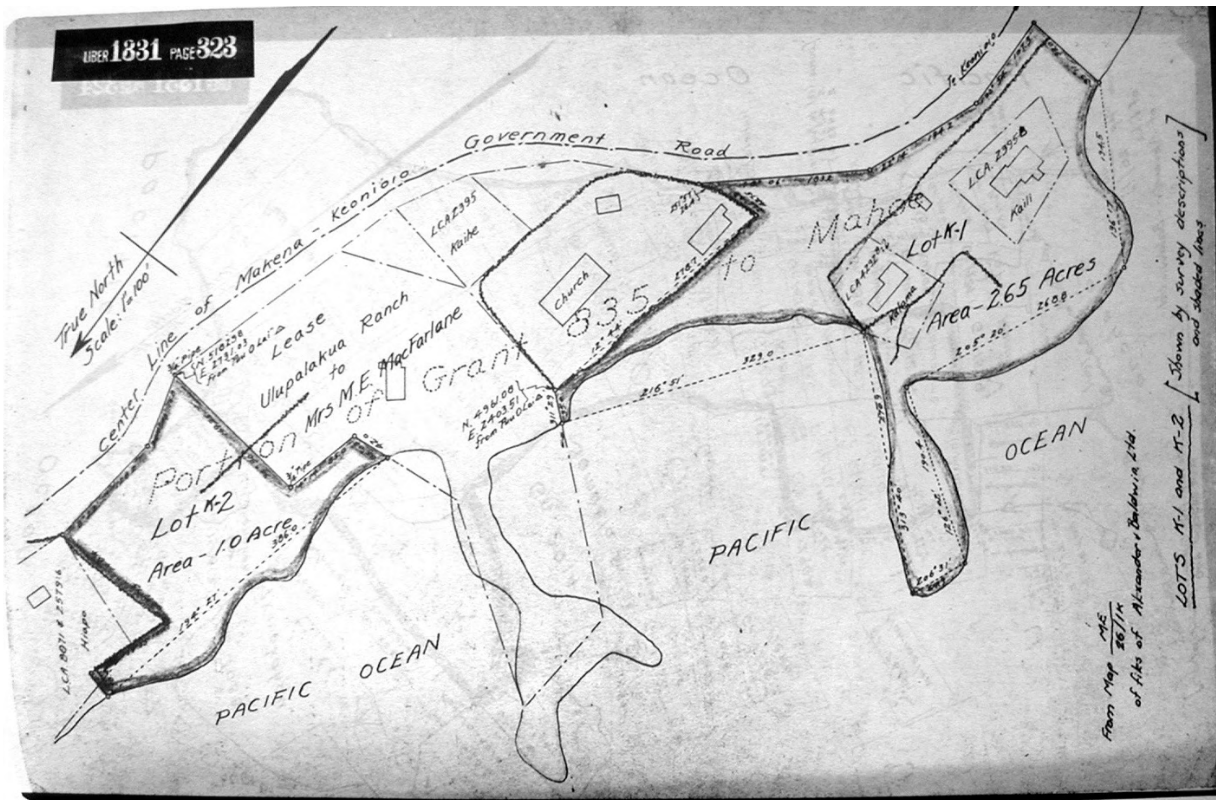


Figure 35 Survey Map of lands involved in 1935 Kapohakimohewa family exchange with Ulupalakua Ranch (From Hawai'i State Archives, Liber 1331:323, 324 electronic image used by permission from Kumupono Associates, Maly, 2006:190-191, fig 9) Ulupalakua Ranch traded these two lots adjacent to Keawala'i church to the Kapohaimohewa family in return for their lands pictured below.

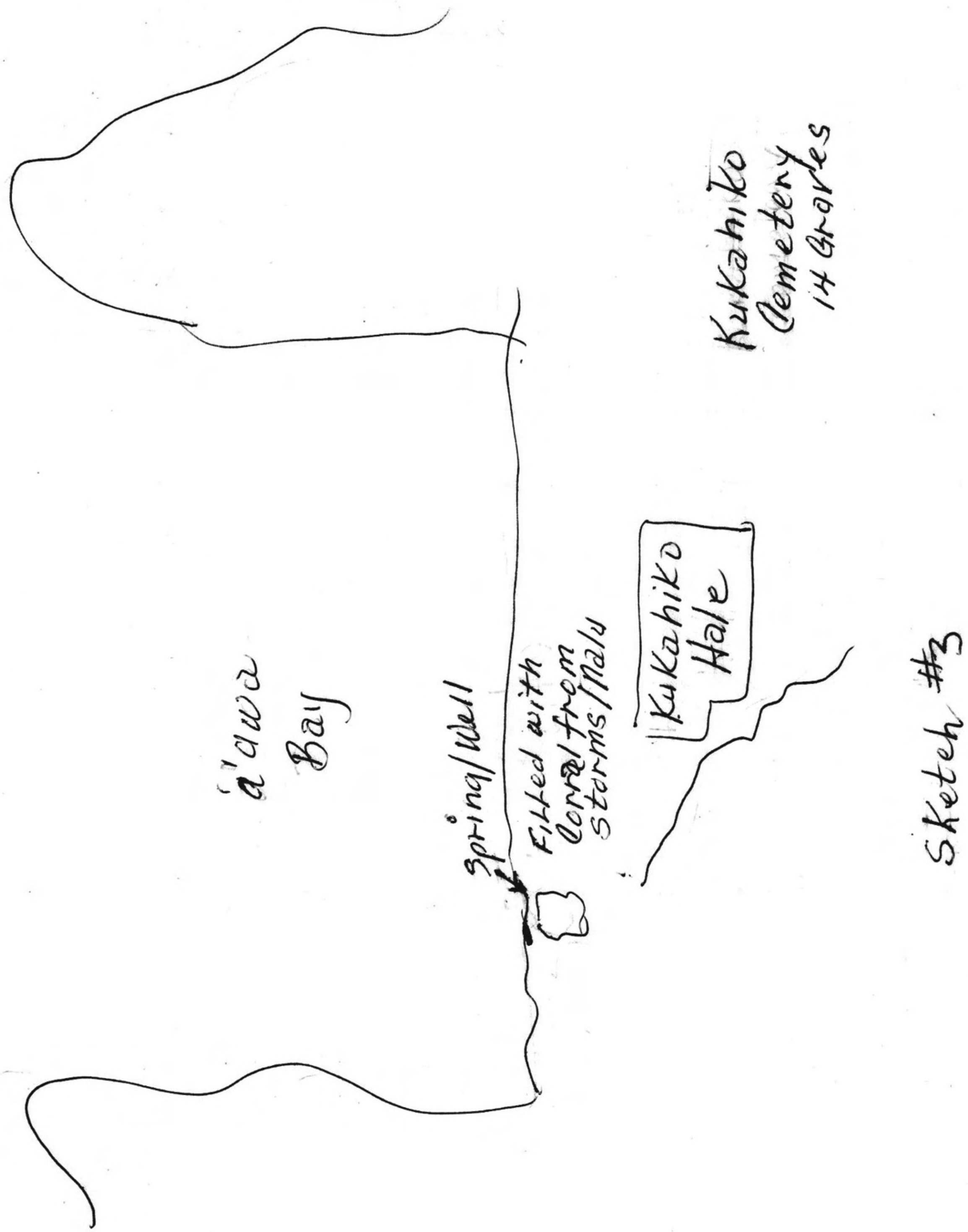


Figure 37 Boogie Luuwai's Map showing the Kukahiko graveyard and Nahuna Pt./,A'awa landing, coastal spring and other features. (reproduced with permission from Kumupono, Associates, from Maly, 2006.)

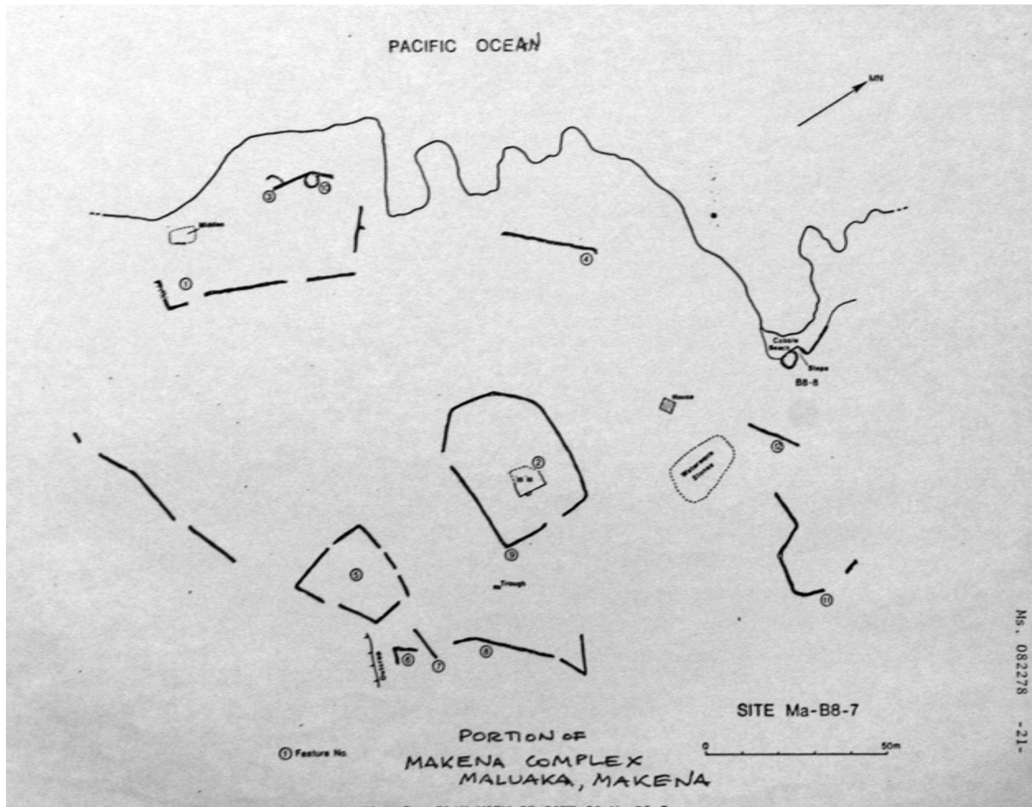
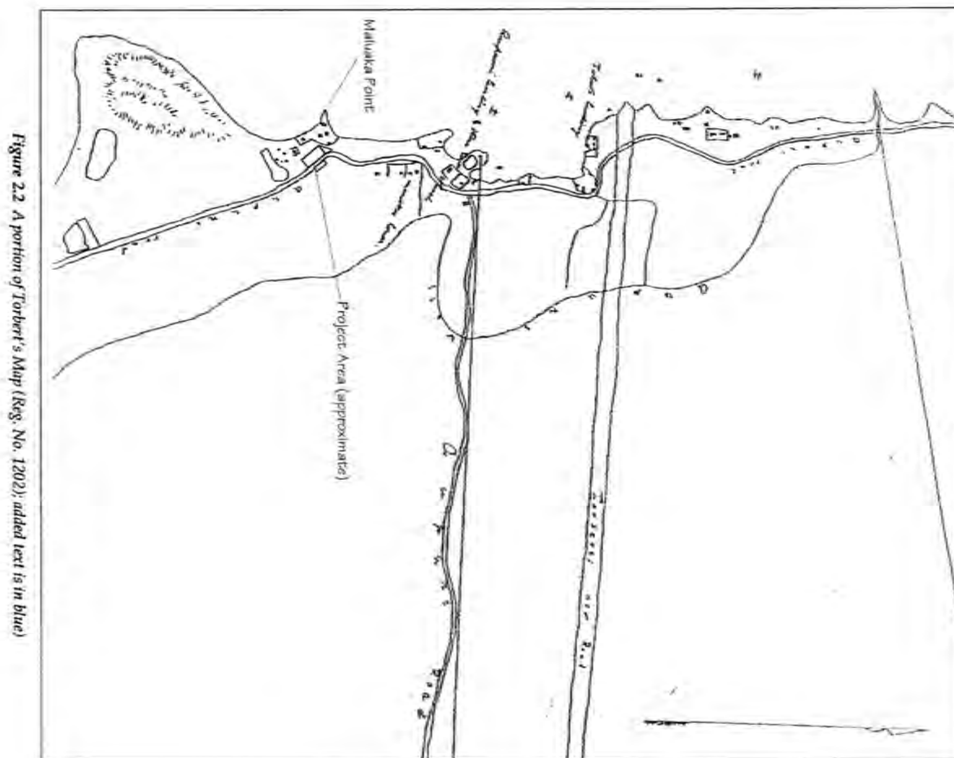


FIGURE 38 MALUAKA SHORELINE: COMPARATIVE VIEWS OF HAUN'S 1978 SITE MAP (FIG 24) AND TORBERT'S C. 1840'S MAP (FIG 27) OF THE SAME AREA)



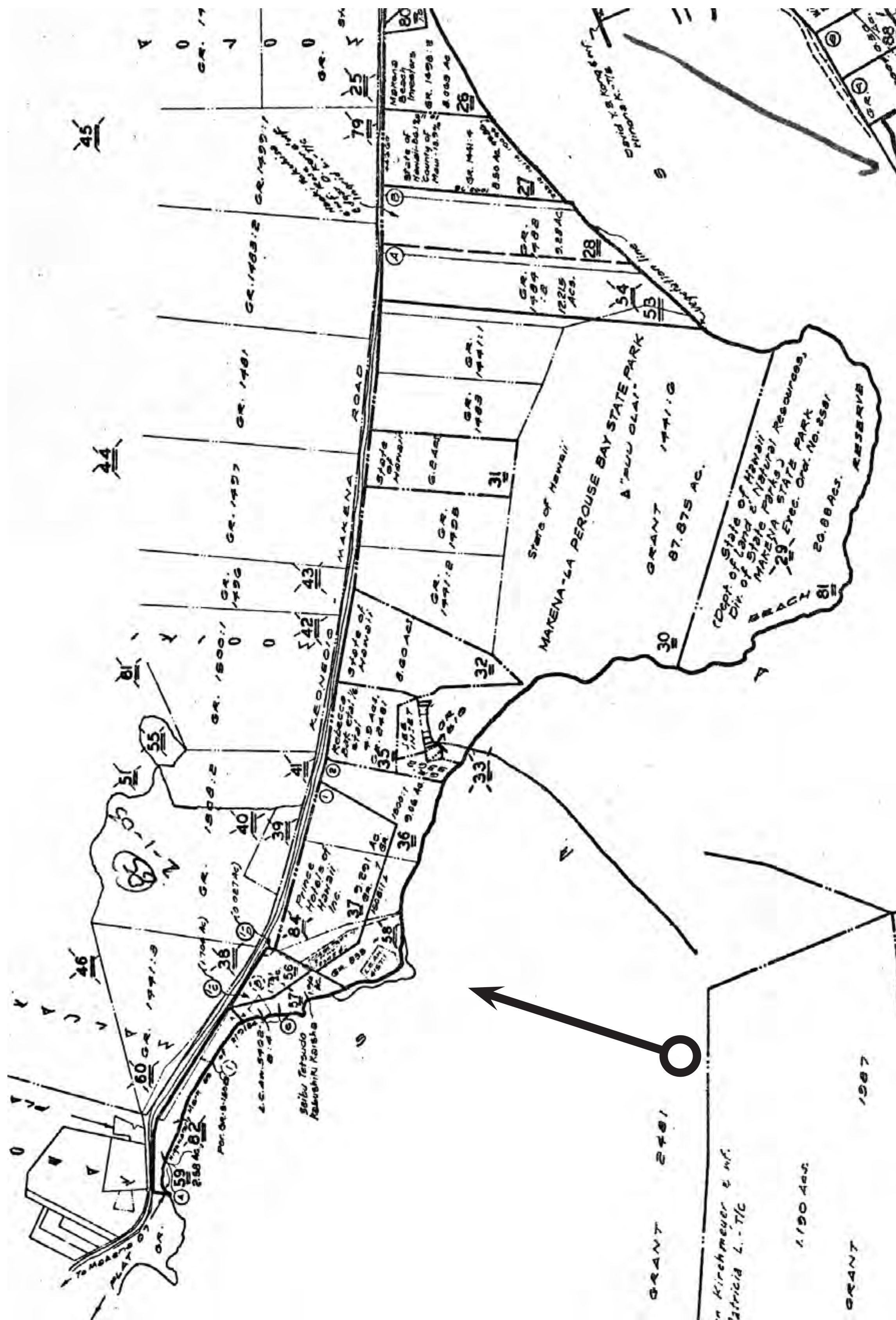


Figure 39 Maui County Tax map for 2-1-06, parcel 58 in Makena, showing location of LCA 5147:7 to Kahaleoka'ia at Maluaka Pt.

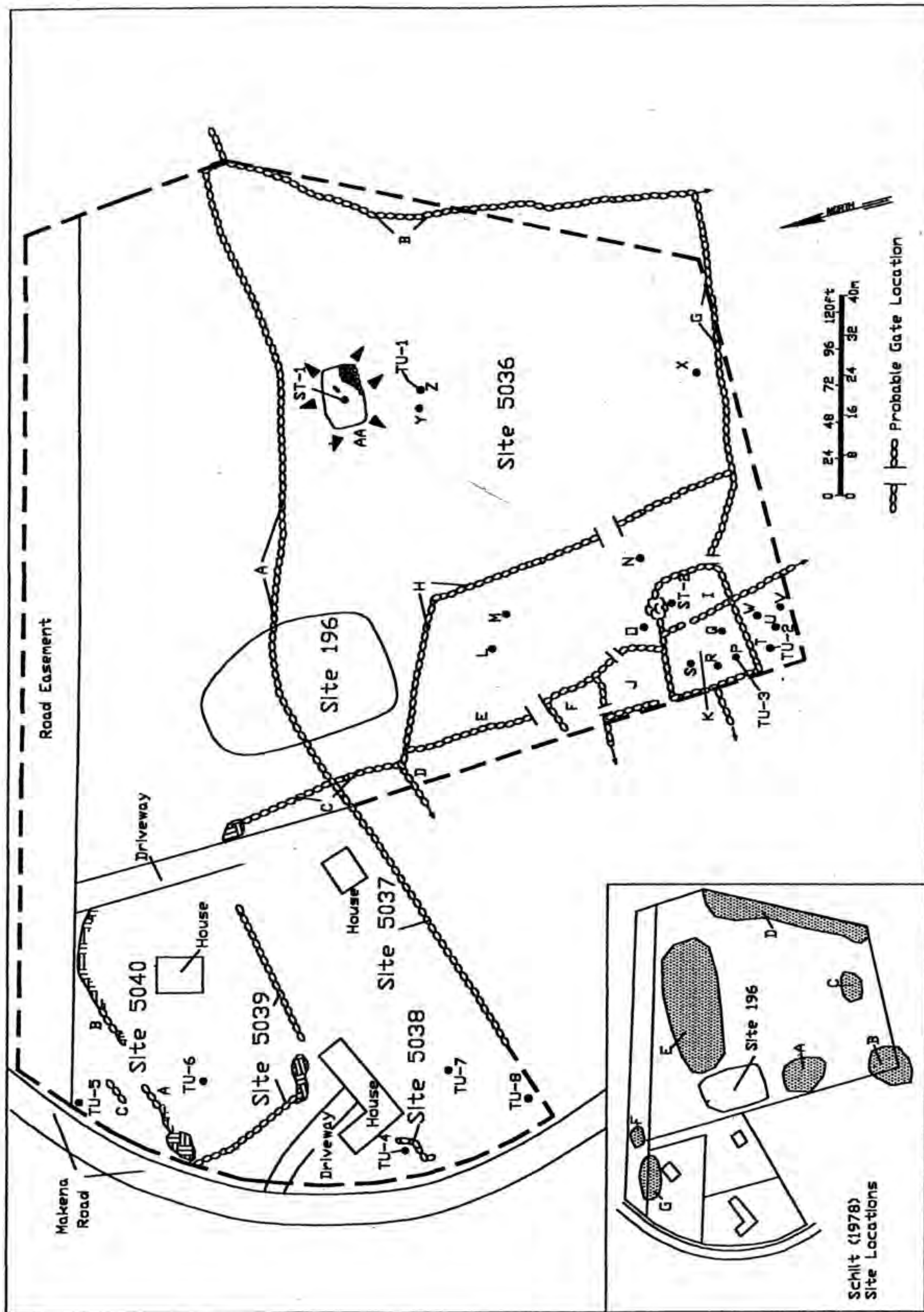


FIGURE 40 MAP OF KALANI HEIAU AND OTHER STRUCTURES LOCATED ON GARCIA FAMILY LAND IN KA'EO. FIG 7 FROM SCHILT, 1978 & HAUN, 2003.

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Figure 42 Cultural site at Maluaka Beach Club condo site that was not preserved because it was judged to be "historic" and therefore unimportant. 2004.

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REVIEW OF ARCHAEOLOGY IN HONUA'ULA

Theresa K. Donham

Archaeologists have been visiting Honua'ula and recording finds for nearly a century, beginning in 1918 and continuing with greater frequency during the past thirty years. During this time, there have been substantial changes in how archaeology is practiced, and in the philosophy of preservation as it has been applied to the cultural resources of the region. This discussion will summarize the archaeological activities that have occurred in Honua'ula from Paeahu to Mo'omuku, and consider how private development goals, the theoretical positions of the archaeologists, and the intervening regulations /regulators have affected preservation policy. Specific projects and sites will be highlighted to illustrate the changes that occurred in site management as well as the on-going and relatively unchanging goals of land development for profit.

The discussion begins with a chronological presentation of work that was conducted in the region prior to the onset of development, which began circa 1969. Background information regarding changes in the relevant state and federal regulations is included. Beginning with the section on resort development, the discussion is organized by ahupua'a or major resort area, from north to south. Important site complexes that underwent various studies through the years are highlighted, noting the often significant changes in preservation and site treatment perspectives that occurred through time. Due to the volume of reports completed in the region since 1969, and the limited or non-availability of some reports, this review does not include every report or project. It does, however, attempt to provide an overview of the important surveys and sites, and to illustrate the number of sites that have been recorded to varying degrees of thoroughness prior to their destruction.

Stokes and Walker

The first recorded visit by an archaeologist to the Makena region was in 1916 when J.F.G. Stokes of the Bishop museum conducted a two-week tour of heiau sites on Maui (Stokes 1918). His report was published in Thrum's 1918 Hawai'ian Annual. Stokes began his tour at Keone'o'io, where he identified three heiau sites - the Ko'a of Kaulana, Pa'alua Heiau, and Hala Heiau. One heiau was identified in Kanahena - Koula, which he did not see. Three heiau were mentioned for the Makena area, and are described as follows:

Heiau of (blank) on top of Pu'u Ola'i. Not seen (reported by son of Mawai).

Heiau of Kalani, land of Ka'eo, inland. Not seen. Said to have been a heiau for human sacrifices, and that the drums were heard at night.

Heiau of Nanahu, land of Makena; on the point north of Makena Bay. This was a pavement of ala and coral, level with the surrounding ground and rocks, about 20 feet square. The only information to be gathered was that is was "a heiau for dead people." It was not a graveyard, and I do not understand nor could the local people explain to me the meaning of their description. (Stokes 1918)

The Makena region was revisited in 1929 when Winslow Walker of the Bishop Museum passed through during his island-wide survey of heiau sites. Walker's survey results were never published; however, his manuscript is widely used as a reference to heiau sites that were known to the local residents with whom Walker consulted. Walker used information from Stokes' (1918) prior work and from lists published by Thrum in the Hawai'ian Annual. In addition to 230 enumerated sites, Walker made notes on fishing ko'a, fishponds, burials, village sites and artifacts of interest. Most of his enumerated heiau were entered in the State Inventory of Historic Places (SIHP) when it was established in the early 1970's.

Walker's report included no new information on the heiau reported by Stokes atop Pu'u Ola'i, and it is not mentioned in his report. He visited Koula Heiau (Site 195) in Kanahena and Kalani Heiau (Site 196) in Ka'eo. Also recorded for the Makena region was Pohakunahana Heiau (Site 197), which was described as being "back of the store at the bottom of the hill beyond the pig-pen" in Makena (Walker 1931:269). Both the Kalani Heiau and the Pohakunahana Heiau are listed in the SIHP (retaining Walker's site numbers) and have been subjected to additional studies in connection with modern development.

Walker was able to locate one of five heiau previously reported by Thrum in the uplands of Ka'eo and Ulupalakua. This site (200), possibly named Pueo, was reported by Walker as being located on the hill slope above Ulupalakua School (Pu'u Ka'eo). It is described as a platform 48 x 95 feet, and 3 feet high, that was partially destroyed and later used as a house site. This heiau was described by Thrum as a sacrificial class (Walker

1931:270). Four additional heiau reported for the Ulupalakua area by Thrum were described by Walker as being gone. These include Kalailani, Ke'eke'ehia, Kalaniana, and Kamahina (Walker 1931:270). It is likely that the Ke'eke'ehia Heiau was located on Pu'u Ke'eke'ehia. Sterling notes that a heiau is shown at this location on a map of Torbert's Grant 234 (Sterling 1998:232). Modern USGS maps show a cemetery at this location, which is a short distance downslope from the former Ulupalakua sugar mill, at an elevation of 1850 feet.

Regarding fishponds, Walker found that "Makena had a small fishpond, now totally destroyed by the surf" (Walker 1931:299). This description probably applies to the pond just north of Keawala'i Church, at 'Apuakehau Point; it is shown on nineteenth century government survey maps of the area.

In his discussion of fishermen's shrines, Walker indicates that he defined Ku'ula Heiau or Ko'a as the "smallest of the structures of worship, and are dedicated solely to the service of Ku'ula, the god of fishing" (Walker 1931:100). He states that they can have a variety of forms, but that "Most ko'as are under 20 feet square;" and "Coral is always associated with the true ko'a, the name itself being a contraction of the word ako'ako'a, which means, coral" (Walker 1931:100).

Walker described four ko'a the Honua'ula District, including Kaulana Ko'a at Keone'o'io, a large ko'a at Pa'ako in Mo'omuku, and the ko'a at Nanahu, which he notes was previously reported (by Stokes) as a heiau. Walker's informants stated that this site was "a place to pray to the Fish God", so the earlier report...seems to be an error (Walker 1931:103). The fourth ko'a reported by Walker is described as follows:

The ko'a at Onouli is located below the school about 100 feet back from the shore. It is a rough platform 13 by 14 feet and 5 feet high at the front. A low wall surrounds it on three sides. Blocks of 'a'a, 'ili'ili, and a few pebbles and coral fragments were found in its construction. (Walker 1931:103).

Assuming that Walker's "Onouli" is actually Oneuli, and that the school he refers to is Makena School, this would potentially place the site in Maluaka or Mo'oiki. Archaeological surveys conducted mauka of Oneuli Beach have reported no feature that matches Walker's description; however, a three-walled structure is shown in the general vicinity on

Torbert's plantation map of circa 1848-1856. A possible match for this ko'a (Site 5711) was recently identified in Maluaka (Rotunno-Hazuka et al. 2005, Donham 2006).

Handy

Information regarding the traditional Hawai'ian settlement pattern and early twentieth century Hawai'ian land use was gathered during the 1930s by Handy (1940; Handy and Handy 1972). Their interests were primarily in agricultural practices, however, a good deal of information regarding conditions that were current in the 1930s, as well as traditional lore, is presented in their study. Regarding the Makena region, they made the following observation:

On the south coast of East Maui, from Kula to Ulupalakua, a consistently dry and lava-strewn country, Makena and Keone'o'io were notable for good fishing; this brought many people to live by the shore and inland. There were some patches of upland taro, not irrigated; but this was a notable area for sweet potato, which, combined with the fishing, must have supported a sizable population although it cannot be counted as one of the chief centers. (Handy and Handy 1972:272).

When Handy visited Keone'o'io in the 1930s, he observed that, "There are no people living there now. The modern fishing locality is Makena, a few miles beyond Keone'o'io" (Handy and Handy 1972:510). In Handy's earlier (1940) publication on Hawai'ian planters, he reported the following description of Makena:

"Makena is today a small community of native fishermen who from time to time cultivate small patches of potatoes when rain favors them. Formerly, before deforestation of the uplands, it is said that there was ample rain in favorable seasons for planting the sweet potato, which was the staple here. A large population must have lived at Makena in ancient time for it is an excellent fishing locality, flanked by an extensive area along shore and inland that was formerly very good for sweet potato planting and eve now is fairly good, despite frequent droughts.

Between Makena and the lava-covered terrain of Keone'o'io (another famous fishing locality) the coastal region includes the small ahupua'a of Onau, Mo'omuku, Mo'oloa, Mo'oiki, Maluaka, Ka'eo. According to an old Kama'aina, these ahupua'a had in former times a continuous population of fisher folk who cultivated sweet potatoes and exchanged their fish for taro, bananas, and sweet potatoes grown by the upland residents of the Ulupalakua section. A few Hawai'ians still live here. One living near

Pu'u Ola'i has a sizable sweet potato patch in the dusty soil near the shore; another raises fine potatoes in a low flatland of white sand near the abandoned schoolhouse of Makena." (Handy 1940:159, reprinted in Sterling 1998:229, 230).

The last location described above may correlate with Sites 1864 and 2272, identified in Maluaka, just makai of the Makena School site (Donham 2006). These two sites consist of rock retaining walls that encompass a unique flat area of white sand within an otherwise rocky terrain.

Emory and Chapman

During the 1950s, Bishop Museum archaeologist Kenneth Emory made a number of trips to Maui, including a rather intensive study of Haleakala Crater. He was in contact with members of the Maui Historical Society, and conducted site visits to specific areas in Honua'ula. In 1957, Emory and B. Savage visited Kanahena, and the sites in the area were placed in the Museum's site files. Emory and others returned to the area in 1971 to map and record the sites (see below).

In 1966 Bishop Museum archaeologists Peter Chapman and Patrick Kirch conducted reconnaissance work in the ahupua'a of Kipapa and Nakaohu in Kahikinui District. During this study they recorded 550 structures along a one-mile section of coastline and inland three miles (Emory and Hommon 1972: 55). In discussing these findings in a later discussion of the endangered sites of Maui, Emory and Hommon made the following observation:

This survey revealed how vast must have been the obliteration of the works of the ancient Hawai'ians in the many thousands of acres which have been plowed under for agriculture and from grazing lands and how numerous must be the unrecorded remains. (Emory and Hommon 1972: 57)

Sterling

During the 1960's Bishop Museum Research Associate Elspeth Sterling lived on Maui and collected both archival and field information on archaeological sites. She used Stokes' and Walker's previous studies to locate and revisit heiau sites, and recorded a number of previously unidentified sites. Her notebooks, which ended in 1970, were compiled by Bishop Museum and published in 1998. Sterling's notes included entries from Hawai'ian language newspapers and various publications

in Hawai'i, in addition to Fornander, Kamakau, Malo, and ethnographic resources. For example, Sterling found a reference to Oneuli in Hawai'ian Ethnological Notes (Bishop Museum Archives) that described it as "a place where there are some old salt pans" (Sterling 1998:5, 215). The same source noted that the sea from Ma'alaea to Keone'o'io, between Kaho'olawe and Molokini was known as Kai o Anehe.

Sterling also located references in the Hawai'ian Ethnological Notes to ten fishing grounds associated with the district of Honua'ula. Three of these areas use points at Pu'u Ola'i and Keone'o'io to establish the boundaries. They are reprinted in Sterling as follows:

8. Koa-hau is another. When the hill of Keone'o'io appears above Pu'u Ola'i that is its upper landmark. When the hills of Kaka on Kaho'olawe appear above (in line with) Pahe'e-o-Lono Point on Molokini, that is the lower mark.
9. Na-ia-a-Kamahalu is another one. When Hoaka, which is in the upland of Kaho'olawe on the western side appears to be in line with the cape of Ke-ala-i-kahiki that is the upper land mark. When the hill of Keone'o'io appears to be in line of the seaward side of Pu'u-Ola'i, that is the lower landmark.
10. Na-ia-a-Kamali'i is another one. When the cave on Makena appears to be close to the point of Paopao at Pu'u-Ola'i, that is the upper landmark. The cave at Pali ku in Keone'o'io is the other landmark. When it appears between the two stones at Makuha and Kanahena, that is the lower landmark. (Sterling 1998:216, after Hawai'ian Ethnological Notes 1:200).

Three heiau were named in the Ethnological Notes as being in Honua'ula. These are listed in Sterling as:

1. Na-hale-loulu-a Kane was the name of the heiau (loulu is a type of heiau built for prevention of epidemics, famine). It was built in remote antiquity. It was dedicated to Kane.
2. Ka-ai-aea was the name of the heiau and was built in remote antiquity. It was for the purpose of multiplying and producing food.
3. Kahe-manini was the name of this heiau that was built in remote antiquity. It was a heiau (built for the purpose of multiplying) fish. (Sterling 1998:217, after Hawai'ian Ethnological Notes 1:199).

The locations of the above three heiau were not identified during Sterling's research or during subsequent studies in the region. These sites may have been located in the uplands of Honua'ula, where Walker located five heiau, including a loulu a Kane on the top of Pu'u Makakualele.

Sterling's notes include information gathered from Stokes and Walker regarding the heiau and ko'a sites that they identified in Honua'ula (see above). She also located a reference to a heiau at the base of Pu'u Ola'i, found in Armine von Tempski's memoirs:

"Makalii saddled our two horses and took me to see an old heiau, temple, at the base of the Hill of Earthquakes, just beyond the point where Pili had speared the ulua the day before. Reverently we inspected the square heap of black stones. 'In this temple kahunas prayed and offered sacrifices in old times.' Makalii said in Hawai'ian. 'This was the temple of the Shark God where fishermen made offerings before putting out to sea.'" (Sterling 1998:229, after von Tempsky 1940:57)

One previously unidentified ko'a was described and recorded by Sterling at Halo Point, along the ahupua'a boundary between Palauea and Keauhou. This site was later designated as SIHP Site 1030. It was described as a small terrace five feet across that was partially broken and fallen down the bluff, with water worn stones and coral paving. This site was further investigated in connection with proposed development in Palauea (Donham 1990), and it was subsequently placed in permanent preservation status (Jensen 1992).

Additional information about Makena was reported in Sterling from a Honolulu Advertiser travel article, written in 1959:

"There's a church at Makena which is now 115 years old, constructed of white coral and rock, with a ceiling and roof of ohia wood. Construction of the ceiling involved cutting the beams and soaking them in the bay for about two weeks, to season the wood.
When the area was densely populated, all the people were Protestants. The church is still used by members of the Kukahiko family and surrounding residents. The present Minister is the Rev. John Kukahiko, now 69, officiating.
The present minister is the first grandson of an unusual and extraordinary chief, the first John Kukahiko who lived in Makena during the whaling era. The first John was said to have had Mana (power) to calm the ocean water, no mater how rough. Thus he served to guide the whalers into the bay, for when he stepped into the ocean, the rough waters became calm. John Kukahiko and his family believed in taking care of sharks, and were not afraid of them. They fed the sharks, which, in turn, protected the Kukahikos. Even now, members of the Kukahiko family have no fear

of danger in the water." (Sterling 1998: 231, after Honolulu Advertiser Aug. 2, 1959: 15).

The Hawai'i Register of Historic Places

Throughout the early twentieth century and until the 1966, the lone federal preservation law (Antiquities Act of 1906, 16 U.S.C. ßß 431-433) addressed only federally owned or controlled lands. There were no federal regulations in place regarding the protection of historic properties on state, county or privately owned lands. In 1966, the National Historic Preservation Act (16 U. S. C. ß 470) established several important policy and organizational features that directly affected preservation policy at the state level. Importantly, the NHPA required the federal government to assist (in funds and regulations) state and local governments in establishing or expanding statewide historic preservation programs.

The NHPA established regulations for state historic preservation programs, federal grants for funding the programs, a system of periodic evaluations and fiscal audits, and minimum standards for acceptance into the federally funded system. The State Historic Preservation Office (SHPO) was established as the governor-appointed administrator of the program for each state; and the state review board was established as the mechanism whereby properties would be reviewed and forwarded to the Keeper of the National Register of Historic Places (NRHP) for inclusion. According to ß470a (7) (b) (3), the SHPO is responsible for eight principal duties, including:
(A) direct and conduct a comprehensive statewide survey of historic properties and maintain inventories of such properties;
(B) identify and nominate eligible properties to the National Register and otherwise administer applications for listing historic properties on the National Register;
(C) prepare and implement a comprehensive statewide historic preservation plan
(D) administer the State program of Federal assistance for historic preservation within the state; ...
(G) provide public information, education, and training and technical assistance relating to Federal and State Historic preservation Programs. (U. S. C. ß470a (7) (b) (3) (A-D and G)
The above section of the law was essentially ignored by most states until 1971, when Executive Order (EO) 11593, signed by Richard Nixon, made compliance more attractive by earmarking specific funds for use by SHPOs and federal agencies in completing their state inventories. This

EO also required federal agencies to complete their historic registers by 1973; and the NHPA was subsequently amended to give states until December 1983 to get their preservation programs approved.

