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GOVERNOR OF HAWAII

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BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

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FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

March 18, 2015

13MD-132

Jessica Wooley, Director
Office of Environmental Quality Control
Department of Health, State of Hawaii
235 South Beretania Street, Room 702
Honolulu, Hawai'i 96813

SUBJECT: Final Environmental Assessment, Camp Maluhia and Related Area Improvements; Kahakuloa, Maui, TMK (2) 3-1-001:001 (por.) and 028

Dear Ms. Wooley:

With this letter, the State of Hawaii, Department of Land and Natural Resources hereby transmits the Final Environmental Assessment and Finding of No Significant Impact (FEA-AFONSI) for the Camp Maluhia and Related Area Improvements situated at TMK (2)3-1-001:001(por.) and 028, in the Wailuku District (Kahakuloa) on the island of Maui for publication in the next available edition of the Environmental Notice.

The DLNR has included copies of public comments and the corresponding responses from the applicant that were received during the 30-day public comment period on the Draft Environmental Assessment and Anticipated Finding of No Significant Impact (DEA-AFONSI).

Enclosed is a completed OEQC Publication Form, two copies of the FEA-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 Daniel Ornellas, District Land Agent, at the Maui District Land Office at (808) 984-8103.

Sincerely,

Carty S. Chang
Interim Chairperson

Enc.

Cc: Robert Nakagawa, Maui County Council Boy Scouts of America
Torrie Nohara, Department of Land and Natural Resources
Ronald Fukumoto, Ronald Fukumoto Engineering, Inc.
Evelyn Aako, Department of Planning
Bryan Esmeralda, Munekiyo Hiraga

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APPLICANT ACTIONS
SECTION 343-5(C), HRS
PUBLICATION FORM (JANUARY 2013 REVISION)

Project Name Camp Maluhia and Related Improvements
Island: Maui
District: Wailuku
TMK: (2)3-1-001:001(por.) and 028
Permits: County Special Use Permit, Off-Site Parking Approval, Parking Variance, Construction Permits

Approving Agency:
State of Hawaii, Department of Land and Natural Resources
54 South High Street, Wailuku, Hawaii 96793
Contact: Daniel Ornellas, (808) 984-8103

Applicant:
Maui County Council Boy Scouts of America
200 Liholiho Street, Wailuku, Hawaii 96793
Contact: Robert Nakagawa, (808) 244-3724

Consultant:
Munekiyo & Hiraga, Inc.
305 High Street, Suite 104, Wailuku, Hawaii 96793
Contact: Bryan Esmeralda, Associate, (808) 244-2015

Status (check one only):

__DEA-AFNSI
Submit the approving 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.

_X_FEA-FONSI
Submit the approving 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 approving 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 approving 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 applicant simultaneously transmits to both the OEQC and the approving agency, 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 oeqc@doh.hawaii.gov); a 45-day comment period ensues upon publication in the periodic bulletin.

__FEIS
The applicant simultaneously transmits to both the OEQC and the approving agency, 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 oeqc@doh.hawaii.gov); no comment period ensues upon publication in the periodic bulletin.

__ Section 11-200-23 Determination
The approving agency simultaneous transmits its determination of acceptance or nonacceptance (pursuant to Section 11-200-23, HAR) of the FEIS to both OEQC and the applicant. No comment period ensues upon publication in the periodic bulletin.

__Statutory hammer Acceptance
The approving agency simultaneously transmits its notice to both the applicant and the OEQC that it failed to timely make a determination on the acceptance or nonacceptance of the applicant's FEIS under Section 343-5(c), HRS, and that the applicant's FEIS is deemed accepted as a matter of law.

__Section 11-200-27 Determination
The approving agency simultaneously transmits its notice to both the applicant 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)**:**

The Maui County Council Boy Scouts of America (BSA) is proposing to construct a new dining hall and related improvements at Camp Maluhia (TMK (2)3-1-001:028) (Parcel 28) located at Kahakuloa, Maui, Hawaii. The property is owned by the BSA. This new dining facility is intended to replace the existing aging dining hall structure which was originally built in 1938.

Related improvements include upgrades to the fire protection and existing domestic water systems which serve the camp, including the construction of two (2) new water tanks, booster pump system, and associated waterlines which are intended to augment the existing system and bring the system up to current design standards. A portion of the proposed water system improvements will be located on the adjacent State-owned parcel identified as TMK (2)3-1-001:001 (Parcel 1), which is leased by the BSA. In addition, the Department of Land and Natural Resources, Division of Forestry and Wildlife proposes to construct a new parking lot also on Parcel 1 near the existing Camp Maluhia gravel parking lots for hikers using the Waihee Ridge Trail.

The proposed project will be funded in part, by State and County grant monies. In addition, a portion of the proposed water system improvements and new trail parking lot will be located on Parcel 1, which is State-owned. For these reasons, Chapter 343, Hawaii Revised Statutes (HRS) compliance is required.

Final Environmental Assessment

CAMP MALUHIA AND RELATED AREA IMPROVEMENTS

(TMKs (2) 3-1-001:001 (por.) and 028)

Prepared for:

Maui County Council
Boy Scouts of America and
State of Hawaii,
Department of Land and Natural Resources

Approving Agency

Department of Land and Natural Resources

April 2015

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by Munekiyo Hiraga

MUNEKIYO HIRAGA

PREFACE

This Chapter 343, Hawaii Revised Statutes (HRS), Environmental Assessment (EA) has been prepared to address two separate actions on lands owned and leased by the Maui County Council, Boy Scouts of America (BSA). These actions are triggers for the preparation of an EA, as follows:

1. The BSA proposes the construction of a new dining hall at Camp Maluhia (TMK (2)3-1-001:028 (Parcel 28)), along with the installation of water system improvements which traverse TMK (2)3-1-001:028, as well as a portion of the adjacent State-owned parcel leased by the BSA (TMK (2)3-1-001:001 (Parcel 1)). This action triggered the need to provide off-street parking as per the Maui County Code, Section 19.36A. As such, the BSA is also requesting with this EA formal designation of the two (2) existing gravel parking areas on Parcel 1 to fulfill the parking requirements of Camp Maluhia. State and County funds, and State-owned lands will be used for the implementation of these projects. Accordingly, a Chapter 343, HRS, EA will be required.

2. The State of Hawaii, Department of Land and Natural Resources, Division of Forestry and Wildlife (DOFAW) proposes to construct an unmarked, gravel parking lot approximately 144 feet by 60 feet in area, and one (1) Americans with Disabilities (ADA)-accessible parking stall adjacent to the trailhead for the Waihee Ridge Trail, which is located near the entrance to Camp Maluhia. The parking lot is specifically intended for users of the Waihee Ridge Trail. The proposed location of the parking lot is on lands adjacent to Camp Maluhia, and leased from the State of Hawaii by the BSA (TMK (2) 3-1-001:001 (por.)). The leased lands are used to support outdoor scouting activities at Camp Maluhia. State funds will be used to construct the parking lot. For these reasons, this Chapter 343, HRS, EA will address the proposed Waihee Ridge Trail parking lot as well.

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List of Acronyms

ADA	Americans With Disabilities Act
AIS	Archaeological Inventory Survey
ALISH	Agricultural Lands of Importance to the State of Hawaii
AMSL	Above Mean Sea Level
BMP	Best Management Practice
BSA	Boy Scouts of America
CIA	Cultural Impact Assessment
CZM	Coastal Zone Management
DLNR	Department of Land and Natural Resources
DOE	Department of Education
DOFAW	Division of Forestry and Wildlife
DWS	Department of Water Supply
EA	Environmental Assessment
FONSI	Findings of No Significant Impact
GPD	Gallons Per Day
GPM	Gallons Per Minute
HAR	Hawaii Administrative Rules
HC&S	Hawaiian Commercial & Sugar Company
HDPE	High Density Polyethylene
HRS	Hawaii Revised Statutes
HwD	Honolua Silty Clay, 15 to 25 percent slopes
KAPWC	Kahakuloa Acres Private Water Company
LSB	Land Study Bureau
MCR	Maluhia County Ranches
MGD	Million Gallons per Day
MIP	Maui Island Plan
NPDES	National Pollutant Discharge Elimination System
rRK	Rock Land
SDR	Standard Dimension Ratio
SMA	Special Management Area
TMK	Tax Map Key
USDA	U.S. Department of Agriculture
WKWWRF	Wailuku-Kahului Wastewater Reclamation Facility

Executive Summary

Project Name:	Camp Maluhia and Related Area Improvements
Type of Document:	Final Environmental Assessment
Legal Authority:	Chapter 343, Hawaii Revised Statutes
Determination:	Finding of No Significant Impact (FONSI)
Applicable Environmental Assessment review "Trigger":	Use of State and County Funds; Use of State Lands
Location:	Maui Island Wailuku Tax Map Key (TMK) Nos. (2)3-1-001:001 (por.) and 028
Landowners:	State of Hawaii Department of Land and Natural Resources 54 South High Street Wailuku, Hawaii 96793 Phone No.: (808) 984-8100 Maui County Council Boy Scouts of America 200 Liholiho Street Wailuku, Hawaii 96793 Contact: Robert Nakagawa Phone No.: (808)244-3724
Applicants:	Maui County Council Boy Scouts of America 200 Liholiho Street Wailuku, Hawaii 96793 Contact: Robert Nakagawa Phone No.: (808)244-3724 State of Hawaii Department of Land and Natural Resources 54 South High Street Wailuku, HI 96793 Phone No.: (808) 984-8100

Approving Agency:	State of Hawaii Department of Land and Natural Resources 54 South High Street Wailuku, Hawaii 96793 Phone No.: (808) 984-8100
Consultant:	Munekiyo & Hiraga, Inc. 305 High Street, Suite 104 Wailuku, Hawaii 96793 Contact: Bryan Esmeralda Phone: (808) 244-2015
Project Summary:	The Maui County Council Boy Scouts of America (BSA) is proposing to construct a new dining hall and related improvements at Camp Maluhia (TMK (2)3-1-001:028) (Parcel 28) located at Kahakuloa, Maui, Hawaii. The property is owned by the BSA. This new dining facility is intended to replace the existing aging dining hall structure which was originally built in 1938. Related improvements include upgrades to the fire protection and existing domestic water systems which serve the camp, including the construction of two (2) new water tanks, booster pump system, and associated waterlines which are intended to augment the existing system and bring the system up to current design standards. A portion of the proposed water system improvements will be located on the adjacent State-owned parcel identified as TMK (2)3-1-001:001 (Parcel 1), which is leased by the BSA. The underlying land use designations for Parcel 28 are as follows: • State Land Use Classification: Agricultural • Wailuku-Kahului Community Plan: Agriculture • County Zoning: Agricultural The camp facility is considered a permitted use under Chapter 205, Hawaii Revised Statutes (HRS). However, under Maui County Code (MCC) Chapter 19.30A relating to the County's Agricultural zoning district, the camp is deemed to be an existing

nonconforming use. For this reason, an application for County Special Use Permit for the new dining hall, as well as all other facilities at the camp, will be filed for review and approval by the Maui Planning Commission.

This action triggered the need to provide off-street parking as per the Maui County Code, Section 19.36A. As such, the BSA is also requesting formal designation of the two (2) existing gravel parking areas on Parcel 1 to fulfill the parking requirements of Camp Maluhia.

In addition, the Department of Land and Natural Resources (DLNR), Division of Forestry and Wildlife (DOFAW), intends to construct an unmarked, gravel parking lot approximately 144 feet by 60 feet in area, and one (1) Americans with Disabilities Act (ADA)-accessible stall on Parcel 1 for the use of hikers utilizing the Waihee Ridge Trail which originates on Parcel 1.

The underlying land use designations for Parcel 1 are as follows:

- State Land Use Classification: Agricultural
- Wailuku-Kahului Community Plan: Agricultural
- County Zoning: Agricultural

The trail is considered a permitted use under Chapter 205, HRS as well as MCC 19.30A as open area recreation, and the parking lot is allowable as an ancillary use to said permitted use.

Due to the foregoing project's use of State and County funds and use of State-owned lands, compliance with Chapter 343, HRS will be necessary. The approving agency for the Environmental Assessment will be the State Department of Land and Natural Resources.

