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Department of Hawaiian Home Lands

LETTER OF TRANSMITTAL RECEIVED

JUL - 1 2015

Date: 6/25/15

RE: Kanakaloloa Cemetery Improvements Project, Hoolehua, Molokai
Draft Environmental Assessment and Anticipated Finding of No Significant
Impact Being Submitted for Review and Publication

To: Ms. Jessica Wooley, Director
Office of Environmental Quality Control

Through: Norman Sakamoto, Acting Land Development Division Administrator

From: Ms. Jobie M. Masagatani, Chairman
Hawaiian Homes Commission

W Sakamoto
Jobie M. Masagatani

REMARKS:

The Department of Hawaiian Home Lands (DHHL) hereby transmits the draft environmental assessment and anticipated finding of no significant impact (DEA-AFONSI) for the Kanakaloloa Cemetery Improvements Project situated at TMK (2) 5-2-017:003 (por.) in the Hoolehua District on the island of Molokai for publication in the next available edition of the Environmental Notice.

Enclosed is a completed OEQC Publication Form, two copies of the DEA-AFONSI, an Adobe Acrobat PDF file of the same, and an electronic copy of the publication form in MS Word. Simultaneous with this letter, we have submitted the summary of the action in a text file by electronic mail to your office.

If there are any questions, please contact James Richardson, DHHL Engineer at 808-620-9282 or by email at james.c.richardson@hawaii.gov.

Enclosures

OFFICE OF ENVIRONMENTAL
QUALITY CONTROL

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RECEIVED

AGENCY ACTIONS
SECTION 343-5(B), HRS
PUBLICATION FORM (FEBRUARY 2013 REVISION)

Project Name: Kanakaloloa Cemetery Project
Island: Moloka'i
District: Ho'olehua
TMK: (2) 5-2-017:003 (por.)
Permits: NPDES General Permit, HRS 6-E Historic Preservation Review Clearance, County Building Permit, County Electrical Permit, County Plumbing Permit, County Sign Permit, County Grading and Grubbing Permit, County Driveway Connection Permit, County Approval of construction drawings

Proposing/Determination Agency:

Department of Hawaiian Home Lands (DHHL)
Land Development Division
Design and Construction Branch
91-5420 Kapolei Parkway
Kapolei, Hawaii, 96707
Contact: James Richardson, HHL Engineer

Consultant:

Group 70 International
925 Bethel Street, 5th Floor
Honolulu, HI 96813
(808) 523-5866

Status (check one only):

- ☒ **DEA-AFNSI** Submit the proposing agency notice of determination/transmittal on agency letterhead, a hard copy of DEA, a completed OEQC publication form, along with an electronic word processing summary and a PDF copy (you may send both summary and PDF to oeqchawaii@doh.hawaii.gov); a 30-day comment period ensues upon publication in the periodic bulletin.
- ☐ **FEA-FONSI** Submit the proposing agency notice of determination/transmittal on agency letterhead, a hard copy of the FEA, an OEQC publication form, along with an electronic word processing summary and a PDF copy (send both summary and PDF to oeqchawaii@doh.hawaii.gov); no comment period ensues upon publication in the periodic bulletin.
- ☐ **FEA-EISPN** Submit the proposing agency notice of determination/transmittal on agency letterhead, a hard copy of the FEA, an OEQC publication form, along with an electronic word processing summary and PDF copy (you may send both summary and PDF to oeqchawaii@doh.hawaii.gov); a 30-day consultation period ensues upon publication in the periodic bulletin.
- ☐ **Act 172-12 EISPN** Submit the proposing agency notice of determination on agency letterhead, an OEQC publication form, and an electronic word processing summary (you may send the summary to oeqchawaii@doh.hawaii.gov). NO environmental assessment is required and a 30-day consultation period upon publication in the periodic bulletin.
- ☐ **DEIS** The proposing agency simultaneously transmits to both the OEQC and the accepting authority, a hard copy of the DEIS, a completed OEQC publication form, a distribution list, along with an electronic word processing summary and PDF copy of the DEIS (you may send both the summary and PDF to oeqchawaii@doh.hawaii.gov); a 45-day comment period ensues upon publication in the periodic bulletin.
- ☐ **FEIS** The proposing agency simultaneously transmits to both the OEQC and the accepting authority, a hard copy of the FEIS, a completed OEQC publication form, a distribution list, along with an electronic word processing summary and PDF copy of the FEIS (you may

send both the summary and PDF to oeqchawaii@doh.hawaii.gov); no comment period ensues upon publication in the periodic bulletin.

___ Section 11-200-23
Determination

The accepting authority simultaneously transmits its determination of acceptance or nonacceptance (pursuant to Section 11-200-23, HAR) of the FEIS to both OEQC and the proposing agency. No comment period ensues upon publication in the periodic bulletin.

___ Section 11-200-27
Determination

The accepting authority simultaneously transmits its notice to both the proposing agency and the OEQC that it has reviewed (pursuant to Section 11-200-27, HAR) the previously accepted FEIS and determines that a supplemental EIS is not required. No EA is required and no comment period ensues upon publication in the periodic bulletin.

___ Withdrawal (explain)

Summary (Provide proposed action and purpose/need in less than 200 words. Please keep the summary brief and on this one page):

Located on 4.35 acres of Department of Hawaiian Home Lands in the Ho'olehua Homestead, the Kanakaloloa Cemetery Project will address infrastructure needs at the cemetery, proposing four main areas of improvement including paved roadways and parking (which will pave existing paths on the site, without additional excavation or disturbance), a 3-4 foot high front perimeter property wall, a new 2 inch water line, and a new outdoor open air pavilion.

For over 75 years, the Kanakaloloa Cemetery has served the Ho'olehua Homestead, one of the first homesteads to be established under the Hawaiian Homes Commission Act. The Kanakaloloa Cemetery has been a place of cultural heritage and remembrance for many generations, allowing homestead families to continue traditional practices that are culturally aligned with Native Hawaiian values and protocol. A portion of the existing cemetery in the southern portion of the parcel was assigned as a new historic property as State Inventory of Historic Places (SIHP) 50-60-02-2564.

The proposed project benefits the trust and its beneficiaries by preserving and improving the current cemetery facilities, providing a more comfortable environment for visitors, as well as benefiting the larger region by providing infrastructure that is better suited for long term expansion and preservation of the cemetery grounds for years to come. The DEA evaluates construction and operational impacts on environmental, archaeological, and cultural resources; utility infrastructure and roadway conditions; and projected socio-economic benefits and costs.

DHHL KANAKALOLOA CEMETERY PROJECT

TMK: (2) 5-2-017:003 (por.)
Ho'olehua, Island of Moloka'i

Draft Environmental Assessment

Applicant:



HAWAIIAN HOME LANDS

Approving Agency:

Department of Hawaiian Home Lands
Hawaiian Homes Commission
Honolulu, Hawai'i

Prepared By:



GROUP 70
INTERNATIONAL

July 2015

DHHL KANAKALOLOA CEMETERY PROJECT

TMK: (2) 5-2-017:003 (por.)
Ho'olehua, Island of Moloka'i

Draft Environmental Assessment

This environmental document is prepared in accordance with the requirements of Chapter 343, HRS and Hawai'i Administrative Rules, Title 11, Department of Health.

Applicant:

Department of Hawaiian Home Lands
91-5420 Kapolei Parkway
Kapolei, Hawai'i 96707

Prepared By:

Group 70 International, Inc.
925 Bethel Street, 5th Floor
Honolulu, Hawai'i 96813

July 2015

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DHHL KANAKALOLOA CEMETERY PROJECT
Draft Environmental Assessment

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- C. Archaeological Inventory Survey Report – Keala Pono Archaeological Consulting, LLC.
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- E. Preliminary Engineering Report – Group 70 International, Inc.

ABBREVIATIONS/ACRONYMS

Ac.	Acre
AC	Asphalt Concrete
ADA	Americans with Disabilities Act
AIS	Archaeological Inventory Survey
BMP	Best Management Practices
CZM	Coastal Zone Management
DHHL	State Department of Hawaiian Home Lands
DLNR	State Department of Land and Natural Resources
DOH	State Department of Health
EA	Environmental Assessment
FIRM	Flood Insurance Rate Maps
HAR	Hawai'i Administrative Rules
HHC	Hawaiian Homes Commission
HHCA	Hawaiian Homes Commission Act
HRS	Hawai'i Revised Statutes
HSPL	Hawai'i State Public Library
HzB	Ho'olehua silty clay, 3 to 7 percent slopes
IBC	International Building Code
KcB	Kalae silty clay, 2 to 7 percent slopes
LaB	Lahaina silty clay, 3 to 7 percent slopes
LaC	Lahaina silty clay, 7 to 15 percent slopes
LCA	Land Commission Awards
MCP	Moloka'i Community Plan
MSL	Mean Sea Level
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
SHPD	State Historic Preservation Division
TMK	Tax Map Key
USDA	U.S. Department of Agriculture

1.0 INTRODUCTION

1.0 INTRODUCTION

This Draft Environmental Assessment (EA) has been prepared in accordance with the requirements of Chapter 343, Hawai'i Revised Statutes (HRS) and Hawai'i Administrative Rules (HAR), Title 11, Department of Health. The proposed action involves the use of public lands owned by the State of Hawai'i Department of Hawaiian Home Lands.

1.1 PROJECT INFORMATION SUMMARY

Type of Document:	Draft Environmental Assessment (EA)
Applicant:	Department of Hawaiian Home Lands (DHHL) Land Development Division Design and Construction Branch 91-5420 Kapolei Parkway Kapolei, Hawaii, 96707 Contact: James Richardson, DHHL Engineer
Accepting Authority:	Hawaiian Homes Commission Department of Hawaiian Home Lands Hale Kalaniana'ole 91-5420 Kapolei Parkway Kapolei, HI 96707
Project Name:	Kanakaloloa Cemetery Project
CH. 343, HRS Trigger:	Use of State lands and funds, use of historic site
Project Location:	2725 Lihi Pali Avenue, Ho'olehua, Moloka'i (<i>Figure 1-1</i>)
Tax Map Key:	(2) 5-2-017:003 (por.)
Landowner:	State of Hawai'i, Department of Hawaiian Home Lands
Project Area:	4.35 Acres
DHHL Existing Land Use:	Community Use (<i>Figure 1-3</i>)
State Land Use District:	Agricultural (<i>Figure 1-4</i>)
County of Maui Community Plan:	Public / Quasi-Public
County of Maui Zoning:	Agriculture
SMA:	Not in SMA
Flood Zone:	FIRM Zone X (outside 500-year flood plain)
Other Permits Required:	Grading and ministerial building permits
Anticipated Determination:	Finding of No Significant Impact (FONSI)

1.2 PROJECT SITE

The Ho'olehua region of Moloka'i encompasses 13,820 acres within the northern central plateau and southern costal corridor of the island. Ho'olehua is also known as the first Hawaiian homestead established following the passage of the Hawaiian Homes Commission Act of 1921. The care and management of the homesteads, its leases, and area improvements are the responsibility of the Department of Hawaiian Home Lands.

The homestead is part of the Maui County Census Tract 318.01, which includes the majority of West Moloka'i and has a total population of about 2,752 according to 2010 Census data, representing a 0.8% population decrease since 2000. Kanakaloloa Cemetery, which is also known as Ho'olehua Cemetery, is the subject property (TMK: (2) 5-2-017:003 (por.)), located at 2725 Lihi Pali Avenue.

Adjacent to the Moloka'i Veterans Cemetery, Kanakaloloa Cemetery is a distinct and separate homestead cemetery located approximately 4.5 miles northeast of the Moloka'i Airport, 6.5 miles west of Pāla'au State Park, and is roughly 0.3 miles north of the intersection of Lihi Pali Avenue and Pu'u Kapele Avenue. Primary vehicular access to the site is from Lihi Pali Avenue. The site is generally surrounded by homestead agricultural activities with scattered low-density homestead residential development in the immediate area (Figure 1-3).

1.3 OVERVIEW OF PROPOSED PROJECT

The Department of Hawaiian Home Lands, Land Development Division has been working on a project to address the infrastructure needs and improvements at the Kanakaloloa Cemetery property. This project specifically proposes the following:

1. **Paved roadway and parking within the cemetery** – Currently, “roads” in the cemetery are trails subject to erosion that turn to muddy lanes during heavy rains. Improvements to the access and interior roadways would include paving a portion of these unimproved paths with asphalt concrete (AC) pavement, approximately 12 feet wide, with a main entry and exit area off of Lihi Pali Avenue. Two vehicle turn-around areas would be provided within the interior of the property as the roadways would be one lane traffic. A surface asphalt parking lot with accessible stalls and an accessible path from the parking lot will also be provided. This parking lot will be located adjacent to the proposed outdoor pavilion. The work will also include a 22 foot wide AC pavement roadway extension of Lihi Pali Avenue, extending from the project's south property line to past the new pavilion area. This work would be completed after future water line improvements off Lihi Pali Avenue.

2. **A front perimeter property wall** – Currently, there is no protective barrier around the perimeter of the cemetery. Illicit entry, trespassing, and loitering are known to occur during late hours and weekends within the cemetery grounds even with existing DHHL land managers patrolling the area on a routine basis. A proposed perimeter wall would extend from the existing Ho’olehua Veteran’s Cemetery to an existing fence line along the northern side of the project parcel. The new wall would be a 3-4 foot high stacked basalt rock wall along the eastern side of the property with the intent to hinder unauthorized vehicle and pedestrian access to the property.
3. **A new 2 inch water line** – Currently there is no domestic potable water use on site. The existing on site water line is used for landscape irrigation. The proposed project will connect a new water line off the cemetery’s existing water system and extend the line to the proposed pavilion as a courtesy provision on property for watering flowers on graves and incidental cleaning from gardening maintenance activities.
4. **An outdoor open air pavilion** – Currently there is no shelter from weather or the elements at the cemetery for visitors during services or grave visits to the site. The proposed work will add an approximately 1,250 square foot open pavilion to provide visitors shelter from the elements, as well as space for gatherings, watering for flowers, incidental cleaning, and other considerations.

The Kanakaloloa Cemetery Project will allow the cemetery to better serve the community with improved, longer term infrastructure that is currently lacking on site. Moreover, the project will aid in fulfilling the purpose of the Hawaiian Homes Commission Act and the Hawaiian Home Lands program, through fully supporting self-sufficiency and self-determination for native Hawaiians, as well as preserving Native Hawaiian values, traditions, and culture through providing and preserving the opportunity for the community to observe and respect the heritage of those who have passed in the history of Moloka’i.

1.4 PURPOSE OF ENVIRONMENTAL ASSESSMENT

The Environmental Assessment is prepared in compliance with Hawai’i Revised Statutes, Chapter 343, which requires that any program or project that proposes the use of State or County lands or funding must undergo an environmental review. The Kanakaloloa Cemetery is on State land, as it is located on DHHL Homestead lands, and will require the use of State funds. The cemetery portion of the site was recently identified and assigned a State Inventory of Historic Places (SIHP) number, recommended significant under the Hawai’i Administrative Rule 13-284-6(b) criterion “e” for its cultural importance.

1.5 AGENCIES AND PUBLIC CONTACTED IN PRE-CONSULTATION PROCESS

The following agencies and groups having jurisdiction or a potential interest in the cemetery land have been consulted for this pre-consultation period.

Federal Agency

U.S. Department of Veteran Affairs, National Cemetery Administration, Moloka'i Veterans Cemetery

State of Hawai'i Agencies

State of Hawai'i, Department of Hawaiian Home Lands

State of Hawai'i, Department of Health, Environmental Health Administration, Environmental Health Service Division, Sanitation Branch

State of Hawai'i, Department of Land and Natural Resources, State Historic Preservation Division

State of Hawai'i, Senate District 7, Senator J. Kalani English

State of Hawai'i, House District 13, Representative Lynn DeCoite

Hawaiian Homes Commission, Moloka'i, Gene Ross Davis

County of Maui Agencies

County of Maui Department of Environmental Management

County of Maui Department of Parks and Recreation

County of Maui Department of Planning

County of Maui Department of Public Works

County of Maui Department of Water Supply

County of Maui Fire Department

County of Maui Council, Councilwoman Stacy Crivello

Community Groups and Associations

Ahupua'a o Moloka'i – President Kammy Purdy

Ho'olehua Homestead Association – President Ochie Bush

1.6 KEY ISSUES IDENTIFIED IN PRECONSULTATION

Key issues identified by respondent agencies include the following (in no prioritized order): lavatory and septic tank system considerations; compliance to building codes; compliance to fire department requirements; an archaeological survey and DHHL consultation; and additional coordination with other agencies. These issues are discussed within their respective sections of this EA. Preconsultation comment letters and their respective responses are included in Appendix A.

DHHL KANAKALOLOA CEMETERY PROJECT
Draft Environmental Assessment

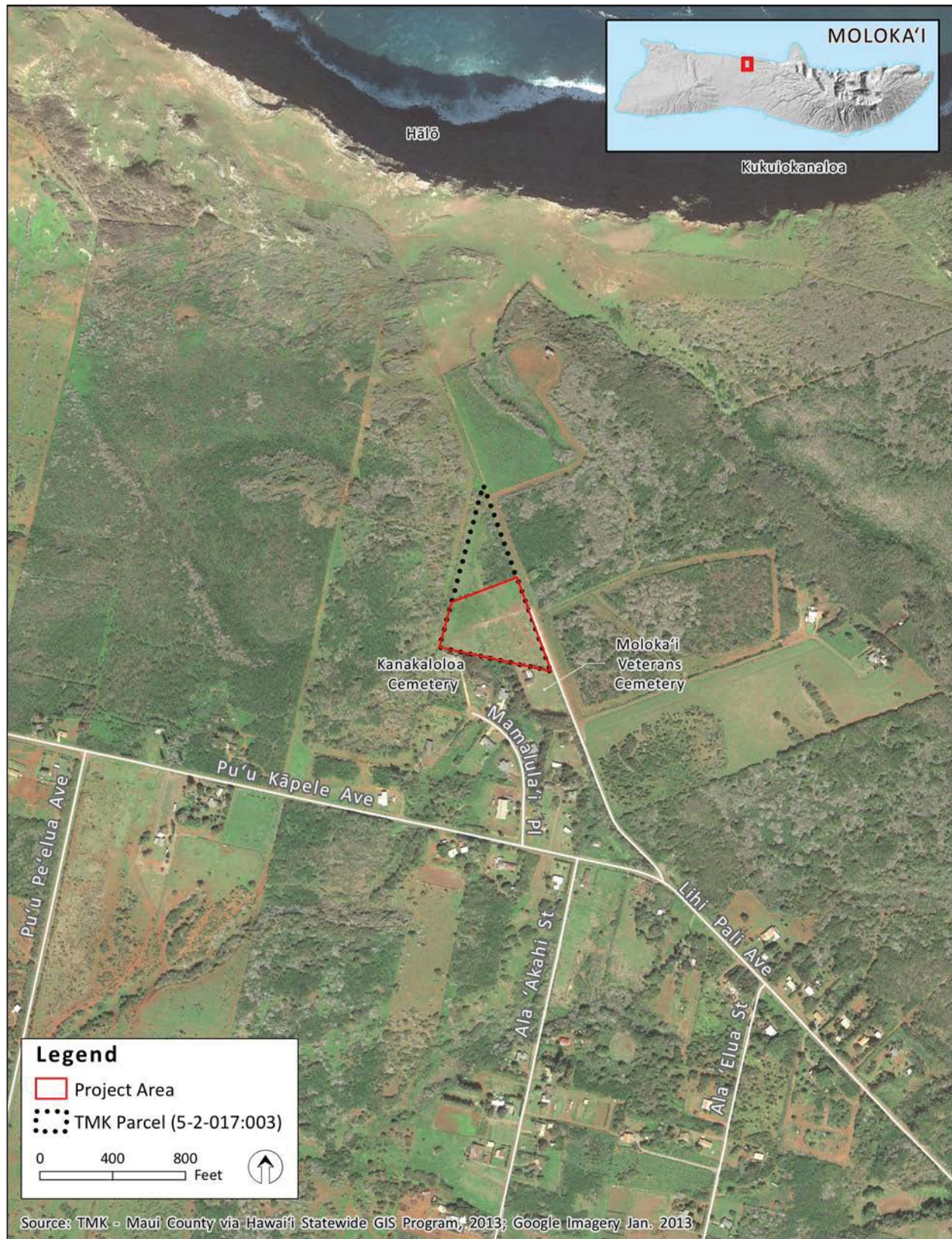


Figure 1-1: Project Location

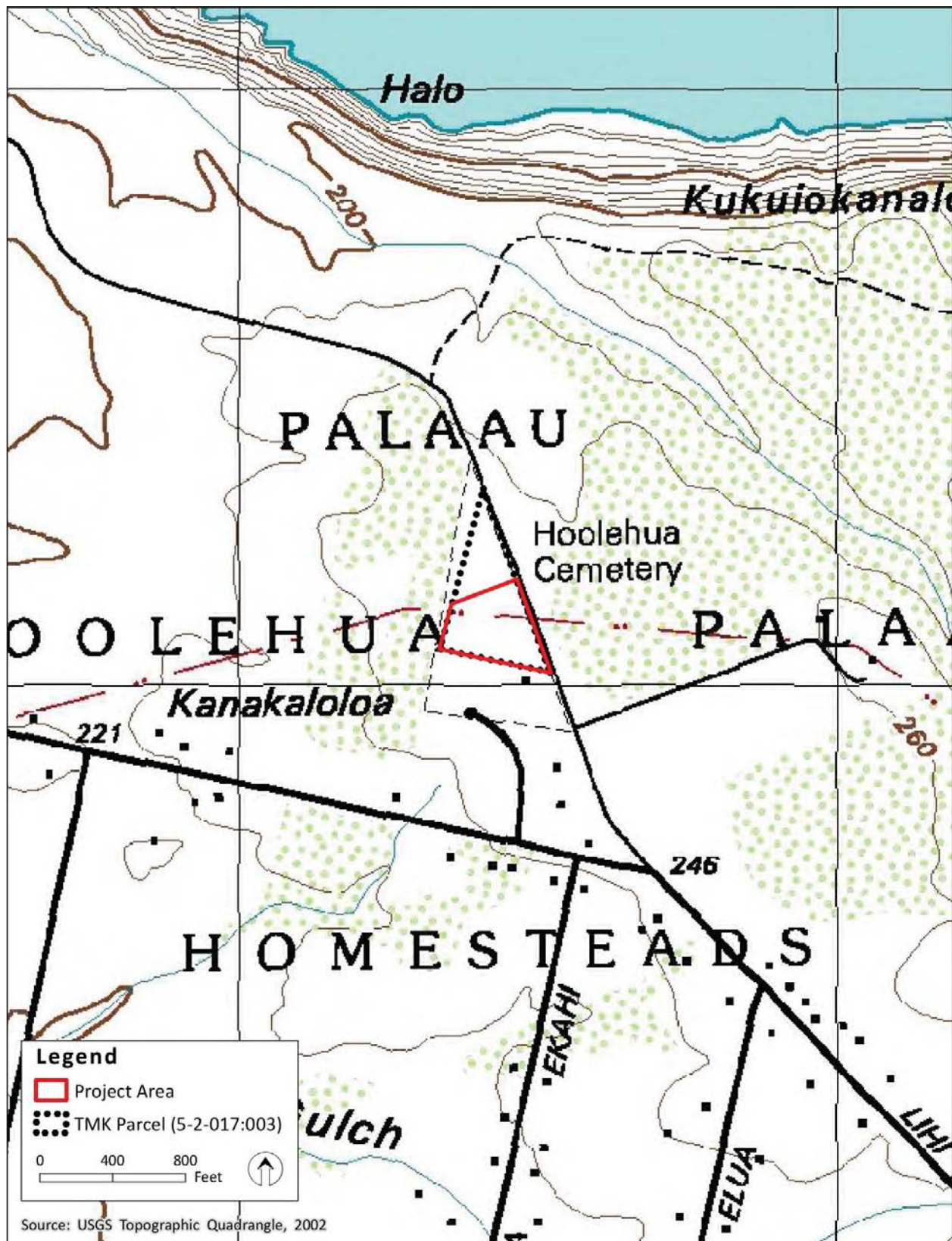


Figure 1-2: Tax Map Key (2) 5-2-017:003 (por.)

DHHL KANAKALOLOA CEMETERY PROJECT

Draft Environmental Assessment

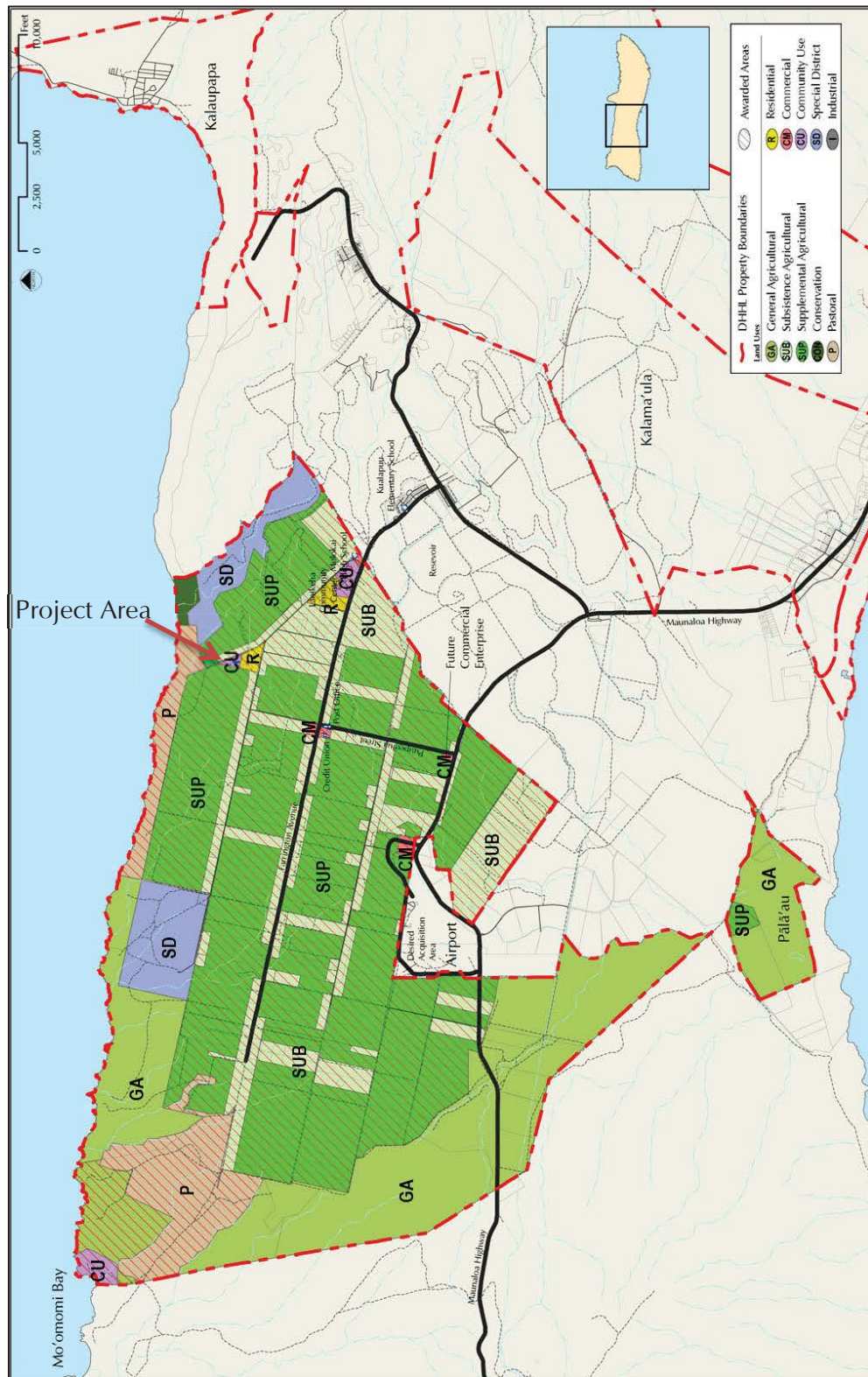


Figure 1-3: DHHL Land Use Designations (DHHL Moloka'i Island Plan 2005)

DHHL KANAKALOLOA CEMETERY PROJECT
Draft Environmental Assessment



Figure 1-4: State of Hawai'i Land Use Classifications

2.0 PROJECT DESCRIPTION

2.0 PROJECT DESCRIPTION

2.1 PURPOSE AND NEED

Through the efforts of Prince Jonah Kūhiō Kalanianaʻole, the Hawaiian Homes Commission Act was passed and signed into law in 1921, for the purpose of “[enabling] native Hawaiians to return to their lands in order to fully support self-sufficiency for native Hawaiians and the self-determination of native Hawaiians...”

For over 75 years, the Kanakaloloa Cemetery has served the Hoʻolehua Homestead, one of the first homesteads to be established under the Hawaiian Homes Commission Act. Documentation signed by the Hawaiian Homes Commission in 1946 shows the cemetery as serving the lessees of the Hawaiian Homelands on the Island of Molokaʻi, along with their families. With the desires of the homestead community in mind, the Kanakaloloa Cemetery project was developed to help preserve and honor the intent of the Hawaiian Homes Commission Act and the vision of Prince Kūhiō.

The Kanakaloloa Cemetery has been a place of cultural heritage and remembrance for many generations, allowing homestead families to continue traditional practices that are culturally aligned with Native Hawaiian values and protocol.

The proposed project benefits the trust and its beneficiaries by improving the current cemetery facilities, preventing further erosion, providing a more comfortable environment for visitors, as well as benefiting the larger region by providing infrastructure that is better suited for long term expansion and preservation of the cemetery grounds for years to come.

2.2 PROJECT LOCATION AND CHARACTERISTICS

The project site is located in the northern central plateau and southern costal corridor of the island of Molokaʻi, known as Hoʻolehua. The project site consists of approximately 4.35 acres and is part of a larger agricultural zoned parcel identified as Tax Map Key (2) 5-2-017:003. The Molokaʻi Veteran’s Cemetery is located in the adjacent lot to the south. The north end of the project is bordered by agricultural lots. The parcels across Lihi Pali Avenue feature additional agricultural lots (*Figure 1-1*).

The project site gently slopes from west to northeast (*Figure 2-1*). Elevations within the site range from 827 meters (2,714 feet) to 844 meters (2,770 feet) above mean sea level (MSL). The site has been utilized as a cemetery for over 75 years. The Molokaʻi Airport is located approximately 4.5 miles away to the southwest of the project site. Urban areas in proximity to the site include the commercial district of Kaunakakai, located approximately 8.6 miles to the southeast, and the residential communities of Hoʻolehua and Kualapuʻu.

2.3 DESCRIPTION OF THE PROPOSED PROJECT

The Kanakaloloa Cemetery project was developed based on the needs and desires of the homestead community, which is part of the Ho'olehua-Pālā'au ahupua'a (*Figure 2-2*). It also incorporates the long-term visions of the County of Maui and DHHL, as outlined in the County of Maui Central Moloka'i Community Plan (2007) and the DHHL Moloka'i Island Plan (2005). The following is a description of the proposed project work, which is displayed in *Figure 2-3*.



Figure 2-1: Cemetery Overview

2.3.1 Paved Roadway and Parking

The proposed roadway and parking work will include paving a portion of these unimproved paths (*Figure 2-1*) with asphalt concrete (AC) pavement, approximately 12 feet wide, with a main entry and exit area off of Lihi Pali Avenue. The work will also include a 22 foot wide AC pavement roadway extension of Lihi Pali Avenue, extending from the project's south property line to past the new Pavilion area. This work would be completed after future water line improvements off Lihi Pali Avenue.

Two vehicle turn-around areas would be provided within the interior of the property as the roadways would be one lane traffic. A surface asphalt parking lot with accessible stalls and an accessible path from the parking lot will also be provided. This parking lot will be located adjacent to the area proposed for the outdoor pavilion. The primary purpose of the paved roadway is to prevent the erosion and mud caused by heavy rains on the current dirt pathways on the site. This also sets up initial roadway infrastructure that could potentially be expanded during future growth and development of the plots and space on site. No future development is planned at this time. The primary purpose of the parking lot is to provide access for those using the pavilion facility, as well as access for cemetery visitors in general.

DHHL KANAKALOLOA CEMETERY PROJECT
Draft Environmental Assessment

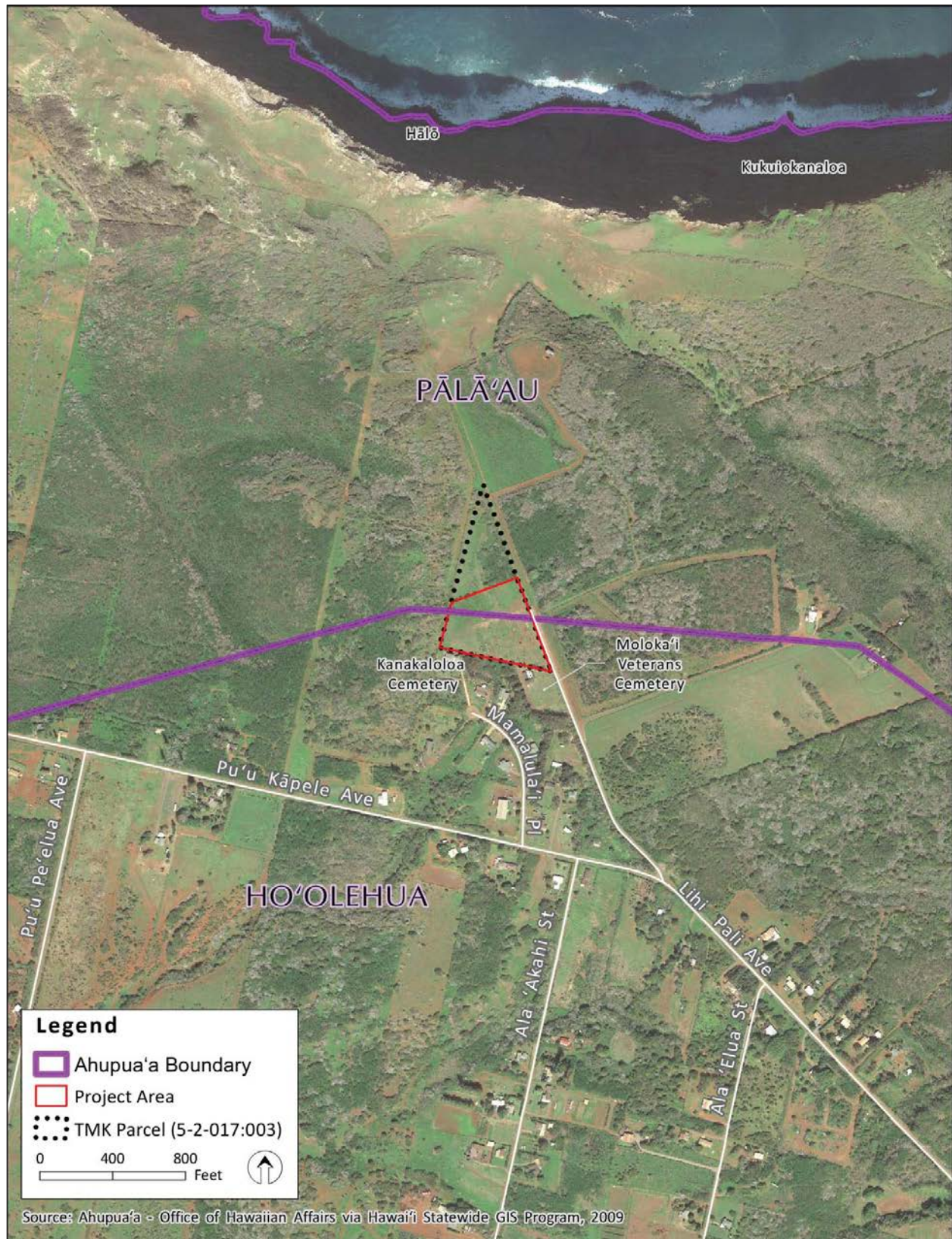


Figure 2-2: Ahupua'a Map

2.3.2 Front Perimeter Property Wall

The proposed project includes installing a perimeter wall extending from the existing Ho'olehua Veteran's Cemetery to an existing fence line along the northern side of the project parcel. The new wall would be a 3-4 foot high stacked basalt rock wall along the eastern side of the property with the intent to hinder unauthorized vehicle and pedestrian access to the property. The primary purpose of the property wall is to prevent and deter illicit entry, trespassing, and loitering that are known to occur currently during late hours and weekends within the cemetery grounds

2.3.3 New 2 inch Water Line

A portion of the proposed project includes extending a new water line off the cemetery's existing non-potable water system. The primary purpose of extending the line to the proposed pavilion is to provide a provision on property for watering flowers on graves and incidental cleaning from gardening maintenance activities.

2.3.4 Outdoor Open Air Pavilion

The proposed project includes an approximately 1,250 square foot outdoor open air pavilion located centrally in the project area. The primary purpose of the pavilion is to provide visitors shelter from the elements, as well as space for gatherings, watering for flowers, incidental cleaning, and other considerations.

In summary, all of the project components will provide much needed infrastructure improvements, while also protecting and preserving a culturally important space to honor those who have passed on.

2.4 PHYSICAL CHARACTERISTICS OF THE PROJECT

The following section provides the calculated areas and dedicated parking spaces for the cemetery.

Project Area: 4.35 acres

The following is the estimated square footage of the Cemetery facilities:

- Pavilion..... 1,250 sq. ft.
- Parking..... 13 stalls (1 van accessible)

Building Height: The building height for the project will follow zoning regulations. According to County of Maui regulations, the height limits in Agricultural districts for non-dwelling structures shall be thirty-five (35) feet, with a set back of an additional foot for every additional foot in height over thirty-five feet.

DHHL KANAKALOLOA CEMETERY PROJECT
Draft Environmental Assessment



Figure 2-3: DHHL Kanakaloloa Cemetery Plan

2.5 INFRASTRUCTURE

Infrastructure facilities to support the proposed development include:

- Parking and Access
- Grading
- Erosion control
- Non-potable water system

Parking and Access: Access into the site will continue to be through the existing driveways off of Lihi Pali Avenue. The two access points will be connected with a one lane, 12-foot wide driveway constructed of asphalt pavement with turnarounds.

On-site parking will be provided at the area adjacent to the proposed pavilion and will include the stall counts in Section 2.4, above. Parking lots will have a stabilized surface and will be designed in compliance with County Fire Department access requirements, at a minimum. Signage for all project sites will also be developed, as necessary.

Grading: The existing topography will be altered only to the extent necessary for construction of the proposed project components. It is anticipated that grading will occur on a localized scale and that cut and fill quantities will generally balance as construction progresses. Grading activities will follow guidelines provided under the County of Maui grading permit.

Erosion Control: During all phases of construction on the proposed project, erosion control practices will comply with both State and County regulations. National Pollutant Discharge Elimination System (NPDES) permits will be obtained from the Hawai'i Department of Health for stormwater discharges from construction activities. Best Management Practice (BMP) plans to control erosion during construction will be a component of the NPDES permits.

Non-Potable Water System: Water from the existing site water line will be pumped to the project components for non-potable use only. The non-potable water distribution system will be designed to conform to the State Water System Standards.

2.6 DEVELOPMENT SCHEDULE

Project development and implementation is scheduled to begin immediately following approvals of necessary land use permits and available funding. The proposed project will be developed over an eight month period from January 2015 to October 2016.

Phasing will be dependent upon funding and infrastructure installation. The proposed project is projected to be developed in two phases and anticipated to commence before the end of 2015. The initial phase, Phase I, is proposed to include construction of the roadways, parking lot, and water line connection. Phase II will include construction of the proposed outdoor pavilion.

2.7 REQUIRED APPROVALS AND PERMITS

Several construction approvals will be required from the State and County levels to implement the proposed action. It is expected that the following list of construction approvals will be required.

The State of Hawai'i will require the following approvals and permits:

Department of Health, Clean Water Branch

- NPDES General Permit

State Historic Preservation Division

- HRS 6-E, Historic Preservation Review Clearance

The County of Maui will require the following permits:

Department of Public Works, Building Division

- Building Permit (Non-Residential)
- Electrical Permit (Non-Residential)
- Plumbing Permit (Non-Residential)
- Sign Permit

Department of Public Works, Engineering Division

- Grading and Grubbing Permit
- Driveway Connection Permit

Department of Water Supply

- Approval of Construction Drawings

3.0 AFFECTED ENVIRONMENT

3.0 AFFECTED ENVIRONMENT

3.1 CLIMATE

Existing Conditions – The weather in Kanakaloloa is characterized as moderate and dry with consistent northeasterly tradewinds. The average temperatures range from 65 to 80 degrees fahrenheit. Annual rainfall averages approximately between 25 to 35 inches per year (*Figure 3-1*) but is variable along steep gradients in rainfall, with most rainfall occurring between December and April. Typical wind velocities range from 9 to 21 miles per hour.

Impacts and Mitigation – The proposed project will have no effect on climatic conditions, therefore, no mitigation measures are required.

3.2 GEOLOGY AND TOPOGRAPHY

Existing Conditions – The proposed project site is located within the northern central plateau and southern coastal corridor of the island of Moloka'i. Geologically, the terrain is composed of lateritic soil (rich in iron and aluminium) over historic lava beds from the East Moloka'i Volcano banked against the older West Moloka'i Volcano.

The general terrain of the site is relatively flat with elevations ranging from 243 meters (798 feet) to 251 meters (824 feet) above Mean Sea Level (MSL) (*Figure 3-2*). See *Section 3.3* for a further discussion on soils.

There are no significant landforms on the proposed site.

Impacts and Mitigation – The proposed project intends to take advantage of existing terrain and design the roadways and pavilion in such a way that will complement existing natural conditions. The proposed pavilion and parking lot will be flattened and smoothed along with the area for walkways. Best Management Practices (BMPs) will be implemented pursuant to the required Grading Permit to mitigate any potential impacts of soil erosion and fugitive dust during any grading or excavation. Mitigation measures related to soils and grading are described in the following section.

3.3 SOILS AND GRADING

Existing Conditions – According to a review of the United States Department of Agriculture Natural Resources Conservation Service Web Soil Survey (USDA NRCS, 2015), soils on site belong primarily to the HzB (Ho'olehua silty clay, 3 to 7 percent slopes), LaB and LaC (Lahaina silty clay, 3 to 7 percent and 7 to 15 percent slopes), and KcB (Kalae silty clay, 2 to 7 percent slopes) soil classifications (*Figure 3-3*).

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Figure 3-1: Rainfall

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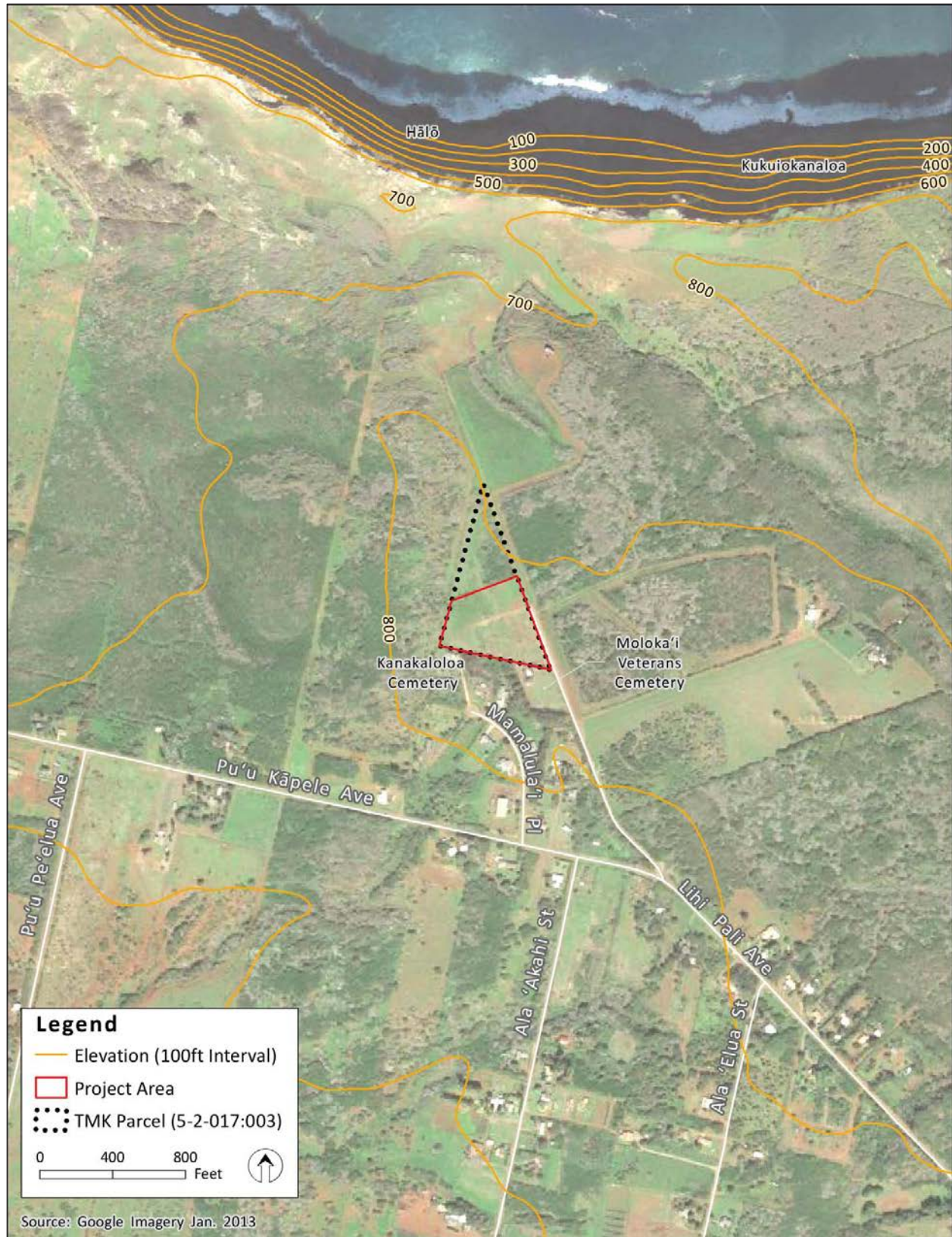


Figure 3-2: Topography

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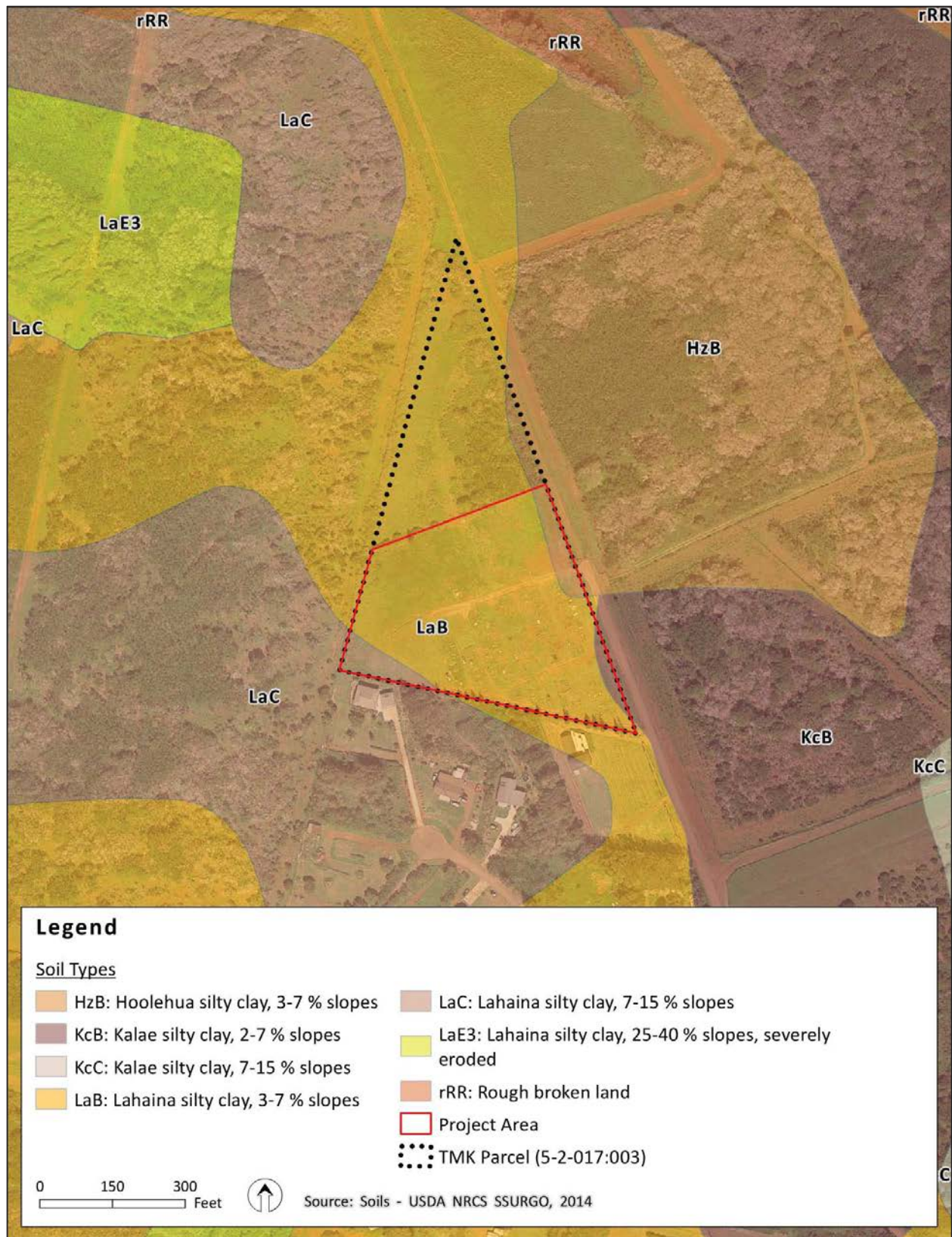


Figure 3-3: Soils

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The majority of the site is comprised of Lahaina Silty Clay. The Ho'olehua, Lahaina, and Kalae series, found on the leeward side of Moloka'i, are all well-drained soils formed in material weathered from basic igneous rock. In a representative profile, their surface layer is typically a dark reddish brown silty clay loam. The depth of the bedrock is typically over 60 inches. Permeability is moderate, runoff ranges from slow to rapid, and the erosion hazard is moderate.

Impacts and Mitigation – Paving in the project area will minimally reduce permeability and increase runoff velocity in selected areas. At a minimum, proposed drainage improvements will be designed in compliance with the County's Storm Drainage Standard. Pre-development flow patterns and flow rates will generally remain in post-development conditions with runoff remediated on-site.

All grading operations will be conducted in compliance with Chapter 20.08, Erosion and Sediment Control, of the Maui County Code. BMPs such as sediment basins, filter fences, diversion swales, and bio-filtration swales will also be used to minimize the amount of erosion and transport of sediment. The impact of construction activities will be mitigated by practicing strict erosion control and dust control measures, particularly those specified in the following:

- County of Maui Grading Ordinance
- State of Hawai'i, Department of Health, Water Quality Standards, Chapter 11-54 (2014)
- State of Hawai'i, Department of Health, Total Maximum Daily Loads (TMDLs)
- USDA Soil Conservation Service, Hawai'i Erosion and Sediment Control Guide (1981)

The long-term landscape management plan will include proper management of fertilizers and pesticides. Site design will minimize runoff and collection through on-site dispersal and filtering methods. Increased surface runoff from newly paved parking and pedestrian areas will be minimized through these methods.

3.4 SURFACE WATER, DRAINAGE, AND FLOODING

Existing Conditions – There are no existing sources of surface water located on the project site. The nearest streams are Mane'opapa, 0.17 miles south of the project, and Anianikeha, 0.26 miles north of the project, both of which are non-perennial (Keala Pono, 2015). The Kualapu'u Reservoir is located about 1.9 miles southeast of the site. The Kualapu'u Reservoir is a 1.4 billion gallon reservoir built in 1969 at the foot of the Kualapu'u cinder cone to capture rainfall on the west side of the island. There is no existing drainage system on the site. For the most part, existing natural permeability on the site soils is moderately rapid, the erosion hazard is moderate, and runoff is slow. The on-site flows naturally drain north to northeast and discharge onto Lihi Pali Avenue through low points along the northern property line.

The Federal Emergency Management Agency's flood hazard mapping program, *Risk Mapping, Assessment, and Planning*, specifies flood hazards for a subject area and illustrates floodplains and areas subject to high risk flood events. The proposed project site is within the Zone X designation of the Special Flood Hazard areas, which is described as areas outside of the 500-year flood plain. Zone X includes areas of minimal hazard from the principal source of flood in the area. The Flood Insurance Program does not have any regulations for development within this district.

Impacts and Mitigation – Construction of the facilities and parking areas may slightly alter the velocities, directions, and quantities of natural drainage patterns on-site. However, the project will be engineered to direct water flow to the proposed drainage system. At a minimum, the proposed drainage system will be designed in compliance with the County's Storm Drainage Standard. Pre-development flow patterns and flow rates will generally remain in post-development conditions with runoff remediated on-site.

3.5 NATURAL AND MANMADE HAZARDS

Existing Conditions – The entire island of Moloka'i is subject to geologic hazards, especially earthquakes. Per the 2006 International Building Code (IBC) Seismic Design Map (Figure 1613.5(10)), the project area could experience seismic activity between .70 and .80 of the earth's gravitational acceleration (g-force). This represents the upper limits of probable force experienced by the region during a probable seismic event. This location is at risk from earthquake damage, especially for poorly designed and/or built structures.

Impacts and Mitigation – In general, geologic and flood conditions impose no major constraints on the project. The proposed pavilion will be constructed in compliance with regulatory controls to meet County Building Code requirements and as appropriate to IBC seismic design requirements. No mitigation measures are required in response to potential flooding hazards.

3.6 FLORA

A Botanical Survey was conducted by AECOS in January 2015 to determine if there are any plant species currently listed as endangered, threatened or proposed for listing under either Federal or the State of Hawai'i's endangered species programs on, or within the immediate vicinity of the proposed project site. The findings of the assessment are included as *Appendix B*.

Existing Conditions – AECOS separated the property into three areas, Area A (existing cemetery), Area B (recently mowed area adjacent to the north of the existing cemetery), and Area C (densely vegetated area north of Area B). The majority of the project area is in Area A, with the pavilion and parking lot portion overlapping into Area B. According to the botanical survey, current vegetation of the project site consists of various grasses and other herbs adapted to the regular maintenance of the grounds. The northern half of the parcel is the least disturbed of the survey area, comprising areas of dense scrub growth and areas of grassland. The botanical survey found only one indigenous, no endemic, and one early Polynesian species of plant. See *Table 3-1* below.

Species	Common Name	Status	Abundance in Project Area Area A / B / C
<i>Araucaria columnaris</i>	Cook-pine	naturalized	Rare / Rare / -
<i>Pinus sp.</i>	Potted indet.pine	cultivated	Rare / - / -
<i>Aptenia cordifolia</i>	hearts-and-flowers	cultivated	Rare / - / -
<i>Lampranthus cf. amoenus</i>	-	cultivated	Rare / - / -
<i>Amaranthus spinosus</i>	Spiny amaranth	naturalized	- / Occasional / -
<i>Gomphrena globosa</i>	lehua mau loa	cultivated	Rare / - / -
<i>Schinus terebinthefolius</i>	Christmas berry	naturalized	Rare / common / very abundant
<i>Adenium obesum</i>	Desert rose	cultivated	Rare / - / -
<i>Catharanthus roseus</i>	Madagascar periwinkle	naturalized	Uncommon / - / -

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<i>Schefflera actinophylla</i>	umbrella tree	naturalized	Rare / - / -
<i>Asclepias physocarpa</i>	balloon plant	naturalized	Uncommon / - / -
<i>Bidens alba</i>	beggartick	naturalized	Uncommon / - / -
<i>Calyptocarpus vialis</i>	-	naturalized	Abundant / - / -
<i>Conyza bonariensis</i>	hairy horseweed	naturalized	Rare / - / -
<i>Crassocephalum crepidioides</i>	-	naturalized	Rare / - / -
<i>Emilia fosbergii</i>	Flora's paintbrush, pualele	naturalized	- / Rare / -
<i>Hypochoeris radicata</i>	hairy cat's ear	naturalized	Uncommon / - / -
<i>Parthenium hysterophorus</i>	false ragweed	naturalized	Rare / - / -
<i>Sonchus oleraceus</i>	sow thistle	naturalized	Common / Uncommon / -
<i>Synedrella nodiflora</i>	Nodeweed	naturalized	Rare / - / -
<i>Tagetes erecta</i>	marigold	cultivated	Rare / - / -
<i>Tetaneuris sp.</i>	Bitterweed	cultivated	Rare / - / -
<i>Tridax procumbens</i>	Coat buttons	naturalized	Occasional / - / -
<i>Verbesina encelioides</i>	golden crown-beard	naturalized	- / uncommon / -
<i>Coronopus didymus</i>	Swinecress	naturalized	Uncommon / - / -
<i>Lepidium virginicum</i>	-	naturalized	Occasional / - / -
<i>Lobularia maritima</i>	Sweet alyssum	naturalized	Rare / - / -
<i>Dianthus barbatus</i>	Sweet-William	cultivated	Rare / - / -
<i>Crassula ovata</i>	Jade plant	cultivated	Rare / - / -
<i>Echeveria elegans</i>	Hen-and-chickens	cultivated	Rare / - / -
<i>Kalanchoe tubiflora</i>	chandelier plant	naturalized	Rare / - / -
<i>Euphorbia hirta</i>	Garden spurge	naturalized	Rare / - / -
<i>Euphorbia pulcherrima</i>	poinsettia	cultivated	Rare / - / -
<i>Acacia confusa</i>	Formosan koa	naturalized	- / Rare / uncommon
<i>Alysicarpus vaginalis</i>	Alyce clover	naturalized	Rare / - / -
<i>Chamaecrista nictitans</i>	Partridge pea	naturalized	Rare / - / Uncommon
<i>Desmanthus pernambucanus</i>	Virgate mimosa	naturalized	- / - / Uncommon
<i>Desmodium incanum</i>	Spanish clover	naturalized	Common/Occasional/ Abundant
<i>Indigofera hendicaphyla</i>	Creeping indigo	naturalized	Occasional / - / -
<i>Indigofera suffruticosa</i>	indigo	naturalized	- / Rare / occasional
<i>Leucaena leucocephala</i>	Koa haole	naturalized	- / - / Very Abundant
<i>Neonotonia wightii</i>	Glycine vine	naturalized	- / Occasional / Very Abundant
<i>Pelargonium xhortorum</i>	Bedding geranium	cultivated	Rare / - / -
<i>Rosmarinus officinalis</i>	rosemary	cultivated	Rare / - / -
<i>Malva parviflora</i>	Cheese weed	naturalized	Rare / Rare / -
<i>Malvastrum coromandelianum</i>	False mallow	naturalized	- / Rare / -
<i>Sida fallax</i>	'ilima	Indigenous	- / Rare / Uncommon
<i>Psidium guajava</i>	Common guava	naturalized	- / - / Rare
<i>Boerhavia coccinea</i>	False alena	naturalized	Rare / - / -
<i>Oxalis corniculata</i>	'ihi'ai	Polynesian	Uncommon / - / -
<i>Peperomia obtusifolia</i>	American peperomia	cultivated	Rare / - / -
<i>Plantago lanceolata</i>	nrv-lvd. plantain	naturalized	Very Abundant / Abundant / Occasional
<i>Plantago major</i>	Common plantain	naturalized	common / - / -
<i>Portulacaria afra</i>	Miniature jade tree	cultivated	Rare / - / -
<i>Antirrhinum majus</i>	snapdragon	naturalized	Rare / - / -
<i>Petunia x hybrida</i>	petunia	cultivated	Uncommon / - / -
<i>Lantana camara</i>	lantana	naturalized	- / - / Uncommon

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<i>Verbena litoralis</i>	ōwī	naturalized	- / - / Uncommon
<i>Cordyline fruticosa</i>	ki, ti	naturalized	Rare / - / Rare
<i>Sansevieria trifasciata</i>	bowstring-hemp	cultivated	Rare / - / -
<i>Aloë vera</i>	Aloe vera	cultivated	Rare / - / -
<i>Syngonium sp.</i>	nephtytis	naturalized	Rare / - / -
<i>Philodendron cf. 'Xanadu'</i>	Dwarf philodendron	cultivated	Rare / - / -
<i>Ananus comosus var. variegatus</i>	pineapple	cultivated	Rare / - / -
<i>Tillandsia sp.</i>	tillandsia	cultivated	Rare / - / -
<i>Cyperus gracilis</i>	McCoy grass	naturalized	Uncommon / - / -
<i>Cyperus rotundus</i>	Nut grass	cultivated	Uncommon / - / -
<i>Tradescantia spathacea</i>	Oyster plant	naturalized	Uncommon / - / -
<i>Asparagus densiflorus</i>	Asparagus-fern	naturalized	Rare / - / -
<i>Crinum cf. asiaticum</i>	Giant lily	naturalized	Rare / - / -
<i>Indet. ground orchid</i>	-	cultivated	Rare / - / -
<i>Bothriochloa pertusa</i>	Pitted beardgrass	naturalized	abundant / - / -
<i>Brachiaria subquadripara</i>	-	naturalized	occasional / - / -
<i>Cenchrus ciliaris</i>	buffelgrass	naturalized	common / - / -
<i>Cenchrus clandestinus</i>	Kikuyu grass	naturalized	occasional / - / abundant
<i>Cynodon dactylon</i>	Bermuda grass	naturalized	abundant / very abundant / -
<i>Cynodon x magennisii</i>	Hybrid Bermuda	cultivated	abundant / - / -
<i>Digitaria insularis</i>	sourgrass	naturalized	Uncommon / uncommon / occasional
<i>Eleusine indica</i>	wiregrass	naturalized	Common / common / -
<i>Eragrostis pectinacea</i>	Carolina lovegrass	naturalized	abundant / abundant / -
<i>Eremochloa ophiuroides</i>	Centipede grass	cultivated	Uncommon / - / -
<i>Poa annua</i>	Annual bluestem	naturalized	Uncommon / - / -
<i>Urochloa cf. brizantha</i>	-	naturalized	- / common / -
<i>Urochloa maxima R.</i>	Guinea grass	naturalized	Uncommon / abundant / very abundant
<i>Urochloa maxima var. trichoglume</i>	Green panic grass	naturalized	Occasional / - / -

Table 3-1: Plant Species Observed on Project Site

Impacts and Mitigation – According to the survey, the single indigenous plant is the ‘ilima (*Sida fallax*), a common short-stature shrub. The ‘ihi’ai is thought to be an early (probably accidental) pre-contact introduction and is an inconspicuous but common plant in the lowlands of Hawai‘i. The development and operation of the proposed project will not result in any adverse impacts to native plant species.

3.7 FAUNA

Avian and mammalian surveys were conducted by AECOS in January 2015 to determine if there are any avian or mammalian species currently listed as endangered, threatened or proposed for listing under either Federal or the State of Hawai‘i’s endangered species programs on, or within the immediate vicinity of the proposed project site. The results of the surveys are included as *Appendix B*.

Existing Conditions – During the survey, only non-native birds were observed utilizing the property. The remaining avian species that were recorded are considered to be alien to the Hawai‘i. No species currently listed as endangered, threatened or proposed for listing under either the Federal or the State of Hawai‘i’s endangered species programs was detected on the site. The most common avian species recorded were the Zebra Dove (*Geopelia striata*) and cattle egret (*Bubulcus ibis*).

Species	Common name	Status
<i>Columba livia</i>	rock pigeon	alien
<i>Geopelia striata</i>	zebra dove	alien
<i>Streptopelia chinensis</i>	spotted dove	alien
<i>Gallus gallus</i>	Red Junglefowl	Poly. introduction
<i>Francolinus pondicerianus</i>	gray francolin	alien
<i>Cettia diphone</i>	Japanese Bush-Warbler	alien
<i>Lonchura punctulata</i>	Scaly-breasted Munia	alien
<i>Carpodacus mexicanus</i>	House Finch	alien
<i>Passer domesticus</i>	house sparrow	alien
<i>Pycnonotus cafer</i>	Red-vented Bulbul	alien
<i>Acridotheres tristis</i>	common myna	alien
<i>Cardinalis cardinalis</i>	Northern Cardinal	alien
<i>Paroaria coronate</i>	Red-crested cardinal	alien
<i>Bubulcus ibis</i>	cattle egret	alien

Table 3-2: Faunal Species Observed on Project Site

Impacts and Mitigation – No plants or animals currently protected or proposed for protection under either the federal or State of Hawai‘i endangered species programs were detected. Although not detected during the survey, the potential presence of the ‘ōpe‘ape‘a (Hawaiian hoary bat) may require consideration. Given the lack of suitable roosting trees, any use of the area by this species would be of an incidental foraging nature. However, it is possible that the ‘ōpe‘ape‘a overfly the area on occasion.

The construction and operation of the proposed project is not expected to result in any adverse impacts to the native birds or the Hawaiian hoary bat that could fly over the project vicinity as the site has currently few shrubs or trees which could be used for nesting. However, construction activities will be mindful to breeding and foraging seasons of critical species. If any of these species are observed within 100 feet of ongoing construction work, all activity will be temporarily suspended until the species move on their own to a safe distance from the project area. Additionally, if a significant flock or colony of native birds or hoary bats are observed foraging within the construction area, construction activity will be temporarily suspended, and a biologist may be notified to further survey the area. If nests are found within a radius of 150 feet of any construction work on the proposed site, or if a previously undiscovered nest is found within the radius after work has already commenced, all work will stop immediately and the U.S. Fish and Wildlife Service will be contacted for further guidance.

3.8 AIR QUALITY, DUST, AND ODORS

Existing Conditions - Although the State of Hawai'i operates a network of air quality monitoring stations around the state, systematic data is not available for Moloka'i. The closest Department of Health (DOH) air quality monitoring station is located 44 miles southeast in Kahului, on the island of Maui (DOH 2014). The second closest monitoring station is located in Kihei, approximately 49 miles southeast of the project location on the island of Maui (DOH 2014). In the State of Hawai'i, both Federal and State environmental health standards pertaining to outdoor air quality are generally met due to prevalent trade winds and the absence of major stationary sources of pollutant emissions. However, the Hawai'i carbon monoxide criteria, which are more stringent than the Federal standards, may be exceeded on occasion near high-volume intersections during periods when traffic congestion and poor dispersion conditions coincide.

Moloka'i has relatively clear air low in pollution due in part to prevailing trade winds as well as lack of industrial uses and low level of residential and commercial development. A residential character and the relative absence of stationary pollutant sources in the area presumably keep air quality in the project area at levels considered good (i.e., well within the air quality standards). Fugitive dust from human activities and emissions from vehicular traffic represent the only sources potentially impacting the air quality at the subject property.

Impacts and Mitigation – The proposed project will have no long-term impact on air quality. There will be short-term impacts during the construction period in the form of exhaust from increased traffic and fugitive dust from construction activity.

A dust control management plan will be developed which identifies and addresses activities that have a potential to generate fugitive dust. The short-term effects on air quality during construction will be mitigated by compliance with provisions of Hawai'i Administrative Rules, Section 11-60.1-33 on Fugitive Dust. Potential control measures to reduce fugitive dust include:

- Using water to control fugitive dust in construction operations, the grading of roads, or the clearing of land;
- Applying asphalt, water, or suitable chemicals on roads, material stockpiles, and other surfaces which may result in fugitive dust;
- Installing and using hoods, fans, and fabric filters to enclose and vent the handling of dusty materials. Reasonable containment methods shall be employed during sandblasting or other similar operations;
- Covering all moving, open-bodied trucks transporting materials which may result in fugitive dust;
- Maintaining roadways in a clean manner;
- Promptly removing earth or other materials from paved streets which have been transported there by trucking, earth-moving equipment, erosion, or other means.

3.9 LAND USE

Existing Conditions – The surrounding region has historically been used for agriculture and grazing. The proposed project site has been used as a cemetery for over 75 years, dating back to the founding of the Ho‘olehua Homestead in 1923. The project site is bordered by the Moloka‘i Veteran’s Cemetery to the south.

Development patterns on the island of Moloka‘i are set by State Land Use District designations, by the County of Maui Community Plan, and County zoning district designations. Per the Hawaiian Homes Commissions Act, the Hawaiian Homes Commission (HHC) is responsible for determining land use on Hawaiian Home Lands. As such, the development patterns on the island of Moloka‘i are also influenced by DHHL land use designations as articulated in its Moloka‘i Island Plan. The principle function of these plans and regulations is to specify where land uses such as commercial, residential, industrial, agricultural, open and public areas are permitted. The existing land use designations are briefly summarized below.

State Land Use Designation – The proposed site is situated within the State Land Use Agricultural District (*Figure 1-4*). According to the Land Study Bureau Detailed Land Classifications, the area has been classified for “Agricultural” type uses.

Coastal Zone Management Program – The parcel is not located in the County of Maui Special Management Area, which was established to administer the Coastal Zone Management (CZM) Program.

DHHL Moloka‘i Island Plan – According to the DHHL *Moloka‘i Island Plan* (2005), the proposed site is designated by the plan to be designated as Community Use, defined as common areas intended for community uses, including parks and recreation, cultural activities, and other public amenities.

County of Maui General Plan – The subject property is owned by DHHL. The Hawaiian Homes Commission intends to designate DHHL lands for purposes that meet the needs of the Department’s mission. DHHL will work with the County of Maui to designate land uses that are compatible with County land use, zoning, and existing uses in the surrounding area without detracting from the purposes of the Hawaiian Homes Commission Act.

County of Maui Moloka‘i Community Plan – The County of Maui Central Moloka‘i Community Plan Map designates the project area as Public/Quasi-Public (*Figure 1-5*). Land uses surrounding the project area include rural and agricultural. Urban areas in proximity to the site include Kualapu‘u, located 3 miles from the site, and Kaunakakai, located approximately 6.3 miles from the site.

County of Maui Zoning - The Maui County Zoning Code (Title 19, Maui County Code of Ordinances) designates the proposed project area as Agriculture.