In Hawai'i, a new SHPO office was not created, rather, the Governor appointed the Chair of the Board of Land and Natural Resources as the SHPO. This practice has continued in Hawai'i, although it is not the norm across the country. Many states established an independent SHPO office and designated the Officer on the basis of professional experience and qualifications in historic preservation. In Hawai'i, the Chair of the Land Board/SHPO is generally not versed in historic preservation laws, procedures, issues or concerns. Decisions are therefore often not made with historic preservation as the primary concern, as was the intent when congress established the Office. When the SHPO was established in Hawai'i, the Department of Land and Natural Resources Division of State Parks was designated as the agency responsible for implementing the requirements of the SHPO as listed above, along with the myriad of other State Parks duties. It was not until 1989 that the State Historic Preservation Division became an autonomous division within the DLNR.

In response to EO 11593, the DLNR Division of State Parks began conducting Hawai'i's state-wide survey in 1971. The actual field work and form preparation was completed through contracts with Bishop Museum, and continued through 1973. The bulk of the inventory consisted of previously identified sites as well as a few new finds that were made during the course of relocating the known sites. Most of the information on known sites was obtained from Bishop Museum, which was the only the only entity in Hawai'i that had a standardized method of site recordation. When the survey was stopped in 1973, the inventory was far from being completed for even State-owned lands. To this day, the SHPO does not know the full nature and extent of historic properties on State-owned land.

In addition to its mandates regarding SHPOs, the NHPA of 1966 also established the National Register of Historic Places (NRHP) as the mechanism through which important places would be recognized, and by extension, protected or at least "taken into account". Regulations regarding significance criteria and processes for nominating sites to the NRHP were not specified in the Act, rather it authorized the Secretary of the Interior and the newly-created Advisory Council on Historic Preservation (ACHP) to establish these regulations and criteria. It was

not until 1981 that the Department of the Interior finalized its regulations regarding the NRHP. This regulation (36 CFR Part 60) includes the specific criteria that are to be applied in making a determination as to whether a property, district, site or building is eligible for inclusion on the NRHP. Following the issuance of this regulation, the SHPOs were required to adapt these criteria and other protocols in order to submit properties for inclusion. Like other states, Hawai'i's SHPO modeled all significance decision making on the requirements of 36CFR Part 60; this was most likely done out of convenience and to ensure that National Park Service auditors would accept and pass the state programs, thus insuring federal funding.

The four significance criteria stated in 36 CFR ß60.4 have remained in effect and essentially unchanged since 1981. These criteria have been used in Hawai'i since 1981, and were included nearly verbatim in the State Historic Preservation Division (SHPD) Administrative Rules, which were not finalized until 1997. As stated in 36 CFR ß60.4, the following criteria were established:

National Register criteria for evaluation. The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and
(a) that are associated with events that have made a significant contribution to the broad patterns of our history; or
(b) that are associated with the lives of persons significant in our past; or
(c) that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that posses high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
(d) that have yielded, or may be likely to yield, information important in prehistory or history. (36CFR ß 60.4)

During the course of federal project review, particularly reviews of military and transportation projects, the National Park Service began to recognize that criteria "a—d" as stated above did not adequately encapsulate "significance", particularly as it was perceived by Native Americans and Native Hawai'ians. Native Hawai'ian testimonies collected

during EIS hearings for the Kaho'olawe military operations (circa 1982) were among the earliest indicators to the NPS that they needed to add language to include culturally significant natural places, landscapes, and sites. As a result of the testimony provided at the EIS hearings, the entire Island of Kaho'olawe was designated as a National Register District, and changes were immediately initiated by the NPS to correct deficiencies in the system.

In 1983, the NPS was directed by the Secretary of the Interior to develop guidelines to assist in the documentation of intangible cultural resources, and to develop appropriate regulations to include these considerations. In response, the NPS prepared "Guidelines for Evaluating and Documenting Traditional Cultural Properties" (National Register Bulletin 38). The NHPA was subsequently amended in 1992 to include the statement that, "properties of traditional religious and cultural importance to an Indian tribe or Native Hawai'ian organization may be determined to be eligible for inclusion on the National Register" (16 U. S. C. 470 ß101 (d) (6) (B). The requirements for consideration of traditional cultural significance did not result in the addition of a new significance criteria at the federal level; however, it did result in the revision of Federal Regulations regarding the implementation of the NHPA.

Prior to finalizing its Administrative Rule, the Hawai'i SHPD added a fifth significance criteria to its later draft rule revisions, and in the final version, there is a fifth criteria (e) that addresses cultural significance. After formal approval in 1997, the Hawai'i Administrative Rule (HAR) regarding evaluation of significance became the required standard for persons submitting site information to DLNR. The text of this rule is as follows:

Evaluation of significance. (a) Once a historic property is identified, then the person shall make an initial assessment of significance or delegate this authority, in writing, to the SHPD. This information is usually submitted concurrently with the survey report, if historic properties were found in the survey.

(b) To be significant, a historic property shall possess integrity of location, design, setting, materials, workmanship, feeling, and association and shall meet one or more of the following criterion:

(1) Criterion "a". Be associated with events that have made an important contribution to the broad patterns of our history;

(2) Criterion "b". Be associated with the lives of persons important

in our past;

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

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

(5) Criterion “e”. Have an important cultural value to the Native Hawai’ian people or to another ethnic group of the state due to associations with cultural practices once carried out, or still carried out, at the property or due to associations with traditional beliefs, event or oral accounts ... these associations being important to the group’s history and cultural identity. (Hawai’i Administrative Rule ß 13-275-6)

The first four criteria are identical to the NRHP criteria and were in use in Hawai’i beginning in the middle 1980s. The fifth criteria (as “e”) was not actively applied during archaeological studies until after the HAR was approved in 1997; however, burial sites and ceremonial sites had been given special status since the inception of the statewide survey in 1973. At that time, a number of ceremonial sites and sites with known burials were recommended for “reserve” status. On the other hand, some heiau sites were placed in the “marginal” category due to the perceived poor condition of the sites.

During the initial State wide inventory, the designated inventory database was called the Hawai’i Register of Historic Places (HRHP), and listing in this register was contingent upon acceptance of the site and paperwork by the State Historic Review Board, established under the authority of the NHPA. At that time, listing on the HRHP was considerably more involved than the current administrative action of assigning site numbers after receipt of information. The Review Board had to review and approve by vote every individual site that was recorded during the statewide survey of 1971-73.

Further problems resulted when many of the sites in the Hawai’i Register were removed due to a lack of private landowner permission to list. This requirement was carried over from requirements for listing in the National Register. To rectify this and other problems, DLNR established a second list, referred to as the State Inventory of Historic Places (SIHP), which was not tied to owner approval. Thus, nearly all of the sites recorded on HRHP forms are actually not in the HRHP, but the SIHP. This list uses the same significance criteria as the HRHP, without the landowner approval mandate. It has been a source of continued confusion among members of

the public who read the forms and assume that the sites are in fact listed in the HRHP. Among all the sites recorded in Honua'ula on HRHP forms, only one ... the Keone'o'io District ... is actually listed in the HRHP.

Two separate sites lists were generated in 1971 when the HRHP was established - one for traditional Hawai'ian sites and one for historic era structures. The historic era site survey was conducted in 1971 by Wright; and Richard Connolly and Robert Hommon recorded the traditional sites in 1973. When the SHPD was established, the historic era sites list was placed under the jurisdiction of the Architecture Branch, and was generally not used by the Archaeology Branch when reviewing permits and reports. Because it was not incorporated into the archaeological sites data base, it was not readily accessible to archaeologists (it is still unknown to some), and the recorded historic era sites were therefore easily overlooked in reviews of known or recorded sites in the area.

Historic era sites recorded in northern Honua'ula during the 1971 HRHP survey by Wright include Keone'o'io (Site 50-50-14-1580), Kanahena Landing (1581), the John N. Makaiwa House (1582), the Pu'u Ola'i Slaughterhouse (1583), Keawala'i Church (1584), and Makena Landing (1585). In the uplands of Ka'eo, Wright recorded the Ulupalakua Ranch District (Site 1534), which includes the old mill site and what is now the Ulupalakua Ranch store and headquarters.

The new state system adapted a numbering system that was more consistent with mainland practices (established by the Smithsonian Institute), which uses state and county code numbers or letters as the locator keys for sites. For the most part, state number codes reflect their alphabetical order (i.e., Indiana is coded 12, in the order of A through Z). Because this system was in place prior to statehood, Hawai'i could not be inserted in the list without changing many state codes. It was therefore given the code number "50". Rather than using a strictly county-based location code, the second digit of the Hawai'i site number indicates the island. Within Maui County, each of the Islands of Maui, Moloka'i, Lana'i and Kaho'olawe have a distinct second digit code (Maui = 50). The third digit of the site number is a code reflecting the relevant USGS 7.5 Minute quadrangle map. Maui Island has 17 USGS quads, so the third digit codes range from 1 through 17. The "14" in the site number string for Honua'ula designates the Makena Quadrangle.

After the DLNR established the new site numbering system in 1971,

Bishop Museum retained its traditional site numbering system, which is still in use today. This system uses letter codes to designate Islands (i.e. Ma=Maui, Mo=Moloka'i), a second letter code to designate the judicial district (i.e. B= Makawao District), and number codes to designate ahupua'a land divisions or divisions based on groups of small ahupua'a. In order to assign numbers or to locate the general area of a known site using the Bishop Museum system, one must have access to the Museum's maps showing where the lines are drawn between ahupua'a or groups thereof. The DLNR numbering system allows anyone to get a general location if they have access to a USGS quad map index.

Bishop Museum did not feel compelled to request SIHP site numbers from DLNR after the newer numbering system was established; as a result, two numbing systems were in use through most of the 1970s and 1980s. Bishop Museum staff used Museum numbers exclusively in their reports, while other researchers not affiliated with the Museum, used SIHP numbers.

SIHP numbers were assigned to Bishop Museum sites by DLNR staff only after the reports were completed, and only if DLNR was provided a copy of the report. The formal process that allowed or required DLNR review of all County permits was not fully operational until the middle to late 1980s. If SIHP numbers were not actually written in the reports by DLNR staff, it is often impossible to determine which (or whether) SIHP numbers were assigned. This is exacerbated by the fact that the old database that was maintained by DLNR during this period is generally not accessible to archaeologists, or to the current DLNR staff. This problem, along with the inability of archaeologists to access prior site data, resulted in considerable duplication of site records, and the assignment of multiple numbers to a single site. In the following discussion, SIHP numbers are used, unless there is no known SIHP number associated with a particular site.

The two heiau previously recorded by Stokes and Walker were listed in the State Inventory of Historic Places (SIHP) during Connolly and Hommon's 1973 survey (Sites 196 and 197), along with a large habitation complex referred to as the Makena Complex (SIHP Site 50-50-14-1266). The area of Site 1266 was recorded as a rectangular area that encompasses 3,600 feet (1.9 km) of shoreline between the north base of Pu'u Ola'i and the north end of Maluaka Beach, and between the shoreline and Makena-Keone'o'io Road. Scaled maps of the sites and features within the complex area

were not produced at the time of Connolly's survey; rather formal feature types were enumerated as follows: walls (numerous, mostly associated with ranching, enclosures (16+), one burial in a wall, platforms (3+), and a pit. Other sites in north Honua'ula that were recorded in the SIHP in 1973 include Ka Lua o Lapa Cave (1017), Ma'onakala Village (1018), the ko'a at Pa'ako in Mo'omuku (1019), the Pu'u Kanaka Stone at the base of Pu'u Mahoe (1021), the sites previously identified by Kirch in Palauea (1027-1029) and the Halo Point Ko'a identified by Sterling (1030).

In 1973, Hommon and Connolly also recorded four site complexes at Keone'o'io (Sites 1805-1808), comprising over 70 surface features. That same year, Hommon completed HRHP nomination forms for the Keone'o'io Archaeological District (Site 1385), which included all four of the complexes. The district was listed in the HRHP in 1988; subsequently, private landowners within the district objected because they were not notified of the listing. At this time, the effective district boundary at Keone'o'io includes State land only.

Additional State-funded work in Honua'ula was conducted in 1971 by Kenneth Emory, Richard Bevaqua and Leslie Bruce from Bishop Museum. With the assistance of Maui residents, the team compiled a scaled plan map of Ma'onakala Village (SIHP Site 1018) in Kanahena (Bevaqua 1971). The action was prompted by DLNR's action to establish the Ahihi-Kinau Natural Reserve Area. The Museum's intent behind the project was clearly stated by Bevaqua:

The Ma'onakala site was chosen as an example of the series of relatively intact ruins of Hawai'ian habitation complexes scattered along the dry south coast of east Maui proceeding eastward from as far as Kaupo. As the most easily accessible, it is also the most endangered by approaching developments. By marking it and having it serve to illustrate the ancient Hawai'ian setting in this type of environment, we hope that the remaining sites will not be needlessly destroyed before they can be studied and incorporated, insofar as practicable, into the landscape of the future. (Bevaqua 1971: 2)

Mapped features at Ma'onakala include a large well, a canoe hale, five houselots and a ko'a. The 1971 map has proven to be a valuable resource for monitoring changes in the condition of this important coastal complex (Singh 2003).

Ma'onakala Village was highlighted in Emory and Hommon's 1972 report

on endangered sites, prepared for the County of Maui. In discussing the value of the site, they make the following observations:

It is undisturbed by the presence of foreign structures and provides an ideal setting in which to visualize the life of the ancient Hawai'ians, their dwellings, their paraphernalia of daily living, and their social, political, and religious arrangements. The means by which this visualization can be prepared is the knowledge which already exists about other similar sites and which can be gained from a study of this site. Thus, Ma'onakala can reestablish for the descendants of the Hawai'ians a vital link with their past. (Emory and Hommon 1972: 53)
The above discussion is one of very few from this era (or later) that mentions the value of archaeological sites for the Hawai'ian residents, as opposed to interpretive value in the context of the visitor industry.

Resort Development

Development-driven archaeology began in 1969 within the Honua'ula District. Since that time, there have been no fewer than 26 reconnaissance surveys, 48 inventory surveys, and 15 data recovery projects from Paeahu to Mo'omuku (Table 1). The bulk of the work was in connection with the Wailea and Makena resorts, comprising approximately 4,000 acres of coastal Honua'ula. These two resort areas were purchased from Ulupalakua Ranch and subjected to very cursory reconnaissance surveys before they were subdivided into development parcels of around 100 acres or less. The smaller parcels were (or are) then processed for permits and constructed out as relatively autonomous units. In both resort areas, the golf courses and major roads were among the first development parcels to be identified and built. An unfortunate aspect of the development history for the region is that the large golf course parcels were surveyed for archaeological sites at a time when both the archaeologists (nearly all of whom were employed by Bishop Museum) and the State were ill-prepared for the volume of finds and the prospects of imminent site destruction on a massive scale.

After completion of golf course construction, the beach front hotel sites, condominiums, and single family subdivisions then followed. More recently, small "remnant" parcels have been sold to private individuals for construction of luxury homes or condominiums. In a number of cases, the remnant parcels were subdivided from development parcels as the result of recommendations for site preservation from archaeologists.

Areas with sites for preservation were therefore set aside, but were not actively protected, resulting in considerable inadvertent damage to the sites. After years of neglect, many of these sites were re-evaluated and found to no longer have preservation value; the land was sold by the resort and mitigation work was completed for the new owners. Examples of this unfortunate process are described below.

There are discernible trends in how the archaeology of Honua'ula was perceived and dealt with in the resort context. Prior to 1980, cultural resource management had not settled into the National Register evaluation formula (described above), and there were no locally established guidelines for determining site significance or assessing impacts. Each archaeologist therefore devised her or his own system, resulting in relatively inconsistent and confusing standards. The Bishop Museum reports from the 1970s and early 1980s reflect a period of experimentation in site assessment that was also occurring throughout the country. In addition, there was a lack of permit review standards by the county and state, and there were no requirements for the completion of studies prior to the issuance of grading permits. Consequently, a considerable amount of field work was conducted after sites had already been impacted by grubbing and grading.

Paeahu to Papa'anui

Patrick V. Kirch, a student at the University of Pennsylvania, and William Berrara, Bishop Museum staff member, conducted the first reconnaissance survey of Alexander and Baldwin Company holdings in Paehau, Palauea, Keauhou and Papa'anui (Kirch 1969). The area examined was two miles along the shoreline by one mile inland (c. 1280 acres). Eleven sites were identified, and testing was conducted at two sites. The survey and testing was completed in twelve days, which calculates to a survey coverage rate of approximately 107 acres per day. In his report of findings, Kirch characterized the region as follows:

Perhaps the most striking fact for an archaeologist conducting work in this area is the paucity of archaeological remains. The entire inland area surveyed, up to a half mile back from the beach, was totally barren of any sign of prehistoric or historic habitation. Even the coastal region lacks any impressive remains, such as extensive village complexes found along other areas of the coast. (Kirch 1969:11).

In this statement, Kirch was comparing the Wailea area with Kahikinui,

where he had previously recorded over 500 sites within a land area of similar size. This characterization was no doubt used as a guideline for the next few Bishop Museum surveys, which were admittedly planned with the presumption that very little, if any archaeological sites would be found. Given the number of sites now known to be present in this area, it is hard to believe that only twelve sites were found during the 1969 survey. We can only assume that the actual surveyed areas were limited to easily accessed strips along the beach and along existing roads, which is where all of the identified sites are located. One factor Kirch did not mention or account for was vegetation, which creates considerably lower site visibility in northern Honua'ula as compared to the more barren Kahikinui District.

The 1969 Kirch report is the first example of attempts by archaeologists to incorporate site preservation into resort development in south Maui. Kirch's site evaluation scheme was based directly on the suitability of archaeological sites for incorporation into resort development, and it recognized two factors: 1) the "tourist appeal", and 2) available funding (Kirch 1969: 12). There is no clarification as to what is included in "tourist appeal", however, we can assume that it loosely translated into a combination of aesthetic, cultural and historical value. It is notable that six of the eleven site identified by Kirch were recommended for preservation, contingent of course on available funding.

The sites identified in 1969 included eight in Paeahu, one in Palauea, and two in Papa'anui. Four of the identified sites in Paeahu were subsequently combined to form the Wailea Point Complex (SIHP Site 50-50-14-1281). One of the Papa'anui Sites was later found to correlate with a heiau (Site 197, Pohakunahaha) that had been previously recorded by Walker (1931). The second Papa'anui Site (SIHP 1362) was later designated as the Po'olenalena Complex. Kirch recommended these three sites for restoration and interpretation in 1969. Presently, only the Pohakunahaha Heiau, which is actually outside of the Wailea resort lands, is preserved intact. A brief history of the Wailea Point and Po'olenalena Complexes provides examples of how preservation intentions were subverted by the developers' strategy of "waiting it out".

Wailea Point Complex

The Site 1281 Complex in Paeahu was located on the shoreline at Wailea Point, and covered a minimum area of 3,000 square meters, with at least six structural features. At the time of its discovery by Kirch in 1969 (as

Site B12-4), it was described as a well-preserved 19th century Hawai'ian kauhale and was recommended for preservation and restoration for educational interpretation (Kirch 1969: 14). When the master plan for the resort was completed, the parcel with this complex was zoned for condominiums and set aside for future development. Rather than pursuing interpretive preservation, the developers placed the site in a neglect status that lasted over a decade. During that time, unmonitored bulldozing destroyed a portion of the site and completely removed one of the structures. The portion of the site destroyed had not been fully mapped or documented prior to the destruction. Mapping was finally conducted in 1980, at which time, the extent of prior destruction was noted, and the value of the site for interpretive preservation was reiterated (Schilt and Dobyns 1980). The following year, a sewer line corridor was grubbed and excavated through the site, and archaeologists were called in after the fact to assess the damage (Shun and Streck 1982).

In 1984, development plans for the parcel were finalized (Wailea Point condominiums) and archaeologists were called back to assist in negotiating an acceptable treatment for the complex, which was still "flagged" for preservation. A re-assessment was made of the site, and the archaeologist concluded that the site was "of only moderate research value and interpretive potential," and that "...continued physical preservation was not essential" (Rosendahl 1984: 3). The State Historic Sites Section concurred with the reassessment. DLNR also concurred with the proposal that data recovery be conducted at the site, and that selected features be "relocated to a suitable place in the vicinity of its original location and in the vicinity of the shoreline walkway for public display" (Rosendahl 1984:1).

A total of 36.5 square meters, less than 1% of the original site area, was excavated as the mitigation program at Site 1281. This relatively small areal excavation resulted in the identification of 61 subsurface features, including a human burial. The artifact assemblage demonstrated that the complex was "one of the earliest and most extensively utilized historic residences that has been described and analyzed to date" in Hawai'i (Garland et al. 1985: 58). Nineteenth century artifacts from the United States, France, Germany, England and China were recovered, indicating that "access to foreign goods was extensive" (Garland et al. 1985: 59). Dating samples from the site indicate that it was occupied from around 1400 AD through the nineteenth century (Walker et al. 1985: 95).

The interpretive plan for Site 1281 included an illustration of the reconstructed site, with three stone structures present; two of the U-shaped walls have thatched roofs, and the large terrace is situated near the beach, as in the original site setting (Rosendahl 1984). The actual relocation site was selected over one half mile to the south of Wailea Point, in a grassy swale adjacent to a 50 foot sea cliff. The area of the three reconstructed features is approximately 300 square meters, roughly 10% of the original site area. The reconstructed hale foundations are perfectly aligned and facing the same direction, set in a lawn of closely cropped grass. The terrace pavement only was reconstructed, giving it a considerably diminished appearance against a backdrop of large, looming condominium structures. The overall visual impression of the site from the public walkway is that it is some kind of miniaturized model of an imagined kauhale, intended as yard ornamentation rather than education. The "interpretive" site is essentially a simulacrum, an exact copy of an original that never existed (Pearson and Shanks 2001:92). As such, it is misinformational and serves to diminish rather than enhance knowledge of traditional Hawai'ian culture.

Po'olenalena Complex

The intact habitation complex at Po'olenalena in Keauhou was among the sites recommended for preservation and interpretive development by Kirch in 1969. As with the Wailea Point Complex, the land surrounding this site was partitioned from a larger development parcel (as Lot 15) and entered into a state of neglect for 21 years. Additional archaeological work was not conducted at the site until 1990, when Bishop Museum archaeologists found the site severely compromised by heavy machinery (Gosser and Cleghorn 1990). At that time, eleven structural features were mapped, and the site was recommended for additional data recovery to determine if it was still worthy of preservation.

Excavations were conducted at the site, and it was recommended that, "...all of the features of Site 1362 be preserved in order to maintain the site's integrity" (Gosser et al. 1993: 104). The site area was further subdivided, and some of the features were now in a different parcel. The main area of the site comprised nearly the entire area of the resulting 1.93-acre TMK parcel.

Another period of neglect (five years) followed, after which the lot was sold for private residential development. In 1998, a mitigation plan was prepared for the new owners, who wanted to construct two homes on

the site (Fredericksen 1998). The plan addresses only four of the original 11 features that were once present at the site; in situ preservation is recommended for Features A (large platform) and E (a ko'a); and "passive preservation" is recommended for portions of Features E and F (terraces). As stated in the plan, passive preservation entailed "being covered over with sand fill" (Fredericksen 1998: 7). In addition, 23-meter long sections of both terraces were destroyed during construction of a retaining wall. After completion of the dwellings and walls at this parcel, the two preserved in situ features are hidden from view and totally inaccessible to the public for viewing or cultural use. This level of site preservation has occurred at a number of private residential parcels that were subdivided from resort lands and sold with the "encumbrance" of archaeological sites. Additional examples are discussed below.

Palauea Complex

Kirch returned to Palauea in January 1970 at the behest of Alexander and Baldwin in order to examine two sites that were not found during the previous survey (Kirch 1970a). At that time, he recorded three sites, named by him as Palauea Cattle Pen (Site 1027), Palauea Landing (B11-2; SIHP Site 1028) and the Palauea Heiau Complex (B11-3; SIHP Site 1029). His assessment of the latter two sites is as follows:

These surveys (1969, 1970) had indicated that sites B12-2 (1028) and B12-3 (1029) were among a very few prehistoric structures located on Alexander and Baldwin's property: for this reason, these sites have been included in the master plan for Wailea as "living museums" of the region's cultural legacy. (Kirch 1970:1)

Kirch returned to Site 1028 and 1029 in March with a crew of seven in order to map, test, and reconstruct selected features at both sites (Kirch 1970b). The reconstruction work was done as a prelude to creating the "living museums". This work and the excavation was conducted with no outside agency review or participation. Four research objectives were identified which essentially defined four levels of analysis 1) single feature; 2) intra-site patterning of features; 3) inter-site relationships between 1028 and 1029; and 4) "synthesize these data into a meaningful picture of the coastal component of Palauea ahupua'a" (Kirch 1970:3).

Site 1028 was found to consist of 13 features, seven of which were tested; and Site 1029 was found to consist of four features, two of which were tested. Based on fieldwork findings, Kirch arrived at six hypotheses

regarding these sites:

Site B11-2 (1028) consisted of a nucleated settlement composed of several households belonging to the same cognatic descent group, or ‘ohana.
Feature 3 at Site B11-2 represents the remains of a men’s house, or mua, while the C-shapes represent domestic residencies.
Site B11-3 (1029) was a religious complex, as evidenced by its size, form, and isolation from apparent residential structures.
Feature 1 at Site B11-3 was a heiau, probably of the mapele type, associated with the chief of the ahupua’a.
Feature 3 at Site B11-3 was a fishing shrine.
Habitation in coastal Palauea was transient, with seasonal occupation by groups exploiting the marine resources in the area. (Kirch 1970:27).

Subsequent work at Site 1028 has found that the C-shape shelters associated with the larger “mua” show a more specialized function that the “domestic residencies” suggested by Kirch, and that this site is actually a component within a much larger and intensively occupied coastal village area (Bordner 1980, Major et al. 1995, Donham 2004). Data recovery was conducted at the associated C-shape structures in connection with the construction of Makena Alanui Drive (Bordner 1980), and with expansion of the golf course (Major et al 1995). This work characterized the structures as specialized activity areas. Later work on newly identified permanent habitation sites in the immediate vicinity indicate that the scale of Kirch’s model was too small (one site only) to account for the type of social group that he envisioned at Site 1028. These sites are further discussed below.

The second hypothesis interpreting the large enclosure (Feature 3) as a mua has not been tested to date. No additional work has been conducted at this feature since 1970. This is somewhat unfortunate because this feature with its functional designation has been used repeatedly by other archaeologists to argue for a hale mua function for other somewhat similar sites, without a critical application of the ethnographic data and the actual archaeological data that is available from Site 1028.

Regarding the third hypothesis, a number of habitation sites have been identified within relatively close proximity to the Site 1029 complex (Toenjes et al. 1992, Rotunno-Hazuka et al. 2001; Donham 2004). In addition, Kirch’s hypothesis 3 ignores the fact that he found a paved

terrace interpreted as a habitation site immediately west of the heiau. This inferred habitation site (Feature 4) has been subsequently re-examined and is thought to be the original heiau of Palauea (Donham 2004). The final hypothesis (6) offered by Kirch has been challenged and rejected by most archaeologists familiar with the region, based on the number of known sites from the pre-contact and historic periods that exhibit attributes of permanent habitation.

In discussing the context of his work at Palauea, Kirch observed that contract archaeology has as its objective not scientifically oriented research, but “the preservation of prehistoric sites with potential commercial value” (Kirch 1970:2). Nevertheless, he managed to publish a research paper on his work at Palauea, which served to validate and perpetuate his hypotheses of transient settlement in the area for some time to follow (Kirch 1971).

Kirch’s 1970 fieldwork was never completed, and the piles of stones removed from the fallen and partially restored walls of the Site 1029 heiau are still present inside this structure. Many visitors to the site believe that these piles are intrinsic parts of the original heiau. A&B/Matson did not move forward with creating a “living museum” at Palauea; instead, they left the land vacant and eventually sold the property to VMS Realty Partners. During the interim, the property was transected by three potential routes of the Wailea Alanui Drive, and surveys were conducted of these routes (Bordner and Davis 1977 a & b). During their surveys of alternate road corridors, Davis and Bordner identified eight sites, all of which were in relatively close proximity to the three sites recorded earlier by Kirch. These sites are described below. The final route of Wailea Alanui Drive was selected in 1980 and data recovery studies were conducted at features within Site 1028 that were destroyed in connection with that route (Bordner 1980; Bordner 1981a & b).

In 1988, Paul H. Rosendahl, Inc. was hired to conduct a survey of the 60-acre property that included three Palauea shoreline tax map parcels, a portion of the Makena-Keone’o’io Road corridor, and a large 44.4-acre parcel that encompassed Sites 1028 and 1029 (Shapiro and Haun 1989). The area was referred to as the Murray Pacific Project. By this time, there were thirteen known historic properties within the project area, twelve of which were relocated by Shapiro and Haun. The twelve relocated sites included the three sites identified by Kirch (1027-1029); eight sites identified during the Makena Alanui road corridor surveys (232-235, 238,

240, 260 and 261); and one site (1030) first described by Sterling and later recorded during the 1973 statewide survey. All but one of these sites were located on the two large mauka parcels. One site (237) identified by Davis and Bordner along the makai side of the Makena-Keone'o'io Road, was not relocated in 1988. This site (a stone mound) was later observed by SHPD during the 1990's, but was subsequently destroyed during road widening. Site 1030, located along the shoreline at the Palauea/Keauhou Ahupua'a boundary, was recorded by Shapiro and Haun as a new site (Site T-6); however, it was subsequently discovered that this was in fact Site 1030 (Donham 1990a). This site is further discussed in the section on residential development in Palauea.

In addition to the eleven known sites, Shapiro and Haun identified eight additional sites within the large mauka parcel, and identified additional features in association with the previously recorded sites. No new features were located at Site 1028, designated by Kirch as the Palauea Landing site; however Davis and Bordner had previously raised the feature count here from 13 to 14. At the heiau site, a minimum of 26 new features were enumerated in addition to the four features designated by Kirch. These were located to the east of the heiau and included 17 cairns, four C-shaped walls, two trail segments, three depressions and some walls (Shapiro and Haun 1989: 10, 12). The sites previously identified by Davis and Bordner (1977a) were found to be consistent with the original records. These sites included a long historic cattle wall (Site 232), a platform with two associated stone mounds (Site 233), a stone mound (Site 234), an historic era enclosure with a smaller rectangular enclosure, terrace, a C-shaped wall and a curved wall inside (Site 235), a C-shaped wall (Site 238), two small enclosures (Site 240), a platform previously identified as a possible heiau (Site 260), and a complex of walls and three platforms (Site 261).

The newly identified sites included three areas of surface midden scatter (T-1, T-2, T-7) two walls (T-3, T-10), a platform (T-8) and an enclosure with an interior platform and five associated cairns (T-9). This latter site is adjacent to the east side of the Site 1027 enclosure.

Shovel testing was conducted at the three new midden scatter sites in order to determine the vertical and horizontal extent of the newly identified sites; and 23 auger cores were excavated in the beach lots makai of Site 1029. No surface evidence of features or midden was observed in the beach lots area, and no evidence of subsurface cultural

deposits or features were encountered in the corings; however, one piece of volcanic glass was located at 1.2 meters below surface at the northern end of the area tested (Shapiro and Haun 1989: 29).

The discussion of the findings at Palauea provides very generalized temporal and functional interpretations of the sites. The temporal framework is given as late prehistoric and historic periods, with the historic period sites relating to cattle control (Sites 232, 235, 1027, T-3 and T-10). The enclosure at Site 235 was interpreted as being used for habitation and agriculture, with the wall serving as an exclosure rather than an enclosure (Shapiro and Haun 1989: 32). The area in general was seen as part of a larger cattle paddock system:

The concentration of walls and enclosures inland of Palauea Beach documents the fact that the area was used to hold cattle prior to the cattle being loaded on boats. A very large enclosure was probably formed by the walls which extended both seaward and inland from the Site 1027 enclosure. (Shapiro and Haun 1989: 32)

The significance assessments for the nineteen sites within this project area applied the NRHP criterion (d), possessing important information value, to all of the sites. NRHP criterion (c), as an excellent example of a site type, was applied to two sites, 1028 and 1029. Cultural value was also applied to sites 1028 and 1029, the residential complex and heiau complex. Provisional cultural value was applied to a possible heiau (Site 260) and possible burials (Site 233 and T-6/1030). These sites were recommended for further data recovery and provisionally for preservation as is, pending the findings of the further work.
Of the remaining 14 sites, 10 were recommended for further work, to include the inventory survey level mapping and testing; and the historic era walls and the Site 1027 enclosure were determined to require no further work. The property was sold prior to the initiation of the recommended additional work

At the time of the 1988 survey, the Wailea Resort Company had been successful in closing sections of the Makena-Keone'o'io Road that transected their developments. This road was referred to on modern tax maps as either Makena Road or South Kihei Road. A section of the road corridor was included within this project area and was originally slated to be closed as well. In anticipation of the closure, an historical research report on the road was attached to the Shapiro and Haun report

(Yoklavich 1988). This study concluded that the paved Makena-Keone'o'io Road alignment follows a military road that was bulldozed during World War II (Yoklavich 1988). At that time, WWII sites were less than 50 years in age and did not qualify as historic properties.

By 1991, the mauka Palauea parcel comprising 44.4 acres had been combined with the road corridor and six small shoreline parcels to form a development area, owned by McCormack Properties. That year, the Bishop Museum Division of Public Archaeology prepared a proposal for a cultural resources management program, to be implemented within the development (Div. Of Public Archaeology 1991). At that time, five of the nineteen known sites within the project area had be recommended for preservation by previous studies. The proposal described five phases of archaeological work, to include: inventory survey, preparation of a cultural resources management plan, mitigation, monitoring, and preservation/interpretation. The Museum envisioned an archaeological park with the preserved sites interpreted for public presentation, and a trail system with signage. An on-site interpretive center was also proposed which would house archaeological collections from the property and educational exhibits.

The Bishop Museum proposal was presented to the Maui County Cultural Resources Commission in 1991, in anticipation of upcoming County permit reviews. Before the reviews were completed, McCormack sold their holdings to Palauea Partners; the smaller shoreline lots were subsequently sold to various parties and the road corridor was removed from the project district. Palauea Partners then requested a new inventory survey of the mauka parcel. The survey was undertaken in 1992 by Paul Cleghorn Consulting, and a draft report was completed (Toenjes et al. 1992); however, it was not submitted to SHPD for formal review until 1999. By that time, the property had again changed ownership, and a new archaeological consultant was involved. In 1999, SHPD requested that the previous report be combined with requested updates and revisions, which resulted in an addendum report (Rotunno-Hazuka et al. 2000).

The 1992 survey was the most intensive to date for the project area, and included completion of scaled maps for the sites, as well as subsurface testing at most of the sites. No new sites were identified; however, several new features were located and added to the existing complexes, and the previous interpretations of some sites were brought into question. For example, 153 new features were identified and mapped within the

area previously identified as Site 1029 Feature 5 (Toenjes et al. 1992 in Rotunno-Hazuka et al. 2000: 66). In addition, Site 1027, long referred to as the Palauea Cattle Pen, was reexamined more closely and found to be a "series of changing wall constructions" (Toenjes et al. in Rotunno-Hazuka et al. 2000: 55). The north side of the enclosure was actually a longer and more substantial wall (Site 2865), whereas the other walls show at least three different construction styles. This led to the suggestion that "the site has served other functions prior to its use as a cattle pen" (Toenjes et al. in Rotunno-Hazuka et al. 2000: 55a). The identification of informal structural features inside the enclosure supported this inference.

At the time of the 1999 review, the property was owned by Dowling Company, Inc., and a 17-lot residential subdivision was proposed for 23.6 acres of the 44.4-acre parcel. The remaining 20.75 acres of the project area was designated as a cultural preserve. The preserve area encompassed nine of the sixteen identified sites within the project area, along with portions of three sites. All five of the sites previously recommended for preservation were located within this preserve area. The summary of recommendations and significance assessments prepared after the establishment of the cultural preserve differs substantially for many of the sites, as compared to previous assessments. For example, five of the historic era ranch walls that occur within the preserve area were assessed in 2000 as being "excellent examples of historic period ranch features" (Rotunno-Hazuka et al. 2000: 115). These sites were previously assessed as being significant only for information, with no further work warranted. Sites identified as containing ceremonial or burial features were previously assessed as significant under HAR Criteria "d" and "e". After the preserve area was established, these sites were given significance assessments under Criteria "a", "c", "d" and "e" (Rotunno-Hazuka et al. 2000: 115). In this situation, the significance of the sites appears to be directly related to the planned use of the land on which they are located. Once the owner established the preserve area, sites within its boundaries became more significant, especially as excellent examples of site types. Preservation of sites is always the preferred treatment; however, in order for the assessment process to properly work, site significance should be independent of proposed land use. All four of the sites located outside of the designated preserve area were assessed in 2000 as significant under Criterion "d" only, and recommended for data recovery (Rotunno-Hazuka et al. 2000: 116).