I. PROJECT OVERVIEW

I. PROJECT OVERVIEW

A. PROPERTY LOCATION, EXISTING USE, AND LAND OWNERSHIP

The Maui County Council Boy Scouts of America (BSA) is proposing to construct a new dining hall and related fire protection and domestic water system improvements at Camp Maluhia (Tax Map Key (TMK) (2)3-1-001:028) (Parcel 28) located at Kahakuloa, Maui, Hawaii. See **Figure 1** and **Figure 2**. This new facility will replace the existing aging dining hall which was originally built in 1938. The new dining hall will be located in proximity to other camp supporting facilities including the Long House, Camp Office, camp ground cabins and swimming pool. See **Figure 3**.

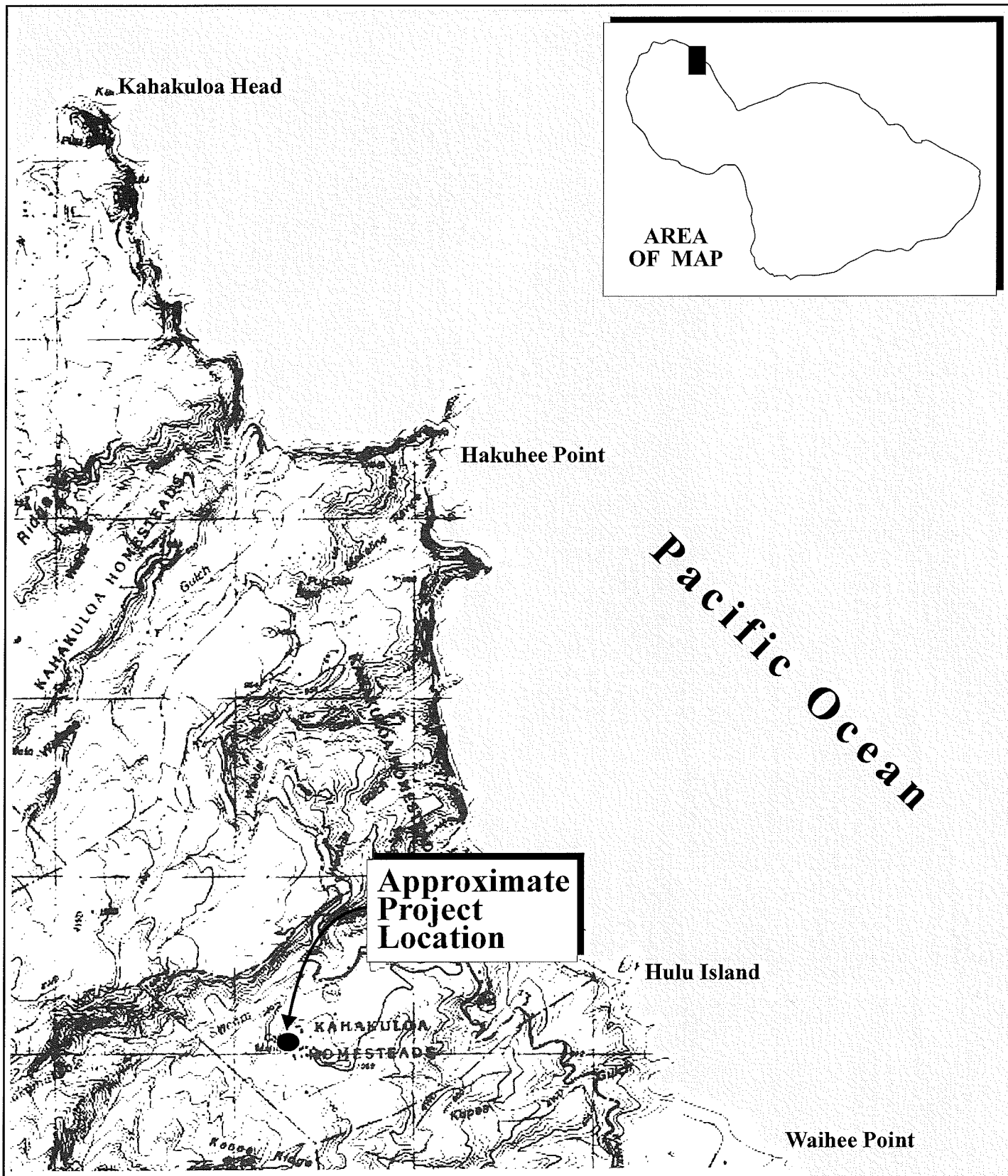
Situated on the northeastern slopes of the West Maui Mountains, the camp is located on a hilly, densely vegetated parcel of land which provides scenic views of the Kahakuloa area and the Pacific Ocean. Access to the BSA-owned Parcel 28 is via a paved local access road which traverses a State-owned parcel identified as TMK (2)3-1-001:001 (Parcel 1). Parcel 1 is leased by the BSA from the State of Hawaii and utilized for outdoor wilderness camp experiences. There are no camp-related buildings on Parcel 1, although an existing water tank which serves the camp (Parcel 28) is located within this State-owned lot. A portion of the State-owned parcel is used for cattle grazing.

In addition, the Department of Land and Natural Resources (DLNR), Division of Forestry and Wildlife (DOFAW), intends to construct an unmarked, gravel parking lot, approximately 144 feet by 60 feet in area, and one (1) Americans With Disabilities Act (ADA)-accessible stall on Parcel 1 for the use of hikers utilizing the Waihee Ridge Trail (Trail) which originates on Parcel 1. Refer to **Figure 2**. The Trail is an approximately 2.5 mile hike which climbs the windward slope of the West Maui Mountains and affords the hikers panoramic views of Wailuku and central Maui.

B. PROJECT NEED

1. Boy Scouts of America New Dining Hall and Water System Improvements

The camp parcel is owned and operated by the BSA, a 501(c)(3) non-profit organization. In this regard, the camp is operated as a non-commercial camp. The camp has been serving scouts as well as other community organizations since its original development in the 1930's. Currently, the camp is occupied 60 percent of the year and 95 percent of the weekends throughout the year, making it one of the most regularly used scout camps nationally.



Source: U.S. Geological Survey Map

Figure 1

Camp Maluhia and Related Area Improvements

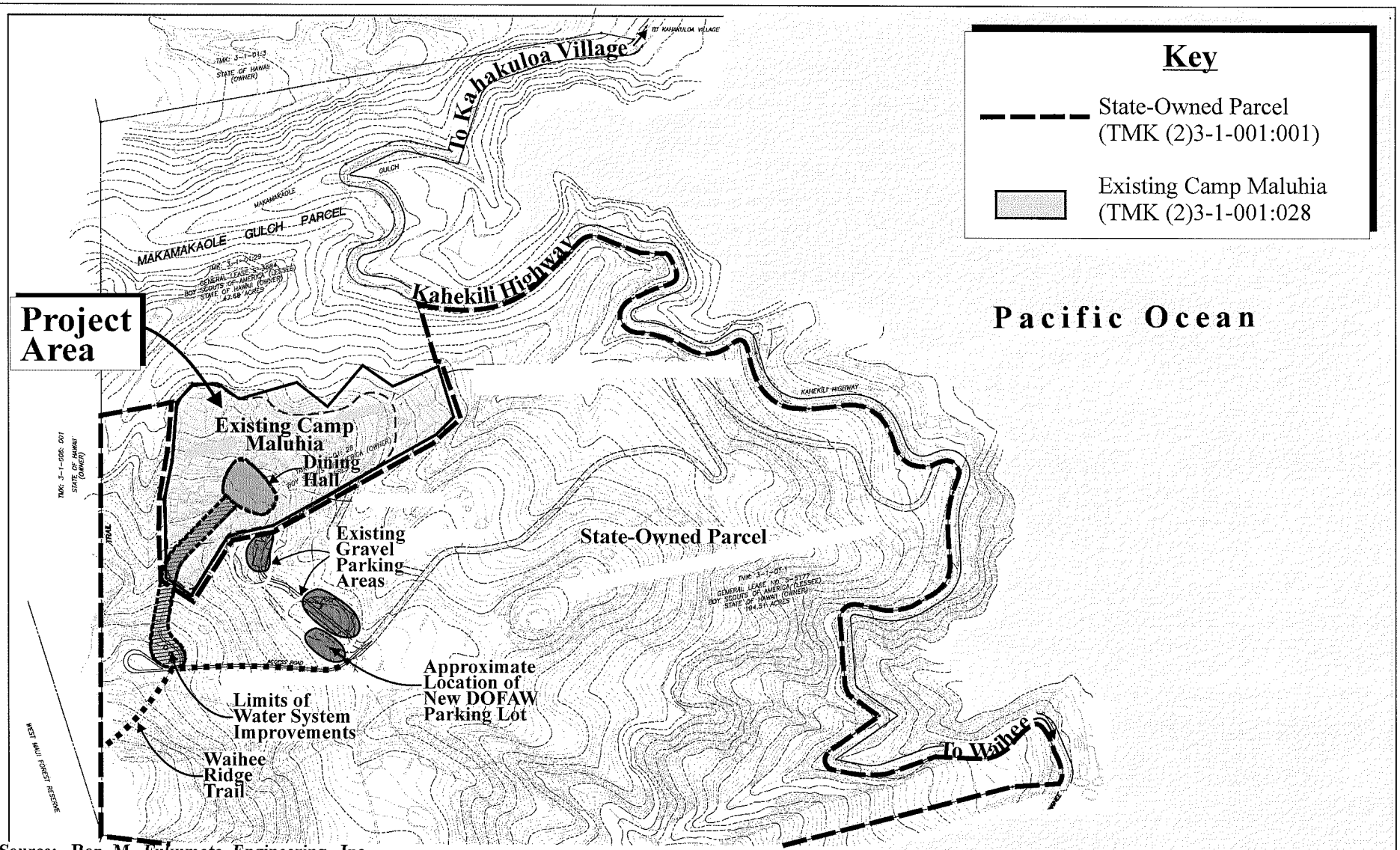
Regional Location Map

1,250
0 Feet
625 2,500

Prepared for: Maui County Council Boy Scouts of America and State of Hawaii, Department of Land and Natural Resources

MUNEKIYO HIRAGA

BSA\CampMaluhiaImpr\FinalEA\regional.BW



Source: Ron M. Fukumoto Engineering, Inc.

Figure 2 Camp Maluhia and Related Area Improvements

Property Location Map

NOT TO SCALE

Prepared for: Maui County Council Boy Scouts of America and State of Hawaii, Department of Land and Natural Resources

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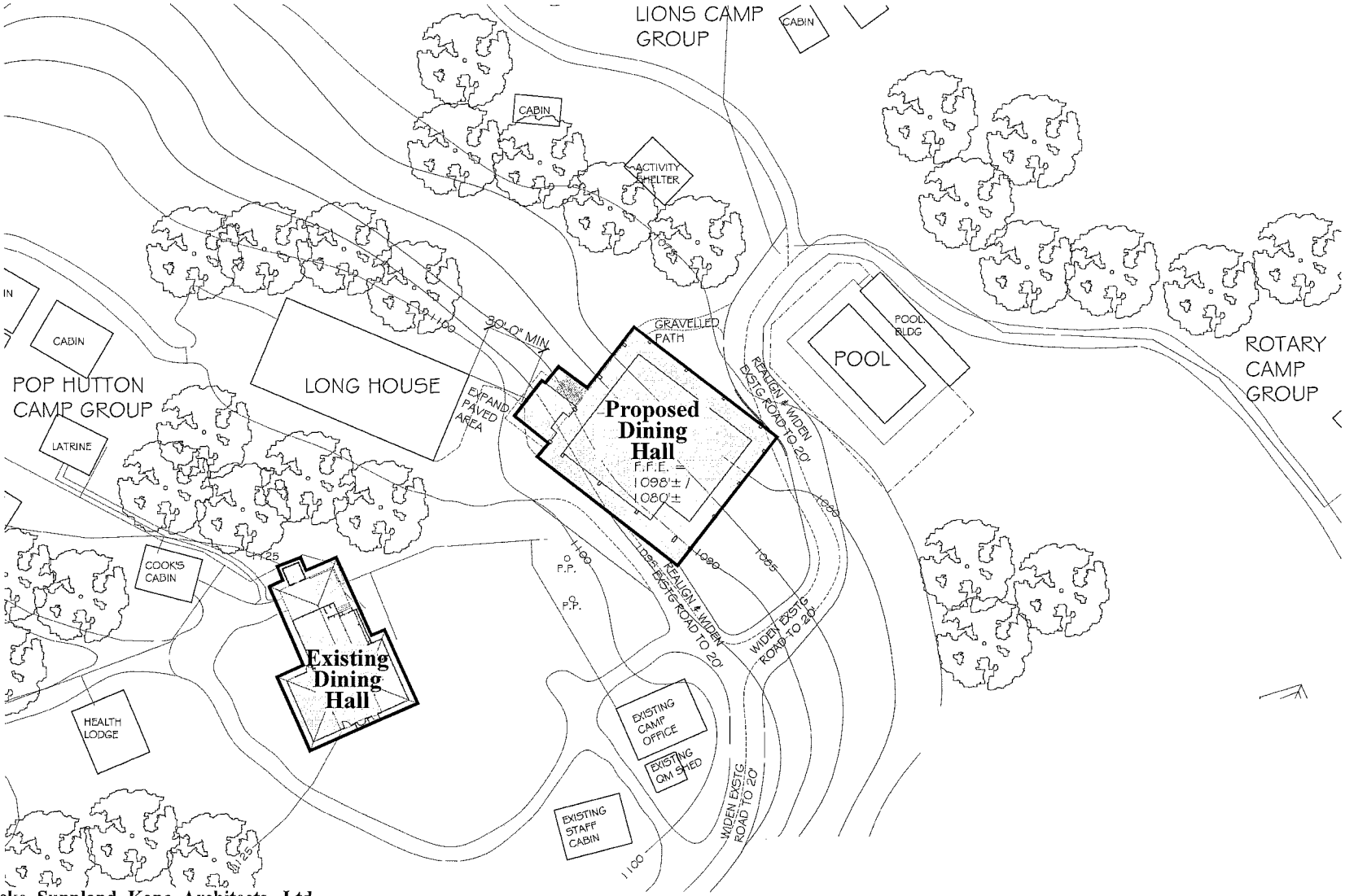
BSA\CampMaluhiaimpr\FinalEA\propertylocation