Impacts and Mitigation – Of the 6.86 acres, approximately 4.35 acres are a part of the proposed project scope of work. The balance of the remaining acres will be open space and preservation easements. Surrounding the proposed open pavilion, the existing cemetery plots will be preserved. The project conforms with state, county, and DHHL guidelines, with no anticipated significant impacts or conflicts with any of the listed plans.

3.10 ADJACENT LAND USES

Existing Conditions – Land uses of adjacent and nearby areas consist of agricultural land to the west, north, and east, with residential slightly to the south, and the Moloka'i Airport to the southwest (*Figure 3-4*). According to State of Hawaii Office of Planning Large Land Owner data, the majority of the adjacent land is owned by DHHL.

Impacts and Mitigation – The property has been used as a cemetery for over 75 years. The project will continue the ongoing current property use and will not impact the surrounding property uses of the existing community.

3.11 ARCHAEOLOGICAL RESOURCES

An Archaeological Inventory Survey (AIS) was conducted within the project area in January 2015 by Keala Pono Archaeological Consulting, LLC of Honolulu, and is included as *Appendix C*. The archaeological inventory survey was conducted to determine the presence, nature, and extent of archaeological resources in the project area; evaluate their significance; and ensure compliance with the National Historic Preservation Act of 1966, as amended, Chapter 6E of the Hawai'i Revised Statutes (HRS), and the guidelines established by the State Historic Preservation Division (SHPD).

Existing Conditions – For the AIS, archaeological and historical literature and documents research was undertaken to understand the historical setting of the area. A surface survey was conducted by walking 3-5 meter (10-16 foot) transects throughout the project area. A total of four trenches in locations proposed for construction (outside the current grave area) were excavated for the purpose of sampling the subsurface conditions of the parcel (*Figure 3-5*). A stratigraphic profile was measured from the surface, and sediments were described.

The results of the archaeological inventory survey indicated that the project area consists of one historic property: Site 50-60-02-2564, Kanakaloloa Cemetery, consisting of more than 300 graves dated from the 1940s to the 2010s, many which may be associated with the establishment of the Ho'olehua Homestead. According to the assessment, no excavations were conducted within the cemetery, and no graves were disturbed. Stratigraphy consisted of a natural deposit, sometimes with a surface layer of topsoil. No cultural remains, either prehistoric or historic, were encountered in any of the trenches.

Impacts and Mitigation – The proposed developments will avoid disturbing existing grave sites within the Kanakaloloa Cemetery archaeological site. The cemetery has been recommended significant under Hawai'i Administrative Rule 13-284-6(b) criterion "e" for its cultural importance, and no further work is recommended for the cemetery, which remains in active use. DHHL will prepare an archaeological monitoring plan for ground disturbance on the remainder of the property, including portions of the parcel outside of the existing cemetery, and will submit this plan for review by SHPD and the DHHL Moloka'i District Office. As a precautionary measure, personnel involved in the project should be informed of the possibility of inadvertent cultural finds and should be made aware of the appropriate notification measures to follow. It should be noted that isolated human burial remains may be discovered during construction activities outside the cemetery, even though no evidence of this was found during the survey.

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In the event that any previously unidentified sites or remains are encountered during site work and construction, work in the immediate area shall cease. An archaeologist from the SHPD, as well as the DHHL Moloka'i District Office, shall be notified and work in the area will be suspended until further recommendations are made for appropriate treatment of archaeological and/or cultural materials.



Figure 3-4: Location of Archaeological Trench Sites and Site 2564 (Keala Pono 2015)

3.12 HISTORICAL AND CULTURAL RESOURCES

As part of this project, a cultural impact assessment was completed for the project area by Keala Pono Archaeological Consultants, LLC. This assessment consisted of background research and oral interviews. The complete report is included as *Appendix D* of this EA.

The Kanakaloloa Cemetery is located on Hawaiian homestead lands within nā ahupua‘a of Pālā‘au and Ho‘olehua, within the larger moku of Kona. The name “Kanakaloloa” is also listed in Place Names of Hawaii, as a hill in north Moloka‘i. It is translated as “tall person”. Most of the contemporary history of Ho‘olehua and Pālā‘au is tied to the Hawaiian homestead lands there. Generations of families have made the area their home. It should be noted that in the 1920s the pineapple industry also came to central Moloka‘i, as seen in historic maps, but this did not extend directly onto the project lands. The island’s major airport was also developed just south of Ho‘olehua-Pālā‘au, but the project area and its community has continued to retain its rural residential atmosphere.

3.12.1 *Traditional Hawaiian Background*

Just prior to the arrival of foreigners, Moloka‘i had seen several centuries as an independent kingdom starting with its first ali‘i nui, Kamauaua, in the 13th century. There was a brief challenge to its independence from Hawai‘i Island in the 15th century, but otherwise, Moloka‘i enjoyed its sovereignty all the way up to the 18th century when it was once again challenged by chiefs from various neighboring islands. It should be noted, however, that there had also been episodes of intra-island conflict among Moloka‘i chiefs from the leeward and windward districts, disrupting the peace. It is uncertain if Moloka‘i was still an independent kingdom or under the rule of a neighboring island’s chief when Westerners arrived in the late 18th century. However, what is clearly recorded is that in 1780, Moloka‘i was under the rule of O‘ahu’s King Kahahana. In 1794, King Kamehameha’s forces from Hawai‘i Island defeated both the O‘ahu warriors and the Maui warriors, and so Moloka‘i unquestionably went under the rule of Kamehameha. Kamehameha stopped on Moloka‘i on his way to fight on O‘ahu, and while on Moloka‘i, Kamehameha used the Ho‘olehua Plain as a training area for his warriors. Kamehameha eventually unified the entire island chain.

3.12.2 *Traditional & Historic Land Tenure and Use*

The Ho‘olehua Plain was noted for the cultivation of ‘uala. This is affirmed by the written and oral histories of Moloka‘i which stress the importance of sweet potato (*Ipomea batatas*) on leeward Moloka‘i and in Ho‘olehua and Pālā‘au in particular.

The majority of Moloka‘i’s pre-contact population resided east of the project area from Kalama‘ula to Kumimi and the population in the island’s central Ho‘olehua-Pālā‘au region was scattered. But this by no means diminished the importance of the area. In contrast, the region was part of a complex of learning centers dedicated to the practice of hula and to the medicinal arts for curing and/or causing sickness. Two of Moloka‘i’s famous sayings allude to this spiritual power that the island has been associated with: Moloka‘i ku‘i lā‘au (Moloka‘i, pounder of medicine); and Moloka‘i Pule ‘O‘o (Moloka‘i of the potent prayer).

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For many decades following the arrival of Westerners, Molokaʻi was not a prominent port of call for foreigners. After Captain Vancouver's description of the island in 1792, the only other accounts of Westerners visiting the island prior to the early 1800s were of missionaries. The first permanent church established on the island was a Protestant mission on the east side of Molokaʻi in 1832. Much later, Catholic missionaries also established themselves on the island, but perhaps the one with the most profound impact was the mission founded on the Kalaupapa Peninsula by Saint Damien in the 1870s. It was there at the settlement established by King Kamehameha V that Saint Damien ministered to the patients afflicted with Hansen's Disease. While the missionary foreigners and their activities helped shape Molokaʻi Island as a whole, they did not have a major impact on the Hoʻolehua Plain.

On the other hand, the activities brought about by ranchers and the ranching industry on Molokaʻi did have a more direct impact on the region of interest. An important figure who ties much of this together is the German immigrant R.W. Meyer. Meyer arrived on Molokaʻi in the 1840s, married a chiefess from the island, and settled in the Kalaʻe area to the east of Hoʻolehua. Meyer also became the overseer of the Kalaupapa settlement for Hansen's disease patients after its creation by King Kamehameha V's legislation in the 1860s, and furthermore, Meyer became the manager for the king's ranch on Molokaʻi which operated on lands to the west and south of the Hoʻolehua Plain.

After Kamehameha V's death in 1872, Meyer continued to administer the royal ranchlands for Kamehameha's heirs. Meyer died in 1897, and coincidentally that same year, a group of businessmen organized to purchase 70,000 acres of the late Kamehameha V's former ranchlands and lease another 30,000 more, stretching from the west end of the island to the Hoʻolehua Plain. By that time, Princess Ruth had passed away, and her Molokaʻi lands had already gone into the hands of her heiress Bernice Pauahi Bishop. The purchasing business entity would later be named the Molokai Ranch, and the next year, this business organization also formed the American Sugar Company (ASCO) which added sugarcane fields to the Hoʻolehua Plain and constructed a railroad through it for transport.

The current project area is a part of the Hoʻolehua Homestead lands, owned by DHHL, whose formation is a part of another historical legacy through the establishment of the Hawaiian Homes Commission Act of 1920. Championed by Prince Jonah Kūhiō Kalanianaʻole, the primary goal to establish the act was to provide for the rehabilitation of the Native Hawaiian people (defined for the purposes of the Act as those with 50% or more blood quantum) through a homesteading program. Resulting from the Hawaiian Homes Commission Act, the plains of Hoʻolehua and Pālāʻau were among the homestead lands designated as such, and in 1923, the first Hawaiian homesteaders settled there. Hoʻolehua is known as one of the first Hawaiian homesteads in the state.

Impacts and Mitigation – Regarding Ho’olehua and Pālā’au, the Māhele records on the Waihona ‘Aina database show no land claims for Ho’olehua and only one unawarded land claim (Land Claim #11094) for Pālā’au. The land claim was submitted by a person named Kaukuna, and it is for land in both Pālā’au and Kahanui, not close to the project area. The Waihona ‘Aina database shows zero land grants awarded in Pālā’au, and five land grants that were awarded in Ho’olehua. Three of these were given to the Dudoit family; one was granted to the Lewis family; and one was conferred to the Makakoa family. Three of the five land grants listed here were awarded in 1899, the other two show no date. And finally, the Waihona ‘Aina database shows that no royal patents were given. The lack of land ownership and transfers for the Ho’olehua-Pālā’au area may reflect the large block of land consolidation first under the Kamehamehas and later by the Molokai Ranch followed by the Hawaiian Homes Commission (*Figure 3-5*).

The Kanakaloloa Cemetery holds a special place in the heart of Moloka’i’s homestead community. The cemetery, Site 50-60-02-2564, consists of more than 300 graves, including individuals and families associated with the establishment of Ho’olehua Homestead, one of the first Hawaiian homesteads in the state. Most graves date from the 1940s to the 2010s, and the cemetery continues to be utilized today.

Based on the research and interviews conducted by Keala Pono, community members were generally very supportive of the proposed plans for cemetery improvements and did not identify any cultural resources that would be affected. They did mention cultural practices that are carried out in the area, such as fishing and gathering ‘opihi at the coast, hunting in the region, and Christian religious practices at the cemetery itself. None of the consultants communicated that the proposed development would adversely affect these practices. On the contrary, construction of facilities such as a pavilion would enhance the experience of those visiting the cemetery and promote the religious traditions that are carried out there. The interviewees shared several concerns and recommendations, including the amount of space available for cemetery expansion, potential theft in the area, and people misusing the water resources and cemetery grounds for illicit/illegal activities.

Based on the research conducted by Keala Pono, other than the Kanakaloloa Cemetery itself, there were no previously identified historic properties located within the project area. Keala Pono recommends that a preservation plan be developed for the Kanakaloloa Cemetery to ensure that it is not adversely affected by the proposed improvements. Community concerns and recommendations should be considered during all phases of the project.

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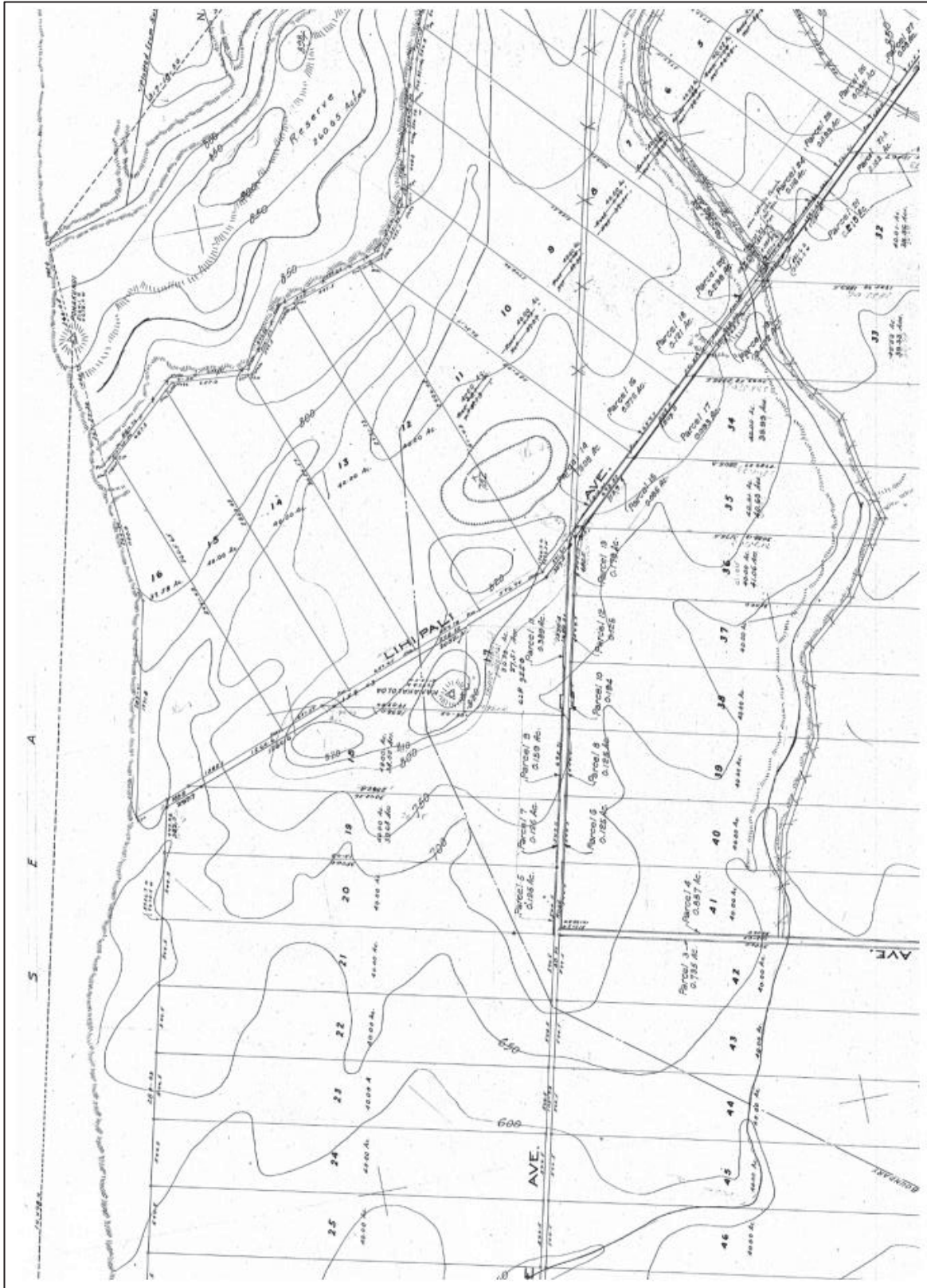


Figure 3-5: Hawai'i Territory Survey Map, 1924
(Wall, 1924, provided by Keala Pono 2014)

3.13 SOCIO-ECONOMIC CHARACTERISTICS

Existing Conditions – Molokaʻi was the home to the first lease sites given out by the Department of Hawaiian Home Lands in 1923, with current DHHL lands spanning approximately 26,000 acres, roughly 15% of Molokaʻi's total land area (DHHL Molokaʻi Island Plan, 2005).

According to the 2010 U.S. Census Data, the population in Molokaʻi decreased over the years from 7,404 in 2000 to 7,345 in 2010. Approximately 2,752 people reside in West Molokaʻi. According to the 2012 Maui County Data Book, the majority of jobs in Molokaʻi are non-agricultural service providing industries, including Government, Education, and Health Services.

According to the 2012 Maui County Data Book, the majority of the population is of Native Hawaiian descent, with a smaller Asian and white population. The population age is evenly spread out across age groups, with the average age being in the late 30s and early 40s. According to 2010 census data, the median household income in the region was \$34,492, with roughly 20.6% of residents living below the poverty level.

Major public facilities located within proximity of the proposed site include Kualapuʻu Elementary School, Molokaʻi Middle School and High School, the Hoʻolehua Fire Station, the Molokaʻi branch of the Maui County Police Department, and Molokaʻi General Hospital. Other private educational facilities located near the site include Pūnana Leo o Molokaʻi, and Molokaʻi Christian Academy.

Impacts and Mitigation – The project will create short-term benefits by creating jobs for local material suppliers and local construction personnel from the increased construction activities. In addition to the creation of jobs, the State of Hawaiʻi and County of Maui will receive excise tax revenues on finished development and building materials, conveyance taxes, and income taxes on wages. The project will not affect population growth or public facilities. The socio-economic impacts will be positive for the local community, as well as the County of Maui and the State. No specific socio-economic mitigation actions are recommended.

3.14 VISUAL RESOURCES

Existing Conditions – The project site is located on the edge of a developed homestead residential neighborhood on an existing cemetery surrounded by agricultural land. The existing views consist of the Molokaʻi Veteran's Cemetery and the surrounding open space (*Figures 3-6, 3-7, 3-8, and 3-9*).

The Maui County Countywide Policy Plan (2010) characterizes the scenic resources of various areas throughout the county. According to the Countywide Policy Plan:

“The beauty of these scenic resources enriches the quality of life for residents and serves as a primary visitor attraction” (Section II, 6. Scenic Resources).

Impacts and Mitigation – The project scale and design will not significantly impact area views, views of the open pastoral landscape will be minimally affected by the new project elements. Overall, the size, scale, and design details of the project will be in character to the surrounding area and key visual corridors will be maintained. Design details will be utilized to maintain the visual character of the project site.

3.15 UTILITIES

A Preliminary Engineering Report was completed by Group 70 International, Inc. in May 2015, and is included as *Appendix E* in this study.

Existing Water System - A 2-inch DHHL waterline, per the topographic survey, in Lihi Pali Avenue serves Kanakaloloa Cemetery and adjacent improvements including the veteran's cemetery and the residential lots to the north. Water service for the site is limited to irrigation and appears to be provided through several hose bibbs that were observed on site. Hose bibbs are typically located near the headstones. An irrigation control valve is located approximately 30 feet north east of headstone 13, near Lihi Pali Avenue.

Fire hydrants are currently not located within close proximity to the site. The nearest fire hydrant is approximately one quarter of a mile away, near the intersection of Farrington Avenue and Lihi Pali Avenue.

Impacts and Mitigation – A new waterline will provide non-potable water to the proposed pavilion. The waterline will connect to an existing irrigation waterline on the cemetery property near headstone 206. Approximately 200 LF of trenching and pipe is anticipated. The line will be routed to avoid existing and proposed grave areas as well as newly paved surfaces wherever possible.

A future 6-inch to 8-inch water main extension is planned in Lihi Pali Avenue by DHHL under a separate project. Fire hydrants will be provided along the road when this line is installed which would serve the new pavilion; however a construction schedule has not been established. The new pavilion will require fire suppression water supply per building and fire code, and thus cannot be constructed until this main is extended. It is anticipated that future improvements, performed by others, would conform to Maui County water system standards which require newly installed hydrants in rural areas to be spaced every 500 feet with a flow capacity of 1,000 gallons per minute for up to 2 hours.

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Figure 3-6: View from Project Area to the South



Figure 3-7: View of Project Area to the North



Figure 3-8: View from Project Area to the East



Figure 3-9: View of Adjacent Veterans Cemetery Fence at South Property Line

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Electrical: Electrical power on the island of Molokaʻi is provided by Maui Electric Company, a privately owned utility company regulated by the State Public Utilities Commission.

An overhead Maui Electric Company electric line is available on the east edge of the cemetery along Lihi Pali Avenue, but does not serve the property.

Impacts and Mitigation – Infrastructure improvements for electrical and sewer systems are not proposed.

Drainage: Storm drain lines, catch basins, curbs, and gutters are not available at the site or within Lihi Pali Avenue. Stormwater appears to sheet flow from the west to the north-east off of the property to Lihi Pali Avenue. During heavy rain events ponding occurs at the northeast corner of the utilized portion of the property.

Impacts and Mitigation – Drainage infrastructure is not proposed, and existing drainage patterns will remain. Minimal grading will be performed to account for the new roadways and driveway connections and positive drainage will be maintained. No wastewater is currently produced on site, and no wastewater is proposed by this project.

3.16 ROADWAYS AND TRAFFIC

Existing Conditions – Primary access to the site is via two access driveways off Lihi Pahi Avenue, a two way two lane road, which is accessible from Farrington Avenue (*Figure 3-11*). Secondary access is provided southeast of the project site via Puʻu Kapele Avenue, also a two way two lane road, which connects to Lihi Pahi Avenue.

Farrington Avenue is a two-way arterial street that runs from Kalae Highway to the east to the Manalo Gulch to the west. East of Hoʻolehua, Kalae Highway is a two-lane arterial highway.

Impacts and Mitigation – On average, traffic in the region is generally lower than most urban areas in the state due to the relatively low population of Molokaʻi. Traffic on Lihi Pali Avenue mainly consists of residential traffic and visitors to the Molokaʻi Veterans Cemetery and the Kanakaloloa Cemetery.

The proposed project is not expected to have a significant impact on traffic operations in the project vicinity. Traffic operations along Lihi Pali Avenue and the critical traffic movements at the project driveways are expected to continue to operate at acceptable levels of service during peak hours of traffic. Critical traffic movements at project driveways should improve in efficiency as a result of the paved driveway entries connecting to the proposed interior drive lanes.

A 22'-0" wide asphalt paved two lane roadway will be constructed along Lihi Pali Avenue from the south property line past the position of the Pavilion project area to the north, after future water line improvements (by others) on Lihi Pali Avenue.

3.17 NOISE

Existing Conditions – The primary noise sources in the area of the project site are related to traffic and adjacent residential activities. Lihi Pali Avenue is the most significant source of noise in the project area. The site and surrounding area are generally quiet due to the rural uses for residential and agricultural activities.

The primary noise receptors in the area are farm dwellings and residences in the Ho'olehua Hawaiian Home Lands. The uses at the cemetery do not generate unacceptable levels of noise.

Impacts and Mitigation – Construction work at the project site will involve activities that may generate an increase in noise levels. However, such exposures will be a short-term condition, occurring during specific daylight hours.

Construction vehicles and activities must comply with State Department of Health Administrative Rules. The State of Hawai'i Department of Health's noise control regulation requires a permit for construction activities that emit noise in excess of 78 decibels or that cost a total of more than \$250,000 (based on the value on the building permit). Mitigation measures to minimize construction noise will include the use of mufflers to suppress loud equipment and limitations on the hours of heavy equipment operation.

Project activities will comply with the Administrative Rules of the Department of Health, Chapter 11-39 on Air Conditioning and Ventilating, and Chapter 11-46 on Community Noise Control. Administrative controls will be implemented to control noise at all facilities and during outdoor events. These controls could include limiting community events to certain hours of the day.

4.0 ALTERNATIVES TO THE PROPOSED PROJECT

4.0 ALTERNATIVES TO THE PROPOSED PROJECT

This Draft Environmental Assessment evaluates two alternatives to the preferred action of the proposed project as described in *Section 2.0*. To evaluate the alternatives it is necessary to consider the impacts each alternative would have on the physical environment (visual, traffic, noise, and air quality, etc.). In addition, it is important to weigh these effects against the benefits each alternative would bring to the surrounding community. The alternatives include:

- No Action Alternative
- Alternative Site Configuration

4.1 NO-ACTION ALTERNATIVE

The “no-action” alternative would result in the continued use of the cemetery with current dirt pathways, no perimeter wall, and no parking lot or pavilion construction.

The no-action alternative would result in the continued erosion of dirt pathways, continued illegal trespassing into the cemetery via Lihi Pali Avenue with continued illegal activities on the cemetery grounds, and lack of parking and shelter with the current cemetery configuration and resources.

The no-action alternative would jeopardize opportunities for Native Hawaiian cultural enrichment and preservation, as the roadways would continue to deteriorate and illegal activities would continue to go on unabated, negatively impacting the visitors of both the Kanakaloa Cemetery as well as the adjacent Molokaʻi Veteran’s Cemetery. While the no-action alternative would have no adverse environmental impacts, it cannot be considered a reasonable solution to the existing and future cultural needs facing the native Hawaiian community in Hoʻolehua or on the Island of Molokaʻi, as action needs to be taken to improve current conditions and prepare the cemetery to better serve the community in the present and for decades to come.

4.2 ALTERNATIVE SITE CONFIGURATION

Another alternative would be to reconfigure the location and layout of the proposed roadways, parking, and pavilion location on site. This alternative considers altering the preferred configuration to alternatives that address optional development and infrastructure priorities.

In short, significant planning went into the preferred configuration and the relationships of the internal project configuration to external elements to address issues such as financial feasibility, ease of access, durability, and adaptability for future development options. For example, using gravel instead of asphalt was considered, and paving all interior roadways on site was also considered.

Reconfiguring the project would also create inefficiencies in the development process, since many components were strategically placed in their respective locations for practical measures. For example, the pavilion location was chosen due to its close proximity to Lihi Pali Avenue, which is ideal for limiting the amount of infrastructure necessary to connect roadways and water to the pavilion. The current location also limits the amount of necessary grading and site work, as the current location has the least amount of slope, wind, and weather exposure.

Under the site reconfiguration alternative, the community would still benefit from the proposed project and limited change in impacts, but it is anticipated that there would be larger amounts of construction and design work, which would result in larger construction costs that are not feasible for the budget and resources available for this project. For practical reasons, the proposed locations of facilities are deemed to be the highest and best use opportunities for this particular project. Furthermore, the current site selections on the parcel have been vetted by the homestead community, the ultimate beneficiaries of the Hawaiian Homes Commission Act and DHHL projects.

5.0 PLANS AND POLICIES

5.0 PLANS AND POLICIES

5.1 OVERVIEW

An important consideration in evaluating the potential impacts of a proposed action on the environment is how it may conform or conflict with approved or proposed land use plans, policies and controls for the affected area. This chapter of the Draft EA will discuss the consistency of the project with respect to the Americans with Disabilities Act, Hawai'i State Plan, Hawai'i State Functional Plans, Hawai'i State Land Use District Boundaries, DHHL Moloka'i Island Plan, DHHL Ho'olehua-Pālā'au Regional Plan, County of Maui General Plan, Moloka'i Community Plan, and County of Maui Zoning Districts.

5.2 AMERICANS WITH DISABILITIES ACT OF 1991

In 1991, the Federal government enacted the American with Disabilities Act (ADA) to provide equal accessibility for persons with disabilities. Part of this statute is having building design consider the needs of persons with disabilities. Chapter 103-50 of the HRS states that "public buildings, facilities, and sites shall be prepared so that the buildings, facilities, and sites are accessible to and usable by persons with disabilities...[and] shall conform to the Americans with Disabilities Act Accessibility Guidelines...and the requirements of the Federal Fair Housing Amendments Act" as adopted and amended by the Disability and Communication Access Board.

Discussion: The proposed pavilion and parking will comply with ADA accessibility requirements.

5.3 HAWAI'I STATE PLAN

The Hawai'i State Plan establishes a statewide planning system that provides goals, objectives, and policies which detail property directions and concerns of the State of Hawai'i. Priority guidelines relating to the economy, housing, population growth, facility systems, and the physical environment will be discussed as they relate to the proposed project.

It is the goal of the State, under the Hawai'i State Planning Act (Chapter 226, HRS), to achieve the following:

- A strong, viable economy, characterized by stability, diversity, and growth, that enables the fulfillment of the needs and expectations of Hawai'i present and future generations.
- A desired physical environment, characterized by beauty, cleanliness, quiet, stable natural systems, and uniqueness, that enhances the mental and physical well-being of the people.
- Physical, social, and economic well-being, for individuals and families in Hawai'i, that nourishes a sense of community responsibility, of caring, and of participation in community life.

The objectives and policies of the State Plan that are relevant to the project are discussed below:

Culture: Planning for the State's socio-cultural advancement with regard to culture shall be directed toward the achievement of the objective of enhancement of cultural identities, traditions, values, customs, and arts of Hawai'i's people. It is the policy of the State to:

- Support activities and conditions that promote cultural values, customs, and arts that enrich the lifestyles of Hawai'i's people and which are sensitive and responsive to family and community needs.

Discussion: The proposed improvements to the cemetery are essential to continuing to provide the community with a culturally appropriate means and space for interment of deceased family members. The proposed improvements will help fulfill the cultural needs of the Ho'olehua community, and will help to continue preservation and education of Hawaiian values.

5.4 HAWAI'I STATE FUNCTIONAL PLANS

The State Functional Plans implement the goals, objectives, policies and priority guidelines of the Hawai'i State Plan. The Functional Plans provide the connection between State programs and State policy. Twelve functional plans have been adopted by the State Legislative, including the areas of Agriculture, Conservation Lands, Education, Energy, Health, Higher Education, Historic Preservation, Housing, Recreation, Tourism, Transportation and Water Resources. These plans contain multiple objectives and specific action items to be implemented by specific state or county agencies in partnership with named entities such as academic institutions and/or community organizations. Although there are no specific action items tied to the proposed project, the general overall goals of these plans should be recognized and wherein appropriate, incorporated into the planning approach for this project.

5.5 HAWAI'I STATE COASTAL ZONE MANAGEMENT PROGRAM

The Hawai'i State Coastal Zone Management Program (CZMP) was enacted by Hawai'i Revised Statutes 205A – Hawai'i Coastal Zone Management Act (CZMA), as a requirement of the National Coastal Zone Management Program of 1972. The program provides policy guidance for development activities as they relate to coastal land and water resources. The entire land area of the State of Hawai'i has been determined to be within the Coastal Zone as defined by the CZMA. The primary objectives and policies of the CZMP that apply to the project include the following:

- **Historic resources**
 - Identify and analyze significant archaeological resources.
 - Maximize information retention through preservation or remains and artifacts or salvage operations.
 - Support state goals for protection, restoration, interpretation, and display of historic resources.

Discussion: An archaeological survey was performed for the project area in compliance with Chapter 6E of the Hawai'i Revised Statutes, supporting the CZMP's objective to protect and preserve historic resources.

5.6 HAWAII STATE LAND USE DISTRICT BOUNDARIES

The State of Hawai'i Land Use Law regulates the classification and uses of lands in the State to accommodate growth and development, and to retain the natural resources in the area. All State lands are classified by the State Land Use Commission, with consideration given to the General Plan of the County, as Urban, Rural, Agricultural, or Conservation.

Discussion: As discussed in *Section 3.0*, implementation of the project involves a permitted use of the proposed site. The proposed project site is located within the State designated Agricultural District (*Figure 1-4*). As the project is within DHHL lands, it is not subject to statutes controlling land use per Section 206 of the Hawaiian Homes Commission Act, which stipulates, "The powers and duties of the governor and the board of land and natural resources, in respect to lands of the State, shall not extend to lands having the status of Hawaiian home lands, except as specifically provided in this title." Therefore, the Hawaiian Homes Commission is the authority that determines its land use designations and governs the allowable use and activities within the parcel.

5.7 DHHL MOLOKA'I ISLAND PLAN

The State Department of Hawaiian Home Lands (DHHL) Moloka'i Island Plan (2005) assesses DHHL's 25,899 acres on the Island of Moloka'i. Under the DHHL Planning System, there are five components outlined in the island plans:

- 1) baseline analysis of existing physical environmental conditions and beneficiary preferences;
- 2) preliminary identification of appropriate land use based on those conditions and preferences;
- 3) community input and participation on the draft land use plan;
- 4) pre-final land use evaluation and public commentary on that evaluation by region; and
- 5) final land use analysis and recommendations.

The Moloka'i Island Plan designated the majority of Ho'olehua Lots as General Agricultural, Subsistence Agricultural, and Supplemental Agricultural, with a small area of Residential under DHHL's Land Use Categories (*Figure 1-3*). The parcel in which this project will be developed is currently designated by the Moloka'i Island Plan for Community Use.

Discussion: The use of this site as a cemetery conforms to the Moloka'i Island Plan, and the improvements will better allow the property to be used for the designated purpose for decades to come.

5.8 DHHL HO'OLEHUA-PĀLĀ'AU REGIONAL PLAN

DHHL regional plans are the third tier of DHHL's planning system, which supports the Department's general plan, strategic program plans, and island plans. The regional plans focus on applying the goals, policies, and land use designations to specific homestead areas, with a two to four year timeframe. The Ho'olehua-Pālā'au Regional Plan was written in 2005 and includes a list of proposed projects and land uses. The Ho'olehua Cemetery is included on the list of current Community Use land uses.

Discussion: Through the proposed project improvements for the cemetery, this project will continue the land use set forth in the 2005 Ho'olehua-Pālā'au Regional Plan.

5.9 DHHL WATER POLICY PLAN

The DHHL Water Policy Plan 2014 was developed with beneficiary input to create DHHL's vision and mission for water, as well as the supporting values, goals, and policies related to water. The mission of the Water Policy Plan is to strive to ensure adequate, quality water by working to understand DHHL's trust water assets; planning for DHHL's water needs; understanding, exercising, and asserting DHHL's kuleana as stewards of water; developing and protecting water resources; and managing water systems.

Discussion: The project supports the DHHL Water Policy Plan through water conservation and best management practices that will be implemented throughout project construction.

5.10 COUNTY OF MAUI COUNTYWIDE POLICY PLAN

Adopted in 2010, the Countywide Policy Plan is the first component of the decennial General Plan update for the County of Maui, and sets forth long-range objectives for the general welfare and prosperity of the people of Maui and broad policies to attain those objectives. The General Plan provides policies and courses of action intended to guide and coordinate growth patterns through the designation and preservation of lands for specified uses. One element of this coordination is the Zoning Code, which is the legal instrument that regulates land use within the County.

The proposed project advocates the following goals and policies of the County of Maui Countywide Policy Plan:

Preserve Local Cultures and Traditions

Goal: Maui County will foster a spirit of pono and protect, perpetuate, and reinvigorate its residents' multi-cultural values and traditions to ensure that current and future generations will enjoy the benefits of their rich island heritage.

Objective 4.

Preserve and restore significant historic architecture, structures, cultural sites, cultural districts, and cultural landscapes.

Policies:

- A. Support the development of island-wide historic, archaeological, and cultural resources inventories.
- B. Promote the rehabilitation and adaptive reuse of historic sites, buildings, and structures to perpetuate a traditional sense of place.
- C. Identify a sustainable rate of use and set forth specific policies to protect cultural resources.
- D. Protect and preserve lands that are culturally or historically significant.
- E. Support programs that protect, record, restore, maintain, provide education about, and interpret cultural districts, landscapes, sites, and artifacts in both natural and museum settings.
- F. Perpetuate the authentic character and historic integrity of rural communities and small towns.
- G. Seek solutions that honor the traditions and practices of the host culture while recognizing the needs of the community.
- H. Support the development of an Archaeological District Ordinance.
- I. Protect summits, slopes, and ridgelines from inappropriate development.
- J. Support the registering of important historic sites on the State and Federal historic registers.
- K. Provide opportunities for public involvement with restoration and enhancement of all types of cultural resources.
- L. Foster partnerships to identify and preserve or revitalize historic and cultural sites.

Improve Parks and Public Facilities

Goal: A full range of island-appropriate public facilities and recreational opportunities will be provided to improve the quality of life for residents and visitors.

Objective 2.

Improve the quality and adequacy of community facilities.

Policies:

- A. Provide an adequate supply of dedicated shelters and facilities for disaster relief.
- B. Provide and maintain community facilities that are appropriately designed to reflect the traditions and customs of local cultures.
- C. Ensure that parks and public facilities are safe and adequately equipped for the needs of all ages and physical abilities to the extent reasonable.
- D. Maintain, enhance, expand, and provide new active and passive recreational facilities in ways that preserve the natural beauty of their locations.
- E. Redesign or retrofit public facilities to adapt to major shifts in environmental or urban conditions to the extent reasonable.

Discussion: The project promotes the objectives of the Countywide Policy Plan by preserving and restoring the oldest place of eternal rest within the homestead community. In addition to preserving this culturally significant site, the project will also improve the safety and accessibility of the cemetery by providing new roadways, parking, and an accessible path to the proposed pavilion.

5.11 MOLOKA'I COMMUNITY PLAN

Adopted by Ordinance No. 1357 in 1984, updated in 2001, the Moloka'i Community Plan (MoCP) was created to reflect current and anticipated conditions for the Moloka'i planning region and to advance planning goals, objectives, policies, and to implement considerations to guide decision-making in the region through the year 2010. The goals selected by the Moloka'i Planning Commission included:

- 1) Land Use – Enhance the unique qualities of the island of Moloka'i to provide future generations the opportunity to experience rural and traditional lifestyles
- 2) Subsistence – The continued practice of subsistence as part of the Moloka'i lifestyle which incorporates and fosters the traditional and cultural values of conservation, malama aina and auwana.
- 3) Cultural Resources – Preservation, enhancement, and appropriate use of cultural resources, cultural practices, and historic sites that provide a sense of history and define a sense of place for the island of Moloka'i.
- 4) Indigenous Architecture – Reserve for future implementation provisions for indigenous architecture as may be adopted from time to time by the County Council and/or the County Cultural Resources Commission.
- 5) Economic Activity – A balanced local economy which provides preferred employment levels, long-term viability and sustainability while meeting residents' needs, respecting cultural and natural resources, and is in harmony with Moloka'i's rural quasi-subsistence lifestyle.
- 6) Housing – Housing opportunities which are affordable, safe, and environmentally and culturally compatible for the residents of Moloka'i.
- 7) Design – Harmony between the natural and man-made environments to ensure that the natural beauty and character of Moloka'i is preserved.
- 8) Infrastructure – Culturally and environmentally sensitive infrastructure systems, developed and maintained in a timely fashion, which protect and preserve the safety and health of Moloka'i's residents and visitors.
- 9) Social Infrastructure – An efficient and responsive system of people-oriented public services which enable residents to live a safe, healthy, and enjoyable lifestyle.
- 10) Government – Accessible, cost effective, and responsive government services and programs which meet the unique needs of the residents of the island of Moloka'i.
- 11) Department of Hawaiian Home Lands – The timely implementation of programs and settlement of Native Hawaiians on Department of Hawaiian Home Lands.

Discussion: The project maintains the land designated for cemetery use as stated in the goal of Land Use, Objective and Policies 19. The project also preserves and enhances the cemetery, a dedicated community cultural resource, maintaining a sense of history and continuing to define a sense of place for the island of Moloka'i.

5.12 COUNTY OF MAUI ZONING DISTRICTS

Adopted in 1980 in the Maui County Code of Ordinances, the purpose of the Zoning Provisions for the County of Maui is to implement the General Plan and its policies for growth and development. Per the County of Maui, the lands that comprise the proposed project site are zoned as Agricultural.

Discussion: As previously mentioned, the subject property is owned by DHHL and is designated for Community Use, which includes cultural uses such as cemeteries. The use of the land as a cemetery will continue under this project, as County of Maui zoning approvals do not apply to Hawaiian Home Lands.

6.0 FINDINGS SUPPORTING ANTICIPATED DETERMINATION

6.0 FINDINGS SUPPORTING ANTICIPATED DETERMINATION

6.1 ANTICIPATED DETERMINATION

After reviewing the significance criteria outlined in Chapter 343, Hawai'i Revised Statutes (HRS), and Section 11-200-12, State Administrative Rules, Contents of Environmental Assessment, it is anticipated that the proposed action will be determined to not result in significant adverse effects on the natural or human environment. A Finding of No Significant Impact (FONSI) is anticipated for this project.

6.2 REASONS SUPPORTING THE ANTICIPATED DETERMINATION

The potential impacts of the development and future use after construction of the proposed Kanakaloaloa Cemetery project have been fully examined and discussed in this Draft Environmental Assessment. As stated earlier, there are no significant environmental impacts expected to result from the proposed action. This anticipated determination is based on the following assessments:

(1) Involve an irrevocable loss or destruction of any natural or cultural resources.

The project does not involve any known destruction of existing natural or cultural resources. The subject property is an existing cemetery with no significant natural resources. The entire site is an existing cultural resource, and this project will protect and enhance this resource. If any undocumented cultural or archaeological resources are unearthed during the course of construction, the SHPD will immediately be notified, and necessary protection measures would be administered in compliance with regulatory requirements.

(2) Curtail the range of beneficial uses of the environment.

The project does not curtail the range of beneficial uses of the environment. The project will create a social benefit for the Ho'olehua homestead and local Moloka'i community. Of the project area, only a small portion will involve new development of buildings, structures, roadways, or support infrastructure. Both the built and remaining undeveloped areas will complement the rural character of the immediate homestead area.

(3) Conflict with the State's long-term environmental policies or goals and guidelines as expressed in Chapter 344, HRS, and any revisions thereof and amendments thereto, court decisions, or executive orders.

The project does not conflict with the State's long-term environmental policies or goals and guidelines as expressed in Chapter 344, HRS, and any revisions thereof and amendments thereto, court decisions, or executive orders. Rather it supports some of the underpinnings of the Chapter relative to preserving opportunities for residents to learn and support their cultural heritage.

(4) Substantially affects the economic or social welfare of the community or State.

The cemetery positively benefits the social welfare of the community by providing a final resting place for homesteaders who in some cases have resided on these lands for generations. Provisions of a cemetery lend to the traditional Hawaiian idea that from where we are born, we then return to these lands from where we are born, we then return to those lands where our ancestors dwell, and from that cyclic relationship, mana goes back into the earth for future generations to thrive. The final resting place for the homestead community is an important center point that enhances both the social and cultural well-being of the community and fosters a sense of relationship and identity for Native Hawaiians that reside on these lands.

(5) Substantially affects public health.

The project does not substantially affect health. Although there would be some limited air and noise level impacts during construction, they will be mitigated through the implementation of best management practices. The long-term benefits associated with the project outweigh the temporary impacts to air and noise levels.

(6) Involves substantial secondary impacts, such as population changes or effects on public facilities.

The project does not create any substantial secondary impacts on the existing population or on public facilities. Existing traffic conditions and estimated future conditions with the project in place will use the same existing infrastructure without a significant increase in traffic volume.

(7) Involves a substantial degradation of environmental quality.

The project will address a long-standing community need, but in doing so, will provide consideration to protecting the natural environment as a cornerstone to maintaining the rural character, feel, experience, and conditions within the area. For all planned activities, integration with topography, prevalent wind conditions, visual relationships, and understanding seasonal cycles to native biota and habitat were evaluated and determined to have no substantial negative impact. Overall, the project provides an opportunity to meet a community need and integrate its built design to work within the natural landscape. Minor impacts to air and noise quality will be experienced during construction but will be mitigated to negligible to no impacts with best management practices.

(8) Is individually limited but cumulatively has considerable effect upon the environment or involves a commitment for larger actions.

The development and implementation of improvements to existing cemetery land will have a limited and negligible impact on the natural and cultural environment while providing an overall general improvement to social and recreational environments. The project does not require or influence a commitment for larger actions.

(9) Substantially affects a rare, threatened or endangered species, or its habitat.

There are no endangered plants or animal species located within the project site.

(10) Detrimentially affects air or water quality or ambient noise levels.

Short-term effects on air, water quality or ambient noise levels during construction will be mitigated by compliance with County of Maui and State Department of Health rules which regulate construction-related activities.

After construction, the impacts on noise levels and air and water quality should be minimal.

(11) Affects or is likely to suffer damage by being located in an environmentally sensitive area such as flood plain, tsunami zone, beach, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters.

The project site is not located in an environmentally sensitive area such as a flood plain, tsunami zone, beach, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters.

(12) Substantially affects scenic vistas and view-planes identified in county or state plans or studies.

The project is surrounded by generally undeveloped agricultural parcels. The proposed improvements will not deter from the overall appearance or aesthetics of the area and will not affect scenic vistas or view planes.

(13) Require substantial energy consumption.

Construction of the project will not require substantial energy consumption.

7.0 REFERENCES

7.0 LIST OF REFERENCES

AECOS, Inc. 2015. *Biological surveys for Kanakaloloa Cemetery (TMK: [2] 5-2-017:003) at Ho'olehua, Moloka'i.*

Baker, H.L. 1976. *Agricultural Lands of Importance to the State of Hawaii.* For the University of Hawai'i at Mānoa College of Tropical Agriculture Cooperative Extension Service Circular 496.

County of Maui. 2010. *County of Maui General Plan 2030.*

County of Maui. 1966, with 2014 amendments. *Maui County Code (Unofficial Online Version).* Accessed at: https://www.municode.com/library/hi/maui_county/codes/code_of_ordinances

Group 70 International, Inc. 2015. *Preliminary Engineering Report – Kanakaloloa.* Prepared for DHHL Kanakaloloa Cemetery.

Keala Pono Archaeological Consulting, LLC. 2015. *Archaeological Inventory Survey for Kanakaloloa Cemetery, TMK: (2) 5-2-017-003 (por.), Pālā'u and Ho'olehua Ahupua'a, Kona District, Island of Moloka'i, Hawai'i.*

Keala Pono Archaeological Consulting, LLC. 2015. *Cultural Impact Assessment for Kanakaloloa Cemetery, TMK: (2) 5-2-017-003 (por.), Pālā'u and Ho'olehua Ahupua'a, Kona District, Island of Moloka'i, Hawai'i.*

State of Hawai'i Department of Hawaiian Home Lands (DHHL). 2005. *Moloka'i Island Plan Final Report,* Prepared by Group 70 International

State of Hawai'i Department of Health (DOH). 2015. *Federal and State Ambient Air Quality Standards.* Accessed at: http://health.hawaii.gov/cab/files/2013/05/naaqs_jan_2013.pdf
<http://health.hawaii.gov/cab/hawaii-ambient-air-quality-data/>

State of Hawai'i Department of Health (DOH). 2014. *State of Hawai'i Annual Summary 2013 Air Quality Data.*

U.S. Census Bureau. 2010. *American Fact Finder.* Accessed at: <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>

U.S. Department of Agriculture, Natural Resource Conservation Service Website (USDA NRCS) 2015. Accessed at: <http://websoilsurvey.sc.egov.usda.gov/>

U.S. Geological Survey. 2013. *Seismic Design Maps for International Building Code (2006 & 2009).* Accessed at: <http://earthquake.usgs.gov/hazards/designmaps/pdfs/?code=IBC&edition=2006+%26+2009>

8.0 AGENCIES, ORGANIZATIONS, AND INDIVIDUALS RECEIVING COPIES OF THE EA

8.0 LIST OF AGENCIES, ORGANIZATIONS AND INDIVIDUALS RECEIVING COPIES OF THE EA

The following agencies, organizations, and individuals were included in either the Pre-consultation notification and/or the review of the Environmental Assessment. Comments letters received by the participants were recorded and are included in this section of the EA.

Respondents and Distribution	Pre-Consultation	Pre-Consultation Comments Received	Received Draft EA	EA Comments Received
Federal Agencies				
U.S. Department of Veteran Affairs, National Cemetery Administration, Moloka'i Veterans Cemetery	X		X	
U.S. Fish and Wildlife Service			X	
State of Hawai'i Agencies				
Department of Hawaiian Home Lands	X		X	
Department of Health	X	X	X	
Department of Health, Environmental Planning Office, Sanitation Branch	X		X	
Hawai'i State Public Library (HSPL), Hawai'i Documents Center			X	
HSPL Kaimukī Regional Library			X	
HSPL Kāne'ohe Regional Library			X	
HSPL Pearl City Regional Library			X	
HSPL Hawai'i Kai Regional Library			X	
HSPL Hilo Regional Library			X	
HSPL Kahului Regional Library			X	
HSPL Līhu'e Regional Library			X	
Hawaiian Homes Commission, Moloka'i Gene Ross Davis	X		X	

DHHL KANAKALOLOA CEMETERY PROJECT

Draft Environmental Assessment

Respondents and Distribution	Pre-Consultation	Pre-Consultation Comments Received	Received Draft EA	EA Comments Received
Department of Land and Natural Resources	X		X	
DLNR, State Historic Preservation Division	X	X	X	
Office of Environmental Quality Control	X		X	
Office of Hawaiian Affairs	X		X	
Office of Planning	X		X	
Senate District 7, Senator J. Kalani English	X		X	
House District 13, Representative Lynn DeCoite	X		X	
County of Maui Agencies				
Department of Environmental Management	X	X	X	
Department of Parks and Recreation	X			
Department of Planning	X	X		
Department of Public Works	X	X	X	
Department of Water Supply	X		X	
Fire Department	X	X		
County of Maui Council, Councilwoman Stacy Crivello	X		X	
Community Groups and Associations				
Ahupua'a o Moloka'i President Kammy Purdy	X		X	
Ho'olehua Homestead Association President Ochie Bush	X		X	
Ho'olehua Hawaiian Civic Club Pelekikena Edwina H. Cacooulidis			X	

APPENDIX A
PRECONSULTATION PERIOD COMMENTS AND RESPONSES

From: Sybil Lopez [mailto:Sybil.Lopez@co.mauhi.us]
Sent: Thursday, February 26, 2015 1:57 PM
To: Kawika McKeague
Subject: Kanakaloloa Cemetary Comments

Aloha Mark;

Attached is the Department of Planning comments in regards to Zoning.

Mahalo;

Sybil

Sybil K Lopez

Staff Planner
County of Maui
Department of Planning-Current Division
Telephone: (808) 270-5529
Office: (808) 270-8205
Cell: (808) 866-8389
Fax: (808) 270-1775
E-mail: sybil.lopez@co.mauhi.us



RECEIVED
2015 JAN 28 P 3:42
COUNTY OF MAUI
DEPT. OF PLANNING
ADMINISTRATION

January 26, 2015

Dear Participant:

PRINCIPALS

Francis S. Oda, Arch.D.,
FAIA, AICP, LEED AP

Norman G.Y. Hong
AIA

Sheryl B. Seaman
AIA, ASID, LEED AP

Hitoshi Hida
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Paul T. Matsuda
PE, LEED AP

Ma Ry Kim
RIBA, ARB

OF COUNSEL

Ralph E. Portmore
FAICP

Subject: Pre-Consultation for Environmental Assessment Pursuant to
Chapter 343, Hawai'i Revised Statutes
Kanakaloloa Cemetery Project (Ho'olehua, Moloka'i, Hawai'i)
TMK (2) 5-2-017:003 (por.)

On behalf of the Department of Hawaiian Home Lands, Group 70 International, Inc. is currently undertaking the preparation of an Environmental Assessment (EA) pursuant to Chapter 343, Hawai'i Revised Statutes, for the development of road pavement work, a surface asphalt parking lot, a perimeter wall, a new 2" water line connection, and an open air pavilion to be built at Ho'olehua Cemetery, also known as Kanakaloloa Cemetery, which is located on homestead lands in Ho'olehua, Moloka'i, Hawai'i.

A pre-consultation process is being conducted to engage agencies and interested parties in the environmental review process. Enclosed for your review and comment is an information summary and overview of the proposed action. You are welcome to provide comments regarding the scope of this EA via telephone, email, fax, or U.S. Mail. We request these comments be received no later than Monday, February 16, 2015 which will help address conditions and impacts to be addressed in the draft EA.

Group 70 International, Inc.
925 Bethel Street, Fifth Floor
Honolulu, HI 96813-4307
Attn: Mark Kawika McKeague, AICP
Email: kmckeague@group70int.com
Tel: (808) 523-5866
Fax: (808) 523-5874

Thank you for participating in pre-consultation for this environmental review process.

Sincerely,

GROUP 70 INTERNATIONAL, INC.



Mark Kawika McKeague, AICP
Senior Planner

Enclosed: Pre-Consultation Handout

15/922
9

COUNTY OF MAUI
DEPARTMENT OF PLANNING
One Main Plaza Building
2200 Main Street, Suite 315
Wailuku, Hawaii 96793



Zoning Administration and
Enforcement Division (ZAED)
Telephone: (808) 270-7253
Facsimile: (808) 270-7634
E-mail: planning@mauicounty.gov

ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Group 70 International, Inc. TELEPHONE 808-523-5866
PROJECT NAME Kanakaloloa Cemetery Project E-MAIL kmckeague@goup70int.com
PROPERTY ADDRESS 2725 Lihi Pali Ave, Hoolehua, HI TAX MAP KEY (2) 5-2-017:003(por)

☐ Yes ☐ No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?

IF YES, answer questions A and B below and comply with instructions 2 & 3 below:

A) ☐ Yes ☐ No Will it be processed under a consistency exemption from Section 18.04.030(B), MCC?

IF YES, which exemption? (No. 1, 2, 3, 4 or 5) _____

B) State the purpose of subdivision and the proposed land uses (ie 1-lot into 2-lots for all land uses allowed by law): _____

INSTRUCTIONS:

- 1) Please use a separate Zoning & Flood Confirmation Form for each Tax Map Key (TMK) number.
- 2) If this will be used with a subdivision application AND the subject property contains multiple districts/designations of (1) State Land Use Districts, (2) Maui Island Plan Growth Boundaries, (3) Community Plan Designations, or (4) County Zoning Districts; submit a signed and dated Land Use Designations Map, prepared by a licensed surveyor, showing the metes & bounds of the subject parcel and of each district/designation including any subdistricts.
- 3) If this will be used with a subdivision application AND the subject property contains multiple State Land Use Districts; submit an approved District Boundary Interpretation from the State Land Use Commission.

(This section to be completed by ZAED)

LAND USE DISTRICTS/DESIGNATIONS (LUD) AND OTHER INFORMATION: ¹

STATE DISTRICT: ☐ Urban ☐ Rural ☒ Agriculture ☐ Conservation

☐ (SMA)
Special
Management Area

MAUI ISLAND PLAN Growth Boundary: ☐ Urban ☐ Small Town ☐ Rural ☐ Planned Growth Area ☐ Outside Growth Boundaries

Protected Area: ☐ Preservation ☐ Park ☐ Greenbelt ☐ Greenway ☐ Sensitive Land ☐ Outside Protected Areas

COMMUNITY PLAN: P/6P - Public / Quasi - Public

COUNTY ZONING: Ag - Agriculture

OTHER/COMMENTS: HAI - Hawaiian Home Lands - (No jurisdiction)

FEMA FLOOD INFORMATION:

FLOOD HAZARD AREA ZONES ³
& BASE FLOOD ELEVATIONS: X

☐ FEMA DESIGNATED FLOODWAY

For Flood Zone AO, FLOOD DEPTH:

☐ FLOOD DEVELOPMENT PERMIT REQUIRED (Zones V, VE, A, AO, AE, AH, D, & Floodways)

☐ (PD)
Planned
Development
☐ (PH)
Project District
☐ See
Additional
Comments (Pg.2)
☐ See
Attached LUD Map

SUBDIVISION LAND USE CONSISTENCY: ☐ Not Consistent. (LUDs appear to have NO permitted uses in common).

☐ Not Applicable. (Due to processing under consistency exemption No. ☐1, ☐2, ☐3, ☐4, ☐5).

(Signature) _____

☐ Interim Zoning. (The parcel or portion of the parcel that is zoned interim shall not be subdivided).

☐ ⁴ Consistent. (LUDs appear to have ALL permitted uses in common).

☐ ⁴ Consistent, upon obtaining an SMA, PD, or PH subdivision approval from Planning.

☐ ⁴ Consistent, upon recording a permissible uses unilateral agreement processed by Public Works (See Pg.2).

NOTES:

- 1 The conditions and/or representations made in the approval of a State District Boundary Amendment, Community Plan Amendment, County Change In Zoning, SMA Permit, Planned Development, Project District and/or a previous subdivision, may affect building permits, subdivisions, and uses on the land.
- 2 Please review the Maui Island Plan and the Community Plan document for any goals, objectives, policies or actions that may affect this parcel.
- 3 Flood development permits might be required in zones X and XS for any work done in streams, gulches, low-lying areas, or any type of drainageway; Flood development permits are required for work in all other zones. Subdivisions that include/adjoin streams, gulches, low-lying areas, or any type of drainageway might require the following designations to be shown on the subdivision map: 100-year flood inundation limits; base flood elevations; drainage reserves.
- 4 Subdivisions will be further reviewed during the subdivision application process to verify consistency, unilateral agreement requirements, and the conditions associated with a unilateral agreement [Section 18.04.030.D, Maui County Code].

REVIEWED & CONFIRMED BY:

John S. Rapacz
(Signature)

2/25/17
(Date)

For: John S. Rapacz, Planning Program Administrator, Zoning Administration and Enforcement Division



July 21, 2015

Sybil K. Lopez
Staff Planner
County of Maui
Department of Planning – Current Division

PRINCIPALS

Francis S. Oda, Arch.D.,
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Ma Ry Kim
RIBA, ARB

OF COUNSEL

Ralph E. Portmore
FAICP

Subject: Chapter 343 Draft Environmental Assessment
DHHL Kanakaloloa Cemetery Project
TMK: (2) 5-2-017:003 (por.)
(Ho'olehua, Moloka'i, Hawai'i)

Dear Ms. Lopez:

Thank you for your comment letter emailed on February 26, 2015 concerning the Chapter 343, Hawai'i Revised Statutes (HRS) Draft Environmental Assessment (EA) for the Department of Hawaiian Home Lands (DHHL) Kanakaloloa Cemetery Project.

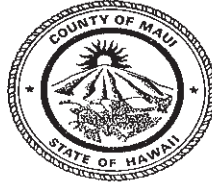
We acknowledge the Land Use Districts/Designations and other information provided on the Zoning and Flood Confirmation Form you included with the email. We have incorporated this information into the Draft EA.

Thank you for your participation in the environmental review process. We will provide you with a copy of the Draft EA for your review. Please contact us if you have any questions or require additional information.

Sincerely,
GROUP 70 INTERNATIONAL, INC.

Mark Kawika McKeague, AICP
Senior Planner

ALAN M. ARAKAWA
MAYOR



JEFFREY A. MURRAY
CHIEF

ROBERT M. SHIMADA
DEPUTY CHIEF

COUNTY OF MAUI
DEPARTMENT OF FIRE AND PUBLIC SAFETY
FIRE PREVENTION BUREAU

313 MANEA PLACE . WAILUKU, HAWAII 96793
(808) 244-9161 . FAX (808) 244-1363

February 6, 2015

Mark Kawika McKeague, AICP
Group 70 International, Inc.
925 Bethel Street, Fifth Floor
Honolulu, HI 96813-5874

Re: Kanakaloloa Cemetery Project
Ho'olehua, Moloka'i, Hawai'i
(2) 5-2-017: 003 por.
Pre-consultation for Environmental Assessment

Dear Mark:

Thank you for the opportunity to comment on this subject. At this time, our office provides the following comments:

- The proposed pavilion would require a building permit under current county rules. During the permit review, our office would request fire apparatus access and water supply for fire protection. Should this project be exempt from acquiring a building permit, our office recommends that this structure be constructed of non-combustible materials.
- Our office does reserve the right to comment on any future applications for building permits regarding this property, if applicable. At that time, fire department access and water supply for fire protection requirements will be addressed. Please be advised that the current specifications for fire apparatus access require a 20-foot wide, all-weather surface capable of supporting a 50,000# fire apparatus. Furthermore, the location of the fire hydrant does not appear to be within 300 feet of all exterior walls of the pavilion as measured from an approved fire apparatus access.
- Turn-arounds shall be designed so that the largest fire apparatus can do a 3-point turn around.

I am unsure if would apply to this project proposed upon Hawaiian Home Lands, but I wanted to provide them to you just in case. Other than those comments, there are no objections to this proposed project.

If there are any questions or comments, please feel free to contact me. Thank you for your attention to fire prevention and public safety.

Sincerely,

A handwritten signature in black ink, appearing to read "Paul Haake", with a stylized, flowing script.

Paul Haake
Captain, Fire Prevention Bureau



July 21, 2015

Mr. Paul Haake
Captain, Fire Prevention Bureau
County of Maui
Department of Fire and Public Safety
Fire Prevention Bureau

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Ma Ry Kim
RIBA, ARB

OF COUNSEL

Ralph E. Portmore
FAICP

Subject: Chapter 343 Draft Environmental Assessment
DHHL Kanakaloloa Cemetery Project
TMK: (2) 5-2-017:003 (por.)
(Ho'olehua, Moloka'i, Hawai'i)

Dear Mr. Haake:

Thank you for your comment letter mailed on February 6, 2015 concerning the Chapter 343, Hawai'i Revised Statutes (HRS) Draft Environmental Assessment (EA) for the Department of Hawaiian Home Lands (DHHL) Kanakaloloa Cemetery Project.

We acknowledge that your comments that the proposed pavilion would require a building permit review under current county rules, and issues including fire hydrant locations, fire apparatus access, and water supply for fire protection requirements will be addressed at that time.

Thank you for your participation in the environmental review process. We will provide you with a copy of the Draft EA for your review. Please contact us if you have any questions or require additional information.

Sincerely,
GROUP 70 INTERNATIONAL, INC.

Mark Kawika McKeague, AICP
Senior Planner

ALAN M. ARAKAWA
Mayor

DAVID C. GOODE
Director

ROWENA M. DAGDAG-ANDAYA
Deputy Director

Telephone: (808) 270-7845
Fax: (808) 270-7955



COUNTY OF MAUI
DEPARTMENT OF PUBLIC WORKS

200 SOUTH HIGH STREET, ROOM NO. 434
WAILUKU, MAUI, HAWAII 96793

GLEN A. UENO, P.E., P.L.S.
Development Services Administration

CARY YAMASHITA, P.E.
Engineering Division

BRIAN HASHIRO, P.E.
Highways Division

February 11, 2015

Mr. Mark Kawika McKeague, AICP
GROUP 70 INTERNATIONAL, INC.
925 Bethel Street, Fifth Floor
Honolulu, Hawaii 96813-4307

Dear Mr. McKeague:

Subject: **PRE-CONSULTATION FOR ENVIRONMENTAL ASSESSMENT
PURSUANT TO CHAPTER 343, HAWAII REVISED STATUTES,
FOR KANAKALOLOA CEMETERY PROJECT (HO'OLEHUA,
MOLOKA'I, HAWAII); TMK: (2) 5-2-017:003 (POR.)**

We reviewed the subject pre-consultation request and have the following comments:

Comment from the Highways Division:

1. We have no comments in regards to the proposed improvements to this Hawaiian Home Lands Cemetery, however, we believe consideration should be given to constructing a lavatory with a septic tank system at the open air pavilion to accommodate cemetery visitors.

Please call Rowena M. Dagdag-Andaya at (808) 270-7845 if you have any questions regarding this letter.

Sincerely,

A handwritten signature in blue ink, appearing to read "David C. Goode", is written over the typed name and title.

DAVID C. GOODE
Director of Public Works

DCG:RMDA:da

xc: Highways Division
Engineering Division

S:\DSA\Engr\CZM\Draft Comments\52017003_kanakaloloa_cemetery_pre_consult_ea.wpd



July 21, 2015

Mr. David C. Goode
Director of Public Works
County of Maui
Department of Public Works

PRINCIPALS

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RIBA, ARB

OF COUNSEL

Ralph E. Portmore
FAICP

Subject: Chapter 343 Draft Environmental Assessment
DHHL Kanakaloloa Cemetery Project
TMK: (2) 5-2-017:003 (por.)
(Ho'olehua, Moloka'i, Hawai'i)

Dear Mr. Goode:

Thank you for your comment letter mailed on February 11, 2015 concerning the Chapter 343, Hawai'i Revised Statutes (HRS) Draft Environmental Assessment (EA) for the Department of Hawaiian Home Lands (DHHL) Kanakaloloa Cemetery Project.

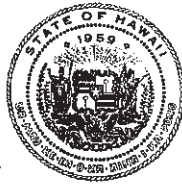
We acknowledge that you have no comments to offer at this time. We also will review your consideration for the construction of a lavatory and septic tank system for cemetery visitors, pending budget and scope limitations.

Thank you for your participation in the environmental review process. We will provide you with a copy of the Draft EA for your review. Please contact us if you have any questions or require additional information.

Sincerely,
GROUP 70 INTERNATIONAL, INC.

Mark Kawika McKeague, AICP
Senior Planner

DAVID Y. IGE
GOVERNOR OF HAWAII



VIRGINIA PRESSLER, M.D.
DIRECTOR OF HEALTH

LORRIN W. PANG, M.D., M.P.H.
DISTRICT HEALTH OFFICER

**STATE OF HAWAII
DEPARTMENT OF HEALTH
MAUI DISTRICT HEALTH OFFICE
54 HIGH STREET
WAILUKU, HAWAII 96793-3378**

February 11, 2015

Mr. Mark Kawika McKeague, AICP
Senior Planner
Group 70 International, Inc.
925 Bethel Street, Fifth Floor
Honolulu, Hawai'i 96813-4307

Dear Mr. McKeague:

**Subject: Pre-Consultation for Environmental Assessment Pursuant to
Chapter 343, Hawai'i Revised Statutes
Kanakaloloa Cemetery Project (Ho'olehua, Molokai, Hawai'i)
TMK: (2) 5-2-017:003 (por.)**

Thank you for the opportunity to review this project. We have no comments to offer.

It is strongly recommended that the Standard Comments found at the Department's website:
<http://health.hawaii.gov/epo/home/landuse-planning-review-program/> be reviewed and any
comments specifically applicable to this project should be adhered to.

Should you have any questions, please call me at 808 984-8230 or E-mail me at
patricia.kitkowski@doh.hawaii.gov.

Sincerely,

A handwritten signature in cursive script that reads "Patti Kitkowski".

Patti Kitkowski
District Environmental Health Program Chief

c EPO



July 21, 2015

Ms. Patti Kitkowski
District Environmental Health Program Chief
State of Hawai'i
Department of Health
Maui District Health Office

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Ralph E. Portmore
FAICP

Subject: Chapter 343 Draft Environmental Assessment
DHHL Kanakaloloa Cemetery Project
TMK: (2) 5-2-017:003 (por.)
(Ho'olehua, Moloka'i, Hawai'i)

Dear Ms. Kitkowski:

Thank you for your comment letter mailed on February 11, 2015 concerning the Chapter 343, Hawai'i Revised Statutes (HRS) Draft Environmental Assessment (EA) for the Department of Hawaiian Home Lands (DHHL) Kanakaloloa Cemetery Project.

We acknowledge that you have no comments to offer at this time. We have also reviewed the Standard Comments found at the State of Hawaii Health Department's website.

Thank you for your participation in the environmental review process. We will provide you with a copy of the Draft EA for your review. Please contact us if you have any questions or require additional information.

Sincerely,
GROUP 70 INTERNATIONAL, INC.

Mark Kawika McKeague, AICP
Senior Planner

DAVID Y. IGE
GOVERNOR OF HAWAII



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KAOHOLAWE ISLAND RESERVE COMMISSION
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**STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES**

STATE HISTORIC PRESERVATION DIVISION
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601 KAMOKILA BLVD, STE 555
KAPOLEI, HAWAII 96707

February 26, 2015

Mark Kawika McKeague, AICP
Group 70 International, Inc.
Via email to: kmckeague@group70int.com

LOG NO: 2015.00358
DOC NO: 1502MD40
Archaeology
History & Culture

Aloha Mr. McKeague,

**SUBJECT: Chapter 6E-8 Historic Preservation Review
Early Consultation for an Environmental Assessment for the Kanakaloloa Cemetery Project
Ho'olehua Ahupua'a, Moloka'i District, Island of Moloka'i
TMK (2) 5-2-017:003 (por.)**

Thank you for the opportunity to comment on the aforementioned submittal, which was received on January 28, 2015. The State of Hawai'i, Department of Hawaiian Home Lands (DHHL) is proposing alterations to the existing Ho'olehua (Kanakaloloa) Cemetery, located at 2725 Lihi Pali Avenue. The cemetery was established ca. 1921 and encompasses an area of 4.35 acres. Proposed alterations include road pavement work; a surface asphalt parking lot; a perimeter wall; a new two-inch water line connection; and a 1,250 square foot open-air pavilion. This project will involve building and grading permits from the County of Maui.

A search of our records indicates that an archaeological survey has not been conducted for the subject parcel. have no records one way or the other regarding historic properties associated with the Kanakaloloa Cemetery.

SHPD's History and Culture Branch recommends consultation with the Hoolehua DHHL lessees to gather information regarding the creation of the Kanakaloloa Cemetery. It is our experience that many historical cemeteries are built adjacent to pre-Historic burial sites. While the proposed construction will be restricted to locations identified as non-burials areas, there remains the potential of encountering pre-Historic burials if the area was known to contain pre-Historic burials. Consultation with those who might have historical information of the Kanakaloloa Cemetery may alleviate that concern.

In addition, there is the potential of encountering unmarked Historic burials. Archaeological monitoring during any ground-altering construction activities could mitigate adverse effects to sub-surface historic properties. Please contact me at (808) 243-4641 or Morgan.E.Davis@hawaii.gov if you have any questions or concerns regarding this letter.

Mahalo,

A handwritten signature in black ink, reading "Morgan E. Davis".
Morgan E. Davis
Lead Archaeologist, Maui Section

cc: James Richardson, HHL Engineer
Department of Hawaiian Home Lands
Land Development Division, Design and Construction Branch
91-5420 Kapolei Parkway
Kapolei, Hawaii 96707

Hinano R. Rodrigues, History & Culture Branch Chief
State Historic Preservation Division
(Hinano.R.Rodrigues@hawaii.gov)

ALAN M. ARAKAWA
Mayor

KYLE K. GINOZA, P.E.
Director

MICHAEL M. MIYAMOTO
Deputy Director



MICHAEL RATTE
Solid Waste Division

ERIC NAKAGAWA, P.E.
Wastewater Reclamation Division

**COUNTY OF MAUI
DEPARTMENT OF
ENVIRONMENTAL MANAGEMENT**

2200 MAIN STREET, SUITE 100
WAILUKU, MAUI, HAWAII 96793

March 6, 2015

RECEIVED

MAR 12 2015

GROUP 70 INTL

Mr. Mark Kawika McKeague
Group 70 International, Inc.
925 Bethel Street, Fifth Floor
Honolulu, Hawaii 96813

**SUBJECT: KANAKALOLOA CEMETERY PROJECT
PRE-CONSULTATION FOR ENVIRONMENTAL ASSESSMENT
TMK (2) 5-2-017:003 (POR.), HOOLEHUA, MOLOKAI**

We reviewed the subject application and have the following comments:

1. Solid Waste Division comments:
 - a. None.
2. Wastewater Reclamation Division (WWRD) comments:
 - a. There is no County wastewater system in the area of the subject project.