In reviewing the development project, the Maui County Council established

that permitted uses within the preserve area would be consistent with interim and final preservation plans approved by the SHPD (Ordinance 2898, 2000). A short-term preservation plan addressing protection of the preserve area during subdivision construction was prepared (Sinoto 2000), along with a more detailed interim preservation plan (Donham 2000). The latter plan was submitted to SHPD for review in October 2000; however, no response or comments from SHPD have been offered to date.

In October of 2000, a 100 ft wide firebreak corridor was mechanically cleared parallel to the Makena-Keone'o'io Road along the west side of the project area. This activity was monitored by archaeologists, and resulted in the discovery of four new historic properties (Sites 5061-5064). These sites were subsequently tested, and two were found to be the remnants of long-term or permanent habitation sites (Sinoto et al. 2001). Additional data recovery work was recommended for Sites 5061 and 5064, while no further work was recommended for the remaining two sites, interpreted as disturbed segments of cattle walls. In addition to the recommendation for further work at the two newly identified sites, the report underscored the likelihood that additional sites are likely to be found within the project area, despite five prior surveys/studies, and monitoring of the subdivision construction phase was recommended. Prior comments from SHPD had indicated that there was no need for archaeological monitoring, due to the presence of the preserve area.

In 2001, data recovery work was conducted at the four sites located outside the preserve area, as well as the two newly identified sites along the firebreak corridor. A formal report of these activities has not been completed to date. Information available during additional preservation planning indicates that the area of Site 5064 was found to contain a very rich cultural deposit, and was subsequently included within the preserve area (Donham and Palomino 2002: 3).

Archaeological monitoring of vegetation clearing and infrastructure construction occurred within the project area in 2001. Removal of vegetation and sewer line trenching in the area of Site 1029 revealed an extensive area of subsurface midden and artifacts along the western slope of what was thought to be a natural ridge formation. Further examination of this formation revealed that is was actually a series of four stepped terraces, the western side of which had been originally defined by a stone terrace faces and a stone wall along the base. A small portion of this site

was previously identified as a habitation site (Feature 4) within Site 1029. Reanalysis of this feature suggests that it was the original heiau, and that the walled structure behind the terraces (identified by Kirch as the heiau) is most likely a later addition to the original heiau site (Donham 2004: 13)

As stated in the 2000 interim preservation plan, the 20.75-acre preserve area was to be treated as follows:

The intent of the current property owner is to transfer the cultural preserve lands to the University of Hawai'i (Manoa and Maui Community College). The final, long-term preservation plan will therefore be the responsibility of the University of Hawai'i Department of Anthropology and Department of Hawai'ian Studies. (Donham 2000: 1).

Pursuant to these goals, a native plant re-vegetation plan was prepared for Dowling Company and the University of Hawai'i. Specific steps were recommended in order to identify access routes and use areas prior to the implementation of the re-vegetation plan (Donham and Palomino 2002). These steps included providing more comprehensive maps of the preserve area so that a safe access and working trail could be established, and providing better updated information on the function of some of the sites, so that plant nursery areas would not impact subsurface deposits.

In 2003, UH-Manoa Department of Anthropology hosted a summer field school in archaeology at the preserve. The work plan for the summer session was based on recommendations made in 2002, and included work at three sites - 1027, 1029, and 2866. Most of the fieldwork involved scaled plan mapping and GPS mapping in order to determine a suitable trail route through the Site 1029 area (Donham 2004) . Subsurface testing was conducted at four features located inside the Site 1027 enclosure, in order to determine whether evidence of habitation might be present, and to determine if the so-called cattle pen would be suitable for use as a native plant nursery. A revised map of the heiau area of Site 1029 was also completed, showing a large terrace complex at Feature 4 which was previously thought to be a relatively small habitation site.

The following year, it was determined that Maui Community College Department of Hawai'ian Studies would be the lead agency for managing the cultural preserve. A classroom/multipurpose building was moved into the area by Dowling Company, Inc. for use by MCC. To date, no

additional activities have been conducted within the preserve area, and the residential subdivision is still in the process of being built out.

Wailea Golf Course

In 1974, William Barrera returned to Keauhou and Kalihi for additional reconnaissance of the 400-acre proposed Wailea (orange) golf course (Barrera 1974). Twenty-nine new sites comprising over 50 features were briefly described in this twelve-page report, and sites were assessed using numerical rankings (1 to 4) for "interpretive potential" and letter rankings (A to C) for "work needed". These latter categories were: A=excavation required, should be preserved; B=excavation required, may be preserved or destroyed; and C=no further work is required, may be preserved or destroyed (Barrera 1974:12). Barrera does not discuss age or function for any of the sites in his report. His summary of findings paragraph states that, "The Wailea area, although lacking in spectacular archaeological remains, does contain some interesting features that would fit well into an interpretive scheme" (Barrera 1974: 8). He also notes that ,

In order to provide a proper cultural-historical background for the interpretation of the sites to be incorporated into the museum atmosphere, it will be necessary to excavate even those sites that are of little or no value as display sites. (Barrera 1974:8)

Among the twenty-nine sites assessed in Barrera's report, two (T-16 and Site E) were given "excellent" rankings for interpretive potential, and 24 were rated for "excavation required".

Additional archaeological work was conducted by Cleghorn in the golf course area the same year, with the objectives to: 1) map Barrera's site T-16; 2) "salvage features scheduled for destruction in the area of Site T-16"; and 3) conduct salvage excavations at three additional sites scheduled for destruction (Cleghorn 1976: 1). In this case, golf course construction plans were clearly driving the archaeological work and these plans were apparently not affected by Barrera's recommendation to preserve Site T-16 in its entirety.

During Cleghorn's fieldwork, the large (9-acre) complex identified by Barrera as T-16 in Keauhou was arbitrarily subdivided into nine distinct sites (B-10-16 through 23; later assigned SIHP numbers 2688-2696) comprising 78 surface features. Of these nine new sites, four (comprising 57 features) were recommended for preservation (2691, 2693, 2694 and

2696). Limited test excavations were conducted at three sites within the T-16 complex area (eight test units), and 51 traditional artifacts were recovered (Cleghorn 1976: 26). Large amounts of charcoal were reportedly collected from test units, however no samples were submitted for dating analysis. The sites recommended for preservation included: an enclosed pahale that may have had ceremonial significance (Site 2691); a complex of 20 features, including an enclosure, C-shapes, platforms, pits, walls and mounds (Site 2693); a complex of 29 features, including a possible heiau, several C-shapes, platforms, and enclosures (Site 2694); and a complex of seven features including four platforms and three enclosures (Site 2696).

Cleghorn also conducted "salvage" excavations at three sites located beyond the large T-16 complex, (SIHP Sites 2697-2699). These correspond to Barrera's sites T-1, T-3 and TP-10. It is not certain what happened with the remainder of Barrera's sites, including Site E, which was highly recommended for preservation. At the completion of the work at these three sites, Cleghorn recommended additional excavation at Site 2697, an enclosure and two-tiered platform; no further work was recommended at the other two sites. These consisted of a large enclosure with a (destroyed) platform, terrace, pavement, and numerous stone mounds (Site 2698), and a wall, stepped platform and mound (Site 2699).

Cleghorn's recommendations reflect Bishop Museum's attempt to design a site assessment system that comported with then current federal preservation language. Terms such as "interpretation", "research", "preservation", "stabilization", "restoration", and "removal" are defined, and assessments are made that include research potential in addition to interpretive potential. In Cleghorn's matrix, sites with research and interpretive potential were recommended for preservation (stabilization, restoration); sites with research potential were recommended for preservation only until research was completed (Cleghorn 1976: 51).

Later in 1974, Cleghorn returned to Site 2697 to conduct the recommended excavation. Vegetation clearing revealed additional features consisting of aligned partially buried stones that formed three abutting square foundations. The previously recorded and tested platform was located in the center of one of these foundations (Feature C), with the other two (Features D and E) abutting the east side of Feature C. Excavations focused on Feature B and the newly identified foundations. No additional

work was conducted at Feature A, a large (12.4 x 6.7 m), high-walled (1.0 to 1.7 m) enclosure located to the southwest of the foundations, and interpreted as a cattle enclosure (Cleghorn 1976).

The platform (Feature B) was disassembled and 16 square meters were excavated in the Feature C foundation, revealing clear evidence of intensive habitation activities. Three firepits, including one structured stone fireplace were identified, in addition to postholes and dense midden and artifact deposits. A burial, consisting of a single adult female, extended and enclosed in a canoe, was found beneath the surface platform (Feature B). This unique burial showed evidence that a koa canoe had been cut in half, with one half used beneath the body and one half used as a cover. Historic era tortoise shell combs were found in the woman's hair, and an imported brass pin and chert flake were found in the burial pit fill (Cleghorn 1975: 14). This individual was subsequently reinterred at the Keawala'i Church cemetery.

Additional firepits and features were documented in the adjacent foundations, and over 3,000 traditional artifacts were recovered from the house site. These included 39 fishhooks, 65 pieces of worked mammal bone, 242 coral abraders and 1753 volcanic glass flakes. Unfortunately, none of the charcoal recovered from the several firepits was submitted for age determination. Hydration rind dates obtained from volcanic glass ranged from AD 1669 though the nineteenth century (Cleghorn 1976:49).

In his interpretation of the site, Cleghorn concluded that it was "... occupied over a period of time on a semipermanent or permanent basis" (Cleghorn 1976: 49); and that it was abandoned sometime in the late-1800s. After abandonment, the site was subsequently used for burial, and the cattle enclosure (if indeed it was used for cattle) was built. It is also feasible to infer that the site was abandoned after its sole remaining occupant died and was interred at her home. Additional cases of single adult female burials at late precontact/historic era house sites have been documented for this region.

The area of Barrera's 1974 survey was reexamined in June 1989, after the first golf course was constructed. At that time, the area surveyed was referred to as the "southern acreage"; it consisted of 187 acres, and encompassed golf course expansion areas and six different residential parcels (multifamily or single family) on the east and west sides of the

existing golf course. The report of this reconnaissance survey indicated that the large T-16 complex was reacquired; however only four of the nine Bishop Museum site numbers assigned to the complex by Cleghorn were listed as being found intact (Gosser and Cleghorn 1990: 8). No information or updates on site conditions is provided for these four sites (2693-2696) in the 1990 report. The summary of recommendations includes Sites 2691, and 2693 - 2696 (Gosser and Cleghorn 1990: 72-73). The recommendation for preservation is consistent with Cleghorn's' 1974 recommendations regarding Sites 2691, 2694 and 2696. The recommendation for site 2693 was changed from preservation to data recovery (Gosser and Cleghorn 1990: 72). The reasons for this change in recommendations are not discussed in the 1990 report. Overall, this survey identified 40 sites with approximately 300 component features.

Bishop Museum conducted mitigation fieldwork in the southern acreage between August 1989 and February 1990 (Gosser et al. 1993). The report of this work provided a preliminary interpretive model based on the findings of previous work. At the conclusion at that discussion, Gosser et al. suggest that.

There is an indication that sites in the (project) area are more random and less architecturally complex that those existing along the coast. This inland pattern is contrasted along the coast where settlement appears to be highly clustered and organized. The implication is that site organization inland from the coast was less structured and they may not have been under the same political or social stimulation as the coastal site organization. In addition, the coastal sites appear to be clustered within individual ahupua'a. ...Tentatively, it is suggested that areas near ahupua'a boundaries were not heavily settled. (Gosser et al. 1993: 18)

This preliminary model assumes or implies that the coastal (shoreline) settlement pattern and that of the coastal zone between 200 and 1,000 feet inland were the results of two separate and distinct systems. An alternative model would attribute the differences between the shoreline and the inland areas of coastal zone to different uses of the two sub-zones. For example, permanent homes were along the shoreline and temporary field shelters and agricultural fields were inland a short distance. Ceremonial sites are scattered among these sites in both sub-zones.

The idea that shoreline sites were clustered within ahupua'a was first

posited by Davis and Bordner (1977b: 17), with somewhat limited data. An actual distribution map in this case would have given more credence to Gosser et al.'s observation that ahupua'a boundary areas were avoided. In some areas, such as the Paeahu/Palauea boundary and the Kalihi/Waipoa boundary, the mapped ahupua'a boundaries run through residential compounds. It has also been pointed out that at least six of the shoreline sites in Honua'ula may well have predated the formal establishment of ahupua'a boundaries. In these cases, the site selection would not have been based on some preexisting political demarcation (Donham 2006: 10). In further developing a test hypothesis for the study area, Gosser et al, following Cordy, suggest that given the "marginal" characteristics of the area, "the Wailea communities may have been ruled by lesser chiefs who lacked the resources and authority to recruit a sufficient number of subjects to organize a militia or construct large, elaborate public structures" (Gosser et al. 1993: 39). This suggestion implies that the region was not of interest to the Ali'i Nui of Maui, or to a district chief. According to Gosser et al., "a lesser leader could exert economic, political, and ideological control over a small, isolated population and thus strengthen his political position" (Gosser et al. 1993: 39). It seems improbable that lesser chiefs could establish control over ahupua'a in Honua'ula without having to answer to more powerful leaders. Furthermore, there is ample oral historical evidence to indicate that a number of relatively powerful and high-status chiefs did in fact spend periods of time in Honua'ula (Donham 2006b).

According to Gosser et al., the archaeological manifestations of this type of social system would be early occupations composed of fishers and religious personnel. Thus, the earliest sites would be religious structures and habitations that would indicate fishing-oriented activities (Gosser et al. 1993: 40). One could argue that in many other situations, early sites (indeed, all sites) would indicate fishing-oriented activities. What is also lacking for this model to be adequately tested is the connection between religious sites and some inferred political leader. One cannot assume that all religious sites were constructed at the behest of a chief, especially the smaller shrines that could represent multi generational composite structures.

During the 1993 data recovery field work in the southern acreage, Gosser et al. conducted excavations at 20 of the 40 identified sites in the project area. An additional five sites had been previously tested. Among the 17 sites not tested or excavated, seven were placed in preservation and four

were historic walls (Gosser et al. 1993: 40). The percentage of tested/excavated sites within this project area (62%) was the highest to date for large project areas in Honua'ula. The site distribution within the project area included seven sites in two clusters within Palauea, 31 sites in four clusters within Keauhou 1 & 2, and two sites in Kalihi.

During the testing and data recovery phases of work in the southern acreage, a total of 99 features were excavated, with unit sizes ranging form 0.25 to 15 square meters. Most of the excavations were 1.0 square meter or greater. A relatively low number of traditional artifacts were recovered in these tests. Only one complete bone fishhook and one nearly complete fishhook were recovered, along with 29 unfinished hooks, blanks or hook fragments (Gosser et al. 1993: 233). Other fishing gear included two leho octopus lures, one breadloaf sinker, 221 coral abraders, 17 echinoid spine abraders, one complete adze and one fragment, one shell scraper, two puka shells, and one grinding stone fragment. Basalt and volcanic glass flakes were less sparse, with 1,765 basalt flakes and 2,279 volcanic glass pieces recovered (Gosser et al. 1993: 247).

Twenty-two radiocarbon dates were obtained from samples collected at 10 sites within the southern acreage. The calendric ranges extend at the earliest to AD 1280 and at the latest to 1950. The earliest date range obtained was from Site 1362, the Po'olenalena Complex, discussed above. Ten of the dates show an early end during the 1400s and a late end during the 1600s. Five dates show tight ranges within the 1500s or late 1500s to early 1600s, and four dates show tight ranges within the 1700s or between the late 1700s and early 1800s (Gosser et al. 1993: 254-255).

Gosser et al. were not able to reliably demonstrate that their hypothesis regarding early religious sites was correct, due primarily to a lack of clear religious function for the features they interpreted as religious. In addition, potentially earlier dates were obtained from two residential complexes (Site 1362 and 2694).

Twelve of the 40 identified sites were recommended for preservation following the data recovery work. These included nine sites determined significant under draft HAR Criteria "c" and "d". In addressing Criterion "c", Gosser et al. recognized that "although many of the sites and features located on the Southern Acreage and on Lot 15 are common within the

region, some clusters as an aggregate represent unique entities that merit distinction" (Gosser et al. 1993: 37). Included in the list of these sites for preservation were 2694 and 2696, two of the nine sites within the T-16 area originally recommended for preservation by Barrera. One of these nine sites (2693) was determined by Gosser et al. to be "no longer significant", and one (2695) was not tested and given provisional preservation status, pending mitigation fieldwork. Other sites recommended for preservation under Criterion "c" included 262, 1361 and 1362, which formed a small cluster in Keauhou. Three of the 40 sites were found to contain human burials (2454, 2539, and 2549); these sites or the features containing the burials were recommended for preservation as well. Three historic era long walls were also recommended for provisional preservation, to be "incorporated, where possible, into the planned landscape, and only be breached when necessary" (Gosser et al. 1993: 265).

Between February and September 1991, Bishop Museum staff monitored mass grading of two areas within the southern acreage where the gold course was expanded (Dang et al. 1993). During the monitoring, eight sites were totally or partially impacted by construction, and no new surface or subsurface findings were reported. Three complexes and two burial features recommended for preservation were fenced off with buffer zones and successfully avoided during golf course construction. Two additional features thought to be possible burials were examined during monitoring and found to be non-burial features. No cultural materials were found at these two features and they were determined to be no longer significant (Dang et al. 1993:24-25).

Wailea Resort Hotels and Residential Lots

Grand Wailea

There are a few available records of additional reconnaissance survey work after Barrera (1974) within the areas of the earliest developments at Wailea; most of these were conducted by Rosendahl in 1981 (a–e) and resulted in no identified archaeological sites. The area slated for construction of the Grand Hyatt (Parcel A/B), the Four Seasons hotel (Parcel C), and Wailea Point condominiums (Parcel D) was subjected to a reconnaissance survey by Bishop Museum staff in 1979, prior to the subdivision of the area into development parcels (Rogers-Jourdane 1979a). This survey identified three archaeological sites - a historic era habitation complex (B12-4, 1281) a long wall with an adjoining enclosure (B12-6, 1280), and a circular enclosure (B12-9). Sites B12-4 and 6 had been previously identified by Kirch during his 1969 reconnaissance.

Bishop Museum staff returned shortly thereafter to conduct additional work at these three sites, which included testing and mapping. At that time, additional features were identified at all the sites, and additional work was recommended at Sites 1280 and 1281, which were located near the shoreline at the southern edge of the parcel, at Wailea Point (Schilt and Dobyns 1980). Site 1281, the Wailea Point Complex, is discussed above. Site 1280 was located a short distance north from the Wailea Point Complex, and was also impacted by sewer line construction in 1981 (Shun and Streck 1982). When the project area was subdivided into four development parcels (A-D), Site 1280 landed in Parcel C while Site 1281 landed in Parcel D.

In 1986, Paul H. Rosendahl, Inc. (PHRI) conducted an inventory survey of Parcels A/B and C, which encompassed the future Grand Hyatt (Grand Wailea) and Four Seasons hotels. This 64-acre parcel had not been previously subjected to a systematic walk-through survey, only reconnaissance level survey. Prior to the onset of fieldwork for this project, a field inspection of the area was conducted, and four new sites were identified (Rosendahl 1986). The scope of work for the inventory survey called for mapping of these sites and testing. No additional walk-through to locate additional sites was conducted (Spear 1987).

Previously identified Sites B12-6 and 9 were relocated, and Site B12-6 was found to be completely destroyed at the time of the 1986 survey. This site was therefore not enumerated in the total site count for the project area, which was five. The newly identified sites included a surface midden and artifact scatter (Site 2011), a rectangular low-walled enclosure (Site 2012), a platform complex (Site 2013), and a walled shelter (Site 2014). Testing was conducted at all of the identified sites, and hand auger coring (10 cores) was conducted along the sand dune formations behind Wailea Beach. Subsurface cultural deposits were found in one coring, at 1.65 ñ2.2 meters below surface (Spear 1987: 19).

Findings of the fieldwork indicated that Site B12-9 was a military site dating to World War II, consisting of five small, roughly constructed enclosures and walls. No further work was recommended at this site. The surface midden scatter (Site 2011) was found to be fully disturbed due to prior grubbing, and it was recommended for no further work. The Site 2012 enclosure was found to contain a subsurface cultural deposit that predated the enclosure structure, which was interpreted as a possible

shrine. Ash from the earlier deposit was dated to a calendric range of AD 1620-1890 (Spear 1987: 21). This site was recommended for data recovery excavations.

The Site 2013 complex was found to include four WWII era walls in addition to two platforms. The larger of the two platforms (Feature A) was tested and found to contain a historic period burial. Size of the platform suggested a probable house site that was used for habitation prior to placement of the burial. Dated charcoal from the habitation deposit under the platform was dated to AD 1480-1665 (Spear 1978: 21). This site was assessed as being culturally significant and recommended for preservation. The final site, a C-shaped shelter was tested and found to contain no cultural deposit; no further work was recommended for this feature.

In 1987, PHRI returned to Sites 2012 and 2013 to conduct data recovery excavations. Prior to the fieldwork, the decision had been made to disinter the known burial and any additional burials that might be discovered at Site 2013. This decision was published in the Maui News and OHA newspaper, and consultation was conducted with representatives from OHA, SHPD, and a representative from Hui Alanui O Makena. At that time, the Island Burial Councils had not been established and there was no legal mandate guiding decisions regarding unmarked Native Hawai'ian burials. No lineal descendants were identified during the notification process (Rosendahl and Haun 1987: 1). During data recovery excavations at Site 2013, a second historic era burial was discovered and disinterred. Both of the burials from Site 2013 were reinterred on the ground of the Hyatt, and were marked using the stone from the platforms that originally marked the burials.

Excavations at Site 2012 confirmed the presence of two historic components, a WWII occupation and an earlier historic occupation that included a small wooden structure and a thin midden deposit with square nails and a boulder-lined hearth. This deposit was not distinguishable as a separate soil layer, rather it occurred over what appeared to be a pre-contact artifact and midden deposit with one intact hearth feature identified. The hearth was dated to AD 1650-1950 (Rosendahl and Haun 1987: 14). The cultural deposits containing early historic and pre-contact artifacts was limited in distribution within the enclosure.

During excavation of the larger platform at Site 2013, the remains of

an earlier terrace structure with a compacted ‘ili’ili surface was found beneath the platform fill. The undisturbed cultural deposit at the base of the original terrace contained abundant midden and artifacts, and two hearth features were identified. Ash from one of these features returned a calendric range of AD 1340-1485. This date remains one of the earliest, and the most compact range obtained from any site in Paeahu. Charcoal fragments collected form elsewhere in the layer returned a calendric range of AD 1345-1650 (Rosendahl and Haun 1987: 29).

A pre-contact deposit was also identified beneath the Feature B platform, which was smaller and roughly the size of the burial that was interred beneath the stone fill. Artifacts recovered from the deposit beneath Features A and B at Site 2013 included 25 fishhook parts, tabs or fragments, most of which (10) were one-piece bone hooks; three leho octopus lures; 89 coral abraders; 15 echinoid abraders, seven shell ornaments, and hundreds of basalt and volcanic glass flakes (Rosendahl and Haun 1987: 49). No excavations were conducted beyond the perimeters of the two platforms, to determine the areal extent of the pre-contact cultural deposit at this site. At the completion of the excavations, it was concluded that no further work was warranted at any of the sites within the project area; however, monitoring of the grubbing, grading and mass excavation during construction was recommended. No additional testing was recommended in the sand dune area, where cultural material was found in relatively deep contexts. The location of this find would later correlate with Site 2804, where 12 primary burials were discovered during construction.

In October 1987, construction started on the hotel grounds with monitors in place. In January 1988, burial features were discovered during construction, and they continued to be discovered until July 1991 (Rechtman 1999:1). During this three year period, a total of 119 undisturbed primary burials and 80-100 previously disturbed burials were located and removed from the construction area. The burial areas were given three new site designations (2802-2804). These were located in a north-south band along the inland side of the coastal dune formation. Sites 2802 and 2803 were at the southern end of the project area, with Site 2803 in the near vicinity of the former Site B12-6.

The upper sand layers at Site 2802 were previously graded and covered with gravel road fill, so that less than 1.0 meter of sand remained over the site area. During mass cutting, a total of 79 human burials were

encountered. Most of these were identified on the basis of burial pit fill prior to machinery disturbance of the burials; pits extended as deep as 2.0 meters below the existing surface. The site also contained subsurface cultural deposits reflecting habitation prior to its use for burial.

Site 2803 was located along the southern boundary of the project area, in the vicinity of a recently installed sewer pumping station. Sand deposits at this site were up to 8.0 meters in thickness, and identified burials extended as deep as 4.0 meters below surface. During the 1988-1991 monitoring, 28 primary burials and 13 clusters of previously disturbed and reinterred remains were recovered. Four subsurface hearth (2) and pit (2) features were also identified and recorded. Charcoal recovered from the hearth features were dated to AD 1270-1645 (Feature 3) and AD 1435-1640 (Feature 4; Rechtman 1999: 129).

Due to the lack of detail in site location maps, it is not possible to determine where exactly Site 2803 was found in relation to the formerly destroyed Site 1280 (B12-6) wall. It is notable that in their survey report of 1980, Schilt and Dobyns stated that the area had "the potential for a buried site" (Schilt and Dobyns 1980: 52). The area was tested to a limited degree in 1980 and 1982 by Shun and Streck; however, the deep sand deposits were not identified at that time. No testing was conducted in the area during the 1986 PHRI survey, although apparently the intent was to place auger cores in the area. The 1986 project map shows coring at the location, but the report indicates that they were not excavated (Spear 1987).

Most of the previously undisturbed burials at this site were found during monitoring of the sewer line, northward from its former terminus at a pumping station located at the southern property line. Sadly, this scenario was a repeat of prior mistakes. According to Rechtman,

During construction for the sewer pumping station in the 1970s, the site was severely impacted resulting in the disturbance of the midden deposit and the unearthing of many burials. According to local informants the disturbed burials were either reburied on site or relocated to nearby Makena Cemetery. (Rechtman 1999: 96)

This situation was previously reported by Streck, in his report on monitoring of the sewer line excavation to the north of the hotel project area, in what is now Wailea Beach Park (Streck 1982: 20-21). Spear also

acknowledged this prior finding in the 1986 survey report (Spear 1987: 5); however no effort was made to relocate the remains that had reportedly been reburied on site. These reinterred remains were found during the 1988-1991 monitoring in eight wooden boxes and five clusters, all within a 10 by 10 meter area approximately 10 meters northwest from the pumping station. Ironically, the remains had been reinterred directly in the path of the next phase of sewer line installation. Osteological analysis of the reinterred remains, all of which were commingled, resulted in a minimum number of 180 individuals. This number was subsequently re-calculated by Rechtman to a more conservative 80-100 individuals (Rechtman 1999: 107). Clearly, the most concentrated area of this burial site was impacted by the pumping station, which was constructed with no archaeological review or oversight.

The third burial site found during construction monitoring at the Hyatt (2804) was located along the makai side of the sewer line easement and had been previously graded to remove much of the sand dune formation. Midden was visible on the site surface prior to commencement of the excavation monitoring in the area. One surface stone feature consisting of stone alignments was also identified. This feature was found to correlate with two in situ burials (Rechtman 1999: 116). A total of 12 burials were found during monitoring in this area, many of which were damaged by bulldozing activities.

Dating samples recovered from nine burial features at the three sites were submitted for age determination. Interestingly, three samples from three burials at Site 2802 returned calendric ranges between 3610-2920 BC. These burials were located in relatively close proximity, at depths ranges in excess of 1.40 meter below surface. Rechtman speculates that they represent the burning of “old wood”, and were probably buried at about the same time (Rechtman 1999: 129). The descriptive information and maps of these burials make no mention of charcoal finds in direct burial context. It is therefore possible that the carbonized materials were actually encountered during pit excavation and the charcoal is from pre-existing natural deposits. The remaining six dating sample ranges all extend into the modern era (1950), and have early extents of AD 1430 to 1675 (Rechtman 1999: 129).

At some point during the monitoring project, OHA and DLNR agreed to expand the MOA that was executed for the Site 2013 burials, so that it would include burials “unintentionally disturbed by construction activities

at the project site". The MOA expansion is attached to the Rechtman report and signed by the OHA Chair, the SHPO (DLNR Chair), and a grand Wailea Company representative. This agreement is not dated, so it is not clear how many burials were known at the time it was signed. At the time this monitoring project was being conducted, the Honokahua Burial Site was the focus of attention by OHA, DLNR, and numerous Native Hawai'ian organizations. Excavation at Honokahua was halted by the Governor in December 1988, and from this date until October 1990, there were continuous meetings and task force studies trying to reach a consensus on the outcome and ownership/control of that site. Meanwhile, the Hyatt disinterments were going on with relatively little attention and no public knowledge. The remains of the c. 220 individuals recovered during the Hyatt monitoring were reinterred on the hotel grounds at the site previously designated for the Site 2013 burials and were marked with an earthen mound, which is next to the reconstructed platforms for the Site 2013 burials.

Embassy Suites/Kea Lani

The Embassy Suites project area was the southern-most hotel constructed along the shoreline at Wailea. The 21-acre project site is situated between Wailea Alanui Drive and the shoreline, and is bordered on the south by Kaukahi Street. Polo Beach condominiums and park are situated at the southwest corner of the project area. In July 1987, PHRI conducted a one-man field inspection of the project area and identified two archaeological sites (Haun 1987). The following month, a crew returned to conduct mapping and testing of the identified sites as well as limited subsurface testing with five hand auger cores along the inland side of Polo beach (Dicks and Haun 1987: 2). No additional surface survey was conducted of the project area.

Sites identified and recorded included Site 2017, a complex consisting of a terrace, a C-shaped wall and two small circular enclosures, with an associated subsurface midden deposit and remnants of possible terrace or enclosure walls. Also identified was Site 2018, a series of short wall segments that represent a once intact wall that ran north-south along a low cliff face inland from Polo Beach (Dicks and Haun 1987: 25).

Test units were excavated in Features A, B and C at Site 2017, with a 4.0 meter long trench placed through the center of Feature A. This 10.7 by 11.5 meter terrace was previously impacted along the east side by bulldozers, and it was difficult to ascertain the original configuration of the feature. It

was most likely rectangular in plan, but was more L-shaped at the time of the survey. WWII era military artifacts were also present on the structure, so it may have been modified at that time. Remnants of a rather large wall base were identified beneath the disturbed surface stones of this feature, along with an 'ili'ili pavement and possible bench.

The artifact and midden material recovered from Feature A were somewhat limited, given the extent of excavation at the Feature. Only three basalt flakes were recovered from a unit placed in the bulldozer disturbance, 5.0 meters from the edge of the terrace. No artifacts were found in the trench excavation area. In contrast, 146 artifacts were recovered from a single 0.5 by 0.5 meter unit at Feature C, the C-shaped shelter. These included a bone fishhook blank and one tab, eight coral abraders, two echinoid abraders, ten volcanic glass flakes and 126 basalt flakes. Also recovered was a carved echinoid spine that stylistically resembles a similar item found at Kamohio Bay on Kaho'olawe (Dicks and Haun 1987: 30).

In interpreting Site 2017, Dicks and Haun suggest that Feature A was a specialized structure, such as a men's house or hale mua, and they indicate that Site 2017 is "very similar to Site 1028, which is located c. 300 meters to the southeast of Site 2017" (Dicks and Haun 1987: 34). No radiocarbon samples were analyzed during this survey, although hydration rind dates were determined for nine of the volcanic glass flakes recovered from Feature C. All of the calendric ranges from the nine flakes were between AD 1626 and 1776.

Site 2017 was assessed as having high research value, minimal interpretive value and minimal cultural value. Data recovery excavations were recommended as a mitigation measure. Site 2018 was assessed as having minimal research, interpretive or cultural value, and no further work was recommended. Archaeological monitoring was recommended for the vicinity of Site 2017 and along the coast, "because of the possibility, however remote, that previously unidentified significant deposits might be encountered" (Dicks and Haun 1987: 36).

In 1989, a data recovery plan was prepared for Site 2017, and implemented by PHRI (Jensen and Haun 1989). During subsequent monitoring of grubbing in the area of the site, 38 subsurface features (including an unmarked human burial) were identified and recorded in the immediate area of the site (Donham 1990a: 7). The report of these findings is currently not available for review.

Grand Champions Condominiums
In August 1987, PHRI crews also conducted a brief (two day) reconnaissance survey of a 10.6-acre parcel in Paeahu, prior to construction of the Grand Champions condominiums (Walker and Haun 1987). This property is adjacent and to the north of the former Stouffer's (now Renaissance hotel), and extended from Wailea Alanui to the shoreline. The survey involved a walk-through reconnaissance and excavation of seven hand auger cores along the sand dune formation just inland of the beach. One test unit was also excavated at the single identified sites within the project area. Also described but not given an SIHP number was a concrete pill box, presumably dating to WWII (Walker and Haun 1987: 4).

The identified site (1794) consisted of an exposed cultural deposit containing marine shell midden and charcoal flecks; it covered an area of about 1.0 meter in diameter (Walker and Haun 1987: 4). A single test unit (0.5 by 0.5 meter) was excavated in the center of this small deposit, and it was found to be 0.8ó0.13 meter in thickness from the surface. No artifacts were recovered from the test unit, although sparse amounts of eight different shellfish species were reported. The site was described as being in an "unbulldozed area", which suggests that the area surrounding the site was previously bulldozed. This would explain the extremely small size of the deposit as described. The report does not include information on the general condition of the project area or prior impacts. No "definite cultural materials" were found during auger coring (Walker and Haun 1987: 6).

In conclusion, Site 1794 was found to have "minimal significance in terms of potential archaeological scientific research, interpretive, and/or cultural values" (Walker and Haun 1987: 6), and no additional work was recommended at the site. Archaeological monitoring was recommended for the area of the sand dunes during grubbing and grading, due to the possibility of encountering human burials.

Wailea Residential Parcels
In January 1989, Bishop Museum staff conducted a reconnaissance survey of two of the designated single family residential parcels situated along the mauka side of the Wailea golf course in Paeahu (SF-7) and Palauea (SF-10). Together, the non-adjacent parcels comprised 47.3 acres, and were generally open space, although "Numerous bulldozer paths and several major unimproved roads exist on both parcels" (Landrum

and Cleghorn 1989a: 5). It was also noted that vegetation was quite dense and that “although the walk-through survey was extensive, some archaeological sites may have been missed” (Landrum and Cleghorn 1989a: 8).

One site consisting of two rock mounds or eroded platforms, was identified in the smaller Palauea parcel, and seven sites consisting of 11 component features were found in the Paeahu parcel. In this latter parcel, C-shaped shelters were most common, with four identified, followed by two terraces and one each of a wall, enclosures, rock shelter, modified outcrop, cairn, and retaining wall (Landrum and Cleghorn 1989a: 11). Three of the C-shapes at one site and the rock shelter were suspected of being either of military construction or of military reuse, due to the recent appearance of the construction and metal cans (Landrum and Cleghorn 1989a: 12). The rock cairn was also suspected of being a recent survey marker.

Other sites were interpreted as traditional Hawai’ian temporary habitation shelters, an animal enclosure, and two possible burial markers, including one at the Palauea parcel and one in Paeahu.

No subsurface testing was conducted during this survey, however scaled maps were completed of most of the sites. In the discussion of survey findings, Landrum and Cleghorn noted that:

The presence of archaeological resources within the project area is significant since they have the potential to contribute new data to the body of knowledge concerning traditional Hawai’ian settlement patterns as well as historic period occupation and influence in the Wailea area. (Landrum and Cleghorn 1989a: 32)

Additional archaeological work, including subsurface testing, was recommended at all of the identified sites except the recent rock cairn interpreted to be s recent survey marker (Landrum and Cleghorn 1989a: 32). Further recommendations were to be made pending the results of additional field work.

When Bishop Museum staff returned to Parcel SF-7 to conduct the additional work in 1992, they were met with an unfortunate situation: “Five of the seven sites were unintentionally destroyed during grading for (a) residential road” (Kleiger et al. 1992: 1). Data recovery was

therefore conducted at the two remaining sites, 2867 and 3113. The latter site consisted of two small "casually constructed" C-shaped shelters; the interiors of both were excavated and found to contain no cultural materials. Metal fragments were found on the surface inside one of the C-shapes, and both were interpreted as likely WWII era or later.