Source: Riecke Sunnland Kono Architects, Ltd.

Figure 3 Camp Maluhia and Related Area Improvements

Site Plan

NOT TO SCALE

Prepared for: Maui County Council Boy Scouts of America and State of Hawaii, Department of Land and Natural Resources

MUNEKIYO HIRAGA

BSA\CampMaluhiaimpr\Final EA\SitePlan

Constructed in 1938, the existing dining hall is aging and has fallen into disrepair. The proposed dining hall is intended to better serve the scouting and local community and will not be used for commercial, profit ventures.

In order to support the new dining facility, improvements to the camp fire protection and domestic water systems including the construction of two (2) new water tanks, new booster pump system and waterlines are required to meet current design standards. A portion of the water system improvements will be on the State's Parcel 1. Refer to **Figure 2**.

2. Division of Forestry and Wildlife Parking Lot for Waihee Ridge Trail

The Waihee Ridge Trail has long been used by Maui residents and visitors alike. Currently, no parking lot is provided for trail users and, as such, most park on the gravel parking lots on Parcel 1 which are designated for Camp Maluhia. Refer to **Figure 2**. Because the Camp Maluhia parking lots are utilized daily by the hikers, issues relating to their management and security have been of concern. Over the years, Camp administrators have reported loitering, littering, and drug and alcohol use in the parking lots. These activities pose potential conflict with Boy Scouts and community members who utilize the Camp's facilities. The proposed Trail parking lot will allow the Camp to install a new gate to secure its two (2) parking lots and will allow for improved access management for Trail users.

C. PROPOSED ACTION

The proposed dining hall will be located at the core of the camp's building facilities, as shown in **Figure 3**. The proposed structure will total approximately 7,500 square feet (sq. ft.). It will feature approximately 1,400 sq. ft. in kitchen space; 3,300 sq. ft. in dining room space; 500 sq. ft. in restroom space, all on the main level; and 2,300 sq. ft. in open activity area space on the lower level. See **Figure 4**. As the camp is located in a hilly area, the building will be constructed into a slope, with the main level accessible by an existing roadway that traverses the camp. The lower level will be open to the slope below. The new dining hall will be centrally located in the camp, in close proximity to the Long House, swimming pool, and camp ground cabins.

Source: Parallel Alliance

Figure 4 Camp Maluhia and Related Area Improvements

Architectural Rendering of Proposed Dining Hall

NOT TO SCALE

Prepared for: Maui County Council Boy Scouts of America and State of Hawaii, Department of Land and Natural Resources

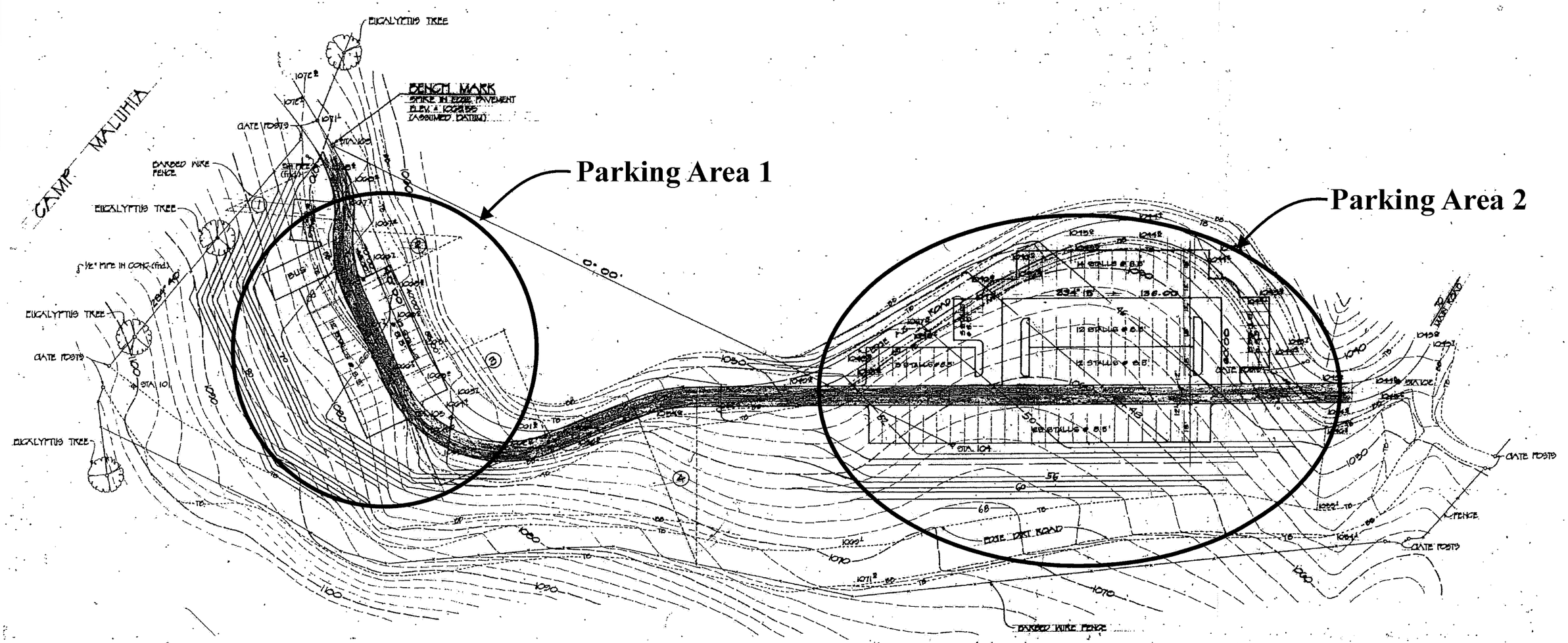
MUNEKIYO HIRAGA

BSA\CampMaluhiaimpr\Final EA\rendering

This action triggered the need to provide off-street parking as per the Maui County Code, Section 19.36A. As such, the BSA is requesting formal designation of the two (2) existing gravel parking areas on Parcel 1 to fulfill the parking requirements of Camp Maluhia. See **Figure 5**.

The proposed water system improvements will include the construction of two (2) glass-fused-to-steel bolted water tanks with sloped steel roofs and concrete foundations; one (1) 67,000-gallon fire protection water tank and one (1) 24,000-gallon drinking water tank, both to be constructed at the site of the camp's existing domestic water storage facility at an elevation of about 1,260 feet above mean sea level. In addition, approximately 850 feet of the existing 2-inch transmission pipeline in Makamakaole Gulch will be replaced with new heavy-wall, standard dimension ratio (SDR) 7, high density polyethylene (HDPE) pipe. This repair effort will be located on adjacent state-owned parcel TMK (2) 3-1-001:029. This measure will be taken to avoid breaks that often occur in the existing transmission pipeline due to high pressures which result in high water costs and inconvenience to campers. A new 20 gallons per minute (gpm) two-pump booster bump system and controls, 2,500-gallon polyethylene control tank, and 10-foot by 10-foot concrete masonry shed will also be constructed at an elevation of approximately 1,030 feet above mean sea level, replacing the existing booster pump system. The new system will draw water from the new control tank and pump the water to the new fire protection and drinking water tanks. Other requirements of this new system include radio controlled tank-level float switches, pressure switches, pump protection controls, and associated electrical system. Lastly, an 8-inch fire protection line from the new fire protection tank to the new dining hall, in addition to new 3-inch lines from the drinking water tank to the new dining hall and lines tying into the existing system in the vicinity of the dining hall would be constructed. All pipes, fittings, and other materials will conform to County of Maui, Department of Water Supply standards. See **Figure 6**.

In addition, the proposed parking lot will be located just above the existing gravel parking lots designated for Camp Maluhia. Refer to **Figure 2**. The parking lot will be unmarked and gravelled. There will also be one (1) paved ADA-accessible stall provided. See **Figure 7**. The parking lot, apart from the ADA-accessible stalls, will be constructed of gravel to maintain permeability during rainfall events, and to maintain design consistency with the adjacent Camp Maluhia parking lots.



Source: Norman Saito Engineering Consultants, Inc.

Figure 5

Camp Maluhia and Related Area Improvements

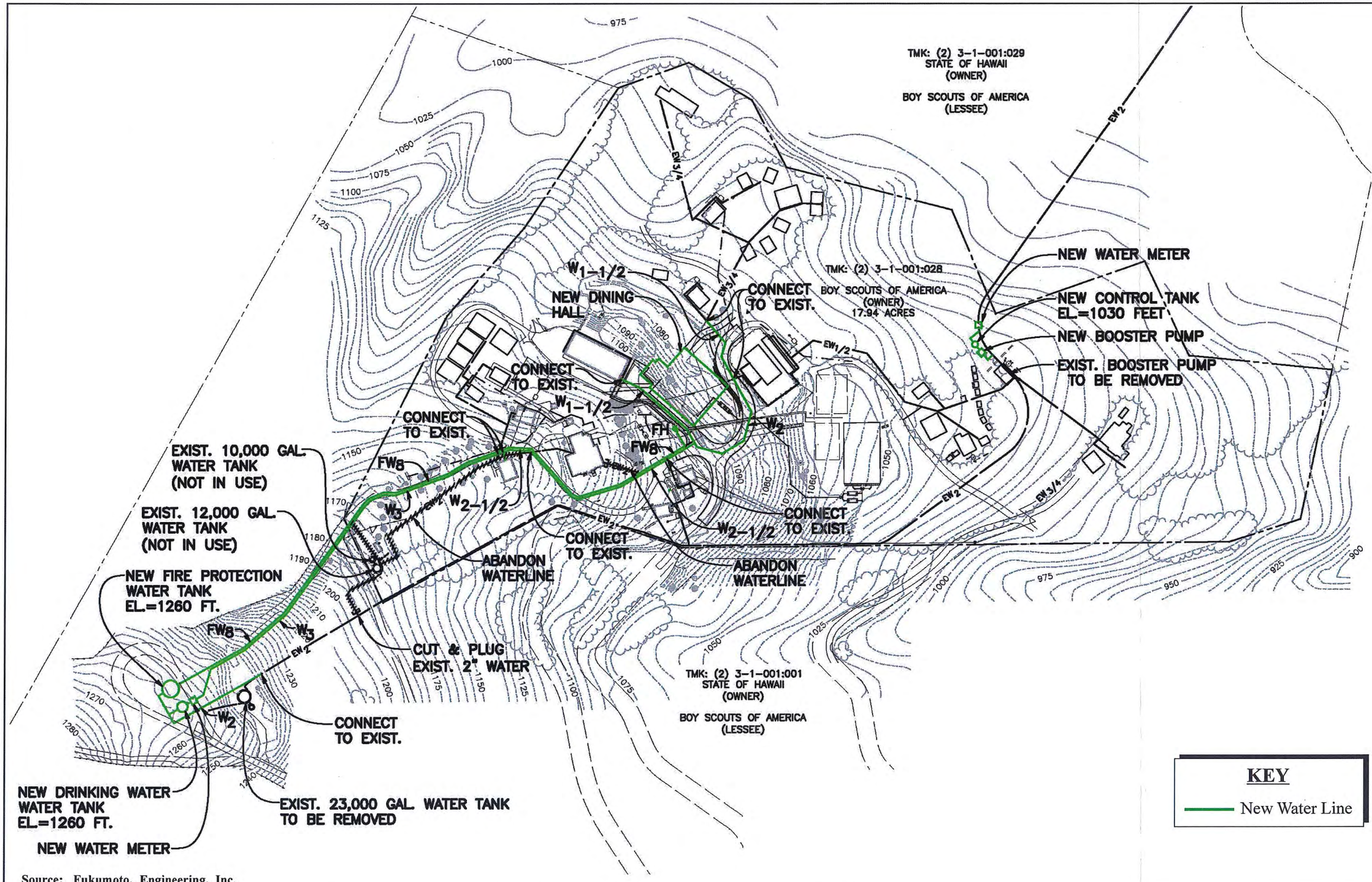
Existing Parking Areas

NOT TO SCALE

Prepared for: Maui County Council Boy Scouts of America
and State of Hawaii, Department of Land
and Natural Resources

MUNEKIYO HIRAGA

BSA\CampMaluhiaImpr\Final EA\ExistParkAreas



Source: Fukumoto, Engineering, Inc.