If you have any questions regarding this memorandum, please contact Michael Miyamoto at 270-8230.

Sincerely,


KYLE K. GINOZA, P.E.
Director of Environmental Management



July 21, 2015

Mr. Kyle K. Ginoza, P.E.
Director of Environmental Management
County of Maui
Department of Environmental Management

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Ma Ry Kim
RIBA, ARB

OF COUNSEL

Ralph E. Portmore
FAICP

Subject: Chapter 343 Draft Environmental Assessment
DHHL Kanakaloloa Cemetery Project
TMK: (2) 5-2-017:003 (por.)
(Ho'olehua, Moloka'i, Hawai'i)

Dear Mr. Ginoza:

Thank you for your comment letter mailed on March 6, 2015 concerning the Chapter 343, Hawai'i Revised Statutes (HRS) Draft Environmental Assessment (EA) for the Department of Hawaiian Home Lands (DHHL) Kanakaloloa Cemetery Project.

We acknowledge that you have no comments to offer at this time from the Solid Waste Division. We also acknowledge the Wastewater Reclamation Division's comment that there is no County wastewater system in the area of the subject project.

Thank you for your participation in the environmental review process. We will provide you with a copy of the Draft EA for your review. Please contact us if you have any questions or require additional information.

Sincerely,
GROUP 70 INTERNATIONAL, INC.

Mark Kawika McKeague, AICP
Senior Planner

DAVID Y. IGE
GOVERNOR OF HAWAII



**STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES**

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KEKOAKALUHIWA
FIRST DEPUTY

W. ROY HARDY
ACTING DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
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KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

June 12, 2015

Windy McElroy, Ph.D.
Keala Pono Archaeological Consulting LLC
47-724D Ahuimanu Loop
Kaneohe, Hawaii 96744

Log No: 2015.00938
Doc No: 1506MD08
Archaeology

Aloha Dr. McElroy:

**SUBJECT: Chapter 6E-8 Historic Preservation Review
Draft Archaeological Inventory Survey of the Kanakaloloa Cemetery
Pālā‘au and Ho‘olehua Ahupua‘a, Kona District, Island of Moloka‘i
TMK (2) 5-2-017:003**

Thank you for the opportunity to review the report submittal titled *DRAFT - Archaeological Inventory Survey Report for Kanakaloloa Cemetery, Pālā‘au and Ho‘olehua Ahupua‘a, Kona District, Island of Moloka‘i, Hawai‘i, TMK (2) 5-2-017:003* by McElroy and Duhaylonsod March 2015. The submitted plan was received by our division on March 10, 2015 and we apologize for the delay in our review.

The archaeological inventory survey report (AIS) was conducted ahead of improvements to the existing Kanakaloloa Cemetery at the request of Group 70 International. Fieldwork for the 6.861-acre project area was conducted on January 20, 2015 by three archaeologists including yourself as the principal investigator. Pedestrian survey was conducted utilizing transects approximately three to five meters apart, and four mechanically-excavated trenches were excavated outside the cemetery boundaries. Visibility was good within the southern half of the survey area, but included heavy vegetation in the north. One new site, the cemetery (located within the southern portion of the parcel), was identified and assigned State Inventory of Historic Places (SIHP) 50-60-02-2564. SIHP 2564 was established following the passage of the Hawaiian Homes Commission Act of 1921 and currently contains in excess of 300 marked graves. Consultation included interviews with five *kupuna* in conjunction with an associated cultural impact assessment.

SIHP 2564 has been recommended significant under the Hawai‘i Administrative Rule 13-284-6(b) criterion “e” for its cultural importance. There are conflicting recommendations for the site, indicating either a preservation plan or avoidance/no further work that need to be reconciled, and we are requesting revisions as detailed in the attachment to this letter. In addition we are not in agreement that archaeological monitoring is unnecessary for the portion of the parcel outside of the Cemetery. In our experience cemetery boundaries are not always as clear; additionally, the heavy vegetation cover of the north portion of the parcel is concerning given this portion was not subject to subsurface testing.

Because this is both an active cemetery and a location of human remains subject to the Department of Hawaiian Home Lands, the treatment of SIHP 2564 and the Native Hawaiian remains within the cemetery are not under SHPD’s jurisdiction¹.

¹ These human remains are instead subject to The Native American Graves Protection and Repatriation Act (Public Law 101-601; 25 U.S.C. 3001-3013) (NAGPRA).

We are requesting revisions to the archaeological findings and recommendations sections as detailed in the attachment to this letter. Please contact me at (808) 243-4641 or Morgan.E.Davis@hawaii.gov if you have any questions or concerns about this letter.

Mahalo,



Morgan E. Davis
Lead Archaeologist, Maui Section

cc:	County of Maui Department of Planning Planning@co.maui.hi.us Group 70 International 925 Bethel Street, 5 th Floor Honolulu, Hawaii 96813	County of Maui Department of Public Works – DSA Renee.Segundo@co.maui.hi.us Mr. Hinano Rodrigues History & Culture Branch Chief State Historic Preservation Division	County of Maui Cultural Resources Commission Annalise.Kehler@co.maui.hi.us
-----	--	--	---

Attachment

*DRAFT - Archaeological Inventory Survey Report for Kanakaloloa Cemetery, Pālā‘au and Ho‘olehua Ahupua‘a,
Kona District, Island of Moloka‘i, Hawai‘i, TMK (2) 5-2-017:003
by McElroy and Duhaylonsod March 2015*

1. Management Summary, page i: please change the recommendation to clarify that while the Cemetery is “avoidance,” the remainder of the property should be subject to archaeological monitoring.
2. Summary and Recommendations, page 43, significance determinations: please revise; as this is DHHL lands, it is subject to HAR §13-275, not 13-284. Significance should be assessed per §13-275-6(b).
 - a. Regarding the recommendation for a preservation plan for the cemetery, we cannot require that one be prepared or followed in this case.
 - b. Please add a recommendation for archaeological monitoring for those portions of the parcel outside of the cemetery.

DAVID Y. IGE
GOVERNOR OF HAWAII



**STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES**

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
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June 18, 2015

Windy McElroy, Ph.D.
Keala Pono Archaeological Consulting LLC
47-724D Ahuimanu Loop
Kaneohe, Hawaii 96744

Log No: 2015.02361
Doc No: 1506MD33
Archaeology

Aloha Dr. McElroy:

**SUBJECT: Chapter 6E-8 Historic Preservation Review
Draft Archaeological Inventory Survey of the Kanakaloloa Cemetery
Pālā‘au and Ho‘olehua Ahupua‘a, Kona District, Island of Moloka‘i
TMK (2) 5-2-017:003**

Thank you for the opportunity to review the report submittal titled *REVISED DRAFT - Archaeological Inventory Survey Report for Kanakaloloa Cemetery, Pālā‘au and Ho‘olehua Ahupua‘a, Kona District, Island of Moloka‘i, Hawai‘i, TMK (2) 5-2-017:003* by McElroy and Duhaylonsod June 2015. The submitted plan was received by our division on June 18, 2015. We previously reviewed an earlier draft of this report and requested revisions (*Log No. 2015.00938, Doc No. 1506MD08*).

The archaeological inventory survey report (AIS) was conducted ahead of improvements to the existing Kanakaloloa Cemetery at the request of Group 70 International during the development of a draft environmental assessment (*Log No. 2015.00358, Doc No. 1502MD40*). Fieldwork for the 6.861-acre project area was conducted on January 20, 2015 by three archaeologists including yourself as the principal investigator. Pedestrian survey was conducted utilizing transects approximately three to five meters apart, and four mechanically-excavated trenches were excavated outside the cemetery boundaries.

Visibility was good within the southern half of the survey area, but included heavy vegetation in the north. One new site, the cemetery (located within the southern portion of the parcel), was identified and assigned State Inventory of Historic Places (SIHP) 50-60-02-2564. SIHP 2564 was established following the passage of the Hawaiian Homes Commission Act of 1921 and currently contains in excess of 300 marked graves. Consultation included interviews with five *kupuna* in conjunction with an associated cultural impact assessment.

SIHP 2564 has been recommended significant under the Hawai‘i Administrative Rule 13-284-6(b) criterion “e” for its cultural importance. We concur with that recommendation. Avoidance/no further work is recommended for the Cemetery, SIHP 2564, which remains in active use and we agree with that recommendation, as well as archaeological monitoring for the remainder of the parcel.

The AIS meets the requirements of Hawai‘i Administrative Rule §13-276 and is accepted. Please send one hardcopy of the document, clearly marked **FINAL**, along with a copy of this review letter and a text-searchable PDF version on CD to the Kapolei SHPD office, attention SHPD Library.

Please contact me at (808) 243-4641 or Morgan.E.Davis@hawaii.gov if you have any questions or concerns about this letter.

Mahalo,



Morgan E. Davis
Lead Archaeologist, Maui Section

cc:	County of Maui Department of Planning Planning@co.maui.hi.us	County of Maui Department of Public Works – DSA Renee.Segundo@co.maui.hi.us	County of Maui Cultural Resources Commission Annalise.Kehler@co.maui.hi.us
	Group 70 International 925 Bethel Street, 5 th Floor Honolulu, Hawaii 96813 kmckeague@group70int.com	Mr. Hinano Rodrigues History & Culture Branch Chief State Historic Preservation Division Hinano.R.Rodrigues@hawaii.gov	James Richardson, HHL Engineer Department of Hawaiian Home Lands Land Development Division, Design & Construction Br. 91-5420 Kapolei Parkway Kapolei, Hawaii 96707



July 21, 2015

Morgan E. Davis
Lead Archaeologist, Maui Section
State of Hawai'i
Department of Land and Natural Resources
State Historic Preservation Division

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Ma Ry Kim
RIBA, ARB

Subject: Chapter 343 Draft Environmental Assessment
DHHL Kanakaloloa Cemetery Project
TMK: (2) 5-2-017:003 (por.)
(Ho'olehua, Moloka'i, Hawai'i)

Dear Ms. Davis,

Thank you for your comment letter mailed on February 26, 2015 concerning the Chapter 6E-8, HRS Historic Preservation Review for Early Consultation and also informing our 343, HRS Environmental Review process for the Department of Hawaiian Home Lands (DHHL) Kanakaloloa Cemetery Project.

We acknowledge your comments recommending consultation with the Ho'olehua DHHL lessees to gather information regarding establishment of the Kanakaloloa Cemetery to alleviate concerns of encountering pre-Historic burials in the area. An archeological inventory survey and Cultural Impact Assessment were completed as a part of this project. The cemetery was identified as significant under Hawai'i Administrative Rule 13-284-6(b) criterion "e" for its cultural importance, and assigned a State Inventory of Historic Places (SIHP) number. We confirm your Chapter 6E-8 Historic Preservation Review of the AIS and conditions of acceptance in regards to mitigation and archeological monitoring. These comments and revisions have been integrated into the Draft EA as appropriate.

Thank you for your participation in both review processes. We will provide you with a copy of the Draft EA for your review. Please contact us if you have any questions or require additional information.

Sincerely,
GROUP 70 INTERNATIONAL, INC.

Mark Kawika McKeague, AICP
Senior Planner

OF COUNSEL

Ralph E. Portmore
FAICP

APPENDIX B
BIOLOGICAL SURVEY REPORT

Biological surveys for Kanakaloloa Cemetery (TMK: (2) 5-2-017:003) at Ho'olehua, Moloka'i

June 25, 2015

AECOS No. 1419

Eric Guinther and Chad Linebaugh

AECOS, Inc.

45-939 Kamehameha Hwy, Suite 104

Kāne'ohe , Hawai'i 96744

Phone: (808) 234-7770 Fax: (808) 234-7775 Email: aecos@aecos.com

Introduction

The Department of Hawaiian Home Lands (DHHL) is planning on expanding the existing Kanakaloloa Cemetery located at the north end of Lihi Pali Avenue in Ho'olehua on the Island of Moloka'i (Figure 1). The 6.86-ac (2.78-ha) triangular parcel (TMK: (2) 5-2-017:003) is presently occupied by a 2.2-ac cemetery at the southern end. The northern ~2.8 ac is unused, although may have supported grazing activity in the past as it surrounded by a fence and there is an access road with separate entrance gate seen on satellite images between 2006 and 2013. Between the northern section and the actively maintained cemetery is an approximately 1.8-ac area, most of which has been recently grubbed or heavily mowed of the wild vegetation. However, this area appears to have been heavily mowed several times back to 2003, so the clearing/mowing of this portion of the property has been ongoing for over a decade.

Methods

Biological surveys of the site were conducted on the morning of January 23, 2015 by the authors. Plant names follow *Manual of the Flowering Plants of Hawai'i* (Wagner, Herbst, & Sohmer, 1990; Wagner & Herbst, 1999) for native and naturalized flowering plants and *A Tropical Garden Flora* (Staples & Herbst, 2005) for crop and ornamental plants. More recent name changes for naturalized plants follow Imada (2012).



Figure 1. Location of Kanakaloloa Cemetery on a triangular parcel off Lihi Pali Avenue in Ho'olehua, north central Moloka'i.

Plant Survey

For the botanical survey, a boundary map was loaded into our Trimble 6000 Series GNSS units (GeoXH) to serve as a guide to the survey area limits. The GNSS units recorded the progress tracks of the botanists, providing real time feedback on location and adequacy of coverage during the pedestrian survey. Plant species were identified as they were encountered and notations used to develop a qualitative sense of abundance of each. Any plants not immediately recognized during the survey were photographed and/or a representative feature (flower, fruit) collected for later identification at the laboratory.

Separate plant and abundance lists were kept for each of the three areas of the property as described further below and mapped in Figure 2.



Figure 2. The three “areas” of the DHHL parcel surveyed separately for plants. Area ‘A’ is the actively used and well-maintained Kanakaloloa Cemetery. “Sta. 1” and “Sta. 2” are the point-count locations of the avian survey.

Avian Survey

The avian survey included two stationary point-count stations in which all birds observed during a 6-minute period were recorded within a visible radius of the observer and by listening for vocalizations. Point-count stations were located near the center of the undeveloped portion of the property (Area ‘C’; Sta. 1) and

at the south end of the cemetery (Sta. 2) in Area 'A.' Additionally, a running tally was kept of all bird species not observed during stationary point counts.

Stationary point counts were conducted between 0700 and 0800 on January 23, 2015. Weather conditions during the survey were ideal, with no rain, unlimited visibility, and calm winds. Species identifications were verified with: *A Photographic Guide to the Birds of Hawaii: the Main Islands and Offshore Waters* (Denny, 2010). Taxonomy follows the Checklist of North and Middle American Birds by American Ornithologists' Union (AOU, 2014).

Terrestrial Mammals Survey

A list of mammal species observed in the project area was noted as biologists conducted botanical and avian surveys. Visual observation for tracks, scat, and other signs of mammalian use of the Project area were undertaken concurrent with our survey.



Figure 3. Sunrise at Kanakaloloa Cemetery in Ho'olehua on Moloka'i.

Results

Vegetation

The area of the existing cemetery (see Figure 3, above; Area 'A') is a mowed and well-kept lawn with gravesites and unpaved access roads. Vegetation here comprises various grasses and other herbs adapted to the regular maintenance of the grounds. Many of the gravesites are planted with ornamentals or support weedy species if grave configuration or various objects such as plastic floral arrangements prevent regular mowing.

The previously grubbed or heavily mowed area is a mixture of bare ground and scraped or mowed grassland with some areas untouched around the edges that support tall grass grassland and scrub growth (Figure 4).



Figure 4. Recently mowed area ('B') adjacent to Kanakaloloa Cemetery.

The northern, slightly less than half of the parcel (Area 'C'), is least disturbed of the survey area, comprising areas of dense scrub growth and areas of grassland (Figure 5).



Figure 5. Dense grass vegetation in Area 'C' adjacent to Kanakaloloa Cemetery. Other parts of this area are more open with lower stature grasses or are covered by dense scrub vegetation.

Flora

The flora of a site is the listing of plant species recorded by the survey. This listing is provided in Table 1. A total of 85 plant species were identified from the three survey "areas". A couple of planted ornamentals have not yet been identified. The listing is by plant family (standard practice) and includes plant status and qualitative abundance estimate for each species (the latter by area). By "status" is meant its assignment as either native or non-native. Native plants are divided into indigenous (**Ind**) or endemic (**End**) species (see definitions at

Table 1. Flora listing for Kanakaloloa Cemetery land.

Species listed by family	Common name	Status	Abundance			Notes
			A	B	C	
GYMNOSPERMS						
CONIFERS						
ARAUCARIACEAE						
<i>Araucaria columnaris</i> (G. Forst.) D. Hook.	Cook-pine	Nat	R	R	--	
PINACEAE						
<i>Pinus</i> sp.	potted indet. pine	Orn	R	--	--	<1>
FLOWERING PLANTS						
DICOTYLEDONES						
AIZOACEAE						
<i>Aptenia cordifolia</i> (L.) N.E. Brown	hearts-and-flowers	Orn	R	--	--	<1>
<i>Lampranthus</i> cf. <i>amoenus</i> (Salm-Dyck) N.E. Brown	---	Orn	R	--	--	<1>
AMARANTHACEAE						
<i>Amaranthus spinosus</i> L.	spiny amaranth	Nat	--	O	--	
<i>Gomphrena globosa</i> L.	<i>lehua mau loa</i>	Orn	R	--	--	<1>
ANACARDIACEAE						
<i>Schinus terebinthefolius</i> Raddi	Christmas berry	Nat	R	C	AA	
APOCYNACEAE						
<i>Adenium obesum</i> (Forssk.) J. Roem. and J.A. Schultes	desert rose	Orn	R	--	--	<1>
<i>Catharanthus roseus</i> (L.) G. Don	Madagascar periwinkle	Nat	U	--	--	<1>
ARALIACEAE						
<i>Schefflera actinophylla</i> (Endl.) Harms	umbrella tree	Nat	R	--	--	<1>
ASCLEPIADACEAE						
<i>Asclepias physocarpa</i> (E. Mey.) Schlechter	balloon plant	Nat	--	--	U	
ASTERACEAE (COMPOSITAE)						
<i>Bidens alba</i> (L.) DC.	beggartick	Nat	U	--	--	
<i>Calyptocarpus vialis</i> Less.	---	Nat	AA	--	--	
<i>Conyza bonariensis</i> (L.)Cronq.	hairy horseweed	Nat	R	--	--	
<i>Crassocephalum crepidioides</i> (Benth.) S. Moore	---	Nat	R	--	--	
<i>Emilia fosbergii</i> Nicolson	Flora's paintbrush, <i>pualele</i>	Nat	--	R	--	
<i>Hypochoeris radicata</i> L.	hairy cat's ear	Nat	U	--	--	
<i>Parthenium hysterophorus</i> L.	false ragweed	Nat	R	--	--	

Table 1 (continued).

Species listed by family	Common name	Status	Abundance			Notes
			A	B	C	
ASTERACEAE (continued)						
<i>Sonchus oleraceus</i> L.	sow thistle	Nat	C	U	--	
<i>Synedrella nodiflora</i> (L.) Gaertn.	nodeweed	Nat	R	--	--	
<i>Tagetes erecta</i> L.	marigold	Orn	R	--	--	<1>
<i>Tetraneuris</i> sp.	bitterweed	Orn	R	--	--	<1>
<i>Tridax procumbens</i> L.	coat buttons	Nat	O	--	--	
<i>Verbesina encelioides</i> (Cav.) Benth. & Hook.	golden crown-beard	Nat	--	U	--	
BRASSICACEAE						
<i>Coronopus didymus</i> (L.) Sm.	swinecress	Nat	U	--	--	
<i>Lepidium virginicum</i> L.	---	Nat	O	--	--	
<i>Lobularia maritima</i> (L.) Desv.	sweet alyssum	Nat	R	--	--	<1>
CARYOPHYLLACEAE						
<i>Dianthus barbatus</i> L.	sweet-William	Orn	R	--	--	<1>
CRASSULACEAE						
<i>Crassula ovata</i> (P. Miller) Druce	jade plant	Orn	R	--	--	<1>
<i>Echeveria elegans</i> Rose	hen-and-chickens	Orn	R	--	--	<1>
<i>Kalanchoë tubiflora</i> (Harv.) Raym.-Hamet	chandelier plant	Nat	R	--	--	<1>
EUPHORBIACEAE						
<i>Euphorbia hirta</i> L.	garden spurge	Nat	R	--	--	
<i>Euphorbia pulcherrima</i> Klotzsch	poinsettia	Orn	R	--	--	<1>
<i>Acacia confusa</i> Merr.	Formosan koa	Nat	--	R	U	
<i>Alysicarpus vaginalis</i> (L.) DC.	alyce clover	Nat	R	--	--	
<i>Chamaecrista nictitans</i> (L.) Moench	partridge pea	Nat	R	--	U	
<i>Desmanthus pernambucanus</i> (L.) Thellung	virgate mimosa	Nat	--	--	U	
<i>Desmodium incanum</i> DC.	Spanish clover	Nat	C	O	A	
<i>Indigofera hendicaphyla</i> Jacq.	creeping indigo	Nat	O	--	--	
<i>Indigofera suffruticosa</i> Mill.	indigo	Nat	--	R	O	
<i>Leucaena leucocephala</i> (Lam.) deWit	<i>koa haole</i>	Nat	--	--	AA	
<i>Neonotonia wightii</i> (Wight & Arnott) Lackey	glycine vine	Nat	--	O	AA	
GERANIACEAE						
<i>Pelargonium xhortorum</i> L.H. Bailey	bedding geranium	Orn	R	--	--	<1>
LAMIACEAE						
<i>Rosmarinus officinalis</i> L.	rosemary	Orn	R	--	--	<1>
MALVACEAE						
<i>Malva parviflora</i> L.	cheese weed	Nat	R	R	--	

Table 1 (continued).

Species listed by family	Common name	Status	Abundance			Notes
			A	B	C	
MALVACEAE (continued)						
<i>Malvastrum coromandelianum</i> (L.) Garcke	false mallow	Nat	--	R	--	
<i>Sida fallax</i> Walp.	‘ilima	Ind	--	R	U	
MYRTACEAE						
<i>Psidium guajava</i> L.	common guava	Nat	--	--	R	
NYCTAGINACEAE						
<i>Boerhavia coccinea</i> Mill.	false <i>alena</i>	Nat	R	--	--	
OXALIDACEAE						
<i>Oxalis corniculata</i> L.	‘ihi‘ai	Pol	U	--	--	
PIPERACEAE						
<i>Peperomia obtusifolia</i> (L.) A. Dietr.	American peperomia	Orn	R	--	--	<1>
PLANTAGINACEAE						
<i>Plantago lanceolata</i> L.	nrv-lvd. plantain	Nat	AA	A	O	
<i>Plantago major</i> L.	common plantain	Nat	C	--	--	
PORTULACAEAE						
<i>Portulacaria afra</i> (L.) N. Jacq.	miniature jade tree	Orn	R	--	--	<1>
SCROPHULARIACEAE						
<i>Antirrhinum majus</i> L.	snapdragon	Nat	R	--	--	<1>
SOLANACEAE						
<i>Petunia</i> x <i>hybrida</i> (J. D. Hook.) Vilmorin	petunia	Orn	U	--	--	<1>
VERBENACEAE						
<i>Lantana camara</i> L.	lantana	Nat	--	--	U	
<i>Verbena litoralis</i> Kunth L.	ōwī	Nat	--	--	U	
FLOWERING PLANTS						
MONOCOTYLEDONES						
AGAVACEAE						
<i>Cordyline fruticosa</i> (L.) A. Chev.	ki, ti	Nat	R	--	--	<1>
<i>Sansevieria trifasciata</i> Prain	bowstring-hemp	Orn	R	--	R	<1>
ALOEACEAE						
<i>Aloë vera</i> (L.) N. L. Burm.	aloe vera	Orn	R	--	--	<1>
ARACEAE						
<i>Syngonium</i> sp.	nephthytis	Nat	R	--	--	<1>
<i>Philodendron xanadu</i> Croat, Mayo, & J. Boos	dwarf philodendron	Orn	R	--	--	<1>
BROMELIACEAE						
<i>Ananus comosus</i> var. <i>variegatus</i> (Lowe) Mold.	pineapple	Orn	R	--	--	<1>
<i>Tillandsia</i> sp.	tillandsia	Orn	R	--	--	<1>

Table 1 (continued).

Species listed by family	Common name	Status	Abundance			Notes
			A	B	C	
CYPERACEAE						
<i>Cyperus gracilis</i> R. Br.	McCoy grass	Nat	U	--	--	
<i>Cyperus rotundus</i> L.	nut grass	Nat	U	--	--	
COMMELINACEAE						
<i>Tradescantia spathacea</i> Swarz	oyster plant	Orn	U	--	--	<1>
LILIACEAE						
<i>Asparagus densiflorus</i> (Kunth) Jessop	asparagus-fern	Nat	R	--	--	<1>
<i>Crinum</i> cf. <i>asiaticum</i> L.	giant lily	Nat	R	--	--	<1,2>
ORCHIDACEAE						
indet. ground orchid	---	Orn	R	--	--	<1,2>
POACEAE						
<i>Bothriochloa pertusa</i> (L.) A. Camus	pitted beardgrass	Nat	A	--	--	
<i>Brachiaria subquadrifera</i> (Trin.) Hitchc.	---	Nat	O	--	--	
<i>Cenchrus ciliaris</i> L.	buffelgrass	Nat	C	--	--	
<i>Cenchrus clandestinus</i> (Hochst ex Choiv.) Morrone	Kikuyu grass	Nat	O	--	A	
<i>Cynodon dactylon</i> (L.) Pers.	Bermuda grass	Nat	AA	A	--	
<i>Cynodon xmagennisii</i> Hurcombe	hybrid Bermuda	Orn	A	--	--	<1,2>
<i>Digitaria insularis</i> (L.) Mez ex Ekman	sourgrass	Nat	U	U	O	
<i>Eleusine indica</i> (L.) Gaertn.	wiregrass	Nat	C	C	--	
<i>Eragrostis pectinacea</i> (Michx.) Nees	Carolina lovegrass	Nat	A	A	--	
<i>Eremochloa ophiuroides</i> (Munro) Hackel	centipede grass	Orn	U	--	--	
<i>Poa annua</i> L.	annual bluestem	Nat	U	--	--	
<i>Urochloa</i> cf. <i>brizantha</i> (Hochst ex A Rich.) R.D. Webster	---	Nat	--	C	--	
<i>Urochloa maxima</i> (Jacq.) R. Webster	Guinea grass	Nat	U	A	AA	
<i>Urochloa maxima</i> var. <i>trichoglume</i> (K. Schum.) C.E. Hibberd	green panic grass	Nat	O	--	--	

Legend to Table 1

STATUS = distributional status for the Hawaiian Islands:

Ind = indigenous; native to Hawaii, but not unique to the Hawaiian Islands.

Table 1 (continued)

Nat =	naturalized, exotic, plant introduced to the Hawaiian Islands since the arrival of Cook Expedition in 1778, and well-established outside of cultivation.
Orn =	A cultivated plant; a species not thought to be naturalized (spreading on its own) in Hawai'i.
Pol =	Early Polynesian introduction.
ABUNDANCE = occurrence ratings for plant species by area:	
A – Cemetery mowed lawn; B – Expansion area, graded/grubbed; C – Scrub growth area.	
-- - Species not present in area.	
R – Rare	seen in only one or perhaps two locations.
U - Uncommon	seen at most in several locations
O - Occasional	seen with some regularity
C - Common	observed numerous times during the survey
A - Abundant	found in large numbers; may be locally dominant.
AA - Very abundant	abundant and dominant; defining vegetation type.
Numbers (1 – 3) following qualitative rating of abundance indicate localized abundance is greater than occurrence rating. For example, R3 would be a plant encountered only once or twice, but very numerous where encountered.	
NOTES: <1> – Grave site ornamental planting.	
<2> – Plant lacking key diagnostic characteristics (flower, fruit); identification, therefore, uncertain.	

the end of the table. Introduced plants may be very early, Polynesian introductions ("canoe plants; **Pol**) or species introduced to the Hawaiian Islands after 1778. The latter category includes plants that are ornamentals (Orn; includes agricultural plants) or species that have become naturalized (Nat) after their introduction, and now grow wild.

For the botanical survey conducted in January 2015 at Kanakaloloa Cemetery, only one indigenous, no endemic, and one early Polynesian species were recorded. Thus, all (98%) of the remaining species listed are either naturalized species or ornamental species; none native to the Hawaiian Islands. The single indigenous plant is 'ilima (*Sida fallax*), a common, short-stature shrub. The 'ihi'ai (*Oxalis corniculatus*) is thought to be an early (probably accidental) pre-contact introduction and is an inconspicuous but common plant in the lowlands of Hawai'i. Although not a clover (it is a wood sorrel), most people would describe this inhabitant of our lawns, gardens, and waste places as a "three-leaved clover" with bright yellow flowers.

Avian Survey

During the January survey, only non-native birds were observed utilizing the property. Zebra Dove (*Geopelia striata*), Japanese Bush-Warbler (*Cettia diphone*), and Northern Cardinal (*Cardinalis cardinalis*) were observed among the *koa haole* and glycine vine in "Area C". A few Red-vented Bulbul (*Pycnonotus cafer*) were sighted in the larger trees of the *koa haole* scrub. House Finch (*Carpodacus mexicanus*), Red-crested Cardinal (*Paroaria coronata*), and Common Myna (*Acridotheres tristis*) spend time among the gravesites and along Lihi Pali Ave. Common Myna and Cattle Egret (*Bubulcus ibis*) fly over the site regularly, and the latter roost in "Area B" throughout the day. A single flock of Rock Dove (*Columba livia*) flew high above the cemetery during the survey.

Table 2. Avian survey counts for Kanakaloloa Cemetery.

PHYLUM, CLASS, ORDER, FAMILY <i>Genus species</i>	Common name	Status	Point Counts		RA	Other
			Sta. 1	Sta. 2		
CHORDATA, AVES	BIRDS					
COLOMBIFORMES						
COLUMBIDAE						
<i>Columba livia</i> Gmelin	Rock Pigeon	Nat	--	--	--	16
<i>Geopelia striata</i> Linnaeus	Zebra Dove	Nat	3	2	2.50	--
<i>Streptopelia chinensis</i> Scopoli	Spotted Dove	Nat	--	--	--	4
AVES, GALLIFORMES						
PHASIANIDAE						
<i>Gallus gallus</i> Linnaeus	Red Junglefowl	Pol	--	--	--	--†
<i>Francolinus pondicerianus</i> Gmelin	Gray Francolin	Nat	--	--	--	--†
AVES, PASSERIFORMES						
CETTIIDAE						
<i>Cettia diphone</i> Kittlitz	Japanese Bush-Warbler	Nat	1	--	0.50	--
ESTRILDIDAE						
<i>Lonchura punctulata</i> Linnaeus	Scaly-breasted Munia	Nat	--	--	--	5
FRINGILLIDAE						
<i>Carpodacus mexicanus</i> Muller	House Finch	Nat	--	3	1.50	--

Table 2 (continued).

PHYLUM, CLASS, ORDER, FAMILY <i>Genus species</i>	Common name	Status	Point Counts		RA	Other
			Sta. 1	Sta. 2		
PASSERIDAE						
<i>Passer domesticus</i> Linnaeus	House Sparrow	Nat	--	--	--	5
PYCNONOTIDAE						
<i>Pycnonotus cafer</i> Linnaeus	Red-vented Bulbul	Nat	--	--	--	2
STURNIDAE						
<i>Acridotheres tristis</i> Linnaeus	Common Myna	Nat	--	2	1.00	--
THRAUPIDAE						
<i>Cardinalis cardinalis</i> Linnaeus	Northern Cardinal	Nat	1	1	1.00	--
<i>Paroaria coronata</i> J.F. Miller	Red-crested Cardinal	Nat	--	--	--	2
AVES, PELECANIFORMES						
ARDEIDAE						
<i>Bubulcus ibis</i> Linnaeus	Cattle Egret	Nat	4	--	2.00	--

Legend – Table 2

Status – Nat = naturalized, exotic, plant introduced to the Hawaiian Islands since the arrival of Cook Expedition in 1778, and well-established outside of cultivation.

Pol = Early Polynesian introduction before 1778.

RA – Relative abundance (station count divided by number of stations).

Other – Counts for incidental (non-station counts) sightings.

† – Species identified by vocalizations nearby, not on Project property.

The cacophonous sounds of Red Jungle Fowl (*Gallus gallus*) were heard throughout the survey period, although no birds were actually sighted at the cemetery or on adjacent parcels. Similarly, the calls of a Gray Francolin (*Francolinus pondicerianus*) were audible, emanating from a parcel across Lihi Pali Ave., east of the subject property.

Terrestrial Mammals

A singular dog (*Canis familiaris*) was observed, a pet of a maintenance worker present on the cemetery property during the survey. Several trails bisect the

undeveloped parcel (Area 'C'). Though the area may have been used as pasture in the past, hoof imprints of axis deer (*Axis axis*) were the only definable tracks observed on the property.

Discussion

Potential Impacts to Protected Species and Habitats

No plants or animals currently protected or proposed for protection under either the federal or State of Hawai'i endangered species programs (DLNR, 1997, 2015; USFWS, 2015) were detected during the course of our survey of the Project site. Indeed, no plants or animals of particular resource value occur on the surveyed property. Although not detected during the survey, the potential presence of the following species may require consideration:

Hawaiian Hoary Bat - It is possible that Hawaiian hoary bat (*Lasiurus cinereus semotus*) or 'ōpe'ape'a overfly the area on occasion (bats were not surveyed for, as detection requires special equipment deployed at night). Few, if any trees on the property have potential value as roosting habitat for this listed species. The principal potential impact that site clearing in Area 'C' could have is the disturbance of roosting bats. Because bats use multiple roosts within a home territory, removal of vegetation would have no or very minimal impact on this species if resident there. However, during the pupping season, females carrying pups may be reluctant to vacate a roost site if a pup is present and very small pups may be unable to flee a tree that is being felled.

Seabirds – Presumably seabirds overfly the site on occasion. No seabird nesting occurs on the property and therefore the only likely impact to seabirds would be the installation of outdoor lights. Night lights can disorient seabirds, resulting in their potential downing and harm from collision with objects and/or predation by feral dogs and cats.

Critical Habitat - No federally delineated Critical Habitat occurs on or adjacent to the Project vicinity. The nearest critical habitat is at Mo'omomi Preserve, located 3.35 miles to the WNW (Moloka'i Coastal Unit 2), proposed in 2012. (USFWS, 2012) Thus, the development and operation of the proposed project will not result in impacts to federally designated Critical Habitat. There is no equivalent statute under state law. However, as well, no state designated conservation lands occur in the immediate vicinity of the parcel, the nearest conservation subzone being 0.3 mile north at the coast.

Recommendations

- If night-time construction activity or equipment maintenance is proposed during any construction, all associated lights should be shielded, and when large flood/work lights are used, they should be placed on poles that are high enough to allow the lights to be pointed directly downward at the ground.
- If streetlights or exterior facility lighting is installed in conjunction with the project, it is recommended that the lights be shielded to reduce the potential for interactions of nocturnally flying seabirds with external lights or other man-made structures (Reed et al., 1985; Telfer et al., 1987).
- To avoid potential deleterious impacts to roosting bats it is recommended that no woody vegetation taller than 15 ft (4.6 m) be removed during the bat pupping season (between June 1 and September 15).

References

- American Ornithologist's Union (AUO). 2014. American Ornithologist's Union. Updated Check-list of Birds of North and Middle America. Available online at URL: <http://checklist.aou.org/>; last accessed on June 1, 2015.
- Denny, J. 2009. *A Photographic Guide to the Birds of Hawai'i: the Main Islands and Offshore Waters*. Univ. of Hawai'i Press, Honolulu. 224 pp.
- Department of Land and Natural Resources (DLNR). 1997. Chapter 107. Threatened and Endangered Plants. Department of Land and Natural Resources. State of Hawaii. Administrative Rule under Title 13. Subtitle 5, Part 1, dated February 17, 2015.
- _____. 2015. Chapter 124. Indigenous Wildlife, Endangered, Injurious Wildlife, Introduced Wild Birds, and Introduced Wildlife. Department of Land and Natural Resources. State of Hawaii. Administrative Rule under Title 13. Subtitle 5, Part 2, dated February 17, 2015.
- Imada, C. T. 2012. Hawaiian Native and Naturalized Vascular Plants Checklist (December 2012 update). Bishop Museum Tech. Rept. 60. 380 pp.

- Reed, J. R., J. L. Sincock, and J. P. Hailman 1985. Light Attraction in Endangered Procellariiform Birds: Reduction by Shielding Upward Radiation. *The Auk*, 102: 377-383.
- Staples, G. W. and D. R. Herbst. 2005. *A Tropical Garden Flora. Plants Cultivated in the Hawaiian Islands and other Tropical Places*. Bishop Museum, Honolulu. 908 pp.
- Telfer, T. C., J. L. Sincock, G. V. Byrd, and J. R. Reed. 1987. Attraction of Hawaiian seabirds to lights: conservation efforts and effects of moon phase. *Wildlife Soc. Bull.*, 15: 406-413.
- U.S. Fish and Wildlife Service (USFWS). 2012. Endangered and Threatened Wildlife and Plants; Listing 38 Species on Molokai, Lanai, and Maui as Endangered and Designation Critical Habitat on Molokai, Lanai, Maui, and Kahoolawe for 135 Species; Proposed Rule. *Federal Register*, 77 (112; Monday, June 11, 2012): 34464-34775.
- _____. 2015. Environmental Conservation Online System. Available online at: <http://www.fws.gov/endangered/>; or http://ecos.fws.gov/tess_public/reports/species-listed-by-state-report?state=HI&status=listed; last visited: June 18, 2015.
- Wagner, W. L., D. R. Herbst and S.H. Sohmer. 1990. *Manual of the Flowering Plants of Hawai'i: Volume I and II*. Bishop Museum Special Publication 83. University of Hawai'i Press. 1853 pp.
- _____ and _____. 1999. *Supplement to the Manual of the flowering plants of Hawai'i*, pp. 1855-1918. In: Wagner, W.L., D.R. Herbst, and S.H. Sohmer, Manual of the flowering plants of Hawai'i. Revised edition. 2 vols. University of Hawaii Press and B.P. Bishop Museum.

APPENDIX C
ARCHAEOLOGICAL INVENTORY SURVEY REPORT

**FINAL—Archaeological Inventory Survey Report for
Kanakaloloa Cemetery, Pālā‘au and Ho‘olehua Ahupua‘a,
Kona District, Island of Moloka‘i, Hawai‘i.**

TMK: (2) 5-2-017:003



Prepared For:

Group 70 International
925 Bethel Street, 5th Floor
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June 2015

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June 2015



MANAGEMENT SUMMARY

An archaeological inventory survey was conducted for TMK: (2) 5-2-017:003 in Pālā‘au and Ho‘olehua Ahupua‘a, Kona District, on the island of Moloka‘i. This was done in preparation for ground disturbance associated with improvements to Kanakaloloa Cemetery, to include construction of a new pavilion, boundary wall, paved road, and parking lot, as well as the installation of a water line and the addition of new graves. The archaeological work included a pedestrian survey that covered 100% of the 2.777 ha (6.861 ac.) project area, along with subsurface testing, where four backhoe trenches were excavated.

One historic property was identified: Site 50-60-02-2564 the Kanakaloloa Cemetery. The cemetery consists of more than 300 graves, including individuals and families associated with the establishment of Ho‘olehua Homestead, one of the first Hawaiian homesteads in the state. Most graves date from the 1940s to the 2010s, and the cemetery continues to be utilized today. Subsurface testing was conducted in areas proposed for construction, and not within the current cemetery. No cultural material or features were found during the subsurface testing. Avoidance and no further work is recommended for Site 2564 (the cemetery), while the remainder of the property should be subject to archaeological monitoring.

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INTRODUCTION

At the request of Group 70 International, Keala Pono Archaeological Consulting conducted an archaeological inventory survey of TMK: (2) 5-2-017:003 in Pālā‘au and Ho‘olehua Ahupua‘a, Kona District, on the island of Moloka‘i, Hawai‘i. Improvements are planned for the cemetery, to include construction of a new pavilion, boundary wall, paved road, and parking lot, as well as the installation of a water line and the addition of new graves. The survey was designed to identify any historic properties that may be located on the parcel in anticipation of the proposed construction.

This report is drafted to meet the requirements and standards of state historic preservation law, as set out in Chapter 6e of the Hawai‘i Revised Statutes and SHPD’s draft *Rules Governing Standards for Archaeological Inventory Surveys and Reports*, §13–276. The report begins with a description of the project area and a historical overview of land use and archaeology in the area. The next section delineates methods used in the fieldwork, followed by the results of the archaeological survey. Project results are summarized and recommendations are made in the final section. Hawaiian words, flora and fauna, and technical terms are defined in a glossary at the end of the document.

Project Location and Environment

The Kanakaloloa Cemetery is located on Hawaiian homestead lands within *nā ahupua‘a* of Pālā‘au and Ho‘olehua and within the larger *moku* of Kona on the island of Moloka‘i (Figures 1 and 2). The cemetery lies within TMK: (2) 5-2-017:003, a 2.777 ha (6.861 ac.) parcel owned by the State of Hawai‘i Department of Hawaiian Home Lands. The project area is surrounded by Hawaiian homestead agricultural land with scattered residential development. Kanakaloloa Cemetery is adjacent to the Moloka‘i Veterans Cemetery but is a distinct and separate homestead cemetery.

TMK: (2) 5-2-017:003 lies at 250 m (820 ft.) in elevation, approximately 700 m (.43 mi.) from the northern coastline of Moloka‘i. Topography is moderately sloping to the east but is relatively flat on the north side of the parcel. The current cemetery occupies the south side of the lot, with dirt roads running through it. Lihi Pali Avenue is on the east, and a post and wire fence bounds the property on several sides. Vegetation within the current cemetery is sparse, consisting of short grass and a few large pine trees. The northern portion of the project area is densely vegetated, mostly with Christmas berry, *koa haole*, and tall grass.

The Ho‘olehua-Pālā‘au lands are situated in the middle section of the island on the Ho‘olehua Plain, and they consist mainly of a rich lateritic soil that runs from 3–9 m (10–30 ft.) in depth (Meyer 1982). The soil type in the project area is mostly LaB, or Lahaina silty clay with 3 to 7% slopes (Figure 3). There is also a smaller amount of LaC, or Lahaina silty clay with 7 to 15% slopes in the southwest corner of the parcel. The soil association for the project area is mostly of the Kahanui-Kalae-Kanepuu association which is described as “deep, gently sloping to moderately steep well-drained soils that have a dominantly fine-textured subsoil; on uplands” (Foote et al. 1972). In the northern part of the project area, the soil association is Very stony land-Rock land, which is described as “gently sloping to very steep, rocky and stony land types; on uplands and in gulches and valleys” (Foote et al. 1972).

The project area receives approximately 51–64 cm (20–25 in.) of rainfall annually with the bulk of the precipitation occurring from November to April. This helps to recharge the basal zone of groundwater on which almost the entire island sits. Beneath the Ho‘olehua Plain, the basal groundwater is thoroughly brackish due to the lack of surface groundwater adding to the zone where the fresh and salt water mix. The nearest streams are Mane‘opapa, a non-perennial stream that runs through a gulch 270 m (.17 mi.) south of the project area and Anianikeha, another non-perennial watercourse situated 425 m (.26 mi.) to the north of the parcel. Temperatures in the Ho‘olehua-

Pālā‘au area range from a low of 20° C (68° F) in the cold, rainy season to 24° C (76° F) in the warm, drier season. Typical northeasterly trade winds blow throughout most of the year but are sometimes replaced by the southerly Kona winds (Stearns and Macdonald 1947).

The Undertaking

Improvements to Kanakaloloa Cemetery include construction of a new pavilion, boundary wall, paved road, parking lot, and water line. The cemetery will also be expanded to the north to include additional plots. The conceptual plan for the Kanakaloloa Cemetery improvements is shown in Figure 4.

The pavilion will be a .01 ha (1,250 sq. ft.) open structure just west of Lihi Pali Avenue that will offer visitors shelter from the elements and space to hold gatherings. Footings for the structure are not expected to exceed 1.2 m (4 ft.) deep.

The boundary wall will provide a protective barrier around the perimeter of the cemetery, which is currently open to Lihi Pali Avenue. The proposed wall would extend from the existing Ho‘olehua Veteran’s Cemetery to an existing fence line that cuts through the parcel. It would consist of a .9–1.2 m (3–4 ft.) high stacked basalt rock wall along the eastern side of the property.

The paved road and parking lot will include paving of existing unimproved paths within the cemetery. This will help prevent erosion and muddy conditions. The pavement would extend approximately 3.7 m (12 ft.) wide, with entry/exit at Lihi Pali Avenue, and two turnaround areas provided. The parking lot will be located near the proposed pavilion.

There is currently no potable water on site, and the new water line will extend an existing line that is currently used for landscape irrigation. The new line will run to the proposed pavilion to provide water for flowers and other plants placed on the graves, as well as cleaning from landscaping activities. Excavations for the water line are not expected to exceed 1.2 m (4 ft.) deep.

Additional grave plots are planned for the north and west sides of the parcel. Grave depths will be approximately 1.8 m (6 ft.).

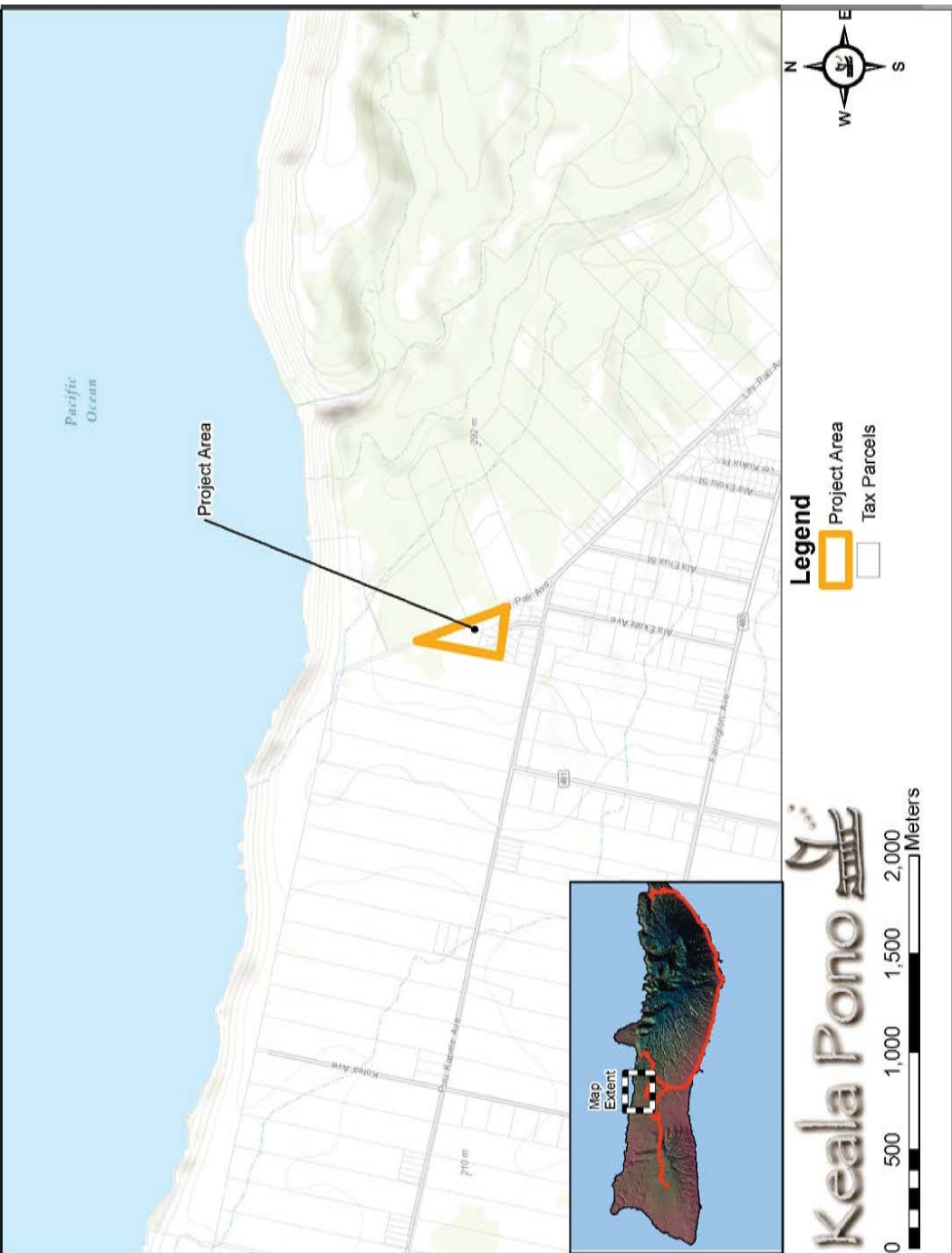


Figure 1. Project area on a 7.5 minute USGS Molokai Airport quadrangle map with TMK overlay.

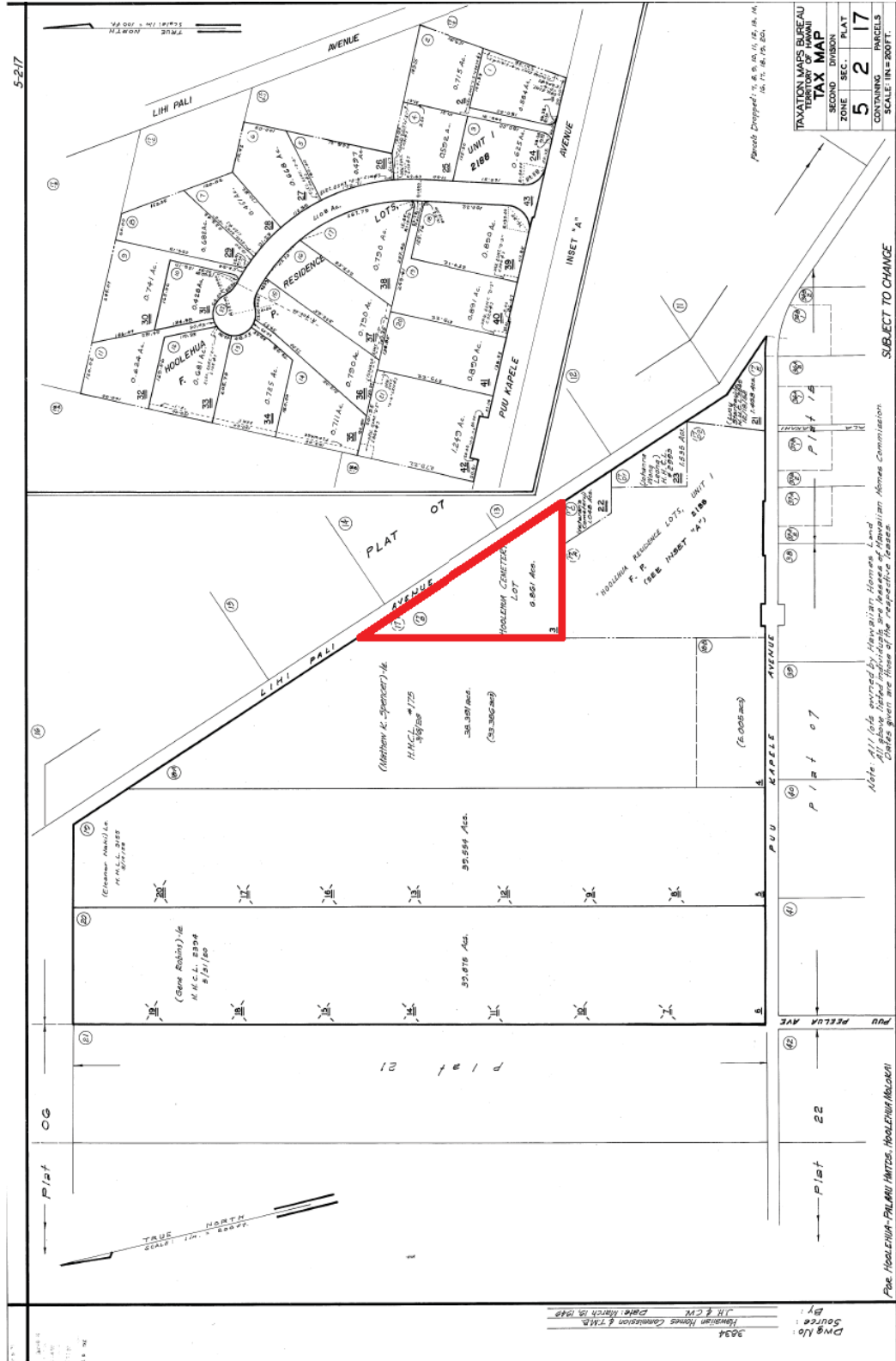






Figure 4. Conceptual plan for Kanakaloloa Cemetery improvements, courtesy of Group 70 International.

BACKGROUND

A summary of the natural environment of the Pālā‘au and Ho‘olehua region followed by a brief historic review is provided below, to offer a better holistic understanding of the use and occupation of the project area. In the attempt to record and preserve both the tangible (i.e., traditional and historic archaeological sites) and intangible (i.e., *mo‘olelo*, *‘ōlelo no‘eau*) culture, this research assists in the discussion of anticipated finds. Research was conducted at the Hawai‘i State Library, the University of Hawai‘i at Mānoa libraries, the SHPD library, and online on the Papakilo, Ulukau, and Waihona ‘Aina databases, and the State of Hawai‘i Department of Accounting and General Services (DAGS) website. Historical maps, archaeological reports, and historical reference books were among the materials examined.

Pālā‘au and Ho‘olehua in Traditional Times

The history of Pālā‘au and Ho‘olehua begins with the origin of Moloka‘i Island:

Moloka‘i and Lāna‘i were the children of Wākea by different wives. Hina was the mother of Moloka‘i and the child was called Moloka‘i-a-Hina. The mother of Lāna‘i was Ka‘ulawahine. They became ancestors of the people of those islands, but the two islands had ancient names (Kamakau 1991:129).

Much of the oral accounts which narrate the events from the first peopling of Hawai‘i to the recent period of written documentation has been lost in time. However, there are other means by which Hawai‘i’s history has been preserved. One often overlooked traditional source of history is the information embedded in the Hawaiian landscape. Hawaiian place names “usually have understandable meanings, and the stories illustrating many of the place names are well known and appreciated... The place names provide a living and largely intelligible history [to those familiar with the stories behind the names]” (Pukui et al. 1974:xii).

Among the place names relevant to the project area which have been listed in the book *Place Names of Hawaii* are Hikauhi, Ho‘olehua, ‘Īloli, Kāluape‘elua, Kona, Moloka‘i, Pālā‘au, and Pu‘ukape‘elua; the stories associated with these place names are in the *Mo‘olelo* section of this report:

Hikauhi. Coastal area, gulch, fishpond, and reef passage, south Moloka‘i. This was the daughter of Chief Ho‘olehua and his wife ‘Īloli. [*No translation given].

Ho‘olehua. Village, land divisions, and Hawaiian homesteads area near the Moloka‘i airport, said to be named for a chief. *Lit.*, acting the expert.

‘Īloli. Three land divisions, Moloka‘i. *Lit.*, yearning.

Kāluape‘elua. Gulch, Moloka‘i. *Lit.*, baked caterpillar

Kona. Leeward districts on Hawai‘i, Kaua‘i, Moloka‘i, Ni‘ihau, and O‘ahu. *Lit.*, leeward.

Moloka‘i. Island, 38 miles long, 10 miles wide, 261 square miles in area, and having a 1970 population of 5,261. District, forest reserve, lighthouse, high school, airport, and hospital. [*No translation given].

Pālā‘au. Three land divisions, north central and southwest Moloka‘i. *Lit.*, wooden fence or enclosure.

Pu‘ukape‘elua. Hill, north Moloka‘i. A beautiful girl lived in a cave near Kala‘e. *Lit.*, hill [of] the caterpillar.

The name “Kanakaloloa” is also listed in *Place Names of Hawaii*, as a hill in north Moloka‘i. It is translated as “tall person.”

In addition to the land features having significance in their names, so too was there importance attached to the naming of the rains, the winds, the clouds and many other phenomena of the natural environment. Hehika‘uala is a rain name of Ho‘olehua. Literally it translates to “the rain that tramples sweet potato.” Lanikeha, literally “lofted heaven,” is another rain name of Ho‘olehua. It is a rain that shares its name with a native sweet potato variety of Moloka‘i. Both rain names are associated with the ‘uala, showing the importance of that crop to the area. Among Ho‘olehua’s wind names, one is Ikioe (Kamakau 1991), and another is Puluea which translates to “a damp breath.” Summers gives two names for Ho‘olehua’s winds, Kaikioe and I‘aiki, and she cites Pukui and Elbert’s dictionary as the source for this information (Summers 1971), but upon verifying the citation, only I‘aiki is listed in the dictionary (Pukui and Elbert 1986). For Pālā‘au, there are no rain names listed, but Summers names two winds; they are Ka‘ele and Hauialialia (Summers 1971). Ka‘ele and Moa‘e are listed as winds of Pālā‘au in *The Wind Gourd of La‘amaomao* (Nakuina 1990).

Subsistence and Traditional Land Use

Like the names of Ho‘olehua’s rains hint, the Ho‘olehua Plain was noted for the cultivation of ‘uala. This is affirmed by the written and oral histories of Moloka‘i which stress the importance of sweet potato (*Ipomea batatas*) on leeward Moloka‘i and in Ho‘olehua and Pālā‘au in particular. This might be expected since sweet potato cultivation was dominant in similar dry environments on other islands throughout the archipelago that were not conducive to wet taro farming. Handy and Handy (1991:571) elaborate on the ‘uala cultivation of this region:

In 1931 there were many flourishing [sweet potato] patches on the Hawaiian homesteads at Ho‘olehua. It is said that Ho‘olehua and Pala‘au were noted for sweet potatoes in the olden days. Any part of the pineapple lands westward from this section may have been used for sweet potatoes.

Handy and Handy (1991:213) also note the cultivation of a distinctive type of gourd in Ho‘olehua:

‘Olo or Hokeo bore the long gourd used for the *hula* drum and for holding the fisherman’s tackle. These still grow wild in Ka‘u, near Punalu‘u, and are cultivated at Ho‘olehua on Molokai.

A final observation on traditional subsistence comes from Southwick Phelps in the 1930s:

For Pala‘au (Apana 2), Kaluakoi, and Punakou, Ho‘olehua, and Naiwa, planting areas for yams and sweet potatoes cannot be delimited but it is known that these were grown in that general area and were, with fish, the staples of the inhabitants. (In Handy and Handy 1991:518)

Summers (1971) reports that the majority of Moloka‘i’s pre-contact population resided east of the project area from Kalama‘ula to Kumimi and that the population in the island’s central Ho‘olehua-Pālā‘au region was scattered. But this by no means diminished the importance of the area. In contrast, the region was part of a complex of learning centers dedicated to the practice of hula and to the medicinal arts for curing and/or causing sickness. Two of Moloka‘i’s famous sayings allude to this spiritual power that the island has been associated with: *Moloka‘i ku‘i lā‘au* (Moloka‘i, pounder of medicine); and *Moloka‘i Pule ‘O‘o* (Moloka‘i of the potent prayer).

Scattered or not, the population on the Ho‘olehua Plain during traditional times was substantial enough to have left behind several *heiau* and *ko‘a*. Summers (1971) lists two *heiau* in Ho‘olehua. One was called Lepekaheo Heiau, and it was near the boundary between Ho‘olehua 2 and Pālā‘au 2 Ahupua‘a. The other *heiau* was documented without a name, and it was east of a place called ‘Eleuweue. For Pālā‘au, Summers lists two *heiau* and three *ko‘a*: a *heiau* east of Ho‘olehua Cemetery; a *heiau* at Anahiki Gulch; a *ko‘a* at Pu‘u Kapele; a *ko‘a* at Kahinaokalani; and a *ko‘a* at Na‘aukahihi. Two other features that Summers notes offer additional insight to traditional living in the area in pre-contact times. One was an ‘ulu *maika* playing field in Akani, Pālā‘au, and the other was a 6 ft. by 7 ft. boulder at Pu‘u Kape‘elua, Ho‘olehua, which was interpreted as either a stone for sharpening adzes or for collecting water (Summers 1971).

Areas north of the Kualapu‘u reservoir near Pu‘u ‘Ano‘ano were used in ancient times to teach *kahuna* the spiritual and medicinal arts. The proverb, “Moloka‘i ku‘i lā‘au” (Moloka‘i, pounder of medicine) attests to the expertise of Moloka‘i *kahuna* in compounding medicines and poisonous potions (Pukui 1983). From a chant extolling the powers of Moloka‘i, Mrs. Vanda Hanakahi, a native of Ho‘olehua wrote in the late 20th century, “ ‘Ae nō ‘o Moloka‘i ka piko o ka pae‘āine o Hawai‘i nei; he wahi la‘a ‘ihi no ke anaina mea ho‘ōla...” meaning that Moloka‘i is agreed upon as the center of the Hawaiian archipelago and is a sacred and revered place of healing arts for the multitudes.

Mo‘olelo

As mentioned earlier, Hawaiian place names were connected to traditional stories by which the history of the places was preserved. These stories were referred to as *mo‘olelo*, defined as follows:

A term embracing many kinds of recounted knowledge, including history, legend, and myth. It included stories of every kind, whether factual or fabulous, lyrical or prosaic. Mo‘olelo were repositories of cultural insight and a foundation for understanding history and origins, often presented as allegories to interpret or illuminate contemporary life... Certainly many such [oral] accounts were lost in the sweep of time, especially with the decline of the Hawaiian population and native language. (Nogelmeier 2006:429–430)

Still, a good amount of traditional stories managed to be recorded as Hawaiian society transitioned from an oral culture to a written one, and among those recorded were several versions of stories concerning the places associated with Moloka‘i’s Ho‘olehua Plain.

One *mo‘olelo* points out that several of these Moloka‘i places were named after legendary figures from the ancient days. Ho‘olehua was named after an ancient chief of the same name (Pukui et al. 1974). Ho‘olehua’s wife was ‘Īloli, and their daughter was named Hikauhi (Pukui et al. 1974). Today, ‘Īloli is the name of a nearby *ahupua‘a* in Moloka‘i’s Kona District, and it is also the name of a hill in another nearby *ahupua‘a*, Kaluako‘i. As for Hikauhi, it is the name of several features in Kaluako‘i Ahupua‘a, namely a gulch, a hill, a fishpond and a specific point along the coast.

This story is tied to the legend of Pāka‘a, which Beckwith (1970) puts in the category of legends about lesser Hawaiian gods. Pāka‘a inherited from his grandmother Loa, the supernatural ability to call upon the winds. However, when others became jealous of Pāka‘a, he left his home on Hawai‘i Island, fleeing for his life, and settled on Moloka‘i. There, he married Hikauhi, the aforementioned daughter of Ho‘olehua and ‘Īloli. Hikauhi bore Pāka‘a a son, named Kūapāka‘a, and this son carried on the supernatural abilities of his father (Beckwith 1970; Pukui et al. 1974).

Beckwith (1970) shares that Pāka‘a’s mother was La‘amaomao, a woman of chiefly rank from Kapa‘a, Kaua‘i. Kamakau also mentions a La‘amaomao in his written accounts, and this La‘amaomao is connected to Moloka‘i, but it appears to be a different person with the same name.

Kamakau does not even specify if this La'amaomao is female or male. In Kamakau's *mo'olelo* of the great navigator Mo'ikeha, La'amaomao is one of many supporters who followed Mo'ikeha as he sailed from Kahiki to Hawai'i. As he sailed through the islands, some of Mo'ikeha's followers stayed on Hawai'i Island, some stayed on Maui, some on O'ahu, and La'amaomao stayed on Moloka'i. It is in this account that Kamakau gives us one of the names of Ho'olehua's winds:

Mo'ikeha belonged to Kahiki, and the reason he came to Hawai'i was because he... was severely criticized, and so he went off to sea. He took with him his followers Moa'ula, Pāha'a, La'a-maomao, Mō'eke, Kaunalewa, and some others. The first place they landed on was at Kalae in Ka'ū, Hawai'i...

La'amaomao remained on Moloka'i at Haleolono in Kaluako'i --- in Kaluako'i of the tiny fish of Haleki'i, the black sea cucumbers of Pālā'au, the Ikioe wind of Ho'olehua; the sweet waters of Waiakāne, and the stratified limestone (*'unu'unu pa'akea*) of Haleolono. There lived La'a-maomao (Kamakau 1991:105–106).

Pālā'au and Ho'olehua are mentioned in a *mo'olelo* involving the inception of sorcery on the island of Moloka'i (Kamakau 1964:131–132). Only one person, a man named Kaiakea was trained in sorcery, and his teaching came directly from the gods. Kaiakea built a house in Kala'e and organized a feast for his house warming. Kaiakea, however, was a man that did not have a god. While his wife prepared the food for the feast, Kaiakea stood in the doorway of the *hale mua*, or men's house, and saw a multitude of women and one man crossing the plains from Ho'olehua to Pālā'au. They wore yellow *kapa* and multicolored leis. The man approached Kaiakea, and Kaiakea offered food to his party. The man said that he would not accept any food unless Kaiakea built a thatched house for them. The man disclosed that he and the women in the procession were angels and if Kaiakea could complete the house in a single day then they would become Kaiakea's gods and give him their belongings to do their work. Kaiakea was able to build the house that day and filled it with food offerings, which pleased the angels. Kaiakea took care of his new gods for the rest of his life and did not use them for malicious purposes. Before he died, Kaiakea instructed his children not to use the gods to seek wealth and not to disclose the knowledge of sorcery.

A final *mo'olelo* sheds light on a hill called Pu'ukape'elua and a gulch called Kāluape'elua, both in the *ahupua'a* of Ho'olehua. According to this *mo'olelo* a beautiful girl was in a relationship with a lover who only visited in the night and left by daylight. Unbeknownst to the girl, her lover was a demi-god who could take the form of a caterpillar. The girl's parents enlisted the aid of a *kahuna* to help them find out who the girl's lover was and where he disappeared to everyday. With the help of the *kahuna*, they found the lover in his caterpillar form sleeping on a hill, and they set him on fire. As a result, he exploded into a multitude of smaller caterpillars, and the situation was ended after all the caterpillars were burned. The name of the hill, which means "Caterpillar Hill," and the name of the gulch, which means "Baked Caterpillar," are reminders of this story (Summers 1971).

Oli and Mele

The noteworthiness of specific locales in Hawaiian culture is further bolstered by their appearance in traditional chants. An *oli* refers to a chant that is done without any accompaniment of dance, while a *mele* is a chant that may or may not be accompanied by a dance. These expressions of folklore have not lost their merit in today's society. They continue to be referenced in contemporary discussions of Hawaiian history, identity, and values.

One chant in particular, which mentions the project area and emphasizes an important episode in Moloka'i's history, should be highlighted. This is the chant which reiterates a special connection that the people of Moloka'i have with King Kamehameha V. At least two slightly different versions have been published; one can be found in the book, *The Echo of Our Song: Chants & Poems of the*

Hawaiians (Pukui and Korn 1973); and the other is translated by Pukui in the book, *Nā Mele Welo: Songs of Our Heritage* (Bacon and Napoka 1995).

In the version published in *The Echo of Our Song*, the chant is titled *Ka Huaka‘i*, and it is classified as an *oli*. It is also described in the book’s commentary as both a *mele ali‘i*, a chant which praises a chief, and a *mele māhala*, a chant of gratitude. Pukui and Korn date the authorship of the chant to the mid-19th century by a Hawaiian Christian who was still mindful of the ancient Hawaiian spiritual beliefs (Pukui and Korn 1973). On the other hand, the version published in *Nā Mele Welo* is titled *I Aloha ‘ia ‘o Kīlauea*, and it is described as a *mele* specifically accompanied by dancers using the *pū‘ili*, or split bamboo stick implement. In this book, the credit for preserving and sharing this version of the chant goes to a Mrs. Maluo Keawe Nainoelua of Hilo (Bacon and Napoka 1995).

Both versions praise King Kamehameha V for sending the ship, the Kīlauea, to Moloka‘i bringing medicine, supplies, and food at a time when it was much needed. One cannot help but wonder if this last of the Kamehameha kings had a particular affection for Moloka‘i. King Kamehameha V had a residence and ranch on the island, and he helped establish a grove of coconut trees in Kaunakakai in the 1860s which continues to be an important landmark today (Pukui et al. 1974). The landmark is known as Kapuāiwa Coconut Grove, an appellation which honors the king’s name at his birth, Lot Kapuāiwa. The two versions of the chant with minor differences are presented with their translations below. Notice the special reference to Pālā‘au in both versions, referring to the ship’s anchoring outside the smaller coastal Pālā‘au land division which was not physically connected to the Ho‘olehua Plain where of the main Pālā‘au Ahupua‘a.

Here is the version found in Pukui and Korn’s book:

Ka Huaka‘i

Ia aloha ia Kīlauea,
Lio kākele a o ka moana,
Holo mamua holo mahope.

Kau pono ka ihu i ka makani,
Haki nu‘a ka uwahi i ke kai,
Nome a‘e ka huila malalo,
Hala e ka lae o Kalā‘au,

‘Oni ana Moloka‘i mamua,
Huli a‘e e eke alo i Lāhainā,
He ukana ka Kīlauea,
Lū a‘e la i Pālā‘au,
Ho‘okahi pahuna malalo.

Kohu ‘āuna manu i ke one,
Ka hoholo i ke ālialia.

E ‘ole o Kalani Mehameha
Ola ai nei pū‘ā hipa,
Na hipa a Kama‘ipu‘upa‘a.

‘Ai ana i ka lau ‘oliwa.