Site 2867 consisted of three features, including a nearly circular rock terrace faced on three sides, a C-shape and alignment, and a lave tube shelter with an adjacent soil terrace. The rock terrace was excavated with three adjoining test units and an adjoining backhoe trench, for a 7.0 meter long excavation. Very few artifacts were located at this feature; they included a basalt hammerstone and two water worn pebbles. No charcoal or culturally transported midden materials were found at this feature. Likewise, excavations at the C-shape resulted in no artifacts or midden finds (Kleiger et al. 1992: 58, 59).

Eight units were excavated at the lava tube shelter, and a small amount of basalt (3) and volcanic glass (13) debitage was recovered, along with surface pieces of metal. Also recovered were six unidentifiable pieces of mammal bone, a single fish bone, and a human metatarsal (Kleiger et al. 1992: 68). Upon discovery of the human bone, additional excavations were conducted at the features to verify whether a burial was present. No additional human remains were located. A charcoal sample collected from a fire hearth at this shelter returned a modern date (Kleiger et al. 1992: 83).

In the conclusion of the data recovery report, Kleiger et al. suggest that the rock terrace at Site 2867 could be a small shrine, even though it lacked the presence of any coral, or other apparent offerings (Kleiger et al. 1992: 86-88). Preservation "as is", or additional data recovery to attempt a more accurate functional interpretation was recommended (Kleiger et al. 1992: 92).

A third residential parcel within Wailea (MF-11) was investigated by Bishop Museum between December 1989 and April 1990 (Roe and Cleghorn 1990; Gosser et al. 1995). In 1989, a reconnaissance survey was conducted of the 10.4 acre parcel, located between Pi'ilani Highway and the Wailea golf course. At the time of the reconnaissance, it was observed that "major portions of this parcel have been affected by previous ground-disturbing activities" (Roe and Cleghorn 1990: 6).

Two sites were identified along the north boundary of the parcel, on the south side of a major drainage gulch. Both sites (2493 and 2294) consisted of overhang rock shelters, located 25 meters from one another. One of the shelters (2493) included surface artifacts, modified outcrop areas and clearings, and surface charcoal/midden concentrations (Roe and Cleghorn 1990: 11). The sites were mapped during reconnaissance, and tested in March-April 1990.

Excavations at the smaller of the two shelters resulted in limited finds of charcoal with no other cultural materials. Eight test units were excavated at Site 2494, and a relatively specialized artifact assemblage of basalt (103) and volcanic glass (74) flakes, and three sea urchin spines was recovered (Gosser et al. 1995: 38, 39). Also recovered was 6 kg of midden, comprised predominantly of marine shell and echinoderms, with small amounts of fish and bird bone. Four radiocarbon dates were obtained from samples collected at three charcoal concentrations/hearths. One of the samples returned a modern age range and the other three returned alternate ranges that extended to 1955. The earliest ranges for two samples were AD 1474-1698 and AD 1451-1705. Both of these dates also showed alternate ranges in the 1700s to 1800s as well as the modern era (Gosser at al 1995: 35). The early ranges were the preferred dates for both samples, given the absence of historic era artifacts in the shelter, and it is suggested that the site was abandoned prior to AD 1820s-30s (Gosser et al. 1995: 37). This site was determined to be significant under Criteria “d” and possibly “c”, and its preservation was recommended in conjunction with the land owner’s intent to leave the gulch as is. No interpretation or public access was recommended, due to the location of the site and the owner’s desire to restrict access (Gosser et al. 1995: 45).

In 1997, a fourth residential parcel (MF-17) in Paeahu was subjected to an inventory survey by Scientific Consultant Services (SCS). This 12.4-acre parcel is located along the mauka side of the Wailea golf course, to the south of MF-11. At the time of the survey, the area was described as having dense grass, and that “An estimated 95+% of the parcel has been altered by machine activities associated with road building, clearing, surface leveling, and stockpiling, and a former nursery planting area” (McGerty and Spear 1998: 18). The one identified site was also noted as having machinery disturbance (McGerty and Spear 1998: 11).

The identified site (4496) consisted of a modified outcrop remnant,

located along the south bank of a drainage area that had been modified for construction of a culvert. Four areas of stacked stones placed on a natural outcrop formation were identified within the site area. The longest section was 19.9 meters in length. Other areas were more mound-like, with small piles scattered in a non-linear formation. One area of soil within the site was tested with a 0.5 by 0.5 meter test unit. No cultural material was recovered (McGerty and Spear 1998: 18). The conclusion of the survey was as follows:

Based on the fieldwork conducted during the project, and the lack of undisturbed soil deposits at the site, it is believed that further work would produce no additional information. The site may be considered no longer significant and no further work is recommended for this project area. (McGerty and Spear 1998: 19)

In March and April 2004, SCS conducted an inventory survey of an additional residential parcel in Wailea (MF-8). This 25-acre parcel is surrounded on most sides by the Wailea (blue) golf course. No traditional Hawai'ian or early historic era sites were identified; however, 23 structural features were identified, 14 of which were definitely interpreted as WWII era military training features (Davis and Fortini 2004). The 14 features were concentrated in five site areas (5548-5552), and consisted predominantly of roughly C-shaped stacked stone features described as firing positions. Also identified was a reinforced concrete bunker (Site 5552) , presumed to have been built by the 4th U.S. Marine Division during WWII (Davis and Fortini 2004: 34). The report includes a more extensive history of military action in the region than is provided in most reports from this area.

A number of military artifacts, including gun parts and ammunition, were observed on the surface at the sites. The military structures were all assessed as having poor integrity and as "not exemplary of either time or place for preservation" (Davis and Fortini 2004: 33). No further work was recommended at the sites. According to Davis and Fortini,

The Developer believes that this history (Marines on Maui) can be better preserved by creating a commemorative plaque describing the history of the site and the Marine's training on the site. The plaque would be placed in an appropriate open area close to the original site of the bunker and near the walking path going through the open area. (Davis and Fortini 2004: 34-35).

Wailea 670

In 1972, Walton Enterprises conducted an inventory survey of a 6,000 ft long section of the proposed extension of Pi'ilani Highway through Palauea, Keauhou, and Papa'anui for the State Department of Transportation (Walton 1972). The area surveyed was 500 ft wide, resulting in an overall survey area of approximately 69 acres. Two weeks were spent in the field (c. 5 acres per day), and 12 sites were identified (SIHP Sites 200-209, 211, 212).

Seven of the 12 identified sites were completely or partially within the proposed highway right-of-way. These sites included two ahupua'a boundary walls (200, 209), three smaller walls, an alignment, two enclosures and an enclosure remnant, a C-shape, and three complexes consisting of multiple platforms with associated enclosures and/or pavements and walls. Walton recommended that the three complexes be preserved until additional work could be completed to determine site function. She also recommended that two platforms (Site 204) and a walled lava bubble shelter (Site 205) be preserved for interpretive purposes. No testing was conducted during this survey. The reasoning given for the preservation of Sites 204 and 205 was as follows:

Sites 204 and 205 are so situated with respect to the proposed truck stop and scenic stop as to offer unusual interpretive possibilities. Site 205 is typical of sporadically used way-stop shelters on journeys from upland to shore. Site 204 is possibly a later and more sophisticated version of this same function. The proposed truck and scenic stop is the present day equivalent of this use ... a place to take a break of rest during a journey. For this reason, rather than for any intrinsic value within the sites themselves, the sites are considered valuable and are recommended to be saved, stabilized and interpreted. Such interpretation should benefit the public by being an historical reminder and refreshment of the close relationship of the past and present. These sites should be verbally interpreted by a roadside sign pointing out the sites, their significance, and their connection by function... it would seem probable that such interpretation could be accomplished at little cost and could provide an added enjoyment to the traveler on Pi'ilani Highway. (Walton 1972: 14-15)

This recommendation is based on a logical assessment that takes into consideration the proposed use of the area, and recognizes that significance is a contextual concept. However, when site significance is directly tied to proposed land use, it is difficult to maintain the assessment if or when the proposed use changes.

Waltons' survey area was approximately one mile inland from the coast and ranged in elevation from 500 to 800 feet, north to south. This was identified as the "intermediate zone",

In the archaeologically better known areas of Hawai'i this elevation zone was generally only transiently utilized, so the survey plan hypothesized that only a few sites would be found, that what sites were found might be roughly made and would have little midden or artifactual evidence of occupation. (Walton 1972:4).

Even though the density of sites found by Walton exceeded that found by Kirch (1969, 1970) for the much larger coastal area, Walton indicated that her findings supported Kirch's hypothesis that the region in general was unsuitable for permanent habitation. She also noted that the area "has a few temporary or transitory shelter areas and no indications of intensive or extensive agricultural activity" (Walton 1972:25). The exception noted is Site 201, which she described as being more complex than the typical short-term habitation site, and she compared it with Kirch's findings, which suggest "a small nucleated population utilizing a marginal area" (Walton 1972:25). Site 201 was located outside of the highway right-of-way and beyond the impact zone identified for the highway, however, Walton recommended that it be "...reserved for a time when further research can be undertaken. Until that time, no disturbance of the site should be allowed" (Walton 1972: 20). To date, Pi'ilani Highway has not been extended into the corridor that was surveyed by Walton, and there is no record of additional work conducted at the sites that were recommended for such by Walton.

In 1979 and 1988, two cursory reconnaissance surveys were conducted of a 670-acre proposed development area located between Maui Meadows subdivision to the north and the Makena resort lands to the south. Portions of Paeahu, Palauea and Keauhou are within this project area, which is situated between c. 400 and 800 feet in elevation. At the time of the earliest survey, the development was referred to as Wailea View Estates (Hammatt 1979). This survey was reported in a two page

letter, and simply stated that no historic properties were located within the 700-acre area; and that the sites previously identified by Walton along the proposed highway corridor could not be relocated.

In 1988, a second reconnaissance was conducted of the same parcels, referred to at that time as Makena 700 (Kennedy 1988). The fieldwork portion of this survey was completed in seven days, for a coverage rate of nearly 100 acres per day. The letter report for this survey states that, "Two archaeologists conducted a number of mauka/makai sweeps in an organized fashion using a four-wheel drive jeep, when possible, and covering the remainder of the property on foot" (Kennedy 1988:3). It is therefore not surprising that only one site (a mapped boundary wall) was identified during this survey. Kennedy was not able to relocate the sites previously identified in the area by Walton, and suggested that these were probably outside the project area to the south, with the possible exception of a wall (Site 200). Regarding the wall, which extended to the east and west beyond the project area, Kennedy stated:

I am uncertain if this was built to keep cattle form attempting to enter this rough lava segment or if (it) was constructed as a boundary between Palauea and Keauhou ahupua'a. In either case, this wall appears on several maps of the area, and I believe this is all that would be necessary in terms of mitigation. It is not unique and has little or no scientific or interpretive value. (Kennedy 1988: 5)

Kennedy also stated that, "I am convinced that there are no surface features that would be jeopardized by the proposed construction" (Kennedy 1988: 5). With that finding, no additional work was recommended or deemed warranted within the area. Later studies would prove Kennedy's observation to be erroneous.

The Makena 700 property changed ownership, and was renamed Wailea 670 by the new developers. Two additional surveys were conducted in 2000 and 2001. The 2000 survey was conducted within the southern portion of the project area in Palauea and Keauhou, and comprised 190 acres. This survey was requested as a condition of State Land Use Commission approval of a change in zoning from agricultural to urban. The southern 190 acres defines a discrete environmental zone consisting of rough 'a'a lava and relatively dense vegetation cover. It would therefore be expected that the two prior and very cursory reconnaissance surveys did not include a full coverage of this (or any other) area.

Sinoto and Pantaleo reported finding 24 archaeological sites comprised of over 40 features within the 190-acre area included in the 2000 survey. Seven of the 24 sites were previously identified, including four sites previously described by Walton in 1972. These include Site 200 (two features), Site 201 (four features), Site 204 and 205. Not relocated were Walton's sites 202, 203, and 211. Three additional previously identified sites were relocated; these include Sites 3156, 3157 and 3158, identified in 1993 during a survey of a cinder haul road in Keauhou (Sinoto and Pantaleo 1993). These three sites include a C-shaped shelter and two walls. These sites were outside the impact corridor of the proposed road in 1993, hence no testing was conducted at the sites at that time (Sinoto and Pantaleo 1993: 12).

The seventeen newly identified sites (4945-4961) include six modified outcrop or overhang areas, two with platforms; four C– or U– shaped shelters; a single wall and a complex of three or more walls; a midden scatter; two trail sections, one with associated pits; and a complex of over six features including enclosures, terraces and a modified outcrop (Sinoto and Pantaleo 2000: 41). Testing was conducted at six of the newly identified sites. Test units consisted of 0.25 by 0.25 meter excavations, and most were terminated at 0.10 meter below surface due to lack of cultural material and bedrock. One test unit, excavated into a visible firepit in a terrace surface (Feature F at Site 4957), resulted in a collection of small amounts of charcoal and marine shell midden (Sinoto and Pantaleo 2000: 36). No dating analysis was undertaken of the collected charcoal.

Two levels of further archaeological work were recommended in the 2000 survey report; mapping by surveyors "at the time of development-related ground survey" was recommended for the six sites comprised of historic era walls (Sinoto and Pantaleo 2000: 43). Additional data recovery, "to permit determination of site function and chronology" is recommended for the remaining 18 sites. This level of work is normally part of inventory survey field work. Because it was not completed during the survey, there are no final recommendations for site preservation; rather the recommendations are contingent on the findings of data recovery. Four sites are recommended for contingent preservation - two complexes (201, 4957) and two trail sections that may have originally connected (4951, 4959). Preservation of the two complexes is further conditioned on the age of the sites; "For the two feature complexes,

preservation may be warranted if a prehistoric date, at the earlier end (A.D. 13-1400s) of the anticipated age range, is obtained" (Sinoto and Pantaleo 2000: 43). It would seem that the functional aspect of these sites would be as important, if not more important, than the age of the sites when considering preservation value. This is another reason why functional determinations are generally required at inventory level work and not data recovery, which is usually implemented as a mitigation measure.

Sinoto and Pantaleo fail to mention that two sites previously recorded by Walton (204, 205) were also previously recommended for preservation (Sinoto and Pantaleo 2000: 17). The two sites are assessed by Sinoto and Pantaleo using significance Criterion "d", which translates generally to having research value; there is no consideration of the interpretive value given these sites by Walton (see above). Recommended treatment of these two sites in 2000 was data recovery prior to destruction (Sinoto and Pantaleo 2000: 44). If there is evidence of SHPD concurrence with Walton's recommendations, then subsequent assessment must take this concurrence into account, and present ample evidence for a change in the assessment. The issue cannot be resolved simply by a failure to recognize the prior assessments.

In their review of the 2000 survey, SHPD indicated a concern over adequate coverage, given the terrain and vegetation within the 190-acre southern portion. Additional concerns over the adequacy of prior coverage in the northern 480-acre section of the project was also raised. An addendum report was therefore prepared in 2001, which presented the results of additional walk-through survey in sections of the 190-acre portion and examination of an aerial photograph of the northern section (Sinoto and Pantaleo 2001: ii). Three new sites (5110-5112) were identified in the southern portion and one new site (5109) was identified in the northern portion of the project area. No specific information is provided regarding the actual area covered during the first survey or the re-survey in the southern section of the project area, so it is difficult to determine how many additional sites are probably present, based on the finding of three new sites in 2001.

Newly identified sites included two rock shelters and two terrace platforms built against outcrop ridges, all of which were interpreted as temporary habitation shelters used during mauka-makai travel (Sinoto and Pantaleo 2001: 18). One of the rock shelters was tested through excavation of a

0.25 by 0.25 meter unit. No further work is recommended for the two rock shelters and data recovery is recommended for the two platforms (Sinoto and Pantaleo 2001: 18).

Regarding the lack of sites in the 480-acre northern portion of the project area, Sinoto and Pantaleo state:

The extensive and compounded nature of the previous disturbances in the northern portion is indicated by the fact that, not even a single wall segment remains within this portion of the project area, which was until recently used for ranching. Major mechanical clearing took place sometime in the past that destroyed all evidence of historic ranching activities. All that remains today, are a few abandoned fencelines that traverse the interior portions of the property. (Sinoto and Pantaleo 2001: 18).

The Wailea 670 project, recently renamed "Honua'ula", is currently proposing a golf course, over a thousand homes, and a commercial center. No additional archaeological work has been conducted in the area since 2001.

Shoreline Area - Keauhou to Papa'anui

Between 1978 and 1989, Bishop Museum archaeologists conducted fieldwork within an important shoreline area, located between the Wailea and Makena resorts. The 17-acre property is situated between Po'olenalena Point to the north and Nahuna Point to the south. The entire shoreline areas of Kalihi and Waipao are included in this property, along with a small section of Keauhou to the north and Papa'anui to the south. The inland extent of the parcel is defined by Makena Alanui Drive and Makena-Keone'o'io Roads. Currently, the area is occupied by the Makena Surf and Makena Place condominium developments. At the time of the first archaeological reconnaissance by Sinoto in 1978, the property consisted of three TMK parcels, and one investment entity was proposing a single condominium development (Makena Shores).

In 1978, a one-day walk-through reconnaissance survey was conducted, and 18 archaeological sites were identified, eleven of which were in Waipao and seven of which were in Kalihi (Sinoto 1978). Approximately half of the project area had been impacted by bulldozers at the time of the survey and ten of the identified sites exhibited evidence of machinery disturbance; three structures were destroyed beyond recognition. Seven

of the sites were large rectangular enclosures with interior paving and midden, indicative of habitation areas. Other sites included four long wall segments in varied degrees of disturbance, an historic era cemetery with at least ten unmarked graves and one marked grave (Rev. John Kukahiko), one long U-shaped enclosure believed to be a canoe hale, and three enclosed platform and terrace complexes. Two of these latter sites were interpreted as possible ko'a or heiau.

Sinoto recommended that a Phase I survey (inventory survey) be conducted of the entire area in order to "evaluate significance and the future disposition of these sites" (Sinoto 1978: 22). Tasks specified in this further work included detailed mapping and recording of all sites, instrument survey for exact locations, selective test excavation to determine the research potential of the sites, and historic research, including a literature search and informant interviews (Sinoto 1978: 22). This was one of the first instances where an archaeological survey was specified to include informant interviews and historic research. Sinoto also recognized the importance of the project area within the context of the region:

Because of the number and types of sites represented, the Makena Shores parcel warrants further archaeological investigation. Another consideration is the number of sites that have already been destroyed in the neighboring areas by the recent influx of developments. Systematic recovery of data and selective preservation is imperative, especially in this region. (Sinoto 1978: 22)

In 1979, Bishop Museum staff returned to the project area for the next phase of work (Sinoto and Rogers-Jourdane 1979). During that time, one additional site was identified and the 18 previously identified sites were mapped and recorded. Subsurface testing occurred at thirteen of the sites. Testing consisted of 0.5 square meter units at ten sites, a 1.0 square meter unit at one site, 1.50 square meters (two units) at one site, and 1.75 square meters (five units) at one site. The sites with the larger excavation areas included the two possible ko'a or heiau (Sites 1830 and 1832). The scope of work included plane table mapping of the sites, however the report includes scaled plan maps for only four of the 19 sites that were surveyed. The site location map used in the 1979 study was the same map provided in 1978; hence, it does not show the location of the newly identified site (B10-32, 1833). The survey included a literature search of previous archaeological work, but did not include

the informant interviews that were specified as part of further work in the preceding study.

Functional and temporal interpretations were offered for most of the tested sites, based primarily on the types and styles of recovered artifacts, and on the results of hydration rind dating of recovered volcanic glass flakes. All of the tested sites contained historic era artifacts, and most of them were indicated as having been used after contact (1778). The presence of a pre-contact component was indicated for three sites (1820, 1827 and 1829), and pre-contact to transitional construction was assumed for the two ceremonial sites (1829 and 1832). One site (1829) appeared to be a single component pre-contact era site; the architectural feature at this site was destroyed at the time of the survey. Dates obtained from ten volcanic glass flakes recovered from seven sites showed ranges between AD 1700 and 1800, with eight of the ranges between 1750 and 1810 (Sinoto and Rogers-Jourdane 1979:51). No charcoal samples were dated during this study.

The habitation sites clustered along the shore within this project area were determined by Sinoto and Rogers-Jourdane to represent a “dual pattern of occupation”, directly following Kirch’s characterization of the coastal settlement in Palauea. This model has the coastal area being “occupied periodically by families from the upland farming areas, who came to stock a supply of fish and other seafoods” (Kirch 1969: 11). The presence of this pattern for the pre-contact era in this project area was supported by the observation that “a paucity of prehistoric permanent-type habitation sites were found, indicating a pattern of frequent periodic (perhaps seasonal) utilization of the coastal areas...with other activities, including permanent habitation and agriculture, occurring further inland” (Sinoto and Rogers-Jourdane 1979: 52). The authors also observe that “the prehistoric record is largely disturbed”, and that “in a majority of the sites tested, no discernible hiatus were present in the stratigraphic record”, suggesting that “occupation originated in the late prehistoric times and may have continued through the early historic period” (Sinoto and Rogers-Jourdane 1979: 52).

One of the logical outcomes of continuous occupation in this area would have been ongoing modification to surface architecture; therefore, one would expect to find few, if any intact structural features that date to the earliest occupations. In this case, a paucity of pre-contact architecture cannot be used as evidence for a lack of permanent settlement,

particularly when the pre-contact components are overlain with historic era structures that indicate permanent habitation.

In beginning the recommendations for this project area, Sinoto and Rogers-Jourdane observe that, “The major concern for contract archaeology is the preservation of cultural resources. Today in Hawai’i, as in other areas, the rapid rate of development threatens many of these resources, especially the prehistoric sites” (Sinoto and Rogers-Jourdane 1979: 53). They go on to describe an on-site meeting with the property owners, and their willingness to revise development plans for preservation purposes. As described by the authors, “This is fortunate; it is unusual for a private concern to be willing to be involved in more than just satisfying the minimal requirements prior to land alterations” (Sinoto and Rogers-Jourdane 1979: 54).

Four of the nineteen identified sites were recommended for preservation. These included the possible canoe shed (Site 1823), a habitation enclosure (Site 1827), a possible ko’a (Site 1830) and a possible heiau/ko’a (Site 1832). Further excavation was recommended for Site 1830, due to the uncertainty of its function and age; as a result, the final recommendation for this site was “pending”. Data recovery excavations (extensive salvage) were recommended for three enclosures (Sites 1820, 1822 and 1826), and a platform complex (Site 1833). Additional work, referred to as limited salvage excavation, was recommended for three of the enclosures (Sites 1819, 1821 and 1832), a wall (Site 1815), and a wall with associated midden (Site 1818). It was also suggested in the table of recommendations that Sites 1830 through 1833 be “perhaps preserved as a complex” (Sinoto and Rogers-Jourdane 1979: 55). Site 1821, an enclosed platform, was recommended for limited excavation and “partial interpretation”. The meaning of this recommendation is not clarified in the text of the report, although “interpretation” is used for all other sites that were recommended for preservation (Sinoto and Rogers-Jourdane 1979: 55).

Additional fieldwork was conducted at the Makena Surf property in 1980 and 1981, with a revised final report completed in 1988 (Dobyns 1988). The research design for the study included three subject areas: 1) site-specific hypotheses regarding function and age, as determined by previous studies; 2) the theoretical hypothesis that the sites studied represent permanent prehistoric and/or historic period occupations; and 3) the methodological hypothesis that “there is no direct relationship

between surface structural walls and subsurface archaeological materials" (Dobyns 1988: 7).

Dobyns' report was the first for the Makena region to include comprehensive historical background information. She notes that the lack of such research in connection with prior archaeological work is "unfortunate", and that, "this lack of a systematic historical profile has contributed to a general sense of Makena as a 'marginal' area unimportant in Maui history" (Dobyns 1988: 8). Dobyns historical background is relatively thorough, and includes the correlation of nine sites within the project area with sites/structures depicted on Torbert's nineteenth century map of the region (Dobyns 1988: 15).

Dobyns' discussion of previous archaeology includes a consideration of prior work that was done on features similar to those encountered at the Makena Surf project site. She found that the four large habitation enclosures found in the project area were rather unique in comparison to the smaller enclosures that had been identified and tested elsewhere in Honua'ula (prior to 1980).

A scaled plan map of sites 1820-1822 indicate that these three enclosures were closer together than what was indicated in prior site maps of the area. For example, the two enclosures of Sites 1820 and 1821 were actually only 7 meters apart, as compared to the approximate 30 meters depicted in prior maps. This raises the probability that the three sites were part of one contemporaneous habitation compound. As indicated in the report, the location of Site 1821 directly correlates with the location of Land Commission Award 2658 to Kiniakua, who describes this apana as a pa hale, or house site. Historic era artifacts confirm that these three sites were occupied during the Mahele. Dobyns' additional excavation indicated that Sites 1820 and 1821 were intensively occupied on a continuous basis, beginning sometime around the sixteenth or seventeenth centuries. The third nearby enclosure (Site 1822) showed "a pronounced absence of habitation indicators" (Dobyns 1988: 69), appears to have been used for either animals or as a garden area.

One radiocarbon sample from Site 1820 indicates an earlier occupation of between AD 1224 to 1524 (Dobyns 1988: 41, 112). Subsurface structural features associated with pre-contact habitation at this site include two walls, and a pavement (Layer VI), which was radiocarbon dated to AD 1539 ± 110 (Dobyns 1988:65, 112). Three radiocarbon dates were obtained

from three general layer contexts at Site 1821; these showed a degree of contamination, and returned dates of AD 1539-present, 1549-present, and 1640-present Dobyns 1988: 112).

A total of 49 square meters (5% of interior surface area) was excavated at Site 1820, and 10 square meters (.4% of total surface area) was excavated at Site 1821. Forty-eight subsurface features, including two in situ human burials, two structural stone features, 24 hearths or pits, and 19 ash or charcoal lenses were identified at Site 1820. Thirty-three subsurface features, including one structural stone feature, four alignments, 11 pits or hearths, and 17 ash lenses or ash/charcoal pits were identified at Site 1821. This type of feature density, in combination with the artifact and midden densities indicated, made these two sites stand out in comparison with the other sites that were excavated during this project.

The work conducted in 1980-81 generally followed the recommendations of Sinoto and Rogers-Jourdane (1979); however, three of the sites recommended for additional salvage excavations (1815, 1818 and 1819) were apparently not subjected to further investigations. The report on the additional work focuses only on the seven sites that were tested in 1980-81, and does not provide an updated list of all the sites in the project area with their status at that time. There is no mention of the possible canoe shed (Site 1823) and a large habitation enclosure (Site 1827) that were recommended for preservation in 1979, and there are no revised or updated recommendations regarding the sites that were excavated. Dobyns did state that the additional work at the two possible ko'a or heiau was not able to confirm or refute these interpretations (Dobyns 1988: 124). This was probably due to the fact that only one additional test unit was excavated at each of these sites.

Given the richness and complexity of the features at Site 1821, and the discovery of two human burials and numerous additional features at Site 1820, it would be expected that the prior recommendation of "partial interpretation" for Site 1821 would have been expanded to preservation; and that Site 1820, clearly associated (temporally and functionally) with 1821, would have been included in that recommendation. Dobyns does mention in the report that Site 1821 was damaged by "land clearance".

An additional week of excavation time (in February 1981) was secured to explore the Layer IV pavement in Test Pits 9 and 10 more thoroughly, but between December 1980 and January 1981, land clearance activities

obliterated the units “Land clearance had destroyed not only the original ground surface but as much as 20 cm to 20 cm of Layer I. (Dobyns 1988: 65)

There is no specific additional information regarding the location and extent of the land clearance activities, although it is mentioned that, “although this site (1830) is scheduled for preservation, land clearance activities in January 1981 destroyed the western 5 to 10 m of the terraced area” (Dobyns 1988: 77). Some disturbance to Sites 1832, also slated for preservation, is mentioned as well.

Dobyns’ conclusion addresses the three hypotheses that were offered. She provides general temporal/functional interpretations for the seven sites studied, and offers conclusions regarding the question of permanent habitation along the coast;

In the absence of inland archaeological evidence, conclusions must remain tentative, but it does appear that leeward adaptation in this area of Maui was characterized by permanent or semi-permanent coastal residence with exploitation of marine resources and small nearby gardens. (Dobyns 1988: 126).

Regarding the relationship between surface architecture and subsurface deposits, Dobyns’ study found:

Not only was there greater subsurface complexity that would have been expected based on surface remains alone, but each of these stratified sites (1820, 1821, 1827 and 1833) yielded prehistoric subsurface deposits that were unrelated to present surface structures. (Dobyns 1988: 127)

There are no records of additional archaeological activities on this property until 1988, when Bishop Museum returned, at the request of a new property owner. At that time, the new owners requested that “archaeological salvage” be conducted at Site 1830, a possible ko’a that was previously designated for preservation (Clark et al. 1990:1). Work was initiated at the site October 17 1988 and continued through December 20. Shortly after work began, it was discovered that the site was actually a multiple-component habitation and burial site. On December 7, 1988, a burial treatment plan was agree upon by several parties, including SHPD and OHA, which allowed for the disinterment of the burials and their reinterment in a concrete crypt at a nearby location on the property.

At the time work was begun at Site 1830, it was surrounded by a chain link fence and defined on three sides by a cinder block wall that was constructed along a bulldozer cut line. As noted in the report, “It was soon apparent that bulldozing in this area had done sufficient damage to the site’s southern and western edges to warrant constructing an updated plan” (Clark et al. 1990: 20). Elsewhere, it is noted that, “Five of the six interconnecting terraces recorded by Sinoto and Rogers-Jourdane (1979) were extensively damaged” (Clerk et al. 1990: 28).

During excavation of Site 1830, eight test trenches and one stratigraphy trench was excavated by hand. Seven additional stratigraphy trenches were excavated by backhoe, and a backhoe was used to break down the cinder block wall that had been built around the site. During this activity, two previously disturbed burials were identified. After multiple burials were found, a series of hand excavated shovel tests were excavated in order to confirm the presence of additional burials. Additional backhoe trenches were also excavated in an attempt to locate all burials at the site (Clark et al. 1990: 20-22).

A total of 31 subsurface features were identified at Site 1830, including 18 burial features containing 20 individuals, four pits, 4 charcoal concentrations, 3 posthole, a coral pebble concentration and a charcoal-stained area (Clark et al. 1990: 47). The presence of three coffins and associated grave items for some burials enabled a determination of approximate period of death for 15 of the 20 individuals. Three were estimated at post-1870s, two at post-1860’, seven at post-1830s, and three between 1778 and 1860s (Clark et al. 1990: 54). Analysis of the surface and subsurface features indicate that most of the surface features are contemporaneous with the historic era use of the site as a burial area, rather than with the earlier pre-contact era use as a habitation site. The authors postulate that when the site was used for habitation, it consisted of an upper and lower terrace, with the lower terrace serving as a cooking area (Clark et al 1990: 133).

Four of six radiocarbon samples submitted from Site 1830 returned reliable ages. Two contemporaneous dates were obtained from the lower cultural (habitation) layer at the upper and lower terraces of the site. One sample, from Layer IVa at the lower terrace, returned a calendric range of AD 1450-1660. A second sample, collected from Layer IVa at the upper terrace, returned three alternate ranges, one of which (AD 1450-1680)

was closest to the adjusted C13 age of the sample, and the date obtained elsewhere for this layer. Charcoal obtained from a pit feature in Layer IV returned two ranges of AD 1527-1559 and 1630-1950. Similar ranges were obtained from charcoal in a post hole, which returned two ranges of AD 1531-1543 and 1640-1950 (Clark et al. 1990: 68). The authors selected the later ranges in these two cases, arguing that the wood had to post-date the two Layer IVa samples. Actually, the sixteenth century ranges could easily post-date the earlier deposit, which could then be given a tighter time frame of middle to late fifteenth century.

Other fieldwork conducted in 1988 included monitoring of vegetation clearing at Site 1832, which was preserved, per previous recommendations. The status of other sites within the property is not mentioned in the 1990 report. As built, the Makena Surf condominium project encompassed approximately the northern 3/4 of the property. The specifics surrounding the fate of Site 1827, a large habitation enclosure recommended for preservation, is not known, other than the fact that it is no longer present. The southern portion of the property, which contained two additional sites recommended for preservation (1823 and 1821), remained vacant and became a generalized dumping area for green waste and construction debris; additional machinery clearing occurred from time to time. At some point between 1980 and 1996, all surface remains of Sites 1820 and 1821 were wiped out.

There are no records of additional work at this project site until 1996, when a new condominium project was proposed for the southern portion of the property. At that time, the owners requested a review of the status of Site 1823, the possible canoe hale, to determine if preservation was still warranted. SHPD stood by the preservation status, and so a preservation plan for the site was prepared, with the following stipulations:

The damaged walls will be repaired and stabilized;
Landscaping will involve planting of native plants outside the perimeter of the site;
A plaque with a short explanation of the site will be set in stone where it will be viewed by pedestrians. (Hammatt 1996: 3)

In addition, the SMA permit to the developer required a 50 foot buffer zone around the preserved site (Hammatt 1996: 3).

Presently, Site 1823 is set in the center of a manicured lawn, with no native

plants within the 50 foot buffer zone. The sign for the site is adjacent to a gate at the makai edge of the property line, over 100 feet from the site. Members of the public are notified that there is no public access to the site, and that any disturbance to the site is punishable by HRS. It cannot be determined whether the damaged walls have been repaired, as it is not possible to approach the site without trespassing on private property. In many ways, this preserved site has suffered the same fate as the reconstructed Wailea Point site. It is a landscaping element, rather than a culturally imbued connection with the past. Sadly, the sign makes no mention of the homes, gardens and burials that were once present in the immediate area of this lone structure.

In the end, the optimism voiced by Sinoto and Rogers-Jourdane in 1979 was not brought to fruition; of the five sites recommended and found to be fully worthy of preservation, only two survived the development process. Both of these sites, although accessible for viewing from a distance, are gated isolates that have lost their integrity of setting, location, feeling and association. In this and the many other cases, the design of the preservation process has diminished the significance of the preserved sites.

Keauhou to Mo'omuku

Makena Resort Golf Course

In January of 1974, Bishop Museum staff conducted a reconnaissance survey of 1000 acres within the 1300-acre Makena resort project area. The survey area was divided into five parcels, and included portions of Keauhou, Kalihi, Papa'anui, Waipao, Ka'eo, Maluaka, Mo'oiki, Mo'oloa and Mo'omoku. The survey was completed in 14 days (71.4 acres per day) with a crew of five persons. A total of 264 sites/features were enumerated for the project area; of these 113 were plotted on the project area topographic map and given Bishop Museum site numbers. No testing was conducted, and no scaled maps were completed of the sites. Clark's report was eight pages in length, with a 15-page appendix of site descriptions.

Clark's report assigned formal Bishop Museum site numbers to 113 (less than half) of the identified sites, and provided site-specific initial evaluations based on a three-level system: A=Valuable, B=Reserve, and C=Marginal. The report provides no discussion as to what these three terms actually mean, or how the evaluations were arrived at (Clark

1974: appendix). It is probable that they followed the same conceptual categories that were described by Cleghorn (1974).

Among the 113 sites listed in Clark's report, only one (Site B8-9, SIHP 1855, a heiau complex) was given evaluation code "A". Two sites (1856, 1857) were given evaluation code "A/B"; 50 sites were coded "B", and the remaining 60 sites were coded either "B/C" or "C". The recommendations for further work do not address the evaluation codes assigned to the sites; rather the recommendations were made by development parcel area. Completion of site location survey and recording was recommended for all of the parcels, and test excavations were recommended for ten sites, all within Parcel III. Preservation was recommended for the heiau (Site 1855) in Mo'oiki. Clark's justification for this recommendation is as follows:

This site will make a beautiful historic place of interest, indeed a tourist attraction. Preservation of this heiau will be of benefit in furthering knowledge of the local cultural heritage. Since it is located on a high knoll, it should not interfere with any planned development in the area. (Clark 1974:8)

Clark's recommendation that site location survey and recording be conducted in all development parcels was never implemented, and it was four years before a Bishop Museum crew returned to the Makena resort area. By that time, the golf course was already under construction.

In March 1978, a crew from Bishop Museum under the supervision of Tom Dye returned to a 96-acre parcel in the western portion of Clark's survey area (Parcel III-A) in Maluaka and Mo'oiki, along the mauka side of Makena Road. A small parcel along the coast in Maluaka was also included in this study. The 1978 field work was a combined survey and salvage excavation project, with two major and distinct work phases (inventory survey and data recovery) compressed into one operation. This structure allowed for no outside review of the survey findings prior to the initiation of mitigation field work. In this situation, the golf course construction priorities were driving the archaeological work, as was the case in the adjacent Wailea golf course.