Figure 6

Camp Maluhia and Related Area Improvements

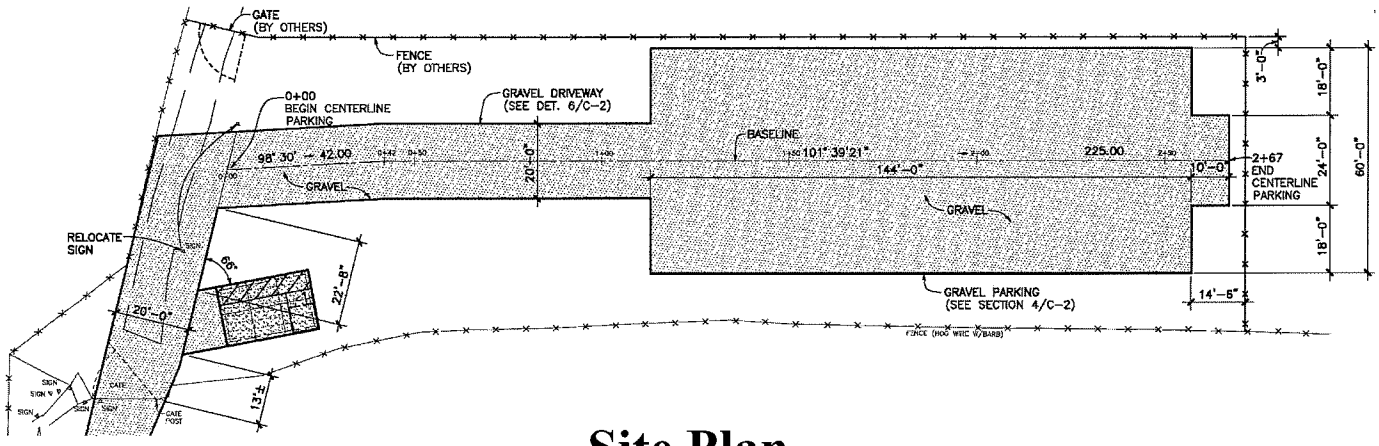
Schematic Engineering Plan for Proposed Camp Maluhia Water System Improvements

NOT TO SCALE

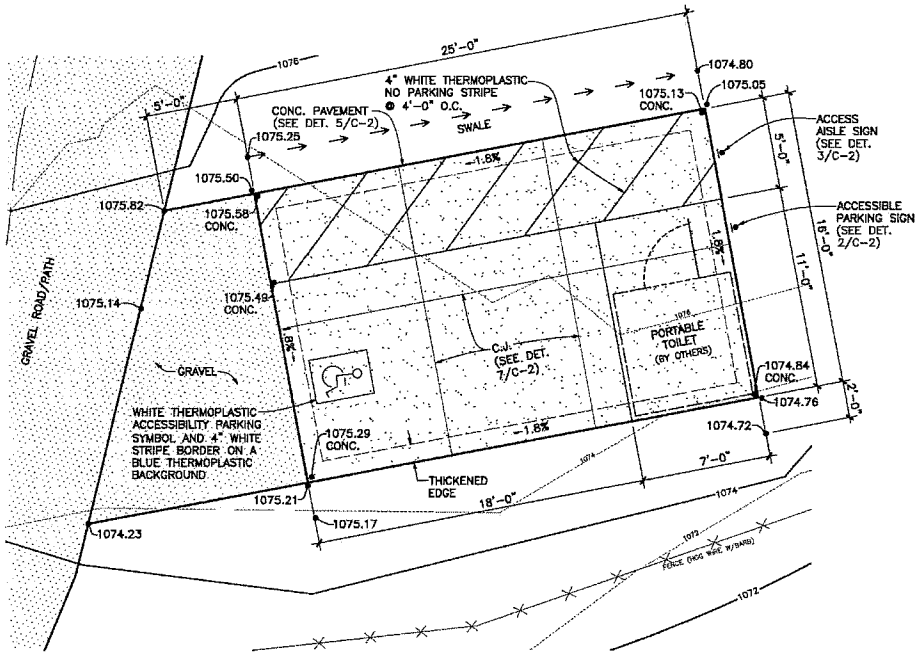
Prepared for: Maui County Council Boy Scouts of America
and State of Hawaii, Department of Land
and Natural Resources

MUNEKIYO HIRAGA

BSA\CampMaluhiaImpr\Final EA\FireProtection



Site Plan



Accessible Parking Detail

Source: Fukumoto Engineering, Inc.

Figure 7

Camp Maluhia and Related Area Improvements

Proposed Waihee Ridge Trail Parking Lot

NOT TO SCALE

Prepared for: Maui County Council Boy Scouts of America and State of Hawaii, Department of Land and Natural Resources

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D. APPLICABLE REGULATORY REQUIREMENTS

The proposed dining hall and water system improvements at Camp Maluhia will use State and County funds, as well as State lands, and the proposed parking lot will use State funds and lands. As such, compliance with Chapter 343, Hawaii Revised Statutes (HRS) is triggered. Therefore, this Environmental Assessment (EA) has been prepared pursuant to Title 11, Chapter 200, Hawaii Administrative Rules (HAR), Environmental Impact Statement Rules to evaluate the proposed action's technical characteristics, environmental and socio-economic impacts, and alternatives, as well as to advance findings relative to the significance of the project's potential impacts and proposed mitigation measures. The Approving Agency for the EA is the Department of Land and Natural Resources.

It is noted that the underlying land use designations for the parcels are:

Table 1. Land Designations of Project Area Parcels

Land Use Designations	Parcel 28	Parcel 1
State Land Use Classification	Agricultural	Agricultural
Wailuku-Kahului Community Plan	Agriculture	Agricultural
County Zoning	Agricultural	Agricultural

The camp facility is considered a permitted use under Chapter 205, HRS. However, under Maui County Code Chapter 19.30A, relating to the County's Agricultural zoning district, the camp is considered an existing nonconforming use. For this reason, an application for County Special Use Permit for the new dining hall, as well as all other facilities at the camp, has been filed for review and consideration by the Maui Planning Commission.

The Waihee Ridge Trail, however, is considered a permitted use under Chapter 205, HRS as well as MCC 19.30A as open area recreation. In this regard, the proposed parking lot is allowable as an ancillary use to said permitted use.

The two (2) parking lots on Parcel 1 will be used to meet parking requirements for the new dining hall located on Parcel 28. Satisfaction of parking requirements where parking is provided on a parcel separate from the parcel upon which the action requiring parking is proposed, requires review and process approval by the Department of Planning. The Applicant will coordinate with the Department of Planning to address applicable regulatory requirements to ensure that parking use and parking needs for Camp Maluhia are appropriately addressed.

In addition, the Maui County parking ordinance (Chapter 19.36A, Maui County Code) requires that these parking stalls be paved. Inasmuch as the existing parking areas which now serve the camp are gravel-surfaced, an application for a variance from this provision of the parking ordinance was submitted for review and approved by the County's Board of Variances and Appeals in November 2013.

E. PROJECT COSTS AND IMPLEMENTATION TIMETABLE

Funding for the project comes from a variety of sources including the State of Hawaii, County of Maui, and the Harry and Jeanette Weinberg Foundation, Inc. The estimated cost for the new dining hall and water system improvements is $6 million, while the estimated cost of construction of the parking lot is $13,600.00. Construction of the project is estimated to begin after all entitlements and permits have been procured. Construction duration is anticipated to last approximately 12 months.

II. DESCRIPTION OF THE EXISTING ENVIRONMENT, POTENTIAL IMPACTS, AND MITIGATION MEASURES

II. DESCRIPTION OF THE EXISTING ENVIRONMENT, POTENTIAL IMPACTS, AND MITIGATION MEASURES

A. PHYSICAL SETTING

1. Surrounding Land Uses

a. Existing Conditions

The project site is located 7.4 miles northwest of Wailuku Town, on the windward slopes of the West Maui Mountains in Kahakuloa, Maui, Hawaii. Refer to **Figure 1**. The area surrounding the camp and trailhead is characterized as agricultural. Lands are heavily vegetated making this an ideal location for a wilderness camp experience and other open area recreation amenities such as the trail. The surrounding agricultural grasslands are also used for cattle ranching purposes. Residential uses are sparse, in keeping with the area's agricultural land use context.

b. Potential Impacts and Mitigation Measures

The proposed new dining hall will be located in the midst of the developed portion of Camp Maluhia, while the water system improvements will be adjacent to the existing domestic tank and waterline which currently serves the camp. Furthermore, the proposed Division of Forestry and Wildlife (DOFAW) parking lot will be located in close proximity to Camp Maluhia's existing gravel parking areas. These improvements are compatible with the existing uses of the properties and are not anticipated to create adverse impacts to the surrounding community.

2. Climate

a. Existing Conditions

Like most areas in Hawaii, the climate in the Wailuku region is relatively uniform year-round. Characteristic of the island's climate, the project site experiences mild and uniform temperatures, moderate humidity, and relatively consistent northeasterly tradewinds. This climatic stability is due to Maui's tropical latitude, its location relative to the Pacific anticyclone

and storm tracts, and the surrounding ocean currents. Variations in climate among the different regions in Maui are largely due to local terrain.

Historically, August is the warmest month with an average temperature in the high 80 degrees Fahrenheit (measured at the Kahului Airport), while the coolest month is February with an average in the low 60s.