Errand

Kīlauea, beloved ship, sea-roving steed
roams this ocean full-steam ahead
backing and hauling, then the voyage home.

Now Kīlauea’s prow heads into the wind,
smoke breaks from stack, ripples over the sea,
paddle wheel slowly revolves,
passes Kalā‘au Point

Moloka‘i up ahead,
Lāhainā yonder,
awaiting freight,
And stops at Pālā‘au to unload cargo,
heave ho and shove down below.

Like a flock of seabirds upon a waste of sand
a hungry horde races along this salt-encrusted
shore.

Were it not for Chief Kamehameha
These creatures would be bereft of all supply,
Would be as sheep without forage, no shepherd
were it not for life-bringing Kama‘ipu‘upa‘a the
Kahuna, wise in matters of sickness, life and death.

Now let this famished flock feed on olive leaves
Given with a King’s love.

Ha'ina 'ia mai ka puana,	This is the end of my song
Nō Kalani Mehameha he inoa.	in praise of Chief Kamehameha.

The chant commemorates an errand of mercy in which Kamehameha V brought the necessities of life, including native medicines as well as food, to workers on his royal ranch at Hālawā, island of Moloka'i, during a period when the ranch had exhausted its supplies. Lot Kamehameha (1830–1872), King Kamehameha V, ruled over Hawai'i from 1863 to 1872. He was the last of the Kamehameha kings directly descended from the Conqueror.

Text: Mary Kawena Pukui. Title assigned (Pukui and Korn 1973:83–85).

And here is the version found in *Nā Mele Welo*:

I Aloha 'ia 'o Kīlauea

I aloha 'ia 'o Kīlauea
 Lio kākele o ka moana.
 Holo ma mua, holo ma hope,
 Kau pono ka ihu i ka makani,
 Haki nu'a ka uahi i ke kai,
 Nome a'e ka huila ma lalo.
 Hala e Ka Lae o Kalā'au
 Pili mākou me Moloka'i.
 Huli aku e ke alo Lahaina,
 He ukana ke Kīlauea.
 Kū a'ela i Pālā'au
 Ho'okahi ka pahuna ma lalo.
 Kohu 'āuna manu i ke one,
 Kāholoholo i ke ālialia.
 E 'ole 'o Kalani Mehameha
 Ola ne'ia pū'āhipa.
 Nā hipa a Kama'ipu'upa'a
 Lālau i ka lau weuweu.
 Ha'ina 'ia mai ka puana
 'O Kalani Mehameha he inoa.

Beloved is the Kīlauea

Beloved is the Kīlauea
 The "horse" that travels the sea.
 It goes forward and back,
 With the prow facing the wind.
 The smoke ripples out over the sea,
 The wheels roll on below.
 The ship passes Kalā'au Point
 And brings us close to Moloka'i.
 Kīlauea turns to face Lahaina,
 With much freight on board.
 It weighs anchor at Pālā'au
 With one shove from below.
 Like flocks of birds on the sand,
 The people run about on the salt-covered earth.
 If it were not for King Kamehameha,
 These sheep would not find sustenance,
 These sheep of Kama'ipu'upa'a,
 That wandered about eating herbage.
 This is the end of my song
 For the king, Kamehameha.

Contributor: Mrs. Maluo Keawe Nainoelua, Hilo, Hawai'i. Hula pū'ili. [Dance using split bamboo stick.] A mele for Kamehameha V ma [at] Moloka'i.

Note: Kama'ipu'upa'a was a woman, a retainer of the king, who saw all was well with his places on Moloka'i (Bacon and Napoka 1995:118, 119).

'Ōlelo No'eau

Like *oli* and *mele*, traditional proverbs and wise sayings also known as '*ōlelo no'eau* have been another means by which the history of Hawaiian locales have been recorded. In 1983, Mary Kawena Pukui published a volume of nearly 3,000 '*ōlelo no'eau*, or Hawaiian proverbs/wise sayings, that she collected throughout the islands. The introductory chapter reminds us that if we could understand these proverbs and wise sayings well, then we would understand Hawai'i well (Pukui 1983). Although none of the '*ōlelo no'eau* in Pukui's volume mentions Pālā'au, there are two which refer to Ho'olehua. One saying calls to mind the hot weather that the Ho'olehua Plain is known for. The other saying is more about the *kioea* bird rather than Ho'olehua, but still, it is a reminder that this native bird is familiar to the area:

(1935) Ku‘u manu lawelawe ʻō o Ho‘olehua.

My bird of Ho‘olehua that cries out about food.

Said of the *kioea*, whose cry sounds like “*Lawelawe ke ʻō! Lawelawe ke ʻō!*” (“Take the food! Take the food!”). The *kioea* is the bird that calls to the fishermen to set out to sea.

(2164) Mo‘a nupu ka lā i ke kula o Ho‘olehua.

The sun scorches the plain of Ho‘olehua.

Refers to Ho‘olehua, Moloka‘i.

There are several other ‘*ōlelo no‘eau* which should be mentioned here. While they are not associated specifically with the project area, these sayings attribute certain things to the Moloka‘i people and/or the entire island, Ho‘olehua-Pālā‘au included. One saying celebrates the people’s lineage to Hina. Other sayings declare that the people of Moloka‘i are expert athletes and practitioners of hula, sorcery, and the medicinal arts. And finally, one of the ‘*ōlelo no‘eau* describes the island as a place of hurt and distress due to the tragedies associated with the Hansen’s disease patients and their exile to a remote part of Moloka‘i:

(2191) Moloka‘i ‘āina o ka ‘eha‘eha.

Moloka‘i, island of distress.

This expression came about after the establishment of the leper colony there. It refers to the separation of loved ones, the ravages of the disease, and the sad life in the early days at Kalawao, when so much was lacking for the comfort of the patients.

(2193) Moloka‘i ku‘i lā‘au.

Moloka‘i, pounder of medicine.

The *kahuna* of Moloka‘i were said to be experts in compounding medicines and poisonous potions. Also, a stick dance bore this name.

(2194) Moloka‘i nui a Hina.

Great Moloka‘i, land of Hina.

The goddess Hina is said to be the mother of Moloka‘i.

(2195) Moloka‘i pule o‘o.

Moloka‘i of the potent prayers.

Moloka‘i is noted for its sorcery, which can heal or destroy.

(2315) Niniu Moloka‘i, poahi Lāna‘i.

Moloka‘i resolves, Lāna‘i sways.

A description of the revolving hips and the swaying movements in *hula*.

(2698) Pua ka uwahi o kā‘e‘a‘e‘a moku o Hina.

Up rose the smoke of the experts of the island of Hina.

Said of the quickness of the athletes of Moloka‘i --- they were so fast that they smoked.

(Pukui 1983:206, 235, 238, 239, 252, 294)

Pālā‘au and Ho‘olehua in the Historic Era

Moloka‘i and the entire Hawaiian archipelago enter the historic era in the late 18th century. Captain Cook’s so-called discovery of the islands is in 1778, and although he noted Moloka‘i in the distance that year, he did not sail up to the island until 1779. But it is not until 1786 that there is the first recording of Westerners meeting and interacting with the natives of Moloka‘i (Summers 1971).

Just prior to the arrival of foreigners, Moloka‘i had seen several centuries as an independent kingdom starting with its first *ali‘i nui*, Kamauaua, in the 13th century (Summers 1971). There was a brief challenge to its independence from Hawai‘i Island in the 15th century, but otherwise, Moloka‘i enjoyed its sovereignty all the way up to the 18th century when it was once again challenged by chiefs from various neighboring islands. It should be noted, however, that there had also been episodes of intra-island conflict among Moloka‘i chiefs from the leeward and windward districts as well disrupting the peace.

It is uncertain if Moloka‘i was still an independent kingdom or under the rule of a neighboring island’s chief when Westerners arrived in the late 18th century. It is documented that when Captain James King landed on O‘ahu in 1779, the warriors of O‘ahu had gone to Moloka‘i to battle the forces of Maui’s King Kahekili there (Summers 1971). What is not clarified is if at that time Moloka‘i was still independent, or if it was under the rule of O‘ahu, or under the rule of Maui. However, what is clearly recorded is that in 1780, Moloka‘i was under the rule of O‘ahu’s King Kahahana. Kahahana gave the far eastern portion of Moloka‘i to Kahekili because Kahekili was Kahahana’s elder, but that was not enough, and eventually, in 1785, Kahekili’s forces invaded O‘ahu and killed Kahahana. As a result, the entire island of Moloka‘i went under the Maui rule of Kahekili. On the way to battle Kahahana on O‘ahu, Kahekili stopped on Moloka‘i to supply their canoes with fish from Moloka‘i’s fishponds. The historian Kamakau records that Kahekili’s forces were multitudinous, and his fleet of canoes stretched from Ho‘olehua to Kaluako‘i (Translation by D. Duhaylonsod):

Ma Lahaina i ho‘ākoakoa ‘ia ke anaina no ka holo ‘ana i ke kaua. ‘O Halekumukalani ka hale o ke akua, aia ma Pūehuehu. I ka pau ‘ana o ke kapu, ‘o ka ho‘omaka nō ia i ka holo a Moloka‘i; ‘o ka i‘a o nā loko kuapā, ‘o ia ke ō o ka holo ‘ana; mai Ho‘olehua a Kaluako‘i ka piha i nā wa‘a. I ka holo ‘ana o nā wa‘a kaua ma ka mole o Lāna‘i, a ua kapa ‘ia kēia alanui moana a Kahekili i holo mai ai i ke kaua i O‘ahu, ‘o Ka‘ōpuaki‘iki‘i ka inoa; a ma ka lewa loa o ka moana, a loa‘a i ka wēlau o ka ‘Ao‘aoa, a nāna i ho‘iho‘i i ka ‘āina, a ‘o Waikīkī ke awa (Kamakau 1996[1866]:88).

Lahaina was where the multitude was assembled to go into battle. Halekumukalani was the name of their god’s house; it was at Pūehuehu. When the kapu period was over, they began sailing to Moloka‘i, to get the fish from the fishponds, and their sailing continued, from Ho‘olehua to Kaluako‘i, it was filled with canoes. When the war fleet sailed away from Lāna‘i, this ocean route that Kahekili traveled on to make war on O‘ahu was called Ka‘ōpuaki‘iki‘i, under the long skies of the open sea, and they caught ahold of the tip of the ‘Ao‘aoa wind, and it pushed them to the land, and Waikīkī was the landing place.

Not long after Kahekili’s death in 1794, King Kamehameha’s forces from Hawai‘i Island defeated both the O‘ahu warriors and the Maui warriors, and so Moloka‘i unquestionably went under the rule of Kamehameha. Like Kahekili, Kamehameha stopped on Moloka‘i on his way to fight on O‘ahu, and while on Moloka‘i, Kamehameha used the Ho‘olehua Plain as a training area for his warriors. Kamehameha eventually unified the entire island chain (Summers 1971).

Missionary and Ranching Activity

For many decades following the arrival of Westerners, Moloka‘i was not a prominent port of call that foreigners visited. After Captain Vancouver’s description of the island in 1792, the only other accounts of Westerners visiting the island prior to the early 1800s were of missionaries (Summers 1971). The first permanent church established on the island was a Protestant mission on the east side of Moloka‘i in 1832. Much later, Catholic missionaries also established themselves on the island, but perhaps the one with the most profound impact was the mission founded on the Kalaupapa Peninsula by Saint Damien in the 1870s. It was there at the settlement established by King Kamehameha V that Saint Damien ministered to the patients afflicted with Hansen’s Disease. While the missionary foreigners and their activities helped shape Moloka‘i Island as a whole, they did not have a major impact on the Ho‘olehua Plain.

On the other hand, the activities brought about by ranchers and the ranching industry on Moloka‘i did have a more direct impact on the region of interest. An important figure who ties much of this together is the German immigrant R.W. Meyer. Meyer arrived on Moloka‘i in the 1840s, married a chiefess from the island, and settled in the Kala‘e area to the east of Ho‘olehua. Meyer also became the overseer of the Kalaupapa settlement for Hansen’s disease patients after its creation by King Kamehameha V’s legislation in the 1860s, and furthermore, Meyer became the manager for the king’s ranch on Moloka‘i which operated on lands to the west and south of the Ho‘olehua Plain. From Kamehameha’s ranch came multitudes of cattle which were allowed to roam free on *kapu*, and in addition to that, the king introduced deer in 1868 which quickly multiplied and spread throughout the island (Summers 1971).

After Kamehameha V’s death in 1872, Meyer continued to administer the royal ranchlands for Kamehameha’s heirs. Excerpts from two Hawaiian language newspapers confirm the continuance of Meyer’s land management. In the first excerpt, from *Ka Nupepa Kuokoa*, Meyer announces that lands of the Kamehameha heiress Princess Ruth Ke‘elikōlani extend from Kaluako‘i, past the Ho‘olehua Plain, and east to Kapa‘akea. In the second article, from *Ka Makaainana*, Meyer specifically lists Pālā‘au as one of the *ahupua‘a* still under the royal name. Both newspaper excerpts, presented below, caution the rest of the population not to allow their animals to roam onto the royal lands:

Mai keia manawa a mahope aku nei. Ke papa ia'ku nei na kanaka a pau, mai hookuu a hooholo i ka lakou mau holoholona maluna o na aina o ke Alii ka Mea Kiekie Ruta Keelikolani e waiho ia ma ka mokupuni o Molokai, ma Kapaakea a hiki i Kaluakoi, me ka ae like ole mamua me ko'u hope R.W. Meyer. Aina e kue kekahi i keia olelo papa, alaila, e hoopii ia no ma ke kanawai SIMON K. KAAI. Agena o ke Alii R. Keelikolani. (*Ka Nupepa Kuokoa* 1879)

Olelo Hoolaha.

E ike auanei na mea a pau he mau holoholona ka lakou [lio, miula a me na iakake], e holo ana maluna o na aina hanai holoholona ma Molokai-Kaluakoi, Palaau, Ioli, Naiwa, Kahanui Kalamaula, Kaunakakai, Makakupaiaiki a me ke kula o Kawela. E hooukuia aku ana mai ka la mua kau o Iulai, 1897, no kela a me keia holoholona e hele ana maluna o ua mau aina la he 25 keneta no ka holoholona hookahi o ka mahina, e hookaaia ma ke dala, a i ole, ma ka hana maoli paha maluna o ua mau aina la, ma ka ae like a ma ke kauoha a ka Luna Hooponopono o ua mau aina la i oleloia maluna. O na holoholona i hookaa ole ia, e hopuia aku ana ma ke ano komohewa. R.W. MEYER, Luna Hooponopono, Kalae, Molokai, Maraki 25, 1897. mar. 28-4ts. (Meyer 1897:1)

Meyer died in 1897, and coincidentally that same year, a group of businessmen organized to purchase 70,000 acres of the late Kamehameha V's former ranchlands and lease another 30,000 more, stretching from the west end of the island to the Ho'olehua Plain. By that time, Princess Ruth had passed away, and her lands there had already gone into the hands of her heiress Bernice Pauahi Bishop. The purchasing business entity would later be named the Molokai Ranch, and the next year, this business organization also formed the American Sugar Company (ASCO) which added sugarcane fields to the Ho'olehua Plain and constructed a railroad through it for transport. Since the Moloka'i sugar venture had a tough time competing with other sugar enterprises throughout the islands, the early 1900s found ASCO switching its focus to raise cattle and sheep and to produce honey instead.

Māhele Land Tenure

During Kamehameha III's reign, in 1848, sweeping changes were made to the traditional land tenure system. This was called the Māhele. This proclamation allowed the king to divide landownership for three groups of people: the king, the chiefs, and the commoners. The new system of land tenure was another influence of Westerners in Hawai'i:

THE MAHELE is rightfully considered one of the most significant chapters in the modern history of Hawai'i. Several legislative acts during the period 1845-1855 codified a sweeping transformation from the centuries-old Hawaiian traditions of royal land tenure to the western practice of private land ownership. (Moffat and Fitzpatrick 1995)

The king enacted the Māhele intending for it to provide the Native Hawaiian population with an irrevocable land base they would own. The process that the commoners needed to follow to secure their land titles consisted of filing a claim with the Land Commission; having their land claim surveyed; testifying in person on behalf of their claim; and submitting their final Land Commission Award to get a binding royal patent. However, in actuality, the vast majority of the native population never received any land commission awards recognizing their land holdings due to several reasons such as their unfamiliarity with the process, their distrust of the process, and/or their desire to cling to their traditional way of land tenure regardless of how they felt about the new system. In 1850, the king passed another law, this one allowing foreigners to buy land. This further hindered the process of natives securing lands for their families.

Regarding Ho'olehua and Pālā'au, the Māhele records on the Waihona 'Aina database show no land claims for Ho'olehua and only one unawarded land claim (Land Claim #11094) for Pālā'au. The land claim was submitted by a person named Kaukuna, and it is for land in both Pālā'au and Kahanui, not close to the project area. The Waihona 'Aina database shows zero land grants awarded in Pālā'au and five land grants that were awarded in Ho'olehua. Three of these were given to the Dudoit family; one was granted to the Lewis family; and one was conferred to the Makakoa family. Three of the five land grants listed here were awarded in 1899, the other two show no date. And finally, the Waihona 'Aina database shows that no royal patents were given. The lack of land ownership and transfers for the Ho'olehua-Pālā'au area may reflect the large block of land consolidation first under the Kamehamehas and later by the Molokai Ranch followed by the Hawaiian Homes Commission.

Hawaiian Homesteads

The turn of the century also brought the most significant political changes to Moloka'i and the rest of the Hawaiian Islands. Following the overthrow of the monarchy in 1893, the United States claimed the islands to be an annexed territory in 1898. To champion the Hawaiian people's rights, Prince Jonah Kūhiō Kalaniana'ole became a delegate to the United States Congress. Due to Prince Kūhiō's efforts, Congress passed the Hawaiian Homes Commission Act in 1921 which set aside

land throughout the islands to be reserved for the native Hawaiian population. An administrative body, The Hawaiian Homes Commission, was created, consisting of the Governor of Hawai‘i and four appointed citizens, three of which must have half Hawaiian blood or more (Keesing 1936). The Commission has evolved so that today it is composed of nine members, at least four of which must have one quarter Hawaiian blood or more (DHHL n.d.).

Resulting from the Hawaiian Homes Commission Act, the plains of Ho‘olehua and Pālā‘au were among the homestead lands designated as such, and in 1924, the first Hawaiian homesteaders settled there. Ho‘olehua was one of the first Hawaiian homesteads in the state, second to Kalamaula, which was established only two years earlier. There were three waves of early settlement for Ho‘olehua: the first 75 people that arrived between 1924 and 1926; another eight that came in 1928; and an additional 48 that moved there in 1929 (Keesing 1936).

The Hawaiian Homes Commission Act designated more than 200,000 acres for Hawaiian Home Lands, with roughly 3,500 acres constituting the Ho‘olehua Homestead. The early homestead at Ho‘olehua consisted of the following:

...153 tracts of approximately forty acres each allotted, also a special group of 10 residential lots, besides other units connected with the scheme: a school and school farm, a community hall, an office of the Hawaiian Homes Commission, churches, stores, and camps for Filipino laborers who work in connection with the pineapple industry. (Keesing 1936:28)

Mele

Like the traditional chants from ancient times that give us a window into pre-contact Hawai‘i, the modern songs of today also provide a glimpse of the specific recent time and place that they were written in. It is interesting that most of the songs about the central Ho‘olehua-Pālā‘au plains refer to the Ho‘olehua homestead with loving affection. While the songs *Moloka‘i Hula* and *Nani Moloka‘i* both praise the entire island of Moloka‘i, the former declares that Ho‘olehua is a beautiful homestead while the latter states that pineapple has brought wealth to the Ho‘olehua area. On the other hand, the song *Ho‘olehua* is a composition that only proclaims the pride and aloha for Ho‘olehua homestead. And finally, the song *Nā ‘Ōpio O Moloka‘i* was composed for the students of Moloka‘i High School. It encourages the students to move forward and reminds them that they are the children of the beloved Ho‘olehua homestead. The lyrics to all four of these songs are presented below. (Lyrics and translation to these songs along with their accompanied descriptions are from the www.huapala.org database compiled by Kanoa-Martin):

Moloka‘i Hula - Words by Mary Robins, Music by John Noble

Hanohano ka inoa a‘o Moloka‘i lā Lei ana i ka pua o ke kukui	Distinguished, the name of Molokai Adorned with a wreath of the kukui flower
O ka wehi kaulana o ku‘u ‘āina O Moloka‘i nui a Hina	Famous symbol of my land Moloka‘i, born of Great Hina
O Hālawa e ‘alawa iho ‘Alawa ka ulua e ma alo nei	Halawa, glance down Look quickly, here, see the ulua on the upper surface
O Pūko‘o no‘u ko aloha Me ka ulu kukui o Lanikāula	Pūko‘o, my love With the kukui grove of Lanikāula

Ho'olehua he 'āina nani
Kaulana ka inoa ho'opulapula

Ho'olehua, a beautiful land
Name of the famous homestead

Kalama'ula ahē home nani
Ho mai ko lama 'ai ala no'u

Kalama'ula, oh, beautiful home
Come, let us go there to eat

Hea aku no wau eō mai 'oe
Lei ana i ka pua o ke kukui

I call to you, you answer
Adorned with a wreath of the kukui flower

Source Johnny Noble's Hawaiian Hula - Hālawā (curve) and Pūko'o (hill that supports) is in east Moloka'i. Kalama'ula (red lama tree) was the site of the first Moloka'i homestead. Verse 3, stanza 2, Lanikāula (royal prophet) is the sacred kukui nut grove of the famous prophet buried here after his death by sorcery. Ho'olehua (no seed), another homestead so named because the wind blew away seeds that were planted.

Nani Moloka'i - Helen Smythe Ayat & Ida Hanakahi

He nani Moloka'i
Nui a Hina
I ka ulu kukui
A'o Lanikaula

Beautiful Moloka'i,
Child of Hina
And its famous kukui grove
Of Lanikaula

He nani Hālawā
I kau ike
He waialele
A'o Moa'ula

Beautiful Hālawā,
In my sight
The waterfall
Of Moa'ula

He nani Kalama'ula
I ka ulu o ka niu
He 'āina ho'opulapula
O Kalaniana'ole

Beautiful Kalama'ula
With its coconut trees
Homestead land
Of Kalaniana'ole

He nani Ho'olehua
I ka ulu o ka hala
He waiwai ui
Ke loa'a mai

Beautiful Ho'olehua
With the pineapple
Brings wealth
To the community

He nani Kalaupapa
Ho'okipa malihini
Ha'ina mai ka puana
A he nani Moloka'i

Beautiful Kalaupapa
Welcomes visitors
Tell the refrain
Beautiful Moloka'i

Source: G. Cooke collection - This mele composed in the 1930's honors the prominent areas of Moloka'i and their claim to fame. Hālawā (curve), Moa'ula (red chicken), Kalama'ula (red torch or red lama tree), Kalaniana'ole (chief without measure), Ho'olehua (acting the expert), Kalaupapa (the flat plain)

Ho'olehua - Clarence Kinney

Ha'aeo no ku'u home lā
E ke kau mai la i ka la'i
Ho'opulu 'ia ma ka 'ehukai
I ka nani o Ho'olehua

Proudly my home
Reposes in the calm
Dampened by the sea spray
In the beauty of Ho'olehua

Ku'u home i ka uka
I ka pā ka makani

My home in the uplands
Where the wind blows

Ko aloha pumehana Mau ana no me ia'u	The warmth of your love Will always be with me
Hu'i lā koni lā I ka pā kolonahe A ke kēhau	Chilling, throbbing In the distant upland Where the wind wafts With the dew
Ku'u home lā ho'opulapula lā Ma ka nani o Ho'olehua Ma ka nani o Ho'olehua	My home, a homestead In the beauty of Ho'olehua In the beauty of Ho'olehua

Source: G. Cooke Collection – Ho'olehua (no seed), homestead area in Moloka'i, was the home of the composer. Translated by Mary Pūku'i
Nā 'Ōpio O Moloka'i - by Ivy Hanakahi Woo

Nā 'ōpio o Moloka'i (eō) Keiki o ka 'āina ('āina) 'Āina ho'opulapula, (pula) Eō mai 'oe (eō, eō, eō)	We are the youth of Moloka'i, (yes) The children of the land, (land) The homestead land (rehabilitate) Will you answer? (yes, yes, yes)
Nā 'ōpio o Moloka'i (eō) Nānā i ke kumu (i ke kumu) Ua mau ke ea o ka 'āina i ka pono Ua mau ke ea o ka 'āina i ka pono	We are the youth of Moloka'i, (yes) Look to the source (to the source) The life of the land is preserved in righteousness The life of the land is preserved in righteousness
Ke kukui o Moloka'i (eō) Aloha 'āina nui ('āina nui) Mai ka Lani he makana (makana) Eō mai 'oe (eō, eō, eō)	Oh, the light of Moloka'i (yes) Love for the great land (great land) It is a gift from Heaven (gift) Will you answer? (yes, yes, yes)
Ke kukui o Moloka'i (eō) I mua puni ka honua (ka honua) Ua mau ke ea o ka 'āina i ka pono Ua mau ke ea o ka 'āina i ka pono	Oh, the light of Moloka'i, (yes) Go forward into the world (the world) The life of the land is preserved in righteousness The life of the land is preserved in righteousness

Source: Lyrics & translation from G. Cooke collection - This mele is dedicated to the High School Graduation Class of 1976

Historic Maps

Historic maps help to paint a picture of Ho'olehua and Pālā'au in times past and illustrate the changes that have taken place in the region over the years. The earliest depiction of the project area comes from an 1886 map of the island of Moloka'i drawn by M.D. Monsarrat (Figure 5). General topography and a few place names are provided, but little else can be gleaned about the project lands during this early period. A second 1886 Monsarrat map shows the names of paddocks in the project area vicinity, indicating that ranching took place during that time (Figure 6).

A 1900 map drawn by Lindgren for ASCO shows lands in the vicinity of the project area in cane production (Figure 7). Several roads and a corral are pictured as well. A long irrigation ditch, undoubtedly to support the sugar plantations, runs through Ho'olehua and into Nā'iwa.

Among the early maps which clearly point out Ho'olehua and Pālā'au is a Hawaii Territory Survey map from 1915 (Figure 8). The map outlines the numerous land boundaries from the east end of the





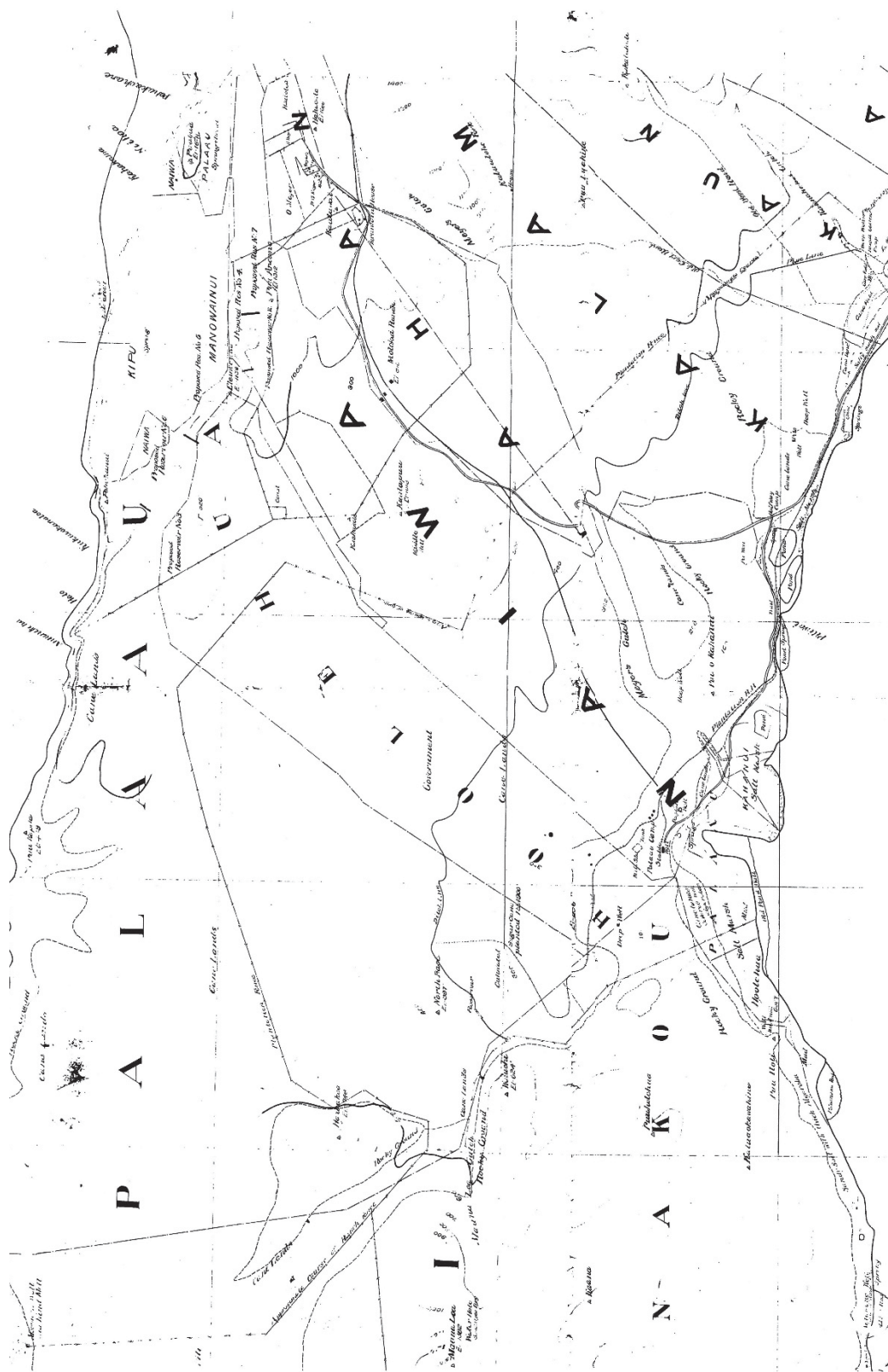


Figure 7. Portion of a map of Molokai showing property of ASCO, water resources, and a proposed irrigation system (Lindgren 1900).



Figure 8. Portion of a Hawaiian Territory Survey map of Molokai government tracts (Wall 1915).

island and west to Kaluako‘i and Punakou. Notice that Pālā‘au is labeled “Lease No. 117, Area 10516 Ac.,” and Ho‘olehua is labeled “Lease No. 565, Area 3869 Ac.”

The next map, titled “Subdivision of Portion of Hawaiian Homes Lands of Hoolehua and Palaaau,” dates to 1924 (Figure 9). This is the same year that the central Ho‘olehua and Pālā‘au lands were designated as homesteads due to the Hawaiian Homes Commission Act. The homestead plots and numbers are clearly depicted. The main roadways that go through the parcel are already in place: Kolea Avenue, Kapeelua Avenue, Puu Kapele Avenue, and Farrington Highway.

The next map is titled “Government Land Of Palaaau Ap. 3,” dated 1935, and done by Thomas J. K. Evans (Figure 10). It outlines the portion of the Pālā‘au lands which are bounded on the north and south by Nā‘iwa and on the east by Kahanui. Notice that this parcel of Pālā‘au is labeled “Boundary Certificate No. 82.” Also, the trail going down the cliff to Kalaupapa Peninsula is shown in the top right of the map.

A University of Hawai‘i Land Study Bureau map shows the land uses and productivity of Central Moloka‘i in 1959 (Figure 11). The project area is in beige, marked with “NI” on the map, which signifies “Urban, Home-sites, Military, etc.” There are large areas designated as grazing lands (in green) and pineapple lands (in yellow). The beige plot just south of the project parcel is marked with an “X,” signifying miscellaneous agricultural land for noncommercial use.

Contemporary History

Most of the contemporary history of Ho‘olehua and Pālā‘au is tied to the Hawaiian homestead lands there. Generations of families have made the area their home. It should be noted that in the 1920s the pineapple industry also came to central Moloka‘i, as seen in historic maps, but this did not extend directly onto the project lands. The island’s major airport was also developed just south of Ho‘olehua-Pālā‘au, but the project area and its community has retained its rural residential atmosphere until today.

Previous Archaeology

The island of Moloka‘i has not received the same amount of archaeological work as the other main islands and this is reflected in the limited number of published materials relating to the island’s archaeological resources. The following summaries are based on reports found in the SHPD library in Kapolei, and are listed chronologically. The work covers both the Ho‘olehua and Pālā‘au regions, in the general vicinity of the project area (Figure 12 and Table 1).

The foundation of works that comprise the canon of Moloka‘i’s archaeological resources include *Heiau of Molokai* (Stokes 1909); *A Regional Study of Molokai* (Phelps 1941); and the most comprehensive work to date, *Molokai: A Site Survey* (Summers 1971).

Regarding Ho‘olehua, a review of the archaeological sites documented by Summers (1971) indicates the presence of Lepekaheo Heiau located west of Kāluape‘elua Gulch; an unnamed *heiau* on the east side of ‘Eleuweue; and an assortment of *pōhaku* on Pu‘u Kape‘elua. One of those stones is a huge boulder interpreted as an adze-sharpening or water-collecting stone, and the rest of the stones are called “The Caterpillar Stones,” which are associated with the legend of the local caterpillar demi-god (Summers 1971).

Regarding Pālā‘au, Summers indicated the presence of a *kahua maika* at Akani; an unnamed *heiau* east of Ho‘olehua Cemetery; a *ko‘a* on top of Pu‘u Kapele; a *heiau* at Anahaki; a *ko‘a* at Na‘aukahihi;

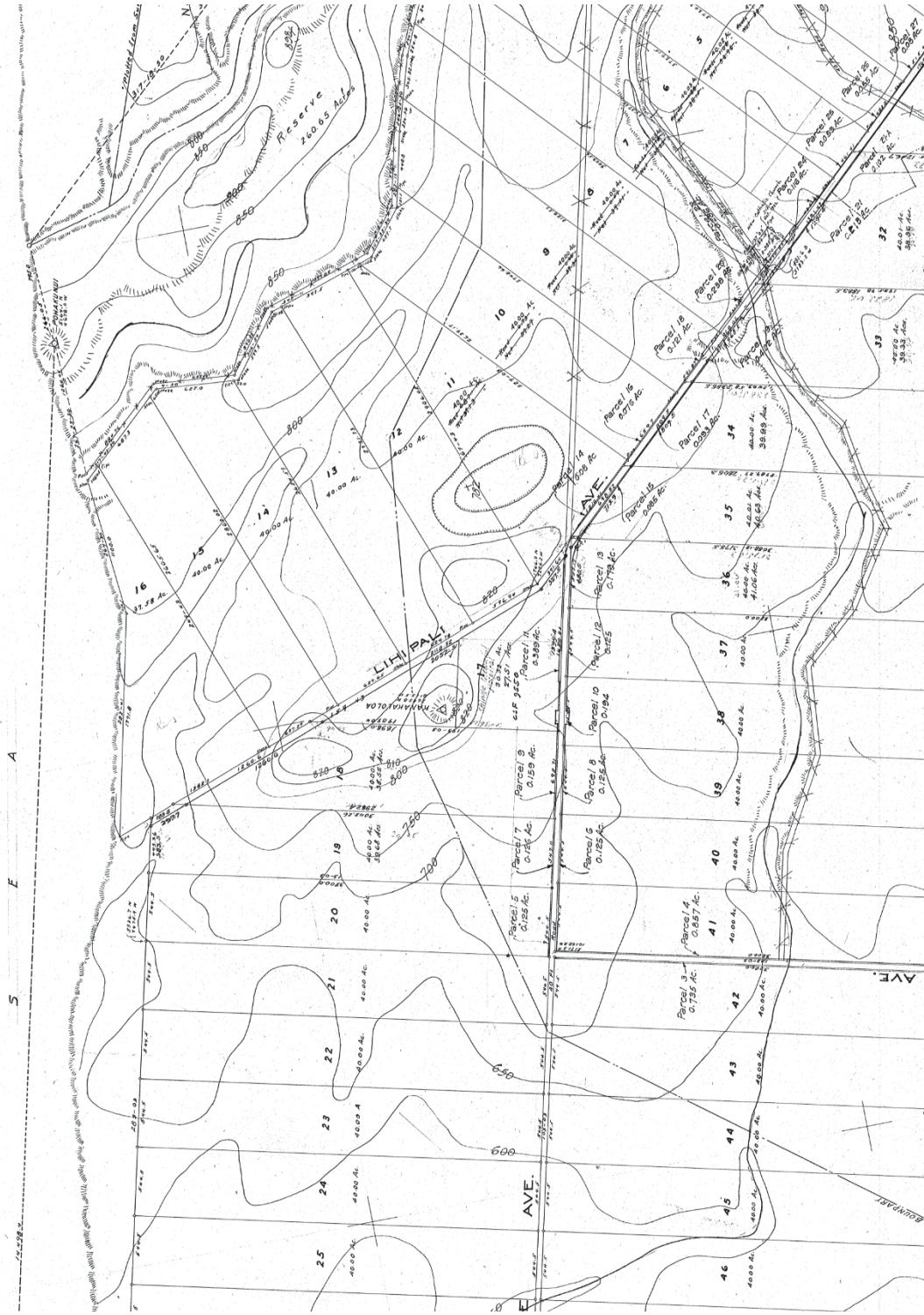


Figure 9. Portion of a Hawaii Territory Survey map of Ho'olehua and Pālā'au (Wall 1924).

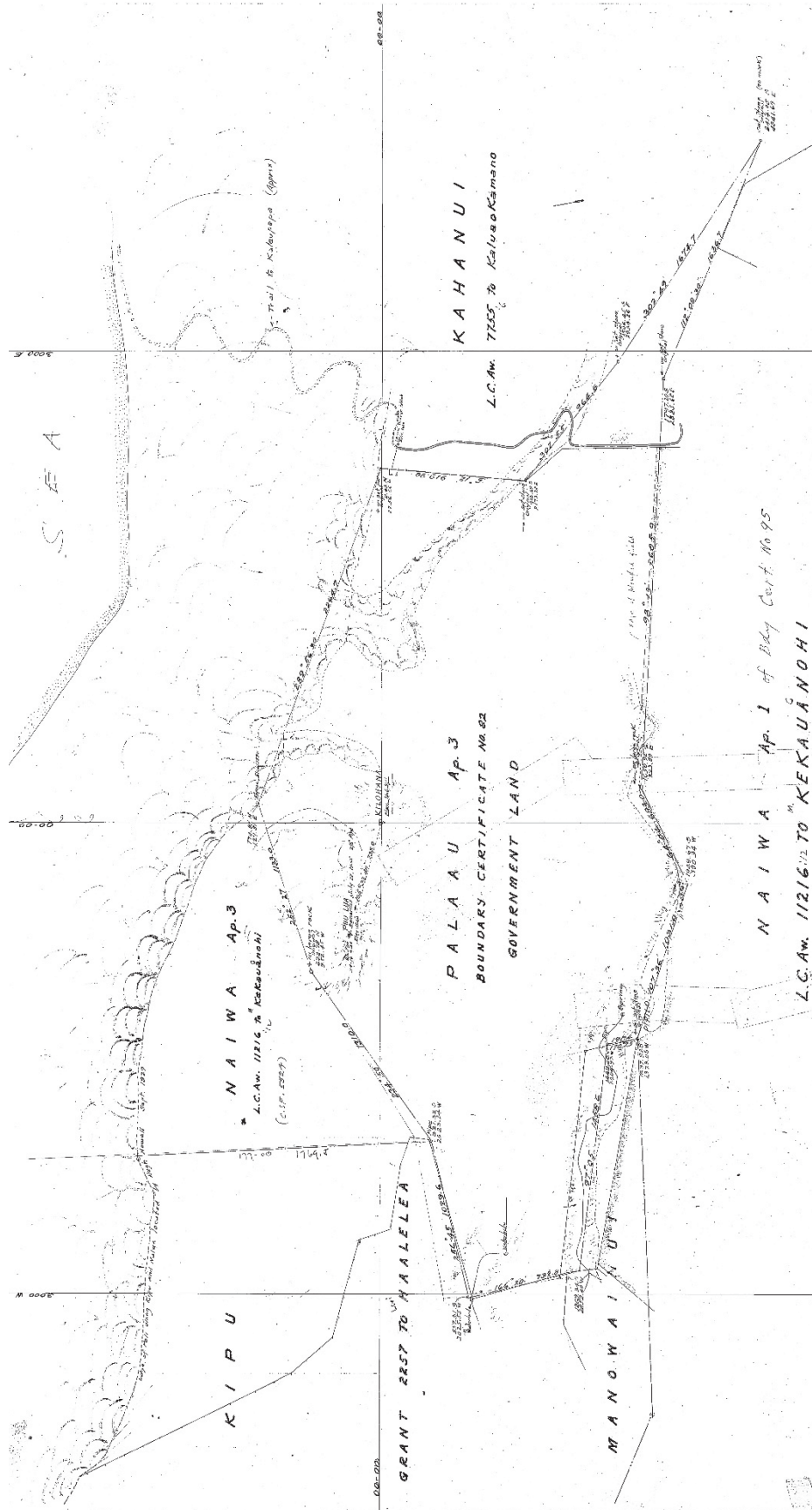


Figure 10. Portion of a map showing government lands in Pālā'au (Evans 1935).

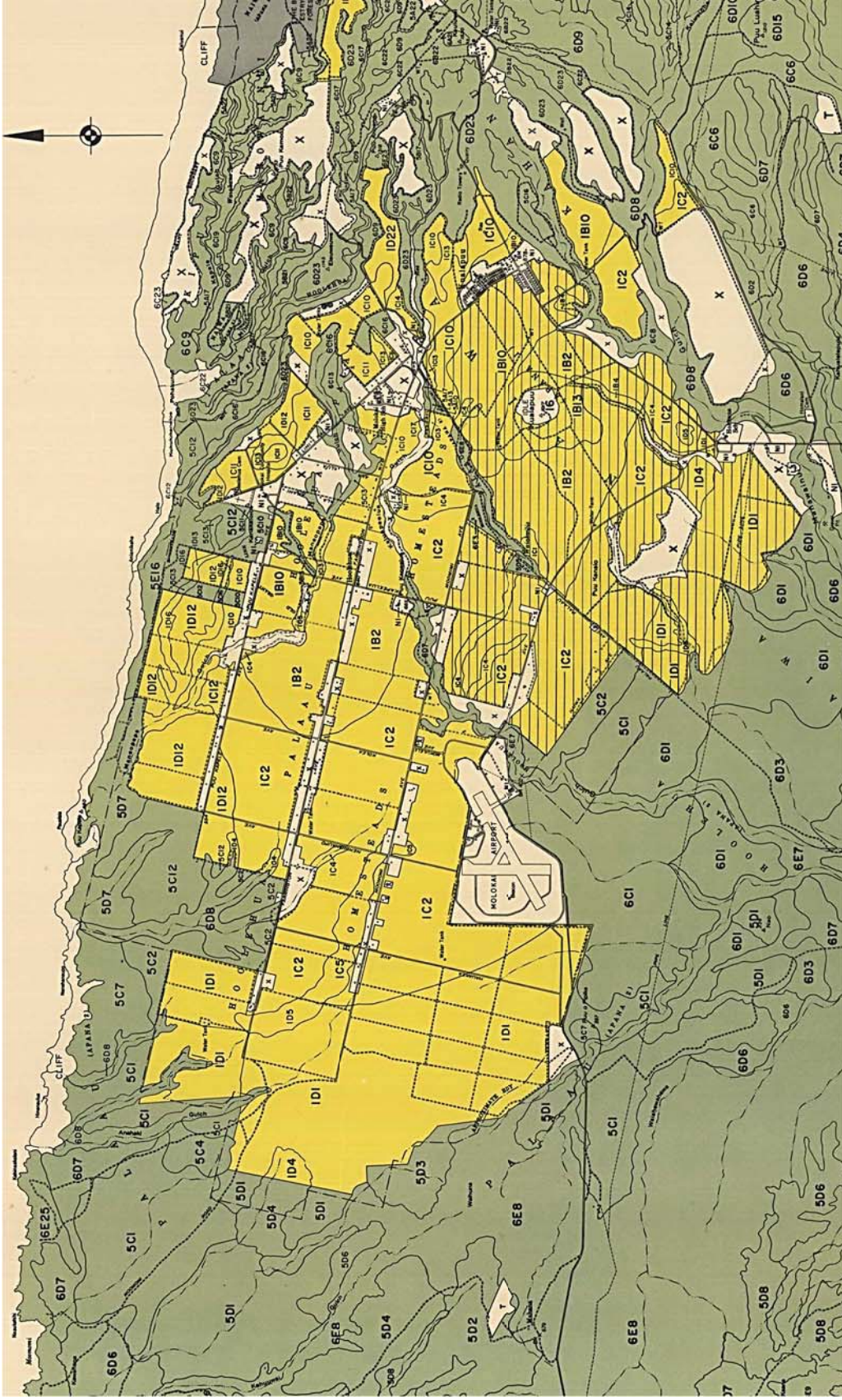


Figure 11. Portion of a map showing land use in the project area ca. 1959 (Fujimura 1959). Note the extent of the pineapple lands in yellow and grazing lands in green.

Table 1. Previous Archaeological Studies in the Vicinity of the Project Area

Author	Location	Work Completed	Findings
Stokes 1909	Moloka‘i, island-wide	Recording	Documented sites island-wide.
Phelps 1941	Moloka‘i, island-wide	Recording	Documented sites island-wide.
Summers 1971	Moloka‘i, island-wide	Recording	Documented sites island-wide.
Curtis 1973	Moloka‘i, island-wide	Archaeological/Cultural Resources Recommendation Report	Recommended the preservation of Pu‘u Kape‘elua and Hawaiian Homes Commission Headquarters.
AECOS 1980	Ho‘olehua Airport	Reconnaissance Survey	Identified World War II sites.
Nagahara and Kolb 1994	Kape‘elua Complex, Ho‘olehua	Field Inspection and Mapping	Recommended the Kape‘elua Complex (Site 50-60-03-11) for preservation.
Hammatt 2001	60 km road corridor (multiple <i>ahupua‘a</i>)	Archaeological Assessment	None.
McElroy 2008	Pālā‘au, Ho‘olehua, and Nā‘iwa	Archaeological Assessment	None.
Ka‘uhane et al. 2009	Moloka‘i Airport Aircraft Rescue and Firefighting Station, Pālā‘au	Cultural Impact Assessment	Compilation of archival and oral history documentation.
Peters and McElroy 2011	27 km proposed waterline corridor (multiple <i>ahupua‘a</i>)	Archaeological Assessment	None; two previously identified sites in the area could not be found.

and a *ko'a*, two house sites and many temporary shelters rich with cultural material all at Kahinaokalani (Summers 1971).

The closest sites to the area of study are Site 11 at Pu'u Kape'elua in Ho'olehua, and Site 107, a *hōlua* slide in Kualapu'u.

Site 11 is located at Pu'u Kape'elua, south of the current project area, between Mo'omomi Avenue and Farrington Avenue. The site consists of two components. Site 11A is known as the "Caterpillar Stones" (Summers 1971:37). Summers (1971:37) quotes a *mo'olelo* told by Cooke (1949:102), although no description is given for the stones

...this beautiful girl was visited each night by a lover who left before daylight. She was unable to discover who he was. This suspense told on her, and she began to waste away. A priest, consulted by her parents, advised the girl to attach a piece of white tapa to a wart on her lover's back. In the morning, sheds of tapa helped to trace the demi-god lover to the hill Puu Peelua, in the middle of Hoolehua. The kahuna (priest) and friends of the family found a large peelua (caterpillar) asleep on the hill. The kahuna ordered the people to collect wood which was placed around the sleeping peelua, and a fire was lit. As the heat of the fire increased, the caterpillar burst into myriads of small caterpillars which were scattered all over the plain. That accounts for the army-worm pest, called peelua.

Site 11B is a "stone at Pu'u Kape'elua" located just south of the Caterpillar Stones (Summers 1971:37). The stone was visited in 1959 and consisted of a flat rock, measuring 7 feet long, 6 feet wide, and 22 inches tall. The flat surface contained a 21 inch-long basin with two grooves leading into two sides of the hollowed-out area on the north. On the south, another set of grooves led from this basin to another basin, 18 inches long. Marine shell was scattered around the area. The stone may have been used for sharpening adzes or for collecting water (Summers 1971:37).

Site 107 is a *hōlua* slide on the south-southwest side of Kualapu'u Hill. Note that the site map in Summers (1971) places the *hōlua* southeast of the project area, as is shown in Figure 12, while the site description says the *hōlua* lies on Kualapu'u Hill. In 1966, no paving could be identified, but traces of the *hōlua* slide could be seen on the hillside. It is also said that the hillside was once covered in sweet potato fields, which were delineated by rows of stones (Cooke 1949 in Summers 1971:80).

In 1973, the Sub-Committee for the Preservation of Historical Resources Ad-Hoc Committee of the Commerce and Industry drafted a report for the Molokai Task Force enumerating the island's numerous pre-contact and post-contact archaeological and cultural sites. In the report, the committee specifically recommended the preservation of the *wahi pana* of Pu'u Kape'elua, legendary since ancient times, and the preservation of the Hawaiian Homes Commission Headquarters first built by the early homesteaders in 1923 (Curtis 1973).

An archaeological reconnaissance was conducted in 1980 for possible expansion of the Moloka'i Airport (AECOS 1980). Two alternative sites were surveyed on foot: one at the current Moloka'i Airport and another *mauka* of Mo'omomi Beach. Only the airport site is in the general vicinity of the current project area. Several historic features were found there, including World War II bunkers, earthen revetments, Quonset huts, and old roads. They were thought to date from 1942–1947.

In 1994, a field inspection and brief mapping was conducted on previously identified Site 50-60-03-11, also known as the Kape'elua complex (Nagahara and Kolb 1994). This site, which consists of the legendary "caterpillar stones," had already been previously mapped. During this field inspection, the site was assessed to be in fairly good condition, and recommended for preservation without further mitigation efforts. The site was also described to be in Kalama'ula which might be erroneous since the site appears to be in Ho'olehua.

In 2001, an archaeological assessment was conducted along a road corridor of 59.55 km (37 mi.) across Molokaʻi for the proposed installation of a fiber-optic cable system (Hammatt 2001). The assessment included a review of literature covering previous work and a field inspection of the route. Regarding the Hoʻolehua-Pālāʻau area, it was determined that the potential for subsurface deposits was low, and no further archaeological work was recommended.

In 2008, an archaeological assessment with a field inspection was conducted through several *ahupuaʻa* including Hoʻolehua and Pālāʻau (McElroy 2008). No surface architecture was observed, and no other cultural materials were identified. The negative findings were attributed to past ranching and agricultural activities which have modified the landscape immensely.

In 2009, a cultural impact assessment (CIA) was conducted in Pālāʻau Ahupuaʻa for the Molokaʻi Airport Aircraft Rescue and Firefighting Station Improvements Project (Kaʻuhane et al. 2009). Results from this CIA concluded that the project would not adversely impact any Hawaiian resources or practices. It was recommended that proactive community consultation should be pursued.

In 2011, an archaeological assessment was conducted through multiple *ahupuaʻa* on Molokaʻi, over a 27-km (16.78-mi.) corridor for a proposed waterline (Peters and McElroy 2011). No archaeological material and/or structures were identified during the project even though archival records indicated the possible presence of two sites. It was determined that previous ranching and agricultural activities as well as modern development may have caused the disappearance of the two previously identified sites. An archaeological inventory survey with subsurface testing was recommended in the event of future ground disturbance.

Summary and Settlement Patterns

The Hoʻolehua-Pālāʻau Plain, set on the island of Molokaʻi, has its origin at the dawn of time when Hina and Wākea dwelled together, and Molokaʻi was born. This same Molokaʻi-a-Hina was to become the ancestor of the people of Molokaʻi (Kamakau 1991).

According to Summers (1971), the estimated population of Molokaʻi at the time of contact was around 10,500. Most of this population was established along the southern shore of the island and in some of the windward valleys. However, evidence suggests that the Hoʻolehua-Pālāʻau Plain must have seen some kind of substantial pre-contact population, whether transient or permanent, due to the many *heiau* and *koʻa* and a *kahua maika* in the area.

Although Molokaʻi remained a sovereign chiefdom for most of its pre-contact history, during the end of the 18th century, the island fell to neighboring Oʻahu and Maui and eventually to Hawaiʻi Island under Kamehameha I. It appears that much of central to west Molokaʻi stayed closely connected to the Kamehameha family during the historic era. By the mid-1800s, Kamehameha V had a ranch in that portion of the island, and after his death in 1872, much of his lands passed into the hands of Princess Ruth Keʻelikōlani and after her, to Princess Bernice Pauahi Bishop.

While ranching was widespread in the historic era, the central plains also saw ventures into sugarcane cultivation, pineapple cultivation, and honey production. However, with the passage of the Hawaiian Homes Commission Act in 1921, the Hoʻolehua-Pālāʻau Plain became a designated location for Hawaiian homesteads, and by 1924, the first homesteaders moved there. The area has developed as Hawaiian homestead lands until today.

Research Questions and Anticipated Finds

Relevant research questions may be to determine if any vestiges of pre-contact and post-contact land use of the Ho‘olehua-Pālā‘au area remain. Based on the known pre-contact use of the region, surface and/or subsurface feature remnants and artifacts may be encountered. Such features and artifacts may be associated with the *heiau*, *ko‘a*, and sweet potato fields that are known for the region.

From the post-contact era, features and artifacts related to the ranching industry, sugarcane and pineapple cultivation, or honey production may also be encountered. In addition, there is a possibility that artifacts from early 20th century Hawaiian homestead settlers could be found as well. A related research question would be to identify any historic buildings or other structures from the early homesteaders that have survived in the project area today.

METHODS

The archaeological inventory survey was conducted on January 20, 2015. Archaeologists participating in the survey included Windy McElroy, PhD; Steven Eminger; and Pūlama Lima, MA. McElroy served as Principal Investigator, overseeing all aspects of the project.

For the pedestrian survey, the ground surface was visually inspected for surface archaeological remains, with transects walked for the entire project area. Of the 6.861-acre survey area, 100% was covered on foot. Vegetation was sparse throughout the south side of the property where the current cemetery is located, and thicker on the north in the undeveloped portion of the parcel (Figure 13). In this northern portion, Christmas berry, *koa haole*, and tall grass affected visibility, and in many places the ground surface was completely covered. The spacing between archaeologists was approximately 3–5 m apart, closer where visibility was hindered by the vegetation.

Archaeological sites and their boundaries were identified visually, with any feature possibly made or used by humans and more than 50 years old considered a site. One archaeological site, the cemetery itself, was identified. It was not mapped because it had already been mapped in detail by surveyors. The cemetery was described and photographed during the inventory survey.

Mechanical test trenches (TR) were excavated in four locations to determine the presence or absence of cultural deposits. These were placed outside of the current cemetery, in areas proposed for construction. A backhoe was used for digging of the trenches (Figure 14). Vertical provenience was measured from the surface, and trenches were excavated to sterile deposits, to a depth below that proposed for construction. Profiles were drawn and photographed, and sediments were described using Munsell soil color charts and a sediment texture flowchart (Thien 1979). Excavations and the cemetery boundaries were recorded with a 3 m-accurate Garmin GPSmap 62st, and all trenches were backfilled after excavation.

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



Figure 13. Pedestrian survey, showing heavy vegetation on the northeast side of the project area. Orientation is to the east.



Figure 14. Excavation of TR 1 with backhoe. Orientation is to the south.

RESULTS

Pedestrian survey and subsurface testing were conducted in the 6.861-acre project area (Figure 15, Table 2). One historic property was found, Site 50-60-02-2564, the Kanakaloloa Cemetery. Excavation of four trenches did not yield any evidence of subsurface cultural deposits or features.

Community consultation for this project took the form of speaking with community members and conducting a cultural impact assessment (McElroy et al. in prep.). Five ethnographic interviews with *kūpuna* were conducted in person by Molokaʻi resident, Pūlama Lima, MA. The community members did not identify any historic properties in the area proposed for construction.

Site 50-60-02-2564

Temporary Site No. KP 1

Formal Type: Cemetery

Size: 175 m long, 120 m wide

Shape: Triangular

Construction: Variable

Surface Remains: Grave Markers

Subsurface Deposits: Human Burials

Condition: Good

Function: Interment

Age: Historic/Modern

Significance Criterion: E, Culturally Important

Mitigation: Avoidance, No Further Work

Kanakaloloa Cemetery is adjacent to the Molokaʻi Veterans Cemetery, but is a distinct and separate homestead cemetery. Hoʻolehua is known as one of the first Hawaiian homesteads that was established following the passage of the Hawaiian Homes Commission Act of 1921, and the cemetery may include graves of some of the original homesteaders.

Kanakaloloa Cemetery is composed of more than 300 grave markers situated on a gently sloping hill (Figures 16–18). The graves are located toward the base of the hill, on the Lihi Pali Avenue side of TMK: (2) 5-2-017:003. The current space used for the cemetery is triangular in plan, 175 m long and 120 m wide.

The surface is covered with mown grass and there are dirt roads and paths between the grave markers. The graves appear to be individually maintained and are fairly diverse in form and style, ranging from traditional granite-type stone engraved with information to simple wooden crosses or rectangular concrete outlines (Figure 19). Some graves exhibit photos; one grave is marked with an over-sized *poi* pounder, while another consists of a traditional *lele* (Figure 20). Many of the graves are adorned with personal items and flowers, indicating continued use of the cemetery. Most graves date from the 1940s to 2010s, although some appear older and their dates are unreadable.

Subsurface Testing

A total of four test trenches were excavated in areas for proposed construction to determine the presence or absence of subsurface cultural deposits or material (see Table 2 and Figure 15). No subsurface testing was conducted within the current cemetery so the existing graves would not be disturbed.



Figure 15. Location of Site 2564 and Trenches 1–4. The project area is outlined in red, and the ahupua‘a boundary is in purple, with Pālā‘au on the north and Ho‘olehua on the south.

Table 2. Sediment Descriptions

Location	Layer	Depth (cmbs)	Color	Description	Interpretation
TR 1	I	0–195+	7.5YR 2.5/2	Silty clay; 1% roots; no rocks; base of excavation.	Natural
TR 2	I	0–180+	7.5YR 2.5/2	Silty clay; 1% roots; no rocks; base of excavation.	Natural
TR 3	I	0–35	7.5YR 3/3	Silty clay; 1% roots; 5% rocks; smooth, very abrupt boundary.	Topsoil
	II	35–158+	5YR 4/6	Silty clay; no roots; 50–80% rocks; base of excavation.	Natural
TR 4	I	0–35	7.5YR 3/3	Silty clay; 1% roots; 5% rocks; smooth, very abrupt boundary.	Topsoil
	II	35–230+	5YR 4/6	Silty clay; no roots; 50–80% rocks; base of excavation.	Natural

TR 1 was excavated on the east side of the project area, in the approximate location of the proposed water line and pavilion (see Figure 15). The trench measured 6.8 m long and .7 m wide. It was excavated to 195 cm below surface (cmbs), well below the 120 cm proposed depth of the pavilion footings and water line. Stratigraphy consisted of a single sterile, natural layer (Figure 21). No cultural deposits or material were identified.

TR 2 was placed 30 m north of TR 1, also at the location of the proposed pavilion (see Figure 15). The trench measured 6.7 m long and .7 m wide. It was excavated to 180 cmbs, well below the 120 cm proposed depth of the pavilion footings. Stratigraphy was the same as that of TR 1 (Figure 22). No cultural deposits or material were encountered.

TR 3 was placed at the proposed road turnaround, near the southwest corner of the parcel, at the top of the slope (see Figure 15). The trench measured 6.5 m long and .7 m wide. The trench was excavated to 158 cmbs, well below the depth proposed for construction of the road. Stratigraphy consisted of a layer of topsoil above a sterile, natural rocky layer, the rockiness increasing with depth (Figure 23). No cultural deposits or material were found.

TR 4 was located 50 m north of TR 3, where additional graves are proposed (see Figure 15). The trench measured 6.5 m long, .7 m wide, and 230 cm deep, a depth greater than the 180 cm proposed for the new graves. Stratigraphy was the same as that found within TR 3 (Figure 24). No cultural deposits or material were identified.

Summary of Findings

Pedestrian survey of TMK: (2) 5-2-017:003 in Pālā‘au and Ho‘olehua Ahupua‘a identified one historic property: Site 50-60-02-2564, Kanakaloloa Cemetery. The cemetery consists of more than 300 graves that might be associated with the establishment of Ho‘olehua Homestead, one of the first Hawaiian homesteads in the state. Most graves in the cemetery date from the 1940s to the 2010s. Test trenches were excavated in four locations where proposed cemetery improvements will take place. No excavations were conducted within the existing cemetery, and no graves were disturbed. Stratigraphy consisted of a natural deposit, sometimes with a surface layer of topsoil. No cultural material or deposits were found within the excavations.

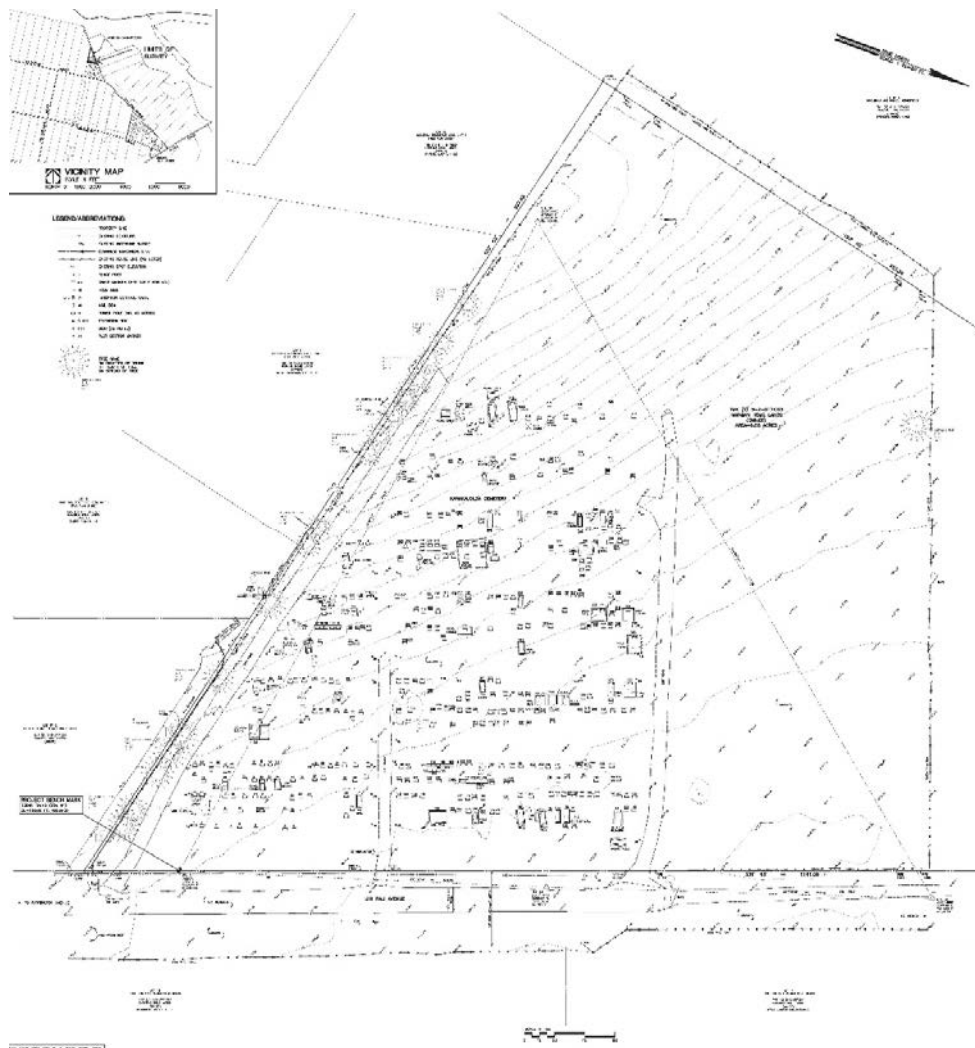


Figure 16. Topographic map of Site 2564, overview.

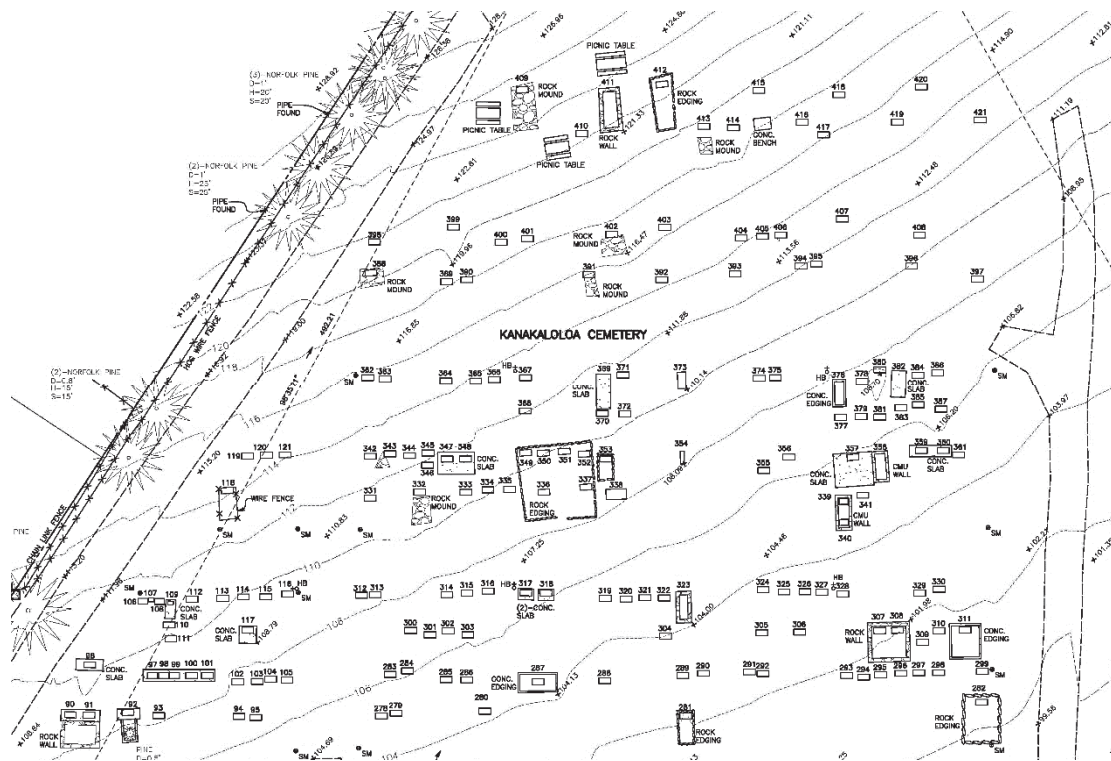


Figure 17. Topographic map of Site 2564, detail of western portion.

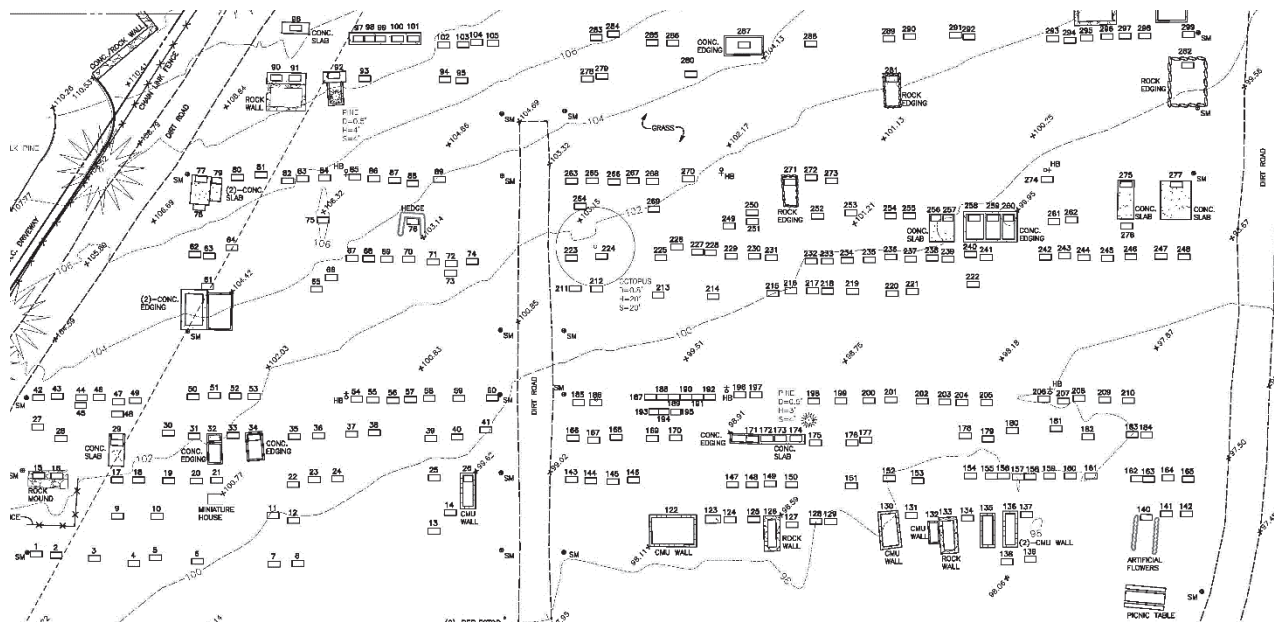


Figure 18. Topographic map of Site 2564, detail of eastern portion.



Figure 19. Kanakaloloa Cemetery, Site 2564. Orientation is to the west.



Figure 20. Grave with traditional *lele*, Kanakaloloa Cemetery, Site 2564. Orientation is to the southwest.