Dye's crew attempted to relocate the 47 sites Clark had previously identified and marked on the map within the 96-acre project area.

According to Haun:

Inaccuracies in the preliminary site locations, and subsequent bulldozer activity in the area, necessitated intensive reexamination of the entire survey area. This was accomplished by a systematic series of transverses by the crew to locate all significant sites evidenced by surface remains. (Haun 1978:4)

Of the 85 sites (187 component features) located during the 1978 survey, only 17 (20%) were definitively identified as being previously recorded by Clark; thirty of Clark's sites that should have been within the survey area were not clearly reidentified. According to Haun, these sites were either given new site numbers, destroyed by recent bulldozing, or were mislocated by Clark and were actually outside the survey area (Haun 1978:5).

In March and April 1978, subsurface testing and/or data recovery excavation was conducted at 11 of the sites (14 features) identified during the March 1978 survey. This represents 13% of the identified sites and 7% of the identified features. The fieldwork was conducted by Bishop Museum staff under the supervision of Alan Haun, and included single test units at nine features, two test units at one feature, and linear excavations consisting of several continuous units at four features. Linear excavation trenches ranging from ten to three meters in length by one meter wide were conducted at Sites 1853 (Feature 1; 10 m), 1886 (Feature 2; 3 m), 2230 (Feature 1; 8 m), and Ma-B8-140 (Feature 1; 8 m).

In summarizing the findings of the 1978 survey, Haun provided counts and general descriptions of the 187 archaeological features by 14 formal/functional categories. The most numerous feature type was rectangular and polygonal enclosures, represented by 51 features, 46 of which were determined to be prehistoric. Frequencies of other feature categories are: prehistoric walls (26), C-shaped enclosures (22), terraces (19), historic walls (14), U-shaped enclosures (14), circular enclosures (9), L-shaped walls (6), pits (6), platforms (5), rock shelters (5), caves (4), wells (2), and cairns (2; Haun 1978: 6-10).

The evaluations and recommendations found in the 1978 report are in summary format only, with no site or feature-specific table of recommendations. Among the 85 identified sites, 20 were described as being outside of the golf course construction area, and therefore were not mapped or tested during this study (Haun 1978:88). These sites were recommended for further work, "if destruction is planned in the

future”. One of these 20 sites (1883, a complex of nine features) was recommended for preservation. The 11 sites with some testing conducted were specifically mentioned in the recommendations; however, the remaining 54 sites were dismissed with the following remarks:

“For the majority of the sites in the project area, the Phase I survey was sufficient to mitigate adverse effects of the proposed construction. Most of these sites are small, poorly preserved structures with little evidence of surface or subsurface deposits, and minimal potential for public-oriented display. The recorded location information and site descriptions include all the data significant for research purposes.“ (Haun 1978: 88).

The only site descriptive information provided for these 54 sites is a tabulation of the identified features, feature type, presence of artifacts or midden, dimensions, area, period of construction (prehistoric or historic) and location (knoll or hilltop, hillside, low plain, high plain or ocean side). Scaled plan maps were completed only for those sites where testing occurred, and for the heiau complex that was designated for preservation (Site 1855).

For eight of the 11 sites tested, this work was determined to have “recovered enough significant information ...to constitute appropriate mitigative action for these sites” (Haun 1978: 88). Two sites, B8-129 (an enclosure) and B8-130 (a C-shape) were recommended for preservation, “to exemplify the diversity of prehistoric sites” (Haun 1978: 88). The other sites tested were described as being “of minimal value for public education purposes” (Haun 1978: 88).

Finally, the heiau complex (Site B8-9, 1855), consisting of 11 features was recommended for preservation, along with two adjacent sites (2229, 2230) consisting of four features. According to Haun, “All three sites are in relatively good states of preservation and are ideal for public-oriented development - - stabilization, restoration and interpretation” (Haun 1978: 88).

In the discussion of findings, a few paragraphs were devoted to an analysis of the settlement pattern, which Haun described as being “seriously skewed by extensive modifications of the land surface,” which included large bulldozed clearings and cuts, roads, and historic period construction (Haun 1978: 86). Haun identified 14 site clusters that he felt were comparable to the Site 1028 complex identified by Kirch in

Palauea. The Palauea complex was interpreted by Kirch as representing a "nucleated settlement composed of several households belonging to the same cognatic descent group, or 'ohana" (Kirch 1970: 27). Haun used this model to suggest that as a reasonable hypothesis, "most of these clusters represent single residential groups" (Haun 1978: 86). He also indicated that this hypothesis could not be tested within the project area, because it was only a "small slice" of an entire ahupua'a, because of the recent land modifications in the area, and due to "time constraints" (Haun 1978: 86).

The first and second reasons are not valid, because the model is site-specific and is based on accurate functional interpretations of individual features within the respective clusters. Testing this hypothesis does not require an entire ahupua'a, only the identified sites and features in question, which were intact at the time of Haun's study. For example, Kirch's original hypothesis regarding Site 1028 was tested through the excavation of the features he had previously identified at Site 1028, not through an ahupua'a study. The features identified by Kirch as house sites associated with a hypothetical men's house or hale mua were found to be special purpose activity areas that were used on a very limited basis, not general purpose habitation areas, as previously thought (Bordner 1980; Major et al. 1995.). Similar data was readily available within Haun's study area, but it was not retrieved.

The issue of time constraints in this case is another example of development priorities controlling archaeological investigations; it is also an often-cited reason for the lack of in-depth or thorough field work. Had a more compelling argument been made regarding the research value of the sites in question, it is likely that minimally, additional archaeological work would have been funded prior to the destruction of the sites. The concept of significance for research value is directly related to the researcher's ability to demonstrate significance. It is subjective, and is contingent upon the kinds of research questions that are being asked about the study area. In this case, a valid research hypothesis was put forward and the potential to test the hypothesis was clearly present within the study area. There were precedents at Bishop Museum (since 1976) for recommending that sites be preserved until research was completed. In the case of the Seibu golf course, there was no follow-through with recommendations regarding the research potential of numerous sites. Recognition of additional significance criteria often comes only when a concerted effort to find more information is made. If the effort is not put forth, the cultural or educational value of a site is often not recognized.

In June 1978, Bishop Museum returned to the Seibu golf course area to complete the “survey and excavation” of sites to be impacted by construction. Two areas of the golf course, identified as increments 2 and 3, were surveyed in two different field projects. The second increment was surveyed in May and the third increment was surveyed in June. Both areas were within the original project area surveyed and reported in 1974; however, the prior survey did not plot the locations of identified sites in the increment 2 or most of the increment 3 area. The exception is a coastal section of land associated with the 16th and 17th holes at Maluaka Point.

The second increment area encompassed about 100 acres and was located in Waipao and Papa’anui, between the 70 and 200 ft elevation contours. The scope of work defined for the 1978 filed work included reconnaissance to locate sites; recordation, including detailed site plan-mapping; test excavations; salvage excavations, contingent on the results of testing; and evaluations and recommendations regarding each site (Sinoto 1981: 2). At the onset of the report, Sinoto remarked that;

“Unlike the southern portion of the Seibu property surveyed previously, this area was characterized by a marked paucity of intact sites with a relative lack of variation in site types among the identifiable features.” (Sinoto 1981: 4)

Fourteen sites were identified within the 100-acre survey area, including five surface midden scatters that were “remnants of sites that had been destroyed during the bulldozing of the golf course fairway centerline” (Sinoto 1981: 4). Additional site type include three modified outcrops (one with a platform); one rectangular enclosure, one terrace, two terrace/platform complexes, and one terrace with a surface midden deposit, and one large complex containing 20 structural features. Additional cleared areas of unspecified size and location were also noted, within which there were no intact archaeological remains.

Subsurface testing was conducted at all of the sites except the large complex (B9-31), which was determined to be outside of the golf course construction zone and given a “preserve” recommendation. Two additional sites, the enclosures (B9-25) and a terrace and platform (B9-29) were also determined to be outside the construction zone and given a “preserve” recommendation. These sites were also described as having “interpretive potential of the structural remains” (Sinoto 1981:

14). The 11 remaining sites were described as having no further research potential, and were "archaeologically cleared" (Sinoto 1981:14).

In discussing the findings, Sinoto remarked on the discrepancy that occurs when comparing this area with adjacent areas to the south. No historic era artifacts were found, as compared to sites to the south; and relatively few pre-contact artifacts were found, as well as no substantial subsurface midden deposits. All of the cultural layers observed appeared to be single component, and no datable materials were recovered. Possible explanations suggested include "socio-political, topographical, or other environmental factors" (Sinoto 1981: 13). The extent of recent land alteration was ruled out as a significant factor in causing this discrepancy.

In conclusion, Sinoto states that, "Due to the low number of sites and poor state of preservation, all archaeological work sufficient to mitigate the adverse effects of the proposed golf course construction was completed in this area" (Sinoto 1981: 13).

Also in 1978, Bishop Museum completed a similar survey of a c. 120-acre portion of the golf course in Ka'eo and Maluaka. This section of the golf course (increment 3) did not exhibit the degree of disturbance noted in increments 1 and 2. The number of identified sites (85) was also considerably higher as compared to the second increment examined that same year, but was comparable to the findings of the first increment survey (Cordy 1978: 8).

A total of 107 features were identified among the 85 sites located in the third golf course increment. The frequencies of formal feature types within this area was similar to that found in the first increment, with enclosures being the predominant feature type (96, 51%) in the first increment and 50 (48%) in the third increment). The Haun report (first increment) tabulated enclosures by shape, whereas the Cordy report (third increment) tabulated them by free-standing or abutted (Cordy 1978: 15). Walls ranked second in frequency for both survey areas, with 46 (25%) in the first increment and 13 (12%) in the third increment. Differences in the distribution of some feature types occurred; 9 platforms (8.4% of all features) were identified in the third increment, as compared to only 6 (3.2%) in the first increment. Cordy tabulated five midden scatters in the third increment, whereas this feature type is not listed for the first increment. This difference is attributed to analyst perspective rather than actual occurrences.

During the third increment survey, 30 features were tested through excavation of a single 1.0 meter square test unit. Three features were tested with two 1.0 meter square test units, one was tested with a 0.5 by 0.5 meter unit, and one was tested with three 1.0 meter square test units (Cordy 1978: 19). Cordy found very similar soil stratigraphy at all the features tested; it consisted of a surface layer, a cultural layer, and a sterile pre-cultural layer. All but three of the features tested reportedly contained a single cultural layer, designated as Layer II (Cordy 1978: 20).

During subsurface testing, Cordy's team recovered 88 traditional artifacts, most of which were volcanic glass flakes (63, 72%). The only other artifact type with more than five items recovered was coral abraders/files, with 15 items (Cordy 1978: 22). Twenty-four of the volcanic glass flakes from nine features were subjected to hydration rind dating. All of the dates were after AD 1570 and most were in the middle 1600s. Unfortunately, no radiocarbon dates were submitted from this project area.

Cordy's report contains a more in-depth analysis of functional categories, including a model for distinguishing between temporary and permanent housing, and between four specific types of permanent housing sites (sleeping houses, men's houses, canoe houses and work shelters). Based on his calculations, Cordy identified 11 features at six sites (out of 26 habitation features) that fit the metrics for pre-contact permanent habitation (Cordy 1978: 37). Three of these were clustered at Site B8-227 and four were clustered at B8-231. In addition, eight features indicative of historic era permanent housing were identified (Cordy 1978: 38). The most frequently identified functional type was pre-contact agricultural, represented by 37 sites, two of which also showed temporary habitation features. Twenty-one sites were identified with pre-contact temporary habitation features, and 11 sites were identified with historic era livestock structures (Cordy 1978: 48).

Using the permanent habitation sites and dates obtained from hydration rind dating and historic artifacts, Cordy presented an estimate of the resident population within his study area. Beginning in AD 1600 with a population of six, a maximum of 30 people was reached in AD 1700-1725, then it decreased through 1800 to six, with a rise to 25 between 1850 and 1875. A second decrease to possibly five people occurred until 1975 (Cordy 1978: 57). The above numbers are based on a count of

six persons per identified permanent house site, per each 25-year period. Thus, two of the pre-contact era house sites are shown as being occupied continuously for 200 years each, based solely on dates obtained from volcanic glass (Cordy 1978: 57). Both of these sites may actually represent one single occupation, given the rather light artifact densities at these sites (only volcanic glass was recovered from these two features). In light of the problems inherent in hydration rind dating, there is insufficient evidence to suggest that each of these features provided habitation for 36 people over a period of 200 years. Also, if each of these stand-alone features served as a sleeping house, where are the associated structures, minimally for eating, that would have been nearby to support a continuously reproducing family?

Cordy's significance evaluations are heavily weighted by the goal of his survey, which was to recover as much information as possible for understanding the questions he was interested in answering regarding the prehistory of the Makena area (Cordy 1978: 59). As noted in the conclusion, "The information recovered has greatly improved our knowledge of the area", and "...with the extent of the work done... significance of the remaining sites must be considered minimal" (Cordy 1978: 59).

Regarding the preservation potential for any sites in the area, the following was offered:

Preservation value of the sites in this survey area for public exhibition and/or long-term scientific work is also minimal. For public exhibition, either an undisturbed area with highly visible sites of high quality is necessary, or an individual site of unique quality that is not already preserved. The prehistoric sites in the survey have minimal exhibition value because the area has been altered by historic activities (both ranching and coastal housing). No individual sites of unique quality are present. The only unique sites are the agricultural sites, which are reflective of adaptation to the arid environments of Maui, and none are highly visible in this area. Another arid area with excellent examples of such sites should be searched for and protected. ...Post-contact sites in the area are not unique. (Cordy 1978: 60)

In concluding, Cordy listed 18 sites that appeared to be outside of the golf course construction areas, and would therefore possibly be preserved by default, rather than because of any value inherent in the sites.
In 1981, additional reconnaissance level survey work was conducted

in areas to be affected by an extension of the Seibu golf course. The work was conducted by EISC, under the direction of Richard Bordner and David Cox (Bordner and Cox 1982). Information about the project area for this survey is very limited, as is the information provided for the identified sites. The survey attempted to plot site locations on a scaled contour map of the project area, and to provide brief verbal descriptions and photographs of the sites. No testing or detailed site mapping was conducted. Overall acreage of the survey area is not given; it is a generally irregular area that runs mauka of the inland extent of the Seibu golf course, and to the south of the golf course along the Makena-Keone'o'io Road. It includes portions of Papa'anui, Ka'eo, Maluaka, Mo'oiki, Mo'oloa and Mo'omuku Ahupua'a.

A total of 79 sites with an undocumented number of features were identified during the survey (Sites 1901-1985; except deleted Sites 1913, 1919, 1928, 1932, 1942, and 1956). This number was more than expected, given the generally mauka location of the survey area. The authors had predicted that prehistoric sites would be rare above the 200-ft. elevation. This was not born out in the survey findings. Bordner and Cox also examined the hypothesis that settlement tended to cluster in the central portions of ahupua'a. Actual site patterns tended to reflect topographic features rather than political boundaries (Bordner and Cox 1982: 14).

The upper elevation sites were described as follows:

Except for the localized use of planting mounds or terraces, the vast majority of possible agricultural features located in the upper portion of this study were mounds from 1-3 meters in diameter, of cleared soil with the loose stone thrown to the edges. These fit Handy's description for sweet potato planting areas, for which the area was noted. ...Of interest is the location of the mounds; they are not dispersed throughout the area, but appear to be concentrated in the immediate area of house sites. Thus, the upper portion of the study area appears to consist of house sites located on ridge-fronts surrounded by cleared planting areas on the lower slopes. (Bordner and Cox 1982: 15)

Among the identified sites were five complexes thought to potentially include heiau. These sites (1936, 1940, 1941, 1944 and 1961) occurred in two general areas. Sites 1936, 1940 and 1941 were located in the mauka area of Mo'oiki, between 150 and 200 feet in elevation. Sites 1944 and 1961 occurred in the makai portion of Mo'oloa, between 20 and 25 feet in elevation.

Significance assessments were not offered for the identified sites in the 1982 report; recommendations for further work were made for each site, and included minimally, accurate plotting for all identified features. Site specific recommendations are unavailable for 49 of the sites, due to a missing page in the manuscript. “Possible testing” was recommended for 20 of the 49 sites and “sub-surface testing” was recommended for 13 sites. No additional work other than accurate plotting, was recommended for 16 sites. Three sites found to be outside the project area were recommended for future testing if and when they would be impacted by construction. Most of the sites recommended for no further work were cattle walls and small C-shaped shelters. Also included in the list for no further work was an historic well site, found to be in good condition. This site was found at an elevation of 65 feet in Mo’oloa and was certainly a unique find for the elevation range. It was constructed with cut stone blocks and had a concrete lip. No habitation structures were identified near this well, and its relationship to other sites in the area is not explored in the report.

There are no records of the site locations being accurately plotted, and the project area covered by Bordner and Cox was not subjected to additional studies before it was divided into smaller development parcels. In 1983, Seibu applied for a County of Maui SMA permit to construct four wells, two storage tanks and access roads in order to service the golf course and club house. The well sites were located along the mauka edge of the golf course, within the areas previously surveyed by Bordner and Cox. Seibu contracted with J. S. Athens Consulting to conduct the archaeological survey required by the Planning Commission as a condition for the permit (Bath 1983: 1).

The overall acreage of this survey area is not provided in the report; it involved one area in Ka’eo where two wells and a tank were clustered; one area in Mo’oiki where a well and a tank were clustered; one well site in Maluaka; and a road corridor beginning at Makena-Keone’o’io Road in Mo’oloa and continuing uphill to the well and tank site in Mo’oiki. Eleven sites were recorded during this survey and given new SIHP site numbers (3100-3110). Included in the identified sites were four historic era cattle walls, which were in all likelihood recorded by Bordner and Cox (1982). Also identified and given new SIHP site numbers were two enclosures that had been previously marked with flagging tape (Bath 1983: 3).

During the survey, it was discovered that the well and tank sites in Ka'eo had been previously bulldozed, removing all surface structural remains. One disturbed midden scatter (Site 3100) was found at a well site here; it was described as "...the remains of a previously dozed archaeological site" (Bath 1983: 5).

In Mo'oiki, two sites (3101, 3102) were found outside the well construction area, and five sites were found within the tank construction area (3106-3110). Sites 3108 and 3109 were noted as the previously recorded features, and it is suggested by Bath that Site 3108 is Bordner and Cox's Site 1926 (Bath 1983: 8). Three historic walls were recorded along the access road corridor through Mo'oloa and Mo'oiki. One is adjacent to and parallels the Makena-Keone'o'io Road (Site 3103), one is oriented mauka-makai (Site 3105) and apparently once connected with the northern end of Site 3103. In a more recent study, these two walls were found to correlate with the boundary of a nineteenth century land grant (1499:1) to Kalili (Donham 2006b). The common practice of referring to these and many other land grant boundaries in the region as "cattle walls" (Bath 1983: 14) or as being associated with "ranching" is misleading and negates the presence of many 19th century private land holdings by Native Hawai'ians in the region. Bath's report recommended realigning the access road through an existing break in the Site 3103 wall, rather than creating a new break in the wall.

The five sites identified within the area of the Mo'oiki water tank were recommended for "archaeological salvage", or avoidance by shifting the tank to the northeast (Bath 1983: iii). We can only assume that the tank location was shifted, as there are no available records of data recovery work at Sites 3106-3110.

In 1985, Seibu identified an area of approximately 2 acres for a water reservoir, located along the mauka side of the golf course in Ka'eo. This project location is to the south of the well and tank area surveyed by Bath in 1983, at the same elevation range. Previously identified Site 1916, described by Bordner and Cox as a site complex consisting of a terraced platform, terraces and cleared areas, was located within the impact zone of this reservoir. The site, estimated to be 14 square meters in area, was recommended for "possible testing" in 1982. Seibu subsequently contracted with J. S. Athens Consulting to conduct data recovery excavations at Site 1916, and to reexamine the proposed route of the waterline from the reservoir.

At the onset of fieldwork at Site 1916, it was discovered that the site actually covered 1.9 acres, or nearly the entire area of the reservoir project, between 260 and 280 feet elevation. A total of forty structural features were recorded at the site within the project area boundaries; additional features were observed outside the project area to the north and south (Cordy and Athens 1985a: 27). The most common feature type were small oval to rectangular enclosures, 19 of which were recorded. One platform, six terraces and three pavings were also recorded, as well as retaining walls, free-standing walls, and cleared soil areas. Only one structural feature, a rectangular enclosure, was interpreted as a habitation feature (temporary dwelling). With one exception, all other enclosures and terraces at the site were interpreted as agricultural features (Cordy and Athens 1985a: 33). One of the enclosures was interpreted as a religious structure, due to the presence of two large water worn beach stones and a possible altar area inside the enclosure (Cordy and Athens 1985a: 34). The single platform was thought to be a possible burial prior to testing; it was found to contain no burial, only two pieces of volcanic glass and three pieces of cowry shell (Cordy and Athens 1985a: 42). The feature was subsequently interpreted as a work area.

A total of 16 test units were excavated at 10 features within Site 1916, with the largest excavated areas (3 square meters) at Feature 1, the habitation enclosure, and Feature 15, a rectangular terrace. The surface and uppermost cultural layer at Feature 1 contained historic era artifacts including tin cans, a can opening key, glass, and other metal fragments. Also present on the surface inside the enclosure was an ulumaika stone. Volcanic glass flakes and one coral file were also recovered during excavation (Cordy and Athens 1985a: 41). A firepit containing quantities of charcoal was excavated as well at this feature. The charcoal returned two alternate ranges of AD 1670-1720 and 1800-1935 (Cordy and Athens 1985a: 49). No additional charcoal samples were collected at the site for age determination. Hydration rind dates from six volcanic glass specimens returned mixed results, with three ranges dating to the late twelfth to thirteen century. These dates were rejected due to the later date returned from the charcoal sample from Feature 1.

In conclusion, Site 1916 was characterized as a prehistoric agricultural field complex with one field house located on a central ridge with a view of "almost the entire site" (Cordy and Athens 1985a: 50). The site is postulated to have been used by people who lived along the shoreline. A construction date for the site was inferred to be the late 1600s, based

on the dated charcoal from Feature 1. The presence of historic artifacts at Feature 1 suggests use of the site during the 1800s or possibly early 1900s as well.

Even though relatively few artifacts were found at Site 1916, it is an important category of historic property because it represents the extensiveness and ingenuity of Hawai'ian agricultural pursuits in the Makena region. It is not so much the excavations at this site that provided the important information, but the mapping of all features, not just "major" features, as is often the case even to this day. It is likely that the family who farmed this 2+ acres of land did so on a regular, inter generational basis, as fluctuations in rainfall allowed. If one envisioned crops growing in all of the 40-plus areas modified for planting, the so-called "barren" landscape would look quite different indeed. There were many other sites comparable to Site 1916 within the area surveyed by Bordner and Cox; a few of these (such as Site 1969) were subjected to studies at a later date; many were not.

In 1985, additional survey work was also conducted by Cordy and Athens along the route of a waterline and access road between the proposed reservoir and Makena Alanui Road. This area had been previously surveyed by Bordner and Cox, and portions of two of their identified sites (1949 and 1952) were within the survey corridor. Three additional newly-identified sites were found along the corridor. All five of the sites were along the mauka portion of the corridor. The previously recorded features included two historic era walls that continued well beyond the survey corridor; no work was recommended at the locations where the road and pipeline would breach the walls.

The three newly-identified sites included a complex of five features (Site 2101), consisting of an enclosure, wall segments, a C-shape and a modified outcrop; amorphous planting areas (Site 2102), and a small enclosure with amorphous planting areas (Site 2103). Site 2102 were determined to be very similar to the multiple features mapped at Site 1916, and was determined to have no excavation potential, and "...a detailed transit map would be of doubtful value considering the time and effort involved" (Cordy and Athens 1985b: 6). Therefore, we have no record of the full extent and nature of this agricultural area. Site 2103 was found to be outside the impact area of the corridor, so no further work was conducted at that site.

Testing was conducted at Site 2101, which was located along the centerline of the corridor. Seven test units were excavated, one at each feature and two in areas between the features. Recovered remains included marine shell midden, charcoal, a few fish bones, very few basalt flakes, a few volcanic glass flakes, and no formed artifacts (Cordy and Athens 1985b). Nine of the volcanic glass flakes were submitted for age determination, however the results were not accepted, and the validity of the glass dating process was called into question (Cordy and Athens 1985b: 8). Within a few years of this report, volcanic glass dating was determined to be inaccurate and its use by archaeologists had ceased. Site 2101 was interpreted to be similar to Site 1916, although smaller and of a shorter use period.

Both of the tested sites and many others in the general vicinity were characterized as being part of the "Makena field system" (Cordy and Athens 1985b: 12), which was described as follows:

In sum, although the inland sites in the Makena area are not large and impressive agricultural systems as in Kohala and Kona on Hawai'i Island, they are nonetheless remains of a sizable agricultural system. And the many archaeological studies in Makena have shown that the remains are surprisingly intact. This fact, plus the wealth of archival information on the Makena area, make the archaeological study of this region extremely important. Makena is a case study of human adaptation to an arid environment - more arid perhaps than in Kohala. Perhaps settlement was late in this region, but permanent settlement and the construction and expansion of an agricultural system did occur and was highly successful. (Cordy and Athens 1985b: 13)

In 1987, Seibu Hawai'i identified two large parcels (III and IV) that were slated for additional golf course development. Parcel III consisted of 158 acres and was located between 100 and 250 ft. elevation in Mo'oiki and Mo'oloa. Parcel IV consisted of 207 acres and was located between 200 and 480 ft. elevation. This parcel included portions of the ahupua'a of Keauhou, Kalihi, Waipao and Papa'anui, and was directly mauka of the Wailea resort southern acreage. Both of these parcels had been included in Clark's initial 1974 reconnaissance survey, and portions of Parcel III had been included in Bordner and Cox's 1982 survey.

Three studies were conducted of these parcels between 1987 and 1989. A reconnaissance survey was started by International Archaeological

Research Institute, Inc. (IARII) in 1987; however, "The unexpectedly large number of sites (221) prevented IARII from completing the proposed scope of work, and additional research was required to enable SHPD to evaluate the significance of recorded sites (Gosser et al. 1996: 4). Bishop museum was subsequently hired in 1988 to supplement the IARII survey, and at that time, 75 sites comprising over 300 features were identified (Pantaleo and Charvet-Pond 1989). The following year (1989), Bishop Museum conducted data recovery excavations at sites within the impact areas of the golf course, and the draft report on this work was completed in 1996 (Gosser et al 1996). A final report was completed in 2002 (Clark and Gosser et al. 2002).

The 1988 Bishop Museum fieldwork resulted in a rather significant reduction in the number of identified sites as compared to the prior survey. This difference is mentioned only briefly in the Bishop Museum report, which states that more than one of Schilt's features were incorporated into some of the feature designations used by the Museum staff (Pantaleo and Charvet-Pond 1989: i). The reduction of feature counts from 415 to 300 would mean that at least a third of the features would have been combinations. All of the features described in the 1989 report are single structures or caves, so it is difficult to determine what constituted the combined features. During the 1988 field work, 20 features were tested, and in June 1989, 19 features believed to possibly contain human burials were tested. Of these, two (B7-32 and B8-94) were confirmed to be burials (Pantaleo and Charvet-Pond 1989: 24, 25).

Substantive analysis of the Parcel III and IV sites did not occur until the completion of the 1989 data recovery field work and report (Gosser et al 1996). In addition to the standard research questions regarding age, function and duration of sites, and subsistence strategies, Gosser et al. attempted to address questions concerning intra– and inter-community organization. This required a distinction between temporary and permanent habitation sites, which was made based on feature size and density values of recovered portable remains.

During the data recovery work, the total feature count for the two parcels was increased from 300 to 493, while the site count was reduced from 75 to 70. The reduction was the result of combining a number of previously recorded sites with Site 1969, and two additional sites with Site 2563. The added features were found primarily within the areas of Sites 1941 and 1969. Both of these sites were first recorded by Bordner and Cox (1982);

however, their prior work is not mentioned in any of the Bishop Museum reports for these two golf course parcels. The 1989 data recovery work was conducted at 78 features in 21 sites; 16 of the tested features were in Parcel IV and the remainder were in Parcel III.

The largest site complex recorded and the site with the highest number of tested features was Site 1969, which comprised a total of 227 features and six additional previously recorded sites (Gosser et al. 1996: 130. Twenty-eight features at Site 1969 were either tested or subjected to data recovery excavations. The entirety of this site was also mapped in plan view. Site 1969 occupies a similar elevation range as Site 1916, previously studied by Cordy and Athens (1985). It is of similar size (2.18 acres), and it has a habitation area atop a prominent, centrally located knoll (Gosser et al. 1996: 128). Like the habitation feature at site 1919, the subsurface deposit at Site 1969 Feature 1 contained a relatively sparse collection of artifacts. Nearly 12 square meters were excavated at Feature 1, and the artifact count from all units included 35 pieces of basalt debitage, 48 pieces of volcanic glass, five volcanic glass cores, one utilized flake tool and one coral abrader (Gosser et al. 1996: 141). This complex differed from Site 1916 in that it was contained within walls.

A second large complex examined in Parcel III was Site 1941, which was comprised of 27 features, 11 of which were excavated in 1989. This agricultural and habitation complex was also mostly contained within walls. A charcoal sample recovered from one of the features (Feature 24) at Site 1941 produced the earliest date obtained from the Seibu resort area, AD 1014-1100 (Gosser et al. 1996: 353).

A total of 61 charcoal samples from 18 excavated sites returned non-modern ages (Gosser et al. 1996: 341). Five of the dates obtained have ranges that predate AD 1400. They were recovered from sites 1941, 1964, 2569, 2584 and 2598. One of these sites (2598, overhang shelter) is in Parcel IV and the remainder are in Parcel III. One of the early dates was obtained from charcoal found in association with a human burial at Site 2569, an enclosure. Twenty of the dated samples were recovered from Site 1969, which showed that most of the features post-date AD 1640. One or two features, including a cave and enclosure may have been occupied in the middle fifteenth century prior to the intensification of agriculture at the site (Gosser et al. 1996: 355).

Despite the generally low frequency of artifacts and midden at habitation sites within the study area, Gosser et al. identified features at eight sites in Parcel III (Mo'oiki and Mo'oloa) to be permanent habitation structures. These included the primary features at Sites 1936, 1941, 1964, 1969, 2557, 2569 and 2570. From these sites, four (1936, 1941, 1969 and 2576) were interpreted as being kauhale, which was defined for the Makena area as "a group of functionally-related structural features with associated agricultural features" (Gosser et al. 1996: 416). Activities represented in the structural features include permanent habitation, workshops, plant preparation, and cooking, with agricultural and storage features. As noted by Gosser et al., "Some of these complexes are enclosed by extensive wall and may designate specific kuleana or other land-use boundaries" (Gosser et al. 1996: 416).

Habitation sites identified in Parcel IV (Keauhou to Papa'anui) did not include permanent habitation or kauhale complexes; sites in this area were described as "recurrent habitation areas" (Gosser et al. 1996: 423) and included four overhang rock shelters with associated terraces (Sites 2587, 2592, 2595 and 2598) and one terrace (Site 2615). Occupation of these sites was presumed to occur on a seasonal basis. This site type was not found in Parcel III. Features at three sites in Parcel IV (2597, 2601 and 2602) were identified as temporary habitation features. This category is not explicitly defined, so it is uncertain how these features differ from the recurrent habitation features.

In comparing the Makena area to the northern portion of Honua'ula, Gosser et al. note two primary differences in the settlement pattern:

1) settlement in the Makena region is denser with less indication of ahupua'a bounded settlement than areas to the north, and 2) land division in the Makena area is subdivided into land units below the ahupua'a-level (possibly 'ili) while the area to the north is not dissected. Denser settlement may equate to greater population density, while land subdivision indicates older established communities (Gosser et al. 1996: 441).

Recommendations regarding the future treatment of the 70 identified sites and 493 features within Parcels III & IV were divided into three categories: permanent preservation, conditional avoidance, and no longer significant. Permanent preservation as described in the report involved in situ preservation with protection from development activities and maintenance of site integrity on a long-term basis (Gosser et al. 1996: 446).

A total of 258 features at seven sites were recommended for permanent preservation. These included 225 features at Site 1969, six features at Site 1936, 26 features at Site 1941, six features at Site 2592, and three individual features containing human burials at Sites 2563, 2569 and 2570. The first three sites, located in Parcel III were selected due to their representation of traditional kauhale, with Site 1969 as the large variant, Site 1941 as the medium variant and Site 1936 as the small variant. Site 2592, a complex of overhang shelters located in Parcel IV, was selected as "an excellent example of adaptation to the environment, especially topography, and of the nature of settlement in Parcel IV" (Gosser et al. 1996: 446). None of the sites in this category were identified for interpretation or for public access or education.

"Conditional avoidance" was applied to sites that were located beyond the immediate impact areas of the golf course and were not subjected to data recovery work during the 1989 field season. A total of 157 features at 47 sites were included in this category (Gosser et al. 1996:447-449). Thirty-nine of these 47 sites are listed for data recovery in a recent draft management plan completed for Makena Resort Corp. (Dashiell et al. 2004). The status of the eight sites with 20 features that were left off the recent list is currently unknown.

The "no longer significant" category as used in the report actually means "no longer present". This was applied to features that were destroyed during construction of the golf course and were subjected to data recovery excavations during the 1989 fieldwork. Sixty-seven features at 28 sites were placed in this category.

In 1989, Bishop Museum was also requested by Seibu Hawai'i, Inc. to conduct fieldwork at previously recorded site 1961, located along the Makena-Keone'o'io Road in Mo'oloa (Williams 1989). The site was recorded by Bordner and Cox in 1982 as a series of connected enclosures, and was interpreted by them as a possible heiau. The goal of the additional work at this site was as follows: "Specifically, evidence was sought to resolve whether or not the site represented a ritual structure such as a heiau or a chiefly residence" (Williams 1989: 1).

Five days were spent with a crew of three clearing, mapping and excavating Site 1961, which was found to consist of eight structural features representing two phases of site construction (Williams 1989: 5). The three connected enclosures observed by Bordner and Cox

were interpreted by Williams to be historic era animal pens that were built on top of a pre-contact era stepped terrace. One of the pens also incorporated portions of a preexisting enclosure that was determined to be contemporaneous with the stepped terrace. Four test units were excavated at the site, and historic era materials predominated, with bottle glass, metal, slate, and square nails recovered. Traditional artifacts included two basalt flakes, a basalt core and a piece of volcanic glass (Williams 1989: 15).

Williams was not able to verify the exact function of the original structure; he noted that it falls within the range of variation for both a small heiau or a chief's house. He concluded with the following observation:

Without further excavation the exact function of the original structure of Site B7-16 (1961) cannot be known, but regardless of whether or not Site B7-16 was a heiau or a chiefly residence, enough data was recovered to indicate that the site was initially constructed for a specialized purpose. (Williams 1989: 36)

Preservation was recommended for Site 1961 under NRHP Criteria (a) and (d). NRHP significance as a traditional cultural property, or HAR Criterion "e" for cultural value, is normally assigned to heiau sites. In this case, it was not used. Criterion (a) is used for a wide range of sites and applies to sites that are associated with events or broad patterns in the history of an area. In this case, a specific event cannot be used, because the actual age and function of the site was not determined. This site is still intact and is included in list of sites to be preserved in the recent draft management plan for the Makena resort (Dashiell et al. 2004: 4).

There are no records of additional archaeological work in the mauka portions of Makena resort until 1996, when Aki Sinoto consulting conducted an inventory survey of a 20-acre parcel for a waste water treatment plant for the golf club (Titchenal 1996). The survey parcel was within areas previously surveyed by Bishop Museum in 1989, and by Bordner and Cox in 1982; it was located partially in Mo'oiki and partially in Mo'oloa. Six archaeological sites were identified, despite a considerable amount of bulldozer disturbance in the area. Three of the sites (1939, 2576 and 2580) were previously identified. The new sites included an enclosure interpreted as a storage structure (Site 4173), an enclosure interpreted as a habitation area (Site 4193), and an agricultural complex comprised of 21 features (Site 4194).

Titchenal's report provides an interesting analysis and discussion of a specific type of enclosure feature that is common in the mauka areas of Ka'eo, Mo'oiki and Mo'oloa. A comparison of several of these features throughout the Parcel III survey area led to his conclusion that they represent crop storage structures, specifically for the storage of sweet potatoes and Irish potatoes. In his conclusion, Titchenal states:

"Currently available evidence suggests that the archaeological manifestations encountered in the subject project area, as wall as Parcel III in general, primarily reflect a singular agricultural expansion encompassing roughly 100 years from the late prehistoric through ca 1860. This agricultural expansion was accompanied by a succession of increasingly precise land divisions and the increased development of crop storage methodologies and associated structures. Evidence indicates only minimal cultural activity prior to or following this period of expansion. A clear florescence of this agricultural enterprise is indicated for the period around 1850." (Titchenal 1996: 111).