Rainfall in the region is seasonal, with the most precipitation occurring between October and March. Annual rainfall data for nearby Waihee Valley shows an average of 44.65 inches (Maui County Data Book, 2012).

b. Potential Impacts and Mitigation Measures

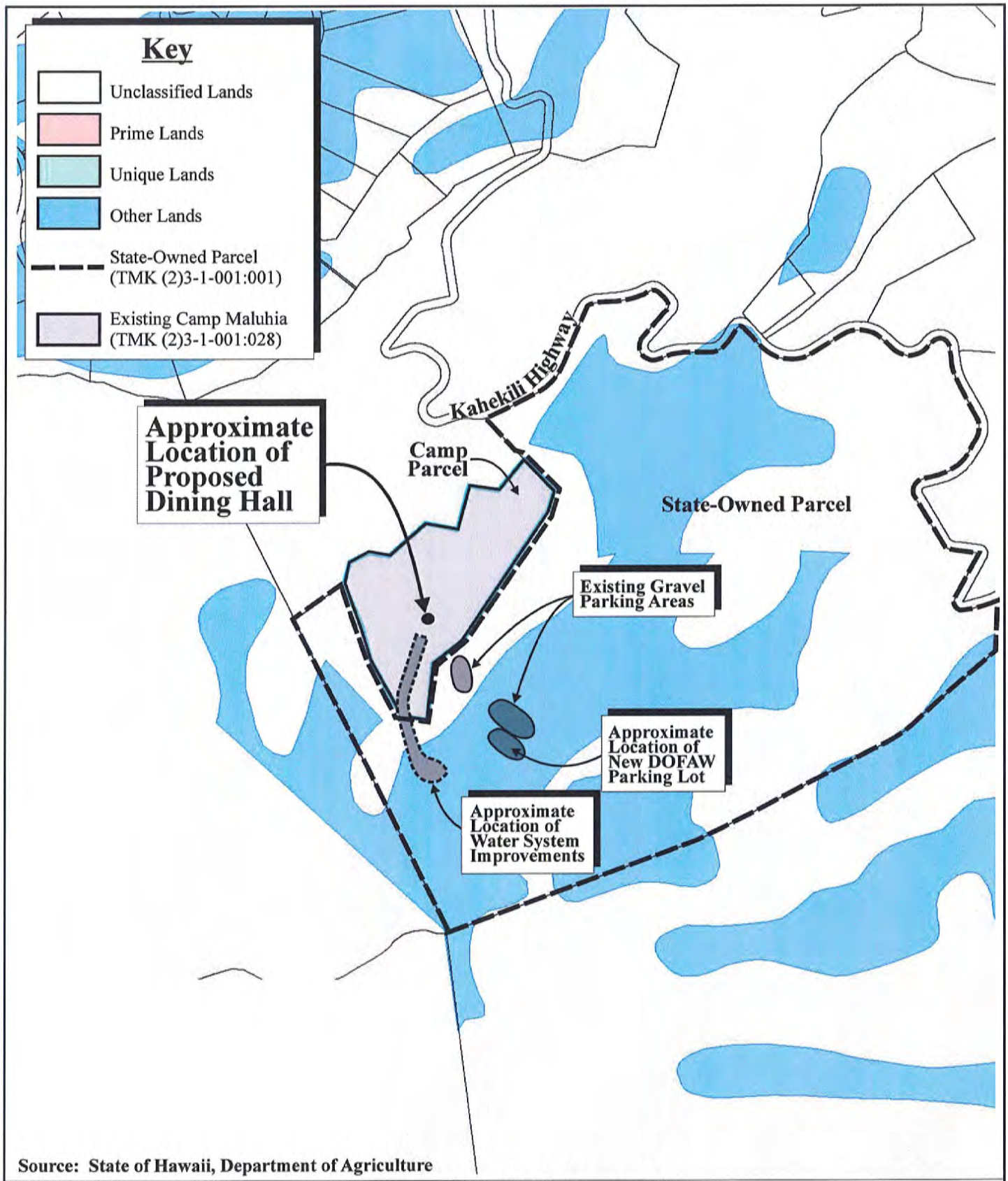
The proposed project is not anticipated to affect or be affected by climatic conditions in the area.

3. Agricultural Productivity Considerations

a. Existing Conditions

In 1977, the State of Hawaii, Department of Agriculture developed a classification system to identify Agricultural Lands of Importance to the State of Hawaii (ALISH), based primarily, though not exclusively, on soil characteristics of the underlying land. The three (3) classes of ALISH lands are "Prime", "Unique", and "Other Important" agricultural lands, with the remaining non-classified lands termed "Unclassified". When utilized with modern farming methods, "Prime" agricultural lands have soil quality, growing season, and moisture supply needed to produce sustained crop yields economically; "Unique" agricultural lands contain a combination of soil quality, growing season, and moisture supply to produce sustained yields of a specific crop. "Other Important" agricultural lands include those important lands that have not been rated as "Prime" or "Unique".

Camp Maluhia, as reflected by the ALISH map, is located on lands designated as "Unclassified" agricultural lands, the proposed water system improvements are on lands designated as "Unclassified" and "Other Important", and the proposed parking lot is located on lands designated as "Other Important". See **Figure 8**.



Source: State of Hawaii, Department of Agriculture

Figure 8

Camp Maluhia and Related Area Improvements

Agricultural Lands of Importance to the State of Hawaii Map

0 387.50 Feet
193.75 775

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Additionally, the University of Hawaii, Land Study Bureau (LSB) developed the Overall Productivity rating, which classified soils according to five (5) levels, with "A" representing the class of highest productivity soils and "E" representing the lowest. These letters are followed by numbers which further classify the soil types by conveying such information as texture, drainage, and stoniness.

The LSB classifications for the proposed project area are "D13" and "E96". See **Figure 9**. The "D13" classification reflects an Overall Productivity Rating of D, the second lowest possible rating. The soils are characterized as nonstony. Soil depths are over 30 inches, with an average slope of 21 to 35 percent. The soil is of fine grain and well-drained. This land is typically found at an elevation of 0 to 1,000 feet, and experiences a mean annual rainfall of 30 to 50 inches. The soils are dark reddish brown in color. The "E96" classification reflects an Overall Productivity rating of E, the lowest possible rating. The soils are characterized as nonstony to rocky. Soil depths are variable, and with an average slope of 36 to 80 percent. The soil is of moderately fine to medium grain and well-drained. The land is typically found at an elevation of 100 to 5,000 feet, and experiences a mean annual rainfall of 40 to 60 inches. The soils are dark brown to dark reddish-brown in color. Both D and E rated lands are suitable for grazing (University of Hawaii, Land Study Bureau, 1967).

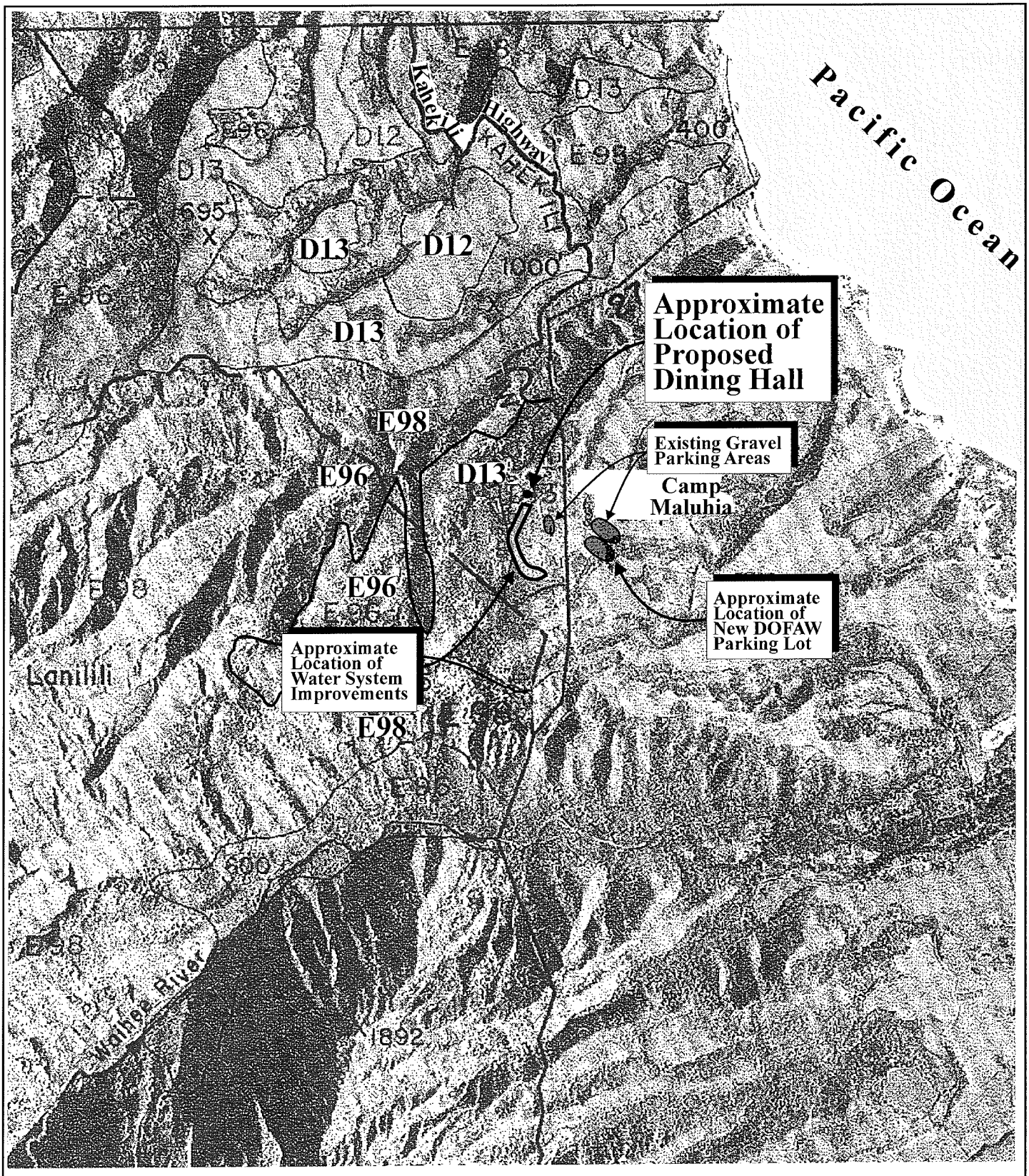
b. Potential Impacts and Mitigation Measures

While the site has relatively low productivity ratings, a portion of the State-owned Parcel 1 is used for cattle grazing purposes. The camp itself is used for camping and outdoor recreational purposes. Adverse impacts to agricultural productivity are not anticipated as a result of the proposed action.

4. Topography and Soils Characteristics

a. Existing Conditions

Elevations at the project site range from approximately 1,050 feet above mean sea level (amsl) to 1,110 feet amsl. The site generally slopes in a south to north direction, ranging from 6 to 50 percent.



Source: University of Hawaii Land Study Bureau

Figure 9 Camp Maluhia and Related Area Improvements

Land Study Bureau Productivity Rating

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The project site consists of soils within the Honolua-Olelo association, which is found on intermediate uplands and is characterized by deep, gently sloping to moderately steep, well-drained soils that have a fine-textured subsoil (U.S. Department of Agriculture (USDA), 1972). See **Figure 10**. Underlying the project site are both Honolua Silty Clay, 15 to 25 percent slopes (HwD), and Rock Land (rRK). See **Figure 11**. Honolua Silty Clay, 15 to 25 percent slopes (HwD) is a dark brown silty clay about 12 inches thick. Permeability is moderately rapid, runoff is medium, and the erosion hazard is slight to moderate. Rock Land (rRK) is made up of areas where exposed bedrock covers 25 to 90 percent of the surface. The rock outcrops and very shallow soils are the main characteristics of this soil type. In many places, the soil material is very sticky and very plastic, and has high shrink-swell potential (USDA, 1972).

b. Potential Impacts and Mitigation Measures

The proposed project is not anticipated to affect or be affected by underlying soil or topographic conditions in the area. The slope at the site ranges from approximately 6 to 50 percent, and does not pose constraints on project constructability.

5. Flood and Tsunami Hazards

a. Existing Conditions

The project site is located on the windward slopes of the West Maui Mountains at an elevation of approximately 1,100 feet above mean sea level. As indicated by the Flood Insurance Rate Map for the County of Maui, the project site is located within Zone X. Zone X is the flood insurance rate zone that corresponds to areas of minimal flooding or areas determined to be outside the 0.2 percent annual chance flood plain. See **Figure 12**.