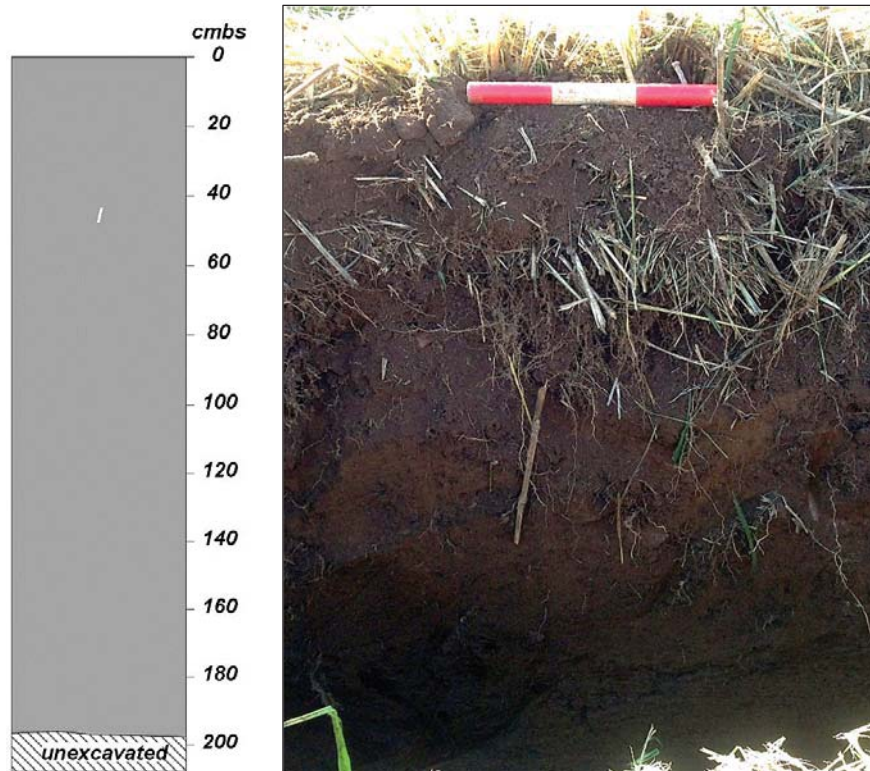


Figure 21. TR 1 south face profile drawing (left) and photo (right).

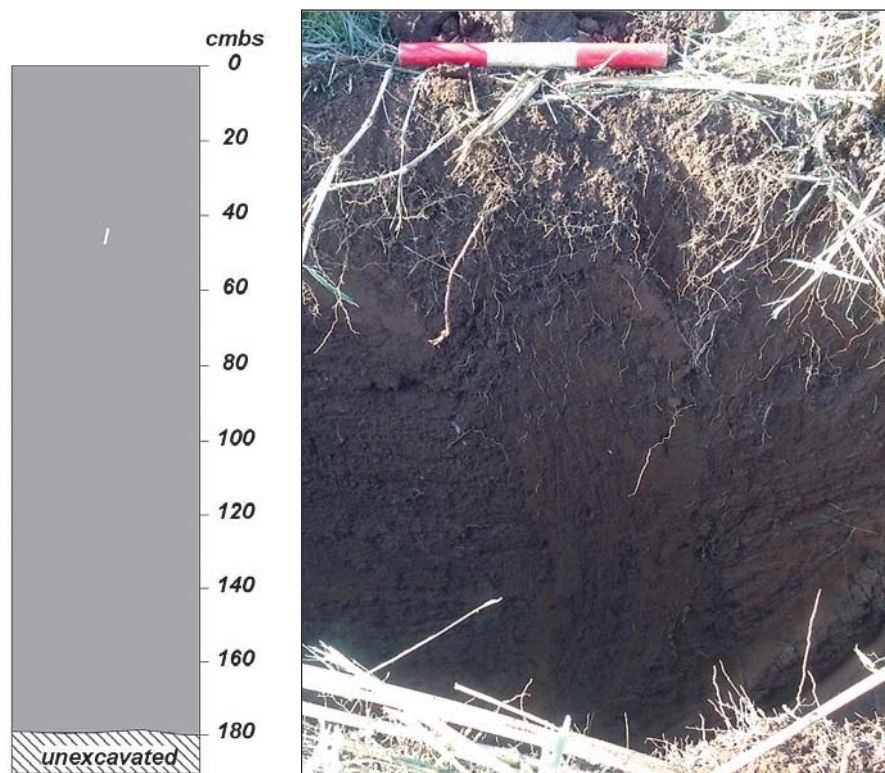


Figure 22. TR 2 southwest face profile drawing (left) and photo (right).

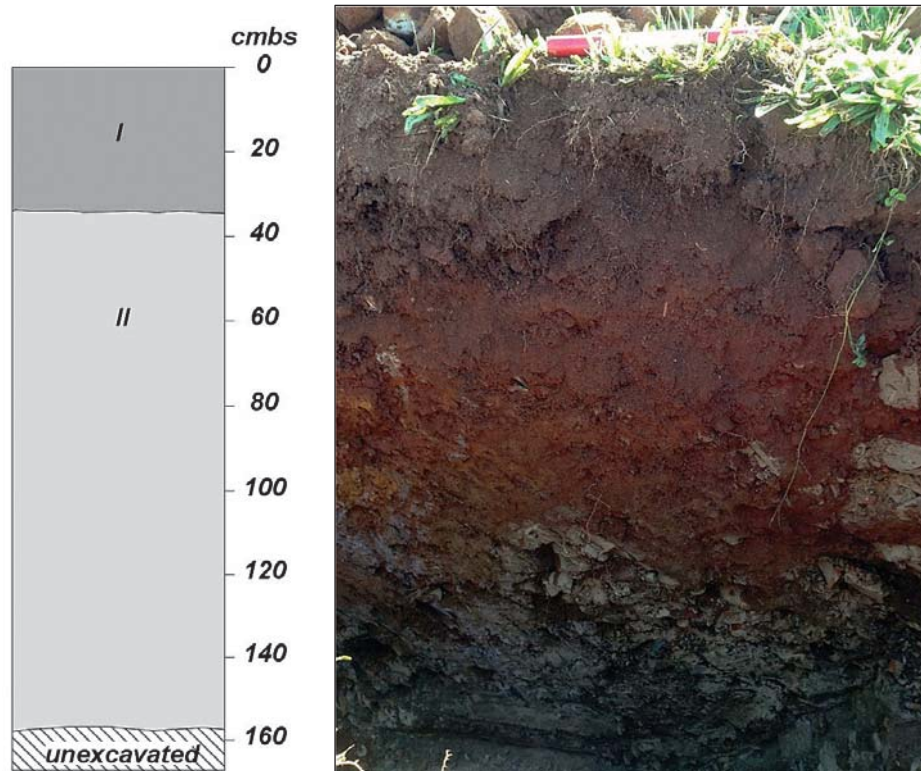


Figure 23. TR 3 east face profile drawing (left) and photo (right).



Figure 24. TR 4 west face profile drawing (left) and photo (right).

SUMMARY AND RECOMMENDATIONS

An archaeological inventory survey was conducted for TMK: (2) 5-2-017:003 in Pālā‘au and Ho‘olehua Ahupua‘a, Kona District, on the island of Moloka‘i. This was done in preparation for ground disturbance associated with improvements to Kanakaloloa Cemetery, which will include construction of a new pavilion, boundary wall, paved road, and parking lot, as well as the installation of a water line and the addition of new graves. The archaeological work included a pedestrian survey that covered 100% of the parcel and subsurface testing, with four backhoe trenches excavated.

One historic property was identified during pedestrian survey. This is Site 50-60-02-2564, the Kanakaloloa Cemetery. The cemetery consists of more than 300 graves, including individuals and families associated with the establishment of Ho‘olehua Homestead, one of the first Hawaiian homesteads in the state. The graves are fairly diverse in form and style, ranging from traditional granite-type engraved headstones to simple wooden crosses or rectangular concrete outlines. Most graves in the cemetery date from the 1940s to the 2010s, although some are unreadable and may be older. The cemetery continues to be used today.

Subsurface testing was conducted in four locations where proposed cemetery improvements will occur. No excavations were placed within the existing cemetery so that the graves would not be disturbed. Stratigraphy consisted of a natural deposit, sometimes with a surface layer of topsoil. No cultural material or deposits were found within the excavations.

Significance Determinations

To determine if a historic property is significant under Hawaii Administrative Rules (HAR) for historic preservation, or is eligible for National Register of Historic Places (NRHP) listing, it must be assessed for significance according to HAR §13-275-6(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; or
- (5) Criterion "e". Have an important value to the native Hawaiian 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, events or oral accounts--these associations being important to the group's history and cultural identity.

Site 50-60-02-2564 is significant under Criterion e, as it holds value to native Hawaiians and other ethnic groups (Table 3). Cultural practices are clearly still carried out at the cemetery, evidenced by recent adornment and landscaping at many of the graves. It is recommended that no further archaeological work is conducted at the existing cemetery, as it will be avoided during construction.

Avoidance and no further work are recommended for the cemetery. Archaeological monitoring should be conducted for ground disturbance on the remainder of the property.

Table 3. Significance Determination

Site	Description	Function	Criterion	Justification	Recommendation
2564	Kanakaloloa Cemetery	Human Burial	e	Culturally Important	Avoidance, No Further Work

In sum, one archaeological site, Kanakaloloa Cemetery, was found within the project area. Avoidance and no further work are recommended for the cemetery, while the remainder of the property should be subject to archaeological monitoring.

It should be noted that isolated human burial remains may be discovered during construction activities outside the cemetery, even though no evidence of this was found during the survey. Should human burial remains be discovered during construction activities, work in the vicinity of the remains should cease and the SHPD should be contacted.

GLOSSARY

ahupua‘a	Traditional Hawaiian land division usually extending from the uplands to the sea.
ali‘i nui	High chief.
Christmas berry	The ornamental tree <i>Schinus terebinthifolius</i> known for its bright red berry-like fruits.
hale mua	Men’s eating house
heiau	Place of worship and ritual in traditional Hawai‘i.
hōlua	Traditional Hawaiian sled used on grassy slopes.
kahua	Open place for sports, such as ‘ulu maika.
kahuna	An expert in any profession, often referring to a priest, sorcerer, or magician.
kapa	Tapa cloth.
kapu	Taboo, prohibited, forbidden.
kioea	The bristle-thighed curlew, or <i>Numenius tahitiensis</i> , a large brown bird with a curved beak.
ko‘a	Fishing shrine.
koa haole	The small tree <i>Leucaena glauca</i> , historically-introduced to Hawai‘i.
kukui	The candlenut tree, or <i>Aleurites moluccana</i> , the nuts of which were eaten as a relish and used for lamp fuel in traditional times.
kupuna	Grandparent, ancestor; <i>kūpuna</i> is the plural form.
lele	A detached part or lot of land belonging to one ‘ili, but located in another ‘ili.
Māhele	The 1848 division of land.
mauka	Inland, upland, toward the mountain.
mele	Song, chant, or poem.
moku	District, island.
mo‘olelo	A story, myth, history, tradition, legend, or record.
‘ōlelo no‘eau	Proverb, wise saying, traditional saying.
oli	Chant.
pōhaku	Rock, stone.
poi	A staple of traditional Hawai‘i, made of cooked and pounded taro mixed with water to form a paste.
pū‘ili	Bamboo implements used in dance.
‘uala	The sweet potato, or <i>Ipomoea batatas</i> , a Polynesian introduction.
‘ulu maika	Stone used in the <i>maika</i> game, similar to bowling.
wahi pana	Sacred places or legendary places that may or may not be <i>kapu</i> , or taboo.

REFERENCES

- AECOS, Inc.
1980 *Environmental Field Studies for the Moloka‘i Airport Master Plan*. Prepared for Austin, Tsutsumi, and Associates, Inc. by AECOS, Inc.
- Bacon, P.N. and N. Napoka (editors)
1995 *Nā Mele Welo: Songs of Our Heritage*. Translated by M. K. Pukui. Bishop Museum Press. Honolulu.
- Beckwith, M.
1970 *Hawaiian Mythology*. University of Hawai‘i Press, Honolulu.
- Cooke, G.P.
1949 Moolelo o Molokai: A Ranch Story of Molokai. *Honolulu Star Bulletin*, Honolulu.
- Curtis, D.
1973 *Recommendations to the Molokai Task Force for the Historical and Cultural Resources of Molokai*. Preservation of Historical Resources Ad-Hoc Committee of the Commerce and Industry Sub-Committee. Moloka‘i.
- DHHL (Department of Hawaiian Homelands)
n.d. “HHC- Hawaiian Homes Commission.” <<http://dhhl.hawaii.gov/hhc>> Accessed 2/25/2015.
- Evans, T.J.K.
1935 *Government Land of Palaau Ap. 3 Island of Molokai*. Scale 1 in. – 300 ft. Registered Map 2989.
- Fujimura, F.
1959 *Land Classified by Present Uses and Crop Productivity Hoolehua – Molokai*. Land Study Bureau University of Hawai‘i. Scale 1:31,680, or 2 in. = approximately 1 mile.
- Foote, D., E. Hill, S. Nakamura, and F. Stephens
1972 *Survey of the Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii*. United States Department of Agriculture, Soil Conservation Service. Published in cooperation with the University of Hawaii Agricultural Experiment Station, Washington, D.C.
- Hammatt, H.H.
2001 *Archaeological Assessment of the Proposed Sandwich Isles Communication Fiberoptic Cable Project Within Approximately 37 Miles (59.7 Kilometers) of Road Corridor on the Island of Moloka‘i*. Cultural Surveys Hawai‘i. Kailua, Hawai‘i.
- Handy, E.S.C. and E.G. Handy
1991 *Native Planters in Old Hawaii; Their Life, Lore, and Environment*. Revised Edition. Bernice P. Bishop Museum Bulletin 233. Bishop Museum Press, Honolulu.
- Ka Nupepa Kuokoa*
1879 “Mai Keia Manawa.” *Ka Nupepa Kuokoa* 29 March 1879:3.
- Kamakau, S.M.
1964 *Ka Po‘e Kahiko* The People of Old. Bernice P. Bishop Museum Special Publication 51. Bishop Museum Press, Honolulu.
1991 *Tales and Traditions of the People of Old: Nā Mo‘olelo a ka Po‘e Kahiko*. Translated by Mary Kawena Pukui. Ed. by Dorothy B. Barrere. Bishop Museum Press. Honolulu.
1996 *Ke Kumu Aupuni*. ‘Ahahui ‘Ōlelo Hawai‘i. Honolulu. Originally published 1866–1868. Honolulu.
- Kanoa-Martin, K.
2012 Huapala: Hawaiian Music and Hula Archives. www.huapala.org, accessed 2015.

- Ka'uhane, L., M. Spearing, R. Groza and H.H. Hammatt
2009 *Cultural Impact Assessment for the Moloka'i Airport Aircraft Rescue and Firefighting Station Improvements (ARFF) Project, Pālā'au Ahupua'a, Kona District, Moloka'i Island, TMK (2) 5-2-008:82 & 83*. Cultural Surveys Hawai'i. Kailua, Hawai'i.
- Keesing, F.M.
1963 *Hawaiian Homesteadng on Molokai*. University of Hawaii Research Publications Number 12. University of Hawaii, Honolulu.
- Lindgren, W.
1900 *Map of Molokai Territory of Hawaii showing property of the American Sugar Co. and water resources of the island with topographic survey and proposed irrigation system*. Scale on map.
- McElroy, W.K.
2008 *Archaeological Assessment of TMKs (2) 5-2-001:012, :014, : 015, :022, (2) 5-2-011:012, :026 and (2) 5-2-12:004 in Pālā'au, Ho'olehua, and Nā'iwa Ahupua'a, Kona District, Moloka'i Island, Hawai'i*. Garcia and Associates, Kailua, Hawai'i.
- McElroy, W.K., D. Duhaylonsod, and P. Lima
in prep. *Cultural Impact Assessment for the Kanakaloloa Cemetery, Pālā'au and Ho'olehua Ahupua'a, Kona District, Island of Moloka'i, Hawai'i*. Keala Pono Archaeological Consulting, Kaneohe, Hawai'i.
- Meyer, C.S.
1982 *Meyer and Molokai*. Graphic-Agri Business. Alden.
- Meyer, R.W.
1897 "Olelo Hoolaha." *Ka Makaainana* 25 March 1897:1.
- Moffat, R.M. and G.L. Fitzpatrick
1995 *Palapala'aina: Surveying the Mahele*. Editions Limited, Honolulu.
- Monsarrat, M.D.
1886a *Molokai Middle & West Section*. Hawaiian Government Survey map. Scale 1 in. = 2,000 ft.
1886b *Molokai Middle & West Section*. Hawaiian Government Survey map. Scale 1 in. = 2,000 ft.
- Nagahara, M. and M. Kolb
1994 *Field Inspection and Location of Site 50-60-03-11, Kape'elua Complex, Ho'olehua, Moloka'i*. SHPD and Hawaiian Home Lands archaeological field crew, Honolulu.
- Nakuina, M.K.
1990 *The Wind Gourd of La'amaomao*. Translated by E.T. Mookini and S. Nākoa. Kalmakū Press, Honolulu.
- National Park Service
1990 (rev. 1997) *How to Apply the National Register Criteria for Evaluation. National Register Bulletin 15*. U.S. Department of the Interior, National Park Service, Cultural Resources.
- Nogelmeier, M.P.
2006 "Commentary." *The Epic Tale of Hi'iakaikapoliopole*. Awaiaulu: Hawaiian Literature Project, Honolulu.
- Peters, M. and W.K. McElroy
2011 *Archaeological Assessment of Existing and Proposed Waterline Corridors, Kualapu'u to Pu'u Nānā, Island of Moloka'i*. Keala Pono Archaeological Consulting, Hau'ula, Hawai'i.
- Phelps, S.
1941 *A Regional Study of Molokai, Hawaii*. Bernice P. Bishop Museum, Honolulu.

- Pukui, M.K.
1983 *‘Ōlelo No‘eau: Hawaiian Proverbs & Poetical Sayings*. Bishop Museum Press, Honolulu.
- Pukui, M.K. and S.H. Elbert
1986 *Hawaiian Dictionary*. University of Hawaii Press, Honolulu.
- Pukui, M.K., S.H. Elbert and E.T. Mookini
1974 *Place Names Of Hawaii*. University of Hawaii Press, Honolulu.
- Pukui, M.K. and A.L. Korn (editors and translators)
1973 *The Echo of Our Song: Chants & Poems of the Hawaiians*. University of Hawaii Press, Honolulu.
- Schoeneberger, P.J., D.A. Wysocki, E.C. Benham, and W.D. Broderson (editors)
2002 *Field Book for Describing and Sampling Soils, Version 2.0*. Natural Resources Conservation Service, National Soil Survey Center, Lincoln, Nebraska.
- Stearns, H.T. and G.A. Macdonald
1947 *Geology and Ground-water Resources of the Island of Molokai, Hawaii*. Hawaii Division of Hydrography, Honolulu.
- Stokes, J.F.G.
1909 *Heiau of Molokai*. Bernice P. Bishop Museum, Honolulu.
- Summers, C.C.
1971 *Molokai: A Site Survey*. Bernice P. Bishop Museum, Honolulu.
- Thien, S.
1979 A Flow Diagram for Teaching Texture-By-Feel Analysis. *Journal of Agronomic Education* 8:54–55.
- Wall, W.E.
1915 *Molokai Govt. Tracts*. Scale 1 in. = 5,000 ft. Hawaii Territory Survey Plat Map 1035.
1924 *Hawaiian Homes Lands of Hoolehua and Palaau Island of Molokai*. Scale 1 in. = 400 ft. Hawaii Territory Survey. Registered Map 2719.

APPENDIX D
CULTURAL IMPACT ASSESSMENT

FINAL—Cultural Impact Assessment for Kanakaloloa Cemetery, Pālā‘au and Ho‘olehua Ahupua‘a, Kona District, Island of Moloka‘i, Hawai‘i.

TMK: (2) 5-2-017:003



Prepared For:

Group 70 International
925 Bethel Street, 5th Floor
Honolulu, Hawaii 96813



June 2015

Keala Pono 

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**FINAL— Cultural Impact Assessment for Kanakaloloa
Cemetery, Pālā‘au and Ho‘olehua Ahupua‘a, Kona District,
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June 2015



MANAGEMENT SUMMARY

A Cultural Impact Assessment was conducted for the Kanakaloloa Cemetery at TMK: (2) 5-2-017:003 in Pālā‘au and Ho‘olehua Ahupua‘a, Kona District, on the island of Moloka‘i. Improvements are planned for the cemetery, to include construction of a new pavilion, boundary wall, paved road, and parking lot, as well as the installation of a water line and the addition of new graves.

The current study took the form of background research and an ethnographic survey consisting of four interviews, all of which are included in this report. The background research synthesizes traditional and historic accounts and land use history for the Ho‘olehua-Pālā‘au Plain. Community consultations were performed to obtain information about the cultural significance of the subject property and the region as a whole, as well as to address concerns of community members regarding the effects of the proposed construction on places of cultural or traditional importance.

The Kanakaloloa Cemetery holds a special place in the heart of Moloka‘i’s homestead community. The cemetery, Site 50-60-02-2564, consists of more than 300 graves, including individuals and families associated with the establishment of Ho‘olehua Homestead, one of the first Hawaiian homesteads in the state. Most graves date from the 1940s to the 2010s, and the cemetery continues to be utilized today.

The interviewees were generally very supportive of the proposed plans for cemetery improvements and did not identify any cultural resources that would be affected. They did mention cultural practices that are carried out in the area, such as fishing and gathering ‘*opihi*’ at the coast, hunting in the region, and Christian religious practices at the cemetery. They also shared *mo‘olelo* associated with the cemetery and reminisced of their time there. Several concerns were raised, mostly related to security issues. Recommendations include giving the community an opportunity to provide input in the design of the pavilion and parking areas, and allowing access for people to visit the graves at any time.

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INTRODUCTION

At the request of Group 70 International, Keala Pono Archaeological Consulting conducted a Cultural Impact Assessment for the Kanakaloloa Cemetery at TMK: (2) 5-2-017:003 in Pālā‘au and Ho‘olehua Ahupua‘a, Kona District, on the island of Moloka‘i. Improvements are planned for the cemetery, to include construction of a new pavilion, boundary wall, paved road, and parking lot, as well as the installation of a water line and the addition of new graves. The Cultural Impact Assessment study was designed to identify any cultural resources or practices that may occur in the area and to gain an understanding of the community’s perspectives on the proposed development.

The report begins with a description of the project area and a historical overview of land use and archaeology in the area. The next section presents methods and results of the ethnographic survey. Project results are summarized, and recommendations are made in the final section. Hawaiian words, flora and fauna, and technical terms are defined in a glossary, and an index at the end of the report assists readers in finding specific information. Also included are appendices with documents relevant to the ethnographic survey, including full transcripts of the interviews.

Project Location and Environment

The Kanakaloloa Cemetery is located on Hawaiian homestead lands within *nā ahupua‘a* of Pālā‘au and Ho‘olehua and within the larger *moku* of Kona on the island of Moloka‘i (Figures 1 and 2). The cemetery lies within TMK: (2) 5-2-017:003, a 2.777 ha (6.861 ac.) parcel owned by the State of Hawai‘i Department of Hawaiian Home Lands. The project area is surrounded by Hawaiian homestead agricultural land with scattered residential development. Kanakaloloa Cemetery is adjacent to the Moloka‘i Veterans Cemetery but is a distinct and separate homestead cemetery.

TMK: (2) 5-2-017:003 lies at 250 m (820 ft.) in elevation, approximately 700 m (.43 mi.) from the northern coastline of Moloka‘i. Topography is moderately sloping to the east but is relatively flat on the north side of the parcel. The current cemetery occupies the south side of the lot, with dirt roads running through it. Lihi Pali Avenue is on the east, and a post and wire fence bounds the property on several sides. Vegetation within the current cemetery is sparse, consisting of short grass and a few large pine trees. The northern portion of the project area is densely vegetated, mostly with Christmas berry, *koa haole*, and tall grass.

The Ho‘olehua-Pālā‘au lands are situated in the middle section of the island on the Ho‘olehua Plain, and they consist mainly of a rich lateritic soil that runs from 3–9 m (10–30 ft.) in depth (Meyer 1982). The soil type in the project area is mostly LaB, or Lahaina silty clay with 3 to 7% slopes (Figure 3). There is also a smaller amount of LaC, or Lahaina silty clay with 7 to 15% slopes in the southwest corner of the parcel. The soil association for the project area is mostly of the Kahanui-Kalae-Kanepuu association which is described as “deep, gently sloping to moderately steep well-drained soils that have a dominantly fine-textured subsoil; on uplands” (Foote et al. 1972). In the northern part of the project area, the soil association is of the Very stony land-Rock land association, which is described as “gently sloping to very steep, rocky and stony land types; on uplands and in gulches and valleys” (Foote et al. 1972).

The project area receives approximately 51–64 cm (20–25 in.) of rainfall annually with the bulk of the precipitation occurring from November to April. This helps to recharge the basal zone of groundwater on which almost the entire island sits. Beneath the Ho‘olehua Plain, the basal groundwater is thoroughly brackish due to the lack of surface groundwater adding to the zone where the fresh and salt water mix. The nearest streams are Mane‘opapa, a non-perennial stream that runs through a gulch 270 m (.17 mi.) south of the project area and Anianikeha, another non-perennial watercourse situated 425 m (.26 mi.) to the north of the parcel. Temperatures in the Ho‘olehua-

Pālā‘au area range from a low of 20° C (68° F) in the cold, rainy season to 24° C (76° F) in the warm, drier season. Typical northeasterly trade winds blow throughout most of the year but are sometimes replaced by the southerly Kona winds (Stearns and Macdonald 1947).

The Undertaking

Improvements to Kanakaloloa Cemetery include construction of a new pavilion, boundary wall, paved road, parking lot, and water line. The cemetery will also be expanded to the north to include additional plots. The conceptual plan for the Kanakaloloa Cemetery improvements is shown in Figure 4.

The pavilion will be a .01 ha (1,250 sq. ft.) open structure just west of Lihi Pali Avenue that will offer visitors shelter from the elements and space to hold gatherings. Footings for the structure are not expected to exceed 1.2 m (4 ft.) deep.

The boundary wall will provide a protective barrier around the perimeter of the cemetery, which is currently open to Lihi Pali Avenue. The proposed wall would extend from the existing Ho‘olehua Veteran’s Cemetery to an existing fence line that cuts through the parcel. It would consist of a .9–1.2 m (3–4 ft.) high stacked basalt rock wall along the eastern side of the property.

The paved road and parking lot will include paving of existing unimproved paths within the cemetery. This will help prevent erosion and muddy conditions. The pavement would extend approximately 3.7 m (12 ft.) wide, with entry/exit at Lihi Pali Avenue, and two turnaround areas provided. The parking lot will be located near the proposed pavilion.

There is currently no potable water on site, and the new water line will extend an existing line that is currently used for landscape irrigation. The new line will run to the proposed pavilion to provide water for flowers and other plants placed on the graves, as well as cleaning from landscaping activities. Excavations for the water line are not expected to exceed 1.2 m (4 ft.) deep.

Additional grave plots are planned for the north and west sides of the parcel. Grave depths will be approximately 1.8 m (6 ft.).

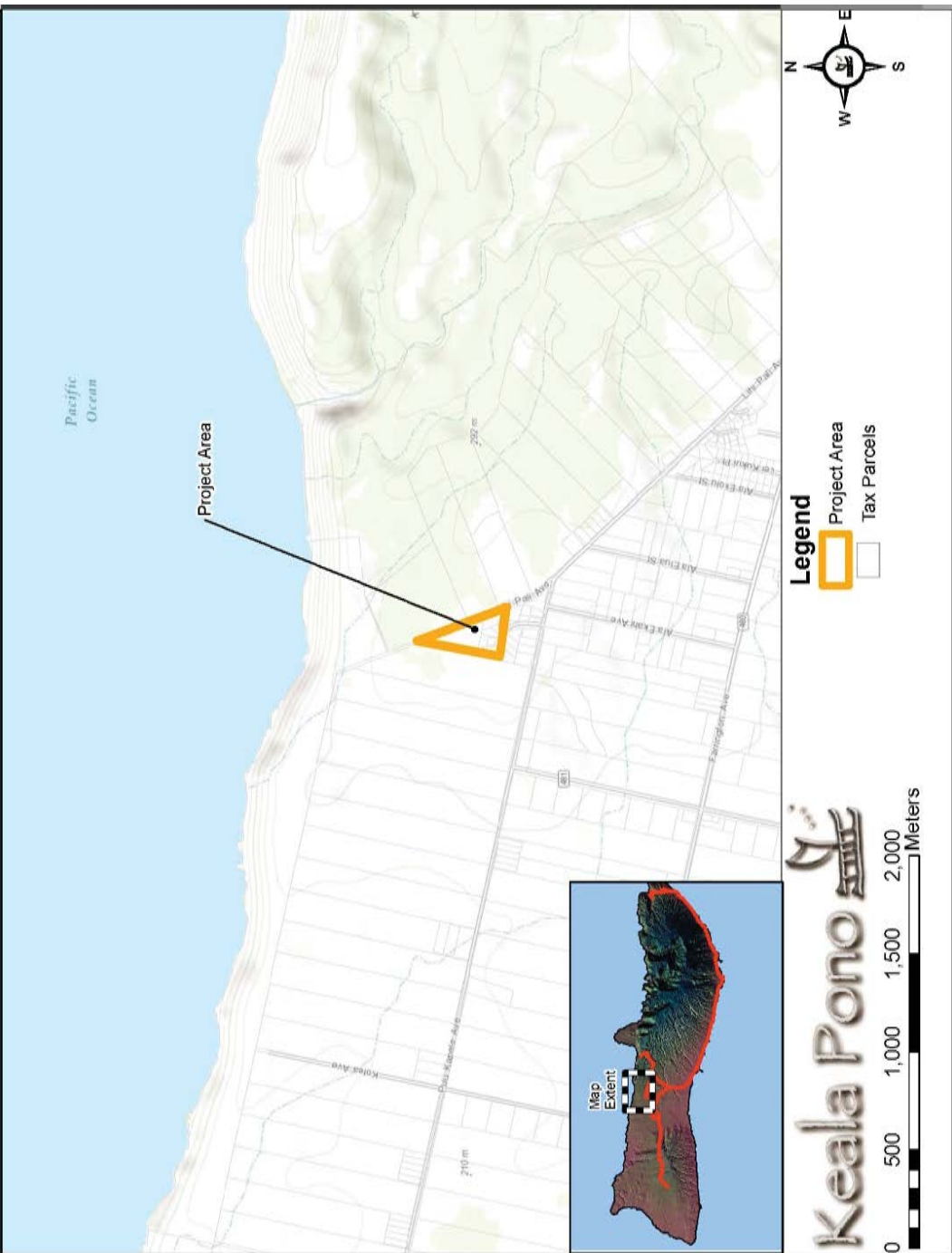


Figure 1. Project area on a 7.5 minute USGS Molokai Airport quadrangle map with TMK overlay.

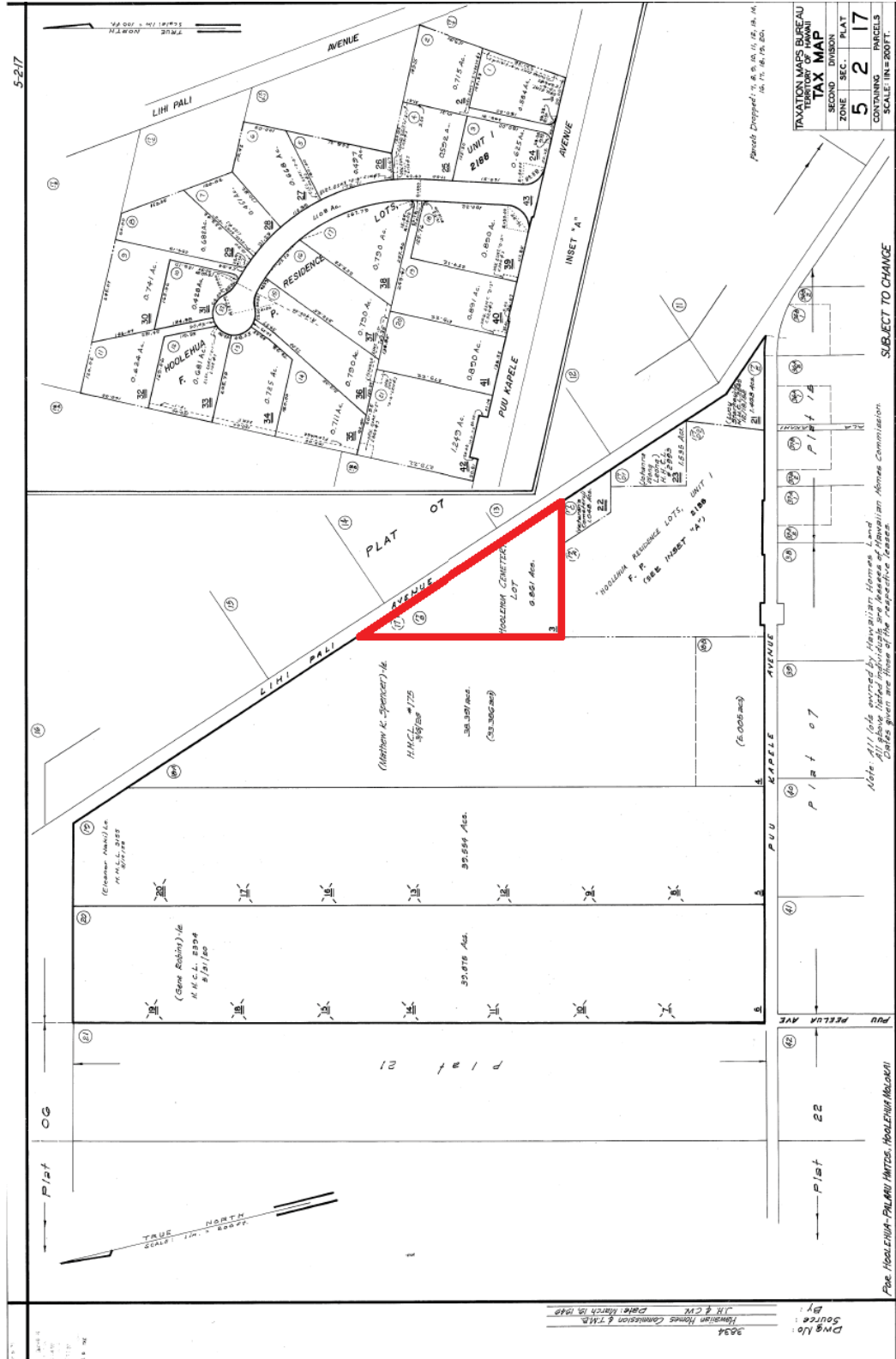


Figure 2. Project area (in red) on TMK plat map (2) 5-2-0017.





Figure 4. Conceptual plan for Kanakaloloa Cemetery improvements, courtesy of Group 70 International.

BACKGROUND

A summary of the natural environment of the Pālā‘au and Ho‘olehua region followed by a brief historic review is provided below, to offer a better holistic understanding of the use and occupation of the project area. In the attempt to record and preserve both the tangible (i.e., traditional and historic archaeological sites) and intangible (i.e., *mo‘olelo*, *‘ōlelo no‘eau*) culture, this research assists in the discussion of anticipated finds. Research was conducted at the Hawai‘i State Library, the University of Hawai‘i at Mānoa libraries, the SHPD library, and online on the Papakilo, Ulukau, and Waihona ‘Aina databases, and the State of Hawai‘i Department of Accounting and General Services (DAGS) website. Historical maps, archaeological reports, and historical reference books were among the materials examined.

Pālā‘au and Ho‘olehua in Traditional Times

The history of Pālā‘au and Ho‘olehua begins with the origin of Moloka‘i Island:

Moloka‘i and Lāna‘i were the children of Wākea by different wives. Hina was the mother of Moloka‘i and the child was called Moloka‘i-a-Hina. The mother of Lāna‘i was Ka‘ulawahine. They became ancestors of the people of those islands, but the two islands had ancient names (Kamakau 1991:129).

Much of the oral accounts which narrate the events from the first peopling of Hawai‘i to the recent period of written documentation has been lost in time. However, there are other means by which Hawai‘i’s history has been preserved. One often overlooked traditional source of history is the information embedded in the Hawaiian landscape. Hawaiian place names “usually have understandable meanings, and the stories illustrating many of the place names are well known and appreciated... The place names provide a living and largely intelligible history [to those familiar with the stories behind the names]” (Pukui et al. 1974:xii).

Among the place names relevant to the project area which have been listed in the book *Place Names of Hawaii* are Hikauhi, Ho‘olehua, ‘Īloli, Kāluape‘elua, Kona, Moloka‘i, Pālā‘au, and Pu‘ukape‘elua; the stories associated with these place names are in the *Mo‘olelo* section of this report:

Hikauhi. Coastal area, gulch, fishpond, and reef passage, south Moloka‘i. This was the daughter of Chief Ho‘olehua and his wife ‘Īloli. [*No translation given].

Ho‘olehua. Village, land divisions, and Hawaiian homesteads area near the Moloka‘i airport, said to be named for a chief. *Lit.*, acting the expert.

‘Īloli. Three land divisions, Moloka‘i. *Lit.*, yearning.

Kāluape‘elua. Gulch, Moloka‘i. *Lit.*, baked caterpillar

Kona. Leeward districts on Hawai‘i, Kaua‘i, Moloka‘i, Ni‘ihau, and O‘ahu. *Lit.*, leeward.

Moloka‘i. Island, 38 miles long, 10 miles wide, 261 square miles in area, and having a 1970 population of 5,261. District, forest reserve, lighthouse, high school, airport, and hospital. [*No translation given].

Pālā‘au. Three land divisions, north central and southwest Moloka‘i. *Lit.*, wooden fence or enclosure.

Pu‘ukape‘elua. Hill, north Moloka‘i. A beautiful girl lived in a cave near Kala‘e. *Lit.*, hill [of] the caterpillar.

The name “Kanakaloloa” is also listed in *Place Names of Hawaii*, as a hill in north Moloka‘i. It is translated as “tall person.”

In addition to the land features having significance in their names, so too was there importance attached to the naming of the rains, the winds, the clouds and many other phenomena of the natural environment. Hehika‘uala is a rain name of Ho‘olehua. Literally it translates to “the rain that tramples sweet potato.” Lanikeha, literally “lofted heaven,” is another rain name of Ho‘olehua. It is a rain that shares its name with a native sweet potato variety of Moloka‘i. Both rain names are associated with the ‘uala, showing the importance of that crop to the area. Among Ho‘olehua’s wind names, one is Ikioe (Kamakau 1991), and another is Puluea which translates to “a damp breath.” Summers gives two names for Ho‘olehua’s winds, Kaikioe and I‘aiki, and she cites Pukui and Elbert’s dictionary as the source for this information (Summers 1971), but upon verifying the citation, only I‘aiki is listed in the dictionary (Pukui and Elbert 1986). For Pālā‘au, there are no rain names listed, but Summers names two winds; they are Ka‘ele and Hauialialia (Summers 1971). Ka‘ele and Moa‘e are listed as winds of Pālā‘au in *The Wind Gourd of La‘amaomao* (Nakuina 1990).

Subsistence and Traditional Land Use

Like the names of Ho‘olehua’s rains hint, the Ho‘olehua Plain was noted for the cultivation of ‘uala. This is affirmed by the written and oral histories of Moloka‘i which stress the importance of sweet potato (*Ipomea batatas*) on leeward Moloka‘i and in Ho‘olehua and Pālā‘au in particular. This might be expected since sweet potato cultivation was dominant in similar dry environments on other islands throughout the archipelago that were not conducive to wet taro farming. Handy and Handy (1991:571) elaborate on the ‘uala cultivation of this region:

In 1931 there were many flourishing [sweet potato] patches on the Hawaiian homesteads at Ho‘olehua. It is said that Ho‘olehua and Pala‘au were noted for sweet potatoes in the olden days. Any part of the pineapple lands westward from this section may have been used for sweet potatoes.

Handy and Handy (1991:213) also note the cultivation of a distinctive type of gourd in Ho‘olehua:

‘Olo or Hokeo bore the long gourd used for the *hula* drum and for holding the fisherman’s tackle. These still grow wild in Ka‘u, near Punalu‘u, and are cultivated at Ho‘olehua on Molokai.

A final observation on traditional subsistence comes from Southwick Phelps in the 1930s:

For Pala‘au (Apana 2), Kaluakoi, and Punakou, Ho‘olehua, and Naiwa, planting areas for yams and sweet potatoes cannot be delimited but it is known that these were grown in that general area and were, with fish, the staples of the inhabitants. (In Handy and Handy 1991:518)

Summers (1971) reports that the majority of Moloka‘i’s pre-contact population resided east of the project area from Kalama‘ula to Kumimi and that the population in the island’s central Ho‘olehua-Pālā‘au region was scattered. But this by no means diminished the importance of the area. In contrast, the region was part of a complex of learning centers dedicated to the practice of hula and to the medicinal arts for curing and/or causing sickness. Two of Moloka‘i’s famous sayings allude to this spiritual power that the island has been associated with: *Moloka‘i ku‘i lā‘au* (Moloka‘i, pounder of medicine); and *Moloka‘i Pule ‘O‘o* (Moloka‘i of the potent prayer).

Scattered or not, the population on the Ho‘olehua Plain during traditional times was substantial enough to have left behind several *heiau* and *ko‘a*. Summers (1971) lists two *heiau* in Ho‘olehua. One was called Lepekaheo Heiau, and it was near the boundary between Ho‘olehua 2 and Pālā‘au 2 Ahupua‘a. The other *heiau* was documented without a name, and it was east of a place called ‘Eleuweue. For Pālā‘au, Summers lists two *heiau* and three *ko‘a*: a *heiau* east of Ho‘olehua Cemetery; a *heiau* at Anahiki Gulch; a *ko‘a* at Pu‘u Kapele; a *ko‘a* at Kahinaokalani; and a *ko‘a* at Na‘aukahihi. Two other features that Summers notes offer additional insight to traditional living in the area in pre-contact times. One was an ‘ulu *maika* playing field in Akani, Pālā‘au, and the other was a 6 ft. by 7 ft. boulder at Pu‘u Kape‘elua, Ho‘olehua, which was interpreted as either a stone for sharpening adzes or for collecting water (Summers 1971).

Areas north of the Kualapu‘u reservoir near Pu‘u ‘Ano‘ano were used in ancient times to teach *kahuna* the spiritual and medicinal arts. The proverb, “Moloka‘i ku‘i lā‘au” (Moloka‘i, pounder of medicine) attests to the expertise of Moloka‘i *kahuna* in compounding medicines and poisonous potions (Pukui 1983). From a chant extolling the powers of Moloka‘i, Mrs. Vanda Hanakahi, a native of Ho‘olehua wrote in the late 20th century, “ ‘Ae nō ‘o Moloka‘i ka piko o ka pae‘āine o Hawai‘i nei; he wahi la‘a ‘ihi no ke anaina mea ho‘ōla...” meaning that Moloka‘i is agreed upon as the center of the Hawaiian archipelago and is a sacred and revered place of healing arts for the multitudes.

Mo‘olelo

As mentioned earlier, Hawaiian place names were connected to traditional stories by which the history of the places was preserved. These stories were referred to as *mo‘olelo*, defined as follows:

A term embracing many kinds of recounted knowledge, including history, legend, and myth. It included stories of every kind, whether factual or fabulous, lyrical or prosaic. Mo‘olelo were repositories of cultural insight and a foundation for understanding history and origins, often presented as allegories to interpret or illuminate contemporary life... Certainly many such [oral] accounts were lost in the sweep of time, especially with the decline of the Hawaiian population and native language. (Nogelmeier 2006:429–430)

Still, a good amount of traditional stories managed to be recorded as Hawaiian society transitioned from an oral culture to a written one, and among those recorded were several versions of stories concerning the places associated with Moloka‘i’s Ho‘olehua Plain.

One *mo‘olelo* points out that several of these Moloka‘i places were named after legendary figures from the ancient days. Ho‘olehua was named after an ancient chief of the same name (Pukui et al. 1974). Ho‘olehua’s wife was ‘Īloli, and their daughter was named Hikauhi (Pukui et al. 1974). Today, ‘Īloli is the name of a nearby *ahupua‘a* in Moloka‘i’s Kona District, and it is also the name of a hill in another nearby *ahupua‘a*, Kaluako‘i. As for Hikauhi, it is the name of several features in Kaluako‘i Ahupua‘a, namely a gulch, a hill, a fishpond and a specific point along the coast.

This story is tied to the legend of Pāka‘a, which Beckwith (1970) puts in the category of legends about lesser Hawaiian gods. Pāka‘a inherited from his grandmother Loa, the supernatural ability to call upon the winds. However, when others became jealous of Pāka‘a, he left his home on Hawai‘i Island, fleeing for his life, and settled on Moloka‘i. There, he married Hikauhi, the aforementioned daughter of Ho‘olehua and ‘Īloli. Hikauhi bore Pāka‘a a son, named Kūapāka‘a, and this son carried on the supernatural abilities of his father (Beckwith 1970; Pukui et al. 1974).

Beckwith (1970) shares that Pāka‘a’s mother was La‘amaomao, a woman of chiefly rank from Kapa‘a, Kaua‘i. Kamakau also mentions a La‘amaomao in his written accounts, and this La‘amaomao is connected to Moloka‘i, but it appears to be a different person with the same name.

Kamakau does not even specify if this La'amaomao is female or male. In Kamakau's *mo'olelo* of the great navigator Mo'ikeha, La'amaomao is one of many supporters who followed Mo'ikeha as he sailed from Kahiki to Hawai'i. As he sailed through the islands, some of Mo'ikeha's followers stayed on Hawai'i Island, some stayed on Maui, some on O'ahu, and La'amaomao stayed on Moloka'i. It is in this account that Kamakau gives us one of the names of Ho'olehua's winds:

Mo'ikeha belonged to Kahiki, and the reason he came to Hawai'i was because he... was severely criticized, and so he went off to sea. He took with him his followers Moa'ula, Pāha'a, La'a-maomao, Mō'eke, Kaunalewa, and some others. The first place they landed on was at Kalae in Ka'ū, Hawai'i...

La'amaomao remained on Moloka'i at Haleolono in Kaluako'i --- in Kaluako'i of the tiny fish of Haleki'i, the black sea cucumbers of Pālā'au, the Ikioe wind of Ho'olehua; the sweet waters of Waiakāne, and the stratified limestone (*'unu'unu pa'akea*) of Haleolono. There lived La'a-maomao (Kamakau 1991:105–106).

Pālā'au and Ho'olehua are mentioned in a *mo'olelo* involving the inception of sorcery on the island of Moloka'i (Kamakau 1964:131–132). Only one person, a man named Kaiakea was trained in sorcery, and his teaching came directly from the gods. Kaiakea built a house in Kala'e and organized a feast for his house warming. Kaiakea, however, was a man that did not have a god. While his wife prepared the food for the feast, Kaiakea stood in the doorway of the *hale mua*, or men's house, and saw a multitude of women and one man crossing the plains from Ho'olehua to Pālā'au. They wore yellow *kapa* and multicolored leis. The man approached Kaiakea, and Kaiakea offered food to his party. The man said that he would not accept any food unless Kaiakea built a thatched house for them. The man disclosed that he and the women in the procession were angels and if Kaiakea could complete the house in a single day then they would become Kaiakea's gods and give him their belongings to do their work. Kaiakea was able to build the house that day and filled it with food offerings, which pleased the angels. Kaiakea took care of his new gods for the rest of his life and did not use them for malicious purposes. Before he died, Kaiakea instructed his children not to use the gods to seek wealth and not to disclose the knowledge of sorcery.

A final *mo'olelo* sheds light on a hill called Pu'ukape'elua and a gulch called Kāluape'elua, both in the *ahupua'a* of Ho'olehua. According to this *mo'olelo* a beautiful girl was in a relationship with a lover who only visited in the night and left by daylight. Unbeknownst to the girl, her lover was a demi-god who could take the form of a caterpillar. The girl's parents enlisted the aid of a *kahuna* to help them find out who the girl's lover was and where he disappeared to everyday. With the help of the *kahuna*, they found the lover in his caterpillar form sleeping on a hill, and they set him on fire. As a result, he exploded into a multitude of smaller caterpillars, and the situation was ended after all the caterpillars were burned. The name of the hill, which means "Caterpillar Hill," and the name of the gulch, which means "Baked Caterpillar," are reminders of this story (Summers 1971).

Oli and Mele

The noteworthiness of specific locales in Hawaiian culture is further bolstered by their appearance in traditional chants. An *oli* refers to a chant that is done without any accompaniment of dance, while a *mele* is a chant that may or may not be accompanied by a dance. These expressions of folklore have not lost their merit in today's society. They continue to be referenced in contemporary discussions of Hawaiian history, identity, and values.

One chant in particular, which mentions the project area and emphasizes an important episode in Moloka'i's history, should be highlighted. This is the chant which reiterates a special connection that the people of Moloka'i have with King Kamehameha V. At least two slightly different versions have been published; one can be found in the book, *The Echo of Our Song: Chants & Poems of the*

Hawaiians (Pukui and Korn 1973); and the other is translated by Pukui in the book, *Nā Mele Welo: Songs of Our Heritage* (Bacon and Napoka 1995).

In the version published in *The Echo of Our Song*, the chant is titled *Ka Huaka‘i*, and it is classified as an *oli*. It is also described in the book’s commentary as both a *mele ali‘i*, a chant which praises a chief, and a *mele māhala*, a chant of gratitude. Pukui and Korn date the authorship of the chant to the mid-19th century by a Hawaiian Christian who was still mindful of the ancient Hawaiian spiritual beliefs (Pukui and Korn 1973). On the other hand, the version published in *Nā Mele Welo* is titled *I Aloha ‘ia ‘o Kīlauea*, and it is described as a *mele* specifically accompanied by dancers using the *pū‘ili*, or split bamboo stick implement. In this book, the credit for preserving and sharing this version of the chant goes to a Mrs. Maluo Keawe Nainoelua of Hilo (Bacon and Napoka 1995).

Both versions praise King Kamehameha V for sending the ship, the Kīlauea, to Moloka‘i bringing medicine, supplies, and food at a time when it was much needed. One cannot help but wonder if this last of the Kamehameha kings had a particular affection for Moloka‘i. King Kamehameha V had a residence and ranch on the island, and he helped establish a grove of coconut trees in Kaunakakai in the 1860s which continues to be an important landmark today (Pukui et al. 1974). The landmark is known as Kapuāiwa Coconut Grove, an appellation which honors the king’s name at his birth, Lot Kapuāiwa. The two versions of the chant with minor differences are presented with their translations below. Notice the special reference to Pālā‘au in both versions, referring to the ship’s anchoring outside the smaller coastal Pālā‘au land division which was not physically connected to the Ho‘olehua Plain where of the main Pālā‘au Ahupua‘a.

Here is the version found in Pukui and Korn’s book:

Ka Huaka‘i

Ia aloha ia Kīlauea,
Lio kākele a o ka moana,
Holo mamua holo mahope.

Kau pono ka ihu i ka makani,
Haki nu‘a ka uwahi i ke kai,
Nome a‘e ka huila malalo,
Hala e ka lae o Kalā‘au,

‘Oni ana Moloka‘i mamua,
Huli a‘e e eke alo i Lāhainā,
He ukana ka Kīlauea,
Lū a‘e la i Pālā‘au,
Ho‘okahi pahuna malalo.

Kohu ‘āuna manu i ke one,
Ka hoholo i ke ālialia.

E ‘ole o Kalani Mehameha
Ola ai nei pū‘ā hipa,
Na hipa a Kama‘ipu‘upa‘a.

‘Ai ana i ka lau ‘oliwa.

Errand

Kīlauea, beloved ship, sea-roving steed
roams this ocean full-steam ahead
backing and hauling, then the voyage home.

Now Kīlauea’s prow heads into the wind,
smoke breaks from stack, ripples over the sea,
paddle wheel slowly revolves,
passes Kalā‘au Point

Moloka‘i up ahead,
Lāhainā yonder,
awaiting freight,
And stops at Pālā‘au to unload cargo,
heave ho and shove down below.

Like a flock of seabirds upon a waste of sand
a hungry horde races along this salt-encrusted
shore.

Were it not for Chief Kamehameha
These creatures would be bereft of all supply,
Would be as sheep without forage, no shepherd
were it not for life-bringing Kama‘ipu‘upa‘a the
Kahuna, wise in matters of sickness, life and death.

Now let this famished flock feed on olive leaves
Given with a King’s love.

Ha'ina 'ia mai ka puana,	This is the end of my song
Nō Kalani Mehameha he inoa.	in praise of Chief Kamehameha.

The chant commemorates an errand of mercy in which Kamehameha V brought the necessities of life, including native medicines as well as food, to workers on his royal ranch at Hālawā, island of Moloka'i, during a period when the ranch had exhausted its supplies. Lot Kamehameha (1830–1872), King Kamehameha V, ruled over Hawai'i from 1863 to 1872. He was the last of the Kamehameha kings directly descended from the Conqueror.

Text: Mary Kawena Pukui. Title assigned (Pukui and Korn 1973:83–85).

And here is the version found in *Nā Mele Welo*:

I Aloha 'ia 'o Kīlauea

I aloha 'ia 'o Kīlauea
 Lio kākele o ka moana.
 Holo ma mua, holo ma hope,
 Kau pono ka ihu i ka makani,
 Haki nu'a ka uahi i ke kai,
 Nome a'e ka huila ma lalo.
 Hala e Ka Lae o Kalā'au
 Pili mākou me Moloka'i.
 Huli aku e ke alo Lahaina,
 He ukana ke Kīlauea.
 Kū a'ela i Pālā'au
 Ho'okahi ka pahuna ma lalo.
 Kohu 'āuna manu i ke one,
 Kāholoholo i ke ālialia.
 E 'ole 'o Kalani Mehameha
 Ola ne'ia pū'āhipa.
 Nā hipa a Kama'ipu'upa'a
 Lālau i ka lau weuweu.
 Ha'ina 'ia mai ka puana
 'O Kalani Mehameha he inoa.

Beloved is the Kīlauea

Beloved is the Kīlauea
 The "horse" that travels the sea.
 It goes forward and back,
 With the prow facing the wind.
 The smoke ripples out over the sea,
 The wheels roll on below.
 The ship passes Kalā'au Point
 And brings us close to Moloka'i.
 Kīlauea turns to face Lahaina,
 With much freight on board.
 It weighs anchor at Pālā'au
 With one shove from below.
 Like flocks of birds on the sand,
 The people run about on the salt-covered earth.
 If it were not for King Kamehameha,
 These sheep would not find sustenance,
 These sheep of Kama'ipu'upa'a,
 That wandered about eating herbage.
 This is the end of my song
 For the king, Kamehameha.

Contributor: Mrs. Maluo Keawe Nainoelua, Hilo, Hawai'i. Hula pū'ili. [Dance using split bamboo stick.] A mele for Kamehameha V ma [at] Moloka'i.

Note: Kama'ipu'upa'a was a woman, a retainer of the king, who saw all was well with his places on Moloka'i (Bacon and Napoka 1995:118, 119).

'Ōlelo No'eau

Like *oli* and *mele*, traditional proverbs and wise sayings also known as '*ōlelo no'eau* have been another means by which the history of Hawaiian locales have been recorded. In 1983, Mary Kawena Pukui published a volume of nearly 3,000 '*ōlelo no'eau*, or Hawaiian proverbs/wise sayings, that she collected throughout the islands. The introductory chapter reminds us that if we could understand these proverbs and wise sayings well, then we would understand Hawai'i well (Pukui 1983). Although none of the '*ōlelo no'eau* in Pukui's volume mentions Pālā'au, there are two which refer to Ho'olehua. One saying calls to mind the hot weather that the Ho'olehua Plain is known for. The other saying is more about the *kioea* bird rather than Ho'olehua, but still, it is a reminder that this native bird is familiar to the area:

(1935) Ku‘u manu lawelawe ʻō o Ho‘olehua.

My bird of Ho‘olehua that cries out about food.

Said of the *kioea*, whose cry sounds like “*Lawelawe ke ʻō! Lawelawe ke ʻō!*” (“Take the food! Take the food!”). The *kioea* is the bird that calls to the fishermen to set out to sea.

(2164) Mo‘a nupu ka lā i ke kula o Ho‘olehua.

The sun scorches the plain of Ho‘olehua.

Refers to Ho‘olehua, Moloka‘i.

There are several other ‘*ōlelo no‘eau* which should be mentioned here. While they are not associated specifically with the project area, these sayings attribute certain things to the Moloka‘i people and/or the entire island, Ho‘olehua-Pālā‘au included. One saying celebrates the people’s lineage to Hina. Other sayings declare that the people of Moloka‘i are expert athletes and practitioners of hula, sorcery, and the medicinal arts. And finally, one of the ‘*ōlelo no‘eau* describes the island as a place of hurt and distress due to the tragedies associated with the Hansen’s disease patients and their exile to a remote part of Moloka‘i:

(2191) Moloka‘i ‘āina o ka ‘eha‘eha.

Moloka‘i, island of distress.

This expression came about after the establishment of the leper colony there. It refers to the separation of loved ones, the ravages of the disease, and the sad life in the early days at Kalawao, when so much was lacking for the comfort of the patients.

(2193) Moloka‘i ku‘i lā‘au.

Moloka‘i, pounder of medicine.

The *kahuna* of Moloka‘i were said to be experts in compounding medicines and poisonous potions. Also, a stick dance bore this name.

(2194) Moloka‘i nui a Hina.

Great Moloka‘i, land of Hina.

The goddess Hina is said to be the mother of Moloka‘i.

(2195) Moloka‘i pule o‘o.

Moloka‘i of the potent prayers.

Moloka‘i is noted for its sorcery, which can heal or destroy.

(2315) Niniu Moloka‘i, poahi Lāna‘i.

Moloka‘i resolves, Lāna‘i sways.

A description of the revolving hips and the swaying movements in *hula*.

(2698) Pua ka uwahi o kā‘e‘a‘e‘a moku o Hina.

Up rose the smoke of the experts of the island of Hina.

Said of the quickness of the athletes of Moloka‘i --- they were so fast that they smoked.

(Pukui 1983:206, 235, 238, 239, 252, 294)

Pālā‘au and Ho‘olehua in the Historic Era

Moloka‘i and the entire Hawaiian archipelago enter the historic era in the late 18th century. Captain Cook’s so-called discovery of the islands is in 1778, and although he noted Moloka‘i in the distance that year, he did not sail up to the island until 1779. But it is not until 1786 that there is the first recording of Westerners meeting and interacting with the natives of Moloka‘i (Summers 1971).

Just prior to the arrival of foreigners, Moloka‘i had seen several centuries as an independent kingdom starting with its first *ali‘i nui*, Kamauaua, in the 13th century (Summers 1971). There was a brief challenge to its independence from Hawai‘i Island in the 15th century, but otherwise, Moloka‘i enjoyed its sovereignty all the way up to the 18th century when it was once again challenged by chiefs from various neighboring islands. It should be noted, however, that there had also been episodes of intra-island conflict among Moloka‘i chiefs from the leeward and windward districts as well disrupting the peace.

It is uncertain if Moloka‘i was still an independent kingdom or under the rule of a neighboring island’s chief when Westerners arrived in the late 18th century. It is documented that when Captain James King landed on O‘ahu in 1779, the warriors of O‘ahu had gone to Moloka‘i to battle the forces of Maui’s King Kahekili there (Summers 1971). What is not clarified is if at that time Moloka‘i was still independent, or if it was under the rule of O‘ahu, or under the rule of Maui. However, what is clearly recorded is that in 1780, Moloka‘i was under the rule of O‘ahu’s King Kahahana. Kahahana gave the far eastern portion of Moloka‘i to Kahekili because Kahekili was Kahahana’s elder, but that was not enough, and eventually, in 1785, Kahekili’s forces invaded O‘ahu and killed Kahahana. As a result, the entire island of Moloka‘i went under the Maui rule of Kahekili. On the way to battle Kahahana on O‘ahu, Kahekili stopped on Moloka‘i to supply their canoes with fish from Moloka‘i’s fishponds. The historian Kamakau records that Kahekili’s forces were multitudinous, and his fleet of canoes stretched from Ho‘olehua to Kaluako‘i (Translation by D. Duhaylonsod):

Ma Lahaina i ho‘ākoakoa ‘ia ke anaina no ka holo ‘ana i ke kaua. ‘O Halekumukalani ka hale o ke akua, aia ma Pūehuehu. I ka pau ‘ana o ke kapu, ‘o ka ho‘omaka nō ia i ka holo a Moloka‘i; ‘o ka i‘a o nā loko kuapā, ‘o ia ke ō o ka holo ‘ana; mai Ho‘olehua a Kaluako‘i ka piha i nā wa‘a. I ka holo ‘ana o nā wa‘a kaua ma ka mole o Lāna‘i, a ua kapa ‘ia kēia alanui moana a Kahekili i holo mai ai i ke kaua i O‘ahu, ‘o Ka‘ōpuaki‘iki‘i ka inoa; a ma ka lewa loa o ka moana, a loa‘a i ka wēlau o ka ‘Ao‘aoa, a nāna i ho‘iho‘i i ka ‘āina, a ‘o Waikīkī ke awa (Kamakau 1996[1866]:88).

Lahaina was where the multitude was assembled to go into battle. Halekumukalani was the name of their god’s house; it was at Pūehuehu. When the kapu period was over, they began sailing to Moloka‘i, to get the fish from the fishponds, and their sailing continued, from Ho‘olehua to Kaluako‘i, it was filled with canoes. When the war fleet sailed away from Lāna‘i, this ocean route that Kahekili traveled on to make war on O‘ahu was called Ka‘ōpuaki‘iki‘i, under the long skies of the open sea, and they caught ahold of the tip of the ‘Ao‘aoa wind, and it pushed them to the land, and Waikīkī was the landing place.

Not long after Kahekili’s death in 1794, King Kamehameha’s forces from Hawai‘i Island defeated both the O‘ahu warriors and the Maui warriors, and so Moloka‘i unquestionably went under the rule of Kamehameha. Like Kahekili, Kamehameha stopped on Moloka‘i on his way to fight on O‘ahu, and while on Moloka‘i, Kamehameha used the Ho‘olehua Plain as a training area for his warriors. Kamehameha eventually unified the entire island chain (Summers 1971).

Missionary and Ranching Activity

For many decades following the arrival of Westerners, Moloka‘i was not a prominent port of call that foreigners visited. After Captain Vancouver’s description of the island in 1792, the only other accounts of Westerners visiting the island prior to the early 1800s were of missionaries (Summers 1971). The first permanent church established on the island was a Protestant mission on the east side of Moloka‘i in 1832. Much later, Catholic missionaries also established themselves on the island, but perhaps the one with the most profound impact was the mission founded on the Kalaupapa Peninsula by Saint Damien in the 1870s. It was there at the settlement established by King Kamehameha V that Saint Damien ministered to the patients afflicted with Hansen’s Disease. While the missionary foreigners and their activities helped shape Moloka‘i Island as a whole, they did not have a major impact on the Ho‘olehua Plain.

On the other hand, the activities brought about by ranchers and the ranching industry on Moloka‘i did have a more direct impact on the region of interest. An important figure who ties much of this together is the German immigrant R.W. Meyer. Meyer arrived on Moloka‘i in the 1840s, married a chiefess from the island, and settled in the Kala‘e area to the east of Ho‘olehua. Meyer also became the overseer of the Kalaupapa settlement for Hansen’s disease patients after its creation by King Kamehameha V’s legislation in the 1860s, and furthermore, Meyer became the manager for the king’s ranch on Moloka‘i which operated on lands to the west and south of the Ho‘olehua Plain. From Kamehameha’s ranch came multitudes of cattle which were allowed to roam free on *kapu*, and in addition to that, the king introduced deer in 1868 which quickly multiplied and spread throughout the island (Summers 1971).

After Kamehameha V’s death in 1872, Meyer continued to administer the royal ranchlands for Kamehameha’s heirs. Excerpts from two Hawaiian language newspapers confirm the continuance of Meyer’s land management. In the first excerpt, from *Ka Nupepa Kuokoa*, Meyer announces that lands of the Kamehameha heiress Princess Ruth Ke‘elikōlani extend from Kaluako‘i, past the Ho‘olehua Plain, and east to Kapa‘akea. In the second article, from *Ka Makaainana*, Meyer specifically lists Pālā‘au as one of the *ahupua‘a* still under the royal name. Both newspaper excerpts, presented below, caution the rest of the population not to allow their animals to roam onto the royal lands:

Mai keia manawa a mahope aku nei. Ke papa ia'ku nei na kanaka a pau, mai hookuu a hooholo i ka lakou mau holoholona maluna o na aina o ke Alii ka Mea Kiekie Ruta Keelikolani e waiho ia ma ka mokupuni o Molokai, ma Kapaakea a hiki i Kaluakoi, me ka ae like ole mamua me ko'u hope R.W. Meyer. Aina e kue kekahi i keia olelo papa, alaila, e hoopii ia no ma ke kanawai SIMON K. KAAI. Agena o ke Alii R. Keelikolani. (*Ka Nupepa Kuokoa* 1879)

Olelo Hoolaha.

E ike auanei na mea a pau he mau holoholona ka lakou [lio, miula a me na iakake], e holo ana maluna o na aina hanai holoholona ma Molokai-Kaluakoi, Palaau, Ioli, Naiwa, Kahanui Kalamaula, Kaunakakai, Makakupaiaiki a me ke kula o Kawela. E hooukuia aku ana mai ka la mua kau o Iulai, 1897, no kela a me keia holoholona e hele ana maluna o ua mau aina la he 25 keneta no ka holoholona hookahi o ka mahina, e hookaaia ma ke dala, a i ole, ma ka hana maoli paha maluna o ua mau aina la, ma ka ae like a ma ke kauoha a ka Luna Hooponopono o ua mau aina la i oleloia maluna. O na holoholona i hookaa ole ia, e hopuia aku ana ma ke ano komohewa. R.W. MEYER, Luna Hooponopono, Kalae, Molokai, Maraki 25, 1897. mar. 28-4ts. (Meyer 1897:1)

Meyer died in 1897, and coincidentally that same year, a group of businessmen organized to purchase 70,000 acres of the late Kamehameha V's former ranchlands and lease another 30,000 more, stretching from the west end of the island to the Ho'olehua Plain. By that time, Princess Ruth had passed away, and her lands there had already gone into the hands of her heiress Bernice Pauahi Bishop. The purchasing business entity would later be named the Molokai Ranch, and the next year, this business organization also formed the American Sugar Company (ASCO) which added sugarcane fields to the Ho'olehua Plain and constructed a railroad through it for transport. Since the Moloka'i sugar venture had a tough time competing with other sugar enterprises throughout the islands, the early 1900s found ASCO switching its focus to raise cattle and sheep and to produce honey instead.

Māhele Land Tenure

During Kamehameha III's reign, in 1848, sweeping changes were made to the traditional land tenure system. This was called the Māhele. This proclamation allowed the king to divide landownership for three groups of people: the king, the chiefs, and the commoners. The new system of land tenure was another influence of Westerners in Hawai'i:

THE MAHELE is rightfully considered one of the most significant chapters in the modern history of Hawai'i. Several legislative acts during the period 1845-1855 codified a sweeping transformation from the centuries-old Hawaiian traditions of royal land tenure to the western practice of private land ownership. (Moffat and Fitzpatrick 1995)

The king enacted the Māhele intending for it to provide the Native Hawaiian population with an irrevocable land base they would own. The process that the commoners needed to follow to secure their land titles consisted of filing a claim with the Land Commission; having their land claim surveyed; testifying in person on behalf of their claim; and submitting their final Land Commission Award to get a binding royal patent. However, in actuality, the vast majority of the native population never received any land commission awards recognizing their land holdings due to several reasons such as their unfamiliarity with the process, their distrust of the process, and/or their desire to cling to their traditional way of land tenure regardless of how they felt about the new system. In 1850, the king passed another law, this one allowing foreigners to buy land. This further hindered the process of natives securing lands for their families.

Regarding Ho'olehua and Pālā'au, the Māhele records on the Waihona 'Aina database show no land claims for Ho'olehua and only one unawarded land claim (Land Claim #11094) for Pālā'au. The land claim was submitted by a person named Kaukuna, and it is for land in both Pālā'au and Kahanui, not close to the project area. The Waihona 'Aina database shows zero land grants awarded in Pālā'au and five land grants that were awarded in Ho'olehua. Three of these were given to the Dudoit family; one was granted to the Lewis family; and one was conferred to the Makakoa family. Three of the five land grants listed here were awarded in 1899, the other two show no date. And finally, the Waihona 'Aina database shows that no royal patents were given. The lack of land ownership and transfers for the Ho'olehua-Pālā'au area may reflect the large block of land consolidation first under the Kamehamehas and later by the Molokai Ranch followed by the Hawaiian Homes Commission.

Hawaiian Homesteads

The turn of the century also brought the most significant political changes to Moloka'i and the rest of the Hawaiian Islands. Following the overthrow of the monarchy in 1893, the United States claimed the islands to be an annexed territory in 1898. To champion the Hawaiian people's rights, Prince Jonah Kūhiō Kalaniana'ole became a delegate to the United States Congress. Due to Prince Kūhiō's efforts, Congress passed the Hawaiian Homes Commission Act in 1921 which set aside

land throughout the islands to be reserved for the native Hawaiian population. An administrative body, The Hawaiian Homes Commission, was created, consisting of the Governor of Hawai‘i and four appointed citizens, three of which must have half Hawaiian blood or more (Keesing 1936). The Commission has evolved so that today it is composed of nine members, at least four of which must have one quarter Hawaiian blood or more (DHHL n.d.).

Resulting from the Hawaiian Homes Commission Act, the plains of Ho‘olehua and Pālā‘au were among the homestead lands designated as such, and in 1924, the first Hawaiian homesteaders settled there. Ho‘olehua was one of the first Hawaiian homesteads in the state, second to Kalamaula, which was established only two years earlier. There were three waves of early settlement for Ho‘olehua: the first 75 people that arrived between 1924 and 1926; another eight that came in 1928; and an additional 48 that moved there in 1929 (Keesing 1936).