All of the six sites identified during Titchenal's survey were determined to be significant under HAR Criterion "d" and were recommended for additional data recovery. In addition, two enclosures, Site 1939 Feature 2, and Site 4173, a large storage enclosure, were recommended for preservation under Criterion "a".

In 1996, Aki Sinoto Consulting was hired to fulfill the archaeological aspects of State Land Use Commission (LUC) change in zoning application for six "petition areas" within Makena Resort. Field work for this project was conducted in May 1996, January 6-23, 1997, and April 10, 1997 (McIntosh et al. 1998: 1). The report of findings for the six petition area indicted that four of the areas had been previously surveyed, and additional survey work was conducted in only one of these four areas (Area 5) to locate new sites (McIntosh et al. 1998: 23). Two of the petition areas (2 and 3) were subjected to inventory survey. These included a 17.5-acre parcel in Ka'eo and Maluaka, along the mauka side of the golf course and south of a water tank (Area 2) and a 15.7-acre parcel to the north of Area 2, in Papa'anui and Ka'eo (Area 3).

Eleven sites were newly identified in petition Areas 2 and 3; these included nine sites in Area 2 (Sites 4382-4390) and two sites in Area 3 (Sites 4391 and 4392).

One previously identified site (2591) in petition Area 4 was tested to determine presence/absence of cultural remains and to evaluate site significance. No new sites were found in the portion of Area 5 that was examined. This area corresponds with a 26.5-acre parcel that was subsequently sold to Dowling Company and others for the development of a Four Seasons hotel; it was later subdivided and a portion was dedicated for use as a retentions basin (see discussion on hotel and infrastructure).

During the inventory survey of petition Area 2, subsurface testing was conducted at eight of the 24 identified features. Those tested in included a mound, two enclosures, a C-shape, a lava blister and two overhang shelters. Test units were also excavated at eight of the 22 features identified in Area 3; these included two enclosures, a wall, a cleared, level area, and four overhang shelters (McIntosh et al. 1998: 24). With a few exceptions, most of the test units were 0.5 by 0.5 meters. Twenty-two artifacts were recovered from four sites during the survey and testing. The clear majority of artifacts (18 of 22) were recovered from two features at Site 4391 in Area 3. These included 11 volcanic glass flakes, four coral files, a bone awl and a bone fishhook from Feature 3; and one piece of bottle glass from the surface of Feature 1 (McIntosh et al. 1998: 86). Midden remains were recovered from four features at four sites. As with the artifacts, Site 4391 Feature 3 showed the greatest amount, with 215 grams recovered from the test unit. This represented 85% of all the midden recovered within the two petition areas.

A dating sample recovered from the Feature 3 overhang shelter at Site 4391 returned three alternate ranges, two of which extend to the modern era. The accepted date for this site was AD 1695-1812 (McIntosh et al. 1998: 97). The earliest of three dates obtained from this project was collected from Site 4389, an enclosure in petition Area 2. This sample returned ranges of AD 1330-1340 and 1399-1452. The third date, obtained from Site 4387 Feature 1, and overhang shelter in petition Area 2, produced a calendric range of AD 1450-1648 (McIntosh et al. 1998: 96).

Recommendations for identified sites within the petition areas were restricted to the two areas surveyed during the project (2 and 3) and to the single site tested in Area 5. Six of the twelve sites were determined to require no further work, and selected features at six sites were determined to require data recovery. These included Site 4383 Feature 1, 4386 Feature 1, 4387, 4389, 4390, and 4391 Features 3 and 7 (McIntosh

et al. 1998: 115-116. None of these 12 sites were recommended for preservation. The sites listed in McIntosh et al for data recovery were also listed for data recovery in the recent draft management plan (Dashiell et al. 2004).

Maluaka Point

Maluaka Point is situated roughly midway between Keawala'i Church to the north and Pu'u Ola'i to the south. On either side of the point are beaches - yellow sand Maluaka Beach to the north and red sand Oneuli Beach to the south. During the pre-contact and historic eras, the exposed lava formations along the shoreline at Maluaka Point provided source locations for underground fresh water outflows, and two freshwater wells have been recorded for Maluaka Point - Site 1854 and Feature 10 at Site 1853.

Maluaka Point and the area immediately inland is the central and core area of the Makena Complex (Site 1266), recorded in 1973 during the State-sponsored inventory. At the time the Makena Complex was recorded, 16 enclosures were enumerated, as well as at least three platforms, numerous walls, a burial in a wall, and a pit (probable well). During the first reconnaissance survey for the Seibu golf course in 1974, three sites were recorded along the shoreline at Maluaka Point (B8-6 though 8; Clark 1974). These included a well, an enclosed platform, and the burial in a wall noted during the previous survey. No mention is made in this or in subsequent Bishop Museum reports about the previously recorded Makena Complex.

When Bishop Museum returned to Maluaka Point in 1978, the enclosed platform (B8-7, Site 1853) was mapped and excavated (Haun 1978). During this work, the site area was expanded to include 17 mapped features, 12 of which were assigned feature numbers. Identified features included three enclosures, seven walls, a well and a platform. Surface artifacts and midden were observed only on the platform (Feature 2) and within the enclosure surrounding the platform (Feature 9).

Haun described the platform at Site 1853 as being 7.8 by 5.5 meters, by 0.40 meter high, with a thick pavement of water worn cobbles and boulders and pieces of coral. He also noted a stairway in the center of the mauka side leading to the top of the structure. Four 1.0 by 1.0 meter square test units were excavated into the platform. These were aligned east-west and spaced at one to three meters apart (Haun 1978:22, 23).

Artifacts from the four test units indicated that the site was historic in age:

The artifact assemblage yielded is almost completely historic --nails, glass, ceramic fragments, pieces of slate, a Jew's harp, and a variety of metal objects. One piece of basaltic glass was the only possible evidence of prehistoric occupation, although this was associated with the historic materials. (Haun 1978: 25)

Based on a hydration rind date obtained from the single volcanic glass flake, and on recovered artifacts, Haun estimated that this platform was occupied between the late 1700s to mid-1800s (Haun 1978: 78). The lack of traditional artifacts calls into question the date of AD 1714-1794 obtained from the volcanic glass flake. Haun described what appeared to be two construction phases of the platform that may have coincided with two occupation phases; however, no distinct layering was observed in the cultural deposits to reflect two components. Haun assigned a "probable residential function" to the platform; although he questioned as to how slate fragments and a lead type fragment (an indicator of school) would be at a house site. Portable slate tablets and slate pencils were standard equipment for school children (and adults learning to read and write) in the middle to late 19th century. It is also possible that the residents were recycling lead to make fishing gear, since a range of different lead items were found, in addition to the type piece.

As indicated in a subsequent study of Maluaka, the Site 1853 complex corresponds with a house lot claimed by Kahaleokaia during the Land Commission hearings in 1848, and awarded to him as LCA 4157:1 (Donham 2006: 11). In testimony relating to the claim, Kahaleokaia described four houses in this parcel, and referred to the location as Papakahiula.

That same year (1978), Cordy revisited the area and assigned new Bishop Museum site numbers to four of the features that had been included in the Site B8-7 complex by Haun. Cordy's definition of a site as "a solitary structure or a tightly clustered set of structures" (Cordy 1978: 8) resulted in this re-numbering of features that were not considered to be tightly clustered. Thus, Haun's Feature 5 enclosure was reassigned Bishop Museum Site B8-232, and the Feature 1 enclosure was reassigned Bishop Museum Site 238. This latter enclosure was tested by Cordy, who excavated two square meters within the c. 800 square meter enclosure, and determined that it was an entirely historic era habitation site. Stylistic

traits of recovered artifacts from this enclosure indicated a use period of the middle and late 19th century, or 1870-1910 (Carter 1978). The location of Cordy's Site 238 correlates with one of the houses shown at Maluaka Point in Torbert's map of the area, dated circa. 1848-1856, and was probably one of the house sites referred to by Kahaleokaia in his house lot description.

SHPD did not assign State site numbers to Cordy's Bishop Museum sites, and subsequent work in the area retained Haun's single site number for this complex, due to the historical records that support a single site designation for the complex (Donham 2006).

Cordy and Haun did not recommend additional archaeological work at either of the two house sites located at Maluaka Point. These sites and the associated features mapped by Haun were destroyed during construction of the Seibu golf course. In hindsight, this was unfortunate, because both of these historic house sites had direct historic documentation that would have greatly enhanced the value of the archaeological data. This situation was also found and not taken full advantage of in Waipao, where relatively limited excavation occurred prior to site destruction (see above).

Additional work was conducted inland of the golf course at Maluaka Point in 2001 and 2005; these studies are discussed below.

Prince Hotel and Infrastructure

During a ten-day period in March 1979, Bishop Museum staff conducted a reconnaissance and "limited phase I survey" of approximately 100 acres in coastal Papa'anui and Ka'eo that included the 38-acre proposed Seibu hotel site and other resort residential/apartment parcels located primarily to the north. This survey, which covered 10 acres per day, identified 21 sites with 26 recorded component features (Rogers-Jourdane 1979b: 4, 26). This survey was conducted during a period of very dense ground covering vegetation, as indicated in the text of the report and in the photographs of identified features. As noted by Rogers-Jourdane, "Detection of sites, almost exclusively surface architectural features, was difficult because of the dense vegetation and the land modification in the recent past by construction equipment" (Rogers-Jourdane 1979b: 4). As with other reports from this time period, there is no indication on maps or in the text as to the location and full extent of the recent land modification.

No subsurface testing was conducted during this survey, which identified eleven of the sites as prehistoric and eight as historic, with two indeterminate. The prehistoric features include six platforms, three enclosures, two L-shaped walls, and a cave. The historic features include six walls and three enclosures. (Rogers-Jourdane 1979b: 25). There is little additional interpretive information offered in the report.

The site evaluations and recommendations devised by Roger-Jourdane were somewhat different from preceding Bishop Museum reports, and used priority levels as opposed to straight significance evaluations. In this approach, high priority was given to sites that showed, "a) Destruction imminent; b) Representative site type; and c) Unique site and/or exhibiting good preservation" (Rogers-Jourdane 1979b: 27). Nine of the sites (43%) were given a high priority rating; however, of these nine sites, only one (Site 1854) was recommended for preservation and two (Sites 2263 and 2270) were recommended for preservation as an option over test/salvage. The remaining high priority sites were recommended for either testing or testing/salvage excavation. The Medium priority sites were those that showed a) Destruction imminent, and b) Fair condition. Four sites were ranked as medium priority and were all recommended for testing.

The low priority sites merited, "a) Further archaeological work contingent on time requirements for High and Medium priority sites, b) Disturbed condition, and c) Types well represented by High and Medium priority sites" (Rogers-Jourdane 1979b: 27). Three sites were ranked as low priority and recommended for testing. A fourth priority category, "Cleared", appears in the assessment table for five sites, along with a recommendation of "no further work". All of these sites are walls or wall remnants that were dated to the historic era. They ranged in length from over 20 to over 50 meters, but are all depicted on the site location map as single points. It is unfortunate that the actual extent and orientation of these features was not mapped (or maps not provided in reports) as part of either the initial survey or by subsequent studies.

Bishop Museum staff returned to the 38-acre Seibu hotel parcel in June of 1979 to complete the recommended testing and salvage excavations (Denison 1979). Work was conducted at six of the eleven sites previously identified within this portion of the original 100-acre survey area. At the time of this work, the vegetation was not as dense, and Denison indicated that, "The greatly reduced vegetation cover was undoubtedly the major

factor leading to changes in interpretations between the reconnaissance survey and the present work" (Denison 1979: 1). Unfortunately, the greatly reduced vegetation did not lead to a reexamination of the project are to determine if sites were missed during the prior reconnaissance.

Three of the six investigated sites were previously ranked as high priority and three were ranked as medium priority. The high priority sites included an enclosure remnant (Site 2268), an enclosure and platform complex (Site 2269) and a platform and terrace complex with six features (Site 2270). These three sites were located in relatively close proximity, at an elevation of 55-60 ft. AMSL. Testing at these sites consisted of a single 1.0 meter square unit at Site 2268, a 1.0 meter unit with a 0.5 by 1.0 meter trench and one 0.5 meter unit at Site 2269, and five 1.0 meter units with two trenches (1.0 by 3.0 meter and .5 by 2.5 meter) at Site 2270.

No portable cultural remains were recovered from Site 2268. Small amounts of marine shell midden and coral were recovered from Site 2269, however no artifacts were recovered. At Site 2270, marine midden, charcoal, kukui nut shell, coral and unidentified bone fragments were recovered, along with a possible abrader fragment, a drilled conus shell, a piece of aluminum, and a .22 caliber shell casing (Denison 1979:16). Sites 2296 and 2270 were interpreted as residential sites; and no functional interpretation was given for Site 2268, which was significantly impacted by bulldozing prior to the work.

Work at the remaining three sites was limited to either none, one and an "informal test pit". These three sites (1864, 2265, and 2272) were determined to contain no midden or artifacts. Sites 1864 and 2265 were also determined to be mostly rubble rather than intact features. Site 2272, although a mostly intact retaining wall, was determined to have no significant information after completion of a single test unit, the size of which was not provided. As indicated above, Site 2272 corresponds with the location of a sweet potato patch observed by Handy during his visit to Makena in the 1930s. This site was re-examined in 2005-6, and two additional features were added to the site (Donham 2006a).

Denison's recommendation regarding the six sites he tested was that no further work was necessary at any of the sites. As stated,

Consideration was given to recommending preservation at Site B8-110 (2270). However, because of the fair-to-poor condition of the site, and

the salvage excavation undertaken there, it was felt that preservation of this site would not contribute significantly to either the scientific or educational resource of the area. Therefore, no recommendation for the preservation of this site is made. (Denison 1979: 21)

No further recommendations were offered by Denison regarding the remainder of the c. 40 acres involved in this hotel site.

In 1987, Seibu Hawai'i contracted with Bishop Museum to conduct a survey of a proposed cul-de-sac and parking lot, to be constructed at the south side of the Prince hotel. The survey was requested by SHPD after their review of a County of Maui SMA permit for the project. The proposed parking lot was to encompass a portion of the former two-acre Makena School Lot, and the cul-de-sac would encroach onto the parcel along the makai side of the existing Makena-Keone'o'io Road (Cleghorn et al. 1988). A reconnaissance level survey was conducted in 1987, at which time the 2-acre parcel was designated as SIHP Site 1007, with five surface structure features identified. These included two boundary walls along the north and west sides of the parcel, two square stone platforms, presumed to be privy foundations, and a cement-lined cistern (Cleghorn et al. 1988: 6-7).

The location of identified school features in relation to the proposed parking lot indicated that one of the privies and possibly the northern boundary wall would be affected by the parking lot construction. Further work was therefore only recommended for these two features (Cleghorn et al 1988). In 1991, Bishop Museum returned to conduct "intensive data recovery" at Site 1007. At that time, excavations were conducted at both of the privies (Features 3 and 4) . Maximum depth of the deposits at Feature 3 was 0.80 meter, and at Feature 4, 1.41 meters. Fifty-six lots of artifacts and five fish bone samples were collected from the privy features (Hurst 1991). Both of the privies were estimated to be post-1894, with use terminated at the time the school closed circa 1928-29. No further work was recommended at these features or at the school site at that time. A report on the data recovery findings has not been completed to date.

Additional work was conducted to the north of the Prince hotel site in 1993, when Aki Sinoto Consulting conducted an inventory survey of a newly acquired 0.37-acre parcel adjacent and to the south of the hotel ballroom. Six structural features 50 years or older were identified on the parcel and were given a single SIHP site designation (Site 3194). The

features included an historic era trash midden, stone walls associated with a kuleana boundary, a stone mound, a small enclosure, and a historic well (Sinoto 1993). Two trenches were excavated through the historic trash midden and a considerable amount of artifacts and midden was recovered. Data recovery work was conducted, and a pre-contact deposit dating to AD 1410-1660 was identified beneath the 19th century deposit (Jones et al. 1994).

The Makena School lot was included in two recent inventory surveys conducted after the parking lot for beach access was completed. The remainder of the school lot and additional properties comprising approximately 25 acres were transferred from Makena Resort Company to Keaka LLC. circa 2000. This area was contemplated for a hotel site, and an inventory survey was conducted in 2001 by Archaeological Services Hawai'i. During the 2001 survey, the only feature associated with Site 1007 that was identified was the cistern (Feature 5). No further work was recommended at the school site, however, it was recommended that a plaque be installed commemorating Makena School (Rotunno-Hazuka et al. 2005: 47).

A subsequent survey of a smaller 12-acre project area that included the school lot was conducted in 2005. At that time, the previously recorded boundary walls for the school lot were found to still be in place, along with the cistern and the unexcavated portion of the Feature 4 privy. Also identified in the 2005 survey were the remnants of the school building foundation, which had not been previously recorded (Donham 2006a: 32). The cistern was mapped in detail for the first time, and four .50 by .50 test units were excavated in the area of the school structure. The deposit in the immediate area was found to be somewhat disturbed, but generally indicative of an early twentieth century school deposit. Recovered artifacts included 20 pieces of chalk, 217 pieces of flat window glass, 10 pieces of No. 2 lead from pencils, 10 pieces of slate chalk board, and six slate pencil fragments. Also recovered were two pieces of chicken eggshell, 3 fish bones and ten pieces of marine shell midden (Donham 2006a: 34). The 2006 report recommended that the data recovery report on excavations conducted in 1991 be completed, and that the oral interviews with local informants familiar with the school be conducted as an ethnographic/historic documentation of the school (Donham 2006a: 178).

In addition to the Makena school lot, Makena Resort Company transferred c. 10 acres of two remnant parcels between the golf course and Makena-Keone'o'io Road at Maluaka Point to Keaka LLC, along with a 19-acre parcel immediately mauka of the school site, between the Makena-Keone'o'io Road and the Makena Alanui Road. This entire area was tentatively slated for a hotel and was surveyed in 2001; however, it was subsequently portioned into two separate projects before the County permits were applied for. A twelve-acre portion, including the two makai parcels and the school lot, was reported on in 2005 (Rotunno-Hazuka et al. 2005), and was also resurveyed in 2005, in response to public concerns about the adequacy of the report.

Portions of these parcels were within the areas previously surveyed by Cordy (1978), Haun (1978) and Rogers-Jourdane (1979) prior to hotel and golf course construction. During the recent surveys, it was found that several of the sites recorded during the early golf course surveys were still present or partially present along the eastern edges of the golf course. These included an enclosure remnant and wall associated with Site 1853, two enclosures (Sites 5795 and 5796, formerly BPBM sites 233 and 234), a wall (Site 5797, 240). In addition, two sites recorded in 1979 were found to still be present along the Makena-Keone'o'io Road; these included Sites 1864 and 2272 (Donham 2006a).

Overall, 15 sites comprising 80 component features were identified within the 12-acre area slated for condominium development. Eleven sites comprising 22 features were previously identified during the five prior surveys that had included portions of the project area (Donham 2006a). Eleven of the total 15 identified sites were historic in age and included the Makena School, five historic home sites (four of which were also modern), a ranch-related storage enclosure, a garden or animal enclosure, and historic/modern pasture walls and fences. The remaining four sites were interpreted as pre-contact in age and included an agricultural complex with midden deposits suggestive of former habitation (Site 5706), one habitation site with a C-shaped enclosure and wall remnants (Site 5707), an agricultural complex with additional modern features (Site 5710), and a ceremonial complex consisting of a high platform, several terraces and an enclosure remnant (Site 5711).

The main platform at Site 5711 was first identified during the 2001 survey, and seven additional associated features were identified during the 2005 survey (Donham 2006a: 97-109). The site encompassed 1,420 square

meters along the top and south-facing slope of a large gulch. The site is immediately inland from the golf course, and roughly half of the Feature 4 enclosure was taken out by the golf course. The gulch makai of the site has been filled, so it is not possible to recreate the topography that was once present at this site. The platform has been tentatively identified as the Onouli Ko'a, described by Walker in 1929. Oddly, it was not seen by Cordy (1978), who recorded an historic ranch wall along the opposite side of the gulch, and an historic era enclosure (Site 233) approximately 150 ft. to the northeast. Subsurface testing was conducted at one of the lengthy terraces that were constructed along the side of the gulch below the platform (Feature 3). Considerable amounts of marine shell midden, fish bone, coral, and charcoal were recovered from a single 1.0 by 1.0 meter unit. Charcoal from the lower portions of the cultural layer was dated with two alternate ranges of AD 1310-1370 and 1380-1470 (Donham 2006a: 101). This is one of the earliest dates obtained from the Maluaka Point area.

The Feature 4 enclosure, located makai of the main platform was also tested and a thick (0.55 m) cultural deposit was found which contained even denser frequencies of midden and artifact remains as compared to Feature 3. The midden density at this feature (1,607.63 grams) is greater than that obtained from any of the features tested during the 1996 survey of Parcel III, located mauka of this study area. Two radiocarbon samples collected from this feature both dated to AD 1680-1740 (Donham 2006a: 103).

All of the features within Site 5711 were designated for preservation in 2006. Subsequently, one the features in the bottom of the gulch was further tested and determined to be non-cultural. This feature was therefore removed from the preserve area. Also recommended for preservation was a burial feature identified in Site 5706.

This burial was determined to post-date a habitation midden deposit at the feature that was dated to AD 1630-1650 (Donham 2006a: 168).

With the exception of Site 5711 and portions of Site 5706, the pre-contact sites and subsurface deposits within the project area were found to be in relatively poor condition. As indicated in the report,

The density and distribution of the historic (and modern) era features indicates that the project area was intensively used during the twentieth

century; this use has most likely resulted in the removal of pre-contact surface architecture and has contributed to the erosion of subsurface cultural deposits. (Donham 2006a: I)

Archaeological monitoring of construction activities was recommended for this project area in order to ensure that the preserve areas are left intact and to document any unidentified findings.

Makena State Park

Prior to the 1990s, there are no reports of formal archaeological surveys within Makena State Park. Stokes (1918) reported the presence of a heiau atop Pu'u Ola'i, however, he did not ascend the hill to determine if structural remains of the site were still present. No follow-up field work was conducted at this location by Walker in 1929. One historic era site, the Pu'u Ola'i Slaughterhouse (Site 1583) was recorded within the park area by Wright in 1971, during the state-wide historic sites inventory. The northern edges of the park were also included within the boundaries of the Makena Complex, recorded in 1973 during the state-wide survey. The southern boundary of this complex extended to the base of Pu'u Ola'i, including Oneuli Beach and some land to the inland side of the Pu'u. In 1989, three human burials were inadvertently discovered during ground alteration work at the base of the south slope of Pu'u Ola'i (Yent 1989). These and a fourth burial (Site 4120) inadvertently exposed by high surf were reinterred on Pu'u Ola'i by the Maui/Lana'i Island Burial Council.

During the early 1990s, the Division of State Parks considered acquiring additional lands and began improvements at Makena State Park. In 1992, an inventory survey was conducted of two proposed acquisition parcels in Mo'oloa, at the southern end of the park. Overall area examined was approximately 2.5 acres (Beggerly 1992). At the time of Beggerly's survey, one of the two parcels (103) had been graded, and remnants of walls and stone concentrations were seen on the second parcel (102). Beggerly suggests that these features were part of the previously recorded Site 250, described earlier by Davis and Bordner as the remains of a village (EISC 1981:C-14). This site was described as "an extensive complex of badly collapsed structures including wall segments, enclosures, platforms, pavements and possible house sites" (EISC 1981: C-16). Portions of what may have been included in Site 250 were revisited by SHPD in 1991 after the property owner had grubbed the property. At that time, numerous features were indistinguishable, although one wall and some structural

remnants were visible. The disturbed area was assigned SIHP Site 2909 because it could not be definitively associated with Site 250 (Donham 1992).

No new sites were recorded during the Beggerly survey; however, remnants of stone features were noted in an adjacent parcel near Paniaka Fishpond, which was state property. A plat map of the two parcels is attached to the report, showing Paniaka Fishpond adjacent to the northern boundary of parcel 102. This site was not discussed or assigned an SIHP site number during the 1992 Beggerly survey; however SHPD conducted a subsequent site visit to the area and assigned Site 2938 to Paniaka Pond. Site 2939 was assigned to the archaeological features observed along the eastern side of the pond.

In 1992, the Division of State Parks also conducted monitoring of an access roadway and parking lot, and conducted an inventory survey of nine parcels that were included in Makena State Park (Yent 1993). The 1992 survey identified and recorded three archaeological complexes; five historic features were also described but not assigned site numbers during the survey. The archaeological complexes include Site 3136, a complex of 22 features located along the lower makai slopes of Pu'u Ola'i, to the north side of Little Beach. The features are predominantly walled enclosures of various sizes, a platform, and wall segments (Yent 1993: 16-21).

The second complex, Site 3137, was located inside the crater, atop Pu'u Ola'i. It consists of five features, including three enclosures, a retaining wall and two parallel walls. Yent recommends additional work at this site to determine function (Yent 1993: 25). It may possibly represent the remains of the heiau described by Stokes, although Yent does not mention this possibility. The third complex (Site 3138) is located at the south end of the park, just south of the newly constructed southern parking lot. It consists of twenty features, including a concrete cistern, a stone ramp, walls, and several overhang shelters and caves along a high natural bedrock cliff formation. To the north, in the low-lying area, is Paniaka Fishpond. Yent suggests that the site represents ranching activities or recent (1970s) "hippie" residencies (Yent 1993:29). It is likely that some of the features represent a former residential home site.

Historic period sites recorded by Yent include five concrete and stone structures (CS). CS-1 corresponds with the Pu'u Ola'i Slaughterhouse,

previously recorded as SIHP Site 1583 by Wright (1971). Yent describes it as "a concrete slab laid atop a stone and mortar platform" with concrete walls and "meat hooks on several of the walls" (Yent 1993:30). CS-2 and 3 were described as concrete structures probably related to ranching activities. One included a trough and the other appeared to be constructed for water storage. CS-5, a concrete trough, was also associated with ranching. The final concrete structure, CS-4, is a 40 by 30 foot concrete slab with a rock-lined pit and metal pipes to the side, and a semi-subterranean garage area. This site was believed by Yent (1993: 32) to be the base station for the FAA radio range towers that were present in the immediate area. This structure has since been identified as the home of the Kukahiko and DeLima families (Donham 2006b).

Archaeological testing was proposed for CS-4 in 1998, as part of the planning process for an on-site residency at the park (Carpenter 1998). It is uncertain whether this fieldwork has occurred, as a record of these findings is currently not available. To date, the on-site residency has not been constructed.

Residential/Small Parcel Development

Paeahu

The bulk of the shoreline area in Paeahu comprised the Wailea resort development, which has been discussed above. One condominium development, known as The Palms, was constructed just north of the resort area in 1989s. An inventory survey was conducted of this area prior to construction by Archaeological Consultants Hawai'i (Kennedy and Biglow 1989). Three walls described as being "recent" were identified within the project area and were not assigned historic site numbers. Eighteen backhoe trenches were excavated throughout the area and no subsurface cultural deposits were identified. No further work was recommended at this project area (Kennedy and Biglow 1989). During mass grading for the project, an undisclosed number of human skeletal remains were disturbed. SHPD in Honolulu was notified of the find, however, there is no record of a follow-up investigation by SHPD (Griffin 1989).

Palauea

Most of the immediate shoreline area of Palauea between Polo Beach and Halo Point was initially included within a single development parcel with the mauka area of Palauea discussed above. A few of the parcels at

the north end of the beach predated the resort, and older 20th century homes were present on these parcels. After McCormack sold the property to new investors circa 1992, the former parcels makai of the Makena-Keone'o'io Road were sold, and the remaining beach area was subdivided into small parcels of 1.0 to 0.5 acres and sold to individuals. At this time, there are approximately 25 small parcels along the shoreline between the Polo Beach condominiums and Halo Point. At least 19 of these parcels have been subjected to some level of archaeological work, beginning in 1989. Only two of these studies have reported no findings. A summary of the findings will be presented here, from north to south along the shoreline of Palauea. Additional summary information on these parcels and a map of the identified sites is found in Donham 2005.

Parcel 3
In 1990, PHRI conducted an inventory survey of the 1.6-acre parcel 3, located adjacent to the south side of the Polo Beach condominiums. During the survey, one historic site (2496) comprising six features was identified within the project area. The site was found to cover nearly all of the level portions of the parcel, covering an area of 1,250 square meters (Donham 1990b: 12). Identified features included the remnants of a wall, a semicircular alignment, two linear alignments of boulders, and a disturbed C-shape or terrace. Surface midden was observed scattered between all of the features. Three test units were excavated at three of the features, and extremely dense amounts of midden and artifacts were recovered. In addition, remains of human infant burials were identified in test units at Features B and E (Donham 1990b: 20).

Results of the testing indicated that "subsurface deposits are present in undisturbed and sealed contexts beneath the cultural deposit that is associated with the surface features: (Donham 1990b:22). These deposits appeared to represent at least two discreet occupations and extended to depths of 1.8 meters in some locations. Six charcoal samples collected from the site returned calibrated calendric ranges beginning in the seventh century AD and extending through the midden eighteenth century. The earliest date (AD 680-1020) was obtained from a single burned stick found at the base of a subsurface pit feature (HF-1). A sample recovered the same pit feature returned a date of AD 1280-1470, which tends to call the earlier date into question (Donham 1990b: 26). A second date obtained from Test Unit 2 at 1.11 meter below surface returned a similar range of AD 1260-1480. This supports the thirteenth century date for an early component, and suggested that the seventh century date may have been mixed from the underlying cultural layer.

The site was assessed as significant under Criterion "d" and as having cultural significance due to the presence of burials. Regarding the information value of the site, Donham stated that, "Due to the rarity of stratified sites in the area, it is expected that findings from this site may aid in developing a model for chronological change that could be applied to other sites within the Wailea/Makena area (Donham 1990b: 36-37).

In 1992, additional testing was conducted at Site 2496 to determine whether additional burials were present (Henry et al. 1992). No additional burials were found; however, lineal descendants were identified for the infant burial, and it was determined by the Maui/Lana'i Islands Burial Council that the undisturbed portion of the burial would be preserved in place. The lineal descendants testified that they had a cottage on the property where they stayed periodically during the early to middle twentieth century. The child was a family member.

In 1995, Xamanek Researches was contracted to conduct data recovery excavations at Site 2496 within the area of the site that did not contain the known burial. The data recovery work included hand excavation of 54 square meters of the site area, with depths up to 2.4 meters below surface (Fredericksen and Fredericksen 1995). Up to five in situ cultural layers were identified during these excavations, and over 140 subsurface cultural features were identified. These included five packed clay habitation floors, pavings, intact buried rock structures, and an additional human burial (Fredericksen and Fredericksen 1995). Based on the preliminary report of the data recovery findings in 1995, SHPD determined that the site was also significant under Criterion "a", and recommended that the area be preserved in situ. Following this determination, the parcel owner sold the land to Dowling Company, and it was subsequently subdivided into two parcels. The parcel with no site area was sold and a house was soon built. The site area was capped with clean sand and large boulders were placed on the surface to mark the locations of known burials.

During the 1995 data recovery work, a WWII era military gun emplacement located on the beach at parcel 3 was also recorded and given a SIHP site number (4128). This site is within the active beach zone and although it is impacted by surf, it is outside of any allowable construction areas.

In 1998, the second parcel was sold and a preservation plan for Site 2496 as well as a monitoring plan was prepared for the new property owners

(Fredericksen 1998). The final report on the data recovery was completed in 2007 (Fredericksen 2007). This report documents 21 radiocarbon dates obtained from the site, six of which predate AD 1300. The remainder of the dates cover the entire period from AD 1300 to the early historic era (AD 1815). Site 2496, located at the site of the historic era Palauea Landing, is clearly one of the most important sites in Honua'ula.

Parcels 5 and 6

Parcels 5 and 6 were not part of the original hotel parcel, and older homes were present on both parcels prior to resort development. In 1991, Bishop Museum conducted somewhat limited subsurface testing on these and other parcels to the south as part of a due diligence task (Rotunno-Hazuka and Cleghorn 1991). Due to the presence of modern homes on both parcels, no historic surface features were present. Four backhoe trenches and two hand testing areas were excavated at that time. One historic property (Site 5462) was identified in three of the backhoe trenches. The site consisted of subsurface cultural deposits consisting predominantly of secondary deposits of sparse marine shell, sea urchin, coral and charcoal flecks. One charcoal lens was also noted (Rotunno-Hazuka et al. 1991). The site covered a major portion of parcel 5 and the northern portion of parcel 6. In 2004, the two parcels were sold and the owner of parcel 5 requested an inventory survey, which was conducted by Archaeological Services Hawai'i. Four backhoe trenches were excavated in the parcel; three were at the inland end and one was behind the beach. Two of the trenches were within the site area as previously defined.

No evidence of a cultural deposit was identified in any of the four backhoe trenches excavated in 2004. In discussing the discrepancy between the two findings, Prishmont and Pantaleo suggest that it may be due to "localized environmental variations and level of disturbances and/or recording practices and procedures of individual archaeologists" (Prishmont and Pantaleo 2004: 27). In their view, the alternative layers of sand and silt observed "indicates periodic tidal surges that deposited basaltic and coralline sand and colluvial forces from upslope land clearing activities" (Prishmont and Pantaleo 2004: 28). Sparse midden and historic era glass was found in one trench and was attributed to colluvial activity.

In their recommendations, Prishmont and Pantaleo do not dispute the existence of Site 5462; rather, they indicate that it is considered significant

under Criterion “d”, and state that it “has yielded information important for understanding historic occupation in Palauea ahupua’a” (Prishmont and Pantaleo 2004: 28). Perhaps if a bit more effort had been expended in the fieldwork, such as additional backhoe trenches within the actual site area, more information would have been obtained about this site. No further work was recommended.

In 2004, additional subsurface testing was conducted in parcel 6 (Rotunno-Hazuka and Pantaleo 2004). At that time, seven backhoe trenches were excavated and no indications of Site 5462 were identified. Subsurface deposits were, however identified during archaeological monitoring of construction activities on this parcel.

Parcels 7, 8, 9, 29 and 31

These five adjacent parcels are located immediately south of parcel 6 and together comprise 2.58 acres. They were included in the hotel lot at the time VMS Realty Partners were planning development. In 1989, VMS contracted with Bishop Museum to conduct an inventory survey of the area (Landrum and Cleghorn 1989b). The survey consisted of a walk-through and excavation of ten backhoe trenches, with supplemental hand excavations in the areas of some of the backhoe trenches. The area was later included in the due diligence study by Rotunno-Hazuka and Cleghorn (1991).

Seven archaeological sites were identified (Ma-B11-12 through 18). Sites B11-15 through 17 were located within parcel 7 and were subsequently assigned SIHP site number 5184-5186. Site 5184 consisted of a boulder alignment and a paving, both visible on the surface, within a 225 sq meter area. Marine shell midden was also observed on the surface. Site 5185 was identified in a backhoe trench and consisted of six cultural layers, with an identified slab-lined hearth and a post hole (Landrum and Cleghorn 1989b: 24).

Site 5186, which also extended into parcel 8, was defined as three locales of subsurface deposits, found in three backhoe trenches and two hand excavation units. Four to six cultural layers were identified, along with a number of subsurface features, including a firepit, a posthole, and a pavement with at least six postholes (Landrum and Cleghorn 1989b:24-25). Overall site area was estimated at 450 square meters. A charcoal sample collected for a firepit at this site was dated and later reported as AD 1720-1820 (Rotunno-Hazuka and Cleghorn 1991).

Also identified in parcel 8 were three additional sites, including a 1500 square meter area of exposed features and midden along the face of the eroding beach sand dune (Site B11-12). This site extended south into parcel 9. Surface structural features were also noted at Site B11-12, including a 24 meter long stone wall, two wall remnants and a concentration of historic era bottle glass. The exposed cultural deposit (Feature C) was 1.5 meter long and exhibited at least four cultural layers and a firepit feature. Historic period glass, ceramics and other materials were observed eroding from the bank at this site (Landrum and Cleghorn 1989b: 22). A charcoal sample collected from the firepit was later reported to be dated at AD 1520-1620 (Rotunno-Hazuka and Cleghorn 1991).