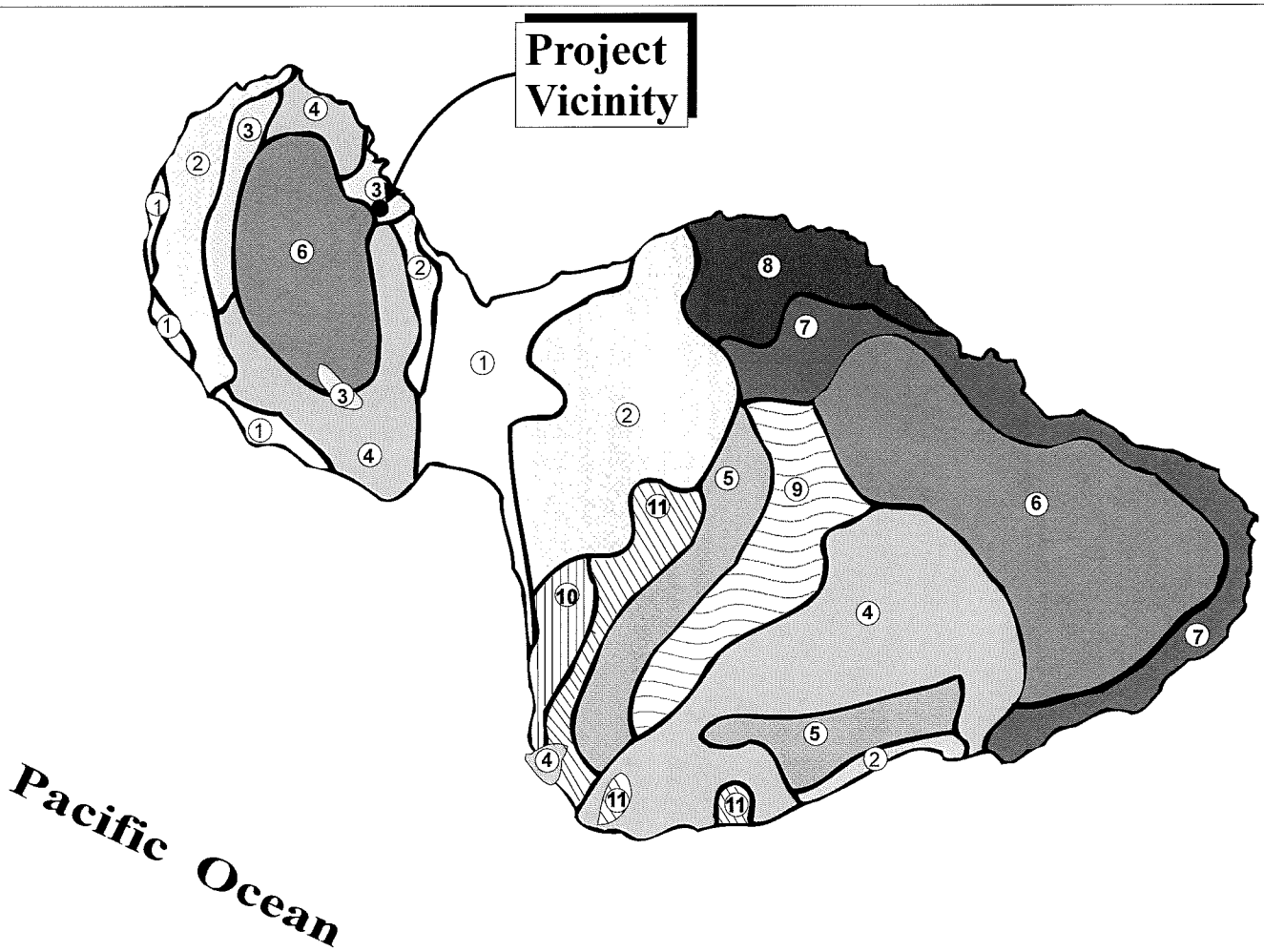
Additionally, the project is located inland and outside the tsunami inundation zone.

b. Potential Impacts and Mitigation Measures

Given the location of the project site within Flood Zone X and outside of the tsunami inundation zone, there are no anticipated adverse effects to the proposed project from flooding or tsunami related events.

LEGEND

- (1) Pulehu-Ewa-Jaucas association
- (2) Waiakoa-Keahua-Molokai association
- (3) Honolua-Olelo association
- (4) Rock land-Rough mountainous land association
- (5) Puu Pa-Kula-Pane association
- (6) Hydrandepts-Tropaquods association
- (7) Hana-Makaalae-Kailua association
- (8) Pauwela-Haiku association
- (9) Laumaia-Kaipoipoi-Olinda association
- (10) Keawakapu-Makena association
- (11) Kamaole-Oanapuka association



Map Source: USDA Soil Conservation Service

Figure 10

Camp Maluhia and Related Area Improvements

Soil Association Map

NOT TO SCALE

Prepared for: Maui County Council Boy Scouts of America and State of Hawaii, Department of Land and Natural Resources

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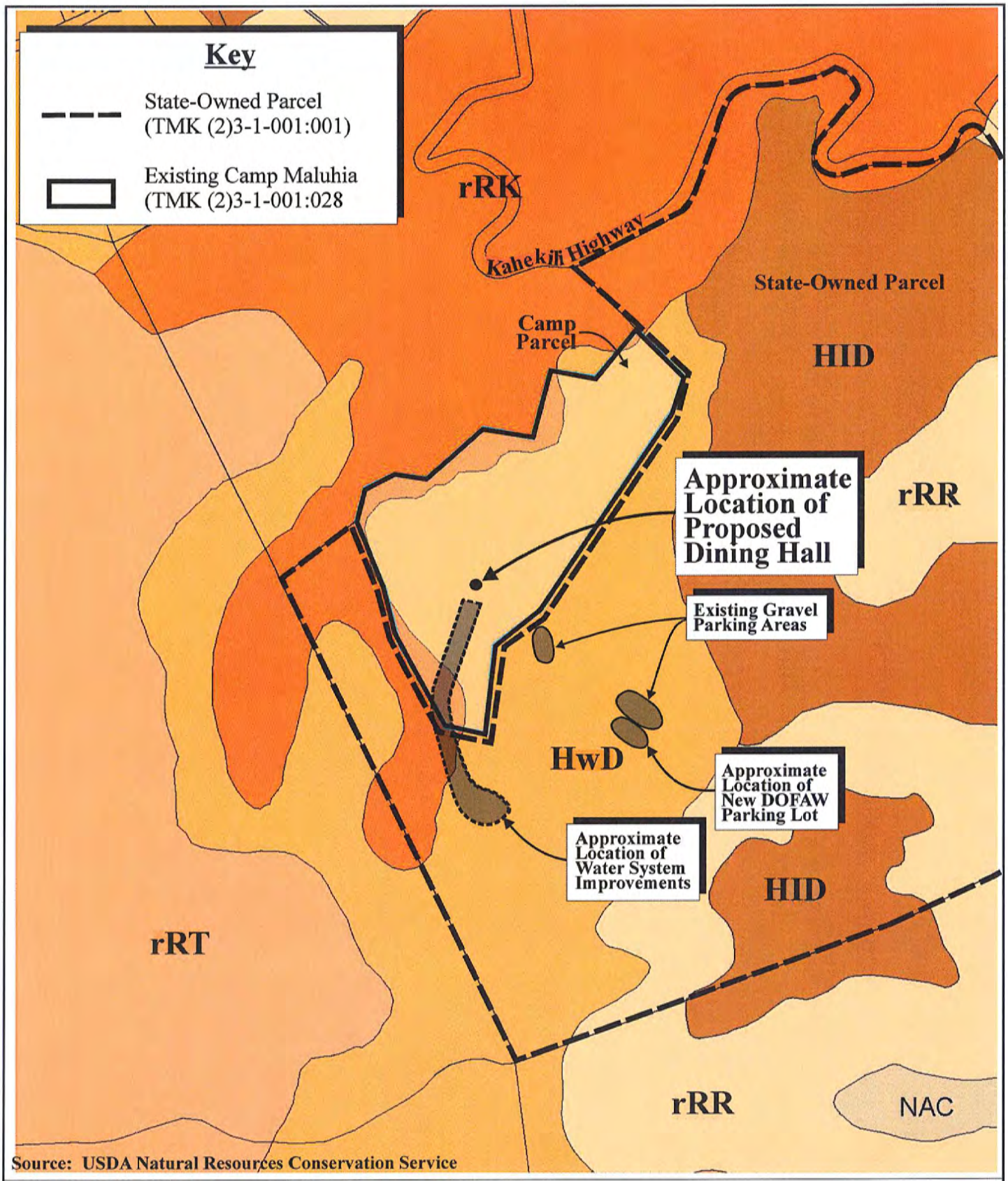

Figure 11

Camp Maluhia and Related Area Improvements

Soil Classification Map

0 125 250 500 Feet

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BSA\CampMaluhiaImpr\Final EA\SoilsClass

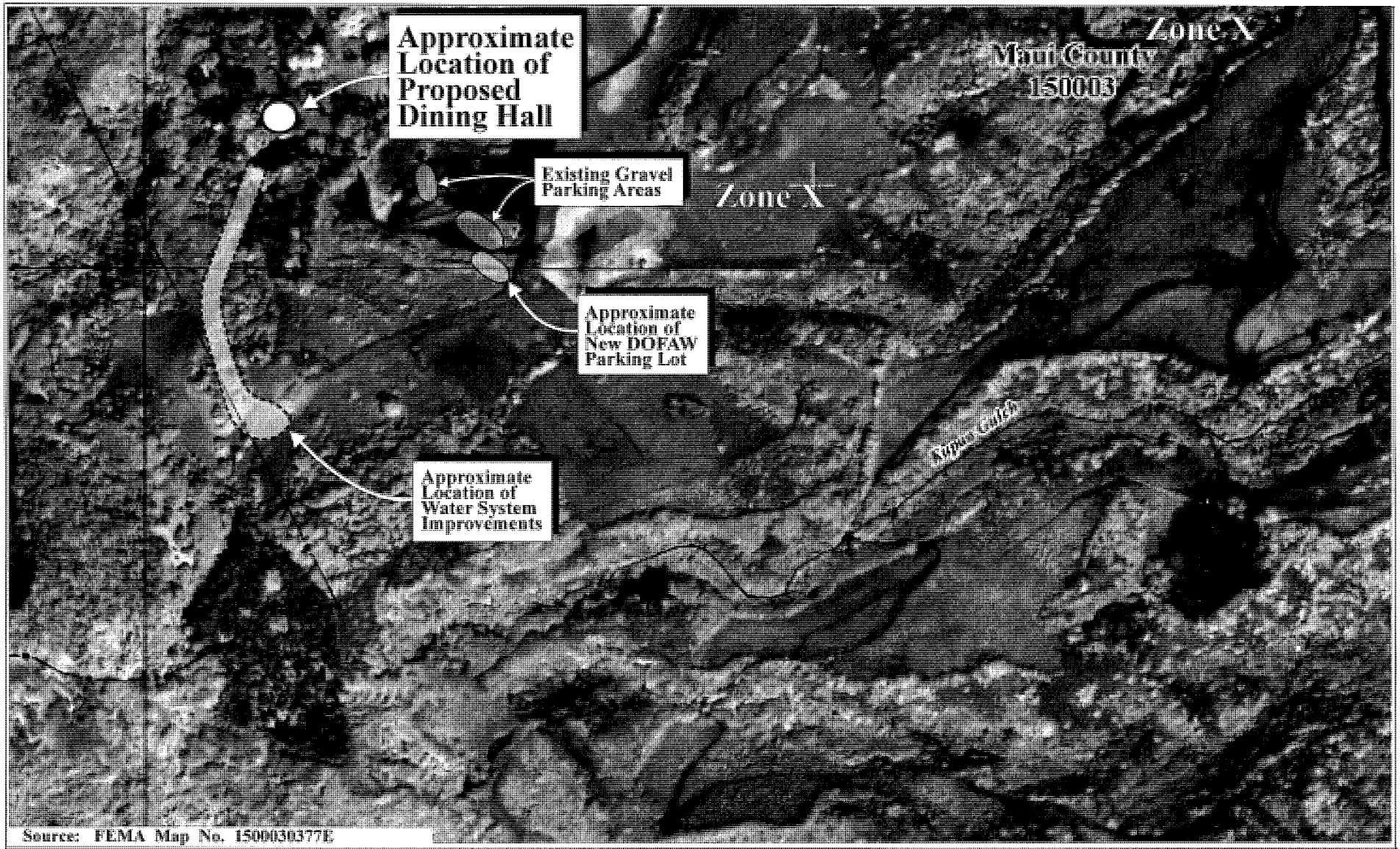

Figure 12 Camp Maluhia and Related Area Improvements

Flood Insurance Rate Map

NOT TO SCALE

Prepared for: Maui County Council Boy Scouts of America and State of Hawaii, Department of Land and Natural Resources

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6. Streams and Wetlands

a. Existing Conditions

There are two (2) streams on the State-owned parcel that are within the vicinity of the proposed project. The Makamakaole Stream is located approximately 1,500 feet to the north of the proposed new dining hall site, and the Maluhia Stream is approximately 900 feet east of the site of the proposed water system improvements. See **Figure 13**.