The Hawaiian Homes Commission Act designated more than 200,000 acres for Hawaiian Home Lands, with roughly 3,500 acres constituting the Ho‘olehua Homestead. The early homestead at Ho‘olehua consisted of the following:

...153 tracts of approximately forty acres each allotted, also a special group of 10 residential lots, besides other units connected with the scheme: a school and school farm, a community hall, an office of the Hawaiian Homes Commission, churches, stores, and camps for Filipino laborers who work in connection with the pineapple industry. (Keesing 1936:28)

Mele

Like the traditional chants from ancient times that give us a window into pre-contact Hawai‘i, the modern songs of today also provide a glimpse of the specific recent time and place that they were written in. It is interesting that most of the songs about the central Ho‘olehua-Pālā‘au plains refer to the Ho‘olehua homestead with loving affection. While the songs *Moloka‘i Hula* and *Nani Moloka‘i* both praise the entire island of Moloka‘i, the former declares that Ho‘olehua is a beautiful homestead while the latter states that pineapple has brought wealth to the Ho‘olehua area. On the other hand, the song *Ho‘olehua* is a composition that only proclaims the pride and aloha for Ho‘olehua homestead. And finally, the song *Nā ‘Ōpio O Moloka‘i* was composed for the students of Moloka‘i High School. It encourages the students to move forward and reminds them that they are the children of the beloved Ho‘olehua homestead. The lyrics to all four of these songs are presented below. (Lyrics and translation to these songs along with their accompanied descriptions are from the www.huapala.org database compiled by Kanoa-Martin):

Moloka‘i Hula - Words by Mary Robins, Music by John Noble

Hanohano ka inoa a‘o Moloka‘i lā Lei ana i ka pua o ke kukui	Distinguished, the name of Molokai Adorned with a wreath of the kukui flower
O ka wehi kaulana o ku‘u ‘āina O Moloka‘i nui a Hina	Famous symbol of my land Moloka‘i, born of Great Hina
O Hālawa e ‘alawa iho ‘Alawa ka ulua e ma alo nei	Halawa, glance down Look quickly, here, see the ulua on the upper surface
O Pūko‘o no‘u ko aloha Me ka ulu kukui o Lanikāula	Pūko‘o, my love With the kukui grove of Lanikāula

Ho'olehua he 'āina nani
Kaulana ka inoa ho'opulapula

Ho'olehua, a beautiful land
Name of the famous homestead

Kalama'ula ahē home nani
Ho mai ko lama 'ai ala no'u

Kalama'ula, oh, beautiful home
Come, let us go there to eat

Hea aku no wau eō mai 'oe
Lei ana i ka pua o ke kukui

I call to you, you answer
Adorned with a wreath of the kukui flower

Source Johnny Noble's Hawaiian Hula - Hālawa (curve) and Pūko'o (hill that supports) is in east Moloka'i. Kalama'ula (red lama tree) was the site of the first Moloka'i homestead. Verse 3, stanza 2, Lanikāula (royal prophet) is the sacred kukui nut grove of the famous prophet buried here after his death by sorcery. Ho'olehua (no seed), another homestead so named because the wind blew away seeds that were planted.

Nani Moloka'i - Helen Smythe Ayat & Ida Hanakahi

He nani Moloka'i
Nui a Hina
I ka ulu kukui
A'o Lanikaula

Beautiful Moloka'i,
Child of Hina
And its famous kukui grove
Of Lanikaula

He nani Hālawa
I kau ike
He waialele
A'o Moa'ula

Beautiful Hālawa,
In my sight
The waterfall
Of Moa'ula

He nani Kalama'ula
I ka ulu o ka niu
He 'āina ho'opulapula
O Kalaniana'ole

Beautiful Kalama'ula
With its coconut trees
Homestead land
Of Kalaniana'ole

He nani Ho'olehua
I ka ulu o ka hala
He waiwai ui
Ke loa'a mai

Beautiful Ho'olehua
With the pineapple
Brings wealth
To the community

He nani Kalaupapa
Ho'okipa malihini
Ha'ina mai ka puana
A he nani Moloka'i

Beautiful Kalaupapa
Welcomes visitors
Tell the refrain
Beautiful Moloka'i

Source: G. Cooke collection - This mele composed in the 1930's honors the prominent areas of Moloka'i and their claim to fame. Hālawa (curve), Moa'ula (red chicken), Kalama'ula (red torch or red lama tree), Kalaniana'ole (chief without measure), Ho'olehua (acting the expert), Kalaupapa (the flat plain)

Ho'olehua - Clarence Kinney

Ha'aeo no ku'u home lā
E ke kau mai la i ka la'i
Ho'opulu 'ia ma ka 'ehukai
I ka nani o Ho'olehua

Proudly my home
Reposes in the calm
Dampened by the sea spray
In the beauty of Ho'olehua

Ku‘u home i ka uka
I ka pā ka makani
Ko aloha pumehana
Mau ana no me ia‘u

My home in the uplands
Where the wind blows
The warmth of your love
Will always be with me

Hu‘i lā koni lā
I ka pā kolonahe
A ke kēhau

Chilling, throbbing
In the distant upland
Where the wind wafts
With the dew

Ku‘u home lā ho‘opulapula lā
Ma ka nani o Ho‘olehua
Ma ka nani o Ho‘olehua

My home, a homestead
In the beauty of Ho‘olehua
In the beauty of Ho‘olehua

Source: G. Cooke Collection – Ho‘olehua (no seed), homestead area in Moloka‘i, was the home of the composer. Translated by Mary Pūku‘i
Nā ‘Ōpio O Moloka‘i - by Ivy Hanakahi Woo

Nā ‘ōpio o Moloka‘i (eō)
Keiki o ka ‘āina (‘āina)
‘Āina ho‘opulapula, (pula)
Eō mai ‘oe (eō, eō, eō)

We are the youth of Moloka‘i, (yes)
The children of the land, (land)
The homestead land (rehabilitate)
Will you answer? (yes, yes, yes)

Nā ‘ōpio o Moloka‘i (eō)
Nānā i ke kumu (i ke kumu)
Ua mau ke ea o ka ‘āina i ka pono
Ua mau ke ea o ka ‘āina i ka pono

We are the youth of Moloka‘i, (yes)
Look to the source (to the source)
The life of the land is preserved in righteousness
The life of the land is preserved in righteousness

Ke kukui o Moloka‘i (eō)
Aloha ‘āina nui (‘āina nui)
Mai ka Lani he makana (makana)
Eō mai ‘oe (eō, eō, eō)

Oh, the light of Moloka‘i (yes)
Love for the great land (great land)
It is a gift from Heaven (gift)
Will you answer? (yes, yes, yes)

Ke kukui o Moloka‘i (eō)
I mua puni ka honua (ka honua)
Ua mau ke ea o ka ‘āina i ka pono
Ua mau ke ea o ka ‘āina i ka pono

Oh, the light of Moloka‘i, (yes)
Go forward into the world (the world)
The life of the land is preserved in righteousness
The life of the land is preserved in righteousness

Source: Lyrics & translation from G. Cooke collection - This mele is dedicated to the High School Graduation Class of 1976

Historic Maps

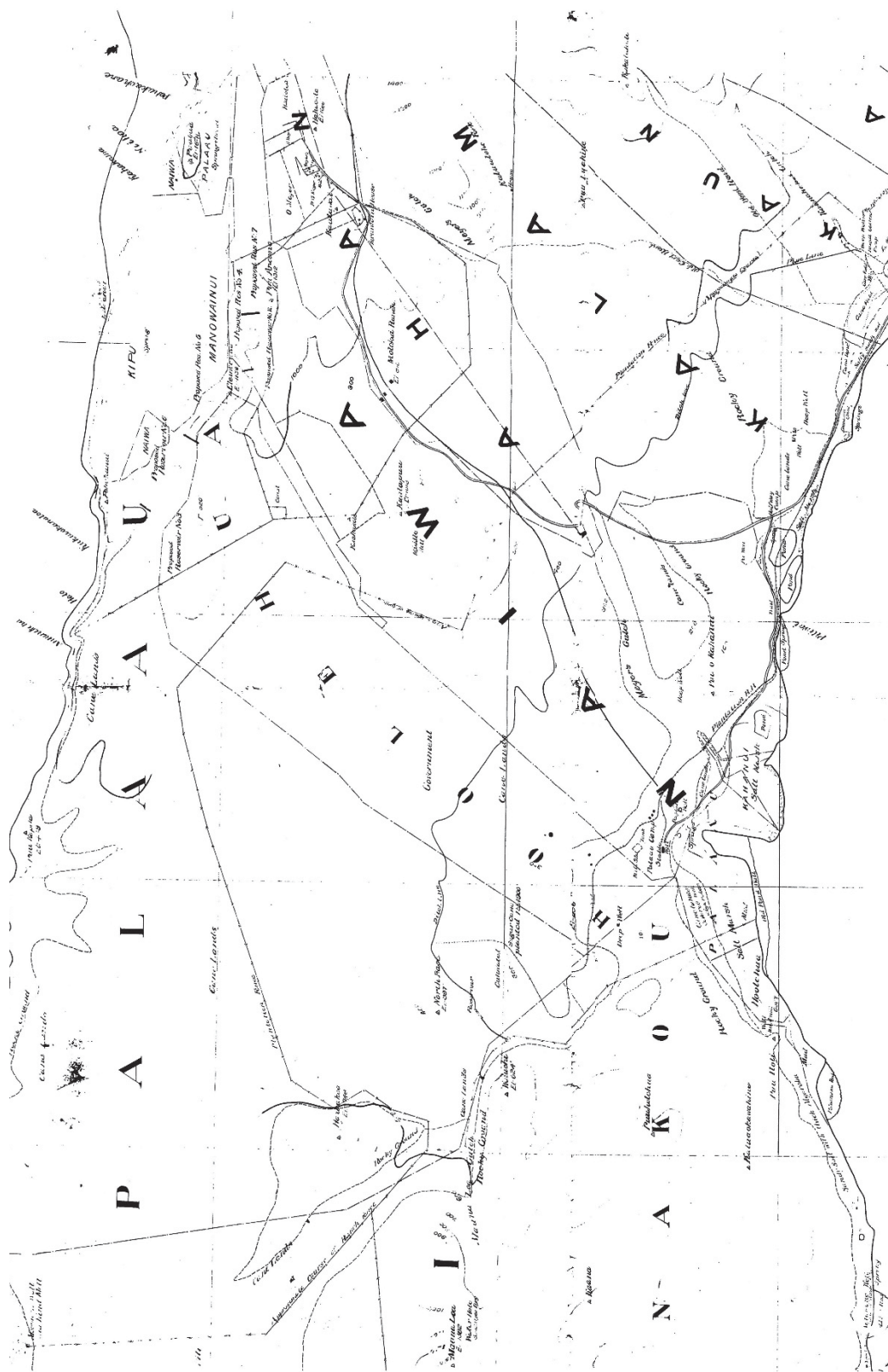
Historic maps help to paint a picture of Ho‘olehua and Pālā‘au in times past and illustrate the changes that have taken place in the region over the years. The earliest depiction of the project area comes from an 1886 map of the island of Moloka‘i drawn by M.D. Monsarrat (Figure 5). General topography and a few place names are provided, but little else can be gleaned about the project lands during this early period. A second 1886 Monsarrat map shows the names of paddocks in the project area vicinity, indicating that ranching took place during that time (Figure 6).

A 1900 map drawn by Lindgren for ASCO shows lands in the vicinity of the project area in cane production (Figure 7). Several roads and a corral are pictured as well. A long irrigation ditch, undoubtedly to support the sugar plantations, runs through Ho‘olehua and into Nā‘iwa.



Figure 5. Portion of Monsarrat's 1886 map of the island of Moloka'i (Monsarrat 1886a).





Among the early maps which clearly point out Ho‘olehuela and Pālā‘au is a Hawaii Territory Survey map from 1915 (Figure 8). The map outlines the numerous land boundaries from the east end of the island and west to Kaluako‘i and Punakou. Notice that Pālā‘au is labeled “Lease No. 117, Area 10516 Ac.,” and Ho‘olehuela is labeled “Lease No. 565, Area 3869 Ac.”

The next map, titled “Subdivision of Portion of Hawaiian Homes Lands of Hoolehuela and Palaau,” dates to 1924 (Figure 9). This is the same year that the central Ho‘olehuela and Pālā‘au lands were designated as homesteads due to the Hawaiian Homes Commission Act. The homestead plots and numbers are clearly depicted. The main roadways that go through the parcel are already in place: Kolea Avenue, Kapeelua Avenue, Puu Kapele Avenue, and Farrington Highway.

The next map is titled “Government Land Of Palaau Ap. 3,” dated 1935, and done by Thomas J. K. Evans (Figure 10). It outlines the portion of the Pālā‘au lands which are bounded on the north and south by Nā‘iwa and on the east by Kahanui. Notice that this parcel of Pālā‘au is labeled “Boundary Certificate No. 82.” Also, the trail going down the cliff to Kalaupapa Peninsula is shown in the top right of the map.

A University of Hawai‘i Land Study Bureau map shows the land uses and productivity of Central Moloka‘i in 1959 (Figure 11). The project area is in beige, marked with “NI” on the map, which signifies “Urban, Home-sites, Military, etc.” There are large areas designated as grazing lands (in green) and pineapple lands (in yellow). The beige plot just south of the project parcel is marked with an “X,” signifying miscellaneous agricultural land for noncommercial use.

Contemporary History

Most of the contemporary history of Ho‘olehuela and Pālā‘au is tied to the Hawaiian homestead lands there. Generations of families have made the area their home. It should be noted that in the 1920s the pineapple industry also came to central Moloka‘i, as seen in historic maps, but this did not extend directly onto the project lands. The island’s major airport was also developed just south of Ho‘olehuela-Pālā‘au, but the project area and its community has retained its rural residential atmosphere until today.

Previous Archaeology

The island of Moloka‘i has not received the same amount of archaeological work as the other main islands and this is reflected in the limited number of published materials relating to the island’s archaeological resources. The following summaries are based on reports found in the SHPD library in Kapolei, and are listed chronologically. The work covers both the Ho‘olehuela and Pālā‘au regions, in the general vicinity of the project area (Figure 12 and Table 1).

The foundation of works that comprise the canon of Moloka‘i’s archaeological resources include *Heiau of Molokai* (Stokes 1909); *A Regional Study of Molokai* (Phelps 1941); and the most comprehensive work to date, *Molokai: A Site Survey* (Summers 1971).

Regarding Ho‘olehuela, a review of the archaeological sites documented by Summers (1971) indicates the presence of Lepekaheo Heiau located west of Kāluape‘elua Gulch; an unnamed *heiau* on the east side of ‘Eleuweue; and an assortment of *pōhaku* on Pu‘u Kape‘elua. One of those stones is a huge boulder interpreted as an adze-sharpening or water-collecting stone, and the rest of the stones are called “The Caterpillar Stones,” which are associated with the legend of the local caterpillar demi-god (Summers 1971).



Figure 8. Portion of a Hawaii Territory Survey map of Molokai government tracts (Wall 1915).

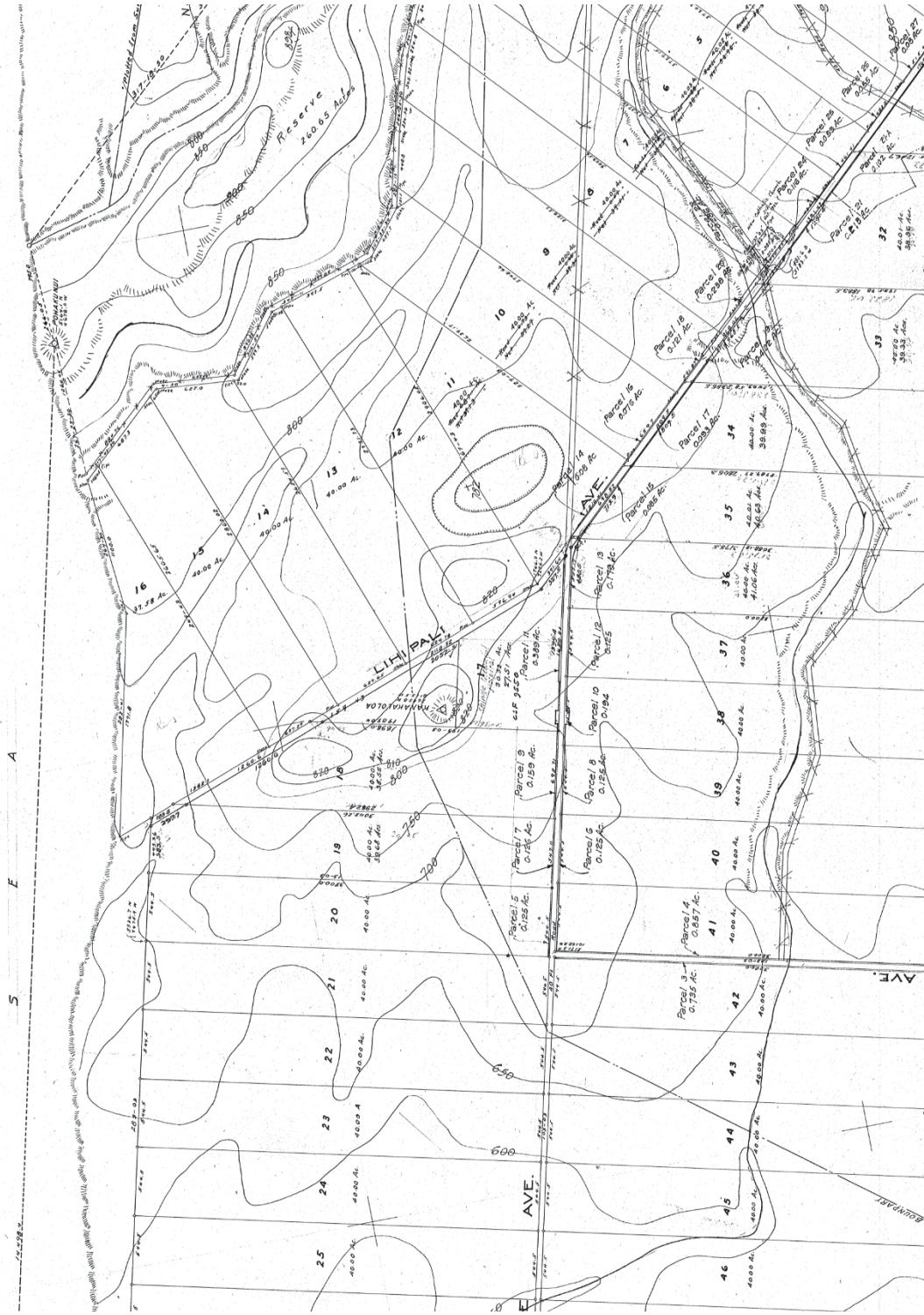
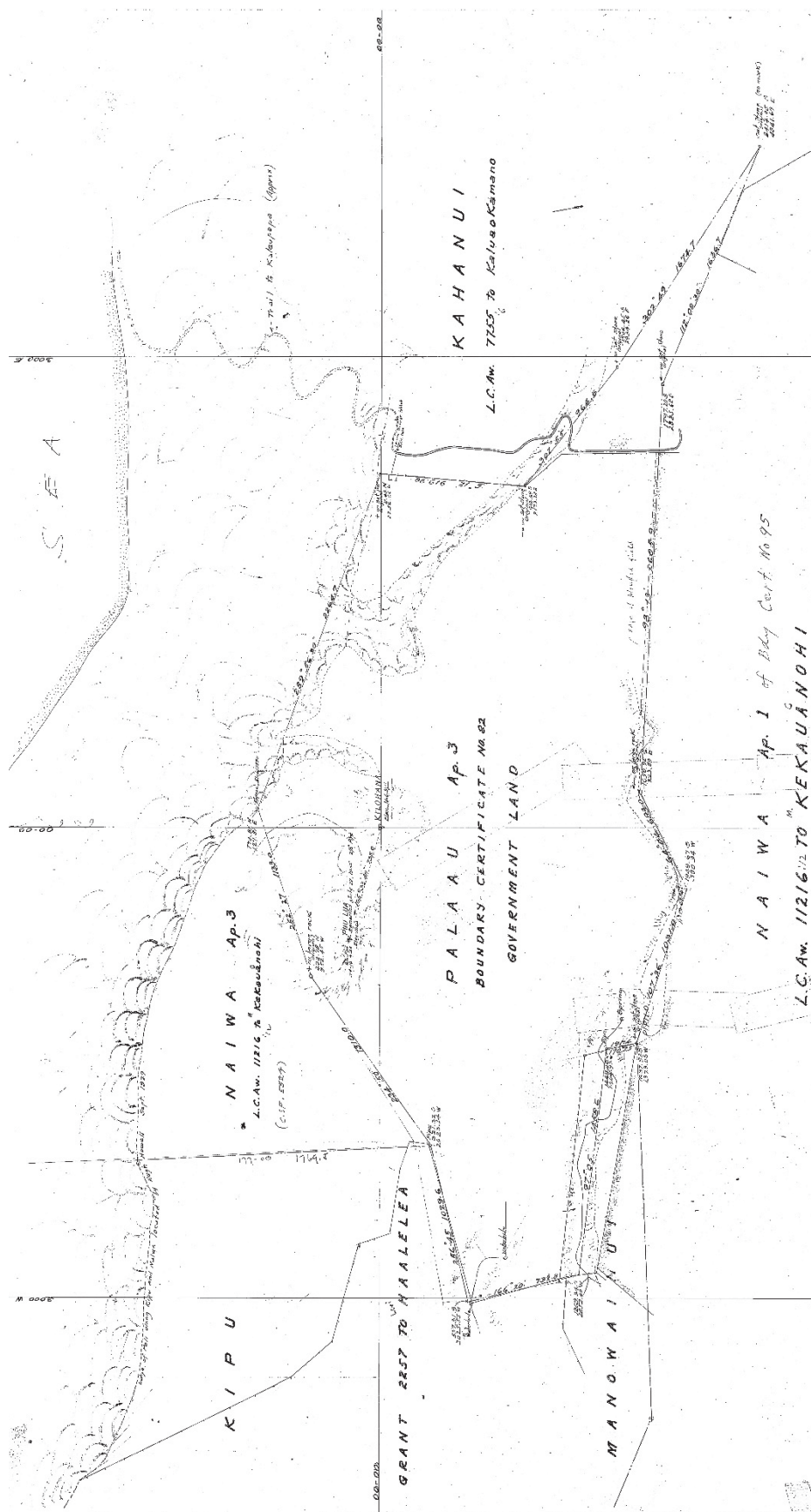


Figure 9. Portion of a Hawaii Territory Survey map of Ho'olehua and Pālā'au (Wall 1924).



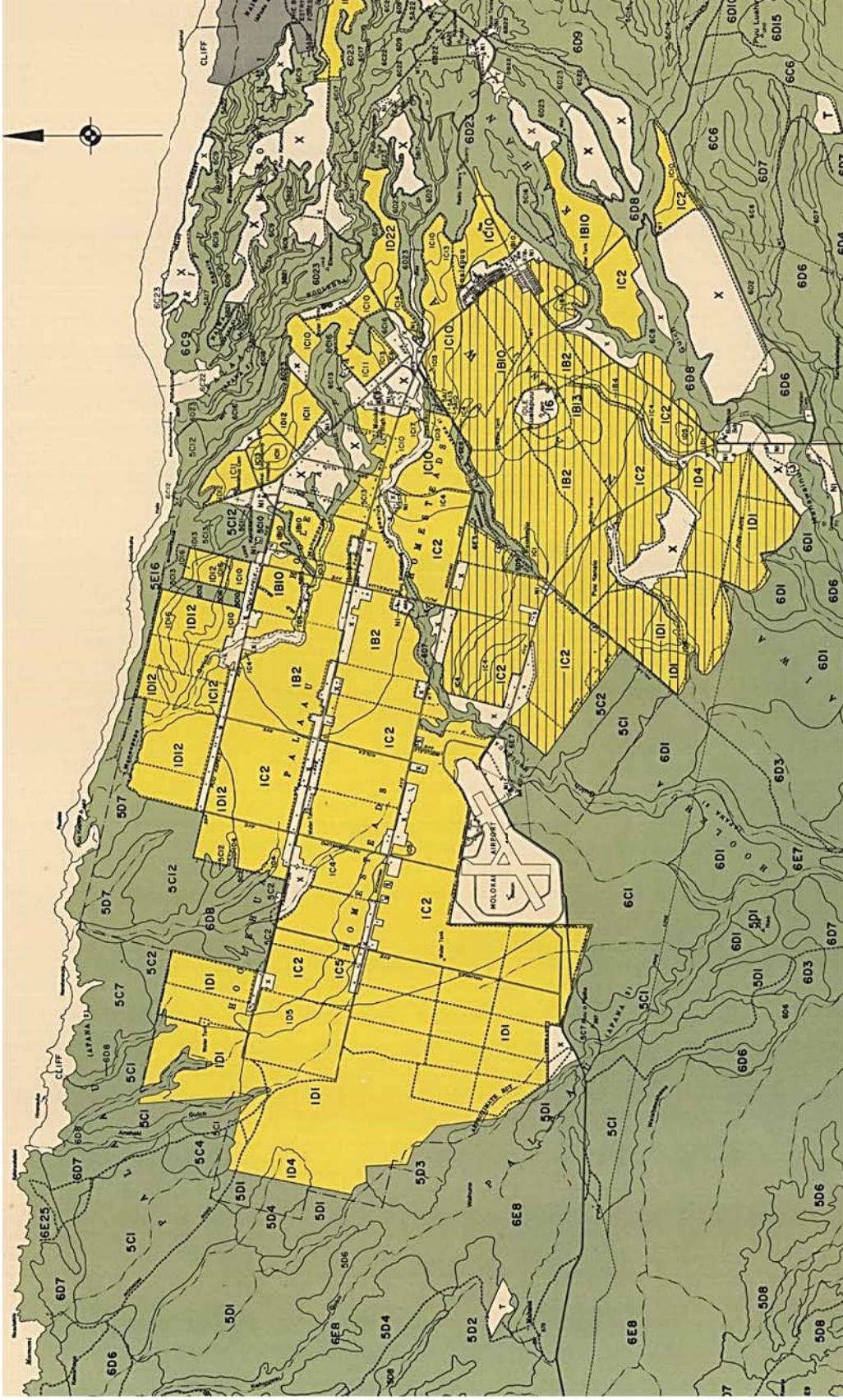


Figure 11. Portion of a map showing land use in the project area ca. 1959 (Fujimura 1959). Note the extent of the pineapple lands in yellow and grazing lands in green.

Table 1. Previous Archaeological Studies in the Vicinity of the Project Area

Author	Location	Work Completed	Findings
Stokes 1909	Molokaʻi, island-wide	Recording	Documented sites island-wide.
Phelps 1941	Molokaʻi, island-wide	Recording	Documented sites island-wide.
Summers 1971	Molokaʻi, island-wide	Recording	Documented sites island-wide.
Curtis 1973	Molokaʻi, island-wide	Archaeological/Cultural Resources Recommendation Report	Recommended the preservation of Puʻu Kapeʻelua and Hawaiian Homes Commission Headquarters.
AECOS 1980	Hoʻolehua Airport	Reconnaissance Survey	Identified World War II sites.
Nagahara and Kolb 1994	Kapeʻelua Complex, Hoʻolehua	Field Inspection and Mapping	Recommended the Kapeʻelua Complex (Site 50-60-03-11) for preservation.
Hammatt 2001	60 km road corridor (multiple <i>ahupuaʻa</i>)	Archaeological Assessment	None.
McElroy 2008	Pālāʻau, Hoʻolehua, and Nāʻiwa	Archaeological Assessment	None.
Kaʻuhane et al. 2009	Molokaʻi Airport Aircraft Rescue and Firefighting Station, Pālāʻau	Cultural Impact Assessment	Compilation of archival and oral history documentation.
Peters and McElroy 2011	27 km proposed waterline corridor (multiple <i>ahupuaʻa</i>)	Archaeological Assessment	None; two previously identified sites in the area could not be found.
McElroy and Duhaylonsod 2015	Current Project Area	Archaeological Inventory Survey	Documented one site, the Kanakaloloa Cemetery (Site 50-60-02-2564).

Regarding Pālā‘au, Summers indicated the presence of a *kahua maika* at Akani; an unnamed *heiau* east of Ho‘olehua Cemetery; a *ko‘a* on top of Pu‘u Kapele; a *heiau* at Anahaki; a *ko‘a* at Na‘aukahihi; and a *ko‘a*, two house sites and many temporary shelters rich with cultural material all at Kahinaokalani (Summers 1971).

The closest sites to the area of study are Site 11 at Pu‘u Kape‘elua in Ho‘olehua, and Site 107, a *hōlua* slide in Kualapu‘u.

Site 11 is located at Pu‘u Kape‘elua, south of the current project area, between Mo‘omomi Avenue and Farrington Avenue. The site consists of two components. Site 11A is known as the “Caterpillar Stones” (Summers 1971:37). Summers (1971:37) quotes a *mo‘olelo* told by Cooke (1949:102), although no description is given for the stones:

...this beautiful girl was visited each night by a lover who left before daylight. She was unable to discover who he was. This suspense told on her, and she began to waste away. A priest, consulted by her parents, advised the girl to attach a piece of white tapa to a wart on her lover’s back. In the morning, sheds of tapa helped to trace the demi-god lover to the hill Puu Peelua, in the middle of Hoolehua. The kahuna (priest) and friends of the family found a large peelua (caterpillar) asleep on the hill. The kahuna ordered the people to collect wood which was placed around the sleeping peelua, and a fire was lit. As the heat of the fire increased, the caterpillar burst into myriads of small caterpillars which were scattered all over the plain. That accounts for the army-worm pest, called peelua.

Site 11B is a “stone at Pu‘u Kape‘elua” located just south of the Caterpillar Stones (Summers 1971:37). The stone was visited in 1959 and consisted of a flat rock, measuring 7 feet long, 6 feet wide, and 22 inches tall. The flat surface contained a 21 inch-long basin with two grooves leading into two sides of the hollowed-out area on the north. On the south, another set of grooves led from this basin to another basin, 18 inches long. Marine shell was scattered around the area. The stone may have been used for sharpening adzes or for collecting water (Summers 1971:37).

Site 107 is a *hōlua* slide on the south-southwest side of Kualapu‘u Hill. Note that the site map in Summers (1971) places the *hōlua* southeast of the project area, as is shown in Figure 12, while the site description says the *hōlua* lies on Kualapu‘u Hill. In 1966, no paving could be identified, but traces of the *hōlua* slide could be seen on the hillside. It is also said that the hillside was once covered in sweet potato fields, which were delineated by rows of stones (Cooke 1949 in Summers 1971:80).

In 1973, the Sub-Committee for the Preservation of Historical Resources Ad-Hoc Committee of the Commerce and Industry drafted a report for the Molokai Task Force enumerating the island’s numerous pre-contact and post-contact archaeological and cultural sites. In the report, the committee specifically recommended the preservation of the *wahi pana* of Pu‘u Kape‘elua, legendary since ancient times, and the preservation of the Hawaiian Homes Commission Headquarters first built by the early homesteaders in 1923 (Curtis 1973).

An archaeological reconnaissance was conducted in 1980 for possible expansion of the Moloka‘i Airport (AECOS 1980). Two alternative sites were surveyed on foot: one at the current Moloka‘i Airport and another *mauka* of Mo‘omomi Beach. Only the airport site is in the general vicinity of the current project area. Several historic features were found there, including World War II bunkers, earthen revetments, Quonset huts, and old roads. They were thought to date from 1942–1947.

In 1994, a field inspection and brief mapping was conducted on previously identified Site 50-60-03-11, also known as the Kape‘elua complex (Nagahara and Kolb 1994). This site, which consists of the legendary “caterpillar stones,” had already been previously mapped. During this field inspection, the site was assessed to be in fairly good condition, and recommended for preservation without

further mitigation efforts. The site was also described to be in Kalama‘ula which might be erroneous since the site appears to be in Ho‘olehua.

In 2001, an archaeological assessment was conducted along a road corridor of 59.55 km (37 mi.) across Moloka‘i for the proposed installation of a fiber-optic cable system (Hammatt 2001). The assessment included a review of literature covering previous work and a field inspection of the route. Regarding the Ho‘olehua-Pālā‘au area, it was determined that the potential for subsurface deposits was low, and no further archaeological work was recommended.

In 2008, an archaeological assessment with a field inspection was conducted through several *ahupua‘a* including Ho‘olehua and Pālā‘au (McElroy 2008). No surface architecture was observed, and no other cultural materials were identified. The negative findings were attributed to past ranching and agricultural activities which have modified the landscape immensely.

In 2009, a cultural impact assessment (CIA) was conducted in Pālā‘au Ahupua‘a for the Moloka‘i Airport Aircraft Rescue and Firefighting Station Improvements Project (Ka‘uhane et al. 2009). Results from this CIA concluded that the project would not adversely impact any Hawaiian resources or practices. It was recommended that proactive community consultation should be pursued.

In 2011, an archaeological assessment was conducted through multiple *ahupua‘a* on Moloka‘i, over a 27-km (16.78-mi.) corridor for a proposed waterline (Peters and McElroy 2011). No archaeological material and/or structures were identified during the project even though archival records indicated the possible presence of two sites. It was determined that previous ranching and agricultural activities as well as modern development may have caused the disappearance of the two previously identified sites. An archaeological inventory survey with subsurface testing was recommended in the event of future ground disturbance.

An archaeological inventory survey was completed in association with the current study (McElroy and Duhaylonsod 2015). One historic property was identified: Site 50-60-02-2564 the Kanakaloloa Cemetery. The cemetery consists of more than 300 graves, including individuals and families associated with the establishment of Ho‘olehua Homestead, one of the first Hawaiian homesteads in the state. Most graves date from the 1940s to the 2010s, and the cemetery continues to be utilized today. Subsurface testing was conducted in areas proposed for construction, and not within the current cemetery. No cultural material or features were found during the subsurface testing. Avoidance and no further work was recommended for Site 2564.

Summary and Settlement Patterns

The Ho‘olehua-Pālā‘au Plain, set on the island of Moloka‘i, has its origin at the dawn of time when Hina and Wākea dwelled together, and Moloka‘i was born. This same Moloka‘i-a-Hina was to become the ancestor of the people of Moloka‘i (Kamakau 1991).

According to Summers (1971), the estimated population of Moloka‘i at the time of contact was around 10,500. Most of this population was established along the southern shore of the island and in some of the windward valleys. However, evidence suggests that the Ho‘olehua-Pālā‘au Plain must have seen some kind of substantial pre-contact population, whether transient or permanent, due to the many *heiau* and *ko‘a* and a *kahua maika* in the area.

Although Moloka‘i remained a sovereign chiefdom for most of its pre-contact history, during the end of the 18th century, the island fell to neighboring O‘ahu and Maui and eventually to Hawai‘i Island under Kamehameha I. It appears that much of central to west Moloka‘i stayed closely connected to the Kamehameha family during the historic era. By the mid-1800s, Kamehameha V

had a ranch in that portion of the island, and after his death in 1872, much of his lands passed into the hands of Princess Ruth Keʻelikōlani and after her, to Princess Bernice Pauahi Bishop.

While ranching was widespread in the historic era, the central plains also saw ventures into sugarcane cultivation, pineapple cultivation, and honey production. However, with the passage of the Hawaiian Homes Commission Act in 1921, the Hoʻolehua-Pālāʻau Plain became a designated location for Hawaiian homesteads, and by 1924, the first homesteaders moved there. The area has developed as Hawaiian homestead lands until today.

ETHNOGRAPHIC SURVEY

As we all know, there are some things that cannot be found in the archives, in textbooks, or at the library. It is here, through the stories, knowledge and experiences of our *kama‘āina* and *kūpuna*, that we are able to better understand the past and plan for our future. With the goal to identify and understand the importance of, and potential impacts to, traditional Hawaiian and/or historic cultural resources and traditional cultural practices of the Pālā‘au/Ho‘olehua region, ethnographic interviews were conducted with community members who are knowledgeable about the project area.

Methods

This Cultural Impact Assessment was conducted through a multi-phase process between February and March, 2015. Guiding documents for this work include The Hawai‘i Environmental Council’s Guidelines for Assessing Cultural Impacts, A Bill for Environmental Impact Statements, and Act 50 (State of Hawai‘i). Personnel involved with this study include Windy McElroy, PhD, Principal Investigator of Keala Pono Archaeological Consulting, Dietrix Duhaylonsod, BA, Archival Researcher, and Pūlama Lima, MA, Ethnographer.

Consultants were selected because they met one or more of the following criteria: 1) was referred by Keala Pono Archaeological Consulting or Group 70; 2) had/has ties to the project area or vicinity; 3) is a known Hawaiian cultural resource person; 4) is a known Hawaiian traditional practitioner; or 5) was referred by other cultural resource professionals. Four individuals participated in the current study. *Mana‘o* and *‘ike* shared during these interviews are included in this report.

Interviews were taped using a digital MP3 recorder. During the interviews, consultants were provided with a map or aerial photograph of the subject property, the Agreement to Participate (Appendix A), and Consent Form (Appendix B), and briefed on the purpose of the Cultural Impact Assessment. Research categories were addressed in the form of open questions which allowed the consultant to answer in the manner that he/she was most comfortable. Follow-up questions were asked based on the consultant’s responses or to clarify what was said.

Transcription was completed by listening to recordings and typing what was said. A copy of the edited transcript was sent to each consultant for review, along with the Transcript Release Form. The Transcript Release Form provided space for clarifications, corrections, additions, or deletions to the transcript, as well as an opportunity to address any objections to the release of the document (Appendix C). When the forms were returned, transcripts were corrected to reflect any changes made by the consultant.

The ethnographic analysis process consisted of examining each transcript and organizing information into research themes, or categories. Research topics include connections to the cemetery, cultural practices, *mo‘olelo*, historic land use, change through time, reminiscences, current use of the cemetery, and comments, concerns, and recommendations for the project. Edited transcripts are presented in Appendices D–G).

Consultant Background

The following section includes background information obtained from each consultant during the interviews. This includes information on the consultant’s *‘ohana* and where the consultant was born and raised. Consultants include Geri Adolpho, Alex Bishaw, Nani Kawa‘a, and Mikiala Pescaia.

Geri Adolpho

Mrs. Geraldine Adolpho was born on December 22, 1957, and currently resides at Mo‘omomi in the Ho‘olehua Homestead area. Although Mrs. Adolph’s family is originally from the Kaunakakai and Mana‘e regions of the island, she has lived in Ho‘olehua for more than 30 years. Since the passing of her husband, Matt Adolpho in 2010, Mrs. Adolpho has been a frequent visitor to the Kanakaloloa Cemetery where her husband is buried.

Alex Bishaw

Mr. Alex Bishaw was born on December 18, 1924 in Waikīkī, O‘ahu, to Christian Bishaw and Henrietta Kaiena. In 1925 the Bishaw family moved from O‘ahu to Moloka‘i and resided on homestead land in Ho‘olehua. The Bishaw family homestead lot is located across from the north end of the project area. The Bishaw family initially grew pineapple on their property, but this endeavor was discontinued after production was unsuccessful. Mr. Bishaw also served in the military for a few years, and then returned to Moloka‘i where he resides today.

Nani Kawa‘a

Mrs. Kenetta Nani Maioho Kawa‘a was born on June 23, 1952 at St. Francis Hospital on the island of O‘ahu to Kenneth Kamakana Maioho and Rena Miriam Leong. Mrs. Kawa‘a’s father, Kenneth Maioho, was from the island of Moloka‘i where his family was one of the first homesteaders to reside in the Kalamaula area. Although Mrs. Kawa‘a was raised in Kalamaula, she currently resides in the Ho‘olehua Homestead where she has lived since 1994. Mrs. Kawa‘a has many relatives that are buried at the Kanakaloloa Cemetery, and frequents the area quite often.

Mikiala Pescaia

Mrs. Michelle Kananionāpua Ayau, or as she goes by today Mikiala Pescaia, was born on December 5, 1975 to Reynolds Leialoha Ayau and Raynette Moanike‘ala Igarta on the island of Moloka‘i. Mrs. Pescaia’s grandparents, Reverend Edward Haleaniani Ayau and Olivia Kaleialohaokālāhui Townsend, were the among the first homesteaders to reside in the Ho‘olehua area at Lot 59 on Farrington Avenue, and the family continues to reside on the property today. Mrs. Pescaia is an educator and a cultural practitioner who is very familiar with the traditional stories of the island.

Topical Breakouts

A wealth of information was obtained through the oral interviews. Quotes from the interviews are organized in the following sections by topic. Topical breakouts include connections to the cemetery, cultural practices, *mo‘olelo*, historic land use, change through time, reminiscences, current use of the cemetery, and comments, concerns, and recommendations. Note that place names are spelled as pronounced in the interviews.

Connections to the Cemetery

[I’ve been living here] like 30+ years... [Geri Adolpho]

So we came there in 1925. We moved here in 1930-something, somewhere around there.
[Alex Bishaw]

On the veterans’ side I have two uncles over there. And then on the Hawaiian Homestead side I get my father-in-law, my mother-in-law, my uncles, my husband’s family which is my family now. [Geri Adolpho]

Okay, so my grandparents, I have an uncle and my father, are buried there besides other uncles, other aunts, cousins, my mother-in-law, so there's quite a few family members, quite a lot of family members I have buried at Kanakaloloa. [Nani Kawa'a]

...And my family, the Maioho family from Kalama'ula, were one of the first settlers on Hawaiian homelands. And so our family is buried toward the bottom of the cemetery. And I notice that in the cemetery, those that were the early settlers are located on the bottom of the cemetery. And as you go further up, people who came later, are buried further up the hill. [Nani Kawa'a]

It was my father loved Moloka'i, but we lived on O'ahu, but his heart was here on Moloka'i. And so it was the appropriate place when he died. We knew that this is where he would want his remains to be. And it was the cemetery, the homestead cemetery, 'cause there's no other place, because he was raised in Kalama'ula so it's real appropriate. And it was something that we just knew that needed to be done, and it was the right thing. And he wanted to be buried next to his mother, and just so happened that the space next to his mother was not taken. So he got everything he wanted, he got next to his mom on Moloka'i. [Nani Kawa'a]

I have lots of 'ohana buried in the cemetery. So my dad's natural parents are Harriet Ahiona Ayau, she'll pass away as Harriet Ahiona Ne. She was married to Jacob Iopa Ne. They were homesteaders in Kalama'ula. Previous to that, my father's biological father was her first husband Paul Kamohoali'i Hapai. All of them are buried there. So my grandmother is buried alongside three of her husbands, the third being Herbert Hooper. Yeah, they all right together, all in the same spot, and as well as, she had a baby that passed while was still infant not too long after birth. And my dad's sister is buried there with her two babies that passed. My dad's, the *kūpuna* that raised him and *hanai'd* him, they're buried there. My dad's brothers, some of their grandchildren, you know, there's a bunch of people in my immediate family buried. [Mikiala Pescaia]

Cultural Practices

So we live there, then my oldest brother came over to help him to build a house, but no more electric those days, back there in 1925, yeah? You live all off the land. So we were living off the land, and off the cliff, down the cliff.... Yeah, make 'opihi, that's for our meal. [Alex Bishaw]

People do plenty hunting in the area. So my homestead is like, I don't know, couple homesteads down, but it's along the cliff where I live now with my husband. And that's a Makaiwi, now Pescaia homestead, Lot 22. And there's a lot of traffic between our place and over there. You know, you hear it, you see it. When my father and my uncle was like, they all used to go rappelling down the cliff for go *holoholo*, go pick 'opihi, go fishing. [Mikiala Pescaia]

There's this wonderful family story I would like, my mom was 8 months pregnant, I think, with me, and she rappelled down the cliff 'cause they had to go *holoholo* for something. And I remember my 'ohana just being like, "You crazy." And she was like, "Ah, can, can." People weren't afraid, or I don't know. But I don't know too many people who rappelled down. I guess now we have better access to the coastline, you know. The road to Mo'omomi is little bit more cherry. You can drive down now, and you don't have to be so dramatic. But I know for a long time, people did, the cliff didn't prevent them from gathering in the area. [Mikiala Pescaia]

No [I don't know of any hunting, gathering, fishing, or cultural practices that occurred in this area].... Other than I guess because my family's Christian, there's really no cultural practice other than maybe a chant or a Hawaiian song occasionally when I go to funerals and things like that, but there's nothing else out of the ordinary that would be really cultural, that I would say would be really cultural....Basically what's observed mostly at the cemetery would be Christian types of things that we do, pray, sing. [Nani Kawa'a]

Mo'olelo

And you know, I was told that you didn't bury people where you planted food, you know, the land use was separate, and given all the cliffs of the Ho'olehua *pali*, you know that back side, and of course Keonelele in the Mo'omomi area which is the traditional burial grounds for the people who lived in that area. This was, from the top of the hill, you can still see that area. So I think there is definitely, say a spiritual connection, but there is a connection between where they used to bury *kūpuna* or people and selecting this location for the cemetery. I'm not sure why, this is just things I've heard or observations I've made. [Mikiala Pescaia]

...So this is an interview conducted February 25, 1988, Harriet Ayau Ne, and what's happening is Philip Spalding III, he's coming to the Kupuna Program, the Alu Like Kupuna Program, and he like talk story with her and gets all this biographical info, and then he just starts asking her questions about all kind stuffs. Anyways, she says:

The story of Kanakaloloa, the talking shell, the story is still hidden, it starts in Anahaki, the area before you get to Mo'omomi. Anahaki means 'a broken cave.' The current comes from the ocean and into this cave, and then at one time they had fall storms and broke the entrance to the cave, and it began to shoot up. So the cave has an opening in the top. And in this cave was a shell...And Anahaki was ruled by an old, old man, an old chief, I can't remember his name. But he ruled there at Anahaki. And he could prophesy anything...

For instance, like he would have this premonition, like Maui is coming to attack, and there would be war, and at a certain time and place. And so he always prepared his village for anything like that, or if there was going to be dry season, and then he would prepare his people to cultivate the right plants and vegetables so that they would have something to eat. Or if there was going to be a storm at sea, he just made sure that everybody adjusted what they were doing to make sure that they survived or was okay through all of these things that were coming.

And all the other chiefs were jealous of him, his ability to predict. And they wanted that *mana*, but they didn't know where the *mana* came from. And so the *mana* actually comes from this shell that talked to him, and it was kept in this broken cave of Anahaki...She says Pu'u Pipika, and Pu'u Pipika is the area before you get to Mahana, and it's not Waihuna, but it's the area on the top on the hill.

And so by Pu'u Pipika, right in that area, is a young chief. He wanted to get this *mana* 'cause he wanted to extend and include all of Anahaki in his territory. So he was like a neighboring chief. So he went to Anahaki to live, just to pretend, 'cause he wanted to be part of the family, the community, and kind of get the scoops. So his intentions was to find out where this *mana* was coming from. So he lived there for one year, and he still couldn't find out. He used to follow the chief, and when the chief go to sleep, he'll follow him to bed and check on him, be sure he sleeping. And during the day, wherever he went, he kind of snuck around and followed him.

And so one night he was going to the chief's house, and he saw the chief come out and go towards the sea. So he followed him. He saw the chief going to the top of the cave, go down, climb on the side of the wall, came to his shell, and he picked it up, and it was this great big shell. And he heard him, put it to his ear. First he talked to it, then he put it to his ear, and then he put it back. And he was there only about ten minutes. He put it back. And then he looked around, and then he went back home.

So this young chief, right, he goes down. And he's trying to figure out like what is the secret, like how do you activate this shell, right? So he keep following the chief, and he cannot tell like what he saying or what he doing. [reading to herself a snippet of the transcript] Yeah, so every time he came out of the cave, he had a new prediction, or he had new wisdom, you know, something to tell the people. And so, the young man, he goes down into the stuff, he finds the shell. He puts the shell to his ear, and all he heard was the ocean. And he didn't hear anything. He didn't know the password, like he didn't know how to activate it, or what to do to make the shell talk.

So he kept following the chief every time he went. And one night when the chief left, he went right back and thought maybe the shell would keep on talking. But all he heard was, "Beware, beware of your enemy." And he didn't know what that was about, what he was hearing. So because he heard the shell talk, he said, "Okay, this must be where the high chief getting, like the shell talk," right, like he kind of actually heard 'em himself. But he noticed that the old chief would talk first, like he said something to the shell, and then he would listen to it. So he knew that had to have like one password, like one activation thing, you know, something that you say to *ho'āla* the shell.

So he hide behind the stone, and then he hears the chief say, I think it's supposed to be, "*Pehea ka puka? 'O au kēia.*" And so he tried to remember that. As soon as the chief left, he went to the shell, and he said, "*Pehea ka puka? 'O au kēia.*" And then the shell said, "*'O wai 'oe?*" And then he said, "Oh, I'm a friend. *He hoa aloha kēia.*" And then the shell said, "I don't know you. I gave the instructions already." So he knew then, that with this shell, that the only way that he could stop the *mana* from this chief was, 'cause he was really trying to break the *mana* of the chief, right? So he was like, "Man, if I cannot get the shell to talk to me, and I cannot like, I gotta just take the shell." So he took it. And he stole it and ran away.

And so the chief the next day went to look for the shell and couldn't find it. And he was so heartbroken. So he told all of his family where Anahaki, like he led them to the cave, and he told them that somebody stole his prized possession and described the shell. And they asked him where was kept, and he said that, "In Anahaki, in the cave." So everybody was looking around, trying to come up with some clues.

And then so one lady remembered seeing the young chief come out of the cave that night. And so she told the chief, yeah, "Oh I saw that boy." And so they went to search his house. Then he knew. And once she said, very much he had a suspicion that he was the one, you know, 'cause he was the newcomer, yeah, they kinda was like, so Molokai yeah? We just suspicious of all the guys who, brah we know your backstory, like we don't know you. So anyways, he better run away, so he took that shell that night, and started running. And then he ran and ran, and the chief told all his warriors to watch him, his every move, don't let him leave the village. Then they realize he was digging out right? So he started to run eastward going up the hill, and they chased after him, but they couldn't catch him. So what they did is *pohu 'ule*, I don't know if that's the right word, but they lassoed him, caught him right around the waist, and he fell down. And so his body was down on the ground, but he wanted to escape. So he crawled with his hands, and his body stretched and stretched and stretched. And his waist stretched so his body, the lower part was down where he fell, but upper part kept stretching and stretching until he got on the top of the hill. Then he

collapsed. And that's where the cemetery is. And so they called 'Kanakaloloa, The Long Man,' was a tall man.

That's how the place got its name. So when this man, the running man, collapsed, they were able to get ahold of the shell, and took it back, back into Anahaki. So that's my grandma's story about how the place got its name. [Mikiala Pescaia]

I've heard other *mo'olelo*. I think Kumu John shared a *mo'olelo* about the *menehune* standing on the hill. And I was trying to look for it 'cause he had one other version of where that, how it got its name, but if I find it, I'll forward it to you. [Mikiala Pescaia]

Pālā'au get choke [*mele*]...I haven't seen anything specific for Kanakaloloa, but I wouldn't be surprised. Yeah, I cannot [think of any *mele* for Kanakaloloa] off the top of my head... I've found that *kanikau* are really cool resource for place names 'cause they like to *helu papa* somebody's life journey. And so you kind of get one idea of who, what, where, when kind. And so I've come across a lot of *mele* for the Pālā'au. I've never heard of Pu'u Pipika before. [Mikiala Pescaia]

I don't know if it's from before or since the cemetery, but get plenty, not *lapu*, but *lapu* I guess. I mean, get plenty *kūpuna* walking around over there at night, like plenty. [Mikiala Pescaia]

The *ala* or the *leina* is actually little bit up above in the Na'iwa area, but it's not that far actually. Like when you standing at the *piko* stone at Na'iwa, you can look down and actually see Kanakaloloa, like which I think is kind of interesting 'cause again it's that connection like between these points of passage. You know what I mean? Like I kind of interested why they went pick that spot because I don't think it was just random, like, "Oh that look like one cool place." I really think like 'cause it's almost halfway between, I mean well it is in the middle between Keonelele and the *ala* that goes to the *leina*, so the *piko* stone, and then the *leina*. [Mikiala Pescaia]

Actually, I don't remember the *kūpuna* talking about it except it's not a scary place to be. And other than them mentioning Uncle where they didn't want him to be lonely and by himself, and it's I guess our concept of death is a little different, we just think of our loved one that we buried as still being but in a different realm, so to speak, but they're still with us. [Nani Kawa'a]

John Ka'imikaua was a *kumu hula*, and basically his chants and everything his knowledge was all about Moloka'i. And so our cousin, whose name is Marcia Camera, was somebody that had given me a book with stories and things that John had shared information. And I know in one of the *mo'olelos* that talks about Kanakaloloa is where the *menehune* used to play. And I have it, and not very many people know of that *mo'olelo* because a lot of what John shared, the history of Moloka'i is really undocumented history. So I would have to go back and look at my research notes. [Nani Kawa'a]

...I remember hearing people say that they used to see *menehune* over there anyway. And so, that was kind of interesting to me. But again, you know when you're young you don't pay attention to stuff like that. [Nani Kawa'a]

Well the story of old Hawaiians was something like "tall man, walking back" at this time. So like you ask, "What is *kanaka*?" *Kanaka* is Hawaiian for "man," the *kanaka* man, or something like that. So this word, "Tall man," that's walk in the back here, the Hawaiian stories go. I don't go too much with this kind stories where you get all screwed up. [Alex Bishaw]

This [road] goes straight in the back to the cliff. That's why they call it "Lihipali." [Alex Bishaw]

Historic Land Use

But this area, the cemetery, wasn't open yet. We had the hospital and all up here yeah? So went along like that, back in '25, somewhere around the '30s, they closed the cemetery down at Homelani... They closed that one to extend it up to Kanakaloloa. [Alex Bishaw]

So that's how it came up here, and only the Hawaiian homes one. And then somehow they allowed the veterans. They had some veterans' homesteads over here with the National Guard. So they were asking if they can have a cemetery up in Ho'olehua where they can use it for the homestead veterans of that sort. But when they gave 'em, they started to extend within their area, they only have the corner of the cemetery for the veterans. And the rest is homestead. [Alex Bishaw]

Oh yeah, you walk down here. See we were at the end, and down in this area, this little open area here, they made a pasture there. The Hawaiian Homes Commission used to raise cattle, not raising cattle for the Hawaiian Homes Commission, but for the homesteaders that have there. So in the back there, they had a pasture that's made for bulls. And all the cows were in the pasture. So every homesteader had cows, cattle that they raised. Instead of raise at home, they raise 'em at the pasture. And then twice a year I think, they have round up, where you go to look for your cattle. [Alex Bishaw]

They give 'em the brand or whatever yeah? And then anytime there is for spawning, so they take the bulls, and they would throw 'em down in the pasture, and then go around with the cows. And they get calves from them, and they bring it all together, and then they have a round up. And then you look for your calves. It's already there. When the calves come out, you have a brand. You have the ear mark. Sometimes the calf is so young that instead of branding, no more time to brand. When they catch 'em, they put the ear mark on. And then when the homesteaders come up for the round up, then you look for your calf. [Alex Bishaw]

... We moved because over here when they went into pineapple, we had hard time raising pineapple, all back here too, because of the salt air... So we have vegetables and things like that. We had hard time yeah? [Alex Bishaw]

In Ho'olehua, anywhere you see black paper-plastic shreds had pineapple field there at some point 'cause that rubbish is like everywhere, and it's in the dirt. So you know those kinds of indications tell us it's been grazed before. You'll notice some of the features have been disturbed. [Mikiala Pescaia]

So we got low ration water. As far as farming is concerned, it was hard to farm because you gotta farm when get rain. No more rain, no more water.... Yeah, and you know, homesteaders had really hard time with the coming on, 'cause lot of Hawaiians when they come on the land, they want to plant taro, and all this kind, East End here, East End side good, but with the stream water coming down, and all this kind. [Alex Bishaw]

Yeah, growing on the land. And then this is really funny because down here not too bad, this open area, yeah? But not too much went into pineapple because there were two companies at that time. Well at first it was only Libby, McNeill, and Libby, and then they had Del Monte but it wasn't Del Monte, it was California Packing Corporation, CPC, and later on it became Del Monte...And then when it started to increase, then lot of the Hawaiians worked on the land. They don't wanna work pineapple field, you know, so what

they did was hire from outside. They brought from the Philippines, they brought from wherever to come and stay, and they had camps, which they have like in Kualapu'u, you know where the store is? That used to be California Packing CPC, California Packing Corporation... And they had this people come over and stay, and they have, like build this kind temporary homes for them where they can stay. [Alex Bishaw]

You get so much [pineapple]. They give the homesteaders so much. And then during the harvesting season, you know, it goes over, and then you get bonus after that. And it was good. And lot of homesteaders use that to pay off their lot as they went along... Yeah and then that went into, what you call, credit union, the Department Hawaiian Homes Credit Union, and then homesteaders got to go in there and put their money into the credit union. This is how it really went really good. [Alex Bishaw]

And this area here, the cemetery, it was good for the homesteaders because they no have to go all the way down to Homelani, you know, right up in this area. So I'm not sure when the veterans got in with the Hawaiian Homes to have their cemetery there. [Alex Bishaw]

[Before it was a cemetery, it was just] open land. [Alex Bishaw]

Okay, right there is another hill, and then they had a camp there... Yeah, they had a camp there, that hill there yeah? And they used to call it the Kanaio Camp... Mmhhh, the Japanese, the Filipinos. [Alex Bishaw]

Below the airport was all pineapple that area. So some of the homesteaders that didn't plant their land, or couldn't plant, or something like that, so they got like an area down in this area. They got just like, temporary, of the land, where you can get, from the pineapple, you know you get so much go to you, so much go to the... yeah? And this is how it's been done with Kalama'ula. Kalama'ula was all pastoral lots. But when they cut off the pastoral lots from them, they threw them down in this area where they can get only pineapple lot. [Alex Bishaw]

Change Through Time

Yeah, even you know when we first came to Molokai yeah? When we first came to Molokai, water was real hard to get in the back here. Yeah? So in other words, we having a tank, there's a wooden tank at that time way back in this area., and then that was for feeding. Molokai wasn't as filled up as it is. This was long before. Afterwards, and then they came. But when we were drinking water, we were drinking water from this tank was coming out. But the tank was coming out from the mountain, intakes, down into the tank, down to here. Okay, when no more rain, the water get slow, what happen to down this area for the water? This all was ration water. [Alex Bishaw]

Well because my family was the early settlers of Kalama'ula, there weren't as many graves as there are now. There's more and more, and more and more people are bringing things to the cemetery, little mementos, like a carburetor, or the *lele*, like John Ka'imikaua, Kumu Ka'imikaua has his *lele*. So there's a lot more trees are planted, like somebody planted a tree or it grew into a tree. So that's all I notice. [Nani Kawa'a]

When we used to go up, when I was little, there were very few graves. In fact, my uncle who's buried with our family is a veteran, and rather than being buried at the veteran's cemetery, my aunty didn't want him to be buried there 'cause at the time he would've been I think, I'm not sure if he would've been the first one or the only one on that side. She felt that she didn't want him to be lonely. So she had him buried where our family is... So every year, sometimes he's forgotten as far as being a veteran, and he doesn't always have his

flag. So definitely every Memorial Weekend, I always go up and check to make sure that his grave has a flag on it, that they remember the veterans that are buried on that side of the cemetery. [Nani Kawa'a]

Reminiscences

Yeah, I was a child. We usually go up to the cemetery when our family member passes away, but more vividly I remember like as a teen always going up, having to clean the graves, putting flowers on the graves, and that's my memory, or going up whenever somebody, there's a funeral. [Nani Kawa'a]

I paid attention to the graves because number one, it's kinda weird when you're a little child to see the *kūpuna* talking to the stones. And you're wondering what's going on. And then they would scold you. You cannot just go step all over. Don't go just stepping on people's graves. You had to like show respect, and you walk around. Don't just step all over. Watch where you walking. So that kind of stuff is what I remember. I didn't pay attention to what was next door or whatever. [Nani Kawa'a]

So we build that terminal [at the airport]. And I had a good experience on that terminal there when we were working. We did the concrete work, the foundation, and they were getting the sand from down in Mo'omomi, they bringing the sand up, and then we're throwing that in for concrete. Yeah, somehow when you look at Mo'omomi, this place were all battleground before. So you can tell what's under there yeah? In the sand, and sometimes you go down there fishing, you can see the bones, out of the sand, the head and all that, lot of bones are there. So lot of this bones came up.... And then we were running the, we were screening it, but sometime they go, it goes in there, and you mix 'em. [Alex Bishaw]

Yeah, that was after they found that bones were going into the concrete, yeah? So they made us screen it real good and bring all this bones out, and then they come up with the truck pick it up, and then take it back down there and then buried it, whatever they doing yeah. So they do that and then when I still working for the company, they had the tunnel going out yeah? The tunnel was starting to start at that Waikolu tunnel where they were going to have water to come out. [Alex Bishaw]

Past and present land use, you know as far as I know, it's always, eh I learned to drive up there. It's always been this very peaceful place. I mean all of Ho'olehua is pretty much peaceful, but there's something special about being on that downslope hill that separates it from the rest of the rolling 'uala plains coming down towards Mahana or towards the Mo'omomi area. And if you look at it, it has that sort of natural, because of that hill, there's this natural separation. [Mikiala Pescaia]

Our kids gotta know where they come from, who they connected to. I mean, I used to walk around, like my dad, we would just come up, we would clean our graves, and then you just walked around and read everybody's names, and you know, as one kid, you kinda start picking out, eh that's my friend's last name, or sometimes my friend's first and last name, like how come, like how come my friend's name is over here, you know like that's not my friend, what happened to my friend, you know, and then, oh no, no, no, that's the grandpa, you know, or that's the uncle, he was named after the uncle. You like, "Oh," and you learn so much about how people are connected, and even like the placement right? So this person is buried next to that person because they 'ohana, and then you just hear like, you know, the *makuas* are talking like, "Oh no, no, no, 'cause das da real mother." You know? And it was like, "I thought Auntie So-and-So was his mom all this time." [Mikiala Pescaia]

Current Use of the Cemetery

I go over there, and I visit with Uncle Matt, and I sit down and talk story. And then with my family, we go over there, we sit down, we hang out, we eat over there, yeah, and we visit, and stuff...I go at least once a week, sometimes more, and my daughter go every day. She one good one for interview. [Geri Adolpho]

And then they used to have [the veteran's cemetery] where it is now, you go down to the end of you know where the road is, and there's the flagpole over there, and have their services right around one small little area there, until they went up. [Alex Bishaw]

Now I go up whenever there's a death or burial, but if there's not, I usually go up about once every other month or so. [Nani Kawa'a]

And so that's how, what I did hear was usually, people didn't share stories about the area, they were sharing stories of the loved one, memories of, "Oh this is my neighbor." And people would talk to the headstones or whatever like that, "Oh hello Auntie So-and-so, Auntie Pua, how are you today," or "Hi Uncle Heine, what are you up to? I had a good week this week." So that's what I remember every time we used to go up to the cemetery. The conversations were focused on talking story with your family as if they were present. [Nani Kawa'a]

I really don't because I think the more people we have, maybe the more use, right now it's too early to tell. There's only that one family that goes up, and they have their own picnic table. And they go regularly and have picnic, but I don't know how it is with others and using the cemetery, I don't know. [Nani Kawa'a]

Okay so every year the boy scouts go up really early at sunrise, and they raise the flag. They do a little flag-raising ceremony. So we say the Pledge of Allegiance, we might sing a song, have a prayer, and then sometimes they have people talk, like maybe veterans will share their experience. And every year it's different depending on who the speaker is and who's planning, but the service isn't very long. It's just maybe half an hour. But it's really neat to watch the young people, these little scouts raise the flag, and then all of us to do the Pledge of Allegiance, and to honor those especially on the veterans' side where they honor those that served in the military. I think it's a nice tribute for them. And then usually the flags, I don't know when they put the flags up, but I really love to see those flags. I love to see 'em on the graves. [Nani Kawa'a]

Mostly from Ho'olehua, and I don't know if the other boy scout troop in Kaunakakai takes care of the graves down in town. But I know in Ho'olehua, it's usually our scout troop that goes. And it's really quite nice, and the boy scouts are from, I think they start like from 8 years old all the way on up. But they all come in their uniform. They fold the flag, well they do everything, I mean like a regular flag raising ceremony with a little more, not like the school how they raise the flag. The flag, they just do it. But this one, it has... More, not only purpose, but there's more discipline in doing it. And they follow the protocol for the flag whereas you don't let it touch the ground. I think it's pretty neat. It's more disciplined, and it's really nice. And to see them salute, and then to say the Pledge of Allegiance, it's really nice, quite nice... I think there's a sense of pride. I hate to see it, and maybe that's why it's not so scary because knowing it's just people, homestead, and their families, maybe somebody has, like my dad, has been off island, and we asked permission to bring him and have him buried in the homestead next to his mother. For me, it gives me a sense of pride, and I hope that, it's nice to know that all of us had the same struggles being homesteaders. We all went through because it's a little different when you live on the homestead, and especially here on Moloka'i. [Nani Kawa'a]

So ever since I was little it's always been a thing. You take your *'ohana*. You go. You spend the day. You clean graves, you know. My papa always said in his yard, he didn't water anything that you couldn't eat. And so, his wife, though, loved flowers. He never watered any of her flowers. He was like, "Eh if you like do that, you do that." So anyways, every time we would go, I remember picking all the fruits or whatever was in season, or you know, vegetables, whatever had, and instead of taking flowers to the grave, we used to take mango or daikon or whatever we had or whatever was happening at the time. So from small kid time I remember going up and putting food on the graves, which is different I guess. And they would always find the choicest flower that we could, and just you know, like one for Grandma. [Mikiala Pescaia]

My other *tūtū*s, they kinda never really care one way or another so we usually just sing for them. But you know, it's one *pu'uhonua*, I mean, the people of Ho'olehua, time and time again, I've seen people just making a day of it, bringing all the chairs, bringing the food and drink and *'ukulele* or whatever and hanging out and spending the day. And we've definitely outgrown our cemetery which is actually kind of nice because of all the places you could go, you choose to come home to that area. It speaks to the *pilina*, the relationship, that people want to be buried amongst their family and stay connected like that. And we're glad that's an option. [Mikiala Pescaia]

You know, like right below my papa them...the biggest headstone was Mitchell Pau'ole, you know, he's buried right below, like right at my papa them's feet, you know and we used to think like, "Ho man, this guy must've been awesome," 'cause he had the biggest marble slab headstone." You know, now he's kinda outdone by other people, like but, back then, you know, and then you go into town, you get one whole facility named after him, makes you wanna ask, "Who was this guy? Like why, how come he get such one big stone?" And then you hear the stories. And then you see the, you know heart, you know, just all the different kind of markers, like anyways. I loved hearing the stories. And now that I'm thinking about it and saying this out loud, like I'm a little regretful that I don't take my children as often as now I'm realizing I should 'cause maybe this is making me realize that how valuable... [Mikiala Pescaia]

Comments, Concerns, and Recommendations

I think that is a good idea to have an extension because it looks like it's getting full, and get more families on the homestead so would be kind of good to provide that for the homesteaders. And if get the land, you might as well utilize 'em. [Geri Adolpho]

And then for the pavilion, I think that's good too because it's hot over there, and sometimes people need shade like that, and not everybody get access to the veterans' side. And so I think that it's a good idea because when people gather like that and sometimes the weather rainy, and they like still go visit their families like that, at least they get one shelter. [Geri Adolpho]

No [I don't know of any concerns the community might have] [Geri Adolpho]

I think that they shouldn't go over there and hang out if not over there visiting, you know. If they visiting and hanging out, then that's good. Like, you know, sometimes like for Uncle's anniversary when he passed away, we get plenty family members that come over there and eat, and we get potluck, and you know, spend time over there. But like that, you know, and I hope that nobody will go over there and abuse the place. [Geri Adolpho]

Well, I think when they build the pavilion then I think I'd like to see how they going make 'em like that, you know, the parking, and the way it's built like that, to have some input or,

you know, suggestions like that, yeah... You know, you want one good amount of parking like that. And then the pavilion, you like 'em little bit spacious, and you know, like how the wind blow and the rain blow, you like coverage, like that yeah. [Geri Adolpho]

You know, I cannot think of anything that would raise red flags in opposition. I think more than anything, the expansion would allow for more people to have comfort in knowing that they could be buried in Ho'olehua, because people know that they running out of space. And when they first created, like I think you could have like four, I don't know what the number was, like four or six people per homestead, like that's how many plots you were entitled to. But now that the plots have changed hands, you know, 100 years almost, of people being born and dying, like man, we went max out. Everybody's like, "Okay, where we going put this aunty?" People are forced to be cremated so that they could be interred legally or whatever on the plot because it's smaller. So you can take one regular coffin plot, and you can put six guys in there or whatever, you know, you can build one crypt. But you know, I think people are entitled to the option of not being cremated, you know, if they don't want to. And I know that people rather stay together or stay in Ho'olehua. [Mikiala Pescaia]

So I think the benefit far outweighs whatever detriment, and there really isn't any that I can think of, you know. That pasture has always had two horses over there ever since ever since, and it's two different horses through the years. But I've always seen a horse tied up over there, you know. I wish people would stop stealing the water and stop watering their *pakalolo* plants from the water over there. [Mikiala Pescaia]

How many times. And I wish people would stop using it as a place to meet up and do drug deals 'cause I see a lot of that too. Yeah, I've seen like some bad stuffs, you know, and I wish people were more respectful, but eh, I guess that's drugs, or that's people who are not operating in their right mind, because generally speaking, everybody looks at this place and treats it like a *pu'uhonua*. And yeah, I think improving the facilities would help people to be more engaged, help them to, you know, give them little bit more tools so that they can be more self-determined in that they can take up more *kuleana* with caring for their graves and their loved ones, you know. I hope we get little bit more community buy-in so people can respect and *mālama* the resources and not... [Mikiala Pescaia]

Yeah, just try, whatever is not like bolted down, somebody always thinks they can take it, or it's like a free for all whatever. Yeah, I don't know how you can secure it, you know, 'cause I would like it to be secured, but I wouldn't want it to be, because people go there all kind time, and sometimes you really just gotta talk to your mom or your grandpa at three in the morning 'cause we don't have enough therapists, and we don't have enough whatever on the island, you know, like sometimes *kūpuna* say it best, you know, and it's just that feeling or whatever that you get when you lying on the grave and crying your heart out, and, you know, you trying to fight your demons or whatever, and then they're there. [Mikiala Pescaia]

You know, you get to have that access. I definitely would like to see a way to preserve that kind of accessibility, and it nurtures a relationship because so many people today, you get buried somewhere, and then the family no ever come, because you're just like out there, and life goes on. But I think Molokai really, I mean, people go cemetery plenty, like you know, it's like set aside every other Saturday or whatever, like oh no, we gotta go graveyard. Or like you know after graduation, like everybody's like, oh no, take all your leis to the graveyard, or whatever like, after the party. [Mikiala Pescaia]

Pavilion, then I was wondering, oh my goodness, now you going have that pavilion over there, you going have to sell the veterans' pavilion over there, they have two pavilions up there, and then the lots only go so far and then that's all you got. Now the veterans, they

have only that corner in there, and now, not too bad, it's not only veterans there, they have the wives who can go in with them. [Alex Bishaw]

I don't think [there will be a problem with the pavilion] because when you look, the people that are born here, lot of the children are born here, they stay and they go high school, but they have to go somewhere else for their education, yeah, they go up higher. Some leave the high school and go high school on another island. Like Kamehameha School, you have Lahainaluna and all these other schools. They go. They leave... [Alex Bishaw]

So I told you, "Gee what's going happen when the veterans want to expand, yeah?" When you look where they are, and I thought oh my goodness... That's another thing, you know, whether you running into the other lot. You expanding, I mean you wanna go down in there as far as you can go. [Alex Bishaw]

When I look at this, you know, you have something like this going on, I'm really pleased that you can have, as far as area, when you looking back there, there is area, opening yeah? 'Cause this homesteaders never went back to the end of their lot. It just sitting there and then growing in shrub and all that, and that's all. And so, unless they tied up for pasture, pastoral lots or what, but other than that, it's standing there. And you have something like this that comes up, you know, for the benefit of, I don't know if the homesteaders would be growing any more or what they are now. [Alex Bishaw]

Well when my mother-in-law passed away several years ago, her grave, she's kind of up towards the top, because there's no more room where her family is located, so they have to like create another place for the family. And we didn't have like a marker on her grave. And she was kind of like at the beginning of the row. I used to notice, we used to go up and check the grave quite frequently like every week. And there would be tire marks over the grave, there would be cans of beer, and just trash around her area. So what we did, my husband did, was he put this big cement thing on so that nobody could like drive over the cemetery, but I do notice, it's a peaceful place, and when people do come, it's to clean, and usually we will have a nice conversation going about a family member, or I have one person that will talk to me about planting grass, how to get rid of the weeds around the grave, just little things like that. [Nani Kawa'a]

Well I think having the pavilion is a good thing like for example, I used to go up with the scouts, and I still go up and watch the scouts when they do a flag raising ceremony for Veteran's Day. It's nice having the pavilion because after they do the flag raising ceremony, we usually have cocoa and cornbread or something, and it's nice to have the pavilion. And especially if it rains or stuff, it's nice. I think having a pavilion on the other side, on the regular cemetery side, is a good thing. [Nani Kawa'a]

My concern would be though for people that go up and drink, like how my mother-in-law's grave they were marking, I hope people don't abuse that. Because the feeling that I get when I go to the cemetery, it's not like a scary place because I know the people that are there. They're people that, family, so it's a place I think people would feel comfortable going. But I know I had, and one of my aunties used to go up, after her husband died, every Sunday she would go up, and she'd sit on his grave, and she would talk story with him. He had passed away, but she felt that his presence and so, I think that having a pavilion would be nice where people that do go up can have someplace if it's rainy or whatever. I think that would be a good thing if it's not abused. [Nani Kawa'a]

But I do know that having a pavilion like say during the holidays where like for example when we have to go put flowers on the graves, it's right now there's no trash place, and I can understand why they removed, 'cause other people are putting stuff in there that they're

not supposed to from the cemetery. But having someplace afterwards, after you decorate the graves, to sit down and to look, talk story with all the others that are coming, and usually the time like during Memorial Weekend, that's when it's really busy, that's when lots of people go up. They'll go for that weekend to decorate. And that's the time that it's kind of like everybody's renewing their friendship with each other because we haven't seen each other. Some people come from off-island to decorate the graves. I know there's a family in Honolulu that comes every year, and they only come during that time to decorate the graves. So it's having that, it's kinda neat to see people that come to decorate the graves, and then to see it real beautiful afterwards.[Nani Kawa'a]

Summary of Ethnographic Survey

A total of four ethnographic interviews were conducted with individuals knowledgeable about the Kanakaloloa Cemetery region: Geri Adolpho, Alex Bishaw, Nani Kawa'a, and Mikiala Pescaia. The consultants are all residents of the area with family ties to the cemetery. They continue to visit the cemetery today.