Site B11-14, located just inland of Site B11-12 in parcel 8, consisted of a boundary wall remnant that is situated along the boundary between parcel 7 and 8. At the eastern end of parcel 8, near the Makena-Keone'o'io Road, a subsurface site (B11-18) was found in three backhoe trenches. This site covered 468 square meters and consisted of buried cultural layers with both traditional and historic era artifacts. One intact firepit and a charcoal lens was also identified (Landrum and Cleghorn 1989b:25). A portion of this site extended into parcel 30, which is a narrow easement lot.

One site was identified in parcel 29 during the 1989 survey. This site (B11-13) consisted of low mound of coral and basalt boulders, and a segment of a parcel boundary wall. The low mound contained numerous pieces of branch coral, including complete coral heads. As indicated by Landrum and Cleghorn, "The nature of this feature suggests it may have had a religions, ceremonial, or burial function" (Landrum and Cleghorn 1989: 23).

For all seven of the sites identified in these parcels, Landrum and Cleghorn considered them significant under NRHP Criteria (a) and (d). All of the sites were determined to require further investigation and mitigation before ground disturbing development takes place (Landrum and Cleghorn 1989: 31). With the exception of the 1991 Rotunno-Hazuka and Cleghorn study, no records of additional archaeological work on these parcels could be located. Personal communication with Lisa Rotunno-Hazuka indicated that monitoring occurred on parcel 7, with negative findings. A palm tree nursery was installed at parcels 9, 29 and 30, and an irrigation system was installed in the makai half of parcel 8 with no monitoring (Lisa Rotunno-Hazuka, personal communication).

Parcel 13

In 1999, Aki Sinoto Consulting and Archaeological Services Hawai'i conducted an inventory survey with subsurface testing on parcel 13 as a due diligence task for the current owner. The parcel was subdivided into two .5-acre parcels (13 and 14) and sold prior to construction of a residence, and the new owner required a formal inventory survey for permits. The work completed in 1999 was therefore compiled in a report in 2002 (Sinoto et al. 2002a). No structures were present on the parcel at the time of the survey, and no surface features over 50 years in age were identified. Subsurface testing consisted of excavating five long mauka-makai trenches across the northern half of the parcel, which is now parcel 13. Trench length ranged from 6 to 11 meters, and depth ranged from 0.95 to 2.3 meters (Sinoto et al. 2002a: 22). No indications of cultural deposits, features or artifacts were found during the subsurface survey. No further archaeological work was recommended, however monitoring of all ground disturbance was recommended due to the known presence of human burials in nearby parcels (Sinoto et al. 2002a: 28)

Parcel 14

This .5-acre parcel was part of parcel 13 in 1999 when Aki Sinoto Consulting and Archaeological Services Hawai'i conducted and inventory survey of both areas. The results of the survey were reported on in 2002 for the new owner of parcel 14 after the lot was subdivided. No residential structures were present on the parcel at the time of the survey, and no surface features older than 50 years were reported. The surveyor's map of the parcel depicts two rock piles in the southeastern corner of the parcel; the nature and possible age of these features are not discussed in the report.

Subsurface testing was conducted with nine backhoe trenches which ranged in length from 6 to 11 meters and 0.9 to 1.7 meters in depth. Cultural deposits and/or features were found across all of the trenches in the makai portion of the lot (509), and in the western ends of trenches 1-4 in the mauka portion of the lot. One continuous site area was identified (5194). The sites area included two hearth features, a darkly-stained cultural layer, marine shell midden and a concentration of stones. As indicated in the report, "the exact nature and origin of the activities that took place could not be discerned" (Sinoto et al. 2002b: 34). The site was determined significant under HAR Criterion "d". No additional work was recommended at this site because "Based on current development plans, Site 50-50-14-5194 will not be impacted during construction activities.

Thus Site 50-50-14-5194 is recommended for in-situ preservation" (Sinoto et al. 2002b: 36). The report states that a preservation plan will be submitted to SHPD for approval prior to commencement of construction activities.

Parcel 15

There are no available formal reports of archaeological activities at parcel 15. Recent personal communication with Lisa Rotunno-Hazuka indicates that some testing has been conducted, and evidence of extensive subsurface disturbance relating to military activities during WWII were observed, as well as previously disturbed human skeletal remains (see Donham 2005).

Parcels 16 and 17

In 2001, Haun & Associates was contracted to conduct an inventory survey of parcels 16 and 17, both of which were owned by a single entity. Both parcels combined comprise 1.0 acre. The surface survey of the site resulted in no reported finds, however a "concrete pad" is depicted on the site map, just makai of the certified shoreline boundary. This feature was later determined to be a WWII era pillbox and was designated SIHP Site 5713 (Donham 2005). The subsurface survey consisted of 21 backhoe trenches spaced evenly across the parcel. Subsurface cultural deposits and features were identified in sixteen of the trenches and were collectively given one archaeological site designation (Site 5200). The site area as mapped covered nearly the entire property, with the exception of the northeastern corner. It was described as a black compact silt loam deposit that was overlain by one or two layers of windblown sand or silty sand. Charcoal flecks, marine shell fragments and fire-altered coral pieces were observed in various backhoe trenches. Also recorded were two articulated human burials (Haun and Henry 2002: 16). No historic era artifacts were observed in subsurface contexts, and the site was interpreted as being prehistoric.

Site 5200 was assessed by Haun and Henry as significant under HAR Criteria "d" and "e", for its information value and due to the presence of human burials. Additional data recovery was recommended for the habitation component of Site 5200, and preservation in place was recommended for the two reported burials (Haun and Henry 2002: 31).

During review of the burial treatment plan for the burials at Site 5200, the Maui/Lana'i Islands Burial Council expressed concerns over the actual

condition and disposition of the identified burials, due to the lack of documentation in the 2002 report and in the plan, and due to an absence of SHPD verification of the burials at the time they were discovered. The Council deferred action on the plan until further information was obtained. In its review of the survey report, SHPD raised additional questions about the findings of the Haun and Henry survey.

Additional inventory survey work was conducted at Parcels 16 and 17 November 2004-May 2005 by Archaeological Services Hawai'i and Akahele Archaeology. Initially, shovel shaving was conducted in the areas of the two backhoe trenches where the human burials were reported. Once these trenches were located, the backfill was removed by hand and screened to recover previously disturbed skeletal materials. Remains of one of the burials (Burial 1) was found scattered in the trench backfill, and no in situ portions of the burial were identified. During explorations in the area of Burial 1, an additional in situ burial was identified. This burial was not disturbed by the previous backhoe work and was still intact. (Donham 2005: 16). Hand explorations in the backhoe trench of previously identified Burial 2 indicated that this feature was actually a concentration of previously disturbed animal bones and was situated within a historic era fill layer that had been deposited at the site, most likely during ranch activities (Donham 2005: 19-21).

During excavation to reacquire the first burial backhoe trench, the remains of a rather wide stone wall were identified just beneath the surface. This wall was traced out through probing and was found to extend north-south along the makai portion of parcel 16, then gradually curve to the east and continue eastward to Makena-Keone'o'io Road near the boundary between parcel 16 and 17. The wall most likely connected with one of the ranch walls that are found immediately east of the road in the Palauea preserve area, and may have formed a large corral.

Twelve controlled hand excavation units were excavated at selected locations within Site 5200 in order to fulfill the scope of work for additional testing and to determine the age and function of the newly identified wall. Excavations along the wall verified that it was historic, based on intact wooden post remnants built into the wall, and on the presence of metal spikes and fencing hardware in direct association. Six intact subsurface features associated with the pre-contact component of Site 5200 were documented, including three in situ hearths, a firepit, a disturbed hearth, and a pit of indeterminate function. Dating samples

from the three hearths returned radiocarbon dates with ranges that fall within a 210-year time frame of AD 1440-1650. A fourth date, obtained from scattered charcoal at the base of the cultural deposit, was dated at AD 1420-1440 (Donham 2005: 64-65). Additional historic era features, including a possible habitation area, were also identified during the 2004-2005 fieldwork. The additional work permitted a more accurate delineation of the boundaries of the pre-contact site, which had been truncated in areas due to historic era activities. In addition, the military pillbox (Site 5713) was recorded.

In the discussion of findings, it was suggested that Site 5200 may have a functional relationship with the Palauea Heiau (Site 1029), which is located directly east, across the road from Site 5200. The testing seemed to indicate a dense yet specialized midden deposit that contained a limited array of artifacts, suggestive of ceremonial rather than daily habitation activities (Donham 2005: 69). This hypothesis requires further examination of Site 5200 and a more detailed comparison of the portable remains from this site with other documented habitation sites nearby. Additional data recovery work was recommended at Site 5200, as well as preservation of the known burials. To date, no further work has occurred on this property.

Parcel 19

In 1999, an inventory with subsurface testing was conducted of parcel 19 by Xamanek Researches. A full report of this survey has not been completed, however a memo was sent to the SHPD Burial Program informing them of the discovery of disturbed human skeletal remains within the property. The find was designated SIHP Site 4757 (Fredericksen 1999). Subsequent to the fieldwork, parcel 19 was acquired (along with parcel 18) by the County of Maui.

Parcel 20

In 1999, Xamanek Researches was contracted to conduct an inventory survey of parcel 20, which is the southernmost parcel at Palauea Bay to consist primarily of intact beach dune deposits. No historic surface features were identified on this 05-acre parcel (Fredericksen and Fredericksen 1999). Subsurface testing was conducted through hand excavation of seven 1.0 by 1.0 meter test units, spaced across the parcel behind the active beach berm (Fredericksen and Fredericksen 1999: 8).

The test units were excavated to depths ranging from 1.0 to 2.0 meters. No indications of subsurface deposits, features or artifacts were identified during the testing. Archaeological monitoring was recommended during ground alteration at this parcel, due to the likelihood of human burials occurring in the area (Fredericksen and Fredericksen 1999: 15).

Parcels 21-23

In 2001, Haun and Associates were contracted to conduct an inventory survey of three adjacent parcels prior to the construction of a large residential compound that encompasses a major portion of the 1.5-acre property. The property is situated on a rocky ridgeline that defines the southern end of Palauea Beach; much of parcel 21 is sloping and much of parcel 22 is an exposed bedrock ridge. During surface survey of the parcel, an historic road bed (Site 5120) was identified just makai of and parallel to the Makena-Keone'o'io Road. Two backhoe trenches and three shovel tests were excavated along the roadbed in order to determine its age. The road surface consisted of black compact sand; the black color was inferred to be the result of oil sprayed onto the road. It was determined to be historic in age, and most likely associated with military activities in the area during WWII (Haun and Henry 2001: 29).

Subsurface testing was conducted in areas that contained soil or sand pockets; due to the topography, backhoe trenching was only possible in the area of the old roadbed. The remainder of the tests were 40 hand excavated shovel tests. During the shovel testing, one area of subsurface cultural deposits (Site 5104) was identified. This site was located on a level bench just north of the major rock ridge, and to the east side of a rocky slope that continues northwest toward the beach (Haun and Henry 2001: 17). Overall area of the site was approximated at 163 square meters. The cultural layers were identified in two shovel tests and were relatively thin (.06 and 0.07 meters respectively). In one shovel test, an additional cultural layer 0.27 meter thick was found beneath the thinner layer. Both cultural layers contained marine shell midden, charcoal and coral or water worn pebbles. A charcoal sample obtained from the uppermost layer in ST-15 returned a selected calendric range of AD 1680-1770. (Haun and Henry 2001: 20).

Both of the identified sites were assessed under Criterion "d", and no further work was recommended for the historic roadbed. According to Haun and Henry, "Site 5104 could be mitigated through data recovery; however, the landowners have decided to preserve the site" (Haun and

Henry 2001: 34). Thus, a preservation plan would be prepared detailing the preservation measures. Also recommended was archaeological monitoring of ground altering activities.

Parcel 26
Parcel 26 was included within the area previously surveyed by PHRI in 1988, as were all of the parcels south of parcel 29 and 30 (Shapiro and Haun 1988). As indicated in the above discussion of the Palauea Complex, one previously identified site (1030) was present within this parcel. The site was first described by Sterling as a ko'a and was recorded during the statewide survey in 1973 (Sterling 1998). During the Shapiro and Haun survey, it was interpreted as a temporary habitation or burial feature, and was subsequently tested to confirm age and function (Donham 1990a). During the testing, the original site identification washer, placed in 1973 was found, confirming that it was Sterling's ko'a site. No indications of a burial or use for habitation was found, supporting the original function. Subsequently, the site was recommended for preservation and a preservation plan was completed in 1992 (Jensen 1992).

The preservation plan called for construction of a two-foot high stone wall around the outer edges of a 1,070 square foot preserve area. An interpretive sign, with text as shown in the preservation plan was to be installed along the trail that ran directly mauka of the site. The site is poised on the edge of a sea cliff and is not accessible from the beach area. Once the residence was constructed on this property, a thicket of vegetation was planted along the trail, and green waste was thrown over the trail to the north and south of the site, essentially precluding its use by the public. Thus, the "interpretive development" aspect of the 1992 preservation plan is not being implemented by the property owners.

Two additional sites were identified on this parcel, including an historic era wall (Site 2864) and a modified outcrop area (Site 2986). The latter site was tested and found to contain no cultural materials; it was interpreted as a landscaping feature or planting area (Donham 119a: 13). No additional work was conducted at the wall prior to its destruction (Shapiro and Haun 1988).

Parcel MF-21
The 23-acre parcel MF-21 was one of several multifamily-zoned residential parcels within the Wailea resort, and was included within the area initially surveyed by Kirch in 1969. Most of the parcel is within Palauea, and the

southern tip is in Keauhou. The parcel is currently adjacent to the south side of the Palauea cultural preserve and subdivision, and it is situated between Makena Alanui Drive to the east and the Makena-Keone'o'io Road to the west. The parcel was sold by Wailea resort and was subsequently subdivided for single family residences. In 1999, Xamanek Researches was contracted to conduct an inventory survey prior to subdivision of the parcel.

No archaeological sites were previously reported within this parcel; however, the Fredericksens were informed through personal communication that Bishop Museum staff had previously conducted work at two of the sites circa 1989-1990. The Xamanek survey identified 10 sites (SIHP 4804-4813), half of which were walls. Other sites included three rock overhang shelters, a low-density scatter of coral and a possible ceremonial structure (Site 4804). The latter site is located adjacent to Makena-Keone'o'io Road and is situated on a small 'a'a knoll, very close to (if not on) the ahupua'a boundary between Palauea and Keauhou.

The primary feature at Site 4804 is a three-sided enclosure (52.8 sq. meters) that opens to the ocean, which is about 100 meters to the west (Fredericksen and Fredericksen 2000: 20). Several upright stones and coral pieces are incorporated into the enclosure walls. Currently, a long wall (Site 4810) defines the western edge of the enclosure; however, this wall appears to post-date the other features on the site. Remnants of a former test unit were found in the center of the enclosure, and a second test unit was excavated by Xamanek. A quantity of sea urchin remains was found, in addition to coral, five basalt flakes and charcoal fragments (Fredericksen and Fredericksen 2000: 22). Apparently, a date was obtained during the Bishop Museum work and reported to Fredericksen as AD 1540±50 (Fredericksen and Fredericksen 2000: 24). Feature A was interpreted as ceremonial based on its location, the amount of energy expended in construction, and lack of food midden inside the enclosure (Fredericksen and Fredericksen 2000: 24). Other features at Site 4804 included two leveled areas that were partially enclosed with aligned boulders. One of these (Feature B) showed indication of previous testing.

The Fredericksens tested two of the three overhang shelters, one of which had been previously tested by Bishop Museum (Site 4805). These sites were found to contain small amounts of marine shell, fish bone, a pig bone, small amounts of coral and charcoal.

The predominant wall (Site 4809) within the project was 400 meters long, 0.9 meter wide and 0.9 to 1.4 meters high; and extended beyond the project area to the east and north. The wall entered from the Makena Alanui Drive and extended west to near Makena-Keone'o'io Road, where it turned south along the east side of the road. Fredericksen and Fredericksen suggest that it may have been an ahupua'a boundary wall (Fredericksen and Fredericksen 2000: 35); however, it does not continue toward Halo Point. An alternative interpretation might be that it is the Aupuni wall that is shown on Torbert's map. According to Fredericksen and Fredericksen, "The site was probably used as a cattle wall, and probably built by someone who controlled a relatively large labor force" (Fredericksen and Fredericksen 2000: 35).

All ten of the identified sites were determined to be significant under HAR Criterion "d"; Site 4804 was determined also significant under Criterion "e" for its traditional cultural value, and Site 4809 was determined also significant under Criterion "c", as an excellent example of its type. Two of the rock shelters and four of the walls were assessed as being "no longer significant", and the remaining four sites were recommended for preservation. These included the ceremonial structure (Site 4804), two of the overhang shelters (4805 and 4806) and the Site 4809 wall. In-place preservation was recommended for as much of the wall as possible, with data recovery to occur for any section that is removed (Fredericksen and Fredericksen 2000: 38).

Keauhou and Kalihi

The prominent shoreline settlement at Keauhou was the Po'olenalena Complex (Site 1362) which was first recorded during Kirch's 1969 survey of Wailea lands, and recommended for preservation. The history of archaeological work at this site has been discussed above. Additional work has been conducted in the area of the site, in connection with a fiber optic cable landing, which was proposed for the County of Maui beach park at Po'olenalena.

In 2001 and 2002, an inventory survey was conducted of the parcel located to south of the County beach park, in connection with the subdivision of the remaining portion of the Chang family property (Lee-Greig 2002). Much of the 3.2-acre property has been intensively used for a plant nursery by the current resident, Mr. Edward Chang Jr. Portions of a previously recorded site (4818) were located, in addition to a historic wall segment, constructed in the early 1940s by Mr. Edward Chang Sr.,

and a fence line, constructed by John Kukahiko in 1945 (Lee-Greig 2002: 3-6). These two features were not given SIHP designations in the draft survey report.

During subsurface testing of the area, three backhoe trenches, eight shovel tests and seven controlled test units were excavated. The testing was concentrated in the northern portion of the parcel and along the low sand dune inland of the beach area. A subsurface cultural deposit and a human burial were encountered in the first backhoe trench, which was excavated on and parallel to the low sand dune behind the beach. Information regarding the depth and disposition of the burial is sketchy, because it was removed by a backhoe bucket and no traces of a pit outline could be seen in the backhoe trench wall. The cultural deposit was apparently beneath the burial level, although this is not clear from the descriptive information provided. This deposit was not found in the other two backhoe trenches, excavated inland from the sand dune (Lee-Greig 2002: 3-10). No SIHP site designation was assigned to this site in the draft report.

A row of six hand excavated 0.5 by 0.5 meter test units were excavated along the inland side of the sand dune, in an area of a proposed house construction. Small amounts of midden remains and modern artifacts were found in all of the test units, with the modern materials confined to the uppermost layer.

A second highly-concentrated area of midden and artifacts was identified within the area of previously recorded Site 4818, near the northern edge of the property, in test unit 7. A total of 74 volcanic glass flakes, 56 basalt flakes, two coral files, two sea urchin spine abraders, worked bone and a possible shell pendant were collected from this single 1.0 by 0.5 meter test unit. Also recovered were 184.3 grams of midden (including fish bone and mammal bone) and 1.9 gram of charcoal (Lee-Greig 2002: 3-24). A sample of this charcoal returned alternate calibrated calendric ranges of AD 1430-1530 and 1550-1630. The more recent range was selected by Lee-Greig because it is more consistent with a date obtained from the same site in the adjacent parcel (Lee-Greig 2002: 3-26). This subsurface deposit was "associated with the occupation of Site 4818", and was characterized as "modest to moderate cultural deposits consistent with temporary to intermittent shoreline habitation" (Lee-Greig 2002: 4-1). Lee-Greig also stated, however, that the subsurface deposit probably pre-dates the historic wall previously recorded as Feature 2 of this site,

and “may be associated with surface features that are no longer extant” (Lee-Greig 2002: 4-1).

Regarding the previously identified wall (Site 4818 Feature 2), Lee-Greig determined that it was significant under Criterion “d” and no further work was recommended. For the associated subsurface deposit, it was recommended that, “should future construction be planned for the immediate area surrounding the location of SP-7 and TU-7, further testing and monitoring is recommended” (Lee-Greig 2002: 4-2).

The second subsurface deposit identified in the sand dune was assessed under Criterion “d”; “However, due to the location of this site in a sand dune that has already contained one known human burial with the potential for additional burials, no further archaeological work in this area is recommended” (Lee-Greig 2002: 4-2). Oddly, this area was not recommended for preservation in the draft report. Finally, the human burial, which was inferred to be Native Hawai’ian, was assessed under Criterion “e”, and was reported to be curated at the SHPD office in Wailuku. Recommendations for this burial were to prepare a burial treatment plan for review and approval by SHPD and the Maui/Lana’i Islands Burial Council.

Papa’anui

In 1998, Xamanek Researches was contracted to conduct an inventory survey of two adjacent parcels comprising one acre at Nahuna Point (Fredericksen and Fredericksen 1998b). The survey preceded construction of a residence at the property. Four archaeological sites were identified during the surface survey (SIHP Sites 4524-4527), including two small rock shelters, an historic era retaining wall, and a pavement believed to be the Nanahu Ko’a as described by Winslow Walker. This latter site (4524) is located within the shoreline setback area and consists of a c. 50 square meter pavement within an 85 square meter site area. The structure is defined on the edges by boulders and covered with water worn pebble paving. Remnants of a former wall were noted as well (Fredericksen and Fredericksen 1998b: 23). Limited subsurface testing was conducted at the site to verify the existence of the pavement, which was found, along with a pit features containing midden, charcoal, basalt flakes and coral. A cultural deposit was also identified intermixed with the pavement stones. Overall, the surface feature at this site was found to be in poor condition, however, the subsurface deposit was found to be “relatively well preserved” (Fredericksen and Fredericksen 1998b: 27).

Subsurface testing was conducted at both of the small overhang shelters, and minimal amounts of traditional midden were found. Both of the sites were determined to have very low research potential. The retaining wall was found to be associated with the former government road that paralleled the shoreline in this area. The site was assessed as having generally low research potential, but was planned to be preserved as part of the landscaping features of the new residence (Fredericksen and Fredericksen 1998b: 32).

The site interpreted as the Nanahu Ko'a was assessed as significant under HAR Criteria "d" and "e", and was recommended for "passive, in-place preservation" (Fredericksen and Fredericksen 1998b: 35). No additional work was recommended at this or the other three sites; however, a preservation plan was stated as required to ensure permanent preservation of the ko'a.

A mitigation plan was prepared for the Nahuna Point parcel in 1998 and it consisted of a monitoring plan for the 1-acre parcel as well as a preservation plan for the Nahuna Ko'a. The preservation measures as stipulated in the plan were as follows:

Recommended archaeological mitigation includes passive preservation for the Site 50-50-14-4524 ko'a. A layer of 20 cm. of fill will be placed over the c. 100 square m. site preservation area. This fill will contain no rocks greater than 7 cm. (3 in.) in diameter. A cap of c. 10 cm of topsoil will be placed over the fill. All fill/cap material will be placed on the preservation area with a loader and manually finished. Due to the location of this ko'a, no interpretive signage is recommended at this time. (Fredericksen and Fredericksen 1998c: 6)

The plan also states that the owners are responsible to maintain the preserve area as part of the "landscaped area", i.e., as part of the lawn (Fredericksen and Fredericksen 1998c: 7). If the site is within the shoreline setback, it is curious as to why it would need to be covered with fill and a lawn. The site map provided shows the site quite close to the rocky cliff line and tidal zone, which would also be close to the public access shoreline area.

Later in 1998, Xamanek conducted an inventory survey of a .8-acre parcel in Papa'anui, located immediately north of the above described project

area. One archaeological site was identified (Site 4544) which consisted of an eroding subsurface ‘ili’ili and water worn coral pavement with an associated cultural deposit. The site was interpreted as a habitation area with an estimated area of c. 900 square meters. Most of the site area was located within the shoreline setback area of the parcel. It was assessed as significant under Criterion “d”. Passive preservation was recommended due to the site location within a no-build zone.

A mitigation plan for this parcel was prepared which included a monitoring plan and a preservation plan for Site 4544 (Fredericksen 1998). The preservation tasks as detailed for Site 4544 are the same (verbatim) as those stated and quoted above for Site 4524 (Fredericksen 1998: 6). Thus, Site 4544 was added to the increasing number of shoreline sites that were “preserved” by being buried.

In 1994, a six-acre parcel situated mauka of the Nahuna Point parcels was subjected to an inventory survey by Scientific Consultant Services. Six archaeological sites comprising 25 features were identified (SIHP Sites 3513-3518). Features included midden and lithic scatters representing permanent and temporary habitation and activity area; and modified outcrops representing agricultural activities. All six of the sites were assessed as significant under Criterion “d”, and selected features at three of the sites were determined to require further data recovery (Cordero and Dega 2001: 8).

In 2001, Data recovery excavations were conducted at **Site 3513** Feature 2A, a large low-walled enclosure interpreted as a house site; a small complex of three modified outcrops (Site 3514); and **Site 3116 Feature 4,** a lithic scatter. This latter site was located 15 meters north from the Pohakunahaha Heiau.

Areal excavations covering 30 square meters were conducted in the southwest corner of the Site 3513 enclosure, in addition to backhoe trenches that were placed across the interior area. Roughly half of the units excavated in the areal excavation were controlled, with screening of soil; all others were shoveled out. Of the controlled excavation collections, only four were subjected to laboratory analysis and sorting, “due to time constraints governing the laboratory process” (Cordero and Dega 2001: 18). Three test units were placed at each of the other two sites investigated during this project.

A total of 64 subsurface features were identified in the areal excavation at Site 3513. Twenty-nine of these features were associated with an 'ili'ili pavement that occurred in the western half of the enclosure, and 33 features were identified in Layer II, which pre-dated the pavement. The walls were found to pre-date the pavement, but not all of the subsurface features (Cordero and Dega 2001: 21-22). Identified subsurface features included 23 post molds, 13 ash/charcoal lenses, 13 hearths, and 15 miscellaneous deposits, depressions, concentrations or lenses (Cordero and Dega 2001: 31). Due to the low frequency of excavation collections analyzed at this site, the numbers of artifacts and midden do not compare with collections from other permanent habitation sites. Three dating samples were collected as analyzed. One sample obtained for a hearth at the base of Layer III, representing the earliest component at the site, returned a calibrated calendric range of AD 1280-1460 A second sample recovered from a hearth just below the pavement layer was dated to AD 1630-1890 and 1530-1550. A third sample, obtained from a hearth that post-dated the pavement, returned ranges of AD 1800-1940 and 1680-1740 (Cordero and Dega 2001: 37).

Based on the three dates, the authors conclude that the Site enclosure was continuous from c. 1300 until late pre-contact/early contact times (Cordero and Dega 2001: 38). No historic components or artifacts were documented at the site, however, a very small sample of soil was actually examined for artifacts. In a discussion of the Site 3513 function, the authors concluded that the enclosure was "quite possibly" a hale mua, or men's eating house. This is based on the presence of basalt flakes and pig bones, of which 6 grams was recovered (Cordero and Dega 2001: 51). The report states that these were items that "women were never traditionally associated with" (Cordero and Dega 2001: 51). Given this reasoning, nearly every habitation site ever tested would be classified as a mua. The popular ethnographic model associating men exclusively with lithic tool use, maintenance, and production is not supported with consistent ethnographic data; and it has been refuted with empirical archaeological findings.

Following the data recovery at this property, the three sites were determined to be no longer significant, and no further work was recommended.

In 2004, Scientific Consulting Services conducted a survey of the 4.8-acre property located adjacent to south side of the above described project

area. This property is located along the mauka side of the Makena-Keone'o'io Road and mauka of Makena Landing; it comprised several smaller TMK parcels. Modern residencies were present along the northern and south-central portions of the property, and areas of refuse dumping, and large-scale landscape modifications were observed (Tome and Dega 2005: 19).
Four archaeological sites comprising six features were identified along the north and south boundaries of the project area (SIHP Sites 5542-5545). These included a remnant habitation terrace and rock shelter (Site 5542), an overhang shelter with associated C-shaped wall and a lithic scatter (Site 5543), a cobble/boulder paving (Site 5544), and a free-standing rock wall (Site 5545). Subsurface testing was conducted at Sites 5542, 5543 and 5544.

Excavations at both of the Site 5542 features indicated that they had little to no in situ midden, and that the rock shelter had been used mostly for refuse disposal. Prior excavation within the rock shelter area was also indicated (Tome and Dega 2005: 28). One charcoal sample from this feature returned a modern date.

At Site 5543 Feature C, a cultural layer II with marine shell, charcoal, vertebrates, basalt and volcanic glass flakes was encountered in a 0.5 by 1.0 meter shovel test excavated within the C-shaped wall. Also recovered from a pit features within the cultural layer was a charcoal sample and a single human tooth (Tome and Dega 2001: 31). Following the discovery of the tooth, additional excavations were conducted at the feature to ascertain the presence of additional human remains. No additional remains were located and the tooth was categorized as an isolated find. Charcoal collected from the cultural layer in the additional excavated area returned alternate ranges of AD 1000-1230 and 1030-1160 (Tome and Dega 2005: 33). This is one of the earliest dates obtained from the Makena region, and the authors suggest that it "shows more temporary use activities from the c. AD 1000-1100 range as a predecessor to more intensive living in the area" (Tome and Dega 2005: 44).

Excavations at the pavement feature (Site 5544) produced negative findings, and the original age and function of the feature could not be determined. Finally, the Site 5545 rock wall was found to correlate with the northern boundary of the property and was interpreted as a boundary wall (Tome and Dega 2005: 42).

All four of the identified sites were determined significant under Criterion “d”; the work conducted during the survey was considered to be adequate data recovery, and no additional work or preservation was recommended. Archaeological monitoring of ground altering activities was recommended “due to the sensitive nature of cultural loci in the Makena area” (Tome and Dega 2005: 46).

Waipao

In 1997, Xamanek Researches conducted an inventory survey of a one-acre parcel located at the southwest corner of Makena Alanui Drive and Makena-Keone’o’io Road, just south of the Makena Surf condominiums and east of the Makena Place condominiums. Currently, the parcel is within the Hale O Makena condominiums. Three archaeological sites were identified, as well as the portion of a previously identified site that extended into the parcel from the south (Site 3513, see Cordero and Dega 2001). The newly identified sites included a well-built and well-preserved enclosure (Site 4504), a rock shelter (Site 4505), and a surface midden and artifact scatter representing a habitation area (Site 4506). This latter site was located adjacent to the north side of the enclosure (Fredericksen 1997: 1).

Test units were excavated at all of the sites during the inventory survey, including two units inside the Site 4504 enclosure. This site is 12.5 by 7.0 meters, with walls up to 1.5 meter in height. Walls were constructed with small boulders and cobbles, held together with an earthen mortar material. A 0.1 to 0.15 meter thick ‘ili’ili pavement was encountered, along with a relatively sparse marine shell midden deposit and a few “marine-oriented artifacts” (Fredericksen 1997: 6). Also observed was a post hole for a likely roof support beam. The enclosure was interpreted as an early post-contact religious structure.

The rock shelter was found to contain minimal amounts of pre-contact midden, and the habitation area was also determined to be pre-contact in age. The enclosure was assessed as significant under HAR Criteria “c”, “d”, and “e”, due to its excellent construction techniques, information value and cultural value. Preservation of the enclosure was recommended. The rock shelter and habitation areas were assessed under Criterion “d”; no further work was recommended at the rock shelter and data recovery was recommended for the habitation site. Subsequent to this determination, the property owner indicated that the habitation site would be preserved along with the enclosure; data recovery was therefore not conducted at Site 4506.

The preservation plan for Site 4504 was as follows:

The structure will be protected by a 3 m. buffer zone and retain its present configuration. The site perimeter (including 3 m. buffer zone) will be permanently marked, preferably with an approved fence or wall. The site will be made accessible to members of the Hawai'ian community and other community members who have an interest in the site. (Fredericksen 1997: 6)

Currently, this site is within the grounds of a gated condominium. Although it is rather close to Makena Alanui Drive, the high walls along the road prohibit any viewing of the site without gaining access to the private property.

Ka'eo

Garcia Property

During the late 1970s when Bishop Museum was conducting preliminary reconnaissance surveys for Seibu, they were requested by representative of the Garcia family to conduct a reconnaissance of their 5.5-acre property. This property is situated just north of the Seibu holdings on the mauka side of the Makena-Keone'o'io Road. Keawala'i Church is across the road and slightly north from the property. The frontage of the Garcia parcel contains the traces of the old road bed and the site of the Makena Post Office. A known site, Kalani Heiau (SIHP Site 196) is located on the Garcia property; this site was reported by Stokes as early as 1918 and visited by Walker in 1929 (Walker 1931). It was recorded as Site 196 and mapped in 1973 during the statewide survey.

During the 1979 reconnaissance survey, a scaled plan map of Kalani Heiau was prepared by Bishop Museum, which significantly updated and improved upon the map prepared during the 1973 statewide survey. In reviewing the prior descriptions and maps of the heiau, Schilt had the following comments:

Given the limited time and attention inherent in the earlier surveys, the variations in descriptive impressions, condition and size of the heiau are not surprising. The extensive damage affected by people, their animals, and other natural processes is unmistakable. However, we do not concur with Walker's description of the site as a "shapeless pile of rocks," or with the State marginal status designation. Much evidence of this former structure is visible and certainly other evidence could be determined archaeologically.

Further, the architectural style, combining as it does natural features of the hill into the context of planned design elements, hold the potential to contribute to our understanding of the stylistic development of heiau construction and how such development may (or may not) relate to social change. Thus we recommend that this archaeological site be preserved and protected as much as possible from further damage. (Schilt 1979: 7, 8).

Bishop museum staff attempted to relocate a small enclosure that had been previously recorded on the Garcia property in 1978, during Rogers-Jourdane's survey of Seibu's hotel site. This site was reportedly on a small rise to the east of the heiau, but due to thick vegetation, (and the poor condition of the enclosure) it was not relocated in 1979. However, an area of terracing was observed in the immediate vicinity of the previously recorded site (Ma-B8-99).

Seven previously unrecorded areas of archaeological features were identified during the 1979 survey. These included the site of the former Makena Post Office, a lava bubble shelter, an area of rock mounds, walls, and a well; an area of rock ahu and walls; and an area of modified outcrops (Schilt 1979). No site numbers were assigned to these areas, and no testing was conducted. Additional survey work in the form of more detailed mapping and testing was recommended for all of the site areas. Historic research was recommended prior to the initiation of any additional archaeological fieldwork. It was also recommended that no additional work would be required at Kalani Heiau if the site is protected and preserved (Schilt 1979: 28-29).

Additional archaeological work did not occur on the Garcia property until 2000, when Haun & Associates were hired to conduct an inventory survey in connection with a proposed condominium project. In addition to Kalani Heiau, five sites were recorded and new SIHP site numbers were assigned (SIHP Sites 5036-5040). All but one of the feature areas previously identified by Schilt were reacquired and included in the areas of the recorded sites. The exception was the lava bubble shelter, which was located in the route of an easement, and was destroyed during construction of a road sometime after 1979. The relatively large area depicted on Schilt's map as terracing was not confirmed by Haun and Henry, who interpreted much of this area as "a natural phenomenon resulting during the downslope movement of surface stones" (Haun and Henry 2000: 17).

Haun and Henry remapped Kalani Heiau and noted that one of the facing walls depicted in Schilt's map was no longer visible; the site was otherwise in the same condition as noted in 1979. The other five sites comprised 33 features and included three agricultural areas and two "livestock control" walls. The largest of these sites (5036) encompassed over half of the property and was comprised of 27 features, including 10 mounds, seven walls, four enclosures, four modified outcrops a lava blister and a modified knoll (Haun and Henry 2000: 19). The latter feature (AA) is the only one within this site that was interpreted as pre-contact in age. Site 5036 as defined by Haun and Henry encompassed five of the seven site areas identified by Schilt in 1979.

The well site depicted by Schilt in 1970 was reported by Haun and Henry to correlate with their Feature O of Site 5036 (Haun and Henry 2000: 17). This feature is described in the 2000 report as a small lava blister, and "Large amounts of modern or historic debris have been deposited within and adjacent to the blister" (Haun and Henry 2000: 311). The functional interpretation given at that time was "as an early to mid-1990s trash dump, probably created by the former occupants of the lot to the west" (Haun and Henry 2000: 31). No testing was conducted at this feature to verify or refute the previous determination that this feature was a well.

Three of the larger and more formal rock mounds within Site 5036 were tested during the Haun and Henry survey, as these were previously interpreted as possible burial features by Schilt. In all cases, historic era materials were found throughout the mound fill and in soil layers beneath the mounds, indicating historic era construction and probably function as clearing piles for gardening.