b. Potential Impacts and Mitigation Measures

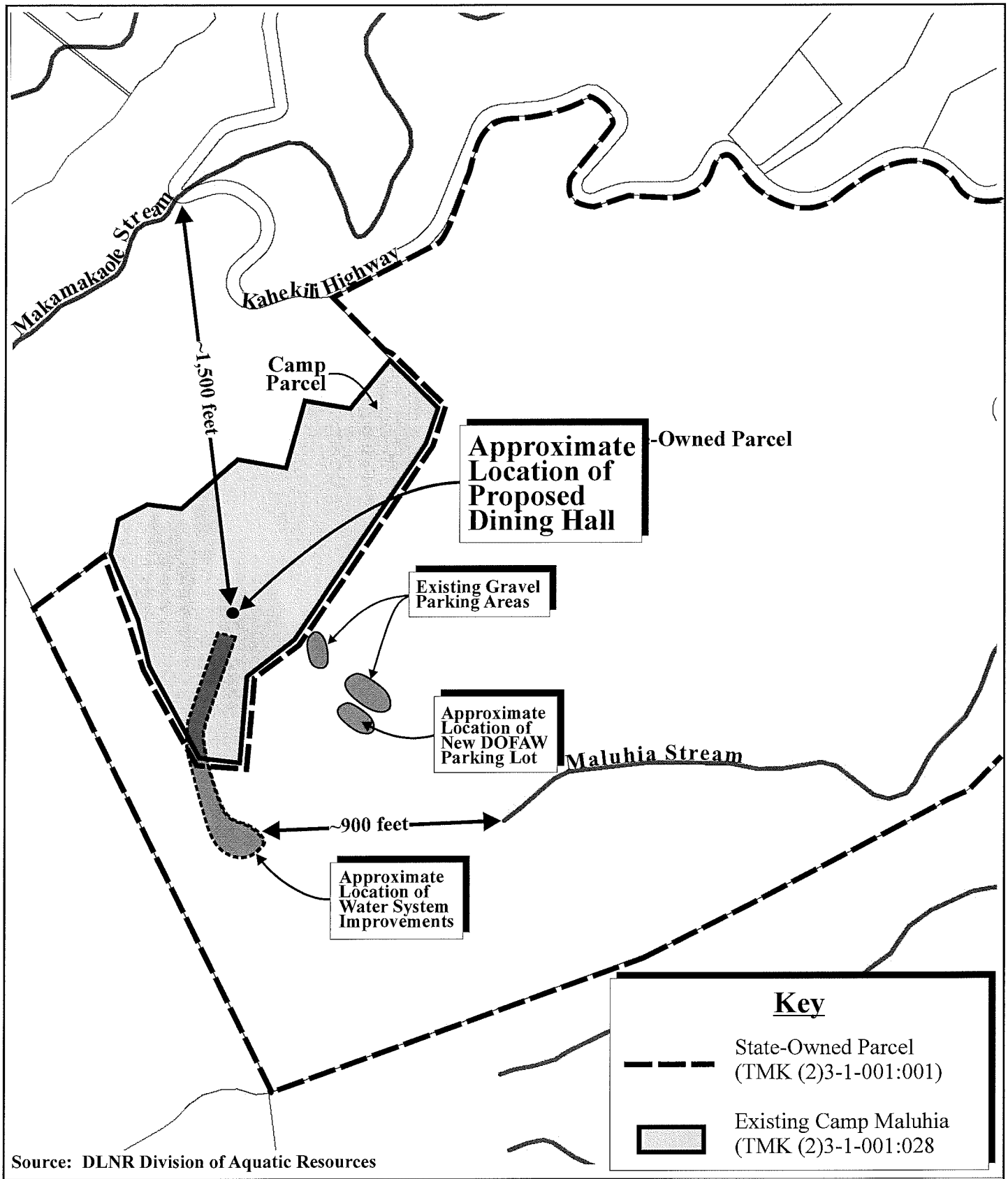
The project will utilize Best Management Practices (BMPs) to minimize soil erosion attributed to construction. Runoff will be managed so as not to affect downstream properties, resources, or nearby stream systems. In this regard, the proposed project is not anticipated to affect stream and wetland conditions in the area.

7. Flora and Fauna

a. Existing Conditions

A flora and fauna field survey of the entire Camp Maluhia parcel (Parcel 28) and a portion of the adjacent State-owned parcel (Parcel 1) (water system improvements and parking lot portion) was undertaken. The results of this study are documented in the report entitled "*Flora and Fauna Study, Camp Maluhia Improvements Project*" which is incorporated in this EA document as **Appendix "A"**. The report notes that 147 plant species were recorded during the survey. Of these, 131 were non-native, with the remaining species categorized as indigenous or endemic to Hawaii. None of the plant species identified were deemed endangered or threatened. Plant types found included ferns, conifers, monocots, and dicots.

The flora and fauna report also documents field findings related to mammals, birds, insects, and mollusks. Four (4) mammal species were observed (domestic cat, feral pig, mongoose, and axis deer). Birdlife was considered moderate. The observed species listed were the common myna, zebra dove, and chicken. Insects documented included the European garden spider, Australian hoverfly, and small rice grasshopper. The East African snail was the only mollusk identified.



Source: DLNR Division of Aquatic Resources

Figure 13

Camp Maluhia and Related Area Improvements

Streams and Wetlands

0 250 Feet
125 500

Prepared for: Maui County Council Boy Scouts of America and State of Hawaii, Department of Land and Natural Resources

MUNEKIYO HIRAGA

BSA\CampMaluhiaImpr\Final EA\StreamsandWet

b. Potential Impacts and Mitigation Measures

The flora and fauna report concludes that there are no endangered or threatened species of plant life and animal life which will be impacted by the project. More particularly, there will be no adverse impacts to these resources as a result of the proposed action.

8. Archaeological Resources

a. Existing Conditions

An archaeological assessment of the project area was undertaken, together with associated archival investigations. See **Appendix "B"**. The assessment report notes that limited, traditional dryland agricultural activities may have been located in the project area in the past. Nearby, approximately 1,500 feet makai of Camp Maluhia, is the Kukuipuka Heiau, which is maintained and protected by the nonprofit organization Kukuipuka Ohana. The report also notes that Camp Maluhia includes a number of historic buildings, more than 50 years in age. The proposed action does not affect either the Kukuipuka Heiau or existing building structures at Camp Maluhia.

b. Potential Impacts and Mitigation Measures

The archaeological assessment report explains that it is unlikely that the Camp Maluhia area was a major permanent settlement in the pre-contact era. Refer to **Appendix "B"**. No surface cultural remains/historic surface features were identified. The report notes that modern era clearing and grading on the parcel associated with the development of the camp have likely disturbed any previously existing sites or surface deposits. Based on the foregoing, the report concludes that the proposed project will not have an adverse impact on any significant sites in the project area or nearby the project area. As such, no further archaeological work has been recommended. See **Appendix "B-1"**.

9. Cultural Resources

a. Existing Conditions

A Cultural Impact Assessment (CIA) was prepared for the project area. See **Appendix "C"**. From a cultural context perspective, the CIA notes that the project area is situated on a rugged slope and unsuitable for wetland taro cultivation. Instead, a limited degree of dry land crop cultivation was likely practiced on the flatter and more gradually sloping coastal bluffs.

Traditional *mo'olelo* (stories) of the lands between Waihee and Kahakuloa are sparse, although there are references to Makamaole Valley, which is located further northwest of the project area. The references cite the rugged nature of the physical geography of the region. The CIA indicates that there were numerous settlements primarily of fishermen, along the cliff-lined coast from Honokohau to Kahakuloa, and the fact that Kahakuloa was home to a complex of both wetland and dry land cultivation.

As noted in the previous section of this report, the Kukuipuka Heiau is located about 1,500 feet makai of Camp Maluhia. The Kukuipuka Heiau is cared for by a corps of volunteers under the direction of Lei'ohu Ryder. While other archaeological studies have been conducted on lands nearby Camp Maluhia, revealing archaeological features on those adjacent lands, the archaeological investigation performed for the proposed project found no surface cultural remains.

b. Potential Impacts and Mitigation Measures

To better understand the relationship between the proposed action and cultural resources and practices in the immediate vicinity of the project site, an extensive consultation process with agencies and individuals who have knowledge of the area was undertaken. Refer to **Appendix "C"**. This process included face-to-face oral interviews, telephone interviews, email correspondences, as well as the publication of a CIA Notice published in The Honolulu Start Advertiser, The Maui News, and Ka Wai Ola (the newspaper of the Office of Hawaiian Affairs).

Based on results of the consultation process, it has been determined that the area of the proposed Dining Hall, related water system improvements

and DOFAW parking lot have not been used for traditional cultural purposes within recent times. It is reasonably concluded, therefore, that the proposed actions will not affect the exercise of Native Hawaiian rights, or the rights of any other ethnic group, as it relates to gathering, access, or other customary activities.

10. Air Quality

a. Existing Conditions

Given the project area's location in a relatively remote and heavily vegetated area, it does not, in general, experience adverse air quality conditions. There are no point sources of airborne emissions within close proximity to the project site. Point sources in the Central Maui region include the Maalaea Power Plant, Puunene Sugar Mill, and the rock quarry at Puunene, all of which are well over five (5) miles from the project site. A non-point source of pollution in the vicinity of the project site is vehicular exhaust from Kahekili Highway and other nearby roadways. Emissions from these sources, however, are quickly dispersed by prevailing tradewinds. Overall, Maui's air quality index is rated good, with 97 percent of days with good air quality and three (3) percent with moderate air quality (Scorecard, 2011).

b. Potential Impacts and Mitigation Measures

During construction, airborne particulates as a result of construction-related activities may temporarily affect the ambient air quality within the immediate vicinity of the project site. Mitigative measures may include utilization of water wagons and sprinklers to control dust, as well as other appropriate BMPs to ensure that fugitive dust from the project area is minimized. By effectively employing these mitigative measures, construction-related activities are not anticipated to pose a significant impact to the air quality in the surrounding area.

11. Noise

a. Existing Conditions

The predominant source of noise in the vicinity of the project site stems from traffic traveling along Kahekili Highway. The lands adjacent to the camp parcel are State-owned lands and are used, in part, for cattle grazing.

Agricultural home sites located along Kahekili Highway and north of Camp Maluhia across Makamakaole Gulch are not major noise-generators.

b. Potential Impacts and Mitigation Measures

Ambient noise conditions may be temporarily affected by construction-related activities. Construction machinery and activities are anticipated to be the dominant noise-generating sources during the construction period. Mitigation measures for construction-related activities may include equipment mufflers or other noise attenuating equipment. Construction activities are anticipated to occur during daylight hours, Monday through Friday, excluding holidays. The use of BMPs for construction, combined with the area's remote location, will ensure that noise impacts associated with construction are appropriately mitigated.

In the long term, the new dining hall and parking lot will not create noise conditions different from those associated with current operations.

12. Scenic and Open Space Resources

a. Existing Conditions

The project site's location, nestled against the windward slopes of the West Maui Mountains, provides picturesque views of the Pacific Ocean and the Kahakuloa region with the mountains as a backdrop to the camp. Kahekili Highway is noted by the County as possessing a high, significant scenic-resource value. It provides ocean, mountain, agricultural, and island-wide views. The slopes of the West Maui Mountains provide for open space resources to the region as well.

b. Potential Impacts and Mitigation Measures

The proposed project will not obstruct views from the camp or from Kahekili Highway. The dining hall building will be built into a slope on the camp grounds. The dense vegetation within and surrounding Camp Maluhia provides coverage of the camp facilities from Kahekili Highway. As such, the proposed project will not adversely affect scenic resources. In addition, as the proposed dining hall will be constructed within the camp boundaries, and the proposed water system improvements will augment the existing system. Additionally, the proposed parking lot's size

is not deemed significant in the context of the greater Kahakuloa region. As such, the proposed actions will not adversely affect open space resources.

13. Beach and Mountain Access

a. Existing Conditions

The project site is located approximately one (1) mile from the coastline. The driveway to the camp also provides access to the Waihee Ridge Trail used by hikers.

b. Potential Impacts and Mitigation Measures

The proposed dining hall and water system projects are not anticipated to affect beach access conditions in the area. In addition, the proposed DOFAW parking lot is intended to improve access to the Waihee Ridge Trail for hikers.