The consultants discussed cultural practices that were carried out or continue to be practiced in the area. These include gathering *'opihi* and fishing along the coast, hunting in the vicinity of the project area, and Christian religious traditions at the cemetery itself. Several *mo'olelo* were shared that are linked with the cemetery. One story attributes the name Kanakaloloa to a thief who stole a special shell and was later caught and stretched his body in an attempt to escape. The cemetery is also associated with *menehune* and *lapu*. Historically, the cemetery was an open lot, with ranching and pineapple cultivation occurring nearby. Pineapple agriculture and other farming was not successful however, due to the high salt content in the air and dearth of fresh water.

The interviewees also noted that the cemetery has changed over time, particularly that there are many more graves there now. They shared reminiscences of visiting the cemetery with family, and think of it as a peaceful place. They continue to frequent the cemetery, and the boy scouts hold a special event on Veteran's Day at the adjacent veteran's cemetery.

The consultants were generally very supportive of the proposed plans for Kanakaloloa Cemetery. One person thought it would be good to have room for more graves and a pavilion to provide shelter from the elements. Some concerns that were raised were that there may not be enough room for expansion; that people may steal things; that people are using the cemetery's water for their marijuana plants; that people are driving over the graves and leaving trash there; and that people are drinking, hanging out unnecessarily, and conducting drug deals at the cemetery. Recommendations include giving the community an opportunity to provide input in the design of the pavilion and parking areas, and allowing access for people to visit the graves at any time.

SUMMARY AND RECOMMENDATIONS

The Kanakaloloa Cemetery holds a special place in the heart of Moloka‘i’s homestead community. The cemetery, Site 50-60-02-2564, consists of more than 300 graves, including individuals and families associated with the establishment of Ho‘olehua Homestead, one of the first Hawaiian homesteads in the state. Most graves date from the 1940s to the 2010s, and the cemetery continues to be utilized today.

Four community members were interviewed to share their *mana‘o* about the area and to help identify any potential cultural resources or practices that might be affected by the proposed improvements to the cemetery. The consultants were generally very supportive of the proposed plans for cemetery improvements and did not identify any cultural resources that would be affected. They did mention cultural practices that are carried out in the area, such as fishing and gathering ‘*opihi*’ at the coast, hunting in the region, and Christian religious practices at the cemetery itself. None of the consultants communicated that the proposed development would adversely affect these practices. On the contrary, construction of facilities such as a pavilion would enhance the experience of those visiting the cemetery and promote the religious traditions that are carried out there.

Cultural Resources, Practices, and Beliefs Identified

Archival research revealed that the Ho‘olehua-Pālā‘au Plain has its origin at the dawn of time when Hina and Wākea dwelled together, and Moloka‘i was born. Cultural resources such as *heiau* and *ko‘a* and a *kahua maika* occur in the region, although not specifically within the current project area. The Kanakaloloa Cemetery is an archaeological site itself, Site 50-60-02-2564, significant for its cultural importance.

Community members who are knowledgeable of the cultural resources of the region provided their ‘*ike* and generously shared their personal and ‘*ohana* connections to this ‘*āina*. Cultural practices of the region include gathering ‘*opihi*, fishing, hunting, and continuing Christian religious traditions. Several *mo‘olelo* were shared that are linked with the cemetery. One story attributes the name Kanakaloloa to a thief who stole a special shell and was later caught and stretched his body in an attempt to escape. The cemetery is also associated with *menehune* and *lapu*. Cultural practices clearly continue today with family and friends of those buried at the cemetery visiting Kanakaloloa on a regular basis. This attests to the importance of the cemetery to the community.

Potential Effects of the Proposed Project

The consultants were not aware of any specific cultural resources or practices which may be affected by the proposed cemetery improvements. In general, they were supportive of the plans.

Confidential Information Withheld

During the course of researching the present report and conducting the ethnographic survey program, no sensitive or confidential information was discovered or revealed, therefore, no confidential information was withheld.

Conflicting Information

No conflicting information was obvious in analyzing the gathered sources. On the contrary, a number of themes were repeated and information was generally confirmed by independent sources.

Recommendations/Mitigations

The interviewees shared several concerns and recommendations. The following concerns were raised:

- there may not be enough room for cemetery expansion
- people may steal things
- people are using the cemetery's water for their marijuana plants;
- people are driving over the graves and leaving trash there
- people are drinking, hanging out unnecessarily, and conducting drug deals at the cemetery

Recommendations include giving the community an opportunity to provide input in the design of the pavilion and parking areas, and allowing access for people to visit the graves at any time.

Background research, an archaeological inventory survey (McElroy and Duhaylonsod 2015), and oral history interviews did not reveal any archaeological resources within the project area, aside from the cemetery itself. Keala Pono recommends that a preservation plan is developed for the Kanakaloloa Cemetery to ensure that it is not adversely affected by the proposed improvements. Community concerns and recommendations should be considered during all phases of the project.

GLOSSARY

ahupua‘a	Traditional Hawaiian land division usually extending from the uplands to the sea.
ala	Trail, road, path.
ali‘i nui	High chief.
‘aumakua	Family or personal gods. The plural form of the word is <i>‘aumākua</i> .
Christmas berry	The ornamental tree <i>Schinus terebinthifolius</i> known for its bright red berry-like fruits.
ha‘awina	Lesson, task, gift.
hale mua	Men’s eating house.
hānai	Foster child, adopted child; to raise, feed, or sustain; a provider or caretaker.
heiau	Place of worship and ritual in traditional Hawai‘i.
helu papa	To count or recite consecutively.
ho‘āla	To rise up or waken.
holoholo	To go out or go for a walk or ride.
hōlua	Traditional Hawaiian sled used on grassy slopes.
ho‘okala	To free, unburden, loosen, or remove.
ho‘omaka	To begin.
‘ike	To see, know, feel; knowledge, awareness, understanding.
kahua	Open place for sports, such as <i>‘ulu maika</i> .
kahuna	An expert in any profession, often referring to a priest, sorcerer, or magician.
kanaka	Human, person, man, Hawaiian.
kanikau	Lamentation, dirge, mourning chant; to mourn, wail, chant.
kapa	Tapa cloth.
kapu	Taboo, prohibited, forbidden.
kioea	The bristle-thighed curlew, or <i>Numenius tahitiensis</i> , a large brown bird with a curved beak.
ko‘a	Fishing shrine.
koa haole	The small tree <i>Leucaena glauca</i> , historically-introduced to Hawai‘i.
kukui	The candlenut tree, or <i>Aleurites moluccana</i> , the nuts of which were eaten as a relish and used for lamp fuel in traditional times.
kuleana	Right, title, property, portion, responsibility, jurisdiction, authority, interest, claim, ownership.
kumu hula	Hula teacher/master.
kupuna	Grandparent, ancestor; <i>kūpuna</i> is the plural form.
lapu	Ghost; haunted.

<i>leina</i>	To leap or spring. <i>Leina ka 'uhane</i> or <i>leina a ke akua</i> were places where spirits leapt into the nether world.
<i>lele</i>	Sacrificial altar or stand.
<i>mahalo</i>	Thank you.
<i>Māhele</i>	The 1848 division of land.
<i>makua</i>	Parent, relative of the parent's generation; Catholic father.
<i>mālama</i>	To care for, preserve, or protect.
<i>mana</i>	Divine power.
<i>mana'o</i>	Thoughts, opinions, ideas.
<i>mauka</i>	Inland, upland, toward the mountain.
<i>mele</i>	Song, chant, or poem.
<i>menehune</i>	Small people of legend who worked at night to build structures such as fishponds, roads, and <i>heiau</i> .
<i>moku</i>	District, island.
<i>mo'o</i>	Lizard, dragon, water spirit.
<i>mo'olelo</i>	A story, myth, history, tradition, legend, or record.
<i>nani</i>	Beauty, glory; beautiful.
<i>noa</i>	Released of restriction, free from <i>kapu</i> .
<i>'ohana</i>	Family.
<i>'ōlelo no'eau</i>	Proverb, wise saying, traditional saying.
<i>oli</i>	Chant.
<i>'opihi</i>	Limpets, four types of which are endemic to Hawai'i: <i>Cellana exarata</i> (' <i>opihi makaiauli</i>), <i>C. sandwicensis</i> (' <i>opihi alinalina</i>), <i>C. talcosa</i> (' <i>opihi ko'ele</i>), and <i>C. melanostoma</i> (no Hawaiian name). ' <i>Opihi</i> are a prized food in Hawai'i and considered a rare treat today.
<i>pakalolo</i>	The marijuana (<i>Cannabis</i>) plant.
<i>pali</i>	Cliff, steep hill.
<i>pī kai</i>	To sprinkle with salt water for purification or to remove <i>kapu</i> .
<i>piko</i>	Navel; summit; center.
<i>pilina</i>	Relationship, connection, association.
<i>pōhaku</i>	Rock, stone.
<i>pū'ili</i>	Bamboo implements used in dance.
<i>pule</i>	Prayer; to pray.
<i>pu'uhonua</i>	Place of refuge.
<i>tūtū</i>	Grandmother or grandfather.
<i>'uala</i>	The sweet potato, or <i>Ipomoea batatas</i> , a Polynesian introduction.

<i>‘ukulele</i>	String instrument of the guitar family, originating in 19 th century Hawai‘i. Lit. jumping flea.
<i>‘ulu maika</i>	Stone used in the <i>maika</i> game, similar to bowling.
<i>wahi pana</i>	Sacred places or legendary places that may or may not be <i>kapu</i> , or taboo.

REFERENCES

- AECOS, Inc.
1980 *Environmental Field Studies for the Moloka‘i Airport Master Plan*. Prepared for Austin, Tsutsumi, and Associates, Inc. by AECOS, Inc.
- Bacon, P.N. and N. Napoka (editors)
1995 *Nā Mele Welo: Songs of Our Heritage*. Translated by M. K. Pukui. Bishop Museum Press. Honolulu.
- Beckwith, M.
1970 *Hawaiian Mythology*. University of Hawai‘i Press, Honolulu.
- Cooke, G.P.
1949 Moolelo o Molokai: A Ranch Story of Molokai. *Honolulu Star Bulletin*, Honolulu.
- Curtis, D.
1973 *Recommendations to the Molokai Task Force for the Historical and Cultural Resources of Molokai*. Preservation of Historical Resources Ad-Hoc Committee of the Commerce and Industry Sub-Committee. Moloka‘i.
- DHHL (Department of Hawaiian Homelands)
n.d. “HHC- Hawaiian Homes Commission.” <<http://dhhl.hawaii.gov/hhc>> Accessed 2/25/2015.
- Evans, T.J.K.
1935 *Government Land of Palaau Ap. 3 Island of Molokai*. Scale 1 in. – 300 ft. Registered Map 2989.
- Fujimura, F.
1959 *Land Classified by Present Uses and Crop Productivity Hoolehua – Molokai*. Land Study Bureau University of Hawai‘i. Scale 1:31,680, or 2 in. = approximately 1 mile.
- Foote, D., E. Hill, S. Nakamura, and F. Stephens
1972 *Survey of the Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii*. United States Department of Agriculture, Soil Conservation Service. Published in cooperation with the University of Hawaii Agricultural Experiment Station, Washington, D.C.
- Hammatt, H.H.
2001 *Archaeological Assessment of the Proposed Sandwich Isles Communication Fiberoptic Cable Project Within Approximately 37 Miles (59.7 Kilometers) of Road Corridor on the Island of Moloka‘i*. Cultural Surveys Hawai‘i. Kailua, Hawai‘i.
- Handy, E.S.C. and E.G. Handy
1991 *Native Planters in Old Hawaii; Their Life, Lore, and Environment*. Revised Edition. Bernice P. Bishop Museum Bulletin 233. Bishop Museum Press, Honolulu.
- Ka Nupepa Kuokoa*
1879 “Mai Keia Manawa.” *Ka Nupepa Kuokoa* 29 March 1879:3.
- Kamakau, S.M.
1964 *Ka Po‘e Kahiko* The People of Old. Bernice P. Bishop Museum Special Publication 51. Bishop Museum Press, Honolulu.
1991 *Tales and Traditions of the People of Old: Nā Mo‘olelo a ka Po‘e Kahiko*. Translated by Mary Kawena Pukui. Ed. by Dorothy B. Barrere. Bishop Museum Press. Honolulu.
1996 *Ke Kumu Aupuni*. ‘Ahahui ‘Ōlelo Hawai‘i. Honolulu. Originally published 1866–1868. Honolulu.
- Kanoa-Martin, K.
2012 Huapala: Hawaiian Music and Hula Archives. www.huapala.org, accessed 2015.

- Ka'uhane, L., M. Spearing, R. Groza and H.H. Hammatt
2009 *Cultural Impact Assessment for the Moloka'i Airport Aircraft Rescue and Firefighting Station Improvements (ARFF) Project, Pālā'au Ahupua'a, Kona District, Moloka'i Island, TMK (2) 5-2-008:82 & 83*. Cultural Surveys Hawai'i. Kailua, Hawai'i.
- Keesing, F.M.
1963 *Hawaiian Homesteading on Molokai*. University of Hawaii Research Publications Number 12. University of Hawaii, Honolulu.
- Lindgren, W.
1900 *Map of Molokai Territory of Hawaii showing property of the American Sugar Co. and water resources of the island with topographic survey and proposed irrigation system*. Scale on map.
- McElroy, W.K.
2008 *Archaeological Assessment of TMKs (2) 5-2-001:012, :014, :015, :022, (2) 5-2-011:012, :026 and (2) 5-2-12:004 in Pālā'au, Ho'olehua, and Nā'iwa Ahupua'a, Kona District, Moloka'i Island, Hawai'i*. Garcia and Associates, Kailua, Hawai'i.
- McElroy, W.K. and D. Duhaylonsod
2015 *Draft—Archaeological Inventory Survey Report for the Kanakaloloa Cemetery, Pālā'au and Ho'olehua Ahupua'a, Kona District, Island of Moloka'i, Hawai'i*. Keala Pono Archaeological Consulting, Kāne'ohe, Hawai'i.
- Meyer, C.S.
1982 *Meyer and Molokai*. Graphic-Agri Business. Alden.
- Meyer, R.W.
1897 "Ōlelo Hoolaha." *Ka Makaainana* 25 March 1897:1.
- Moffat, R.M. and G.L. Fitzpatrick
1995 *Palapala'aina: Surveying the Mahele*. Editions Limited, Honolulu.
- Monsarrat, M.D.
1886a *Molokai Middle & West Section*. Hawaiian Government Survey map. Scale 1 in. = 2,000 ft.
1886b *Molokai Middle & West Section*. Hawaiian Government Survey map. Scale 1 in. = 2,000 ft.
- Nagahara, M. and M. Kolb
1994 *Field Inspection and Location of Site 50-60-03-11, Kape'elua Complex, Ho'olehua, Moloka'i*. SHPD and Hawaiian Home Lands archaeological field crew, Honolulu.
- Nakuina, M.K.
1990 *The Wind Gourd of La'amaomao*. Translated by E.T. Mookini and S. Nākoa. Kalmakū Press, Honolulu.
- Nogelmeier, M.P.
2006 "Commentary." *The Epic Tale of Hi'iakaikapoliopele*. Awaiaulu: Hawaiian Literature Project, Honolulu.
- Peters, M. and W.K. McElroy
2011 *Archaeological Assessment of Existing and Proposed Waterline Corridors, Kualapu'u to Pu'u Nānā, Island of Moloka'i*. Keala Pono Archaeological Consulting, Hau'ula, Hawai'i.
- Phelps, S.
1941 *A Regional Study of Molokai, Hawaii*. Bernice P. Bishop Museum, Honolulu.
- Pukui, M.K.
1983 *Ōlelo No'eau: Hawaiian Proverbs & Poetical Sayings*. Bishop Museum Press, Honolulu.
- Pukui, M.K. and S.H. Elbert
1986 *Hawaiian Dictionary*. University of Hawaii Press, Honolulu.

- Pukui, M.K., S.H. Elbert and E.T. Mookini
1974 *Place Names Of Hawaii*. University of Hawaii Press, Honolulu.
- Pukui, M.K. and A.L. Korn (editors and translators)
1973 *The Echo of Our Song: Chants & Poems of the Hawaiians*. University of Hawaii Press, Honolulu.
- Stearns, H.T. and G.A. Macdonald
1947 *Geology and Ground-water Resources of the Island of Molokai, Hawaii*. Hawaii Division of Hydrography, Honolulu.
- Stokes, J.F.G.
1909 *Heiau of Molokai*. Bernice P. Bishop Museum, Honolulu.
- Summers, C.C.
1971 *Molokai: A Site Survey*. Bernice P. Bishop Museum, Honolulu.
- Wall, W.E.
1915 *Molokai Govt. Tracts*. Scale 1 in. = 5,000 ft. Hawaii Territory Survey Plat Map 1035.
1924 *Hawaiian Homes Lands of Hoolehua and Palaau Island of Molokai*. Scale 1 in. = 400 ft. Hawaii Territory Survey. Registered Map 2719.

APPENDIX A: AGREEMENT TO PARTICIPATE

Agreement to Participate in the Cultural Assessment and Consultation for the
Kanakaloloa Cemetery Project on the Island of Moloka'i
Pūlama Lima Ethnographer, Keala Pono Archaeological Consulting

You are invited to participate in a Cultural Impact Assessment for the Kanakaloloa Cemetery Project (TMK: (2) 5-2-017:003 (por.)) in the Pālā'au/ Ho'olehua Ahupua'a, on the island of Moloka'i (herein referred to as "the Project"). The Project is being conducted by Keala Pono Archaeological Consulting (Keala Pono), a cultural resource management firm, on behalf of Group 70, and The Department of Hawaiian Home Lands. The ethnographer will explain the purpose of the Project, the procedures that will be followed, and the potential benefits and risks of participating. A brief description of the Project is written below. Feel free to ask the ethnographer questions if the Project or procedures need further clarification. If you decide to participate in the Project, please sign the attached Consent Form. A copy of this form will be provided for you to keep.

Description of the Project

This Cultural Impact Assessment is being conducted to collect information about the Kanakaloloa Cemetery located in the *ahupua'a* of Pālā'au and Ho'olehua, Kona District on the island of Moloka'i, through interviews with individuals who are knowledgeable about this area, and/or about information including (but not limited to) cultural practices and beliefs, *mo'olelo*, *mele*, or *oli* associated with this area. The goal of this Project is to identify and understand the importance of any traditional Hawaiian and/or historic cultural resources, or traditional cultural practices on the current subject property. This Cultural Impact Assessment will also attempt to identify any affects that the proposed project may have on cultural resources, or cultural practices within the Project area, and will attempt to identify measures that will mitigate such effects.

Procedures

After agreeing to participate in the Project and signing the Consent Form, the ethnographer will digitally record your interview and it may be transcribed in part or in full. The transcript will be sent to you for editing and final approval. Data from the interview will be used for the Cultural Impact Assessment report for this project and transcripts may be included in part or in full as an appendix to the report. The ethnographer may take notes and photographs and ask you to spell out names or unfamiliar words.

Discomforts and Risks

Possible risks and/or discomforts resulting from participation in this Project may include, but are not limited to the following: being interviewed and recorded; having to speak loudly for the recorder; providing information for reports which may be used in the future as a public reference; your uncompensated dedication of time; possible misunderstanding in the transcribing of information; loss of privacy; and worry that your comments may not be understood in the same way you understand them. It is not possible to identify all potential risks, although reasonable safeguards have been taken to minimize them.

Benefits

This Project will give you the opportunity to express your thoughts and opinions and share your knowledge, which will be considered, shared, and documented for future generations. Your sharing of knowledge may be instrumental in the preservation of cultural resources, practices, and information.

Confidentiality

Your rights of privacy, confidentiality and/or anonymity will be protected upon request. You may request, for example, that your name and/or sex not be mentioned in Project material, such as in written notes, on tape, and in reports; or you may request that some of the information you provide remain off-the-record and not be recorded in any way. To ensure protection of your privacy, confidentiality and/or anonymity, you should immediately inform the ethnographer of your requests. The ethnographer will ask you to specify the method of protection, and note it on the attached Consent Form.

Refusal/Withdrawal

At any time during the interview process, you may choose to not participate any further and ask the ethnographer for the tape and/or notes. If the transcription of your interview is to be included in the report, you will be given an opportunity to review your transcript, and to revise or delete any part of the interview.

APPENDIX B: CONSENT FORM

Consent Form

Keala Pono Archaeological Consulting appreciates the generosity of the *kūpuna* and *kama 'āina* who are willing to share their knowledge of cultural and historic properties, and experiences of the past and present cultural practices of the Ho'olehua and Pālā'au areas.

I, _____, am willing to participate in the Cultural Impact Assessment for the Kanakaloloa Cemetery Project on the island of Moloka'i (herein referred to as "the Project"). I understand that the purpose of the Project is to conduct interviews with individuals knowledgeable about the subject property and the Ho'olehua/Pālā'au region on the island of Moloka'i. I understand that Keala Pono Archaeological Consulting, Group 70, and/or The Department of Hawaiian Home Lands will retain the product of my participation (digital recording, transcripts of interviews, etc.) as part of their permanent collection and that the materials may be used for scholarly, educational, land management, and other purposes.

_____ I hereby grant to Keala Pono, Group 70, and The Department of Hawaiian Home Lands the physical property delivered to the institution and the right to use the property that is the product of my participation (e.g., my interview, photographs, and written materials) as stated above. By giving permission, I understand that I do not give up any copyright or performance rights that I may hold.

_____ I also grant to Keala Pono, Group 70, and The Department of Hawaiian Home Lands my consent for any photographs provided by me or taken of me in the course of my participation in the Project to be used, published, and copied by Keala Pono and The Department of Hawaiian Home Lands and its assignees in any medium for purposes of the Project.

_____ I agree that Keala Pono, Group 70, and The Department of Hawaiian Home Lands may use my name, photographic image, biographical information, statements, and voice reproduction for this Project without further approval on my part.

_____ If transcriptions are to be included in the report, I understand that I will have the opportunity to review my transcripts to ensure that they accurately depict what I meant to convey. I also understand that if I do not return the revised transcripts after two weeks from the date of receipt, my signature below will indicate my release of information for the draft report, although I will still have the opportunity to make revisions during the draft review process.

By signing this permission form, I am acknowledging that I have been informed about the purpose of this Project, the procedure, how the data will be gathered, and how the data will be analyzed. I understand that my participation is strictly voluntary, and that I may withdraw from participation at any time without consequence.

_____	_____
Consultant Signature	Date
_____	_____
Print Name	Phone

Address	

Mahalo for participating in this valuable study.

APPENDIX C: TRANSCRIPT RELEASE

Transcript Release

I, _____, am a participant in the Cultural Assessment and Consultation for The Kanakaloloa Cemetery Project on the island of Moloka'i (herein referred to as "Project") and was interviewed for the Project. I have reviewed the transcripts of the interview and agree that the transcript is complete and accurate except for those matters delineated below under the heading "CLARIFICATION, CORRECTIONS, ADDITIONS, DELETIONS."

I agree that Keala Pono Archaeological Consulting, Group 70, and/or The Department of Hawaiian Home Lands may use and release my identity, biographical information, and other interview information, for the purpose of including such information in a report to be made public, subject to my specific objections, to release as set forth below under the heading "OBJECTIONS TO RELEASE OF INTERVIEW MATERIALS."

CLARIFICATION, CORRECTIONS, ADDITIONS, DELETIONS:

OBJECTIONS TO RELEASE OF INTERVIEW MATERIALS:

Consultant Signature

Date

Print Name

Phone

Address

APPENDIX D: INTERVIEW WITH GERI ADOLPHO

TALKING STORY WITH
GERI ADOLPHO (GA)

Oral History for the Kanakaloloa project by Pūlama Lima (PL)
For Keala Pono 2/23/2015

PL: Okay, so today is February 23, 2015, and I'm meeting here today with Aunty Geri Adolpho. So Aunty before we begin, if you can just state your full name and your birthday and where you from?

GA: Geraldine Adolpho, 12/22/57, and I reside at Ho'olehua, Mo'omomi.

PL: How long you been living there, Aunty?

GA: Like 30+ years.

PL: And where you originally from, your *'ohana*?

GA: Molokai, Kaunakakai, and East End.

PL: And then, for the cemetery, if you can just, um you can answer 'em [phone ringing in the background].

GA: Oh okay. Aloha!

[recorder stops then starts again]

PL: Okay, so the next question is: How long have you been going to the Kanakaloloa Cemetery?

GA: Since 2010.

PL: Since 2010?

GA: Yes.

PL: And when you go, Aunty, what do you guys do?

GA: I go over there, and I visit with Uncle Matt, and I sit down and talk story. And then with my family, we go over there, we sit down, we hang out, we eat over there, yeah, and we visit, and stuff.

PL: How often do you guys go?

GA: I go at least once a week, sometimes more, and my daughter go every day. She one good one for interview.

PL: Oh okay. When you guys go over there, is there a lot of people that come and go while you guys are there?

GA: Sometimes, yeah, sometimes.

PL: You guys recognize any other frequent people who go?

GA: Yeah, yeah.

PL: The older *kūpuna*.

GA: Yeah, get some, yeah.

PL: You know of any like, besides people going over there to visit family, if you know of anybody else who use that area for like hunting, or this area right here.

GA: Not that I know of, no.

PL: And you know of anybody who been back there or been using the land?

GA: No.

PL: Okay. If you could just share what your thoughts are on this project, the building, the extension, and then the building of the pavilion.

GA: I think that is a good idea to have an extension because it looks like it's getting full, and get more families on the homestead so would be kind of good to provide that for the homesteaders. And if get the land, you might as well utilize 'em.

PL: Right.

GA: And then for the pavilion, I think that's good too because it's hot over there, and sometimes people need shade like that, and not everybody get access to the veterans' side. And so I think that it's a good idea because when people gather like that and sometimes the weather rainy, and they like still go visit their families like that, at least they get one shelter.

PL: Shelter. Yeah, that's a good point.

Do you know of any concerns that some of the community might have about the project?

GA: [pause] No.

PL: No. I know in just one of the persons' concerns that we talked to so far was worried about having people using the pavilion not for visiting purposes, like parties and stuff like that. You think that is a potential?

GA: I no think that it's a potential thing that they would just use 'em for parties.

PL: Well, not parties, but you know how people go there afterward and hang out.

GA: I mean I think that they shouldn't go over there and hang out if not over there visiting, you know. If they visiting and hanging out, then that's good. Like, you know, sometimes like for Uncle's anniversary when he passed away, we get plenty family members that come over there and eat, and we get potluck, and you know, spend time over there. But like that, you know, and I hope that nobody will go over there and abuse the place.

PL: Okay, you know any history about the general area?

GA: No, I know that that's homesteaders, that that's for their families to be buried and stuff like that, but no, I don't know too much.

PL: Okay. And then what about just the feeling of that area? You think you can speak on that, like the feeling?

GA: Well when I go there, you know, it's a beautiful place. So I happy, and get nice view. It's cool, and I feel good when I go over there like 'cause my daughter take care of the place yeah? And she go over and beyond sometimes. She take care of other people's graves and stuff like that. And so, you know, she make up her dad's place really nice. So I just feel good when I go over there, yeah, I get one good feeling.

PL: Besides Uncle Matt, you get any other *'ohana* buried at the cemetery?

GA: On the veterans' side I have two uncles over there. And then on the Hawaiian Homestead side I get my father-in-law, my mother-in-law, my uncles, my husband's family which is my family now.

PL: Right, right. Oh big family then.

GA: Yeah, yeah.

PL: So that's how come everybody say, "Talk to the Adolphos," because you there all the time.

GA: Yeah.

PL: Okay, other than that, Aunty, you have any other recommendations or any other *mana'o* you wanna share about this?

GA: Well, I think when they build the pavilion then I think I'd like to see how they going make 'em like that, you know, the parking, and the way it's built like that, to have some input or, you know, suggestions like that, yeah.

PL: Okay, so what you mean, 'cause in this one, they get the parking lot right here.

GA: Yeah, so like how much parking would have, like that?

PL: Oh.

GA: You know, you want one good amount of parking like that. And then the pavilion, you like 'em little bit spacious, and you know, like how the wind blow and the rain blow, you like coverage, like that yeah.

PL: Okay, okay. I think that's pretty much it. Is that all you have to share?

GA: Yeah. I can give you Leialoha's number, and you can call her. She's a good one to get because she go every day and so, you know, she might have more view of who come and go 'cause she know who come and go. I see people that'll go over there, like that so, because she make her dad's place good that like more people going over there, and at least make 'em nice, and stuff like that so.

PL: Thank you, Aunty for sharing.

APPENDIX E: INTERVIEW WITH ALEX BISHAW

TALKING STORY WITH
ALEX BISHAW (AB)

Oral History for the Kanakaloloa project by Pūlama Lima (PL)
For Keala Pono 2/19/2015

AB: In the back here, way down, as these lots are coming down towards the cliff, we are the last lot that was there. So the lots came down. We got awarded the last lot.

PL: So over here is all, I believe, Decoite? The farm?

AB: Decoite is somewhere around there.

PL: And your guys' lot was before them?

AB: So this is running up to the high school. And this is going back to the cliff and along the area where this lots run back like that, you see.

PL: Oh okay, I see.

AB: Right now, it's not stapled off yeah? It's all marked up like this. And then you go back here to the cemetery. This is where there cemetery is. Now if you look all these lots in the back here, it came down like this, and the last lot here is Bishaw. That's where we were. So we came here in 1925.

PL: From where? Where you guys came from?

AB: Honolulu. Waikiki. I was the last born there of the nine children. So I was number seven. And then when I was born, then my mom and my dad had an offer. They were breaking lots, that was to be taken. So she took this lot. When my dad and my mom came over to look at the lot, when my dad looked at this, instead of putting house right here where the road is, he went in the back. In the middle of the lot, that's where he chose.

And then down in Kalama'ula, he had a sister there that came because Kalama'ula was the first [place] that opened up the homestead. Then Ho'olehua came next. And he has a sister there. So he came over to stay with the sister. So [it was] my mom, my dad, and I have to come because I'm only 4 months old. I have to come live on baby-sucking bag. [laughs] So we live there, then my oldest brother came over to help him to build a house, but no more electric those days, back there in 1925, yeah? You live all off the land. So we were living off the land, and off the cliff, down the cliff.

PL: You guys would go down there to fish?

AB: Yeah, make 'opihi, that's for our meal.

But this area, the cemetery, wasn't open yet. We had the hospital and all up here yeah? So went along like that, back in '25, somewhere around the '30s, they closed the cemetery down at Homelani.

PL: Oh yeah.

AB: They closed that one to extend it up to Kanakaloloa.

PL: Oh okay.

AB: So that's how it came up here, and only the Hawaiian homes one. And then somehow they allowed the veterans. They had some veterans' homesteads over here with the National Guard. So they were asking if they can have a cemetery up in Ho'olehua where they can use it for the homestead veterans of that sort. But when they gave 'em, they started to extend within their area, they only have the corner of the cemetery for the veterans. And the rest is homestead.

PL: Oh okay, right here. Okay, so I think this little triangle right here is where they trying to extend.

AB: So we extended a little more because we was going all the time yeah? And then we went as far as Spencer's lot that goes in the back in here someplace. So went up to his lot, and then got this one, but still have an extension of more within that area where it is yeah?

That's the area you asking for, the vacant area?

PL: Yeah. I think right where this red is, I think that's where they want.

AB: Oh right down the end?

PL: Yeah. Right here. So the old hospital was here?

AB: Yeah, inside here.

PL: Oh okay, okay, so this right now, this one right here is Pico yeah?

AB: Yeah.

PL: Okay, and this the new subdivision inside here.

AB: Yeah. And then they added some more homestead lots within that area.

PL: After they went close down the hospital? You know when they went close down the hospital?

AB: I guess was more convenient down in Kaunakakai where they have it now yeah?

PL: Ah, I see.

Do you know how Kanakaloloa got its name, or any stories about the area?

AB: Well the story of old Hawaiians was something like "tall man, walking back" at this time. So like you ask, "What is *kanaka*?" *Kanaka* is Hawaiian for "man," the *kanaka* man, or something like that. So this word, "Tall man," that's walk in the back here, the Hawaiian stories go. I don't go too much with this kind stories where you get all screwed up.

PL: Yeah. [laughs]

AB: [laughs] So it got the name Kanakaloloa.

PL: Interesting, interesting.

What about, you guys used to go hunting in this area?

AB: Oh yeah, you walk down here. See we were at the end, and down in this area, this little open area here, they made a pasture there. The Hawaiian Homes Commission used to raise cattle, not raising cattle for the Hawaiian Homes Commission, but for the homesteaders that have there. So in the back there, they had a pasture that's made for bulls. And all the cows were in the pasture. So every homesteader had cows, cattle that they raised. Instead of raise at home, they raise 'em at the pasture. And then twice a year I think, they have round up, where you go to look for your cattle.

PL: And they brand 'em?

AB: They give 'em the brand or whatever yeah? And then anytime there is for spawning, so they take the bulls, and they would throw 'em down in the pasture, and then go around with the cows. And they get calves from them, and they bring it all together, and then they have a round up. And then you look for your calves. It's already there. When the calves come out, you have a brand. You have the ear mark. Sometimes the calf is so young that instead of branding, no more time to brand. When they catch 'em, they put the ear mark on. And then when the homesteaders come up for the round up, then you look for your calf.

PL: Your cattle.

AB: You look for your calf. That's how it's been going on.

PL: Interesting. They still do that?

AB: During the olden days.

PL: Oh they no do that today?

AB: No, they all *pau*.

PL: Uncle, so you still live over here?

AB: No, we moved because over here when they went into pineapple, we had hard time raising pineapple, all back here too, because of the salt air.

PL: Oh, the moisture?

AB: Yeah. So we have vegetables and things like that. We had hard time yeah? And then so there's another Bishaw way down here. This is my nephew. But we moved here, and my nephew, my brother lives up here in this area. So when things went on, and then he became the one to inherit the homestead. So he moved down here, but this is where we used to stay. From there we moved here.

PL: Okay, okay.

AB: So we came there in 1925. We moved here in 1930-something, somewhere around there.

PL: Okay. You know before this was a cemetery, this was just open land then?

AB: This one open land.

PL: Open lot? Nobody used it for anything?

AB: Like some of the areas are...

PL: Or you don't remember.

AB: All open and nobody on.

PL: Oh okay. And as long as you can remember, nobody was over there?

AB: Mmhmm

PL: Okay, let me see, sorry, I get some questions.

AB: Like what you asking for, the pavilion or something, to build on there?

PL: So basically because they're gonna be doing ground disturbance, it's not on the grave, the cemetery, but it's right up to the side. We want to make sure that they don't impact anything that could potentially be there, you know, like cultural sites. Or even land use, if people use that area for any cultural practices, if you know people who use that little or even the surrounding areas, for anything? Cultural practices for subsistence gathering? I don't know if people go in the back there hunt, nowadays, I don't know, you know anybody go back there hunt?

AB: No, I don't.

PL: Yeah, so just basic stuff like that. Or about your family. I know you said something about pineapple, if you can share a little bit more about that.

AB: Yeah we had pineapple, but because of the salt air, you know, it didn't go too long there yeah?

PL: Oh, so you guys were growing pineapple on your guys' lot then?

AB: Yeah, growing on the land. And then this is really funny because down here not too bad, this open area, yeah? But not too much went into pineapple because there were two companies at that time. Well at first it was only Libby, McNeill, and Libby, and then they had Del Monte but it wasn't Del Monte, it was California Packing Corporation, CPC, and later on it became Del Monte.

And then when it started to increase, then lot of the Hawaiians worked on the land. They don't wanna work pineapple field, you know, so what they did was hire from outside. They brought from the Philippines, they brought from wherever to come and stay, and they had camps, which they have like in Kualapu'u, you know where the store is? That used to be California Packing CPC, California Packing Corporation.

And they had this people come over and stay, and they have, like build this kind temporary homes for them where they can stay.

PL: Like plantation kind?

AB: Yeah. And when they started to increase, I don't know, how long you been to Moloka'i?

PL: I was born here in 1989. [laughs]

AB: [laughs] Oh so you used to that hill they call...

PL: Pe'elua? Pu'upe'elua?

AB: Right by Kalama‘ula, uh not Kalama‘ula

PL: Kualapu‘u?

AB: Kualapu‘u, that hill there.

PL: By the reservoir?

AB: Yeah.

PL: Okay.

AB: The reservoir. So that reservoir, you go over, and then you have a road going down Kaunakakai and then goes up to Maunaloa?

PL: Yes.

AB: Okay, right there is another hill, and then they had a camp there.

PL: Oh, so where Monsanto stay now?

AB: Where Monsanto get his corn.

PL: Yeah.

AB: Yeah, they had a camp there, that hill there yeah? And they used to call it the Kanaio Camp.

PL: Kanaio Camp?

AB: Mmhhh, the Japanese, the Filipinos.

PL: Oh. [laughs]

AB: [laughs] Yeah.

PL: Oh, okay so had the plantation before had all these homesteads then.

AB: Oh yeah.

PL: Oh got it. And then when they moved on to the land, then they had the decision whether to keep planting or not to?

AB: Yeah. Well, pineapple, at that time, was hard to dump here, dump there, dump there, you know, so what they wanted to do, they wanted to get it into one area.

PL: Oh I see.

AB: So below the airport.

PL: Yeah.

AB: Below the airport was all pineapple that area. So some of the homesteaders that didn't plant their land, or couldn't plant, or something like that, so they got like an area down in this area. They got just like, temporary, of the land, where you can get, from the pineapple, you know you get so much go to you, so much go to the...yeah? And this is how it's been done with Kalama'ula. Kalama'ula was all pastoral lots. But when they cut off the pastoral lots from them, they threw them down in this area where they can get only pineapple lot.

PL: Okay.

AB: Yeah and so with the homesteaders up in this area here, where you see a lot of cut up of the land.

PL: Yeah, subdivisions.

AB: Okay, that particular homesteader gave up their land to put on homesteaders in there. And then they got just like a detached lot down in where get pineapple. That was good though, pineapple, because every month you get.

PL: Pineapple.

AB: So much. You get so much. They give the homesteaders so much. And then during the harvesting season, you know, it goes over, and then you get bonus after that. And it was good. And lot of homesteaders use that to pay off their lot as they went along.

PL: Oh okay, so they sell their pineapple to pay off.

AB: Yeah and then that went into, what you call, credit union, the Department Hawaiian Homes Credit Union, and then homesteaders got to go in there and put their money into the credit union. This is how it really went really good.

PL: Makes sense.

AB: And this area here, the cemetery, it was good for the homesteaders because they no have to go all the way down to Homelani, you know, right up in this area. So I'm not sure when the veterans got in with the Hawaiian Homes to have their cemetery there.

PL: Right, right.

AB: So when you mention to me that you looking to build a...

PL: Pavilion.

AB: Pavilion, then I was wondering, oh my goodness, now you going have that pavilion over there, you going have to sell the veterans' pavilion over there, they have two pavilions up there, and then the lots only go so far and then that's all you got. Now the veterans, they have only that corner in there, and now, not too bad, it's not only veterans there, they have the wives who can go in with them.

PL: So you think gonna be a problem then, to have the pavilion? Or you just wondering why they gotta build one more?

AB: I don't think so because when you look, the people that are born here, lot of the children are born here, they stay and they go high school, but they have to go somewhere else for their education, yeah, they go up higher. Some leave the high school and go high school on another island. Like Kamehameha School, you have Lahainaluna and all these other schools. They go. They leave. And they come and recruit, yeah, the school come in, those wanna recruit to come. A lot of them recruit for Kamehameha School. They go to Kamehameha School. Now they have Kamehameha School in Maui. They have it in Hawai'i. They have all this Kamehameha Schools, so this children, they go to high school, and then they say, "Oh I rather go Kamehameha School." They try. If they pass through, you know they get in, they go. Because my sister went to Kamehameha School.

PL: Oh yeah?

AB: Yeah. And I had another sister went to McKinley High School.

PL: Oh.

AB: And then my youngest sister went to the Catholic school in Honolulu.

PL: St. Andrew's?

AB: St. Andrew's Priory.

PL: What high school you went to?

AB: I went to Molokai High School.

PL: Molokai High School.

AB: I graduated there. But actually I didn't graduate because my graduation year was 1943. In 1941, when I was getting out from sophomore going to junior, '41, Pearl Harbor was bombed.

PL: Oh, so did you go to service after?

AB: Yeah.

PL: For how long?

AB: I went to service for, let me see, from '43, I graduated in '43, up to '49.

PL: Oh wow.

AB: Yeah, went to down in the Marianas Islands, down Guam and all those place.

PL: Wow.

AB: And then when we finished there, 'cause Japan surrendered in 1945, and since we're there, was time for finishing of service, we came back, and then they were recruiting again. What they call that, drafting?

PL: Drafting, yeah, yeah.

AB: So they were drafting again. And then they caught us. And they brought us back in there. We said, "What how come, we just came back from this area, no we have to go in again?" They said, "Well there's others that need to come home, that you need someone to go down there to relieve until."

And so, that's what they were asking for. We don't want to go back down there. We just came from there. The only way you can get away from that is to re-enlist instead of going as a draftee, yeah?

PL: Ohhh.

AB: After you 18 months.

PL: 18, yeah.

AB: But you re-enlist. How long you gotta re-enlist? You have to re-enlist for 3 years.

Now Europe was kind of, place I didn't see, you know, so a lot of us said, "Let's go Europe. Let's go see." So we re-enlisted for 3 years and went over to Germany.

PL: Oh wow. And then after service you came back Molokai?

AB: I came back. And then they have you know this Vietnam War and all this things going on yeah? Korean War. But we don't wanna get in, we all through already. And there were just like looking for like old soldiers coming out, wanna put 'em in there yeah. How you gonna get out of there? They say, "Well the only way you can get out of there is if you married."

PL: And you was with the Army or?

AB: The Army.

PL: The Army?

AB: Yeah.

PL: So when you came home, you came back here or?

AB: I came back here, and then, well, my mom and my dad, they moved already when we weren't in school, they bought down here. My dad worked for the pineapple company all his life.

PL: Which one is this? The C?

AB: Libby

PL: Oh Libby's? Okay.

AB: But when you called me that day?

PL: Yeah.

AB: And when you mentioned about you were trying to get a pavilion or something, yeah? Building, then I was wondering, oh my goodness, how we gonna get a pavilion in the back there.

PL: I not sure exactly what's there, so let me see, which way is north, [pause] okay I think look like this yeah? I think so this is what they're essentially planning to do. So I think the veterans is right here yeah? And then this is all the cemetery. And this is that one road that go all the way to the top. I think right here is where they wanna put in the pavilion. And then add in plots right here.

AB: How's your map showing there?

PL: This is the, I'm still trying to figure out right now.

AB: If you put it back inside here, let's say, right in this area here.

PL: Okay, okay, so right here. So this is 'em.

AB: Okay.

PL: You see this corner? Is that corner right there, down like this. [pause] There, like that, just like that. So the veterans stay over here I believe.

AB: Oh you got the veterans outside of this map.

PL: Yeah

AB: Yeah, that's why I was wondering what.

PL: 'Cause let me see, yeah, yeah, so the veterans is outside of this. So the veterans is over here. So this is just the Kanakaloloa side or the homestead side.

AB: Right.

PL: You see this road right here? Is this one. You know that main road that people always drive up on?

AB: The road.

PL: I think so.

AB: Comes like this yeah?

PL: Okay so this road.

AB: This one goes straight in the back to the cliff.

PL: Yeah so that's right here.

AB: That's why they call it "Lihipali."

PL: Yeah, this is Lihipali Road right here, the black. And then so this is whatever graves that get now, you know all the graves that get now, and then get this road, and then get one empty pasture right here, not empty pasture, but empty lot.

AB: Empty lots, yeah.

PL: So right here is where they going put the pavilion.

AB: Oh okay.

PL: So they going make one parking lot right here, and then the pavilion right here, and then I think they going open up more plots for graves over here and all down here. And then the veterans is right here. I mean look big over here, but it's pretty tight.

AB: [laughs] It is tight, it is tight.

PL: But.

AB: So I told you, "Gee what's going happen when the veterans want to expand, yeah?" When you look where they are, and I thought oh my goodness.

PL: That's something potential that DHHL might need to consider is if the veterans do eventually expand or if maybe over here could be like one separate place for them, but that's a good point is the expansion for the veteran's cemetery.

I don't think it's gonna be, you know like a big pavilion. I think it's going be just one place for the families.

AB: Just like the veteran's one, you know, it's...

PL: Small.

AB: Small. And then they used to have it where it is now, you go down to the end of you know where the road is, and there's the flagpole over there, and have their services right around one small little area there, until they went up.

PL: To bury.

AB: And they build that building up there.

PL: Oh okay, okay. Yeah, and I think the main purpose, too, is just so that they have restrooms.

AB: Yeah, they have restroom and place for you to gather and all that.

PL: So I don't know, you have any...

AB: So that's what you looking for? A place for you can go there and have your service.

PL: I think that's you know one of the things that they might want to use, sorry, where that paper stay? [pause] This one over here.

Okay, so currently there is no shelter from weather or the elements at the cemetery for visitors during services or grave visits to the site. The proposed pavilion will add an approximately 1,250 square foot open pavilion to provide visitors shelter from the elements as well as space for gatherings, watering for flowers, incidental cleaning, and other considerations.

So that's basically what they like the pavilion there for. And then, of course along with that, they got to add in more water lines, and then I guess they wanna put in a property wall which would extend

the Ho‘olehua veteran’s cemetery to an existing fence line. And then the new wall would be a 3 to 4 foot high stacked rock wall on this side too, I think, of the property.

AB: Oh okay, so after you set all this up with you, you know, what you doing, then you work it over with the Hawaiian Homes Commission?

PL: We have no control on what they gonna do. We just you know doing the consultation part, and we gather the information about the community *mana‘o*, stuff like that, then we hand it over to them, and then they use whatever information that is gathered in our interviews to figure out what is best for the project.

AB: So this will be a project more for the homesteaders?

PL: Yeah, yeah because it’s just expanding the homestead cemetery so that more homestead people can be buried here, ‘cause I think all of this up here, you know, is getting pretty full.

AB: Right.

PL: So in order to get more lots they gotta go through this process.

AB: Yeah.

PL: So I don’t know if you think that’s a good thing, if you have problems with them expanding it, you no like them expand it?

AB: That’s another thing, you know, whether you running into the other lot.

PL: Oh over here? I think so what they wanna do is take it, you get your red right here, just out to that point.

AB: You expanding, I mean you wanna go down in there as far as you can go.

PL: Yeah, then that’s it.

AB: Then if you want some more, then you have to say, “Oh.”

PL: Then 50 years from now they gotta go through this whole process again. [laughs]

AB: [laughs]

PL: Even like Kapa‘akea Cemetery, I don’t know after that, you know, what they going do, but...

AB: Yeah, ‘cause that’s a community, they let the community go in there too.

PL: Yeah community, but I think that’s DHHL too down there, Hawaiian Homes, not sure, but yeah for now they just wanna expand it to the property that they already have, not going into anybody else’s lots.

AB: The Hawaiian homes, they closed down that one in Homelani? You know, down at where Manowainui Gulch going down there, so they closed that one down, and then that’s how they went up to Kanakaloloa. But they still can use Homelani, like if you have a plot there, because they allow you four in a plot, or eight in a plot like that. During a time of closure, maybe you had only four of

the family in there, but now you still can go and put where your plot is still, you know, have some more to put in.

PL: Right.

AB: So that's all, sometimes you feel, "Eh how come, I thought they close 'em?" But they have funeral going on there. But there's...

PL: They can go deeper.

AB: No, no, they go next to the family plot that had room there.

PL: Oh I see. okay, sorry, let me go back to, oh, do you know if this area, the cemetery area was used for plantation?

AB: Plantation? No.

PL: No, was just open?

AB: Yeah.

PL: Okay. And then, I think that's it, you pretty much covered everything that I would like to talk about except you sure you don't have any other questions or concerns about the cemetery improvements? You think it's good? You think it's bad? You think it's waste time?

AB: When I look at this, you know, you have something like this going on, I'm really pleased that you can have, as far as area, when you looking back there, there is area, opening yeah? 'Cause this homesteaders never went back to the end of their lot. It just sitting there and then growing in shrub and all that, and that's all. And so, unless they tied up for pasture, pastoral lots or what, but other than that, it's standing there. And you have something like this that comes up, you know, for the benefit of, I don't know if the homesteaders would be growing any more or what they are now.

PL: Okay, so it's okay then.

AB: Yeah.

PL: In your mind. Okay. That's good. And then, sorry Uncle, I never get the beginning part, if you can just state your full name?

AB: Alexander.

PL: Like that.

AB: Kauholonuimoku Bishaw.

PL: Bishaw. And sorry, Uncle, when is your birthday?

AB: Beg your pardon?

PL: Your birthday.

AB: 12/18/24

PL: And you said you was born on Waikiki, yeah?

AB: Yeah.

PL: Waikiki, and then you moved to Moloka'i.

Uncle, what is your parents' name?

AB: My dad is Christian. My mom is Henrietta. My dad is Bishaw. My mom is Kaiena.

PL: After you got out of the service, Uncle, what was your occupation?

AB: My occupation was, oh it wasn't a true, but it was a real occupation that I didn't believe I would do something like that you know, working on the island itself, and that was with water.

PL: Oh okay.

AB: The water was situated on you know Wailau, Pelekunu, they were gauging this water of how much water is coming out, blah blah blah, you know? I didn't know what they was for. It was work, a job, so I went. I went to the first valley, the Pelekunu, then when just about going into Waikolu, then I asked the guy, "What they doing with this water?"

---ho 'omaka ---

PL: They running.

AB: They said, well, at first they wanna take the water from Waikolu, but that's our last job there, take the water from Waikolu, if it doesn't throw out enough to feed, then they'll tunnel over to Pelekunu. And the same they do with Wailau.

PL: People was living back there?

AB: People was living back there.

PL: Oh wow.

AB: And some of those people they use that, you know, the stream water that come, eh it runs all year round into Wailau, Pelekunu, all year round it's running into the ocean. And then what they catch, they use that water, and then the rest just run away, going like that, so they wanna make use of the water on this side for planting or whatever yeah? So it was really interesting. It was a interesting thing because, I don't know, a job is a job.

PL: Right

AB: When you look at it yeah? But as it went along, then you know it was like, our last job was Waikolu. And that one was not too much, was just you looking from the top. You look down in the valley, and you see the fall, not the top fall now, the bottom fall that run off. And that's where they wanna take the first one. So what we did was cut the trail down there to that fall, and put on the beacon light. And then you know, in the night, you know they go and then take readings.

PL: Oh yeah, yeah

AB: Of that, all that readings, and see how the tunnel comes out and feed the homestead. The homestead was, it was for water, water was the number one situation over here. Water.

PL: Interesting.

AB: Because when they got that water out, and then right in the back here, one of the lots in the back here, [long pause] right back in the Lishman area, right in there, there's a gulch in there. And they wanna put the, when they get that water out, they wanna put in there as a reservoir.

PL: Oh.

AB: Yeah, 'cause it has that bowl.

PL: Yeah, yeah. And did they end up doing that?

AB: It's a good question, because when everything was finished, when we put that beacon light on, where they gonna take that first tunnel, they went take it out from there, then my job ended over there. Then I went to another job. I worked with the county, was only temporary, 'til pau, and then I went with the construction, with Harada Construction, I don't know if you heard of that one, Harada. You know George Harada?

PL: No, but I see the name, the brand, the Harada.

AB: Yeah, that's where I worked, Harada, and over there we build the airport, what you call that building, the terminal?

PL: Terminal? Oh okay.

AB: So we build that terminal. And I had a good experience on that terminal there when we were working. We did the concrete work, the foundation, and they were getting the sand from down in Mo'omomi, they bringing the sand up, and then we're throwing that in for concrete. Yeah, somehow when you look at Mo'omomi, this place were all battleground before. So you can tell what's under there yeah? In the sand, and sometimes you go down there fishing, you can see the bones, out of the sand, the head and all that, lot of bones are there. So lot of this bones came up.

PL: To the airport?

AB: To the airport. And then we were running the, we were screening it, but sometime they go, it goes in there, and you mix 'em.

PL: After you guys went screen out the bones, you guys took 'em back Mo'omomi, or?

AB: Yeah, that was after they found that bones were going into the concrete, yeah? So they made us screen it real good and bring all this bones out, and then they come up with the truck pick it up, and then take it back down there and then buried it, whatever they doing yeah. So they do that and then when I still working for the company, they had the tunnel going out yeah? The tunnel was starting to start at that Waikolu tunnel where they were going to have water to come out.

PL: And where would end?

AB: The reservoir. You know where the reservoir is in Kualapu'u?

PL: Yeah.

AB: Yeah, that's the reservoir.

PL: Oh so that's where the water coming from now.

AB: Yeah, that's where they getting water now. So where they wanted the water for put first was up here.

PL: Right, okay.

AB: Okay if they had that water reservoir here.

PL: That's right next to the cemetery.

AB: And then the homesteaders would get this water from that reservoir for their farming, and they have it up here. But when they did it, then I worked for Hawaiian Homes Commission, when they working on that, Hawaiian Homes Commission, when I look at them, oh they putting the reservoir, oh I work on that place over here. So they went to this place, and they got that water, and they brought it out. And lo and behold, they started the reservoir, they started digging the reservoir, when you look at it, oh yeah, what happened? I thought supposed to be up here, no, when they put it all in, and then, I don't know, that's why I mentioned George Harada, you remember George Harada? He was working for the hospital. Then after that he came and he worked for the irrigation company, that one right up here by the post office. So he worked there, and I was working Hawaiian Homes.

So one day I went down to his office. I go, "Eh, you over here now? You work hospital. How you like it?" He tell, "Oh, like it good." Then he told me, he look, because he know they get the reservoir. I tell 'em, "Yeah." I told 'em, "You know I work down on that water, and that was the last valley we worked in, and that was the valley they was going take the water from. He said, "Oh yeah, our tunnel went through. Yeah." So I told 'em, "Oh I'd like to go see." He said, "Come, I take you one day." So next day we made the plans, so I left my car up the commission office, and I went down to his office. Somebody took me down, and you know, I went up in the back, Manila Camp, you know Manila Camp is?

PL: Yeah.

AB: You go there, and then you go up, and as we're going up and...

PL: You guys driving up the mountain?

AB: Yeah, but was below here, because Waikolu is way down this side.

PL: Okay.

AB: Waikolu, Pelekunu, Wailau

PL: Yeah, yeah

AB: So you coming back this side.

PL: Okay.

AB: Waikolu was the first valley they would go to get this water. If no 'nough, they would go to Pelekunu. Okay, we're going, then I seen this power pole, electric line out there. So I just look at this line, I tell 'em, "What this for?" I didn't ask him. But when we turn the corner, and we look where the tunnel mouth came out, I seen this transformer sitting over there, transformer outside of the tunnel there. Ooh, George, what you doing with the transformer up here? He said, "Oh, Alex, we get one pump on the other side." What? Pump? How come you putting pump? He said, "Why? They gotta pump the water out because no enough coming out to put in the reservoir. I tell, "Oh yeah?" So we went through the tunnel. You know, they had the electric line going through. When we came out, I walked out of the tunnel, and I looked where the water coming from ah? It's the wrong fall. Then when I looked down, I seen the fall. I say, "George, the water supposed to come out from down there, not up here. Yeah?" He said, "Yeah, down there when come out they said the thing was too low, cannot come up to the reservoir, because he down."

PL: Oh, down.

AB: So they have to come up a little.

PL: And then pump.

AB: You get like that. And still, the water wasn't enough to put in, so they put a pump over there. And that's what they pumping in the reservoir. The reservoir was never filled to the top, 'til today. So when I look li'dat, I told 'em, "Oh George, something went wrong over here, yeah." That's why the homesteaders, instead of getting the full amount of the irrigation water that they were gonna use, they only got one-third of that water. Yeah, when you look at it, where's the other two-third? It went over to West End, Moloka'i Ranch yeah? And so even that area, when they were gonna start the tunnel, they met with Hawaiian Homes, and they told 'em, Hawaiian Homes said, "Eh they told us that you know the elevation wasn't enough to reach where we was told to put it up in this area."

PL: Oh, I see.

AB: So when they sat down with Moloka'i Ranch, Moloka'i Ranch said, "Put 'em on our lands."

PL: Sneaky buggahs, and then we can take some.

AB: Yeah put 'em, and that's how over there, in Kualapu'u, they call it the Kualapu'u Reservoir. Yeah? Now, things that down that low, and they couldn't get Pelekunu. Yeah, because when they go to Pelekunu, they have to go up, to where they was gonna get, to where we took the reading of the water, you know, all that area li'dat, they have to go up, and when you go up, it's just like the main fall, when the main fall no more rain, no more fall, yeah? When you look, no more no fall yeah? The water is down there. And that's how the water is still going. So they couldn't go down there, there would be more low down.

PL: Mmhmm, no can pump.

AB: More water cannot come on this side. So when you look at the people that was staying in Wailau, and when you tell 'em, "Ho, they cannot get this water." They free, they not taking the water!

PL: Yeah but the guys in Waikolu, they, oh okay.

AB: So that's it.

PL: [laughs] That's interesting though, I never realized that.

AB: Yeah, even you know when we first came to Molokai yeah? When we first came to Molokai, water was real hard to get in the back here. Yeah? So in other words, we having a tank, there's a wooden tank at that time way back in this area., and then that was for feeding. Molokai wasn't as filled up as it is. This was long before. Afterwards, and then they came. But when we were drinking water, we were drinking water from this tank was coming out. But the tank was coming out from the mountain, intakes, down into the tank, down to here. Okay, when no more rain, the water get slow, what happen to down this area for the water? This all was ration water.

PL: Oh, and the farther you get, the more ration?

AB: So we got low ration water. As far as farming is concerned, it was hard to farm because you gotta farm when get rain. No more rain, no more water.

PL: And this side never have rain anyway because [Mount] Kamakou block 'em.

AB: Yeah, and you know, homesteaders had really hard time with the coming on, 'cause lot of Hawaiians when they come on the land, they want to plant taro, and all this kind, East End here, East End side good, but with the stream water coming down, and all this kind.

PL: Interesting.

AB: 'Cause when I look at homestead area, yeah, this only Ho'olehua, but you see, got Kalama'ula, Kapa'akea, One Ali'i, even running outside, you know, I used to work outside in Kainalu, all those things. It was all on water. But lot of these areas, like in East End, down in Kalama'ula, they still take water from [can't understand] yeah? And that's where they get all their water.

PL: Yeah, I remember my mom was talking about that. Interesting.

AB: But it's good. I like when they gonna put something over there at the cemetery.

PL: Okay. I no think I have any more questions. Do you have any more questions, Uncle?

AB: No, but this map here, when I used to work.

PL: I can actually take a picture of that map. I can take picture of that map?

AB: Yeah.

PL: Okay, I have to grab my camera.

AB: When I used to work Hawaiian Homes, then I got one of these maps, and I kept it with me. When I retired, I brought it home with me.

PL: Alright.

AB: [laughs]

PL: Okay [long pause, probably taking picture]

AB: Catch 'em up here, where you wanna catch your?

PL: Okay, perfect. Okay, I go turn this off then.

APPENDIX F: INTERVIEW WITH NANI KAWA‘A

TALKING STORY WITH
NANI KAWA'A (NK)

Oral History for the Kanakaloloa project by Pūlama Lima (PL)

For Keala Pono 2/23/2015

PL: Today is February 23, 2015, and we're here interviewing Aunty Nani Kawa'a. Aunty, to start, can you please tell us about yourself, your full name, birthdate, where you were born and where you grew up?

NK: Okay, my name is Kenetta Nani Maioho Kawa'a. My birthday is the 23rd of June, 1952. I was born at St. Francis Hospital on O'ahu, but raised here on Moloka'i in Kalama'ula.

PL: And who are your parents?

NK: My father is Kenneth Kamakana Maioho. And my mother is Rena Miriam Leong.

PL: And your area of residence?

NK: The area of residence now is Ho'olehua, Moloka'i.

PL: And how long you lived there?

NK: I lived there since 1994, so it's more than 20 years.

PL: More than 20, okay. Aunty if you could just please tell me about I guess your connection to the project area, you know, if you have *'ohana* that are buried there, just your own personal connection.

NK: Okay, so my grandparents, I have an uncle and my father, are buried there besides other uncles, other aunts, cousins, my mother-in-law, so there's quite a few family members, quite a lot of family members I have buried at Kanakaloloa.

PL: And Kanakaloloa was the cemetery for the homesteading.

NK: That's right, and my family, the Maioho family from Kalama'ula, were one of the first settlers on Hawaiian homelands. And so our family is buried toward the bottom of the cemetery. And I notice that in the cemetery, those that were the early settlers are located on the bottom of the cemetery. And as you go further up, people who came later, are buried further up the hill.

PL: But just to clarify, your *'ohana* were homesteaders not in Ho'olehua area.

NK: Right, I'm from the homesteading family from Kalama'ula, Moloka'i.

PL: Okay, do you know what year that was that they got the homestead in Kalama'ula?

NK: I know the Homestead Act passed in 1920. I'm not sure. I would have to go back and check and see when our family came over.

PL: Okay, Aunty, do you have any memories of, what is your earliest memory of you visiting the cemetery?

NK: Okay.

PL: For what, if you remember.

NK: Yeah, I was a child. We usually go up to the cemetery when our family member passes away, but more vividly I remember like as a teen always going up, having to clean the graves, putting flowers on the graves, and that's my memory, or going up whenever somebody, there's a funeral.

PL: And how often do you guys frequent the cemetery?

NK: Now I go up whenever there's a death or burial, but if there's not, I usually go up about once every other month or so.

PL: And when you do go up, is there anything that you notice in particular about the project area, like different people coming up, you know, like the activity that happens there.

NK: Well when my mother-in-law passed away several years ago, her grave, she's kind of up towards the top, because there's no more room where her family is located, so they have to like create another place for the family. And we didn't have like a marker on her grave. And she was kind of like at the beginning of the row. I used to notice, we used to go up and check the grave quite frequently like every week. And there would be tire marks over the grave, there would be cans of beer, and just trash around her area. So what we did, my husband did, was he put this big cement thing on so that nobody could like drive over the cemetery, but I do notice, it's a peaceful place, and when people do come, it's to clean, and usually we will have a nice conversation going about a family member, or I have one person that will talk to me about planting grass, how to get rid of the weeds around the grave, just little things like that.

PL: What about, how has the area changed throughout the course of your lifetime, or within your memory?

NK: Well because my family was the early settlers of Kalama'ula, there weren't as many graves as there are now. There's more and more, and more and more people are bringing things to the cemetery, little mementos, like a carburetor, or the *lele*, like John Ka'imikaua, Kumu Ka'imikaua has his *lele*. So there's a lot more trees are planted, like somebody planted a tree or it grew into a tree. So that's all I notice.

When we used to go up, when I was little, there were very few graves. In fact, my uncle who's buried with our family is a veteran, and rather than being buried at the veteran's cemetery, my aunt didn't want him to be buried there 'cause at the time he would've been I think, I'm not sure if he would've been the first one or the only one on that side. She felt that she didn't want him to be lonely. So she had him buried where our family is.

So every year, sometimes he's forgotten as far as being a veteran, and he doesn't always have his flag. So definitely every Memorial Weekend, I always go up and check to make sure that his grave has a flag on it, that they remember the veterans that are buried on that side of the cemetery.

PL: Do you remember any of the *kūpuna* talking about the cemetery, or just that area, or what was used for?

NK: Actually, I don't remember the *kūpuna* talking about it except it's not a scary place to be. And other than them mentioning Uncle where they didn't want him to be lonely and by himself, and it's I guess our concept of death is a little different, we just think of our loved one that we buried as still being but in a different realm, so to speak, but they're still with us. And so that's how, what I did hear was usually, people didn't share stories about the area, they were sharing stories of the loved

one, memories of, “Oh this is my neighbor.” And people would talk to the headstones or whatever like that, “Oh hello Auntie So-and-so, Auntie Pua, how are you today,” or “Hi Uncle Heine, what are you up to? I had a good week this week.” So that’s what I remember every time we used to go up to the cemetery. The conversations were focused on talking story with your family as if they were present.

PL: Do you remember the hospital being right on the other side? Were you guys still here when that was there?

NK: I don’t remember the hospital. Again, I didn’t pay attention. You know when you’re young you don’t pay attention to those things. I paid attention to the graves because number one, it’s kinda weird when you’re a little child to see the *kūpuna* talking to the stones. And you’re wondering what’s going on. And then they would scold you. You cannot just go step all over. Don’t go just stepping on people’s graves. You had to like show respect, and you walk around. Don’t just step all over. Watch where you walking. So that kind of stuff is what I remember. I didn’t pay attention to what was next door or whatever.

PL: Okay.

And then as far as like any hunting, gathering, fishing, or cultural practices that occurred in this area or near or down here, do you know of any, or happen to know of people that fished down here, people who hunt in this area?

NK: No.

PL: Okay.

What about, I guess, anything you have to say about the homesteaders during the pineapple plantation era? Do you know anything, if that’s about that area being pineapple?

NK: Oh no I don’t.

PL: Okay.

NK: I only know that area as being the cemetery.

PL: Okay, and then as far as the project goes, do you have any thoughts about the proposed cemetery improvements, whether it’s a good thing, whether it’s a bad thing, whether it’s necessary, unnecessary?