The Feature AA "modified knoll" at Site 5036 was described as including a pavement of 'a'a cobbles that was built up to a height of 0.4 meters and incorporated existing outcrops. This type of construction would constitute a terrace or platform structure rather than a pavement. An alignment of large cobbles was also located on the leveled top of the knoll, which rises 4.0 meters above the surrounding terrain, overlooking the Kalani Heiau. Also observed was an area of 'ili'ili and water worn coral, which is normally defined as a pavement. Marine shell midden was seen scattered on the surface, and in the subsurface deposit that was tested with one shovel probe. According to Haun and Henry, "Feature AA is interpreted as a temporary habitation feature based on the feature's insubstantial construction and limited range and quantity of cultural remains" (Haun

and Henry 2000: 40). This interpretation was subsequently questioned, and additional testing was recommended at Feature AA because "its location and setting suggest a possible ceremonial function" (Donham 2002:9).

Site 5037 was identified as a stone wall that formed the southern boundary of the Garcia property and also formed the southern boundary of a former kuleana (LCA 2399, Apana 2 to Kalili). This wall was however interpreted as a cattle wall, "based on it method of construction" (Haun and Henry 2000: 40). The second single wall (Site 5039) was also interpreted as a cattle wall "based on its method of construction" (Haun and Henry 2000: 539).

Additional testing was conducted at four locations in the western portion of the property which did not show evidence of surface features. These locations were essentially within the yard areas of modern homes. Subsurface cultural deposits were found in two of the test units, including marine shell midden, volcanic glass, square nails, and a deposit of 'ili'ili in a Layer III deposit 0.20-0.30 meter below surface (Haun and Henry 2000: 45). This deposit was not assigned a site or feature number.

All five of the newly identified sites at the Garcia property were assessed as significant under HAR Criterion "d". The mapping, documentation and testing conducted during the 2000 survey was determined to be adequate data recovery and no further work was recommended at any of these sites (Haun and Henry 2000: 50). Kalani Heiau, assessed under Criteria "d" and "e", was recommended for preservation. In addition, monitoring was recommended during demolition of the modern homes located in western portion of the property.

In their review of the 2000 report, SHPD concurred with all recommendations, except that they requested that a site number be assigned to the subsurface cultural deposit identified in two test units, and that additional inventory survey testing occur in the area of this find prior to the determination of mitigation measures (Don Hibbard letter to Alan Haun February 16, 2001).

During the permit review process and consultation with Native Hawai'ian cultural groups regarding the preservation plan for Kalani Heiau, additional questions arose regarding the actual boundaries of Kalani Heiau and the

function of the site on the knoll overlooking the heiau (Site 5036 Feature AA). SHPD subsequently requested additional fieldwork to address these questions.

In 2003, additional field work was conducted and an addendum survey report was completed (Haun and Henry 2003). The report includes a new sites number (5079) that was assigned to the subsurface deposit identified in the yard area of the Garcia homes, along with a more detailed and expanded map of Kalani Heiau. Also reported on was the excavation of nine test units placed at various locations within the property; these included Kalani Heiau, the base of the hill on which Kalani Heiau sits, the yard area, the knoll (Site 5036 Feature AA), and other features less thoroughly investigated during the inventory survey. At the conclusion of the additional testing, the addendum report concluded that, "Based on the results of the additional fieldwork, there is no change in the significance assessments recommended in the original inventory survey report" (Haun and Henry 2003: 22).

After receiving public input which disputed Haun and Henry's interpretation of Site 5036 Feature AA, SHPD decided to not concur with Haun and Henry's assessment. A ceremonial use was determined more feasible for the site by SHPD, and preservation of the knoll was recommended (P.H. McEldowney letter to Alan Haun October 23, 2003). Additional consultation with the Hawai'ian community was also recommended.

The Garcias subsequently hired Kumu Pono Associates, LLC to conduct a cultural-historical study of Kalani Heiau, the proposed project and surrounding Ka'eo Ahupua'a (Maly and Maly 2005). This study consists of two parts; the first is a collection of historic references, letters, memoirs, newspaper articles and legal transactions regarding Makena and Ka'eo; the second part consists of interviews with local residents and persons familiar with Makena in the early to middle twentieth century.

In 2000, Scientific Consultant Services conducted an inventory survey of the 1.55-acre parcel located immediately south and west of the Garcia property, along the mauka side of Makena-Keone'o'io Road (McGerty and Yeomans 2001). A single archaeological site (SIHP Site 4986) comprising 13 features was identified for the project area. The site area essentially encompasses the entire property, and some of the Site 4986 wall features are continuous with features that were identified on the Garcia property. These include a large enclosure (Feature 1) with two abutting

smaller enclosures (Feature 2) along the south wall and two abutting enclosures along the west wall, on the Garcia parcel (Site 5036 Features J and K); and a wall in the northeast corner of the parcel that adjoins the Site 5036 Feature H wall near the Kalani Heiau. Other shorter wall sections were recorded (Features 4-6) that showed obvious breaches from modern residential activities, most likely associated with the two homes that were formerly present. Also recorded were two pavement areas, modified outcrops and mounds. Shovel probes were excavated in the pavement areas and historic era artifacts were recovered, as well as marine shell midden. A possible pre-contact component was therefore indicated, although a distinct pre-contact cultural layer was not identified. (McGerty and Yeomans 2001: 26, 31).

The functional interpretation of the adjoining enclosures of various sizes in this parcel follows that offered by Haun and Henry for the adjacent parcel:

Some of the existing wall remnants appear to form enclosures and most likely served as multiple pens for separating stock before shipping from the landing at the bay. The mounds are thought to represent clearing mounds. These wall remnants and mounds have been thoroughly mapped and documented during the course of the present inventory survey. (McGerty and Yeomans 2001: 41)

There is no consideration of the possibility of 19th century habitation in this area, which would be expected, given the presence of Land Commission awards, and a “town center” in the form of a store house, church and post office in the immediate vicinity. In addition, the landing for cattle shipment was nearly .5 mile to the north of this site; it would therefore seem logical that stock separating would occur closer to the landing, and within the ranch lands. These properties were within the portion of Ka’eo that was not leased and later sold to the ranch, rather they were within Mahoe’s ahupua’a award. Torbert’s mid-nineteenth century map of the area shows four houses along the mauka side of Makena-Keone’o’io Road just south of the church, with walls separating the houselots. The complex represented by Sites 5036, 5037 and 4986 certainly conform with this cartographic data. Therefore, an association of the walls with 19th century habitation would seem more appropriate than an association with cattle.

The site was determined to be significant under Criterion “d”, and no further work was recommended, with the exception of archaeological monitoring (McGerty and Yeomans 2001: 41).

Monitoring was conducted in 2001 during grubbing and structural demolition, and in 2002 during excavation of trenches for water service laterals (Tome and Dega 2002). Three trenches were excavated along the western edge of the property, mostly within the Makena-Keone’o’io Road easement; all were 6.0 meters long by 1.55 meter deep. No cultural features or deposits were identified in the trenches, and no additional monitoring was recommended for the parcel. This recommendation seems rather odd, given that the monitored trenching occurred outside the area of Site 4986, and not within any of the enclosures or near other recorded features (Tome and Dega 2002: 22). It was noted that “Based on the parcel’s proximity to Kalani Heiau, archaeological work in the form of setting buffer zone fences during construction on the parcel is recommended” (Tome and Dega 2002: 27).

Keawala’i Church

Two archaeological projects were conducted on the grounds of Keawala’i Church (SIHP Site 1584) between 1994 and 1997. The 1994 project involved data recovery excavations inside the church structure, after removal of the wooden floor that was installed in 1901. It was determined during the construction project that excavation would be required for placement of new floor footings, which was not part of the project description at the time it was reviewed by SHPD. A volunteer group of church members conducted controlled excavation of the footing trenches, with screening, under the supervision of archaeologist Theresa K. Donham. Over 200 artifacts were recovered, including 37 buttons, 24 beads, six coins, marbles, carved wood and bone items, matting, braided sennett, slate pencils, chalk, toys, coral abraders, stone sinkers, bone fishhook segments, volcanic glass flakes and basalt flake tools (Donham 1998: 17).

One deep test unit was excavated in the center of the church floor and identified an undisturbed pre-contact cultural deposit beneath the former church floor, which was an ‘ili’ili pavement. A mixed layer of traditional and historic materials occurred at the interface of the undisturbed cultural deposit and the ‘ili’ili church pavement. An undisturbed charcoal concentration was located at the base of the pre-contact cultural deposit, 0.60 meter below the ‘ili’ili pavement surface. This charcoal returned

a calibrated calendric range of AD 1445-1645 (Donham 1998: 17). A sample obtained from the upper, mixed portions of the deposit produced multiple ranges with two intercepts that fall between AD 1725-1815. These findings indicated that the church was built on an active habitation site; the presence of traditional artifacts in foundation trenches along the outer edges of the building also indicated that the traditional site was larger than the footprint of the church structure.

In 1997, the Church Board of Directors requested an inventory survey of the northern portion of the church yard, where a community building was proposed to be constructed. The survey was conducted by Theresa k. Donham and included a surface survey with systematic subsurface testing. Five surface features, four of which were contemporaneous with the extant church structure, were identified. These included two rock mounds, an area of modified outcrops, and the church yard boundary wall. Also identified was a partially buried stone alignment that upon testing was found to be a former bifaced probable foundation wall. This feature was located to the east side of the church, parallel with the existing east church wall.

Six test units were excavated in the 890 square meter project area and subsurface pre-contact cultural deposits were found in all units. The test units closest to the shoreline showed six layers of superimposed beach sand deposits with cultural materials that were capped with two historic era layers, the most recent of which was stony fill. Dated samples obtained from lower layers in the two makai test units returned contemporaneous dates of AD 1265-1300 (Donham 1998: 115). These samples were not recovered from the earliest deposits, and in one of the units, two distinct cultural layers occurred beneath the dated layer. The deepest cultural deposit (Layer VI), found at 1.65-1.75 meter below surface, contained a concentration of charred turtle remains (Donham 1998: 59). Two additional dates obtained from cultural layers at two test units in the mauka portion of the yard returned contemporaneous date ranges of AD 1675-1770 (Donham 1998: 113).

During subsurface testing, a total of 1354 artifacts were recovered, 564 of which were traditional. Among the traditional items were bone fishhook parts, picks, a pin, pieces of cut and polished bone, a drilled dog tooth, a polished shark tooth, shell scrapers, scoops, a shell adze, shell lures, shell ornaments, coral abraders and sea urchin spine abraders (Donham 1998: 93-101). Historic artifacts included ceramic and glass sherds, metal

items, slate, and plastic comb parts. Midden collected from the six test units at the church site included 5,521 grams of marine shell and 1,737 grams of vertebrate remains, including turtle, fish, dog and bird remains. This density of artifacts and midden indicated pre-contact permanent habitation, quite possibly of persons with high status, given the number of fine bone and shell items as well as personal ornaments.

The Keawala'i Church site was determined to be significant under multiple HAR Criteria, including "a", "c", "d", "e" and quite possibly "b", due to a possible association with Kalola, one of the highest ranking Ali'i of her time. As noted in the discussion,

Historic information indicates that she (Kalola) stayed in Honua'ula during a very critical period in the history of Hawai'i. The presence of a landing, a fishpond, a heiau, and numerous contact period residential sites in the immediate area make this site a very likely candidate for also having a chief's compound. (Donham 1998: 123)

Recommendations regarding the proposed project indicated that the new building would have visual impacts, and would affect the integrity of the location, design, setting and feeling of the historic church site. It was determined that construction related excavation would impact significant cultural deposits and features, and that the most effective way to mitigate these affects would be to relocate the proposed building. If relocation is not implemented, additional data recovery would be required. In addition, a burial treatment plan addressing preservation of the historic cemetery at the church was also recommended (Donham 1998: 123-124).

Given the findings of the survey and additional public review comments, the Board of Directors decided to remodel and redesign the existing community building rather than construct a new building behind the church.

Mo'oiki

Between 1999 and 2001, a series of archaeological studies were conducted on two adjacent parcels located between the Makena golf course and Makena State Park in Mo'oiki. Together the parcels comprise 6.1 acres and were formerly known as the Bak and Donaghy parcels. The intent of the owners was to consolidate and re-subdivide the property for residential development **(seven lots).** An inventory survey was

conducted on the Donaghy parcel by Archaeological Services Hawai'i in 1999, and on the Bak parcel in 2000. Additional subsurface testing was conducted in 2000-2001 on both parcels in order to determine the extent of unmarked historic burials associated with the Bak and Lono families (Rotunno-Hazuka et al. 2002).

This project area is located within the area previously recorded in the SIHP as the Makena Complex (Site 1266); the enclosures and walls located within this project area were no doubt among those enumerated during the 1973 survey. Further correlation is not possible due to the lack of a site map from the 1973 survey.

The 1999-2000 surveys identified six archaeological sites, including three burial sites (SIHP Sites 5089-5091), a fishpond with remnant perimeter wall sections (Site 5209), and two wall complexes (Site 5210 and 5211). The largest site (5210) encompassed most of the Bak parcel and was described as "several rectangular areas defined by enclosing, free-standing walls or a combination of free-standing and retaining walls" (Rotunno-Hazuka et al 2002: 32). Surface scatters of midden and historic artifacts were observed at five locations within this site area. The largest enclosure (Feature 1) encompassed one of the surface midden scatters, which was located in the center of the square enclosure. This scatter was tested with a backhoe trench (BHT-4) and a "primary deposit of cultural material consisting of 'ili'ili paving mixed with midden" was identified (Rotunno-Hazuka et al. 2002: 40). A second backhoe trench located to the west of the surface scatter and along the inside of the enclosure wall found a disturbed secondary deposit that appeared to be the result of bulldozing (Rotunno-Hazuka et al. 2001: 40).

Two areas of surface scatter located just outside the walls of the Feature 1 enclosure were also tested with backhoe trenches and were found to contain either no subsurface deposits or bulldozer-disturbed deposits. This enclosure was determined to represent a residential compound that was occupied from around 1880 through around 1910. A second Site 5210 enclosure was also interpreted as a residential compound that was constructed around 1920. Other wall features of this site were determined to be associated with the modern residence constructed c. 1950 (Rotunno-Hazuka et al. 2002: 130). The second large enclosure (Site 5211) was interpreted as a livestock enclosure. The report found that "Although a few traditional artifacts were recovered, no intact deposition with a datable component, exhibiting integrity of context, was encountered during testing" (Rotunno-Hazuka et al. 2002: 130).

A total of eight primary burials were identified at three burials sites within the project area. Seven of the burials were known and identified by lineal descendants; these burials dated to 1929-1940. One burial (Site 5090) was found in a rock-lined pit and even though it was within the boundaries of a historic period cemetery, it was tentatively interpreted as pre-contact (Rotunno-Hazuka et al. 2002: 51).

The three burial sites were determined to be significant under HAR Criteria "d" and "e", and permanent preservation was recommended. The portion of the fishpond and perimeter walls within the project area was determined to be significant under Criteria "c" and "d", and preservation was recommended. The remaining walls (Sites 5210 and 5211) were determined significant under Criterion "d", and no further archaeological work other than monitoring during their removal, was recommended (Rotunno-Hazuka et al. 2002: 133).

In 2003, Scientific Consultant Services prepared monitoring plans for each of the seven newly subdivided lots within the Bak South project area, and conducted monitoring of extant house demolition. No significant finds were reported during that monitoring (Dega 2003). A preservation plan was also prepared for the portion of the Site 5902 fishpond wall that is located on lot 4 within the project area. The portion of the fishpond wall addressed in the preservation plan is described as 7.0 meters long and between 21 an d42 cm in height (O'Rourke 2003: 8). The plan proposed a permanent 20 foot buffer zone around the wall feature.

Mo'oloa

In 2005, an inventory survey was conducted of a 3-acre parcel located at the southern end of the Makena golf course, along the mauka side of the Makena-Keone'o'io Road. The parcel is situated across the road from Makena State Park and was part of the original Seibu resort holdings during the time that the golf course was constructed. Portions or all of the property were included in prior surveys by Clark (1974), Bordner and Cox (1982) and Bath (1983). Site 1961, a possible heiau identified by Bordner and Cox, and later tested by Bishop Museum (Williams 1989), is located in the adjacent property, immediately to the south of this parcel. The property was transferred to the nonprofit organization Keauhou o Honua'ula as part of litigation settlement; the inventory survey by Akahele Archaeology was requested in preparation for future construction on the property.

Surface survey of the parcel resulted in the identification of a stone boundary wall that had been previously recorded by Bordner and Cox (1982) as Site 1931. The western portion of this wall was subsequently recorded as Site 3103 by Bath (1983) during a survey of a proposed access road. The 2005 survey determined that these two wall sections were part of the original property line boundary for land Grant 1499:1 to Kalili. No additional sites had been previously recorded in the interior area of the property, and none were found during the 2005 survey (Donham 2005).

Subsurface testing within the parcel consisted of 32 backhoe trenches regularly spaced across the property. Testing indicated that the major portion of the property had been excavated, most likely to remove the soil for fill that was taken elsewhere, and was then used as a dumping area for boulders and modern construction debris. Various types of secondary fill were observed across 97% of the property (Donham 2005: 41). A local resident who lived adjacent to the parcel to the east recounted that the excavation and dumping occurred during construction of the Makena golf course. The only area not affected by excavation and dumping was a narrow band along Makena-Keone'o'io Road. This area showed evidence of bulldozed push piles, no doubt made when the area was being excavated. The wall along the road was found to be mostly in very poor condition, due to machinery driving over it, and due to stone removal (probably by rock wall boulders). The negative findings in the project area were attributed to the mass excavation and dumping that occurred here during the 1980s. Given the project location, relatively intensive habitation and agricultural use was expected, but no traces of such were found. No further archaeological work was recommended due to the negative findings (Donham 2005).

In 1996-1997, Xamanek Researches conducted an inventory survey of a 4.2-acre parcel in Mo'oloa, located a short distance south from the above property, along the mauka side of Makena-Keone'o'io Road. The parcel was part of Seibu holdings at the time of golf course development, and it was included in the areas surveyed by Bordner and Cox (1982) for the golf course expansion. At that time, two sites were recorded within the property area; an enclosure with internal divisions (Site 1944) and a cattle enclosure and chute (Site 1965). The property was later sold by Makena Resort, and permits were sought by the new owner for construction of a private residence. During the 1996-97 survey, the two previously recorded sites and five additional sites were identified and given new SIHP site numbers (4185-4191).

Previously recorded Site 1944 was assigned SIHP Site 4185 and detailed mapping as well as subsurface testing was conducted at the enclosure. At the time of the Fredericksens' survey, the site consisted of a large C-shaped enclosure that opened to the east, a rock mound located just outside the south wall of the enclosure, and a small platform located to the west of the enclosure (Fredericksen and Fredericksen 1997: 15). A surface scatter of midden and artifacts was also observed to the west of the enclosure.
The interior area and the eastern ends of the enclosure walls had been impacted by bulldozing that occurred in connection with a nearby power line. A power pole was situated a few feet from the eastern end of the walls (Fredericksen and Fredericksen 1997: 17). This utility line was installed some time after 1982, because no damage was noted to the site at that time. Bordner and Cox noted the presence of an internal terrace 0.5 meters in height across the interior of the enclosure (Bordner and Cox 1982: 27). This terrace was impacted by bulldozing, although possible traces of it are depicted in the 1997 site map. The 1997 survey located several pieces of branch coral, 'ili'ili and a possible basalt hammerstone inside the enclosure.

Two test units were excavated in the interior area of the Site 4185 enclosure in order to better determine its age and function. The uppermost soil layers (I and II) contained marine midden, charcoal, coral, 'ili'ili, a coral abrader fragment and basalt artifacts. A large firepit was identified in Layer II which contained a number of pieces of branch coral, fire-cracked stones and a charred pig bone implement.

Charcoal collected from the firepit was submitted for age determination and returned multiple ranges with intercepts at AD 1505, 1595 and 1620 (Fredericksen and Fredericksen 1997: 24). As indicated in the description of this pit, "The lack of quantities of food midden remains in the firepit indicates that it was utilized for ceremonial rather than cooking purposes in the late precontact period" (Fredericksen and Fredericksen 1997: 19). A second large firepit was encountered in the second test unit; this pit also contained quantities of coral, a worked bone fragment and a coral abrader fragment. These subsurface findings in conjunction with the amounts of branch coral found at Site 4185, indicated a ceremonial function.

Other sites identified within the project area include: two modified outcrops consisting of hastily filled lava blisters with associated metal and

glass (Sites 4186 and 4187); a narrow lava ridge with three short stone alignments and minor modifications (Site 4188); a cattle or boundary wall (Site 4189, previously recorded as Site 1965); the ruins of a wooden structure with an associated wall, an iron cook stove, and round nails associated (Site 4190); and a small rock overhang shelter (Site 4191). Three test units were excavated at this overhang and low amounts of marine shell midden and a few artifacts were recovered. These included coral abraders, volcanic glass flakes and basalt flakes (Fredericksen and Fredericksen 1997: 28, 29). Insufficient amounts of charcoal were recovered to obtain a radiocarbon date for this deposit, although a pre-contact age was indicated based on portable materials.

Site 4185 was determined to be significant under HAR Criteria "d" and "e", due to its high research potential and cultural value. Preservation in place was recommended for the site, with monitoring of any work in the area of the site (Fredericksen and Fredericksen 1997: 32). The remaining six sites were determined significant under Criterion "e", and it was also determined that "an adequate amount of information has been recovered and recorded, therefore rendering the sites 'no longer considered significant'. No further archaeological work is recommended for these 6 sites" (Fredericksen and Fredericksen 1997: 32).

Archaeological monitoring was recommended for the entire parcel, "to insure that historic resources which may have been obscured by the dense vegetation present during our inventory survey, are not adversely affected by this work" (Fredericksen and Fredericksen 1997: 32, 33).

Mo'omuku

In 1990 Bishop museum conducted a walk-through survey of a 150-acre parcel adjacent to the south end of the Makena resort lands for Japan Grand Prix Ltd. The following year, a survey was completed of the project area by Paul Cleghorn Consulting (Cleghorn 1991). A narrow section of the property fronted the Makena-Keone'o'io Road and it extended mauka to an elevation of 350 feet. At the time of fieldwork, large areas within the property had been bulldozed. Although the 1990-1991 fieldwork was described as an inventory level survey, no subsurface testing was conducted and a limited amount of mapping was conducted. Descriptive information was not obtained for all of the recorded features.

Twenty-six archaeological sites were recorded (SIHP Sites 2771-2796), and a minimum of 60 features were enumerated. A number of walls

(17) were plotted on the project area map, however no actual count was provided in the report. All of these walls were given a single site number (2796) and all were described as being relatively high and narrow of multiple stacked construction. They were all associated with cattle raising (Cleghorn 1991: 19). A simple overlay of the project area map with a map of 19th century land grants indicates that these walls correspond with land grant boundaries. There were nine land grants and two Land Commission awards within the project area; the plotted walls correspond with the two LCA and seven of the land grants. A more accurate interpretation of these walls would therefore be as property boundaries.

Cleghorn identified nine sites as representing permanent habitation, "because of their size, and form" (Cleghorn 1991: 21). These included six enclosures and thee platforms. Two agricultural complexes were identified, as well as two temporary habitation sites. Two activity areas were identified, along with six sites of unknown function and one burial cave.

All of the identified sites were assessed as significant under Criterion "d", and one site, a known burial cave (Site 2778) was assessed under criterion "e" as well. At that time, this criterion was proposed, but was not officially an HAR criteria.

Recommended work included the completion and implementation of a data recovery plan. Preservation of the burial cave was recommended, and four of the permanent habitation sites were recommended for preservation, because they "are good examples of their site type and would make interesting interpretive displays" (Cleghorn 1991: 21). These sites were not, however assessed as significant under Criterion "c". Preservation of selected walls and incorporation into the landscaping design was also recommended.

There are no available records of additional work being conducted on this property.

Summary

The 90 archaeological studies discussed above identified a minimum of 979 archaeological sites in the coastal portion of northern Honua'ula. This area includes the 14 *ahupua'a* of Paeahu, Palauea, Keauhou I & II, Kalihi, Papa'anui, Waipao, Ka'eo, Maluaka, Mo'oloa, Mo'oiki, Mohopilo and Mo'omuku. Of this minimum number of identified sites, 68, or 7% are currently in preservation status. This number does not include sites that were recommended for preservation but were not, for various reasons, actually preserved. Nor does it include sites that could, for various reasons, be destroyed in the near future. It should be noted that this study was not accompanied by field checks of sites that are on the record as being preserved. It is therefore not known whether some of the sites placed in preservation status are actually intact. A few sites are accessible without obtaining owner permission; these have been visited in the recent past and are verifiably intact.

In 1970, nearly all of the sites in preservation status would have been located on property controlled by the two resort factions, Wailea and Seibu/Makena. Through the years, lands with these sites have been subdivided from the resorts and sold to private developers or individuals. Currently, less than half of the sites in preservation status (12 in Wailea and 15 in Makena) are on resort lands. To date, the only interpretive display offered by the resorts is the reconstructed Wailea Point *kauhale*. Described above, the Wailea Point display hardly qualifies as a preserved archaeological complex. There has been no indication that the Makena Resort is planning to provide a truly accessible and real preservation area that consists of more than one isolated site.

The remaining 42 sites in preservation status are in the hands of approximately 17-20 different land owners. Among these 42 sites, the largest cluster on one property is in Palauea, where 12 sites are within a 20-acre preserve that is presumably under the control of the University of Hawai'i Foundation. This area has the potential to be a model preservation area; however, there does not appear to be any movement on the part of UH toward this goal. Smaller clusters of four sites each occur on two private development properties in Palauea and Mo'oiki. Most of the "preserved" sites on small parcels (22 of 42) occur as single entities on single-family parcels or within condominium developments. Four of these sites are preserved under fill and there is no clause in the preservation plan for access to the sites. In four cases, preservation plans called for interpretive signage and access to the sites; however, limited

to no access is actually provided, and signage is either not accessible or provides very limited information about the site. Four sites are burials that require preservation under the special conditions approved by the Maui/ Lana'i Islands Burial Council. The fate of four sites is currently unknown, as the two developments are not completed. The remaining six sites are in "passive preservation", indicating that the landowner chose to leave them intact rather than pay for archaeological data recovery. These sites have no requirements for access or interpretation, and in most cases, would not normally be candidates for interpretation.

The historic trends of site treatment in Honua'ula provide an important lesson – the processes of private land development severely inhibit the meaningful preservation of historic and cultural properties. Successful preservation requires that the public interest be put above private profit margins. The preservation laws in Hawai'i rely heavily on land owner consent, and on the owner's willingness to do more than the bare minimum preservation that is required by law for non-burial sites. With the exception of a few philanthropists, this rarely happens in the private sector. For Honua'ula, hope lies in the Palauea property controlled by the UH Foundation, and in the possibility that a public agency might partner with private non-profits or other foundations to acquire lands for the in-perpetuity preservation of important cultural complexes that are still intact.

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Date	Author(s)	Project	Acres	Ahupua'a	Sites	Activity
1969	Kirch	Wailea Resort	1280	Paeahu - Papa'anui	11	Reconnaissance
1970	Kirch	Wailea Resort	40	Palauea	2	Test excavation, Reconstruction
1971	Bevaqua	Maonakala Village	5.5	Kanahena	9	Inventory survey
1972	Walton	Piilani Highway	69	Palauea, Keauhou	12	Inventory survey
1974	Clark	Makena Resort	1000	Keauhou-Mo'omuku	264	Reconnaissance
1974	Barrera	Wailea golf course	400	Keauhou, Kalihi	29	Reconnaissance
1974	Cleghorn	Wailea golf course	400	Keauhou, Kalihi	14	Inventory survey
1975	Cleghorn	Wailea golf course	1	Keauhou	1	Data recovery
1975	Hommon	Makena water line		Palauea to Mo'oloa		Reconnaissance
1977a	Davis & Bordner	Makena Alanui		Palauea to Kanahena	28	Reconnaissance
1977b	Davis & Bordner	Makena Alanui	11	Palauea, Keauhou, Papa'anui	34	Reconnaissance
1978	Haun	Seibu golf course	96	Maluaka, Mo'oiki	85	Inventory, salvage
1978	Cordy	Seibu golf course	c. 120	Ka'eo, Maluaka	76	Inventory, salvage
1981	Sinoto	Seibu golf course	100	Waipoa, Papa'anui	17	Inventory, testing
1978	Sinoto	Makena Shores	17	Kalihi, Waipao, Papa'anui	18	Reconnaissance
1979	Sinoto & R-Jourdane	Makena Shores	17	Kalihi, Waipao, Papa'anui	19	Inventory survey

Table 1. Summary of Archaeological Studies in Honua'ula, from 1969

Date	Author(s)	Project	Acres	Ahupua'a	Sites	Activity
1979a	Rogers-Jourdane	Seibu hotel	100	Papa'anui, Kaeo	21	Reconnaissance
1979b	Rogers-Jourdane	Wailea parcels A-D		Paeahu	2	Reconnaissance
1979	Denison	Seibu hotel	c. 40	Ka'eo, Maluaka	6	Inventory, salvage
1979	Hammatt	Wailea View	700	Paeahu, Palauea	0	Reconnaissance
1979	Schilt	Garcia property	5.5	Ka'eo	7	Reconnaissance
1980	Bordner	Makena Ala Nui	2	Palauea	2	Data recovery
1980	Schilt & Dobyns	Wailea parcels A-D	c. 80	Paeahu	2	Inventory survey
1981	Rosendahl	5 Wailea parcels	nd	Paeahu	0	Reconnaissance
1982	Bordner & Cox	Seibu golf course	nd	Papa'anui-Mo'omuku	79	Reconnaissance
1982	Shun & Streck	Wailea sewer line	c. 10	Paeahu, Palauea	2	Monitoring, testing
1983	Bath	Seibu wells, tanks	nd	Ka'eo-Mo'oloa	11	Reconnaissance
1985	Cordy & Athens	Seibu reservoir	nd	Ka'eo	6	Data recovery
1987	Spear	Wailea parcels A-C	64	Paeahu	5	Inventory survey
1987	Rosendahl & Haun	Wailea parcels A-C	-	Paeahu	2	Data recovery
1987	Dicks & Haun	Embassy Suites	21	Palauea	2	Inventory survey
1987	Walker & Haun	Grand Champions	10.6	Paeahu	1	Reconnaissance

Table 1. Summary of Archaeological Studies in Honua'ula, from 1969

Date	Author(s)	Project	Acres	Ahupua'a	Sites	Activity
1988	Dobyns	Makena Surf	17	Kalihi, Waipao	7	Data recovery
1988	Kennedy	Makena 700	670	Paeahu, Palauea, Keauhou	1	Reconnaissance
1988	Pantaleo & Charvet-Pond	Seibu Parcels III & IV	365	Keauhou-Papa'anui & Mo'oiki, Mo'oloa	75	Inventory survey
1988	Cleghorn et al.	Seibu parking lot	2	Maluaka	1	Reconnaissance
1989	Shapiro and Haun	Palauea Lands	60	Palauea	19	Reconnaissance
1989	Landrum & Cleghorn a	Parcels Sf-7 & 10	47.3	Palauea, Paeahu	8	Reconnaissance
1989	Landrum & Cleghorn	Palauea Beach lots	2.58	Palauea	7	Inventory survey
1989	Williams	Seibu golf course	.5	Mo'oloa	1	Data recovery
1990	Gosser & Cleghorn	Wailea So. Acres	187	Palauea, Keauhou, Waipoa	40	Reconnaissance
1990	Roe & Cleghorn	Wailea, MF-11	10.4	Paeahu	2	Reconnaissance
1990	Clark et al.	Makena Surf	1	Kalihi	1	Data recovery
1990	Donham	Palauea parcel 3	1.6	Palauea	1	Inventory survey
1991	Cleghorn	Japan Grand Prix	150	Mooloa, Moomuku	26	Inventory survey
1992	Toenjes et al.	Palauea Develop.	44.4	Palauea	16	Inventory survey
1992	Kleiger et al.	Wailea, SF-7	32.8	Paeahu	2	Data recovery
1992	Beggerly	Makena State Park	2.5	Mo'oloa	1	Reconnaissance

Table 1. Summary of Archaeological Studies in Honua'ula, from 1969

Date	Author(s)	Project	Acres	Ahupua'a	Sites	Activity
1993	Gosser et al.	Wailea So. Acres	187	Palauea, Keauhou, Waipoa	40	Data recovery
1993	Sinoto & Pantaleo	Cinder haul road	3	Keauhou	3	Inventory Survey
1993	Yent	Makena State Park	165	Mo'oiki, Mo'oloa	4	Inventory survey
1994	Jones et al.	Seibu hotel area	0.4	Ka'eo	1	Inventory survey
1994	Chaffee & Spear	Papa'anui parcel	6	Papa'anui, Waipoa	6	Inventory survey
1995	Gosser et al.	Wailea, MF-11	10.4	Paeahu	2	Inventory survey
1995	Fredericksen & Fredericksen	Palauea parcel 3b	.8	Palauea	1	Data Recovery
1996	Gosser et al.	Seibu Parcels III & IV	365	Keauhou-Papa'anui & Mo'oiki, Mo'oloa	70	Data recovery
1996	Titchenel	Seibu Water Treatment Plant	20	Mo'oiki	6	Inventory Survey
1997	Fredericksen	Hale O Makena	1	Waipao	3	Inventory survey
1997	Fredericksen & Fredericksen	Mo'oloa parcel	4.2	Mo'oloa	7	Inventory survey
1998	McGerty & Spear	Wailea, MF-17	12.4	Paeahu	1	Inventory survey
1998	McIntosh et al.	Seibu LUC	33.2	Papa'anui-Maluaka	11	Inventory survey
1998	Fredericksen & Fredericksen	Nahuna Point	1	Papa'anui	4	Inventory survey
1998	Fredericksen	Nahuna Point	.8	Papa'anui	1	Inventory survey
1998	Donham	Keawala'i Church	.1	Ka'eo	1	Inventory survey

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Date	Author(s)	Project	Acres	Ahupua’a	Sites	Activity
1999	Fredericksen	Palauea Parcel 19	.5	Palauea	1	Inventory survey
1999	Fredericksen et al.	Palauea Parcel 20	.5	Palauea	0	Inventory survey
1999	Rechtman	Grand Wailea	20	Paeahu	3	Monitoring
2000	Rotunno-Hazuka et al.	Palauea	44.4	Palauea	16	Addendum survey
2000	Sinoto and Pantaleo	Wailea 670	190	Palauea, Keauhou	24	Inventory survey
2000	Fredericksen & Fredericksen	Parcel MF-21	23	Palauea, Keauhou	10	Inventory survey
2000	Haun & Henry	Garcia property	5.5	Ka’eo	6	Inventory survey
2001	Sinoto and Pantaleo	Wailea 670	670	Paeahu, Palauea, Keauhou	4	Addendum survey
2001	Sinoto et al.	Palauea	5	Palauea	4	Addendum survey
2001	Haun & Henry	Palauea p. 21-23	1.5	Palauea	2	Inventory survey
2001	Cordero & Dega	Papa’anui parcel	6	Papa’anui, Waipoa	3	Data recovery
2001	McGerty and Yeomans	Ka’eo parcel	1.55	Ka’eo	1	Inventory survey
2002a	Sinoto et al.	Palauea parcel 13	.5	Palauea	0	Inventory survey
2002b	Sinoto et al.	Palauea Iparcel14	.5	Palauea	1	Inventory survey
2002	Haun & Henry	Palauea par. 16, 17	1	Palauea	1	Inventory survey
2002	Lee-Greig	Chang Family lot	3.2	Keauhou, Kalihi	4	Inventory survey

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Date	Author(s)	Project	Acres	Ahupua’a	Sites	Activity
2002	Rotunno-Hazuka et al.	Bak South parcel	6.1	Mo’oiki	5	Inventory survey
2003	Prishmont & Pantaleo	Palauea parcel 5	1	Palauea	1	Inventory survey
2004	Rotunno-Hazuka & Pantaleo	Palauea parcel 6	.88	Palauea	1	Inventory survey
2004	Davis & Fortini	Wailea, MF-8	25	Paeahu	5	Inventory survey
2005	Rotunno-Hazuka et al.	Makena Parcel H-1	11.9	Ka’eo, Maluaka	8	Inventory survey
2005	Donham	Palauea P. 16-17	1	Palauea	2	Addendum survey
2005	Tome and Dega	Papa’anui parcel	4.8	Papa’anui	4	Inventory survey
2005	Donham	Palauea parcel	1	Palauea	2	Inventory survey
2006	Donham	Mo’oloa parcel	3	Mo’oloa	1	Inventory survey
2006	Donham	Dowling Develop.	12	Maluaka, Ka’eo	15	Inventory survey
2007	Fredericksen	Palauea Parcel 3b	.8	Palauea	1	Data recovery

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