NK: Well I think having the pavilion is a good thing like for example, I used to go up with the scouts, and I still go up and watch the scouts when they do a flag raising ceremony for Veteran’s Day. It’s nice having the pavilion because after they do the flag raising ceremony, we usually have cocoa and cornbread or something, and it’s nice to have the pavilion. And especially if it rains or stuff, it’s nice. I think having a pavilion on the other side, on the regular cemetery side, is a good thing.

My concern would be though for people that go up and drink, like how my mother-in-law’s grave they were marking, I hope people don’t abuse that. Because the feeling that I get when I go to the cemetery, it’s not like a scary place because I know the people that are there. They’re people that, family, so it’s a place I think people would feel comfortable going. But I know I had, and one of my aunties used to go up, after her husband died, every Sunday she would go up, and she’d sit on his grave, and she would talk story with him. He had passed away, but she felt that his presence and so,

I think that having a pavilion would be nice where people that do go up can have someplace if it's rainy or whatever. I think that would be a good thing if it's not abused.

PL: Mmhhh, right. And your concern about the facilities being abused, do you have any recommendations as far as like how to control that, or?

NK: I really don't because I think the more people we have, maybe the more use, right now it's too early to tell. There's only that one family that goes up, and they have their own picnic table. And they go regularly and have picnic, but I don't know how it is with others and using the cemetery, I don't know.

But I do know that having a pavilion like say during the holidays where like for example when we have to go put flowers on the graves, it's right now there's no trash place, and I can understand why they removed, 'cause other people are putting stuff in there that they're not supposed to from the cemetery. But having someplace afterwards, after you decorate the graves, to sit down and to look, talk story with all the others that are coming, and usually the time like during Memorial Weekend, that's when it's really busy, that's when lots of people go up. They'll go for that weekend to decorate. And that's the time that it's kind of like everybody's renewing their friendship with each other because we haven't seen each other. Some people come from off-island to decorate the graves. I know there's a family in Honolulu that comes every year, and they only come during that time to decorate the graves. So it's having that, it's kinda neat to see people that come to decorate the graves, and then to see it real beautiful afterwards.

PL: So it's not just the spiritual side, but it's the social thing, too, that happens.

NK: Yeah, yeah. But I don't know how, if you do build a pavilion, how much use it's gonna be. I can't say that. I really don't know. I'm sorry, I can't make any recommendations.

PL: Mmhhh, and then just if you have any memories of any cultural, I wouldn't say protocol, but just cultural practices as far as like funeral practices that you see during, you know, when they bury them, if you can point out any cultural practices that occur, besides, I don't know, Kumu John's *lele*.

NK: Other than I guess because my family's Christian, there's really no cultural practice other than maybe a chant or a Hawaiian song occasionally when I go to funerals and things like that, but there's nothing else out of the ordinary that would be really cultural, that I would say would be really cultural.

PL: Okay.

NK: Basically what's observed mostly at the cemetery would be Christian types of things that we do, pray, sing.

PL: And then one more thing I just wanted to go back on was how you talked about the scouts, the boy scouts, if you could elaborate on that little bit more?

NK: Okay so every year the boy scouts go up really early at sunrise, and they raise the flag. They do a little flag-raising ceremony. So we say the Pledge of Allegiance, we might sing a song, have a prayer, and then sometimes they have people talk, like maybe veterans will share their experience. And every year it's different depending on who the speaker is and who's planning, but the service isn't very long. It's just maybe half an hour. But it's really neat to watch the young people, these little scouts raise the flag, and then all of us to do the Pledge of Allegiance, and to honor those especially on the veterans' side where they honor those that served in the military. I think it's a nice

tribute for them. And then usually the flags, I don't know when they put the flags up, but I really love to see those flags. I love to see 'em on the graves. I don't know if that answers your question?

PL: No, yeah, yeah.

NK: Yeah, so that's what they do.

PL: I didn't know that happened.

NK: Yeah, and not very many people know that. I'm surprised, but I don't know if they don't really advertise it. But it's really neat. They come dressed in their uniforms.

PL: And this is the Moloka'i boy scouts from all over or just mostly from Ho'olehua?

NK: Mostly from Ho'olehua, and I don't know if the other boy scout troop in Kaunakakai takes care of the graves down in town. But I know in Ho'olehua, it's usually our scout troop that goes. And it's really quite nice, and the boy scouts are from, I think they start like from 8 years old all the way on up. But they all come in their uniform. They fold the flag, well they do everything, I mean like a regular flag raising ceremony with a little more, not like the school how they raise the flag. The flag, they just do it. But this one, it has...

PL: More purpose?

NK: More, not only purpose, but there's more discipline in doing it. And they follow the protocol for the flag whereas you don't let it touch the ground. I think it's pretty neat. It's more disciplined, and it's really nice. And to see them salute, and then to say the Pledge of Allegiance, it's really nice, quite nice.

PL: Okay, I have one more question.

NK: Okay.

PL: Just about the cemetery itself being dedicated for homesteaders, if you have any *mana'o* on that, you know, you think it's, what that means to you, to your *'ohana*, just knowing that, you know?

NK: I think there's a sense of pride. I hate to see it, and maybe that's why it's not so scary because knowing it's just people, homestead, and their families, maybe somebody has, like my dad, has been off island, and we asked permission to bring him and have him buried in the homestead next to his mother. For me, it gives me a sense of pride, and I hope that, it's nice to know that all of us had the same struggles being homesteaders. We all went through because it's a little different when you live on the homestead, and especially here on Moloka'i.

PL: What in particular, sorry if this is too personal, made you guys decide to bring your father back to be buried at Kanakaloloa?

NK: It was my father loved Moloka'i, but we lived on O'ahu, but his heart was here on Moloka'i. And so it was the appropriate place when he died. We knew that this is where he would want his remains to be. And it was the cemetery, the homestead cemetery, 'cause there's no other place, because he was raised in Kalama'ula so it's real appropriate. And it was something that we just knew that needed to be done, and it was the right thing. And he wanted to be buried next to his mother, and just so happened that the space next to his mother was not taken. So he got everything he wanted, he got next to his mom on Moloka'i.

PL: Nice. Okay, and then do you have any other things you'd like to say, *mana'o* about the project?

NK: No.

PL: No? Okay, *mahalo nui*, Aunty.

NK: You're welcome!

PL: Thank you very much!

[tape stops then starts again]

PL: Yeah, okay so if we could just share that *mo'olelo*.

NK: Oh okay, I have a cousin who used to take pictures for John Ka'imikaua, and she documented a lot, some of the sites he talked about.

PL: Sorry Aunty, just to, sorry for the interruption, but John Ka'imikaua?

NK: Okay, John Ka'imikaua was a *kumu hula*, and basically his chants and everything his knowledge was all about Moloka'i. And so our cousin, whose name is Marcia Camera, was somebody that had given me a book with stories and things that John had shared information. And I know in one of the *mo'olelos* that talks about Kanakaloloa is where the *menehune* used to play. And I have it, and not very many people know of that *mo'olelo* because a lot of what John shared, the history of Moloka'i is really undocumented history. So I would have to go back and look at my research notes.

PL: Okay.

NK: To find where she had written that out.

PL: But from your recollection, that's what was said is that Kanakaloloa was the area.

NK: Yeah, where the *menehune* used to play.

PL: Play, oh okay.

NK: Yeah, they used to play, so.

PL: Okay, perfect.

NK: Yeah, in fact some people, I can't remember, but I remember hearing people say that they used to see *menehune* over there anyway. And so, that was kind of interesting to me. But again, you know when you're young you don't pay attention to stuff like that.

PL: You remember, or yeah, I guess well maybe if I say it then you'll think but seeing any cultural sites in that area? No? Okay.

NK: Yeah, I don't look for them.

PL: [laughs] Yeah.

NK: That's why. That's about all the *mo'olelo*. I'll go look it up.

PL: Okay, no, that's perfect. Thank you Aunty.

NK: You're welcome.

APPENDIX G: INTERVIEW WITH MIKIALA PESCAIA

TALKING STORY WITH
MIKIALA PESCAIA (MP)

Oral History for the Kanakaloloa project by Pulama Lima (PL)

For Keala Pono 2/18/2015

PL: Today is February 18, 2015, and I am meeting with Mikiala Pescaia. This is Pulama Lima, and we will be discussing the Kanakaloloa Cemetery project on the island of Moloka'i.

So, Miki, if you can begin, just tell us about yourself, name, where you were born, birthdate, that kind of thing.

MP: My name is Michelle Kananionāpua Ayau, born to Reynolds Leialoha Ayau and Raynette Moanike'ala Igarta, December 5, 1975, at Moloka'i General Hospital. My family resides at Lot 59 on Farrington Avenue homestead. I was born and raised on that property by my parents. My father was born and raised on that same homestead, and he was raised by his grandparents who were Reverend Edward Haleaniani Ayau and Olivia Kaleialohaakalāhui Townsend. And they were original homesteaders in the Kalama'ula area, and then when the ag lots in Ho'olehua opened up, they were able to upgrade and acquired a Ho'olehua homestead for farming. And so pretty much since the Ho'olehua homestead program started, my family has been homesteaders there.

PL: *Mahalo*. Okay, so is there anything you would like to say about the general area of the project area, or past and present land use?

MP: Past and present land use, you know as far as I know, it's always, eh I learned to drive up there. It's always been this very peaceful place. I mean all of Ho'olehua is pretty much peaceful, but there's something special about being on that downslope hill that separates it from the rest of the rolling 'uala plains coming down towards Mahana or towards the Mo'omomi area. And if you look at it, it has that sort of natural, because of that hill, there's this natural separation.

And you know, I was told that you didn't bury people where you planted food, you know, the land use was separate, and given all the cliffs of the Ho'olehua *pali*, you know that back side, and of course Keonelele in the Mo'omomi area which is the traditional burial grounds for the people who lived in that area. This was, from the top of the hill, you can still see that area. So I think there is definitely, say a spiritual connection, but there is a connection between where they used to bury *kūpuna* or people and selecting this location for the cemetery. I'm not sure why, this is just things I've heard or observations I've made. Yeah, anyways.

PL: Do you have any 'ohana that are buried in the cemetery?

MP: I have lots of 'ohana buried in the cemetery. So my dad's natural parents are Harriet Ahiona Ayau, she'll pass away as Harriet Ahiona Ne. She was married to Jacob Iopa Ne. They were homesteaders in Kalama'ula. Previous to that, my father's biological father was her first husband Paul Kamohoali'i Hapai. All of them are buried there. So my grandmother is buried alongside three of her husbands, the third being Herbert Hooper. Yeah, they all right together, all in the same spot, and as well as, she had a baby that passed while was still infant not too long after birth. And my dad's sister is buried there with her two babies that passed. My dad's, the *kūpuna* that raised him and *hanai'd* him, they're buried there. My dad's brothers, some of their grandchildren, you know, there's a bunch of people in my immediate family buried.

So ever since I was little it's always been a thing. You take your 'ohana. You go. You spend the day. You clean graves, you know. My papa always said in his yard, he didn't water anything that

you couldn't eat. And so, his wife, though, loved flowers. He never watered any of her flowers. He was like, "Eh if you like do that, you do that." So anyways, every time we would go, I remember picking all the fruits or whatever was in season, or you know, vegetables, whatever had, and instead of taking flowers to the grave, we used to take mango or daikon or whatever we had or whatever was happening at the time. So from small kid time I remember going up and putting food on the graves, which is different I guess. And they would always find the choicest flower that we could, and just you know, like one for Grandma.

My other *tūtūs*, they kinda never really care one way or another so we usually just sing for them. But you know, it's one *pu'uhonua*, I mean, the people of Ho'olehua, time and time again, I've seen people just making a day of it, bringing all the chairs, bringing the food and drink and 'ukulele or whatever and hanging out and spending the day. And we've definitely outgrown our cemetery which is actually kind of nice because of all the places you could go, you choose to come home to that area. It speaks to the *pilina*, the relationship, that people want to be buried amongst their family and stay connected like that. And we're glad that's an option.

PL: Yeah, definitely. Do you know of what about like past agricultural or even like fishing alongside the cliff? People go hunting in the area, do you know?

MP: People do plenty hunting in the area. So my homestead is like, I don't know, couple homesteads down, but it's along the cliff where I live now with my husband. And that's a Makaiwi, now Pescaia homestead, Lot 22. And there's a lot of traffic between our place and over there. You know, you hear it, you see it. When my father and my uncle was like, they all used to go rappelling down the cliff for go *holoholo*, go pick 'opihi, go fishing.

There's this wonderful family story I would like, my mom was 8 months pregnant, I think, with me, and she rappelled down the cliff 'cause they had to go *holoholo* for something. And I remember my 'ohana just being like, "You crazy." And she was like, "Ah, can, can." People weren't afraid, or I don't know. But I don't know too many people who rappelled down. I guess now we have better access to the coastline, you know. The road to Mo'omomi is little bit more cherry. You can drive down now, and you don't have to be so dramatic. But I know for a long time, people did, the cliff didn't prevent them from gathering in the area.

In Ho'olehua, anywhere you see black paper-plastic shreds had pineapple field there at some point 'cause that rubbish is like everywhere, and it's in the dirt. So you know those kinds of indications tell us it's been grazed before. You'll notice some of the features have been disturbed.

In my brother's lot, which is what we inherited from my great-grandma on my other side, the U'u lot, there's walls and structures, archaeological sites in that property. You can talk story with my brother maybe, or my husband. My husband has walked through there 'cause when we was working on my brother's property and trying to come up with a clearing plan and stuff, you know, we identified some of those, you can tell was something. We might not know exactly what, but you know, anyways. And you get the feel that you just know.

PL: Well going off of that, do you know any *mo'olelo* about the place?

MP: So I went go pull out for you, it's a transcript that Phil Spalding did with my grandma, and she tells the story of how the place got its name. So I don't know what you like me do. You like me read 'em?

PL: It's up to you. If you like read 'em, can read 'em, if you comfortable, or if you like me take picture or something. It's up to you.

MP: Yeah, well, okay so, one thing about my grandma as a storyteller is she adapted sometimes her *mo'olelo* to whoever the audience is. So sometimes you know *kūpuna* like they change the name 'cause they like drive home one *ha'awina*. So oftentimes, like the version she told us, I find out was like different than the version she told other people, and maybe it's more just a highlight of certain details 'cause for you, you know, in this moment that I telling you this story because I need you to catch on to this, you know?

Anyways, maybe I can kind of go through this 'cause I think this is yeah. Okay, so she says, so this is an interview conducted February 25, 1988, Harriet Ayau Ne, and what's happening is Philip Spalding III, he's coming to the Kupuna Program, the Alu Like Kupuna Program, and he like talk story with her and gets all this biographical info, and then he just starts asking her questions about all kind stuffs.

Anyways, she says:

The story of Kanakaloloa, the talking shell, the story is still hidden, it starts in Anahaki, the area before you get to Mo'omomi. Anahaki means 'a broken cave.' The current comes from the ocean and into this cave, and then at one time they had fall storms and broke the entrance to the cave, and it began to shoot up. So the cave has an opening in the top. And in this cave was a shell, that kind of, the crest of this...

But she says:

And Anahaki was ruled by an old, old man, an old chief, I can't remember his name. But he ruled there at Anahaki. And he could prophesy anything. And he always sent...

Okay, so she says:

For instance, like he would have this premonition, like Maui is coming to attack, and there would be war, and at a certain time and place. And so he always prepared his village for anything like that, or if there was going to be dry season, and then he would prepare his people to cultivate the right plants and vegetables so that they would have something to eat. Or if there was going to be a storm at sea, he just made sure that everybody adjusted what they were doing to make sure that they survived or was okay through all of these things that were coming.

And all the other chiefs were jealous of him, his ability to predict. And they wanted that *mana*, but they didn't know where the *mana* came from. And so the *mana* actually comes from this shell that talked to him, and it was kept in this broken cave of Anahaki.

So one day the chiefs from...

She says Pu'u Pipika, and Pu'u Pipika is the area before you get to Mahana, and it's not Waihuna, but it's the area on the top on the hill.

And so by Pu'u Pipika, right in that area, is a young chief. He wanted to get this *mana* 'cause he wanted to extend and include all of Anahaki in his territory. So he was like a neighboring chief. So he went to Anahaki to live, just to pretend, 'cause he wanted to be part of the family, the community, and kind of get the scoops. So his intentions was to find out where this *mana* was coming from. So he lived there for one year, and he still couldn't find out. He used to follow the chief, and when the chief go to sleep, he'll follow him to bed and check on him, be sure he sleeping. And during the day, wherever he went, he kind of snuck around and followed him.

And so one night he was going to the chief's house, and he saw the chief come out and go towards the sea. So he followed him. He saw the chief going to the top of the cave, go down, climb on the side of the wall, came to his shell, and he picked it up, and it was this great big shell. And he heard him, put it to his ear. First he talked to it, then he put it to his ear, and then he put it back. And he was there only about ten minutes. He put it back. And then he looked around, and then he went back home.

So this young chief, right, he goes down. And he's trying to figure out like what is the secret, like how do you activate this shell, right? So he keep following the chief, and he cannot tell like what he saying or what he doing. [reading to herself a snippet of the transcript] Yeah, so every time he came out of the cave, he had a new prediction, or he had new wisdom, you know, something to tell the people. And so, the young man, he goes down into the stuff, he finds the shell. He puts the shell to his ear, and all he heard was the ocean. And he didn't hear anything. He didn't know the password, like he didn't know how to activate it, or what to do to make the shell talk.

So he kept following the chief every time he went. And one night when the chief left, he went right back and thought maybe the shell would keep on talking. But all he heard was, "Beware, beware of your enemy." And he didn't know what that was about, what he was hearing. So because he heard the shell talk, he said, "Okay, this must be where the high chief getting, like the shell talk," right, like he kind of actually heard 'em himself. But he noticed that the old chief would talk first, like he said something to the shell, and then he would listen to it. So he knew that had to have like one password, like one activation thing, you know, something that you say to *ho'āla* the shell.

So he hide behind the stone, and then he hears the chief say, I think it's supposed to be, "*Pehea ka puka? 'O au kēia.*" And so he tried to remember that. As soon as the chief left, he went to the shell, and he said, "*Pehea ka puka? 'O au kēia.*" And then the shell said, " '*O wai 'oe?*" And then he said, "Oh, I'm a friend. *He hoa aloha kēia.*" And then the shell said, "I don't know you. I gave the instructions already." So he knew then, that with this shell, that the only way that he could stop the *mana* from this chief was, 'cause he was really trying to break the *mana* of the chief, right? So he was like, "Man, if I cannot get the shell to talk to me, and I cannot like, I gotta just take the shell." So he took it. And he stole it and ran away.

And so the chief the next day went to look for the shell and couldn't find it. And he was so heartbroken. So he told all of his family where Anahaki, like he led them to the cave, and he told them that somebody stole his prized possession and described the shell. And they asked him where was kept, and he said that, "In Anahaki, in the cave." So everybody was looking around, trying to come up with some clues.

And then so one lady remembered seeing the young chief come out of the cave that night. And so she told the chief, yeah, "Oh I saw that boy." And so they went to search his house. Then he knew. And once she said, very much he had a suspicion that he was the one, you know, 'cause he was the newcomer, yeah, they kinda was like, so Molokai yeah? We just suspicious of all the guys who, brah we know your backstory, like we don't know you. So anyways, he better run away, so he took that shell that night, and started running. And then he ran and ran, and the chief told all his warriors to watch him, his every move, don't let him leave the village. Then they realize he was digging out right? So he started to run eastward going up the hill, and they chased after him, but they couldn't catch him. So what they did is *pohu 'ule*, I don't know if that's the right word, but they lassoed him, caught him right around the waist, and he fell down. And so his body was down on the ground, but he wanted to escape. So he crawled with his hands, and his body stretched and stretched and stretched. And his waist stretched so his body, the lower part was down where he fell, but upper part kept stretching and stretching until he got on the top of the hill. Then he collapsed. And that's where the cemetery is. And so they called 'Kanakaloloa, The Long Man,' was a tall man.

That's how the place got its name. So when this man, the running man, collapsed, they were able to get ahold of the shell, and took it back, back into Anahaki.

So that's my grandma's story about how the place got its name.

PL: *Nani*.

MP: Yeah. That one is pretty close to, I mean that's kind of the version we heard, like there's no other variation of it, that *mo'olelo*.

PL: So the question is how he could keep stretching.

MP: Maybe he was *pule-ing* to his *kūpuna*, and they was like, "Come on, *mo'o*! Like, come on, get over here," trying to help him escape. But you know what I mean like this is the *mo'olelo* from the Anahaki family side, but the Pu'u Pipika side, they might have one whole 'nother version of why that young man wanted to go over there, and maybe he had his *ho'okala kupu*-ness happening on that side. But that's what I mean, like when get *mo'olelo*, like depending on what served the purpose of the *ha'awina*.

I thinking he had *pule* to his *kūpuna* or to his *'aumakua* to help him try escape.

[pause] Hope that helps.

PL: No yeah, that does. That clarifies, I mean, there's not a lot of places where you get *mo'olelo* attached to the name and still be able to talk about it. So that is very useful.

You know any...

MP: I've heard other *mo'olelo*. I think Kumu John shared a *mo'olelo* about the *menehune* standing on the hill. And I was trying to look for it 'cause he had one other version of where that, how it got its name, but if I find it, I'll forward it to you.

PL: Oh okay, I think Nahulu was mentioning something about, I don't know, all he said was the *menehune* went stand up, and the sun was setting, and they said, "Oh look, *kanaka loloa*."

MP: Yeah, something like that. It was like that short and simple. But I go try look for 'em.

PL: What about any *mele*? Is there any *mele* written for that area? Or like the Pālā'au?

MP: Pālā'au get choke.

PL: Choke, yeah I bet.

MP: Um, I haven't seen anything specific for Kanakaloloa, but I wouldn't be surprised. Yeah, I cannot off the top of my head.

PL: Guarantee, though, if we researched more.

MP: Yeah, I've found that *kanikau* are really cool resource for place names 'cause they like to *helu papa* somebody's life journey. And so you kind of get one idea of who, what, where, when kind. And so I've come across a lot of *mele* for the Pālā'au. I've never heard of Pu'u Pipika before.

PL: Where's that, by Red Light?

MP: I not sure. But it has to be right below Mo'omomi area, well, towards Mahana, like...

PL: Because that's where Nahulu guys...

MP: Yeah, so kind of going up to that 'cause that's a hill, or it's a hilly area. And then you know like if you walking from Mo'omomi towards Mahana, get that road?

PL: Yeah.

MP: I always imagine that it's over there somewhere.

PL: Oh okay.

MP: 'Cause I can imagine them wanting to extend down towards the ocean access.

PL: Right, right.

MP: Bet that chief was like, "I like include this section over here."

PL: Right, okay, let me see, what about any traditional practices associated with I guess the area besides your 'ohana's homestead family, you know, like your guys' practices and traditions as a 'ohana there, do you know of anything else that occurred in the area? Like I know for Mo'omomi, people went down there for *pūkai*. Do anybody go to Kanakaloloa besides funerals?

MP: You know, I cannot really [pause], I don't know if it's from before or since the cemetery, but get plenty, not *lapu*, but *lapu* I guess. I mean, get plenty *kūpuna* walking around over there at night, like plenty.

The *ala* or the *leina* is actually little bit up above in the Na'iwa area, but it's not that far actually. Like when you standing at the *piko* stone at Na'iwa, you can look down and actually see Kanakaloloa, like which I think is kind of interesting 'cause again it's that connection like between these points of passage. You know what I mean? Like I kind of interested why they went pick that spot because I don't think it was just random, like, "Oh that look like one cool place." I really think like 'cause it's almost halfway between, I mean well it is in the middle between Keonelele and the *ala* that goes to the *leina*, so the *piko* stone, and then the *leina*.

PL: When I talk to Uncle Alex, he said that when they first got there, that wasn't a cemetery yet. And I asked him, "Oh Uncle, what was it then?" He said, "Everything else was pineapple, but that one triangle was always open." I don't know if was for any particular reason.

MP: And that road actually that goes up is Lihipali Road. It was intended to be paved, and you know, like it's supposed to look different than what it looks like now. And it's supposed to come all the way back to the backside of our property. That's supposed to be one real road, like a paved road. And then, for that reason, they just stopped right there. They had the cemetery, and I guess they didn't want. Actually, I don't know why.

But like my great-grandma, Lady U'u, that homestead that's right there, like you know, they had a house, you know, homestead, and people did live back there. And then now those houses have been removed. And then only now my brother's kind of getting back into living over there.

PL: You know how come they left?

MP: I really don't know. Well, that was like their, I don't know how they got separated or how they got two, but they had a smaller lot, and they wound up dividing the lot. So it was like, I think they got the 5-acre residential and the 35 pastoral or something. I not sure.

PL: Interesting, yeah, puzzle pieces that you find?

MP: Yeah, now you making me think like, "Eh what is the rest of the story?"

PL: According to Uncle Alex [Bishaw], he said that they were there, but at that time they were planting pineapple for Libby. But because the ocean, the sprays...

MP: Thing was too strong, yeah.

PL: Was too strong, so they left, and then they went to where his nephew is now on Pukapele.

MP: Okay.

PL: And he didn't mention anything other than that, but I mean even if your pineapples no grow, I wouldn't think you would leave the area.

MP: Well, all those guys was leasing, yeah? 'Cause you look like up in the Na'iwa area, all up in there, get all black paper, like plenty. But the records show they didn't do it for very long, and it wasn't successful. They had to come away from the ocean, like more down, yeah? I don't know. And maybe the *kupunas* was like, "Heck no, we no like pineapples over here." Zap zap zap zap zap, and then that was it, cannot fight with them.

PL: Definitely. Okay, so as far as the proposed cemetery improvements, do you have any *mana'o* or concerns that you think the community might have?

MP: You know, I cannot think of anything that would raise red flags in opposition. I think more than anything, the expansion would allow for more people to have comfort in knowing that they could be buried in Ho'olehua, because people know that they running out of space. And when they first created, like I think you could have like four, I don't know what the number was, like four or six people per homestead, like that's how many plots you were entitled to. But now that the plots have changed hands, you know, 100 years almost, of people being born and dying, like man, we went max out. Everybody's like, "Okay, where we going put this aunty?" People are forced to be cremated so that they could be interred legally or whatever on the plot because it's smaller. So you can take one regular coffin plot, and you can put six guys in there or whatever, you know, you can build one crypt. But you know, I think people are entitled to the option of not being cremated, you know, if they don't want to. And I know that people rather stay together or stay in Ho'olehua.

So I think the benefit far outweighs whatever detriment, and there really isn't any that I can think of, you know. That pasture has always had two horses over there ever since ever since, and it's two different horses through the years. But I've always seen a horse tied up over there, you know. I wish people would stop stealing the water and stop watering their *pakalolo* plants from the water over there.

PL: What?

MP: How many times. And I wish people would stop using it as a place to meet up and do drug deals 'cause I see a lot of that too. Yeah, I've seen like some bad stuffs, you know, and I wish people were more respectful, but eh, I guess that's drugs, or that's people who are not operating in their right mind, because generally speaking, everybody looks at this place and treats it like a *pu'uhonua*. And yeah, I think improving the facilities would help people to be more engaged, help them to, you know, give them little bit more tools so that they can be more self-determined in that they can take up more *kuleana* with caring for their graves and their loved ones, you know. I hope we get little bit more community buy-in so people can respect and *mālama* the resources and not...

PL: Try trash the...

MP: Yeah, just try, whatever is not like bolted down, somebody always thinks they can take it, or it's like a free for all whatever. Yeah, I don't know how you can secure it, you know, 'cause I would like it to be secured, but I wouldn't want it to be, because people go there all kind time, and sometimes you really just gotta talk to your mom or your grandpa at three in the morning 'cause we don't have enough therapists, and we don't have enough whatevers on the island, you know, like sometimes *kūpuna* say it best, you know, and it's just that feeling or whatevers that you get when you lying on the grave and crying your heart out, and, you know, you trying to fight your demons or whatevers, and then they're there.

You know, you get to have that access. I definitely would like to see a way to preserve that kind of accessibility, and it nurtures a relationship because so many people today, you get buried somewhere, and then the family no ever come, because you're just like out there, and life goes on. But I think Molokai really, I mean, people go cemetery plenty, like you know, it's like set aside every other Saturday or whatevers, like oh no, we gotta go graveyard. Or like you know after graduation, like everybody's like, oh no, take all your leis to the graveyard, or whatevers like, after the party.

PL: After the wedding, we did our convoy through Kapa'akea because my *tūtū* guys stay, and one of Nahulu's friends, you might know him, Johnny Pestana, he work Papahana Kuaola.

MP: Oh yeah.

PL: He's like, "And then, that's when I knew we was on Molokai because nobody else going go drive thru during one wedding." And he was like, "Brah, das *ola nā iwi*!" And I was like, "Exactly, that is, das *kulāiwi*."

MP: It's getting the blessings of the *kūpuna*, they like be included too. And it's like, I think it's so awesome that we live it, and anyways. How many times, like, I don't know, we just no forget. We remember every anniversary, every tragedy, and whatevers like, you know, people now, we posting 'em on Facebook, and you know like, and you see these photos of like whole families, like eh, get the picnic table, everything, 'cause it's Tūtū's birthday, she would've been 101 or whatevers you know. It's like, that is awesome. Doesn't happen too many other places, but we can, and I would support a facility that encourages that, that connection.

Our kids gotta know where they come from, who they connected to. I mean, I used to walk around, like my dad, we would just come up, we would clean our graves, and then you just walked around and read everybody's names, and you know, as one kid, you kinda start picking out, eh that's my friend's last name, or sometimes my friend's first and last name, like how come, like how come my friend's name is over here, you know like that's not my friend, what happened to my friend, you know, and then, oh no, no, no, that's the grandpa, you know, or that's the uncle, he was named after the uncle. You like, "Oh," and you learn so much about how people are connected, and even like the placement right? So this person is buried next to that person because they *'ohana*, and then you just

hear like, you know, the *makuas* are talking like, “Oh no, no, no, ‘cause das da real mother.” You know? And it was like, “I thought Aunty So-and-So was his mom all this time.”

PL: No, he went jump the fence.

MP: Yeah, yeah, yeah, you start hearing all these *mo‘olelos* right? But it’s like genealogy. It’s family history. It’s island history. You know, like right below my papa them, I will forever, the biggest headstone was Mitchell Pau‘ole, you know, he’s buried right below, like right at my papa them’s feet, you know and we used to think like, “Ho man, this guy must’ve been awesome,” ‘cause he had the biggest marble slab headstone.” You know, now he’s kinda outdone by other people, like but, back then, you know, and then you go into town, you get one whole facility named after him, makes you wanna ask, “Who was this guy? Like why, how come he get such one big stone?” And then you hear the stories. And then you see the, you know heart, you know, just all the different kind of markers, like anyways. I loved hearing the stories. And now that I’m thinking about it and saying this out loud, like I’m a little regretful that I don’t take my children as often as now I’m realizing I should ‘cause maybe this is making me realize that how valuable...

PL: The experience.

MP: Those excursions are and have been.

PL: Yeah, same here.

MP: Bring it back. Eh, awareness, you know, cultural awareness.

PL: Well aside from that, you have any other *mana‘o* you’d like to add or recommendations of who else we should talk to about this study?

MP: Yeah, you might want to talk to my, you went talk to my brother?

PL: No.

MP: Try, try ask him about, ‘cause that’s his homestead right there, and he might have...

PL: I’ll see if can though I don’t know if conflict of interest.

MP: Oh yeah, yeah, yeah, oh yeah, that’s probably why, okay.

PL: Would be nice though. I can ask. I don’t know if that would be really.

MP: Well, or if I gather, ‘cause I can ask my husband, or if I gather any more, and I find the other Kumu John version, his *mo‘olelo*, I’ll send it to you.

PL: Okay, *mahalo*.

MP: Or convey it somehow. His peeps don’t like us. But you know, I think stuff like this, like if he went like allow somebody else to record it, and it’s published or it’s printed, it was in the newspaper, or whatever. I think it’s kinda *noa*.

PL: Right, right.

MP: That *mo'olelo* I shared with you has been published in different shapes, you know, I just like this one because somebody else, this is my grandma talking, yeah like she talks story, whereas the other ones is like, somebody heard it, they flowered it up and published it or whatever.

PL: Right, right.

MP: So it's like, yeah...

PL: It's more authentic, not fabricated.

MP: Yeah, yeah, yeah.

PL: Okay, that's all.

MP: Okay, that's it.

PL: *Mahalo, mahalo nui.*

MP: Yeah.

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APPENDIX E
PRELIMINARY ENGINEERING REPORT

PRELIMINARY ENGINEERING REPORT

FOR

Kanakaloloa Cemetery Improvements Projects

Ho'olehua, Moloka'i, HI
TMK: (2) 5-2-017:003

May 2015

DEVELOPER/OWNER:

Department of Hawaiian Home Lands
Land Development Division
Design Construction Branch
91-5420 Kapolei Parkway
Kapolei, HI 96707

THIS WORK WAS PREPARED
BY ME OR UNDER MY SUPERVISION

SIGNATURE
EXPIRATION DATE:

Prepared by:



925 Bethel Street, 5th Floor
Honolulu, HI 96813
Phone: (808) 523-5866
Fax: (808) 523-5874

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REFERENCES

The State of Hawai'i, Department of Land and Natural Resources Engineering Division, National Flood Insurance Program, Flood Hazards Assessment Tool.
www.dlnreng.hawaii.gov/nfip

United States Department of Agriculture, Natural Resources Conservation Service, Web soil survey
www.websoilsurvey.sc.egov.usda.gov

Topographic Map of Kanakaloloa Cemetery, prepared by Fukumoto Engineering, Inc. November 28, 2014

Survey of Ho'olehua Cemetery portion of Lot 17 of the Ho'olehua Hawaiian Homes, prepared by John McCandless, May 1946

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Appendix A – Preliminary Site Plan

Appendix B – Preliminary Pavilion Elevations

Appendix C – Topographic Map of Kanakaloloa Cemetery

1.0 Introduction

1.1 Overview

The State of Hawai'i Department of Hawaiian Home Lands (DHHL) is planning for improvements and expansion of Kanakaloloa Cemetery, located in Ho'olehua, on the island of Moloka'i. The proposed improvements to the site include the construction of paved roads, an asphalt paved surface parking lot and a covered open-air pavilion. Other site work includes construction of a rock wall on the east side of the property fronting Lihi Pali Avenue as well as the addition of a new waterline to service the proposed pavilion.

An Environmental Assessment (EA) is required before the proposed improvements can be built, pursuant to HRS 343, because this project involves the use of State land and State funds.

1.2 Site Location

Kanakaloloa Cemetery is located near the north shore of the Island of Moloka'i, north of the town of Ho'olehua, at 2725 Lihi Pali Avenue. The triangular shaped lot is approximately 6.86 acres and lies within TMK: (2)-5-2-017:003. Lihi Pali Avenue provides vehicular access to the property. A veteran's memorial cemetery is adjacent to the property on the south side and residential properties surround the remainder of the lot. Refer to Figure 1 - Location Map.

1.3 Purpose of Report

The purpose of this report is to assess existing site infrastructure systems to determine the extent of proposed improvements that may be required to support the proposed project and development on the site.

2.0 Existing Conditions

2.1 Land Use

The land is owned by the Department of Hawaiian Home Lands and is used as a cemetery for native Hawaiians. Approximately one-third of the property area on the south side is currently being utilized for grave sites. The remainder of the lot is currently not utilized.

The utilized portion of the property is covered by grass and light vegetation. Several dirt paths are worn into the surface from vehicle traffic between various grave sites. The unutilized portion of the property is covered by thick overgrown vegetation and brush.

2.2 Survey and Topography

A topographic survey of the site was performed on November 28th, 2014. The site slopes upwards from Lihi Pali Avenue. Existing grades are steeper toward the west corner of the lot. The information provided by the survey also reveals that the actual grave plot locations vary from the original plot plan designations surveyed and mapped in May 1946. The variation

appears to be generally offset north-west from the original designations by approximately 13 feet. This variation was observed for the majority of the existing grave sites. Refer to Appendix C – Topographic Map of Kanakaloloa Cemetery. The proposed project takes into account this variation for planning and design of the proposed improvements.

2.3 Soils

The soil information for the site, listed below, was obtained through interpretation of soil classification maps created by the United States Department of Agriculture. From this reference it appears that Lahaina Silty Clay (LaB) makes up approximately 90% of the soil on site.

<u>Soil Classification</u>	<u>Soil Classification</u>	<u>Slope Range (%)</u>	<u>Hydrologic Soils Group</u>	<u>Drainage Class</u>	<u>Depth to Water Table (inches)</u>	<u>Capacity to transmit water (Ksat (in/hr))</u>	<u>Typical Soil Profile – Layer 1 (depth from surface)</u>	<u>Typical Soil Profile – Layer 2 (depth from surface)</u>	<u>Typical Soil Profile – Layer 3 (depth from surface)</u>
Lahaina silty clay	LaB	3 to 7%	B	Well drained	>80"	0.20 to 1.98	0" to 15" silty clay	15" to 31" silty clay	31" to 60" silty clay
Lahaina silty clay	LaC	7 to 15%	B	Well drained	> 80"	0.20 to 1.98	0" to 15" silty clay	15" to 31" silty clay	31" to 60" silty clay
Kalae silty clay	KcB	2- 7%	C	Well drained	>80"	0.06 to 0.60	0 to 9" inches silty clay	9 to 15" silty clay	15" to 26" silty clay
Hoolehua silty clay	HdB	3- 7%	C	Well drained	>80"	0.06 to 0.20	0 to 9" inches silty clay	9 to 15" silty clay	15" to 21" silty clay

2.4 Flood Hazards

Kanakaloloa Cemetery lies entirely within Flood Zone X, according to the State of Hawai'i Flood Hazard Assessment Report. Flood Zone X areas are determined to be outside of the 0.2% annual chance floodplain. Refer to Figure 2 – Flood Hazard Assessment.

3.0 Existing Infrastructure

3.1 Roads, Access, and Parking

Lihi Pali Avenue is an approximately 15 foot wide, asphalt road that fronts the east side of the property and is the only road that serves the site. This road connects to Farrington Avenue, a major thoroughfare in Hoolehua, approximately one quarter of a mile south of the cemetery. According to the recent survey, the right-of-way width of Lihi Pali Avenue is 50 feet. Curbs,

gutters, sidewalks and drainage infrastructure are not provided in the right-of-way. The pavement for Lihi Pali Avenue ends at an existing gate just beyond the utilized area of the cemetery. Lihi Pali Avenue continues beyond the gate to serve residential properties to the north, via a dirt roadway.

On the cemetery site, several dirt paths have been worn into the grass surface due to vehicle traffic between the various grave sites. There are three distinct paths that run east-west through the utilized portion of the property. Currently there are no paved road surfaces or improved driveways on the site.

Vehicles generally park on or near the dirt paths leading between grave sites, or on Lihi Pali Avenue.

Pedestrian access is obtained through the Lihi Pali Avenue right-of-way; however there are no sidewalks or crosswalks in the area. Access to the site is controlled by chain link and hog wire fences along the south perimeter and the utilized area of the lot.

3.2 Pavements and Structures

There are currently no pavements or structures located within the site.

3.3 Water Infrastructure

A 2-inch DHHL waterline, per the topographic survey, in Lihi Pali Avenue serves Kanakaloloa Cemetery and adjacent improvements including the veteran's cemetery and the residential lots to the north. Water service for the site is limited to irrigation and appears to be provided through several hose bibbs that were observed on site. Hose bibbs are typically located near the headstones. An irrigation control valve is located approximately 30 feet north east of headstone 13, near Lihi Pali Avenue.

Fire hydrants are currently not located within close proximity to the site. The nearest fire hydrant is approximately one quarter of a mile away, near the intersection of Farrington Avenue and Lihi Pali Avenue.

3.4 Drainage Infrastructure

Storm drain lines, catch basins, curbs, and gutters are not available at the site or within Lihi Pali Avenue. Stormwater appears to sheet flow from the west to the north-east off of the property to Lihi Pali Avenue.

3.5 Other Utilities

An overhead Maui Electric Company electric line is available on the east edge of the cemetery along Lihi Pali Avenue, but does not serve the property.

4.0 Proposed Infrastructure

4.1 Roads, Access, and Parking

A system of new 12-foot wide, one lane asphalt roads with driveway connections to Lihi Pali Avenue will be constructed on the cemetery property to accommodate the cemetery expansion and facilitate visitor access to the proposed pavilion and to grave locations.

DHHL has requested that the proposed roadways be aligned between the observed grave locations in areas where graves do exist, and between the original plot designations (mapped in 1946) in areas that do not yet have graves. The proposed roads are generally aligned with the existing dirt paths bounding the property on the north and south side. These locations were chosen based on the location of the existing graves and headstones, the proposed pavilion, observation of vehicle wear on the site, turning radii requirements, and where clearance between plot locations is maximized. Refer to Appendix A – Preliminary Engineering Site Plan.

An asphalt parking lot inclusive of one Americans with Disabilities Act (ADA) accessible stall is proposed to provide access to a newly proposed pavilion. Parking stalls will be 8-1/2 feet wide and 18 feet deep. The ADA stall is located near to the pavilion and includes an access aisle and an ADA accessible sidewalk that connects the building to the parking lot.

Additionally, the asphalt for Lihi Pali Ave. will be re-paved along the frontage of the cemetery where the plots are cleared and/or utilized. The existing gate near the end of the Lihi Pali pavement will be relocated further north to the edge of the cleared portion of the cemetery and the existing chain link fence that bisects the property, and the pavement will be extended up to the new gate location. In the future, it is expected that Lihi Pali Ave. and the asphalt pavement would continue to the end of the entire cemetery property.

4.2 Pavements and Structures

The proposed covered pavilion will be located centrally in the cemetery property, close to Lihi Pali Avenue. The structure will be approximately 45'-0" x 25'-0". The building will provide a covered gathering space for visitors to the cemetery. It will be designed as an open-air structure with a slab on grade foundation, and several square columns supporting the roof structure. Refer to Appendix B - Preliminary Pavilion Elevations.

Fire department access to the pavilion is provided by Lihi Pali Avenue. Fire truck accessible driveways on-site will not be required as the structure will be within 150 feet of Lihi Pali Avenue.

A 3-1/2 foot-high rock wall is proposed to be constructed along the eastern property line fronting Lihi Pali Avenue and will run approximately 530 feet along the entire utilized frontage of the property. The wall will match the height of the CMU block wall that fronts the existing veteran's cemetery to the south. The wall will provide a barrier for the site on the front with openings only at each driveway. In the future, the wall will be continued to the end of the property when the remainder of the site is developed.

4.3 Water Infrastructure

A new waterline will provide non-potable water to the proposed pavilion. The waterline will connect to an existing irrigation waterline on the cemetery property near headstone 206. Approximately 200 LF of trenching and pipe is anticipated. The line will be routed to avoid existing and proposed grave areas as well as newly paved surfaces wherever possible.

A future 6-inch to 8-inch water main extension is planned in Lihi Pali Avenue by DHHL under a separate project. Fire hydrants will be provided along the road when this line is installed which would serve the new pavilion; however a construction schedule has not been established. The new pavilion will require fire water supply per building and fire code, and thus cannot be constructed until this main is extended. It is anticipated that the future improvements, by others, would conform to Maui County water system standards which require newly installed hydrants in rural areas to be spaced every 500 feet with a flow capacity of 1,000 gallons per minute for up to 2 hours.

4.4 Drainage Infrastructure

Drainage infrastructure is not proposed and existing drainage patterns will remain. Minimal grading will be performed to account for the new roadways and driveway connections and positive drainage will be maintained.

4.5 Other Utilities

Infrastructure improvements for electrical and sewer systems are not proposed.

5.0 Anticipated Approvals and Permits

The anticipated approvals and permits required for design and construction of the proposed improvements are likely limited to a grading and building permit from the County of Maui, and approval of the Environmental Assessment. Coverage under the National Pollutant Discharge Elimination System General Permit for stormwater discharges during construction activity will likely not be required as the proposed improvements disturb an area less than 1 acre.

5.1 State of Hawai'i

- Environmental Assessment (EA)

5.2 County of Maui

- Grading Permit
- Building Permit

6.0 Conclusions

The proposed improvements for this project will be designed in accordance with the applicable rules and regulations of the County of Maui and DHHL. Based on this study, the project is expected to have no adverse effects on existing facilities and the surrounding environment.

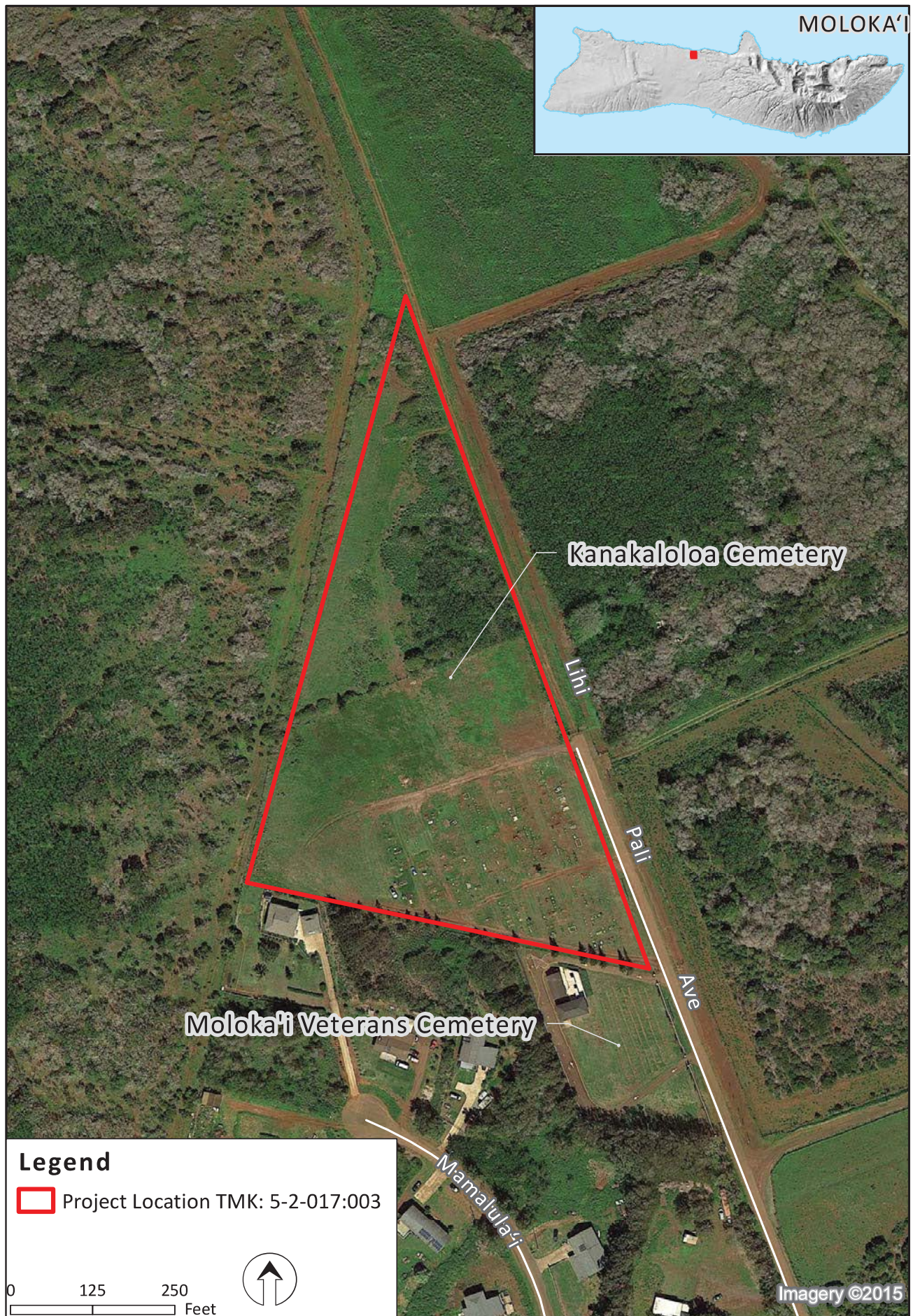
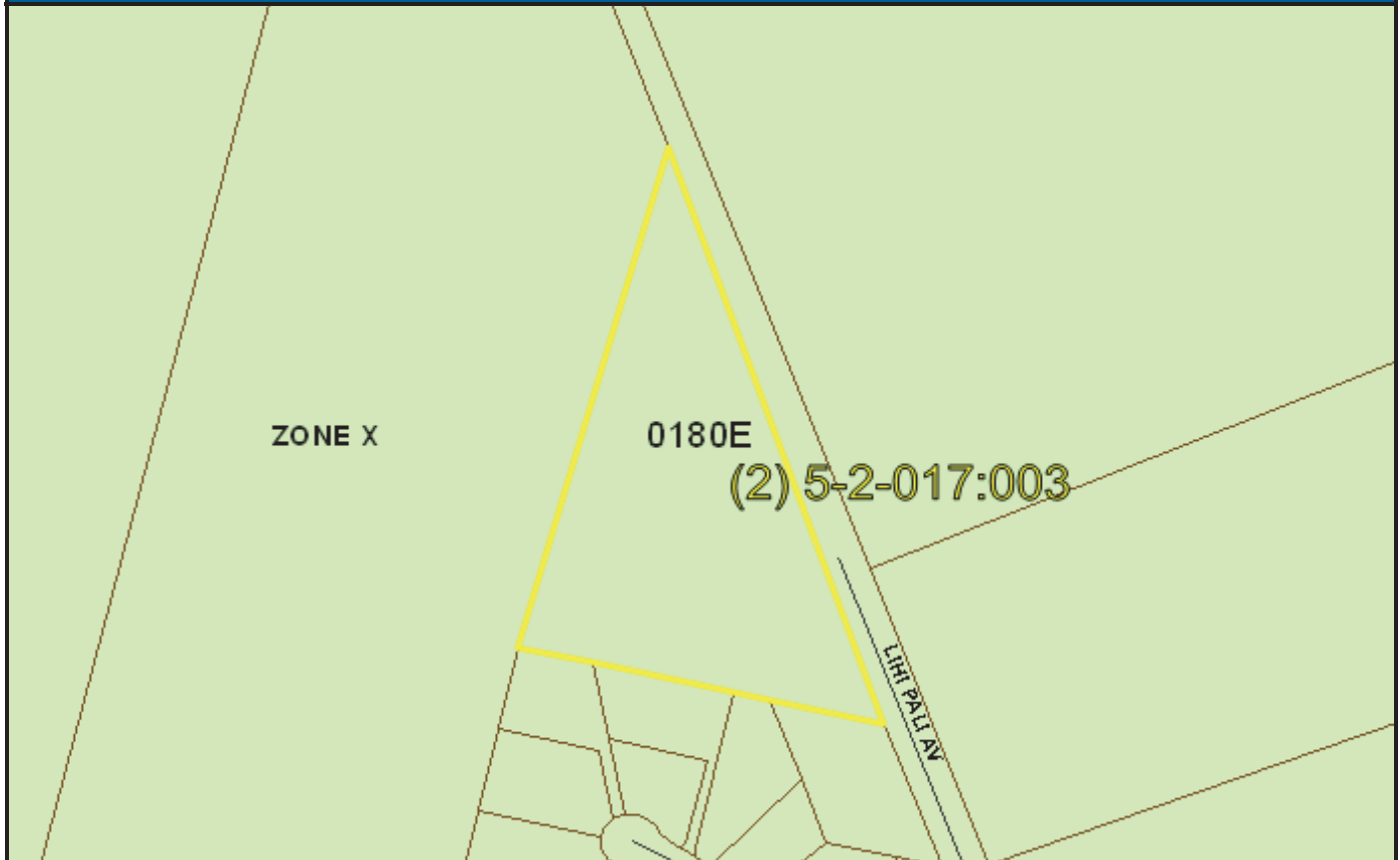


Figure 1 - Location Map



FLOOD HAZARD ASSESSMENT REPORT



NATIONAL FLOOD INSURANCE PROGRAM

FLOOD ZONE DEFINITIONS

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD – The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zone A, AE, AH, AO, V, and VE. The Base Flood Elevation (BFE) is the water-surface elevation of the 1% annual chance flood. Mandatory flood insurance purchase applies in these zones:

- Zone A:** No BFE determined.
- Zone AE:** BFE determined.
- Zone AH:** Flood depths of 1 to 3 feet (usually areas of ponding); BFE determined.
- Zone AO:** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined.
- Zone V:** Coastal flood zone with velocity hazard (wave action); no BFE determined.
- Zone VE:** Coastal flood zone with velocity hazard (wave action); BFE determined.
- Zone AEF:** Floodway areas in Zone AE. The floodway is the channel of stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without increasing the BFE.

NON-SPECIAL FLOOD HAZARD AREA – An area in a low-to-moderate risk flood zone. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities.

- Zone XS (X shaded):** Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.
- Zone X:** Areas determined to be outside the 0.2% annual chance floodplain.

OTHER FLOOD AREAS

- Zone D:** Unstudied areas where flood hazards are undetermined, but flooding is possible. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities.

PROPERTY INFORMATION

COUNTY: MAUI
TMK NO: (2) 5-2-017-003
PARCEL ADDRESS: 2725 LIHI PALI AVE
HOOLEHUA, HI 96729
FIRM INDEX DATE: SEPTEMBER 19, 2012
LETTER OF MAP CHANGE(S): NONE
FEMA FIRM PANEL(S): 1500030180E
PANEL EFFECTIVE DATE: SEPTEMBER 25, 2009

PARCEL DATA FROM: JULY 2013
IMAGERY DATA FROM: MAY 2005

IMPORTANT PHONE NUMBERS

County NFIP Coordinator
County of Maui
Carolyn Cortez (808) 270-7253
State NFIP Coordinator
Carol Tyau-Beam, P.E., CFM (808) 587-0267

Disclaimer: The Department of Land and Natural Resources (DLNR) assumes no responsibility arising from the use of the information contained in this report. Viewers/Users are responsible for verifying the accuracy of the information and agree to indemnify the DLNR from any liability, which may arise from its use.

If this map has been identified as 'PRELIMINARY' or 'UNOFFICIAL', please note that it is being provided for informational purposes and is not to be used for official/legal decisions, regulatory compliance, or flood insurance rating. Contact your county NFIP coordinator for flood zone determinations to be used for compliance with local floodplain management regulations.

Figure 2 - Flood Hazard Assessment



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CIVIL ENGINEERING

808.523.5866
r.group70int.com

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TMK: (2) 5-2-017:003
OLEHUA, MOLOKAI, HAWAII

APPROVED BY:

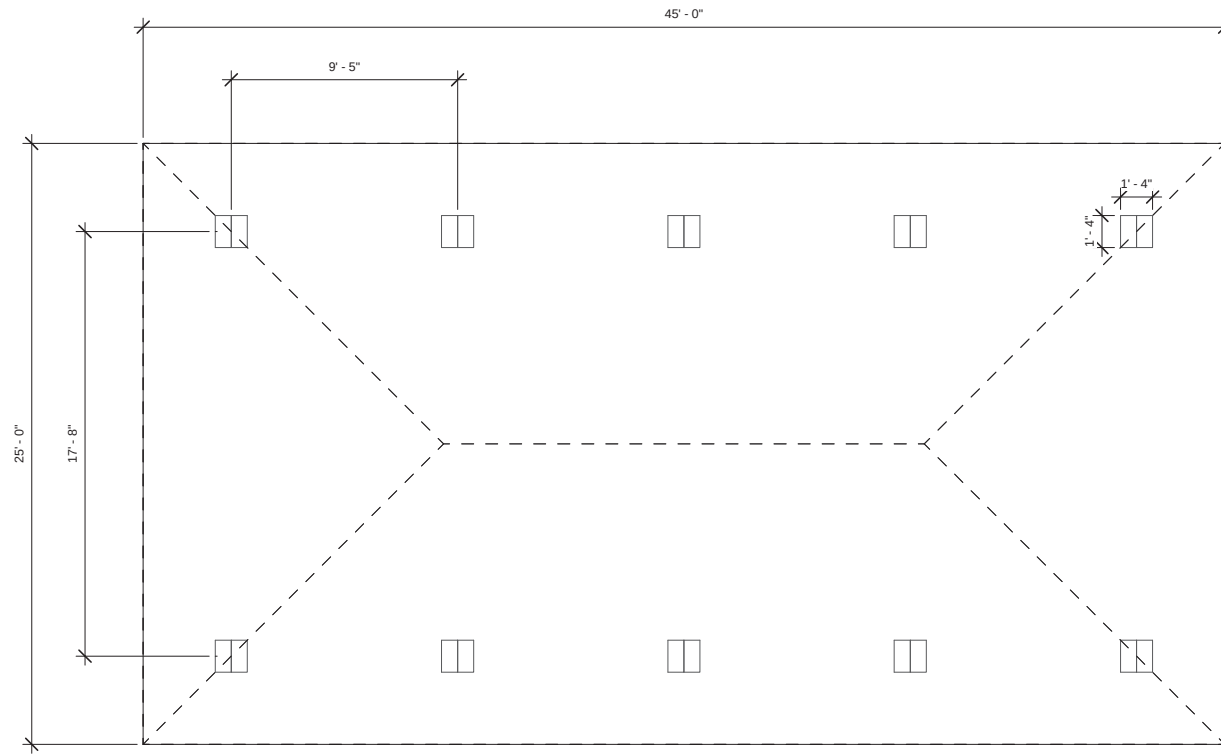
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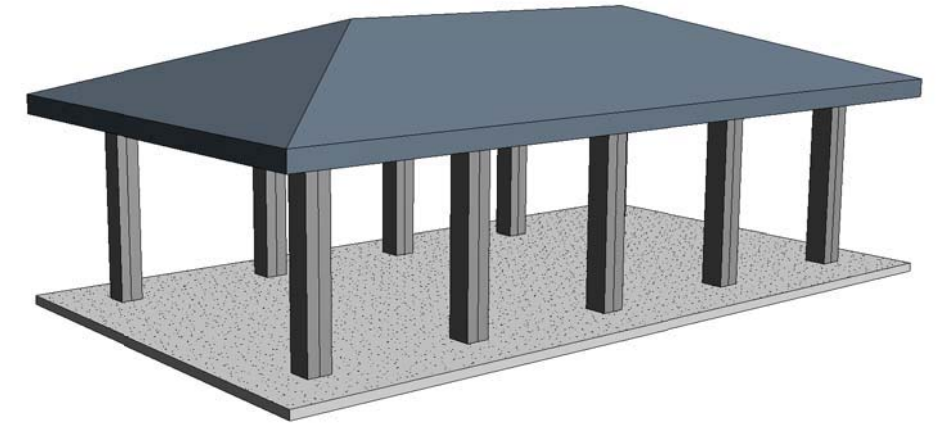


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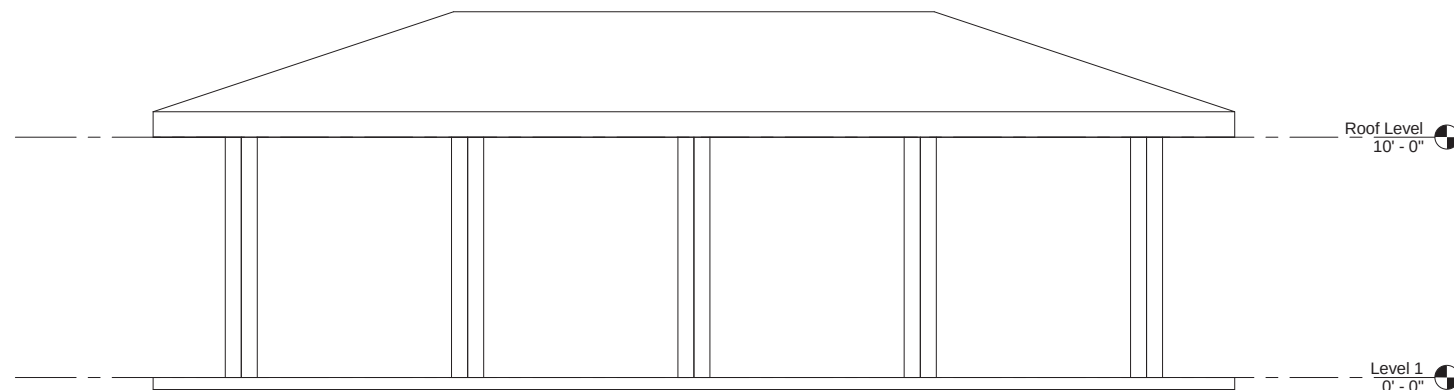




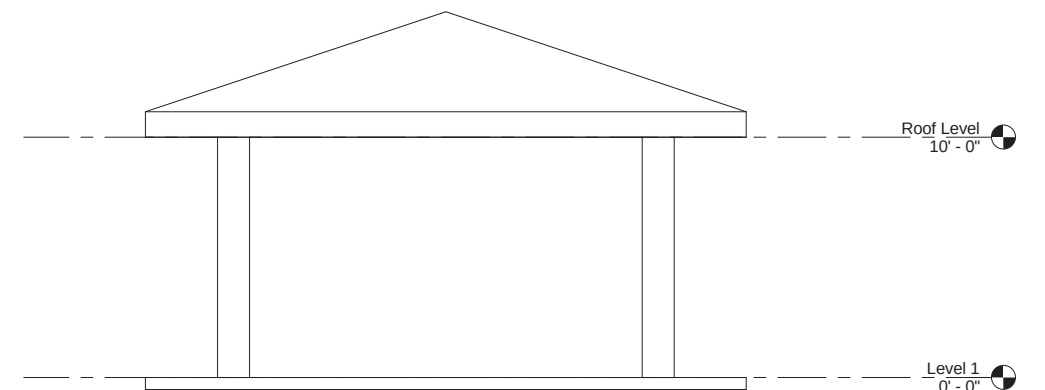
① FLOOR PLAN
1/4" = 1'-0"



④ 3D View 1



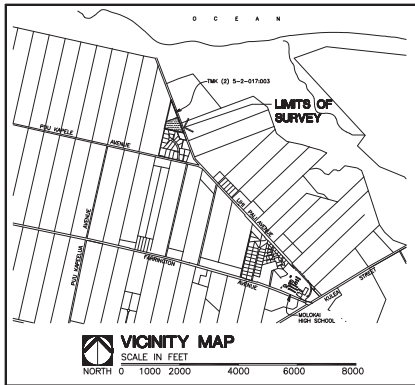
② South
1/4" = 1'-0"



③ East
1/4" = 1'-0"

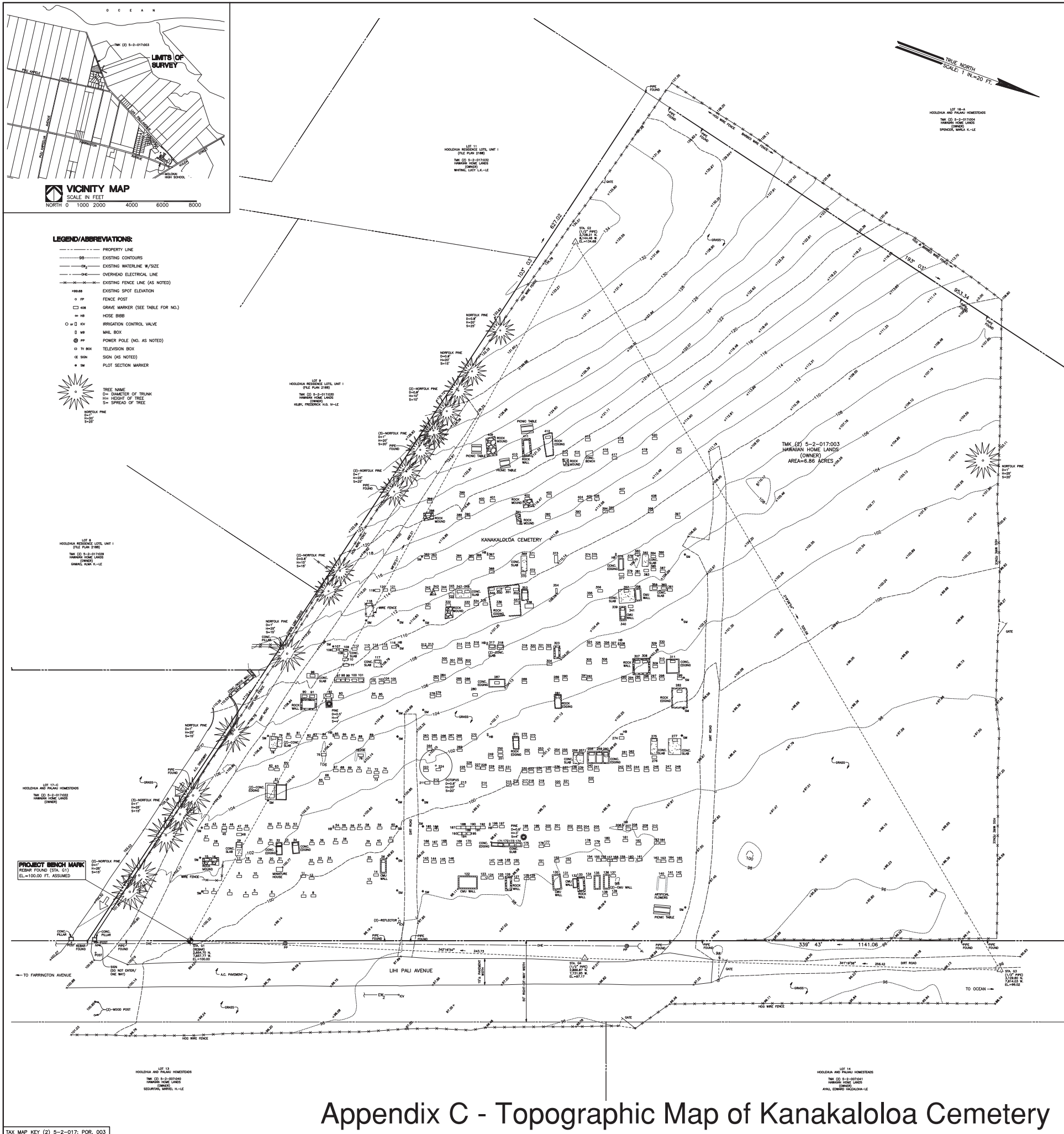
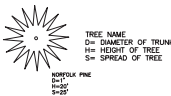
Appendix B - Preliminary Pavilion Elevations





LEGEND/ABBREVIATIONS:

- PROPERTY LINE
- EXISTING CONTOURS
- EXISTING WATERLINE W/SIZE
- OVERHEAD ELECTRICAL LINE
- EXISTING FENCE LINE (AS NOTED)
- EXISTING SPOT ELEVATION
- o FP FENCE POST
- o MB HOSE BIB
- o IVC IRRIGATION CONTROL VALVE
- o MB MAIL BOX
- o PP POWER POLE (NO. AS NOTED)
- o TV BOX TELEVISION BOX
- o SIGN (AS NOTED)
- o PLOT SECTION MARKER



GRAVE LISTING			
NO.	NAME	NO.	NAME
1	AMERSON, JAMES H. JR.	201	AMERSON, JAMES H. JR.
2	AMERSON, JAMES H. JR.	202	AMERSON, JAMES H. JR.
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68	AMERSON, JAMES H. JR.	268	AMERSON, JAMES H. JR.
69	AMERSON, JAMES H. JR.	269	AMERSON, JAMES H. JR.
70	AMERSON, JAMES H. JR.	270	AMERSON, JAMES H. JR.
71	AMERSON, JAMES H. JR.	271	AMERSON, JAMES H. JR.
72	AMERSON, JAMES H. JR.	272	AMERSON, JAMES H. JR.
73	AMERSON, JAMES H. JR.	273	AMERSON, JAMES H. JR.
74	AMERSON, JAMES H. JR.	274	AMERSON, JAMES H. JR.
75	AMERSON, JAMES H. JR.	275	AMERSON, JAMES H. JR.
76	AMERSON, JAMES H. JR.	276	AMERSON, JAMES H. JR.
77	AMERSON, JAMES H. JR.	277	AMERSON, JAMES H. JR.
78	AMERSON, JAMES H. JR.	278	AMERSON, JAMES H. JR.
79	AMERSON, JAMES H. JR.	279	AMERSON, JAMES H. JR.
80	AMERSON, JAMES H. JR.	280	AMERSON, JAMES H. JR.
81	AMERSON, JAMES H. JR.	281	AMERSON, JAMES H. JR.
82	AMERSON, JAMES H. JR.	282	AMERSON, JAMES H. JR.
83	AMERSON, JAMES H. JR.	283	AMERSON, JAMES H. JR.
84	AMERSON, JAMES H. JR.	284	AMERSON, JAMES H. JR.
85	AMERSON, JAMES H. JR.	285	AMERSON, JAMES H. JR.
86	AMERSON, JAMES H. JR.	286	AMERSON, JAMES H. JR.
87	AMERSON, JAMES H. JR.	287	AMERSON, JAMES H. JR.
88	AMERSON, JAMES H. JR.	288	AMERSON, JAMES H. JR.
89	AMERSON, JAMES H. JR.	289	AMERSON, JAMES H. JR.
90	AMERSON, JAMES H. JR.	290	AMERSON, JAMES H. JR.
91	AMERSON, JAMES H. JR.	291	AMERSON, JAMES H. JR.
92	AMERSON, JAMES H. JR.	292	AMERSON, JAMES H. JR.
93	AMERSON, JAMES H. JR.	293	AMERSON, JAMES H. JR.
94	AMERSON, JAMES H. JR.	294	AMERSON, JAMES H. JR.
95	AMERSON, JAMES H. JR.	295	AMERSON, JAMES H. JR.
96	AMERSON, JAMES H. JR.	296	AMERSON, JAMES H. JR.
97	AMERSON, JAMES H. JR.	297	AMERSON, JAMES H. JR.
98	AMERSON, JAMES H. JR.	298	AMERSON, JAMES H. JR.
99	AMERSON, JAMES H. JR.	299	AMERSON, JAMES H. JR.
100	AMERSON, JAMES H. JR.	300	AMERSON, JAMES H. JR.

Appendix C - Topographic Map of Kanakaloloa Cemetery