B. SOCIO-ECONOMIC ENVIRONMENT

1. Population

a. Existing Conditions

The population of the County of Maui has exhibited relatively strong growth over the past decade. The County's resident population grew by 20.9 percent between 2000 and 2010, compared to a 12.3 percent increase in the State of Hawaii as a whole during the same time period. Maui County's population increased from 128,094 residents in 2000 to 154,834 residents in 2010. Population on the island of Maui exhibited even stronger growth than the County as a whole, with a 22.8 percent population increase over the decade. Approximately 144,444 residents lived on the island of Maui in 2010 (U.S. Census Bureau, 2000 and 2010). Maui County's resident population is projected to rise to 174,450 people in 2020 and to 199,550 people in 2030 (SMS, 2006).

The proposed project is located on the northwestern coast of Maui, within the Wailuku-Kahului Community Plan region. Just as Maui County and Maui Island's populations have grown, the resident population of the Central Maui region has also increased. The estimated population of the

Wailuku-Kahului region in 2000 was 41,503 (SMS, June 2006), which comprised 35.3 percent of the island's population. In 2010, the region's population stood at approximately 54,400 residents, a 31.2 percent increase over 10 years (U.S. Census Bureau, 2010). The population of the Wailuku-Kahului region is projected to increase to 60,877 people in 2020 and to 71,223 people in 2030 (SMS, June 2006).

b. Potential Impacts and Mitigation Measures

The proposed new dining hall and water system improvements are intended to provide upgraded facilities for scouting use, as well as non-scouting community users. Similarly, the proposed parking lot is intended to improve trail activities and access for hikers. The improvements are not considered a population generator. Accordingly, the proposed actions will not affect the island's population.

2. Economy

a. Existing Conditions

The Wailuku region is Maui County's center of governmental activity. Along with neighboring Kahului, the region encompasses a broad range of commercial, service, and public sector activities. In addition, the region is surrounded by approximately 32,000 acres of sugar cane. This vast expanse of agricultural land, managed by Hawaiian Commercial & Sugar Company (HC&S), is a key contributor to the local economy.

Non-seasonally-adjusted unemployment rates for both Maui County and the Island of Maui in December 2014 were 3.8 percent and 3.6 percent, respectively. These rates both decreased from the December 2013 unemployment rates of 4.7 percent and 4.5 percent (Department of Labor and Industrial Relations, March 2015).

b. Potential Impacts and Mitigation Measures

In the short term, the proposed project will provide construction-related revenue and employment. Accordingly, the project will have a beneficial impact on the local economy during the construction phase.

In the long term, the proposed actions are not anticipated to have a significant impact on the economy of Maui County.

C. PUBLIC SERVICES

1. Police and Fire Protection

a. Existing Conditons

Police protection for the Wailuku region is provided by the Maui County Police Department headquartered on Mahalani Street, approximately 9.1 miles southeast of the project site. The region is served by the Department's Central Maui station, which is divided into three (3) sectors. Each sector is divided into three (3) beats, each patrolled by a single officer.

Fire prevention, suppression, and protection services for the Waiehu, Waihee, and Wailuku regions are provided by the County Department of Fire and Public Safety's Wailuku station, located on Kinipopo Street in Wailuku, approximately 7.8 miles southeast of the project site. The region is also served by the Department's Kahului station, located on Dairy Road in Kahului, approximately 10.0 miles southeast of the project site.

b. Potential and Impacts and Mitigation Measures

The proposed projects will not affect the service area limits or personnel for police and fire protection. The proposed improvements to the fire protection water system are intended to reduce the risk of catastrophic fire events at the camp.

2. Medical Services

a. Existing Conditions

The island's major medical facility is Maui Memorial Medical Center, located approximately nine (9) miles southeast of the project site, midway between Wailuku and Kahului. Acute, general, and emergency care services are provided at the facility. Other private medical service providers in the Central Maui region, which have regular hours, include Maui Medical Group and Kaiser Permanente.

b. Potential Impacts and Mitigation Measures

The proposed projects will not affect requirements for medical services. As with police and fire protection services, service area limits for medical emergency responders will not be affected by the proposed projects.

3. Solid Waste

a. Existing Conditions

Single-family residential solid waste collection service is provided by the County of Maui. Residential solid waste collected by County crews is disposed at the County's Central Maui Landfill, located four (4) miles southeast of the Kahului Airport. Commercial waste from private collection companies is also disposed at the Central Maui Landfill. A County-operated green waste recycling facility is also located at the Central Maui Landfill.

Maui Demolition and Construction Landfill, a privately owned facility, accepts solid waste and concrete from demolition and construction activities. This facility is located at Maalaea, approximately 14.2 miles south of the project site, near Honoapiilani Highway's junction with North Kihei Road and Kuihelani Highway.

b. Potential Impacts and Mitigation Measures

Construction waste which may be generated from implementation of the project will be recycled or disposed at an appropriate construction waste disposal location. After project construction, the proposed actions will not result in the generation of additional solid waste. A private vendor will continue to provide solid waste collection service for the camp. With these solid waste management measures, the contribution of construction waste to landfills will be minimized. Thus, the proposed actions are not anticipated to adversely affect capacity parameters of the County's solid waste system.

4. Recreational Resources

a. Existing Conditions

There are a number of public recreational facilities in the Central Maui region, including the War Memorial complex and the adjacent Keopuolani Park. Camp Maluhia itself is considered a recreational opportunity, as various open land recreation activities such as hiking and camping are held at this facility. The Waihee Ridge Trail is also considered a recreational resource. In addition, recreational activities such as swimming, archery and related outdoor programs which advance scouting skills are offered at Camp Maluhia. These opportunities are also available to non-scouting groups such as church and school organizations.

b. Potential Impacts and Mitigation Measures

The proposed projects are not anticipated to adversely impact Camp Maluhia's existing scouting and related skill-building recreational purposes or facilities, nor will it adversely affect the Waihee Ridge Trail or other recreational facilities/opportunities in Central Maui.

5. Schools

a. Existing Conditions

The Wailuku-Kahului region is served by the State Department of Education's (DOE) public school system and by several privately operated schools. Public schools operated by the DOE in the Kahului area include Lihikai, Kahului, and Pomaikai Elementary Schools (Grades K to 5); Maui Waena Intermediate School (Grades 6 to 8); and Maui High School (Grades 9 to 12). Public schools operated by the DOE in the Wailuku area include Wailuku, Waihee, and Puu Kukui Elementary Schools (Grades K to 5); Iao Intermediate School (Grades 6 to 8); and Baldwin High School (Grades 9 to 12). The University of Hawaii-Maui College, located southeast of the project site in Kahului, serves as the island's primary higher education institution.

b. Potential Impacts and Mitigation Measures

The proposed projects are not anticipated to impact school enrollments or facility requirements.

D. INFRASTRUCTURE

1. Roadways

a. Existing Conditions

The project site is located to the "mauka" (mountain) side of Kahekili Highway in Kahakuloa, Maui, Hawaii. Access to the site is provided by a one-lane paved driveway off of Kahekili Highway.

Kahekili Highway is a two-way, two-lane, undivided State-owned roadway that serves as the primary roadway throughout the north Wailuku region encompassed by Waiehu, Waihee, and Kahakuloa. Kahekili Highway begins in the "Happy Valley" district of Wailuku, where North Market Street, Mokuhau Road and Piihana Road converge, and continues north and around the West Maui Mountains where it eventually becomes Honoapiilani Highway near Honokohau Bay.

b. Potential Impacts and Mitigation Measures

There will be a short-term increase in traffic along Kahekili Highway associated with construction workers and equipment entering and leaving the project site. Parking for construction workers will be onsite to minimize additional traffic impacts. There are no anticipated long-term traffic impacts as there are no changes in camp capacity and operations resulting from the proposed action. In addition, the proposed DOFAW parking lot is intended to address existing parking needs for Waihee Ridge Trail users. No adverse impacts to traffic are anticipated as a result.

2. Water

a. Existing Conditions

Water to the Wailuku-Kahului region is provided by the Maui County, Department of Water Supply (DWS) Central Maui System which also serves the South Maui and Paia areas. The main sources of water for this system include the Iao and Waihee aquifers, the Iao Tunnel, and the Iao-Waikapu ditch.

The project site is located within the Waihee Aquifer System, which has a sustainable yield of eight (8) million gallons per day (MGD). The current

withdrawal from the Waihee Aquifer system is approximately six (6) MGD on a 12-month moving average basis.

The camp currently receives water from the Kahakuloa Acres Private Water Company (KAPWC) through a 5/8-inch meter located in the Maluhia Country Ranches (MCR) subdivision. A 2-inch transmission pipeline runs from the meter through an easement on one of the MCR lots, traverses the Makamakaole Gulch State-owned parcel, and enters the lower end of the camp near the Rotary campsite. It is noted that an easement will be sought from the State in favor of the BSA for the portion of the waterline which traverses Makamakaole. See **Appendix "D"**.

Annually, the average water usage level for the camp ranges anywhere from 3,500 to 5,300 gallons per day (GPD). Peak water use at the camp generally occurs during the Boy Scouts' summer camp, wherein approximately 200 to 240 campers use the facilities, resulting in maximized water usage levels. Based on water use and camp attendance data, an average daily demand of 12,000 GPD was estimated for the camp during this peak time. This equates to an approximately 50 to 60 GPD per camper average. This estimate is comparatively low to average household use of 100 gallons per person per day.

In addition, between the years of 2009 and 2011, there were a number of breaks in the transmission pipeline crossing Makamakaole Gulch, resulting in high water use and associated costs. In the year 2012, there was a substantial reduction in the number of pipeline breaks resulting in an equitable reduction of water use and costs.

b. <u>Potential Impacts and Mitigation Measures</u>

The proposed water system improvements constitute an augmentation of an existing water system. Refer to **Appendix "D"**. Inasmuch as the proposed improvements boast better efficiency of water usage, storage, and transmission, the proposed project does not present any adverse impacts to water infrastructure or utilization parameters. Furthermore, the proposed parking lot will not require domestic water service.

As noted above, Camp Maluhia is located within the Waihee Aquifer. In this regard, appropriate construction mitigation measures will be implemented to ensure the protection of the aquifer. Such measures may

include, as applicable, management of hazardous onsite materials to ensure proper security and handling, and the proper maintenance of construction vehicles and stationary equipment to ensure that there is no leakage of fuel and other petroleum-based fluids.

3. Wastewater

a. Existing Conditions

Wastewater from the Wailuku-Kahului region is treated at the Wailuku-Kahului Wastewater Reclamation Facility (WKWWRF). The WKWWRF also receives flow from Kuau, Paia, Skill Village, and Spreckelsville. Currently, the WKWWRF has a design capacity of 7.9 MGD and average dry weather flow of 4.4 MGD. Effluent disposal from the WKWWRF is via eight (8) gravity injection wells. Principal solids from the WKWWRF are treated, processed and digested, dewatered and then composted at the Central Maui Landfill. There are 15 major wastewater pump stations which are part of the WKWWRF system.

There are no existing County sewer system facilities at Camp Maluhia.

b. Potential Impacts and Mitigation Measures

The proposed dining hall will be served by an individual wastewater system approved by the State Department of Health. The proposed parking lot will not require wastewater connections or service. In this regard, there will be no impacts to County collection, transmission and treatment systems.

4. Drainage

a. Existing Conditions

The proposed project site is located on the slopes of the West Maui Mountains at approximately 1,000 feet above mean sea level (amsl). There are no drainageways at the site. Runoff currently sheet flows through the site and eventually enters a tributary of Makamakaole Gulch. A ridge borders the southwesterly portion of the property, preventing off-site runoff from entering the site.

b. Potential Impacts and Mitigation Measures

The increase in runoff resulting from the proposed dining hall will be mitigated by two (2) drainage sumps. The drainage sumps will collect runoff and retain a portion of the collected runoff, and grassed berms will be implemented to control the outflow of runoff. Per the "Rules for the Design of Storm Drainage Facilities in the County of Maui," the drainage sumps are designed to keep runoff volumes at pre-development levels. The proposed parking lot will be constructed with gravel and will not use impervious surface materials. As such, there are no anticipated adverse effects on adjacent or downstream properties as a result of this project. Refer to **Appendix "E"**.

5. Energy and Communication Systems

a. Existing Conditions

Electrical and telephone utilities are provided to the camp by above ground utility poles from Kahekili Highway extending up to the site. Energy reducing measures being considered for use in the proposed project include, but are not limited to, solar water heating and regional appropriate and drought resistant landscaping. In addition, to the extent practicable, water conservation measures such as low flow showerhead and faucets, and use of Energy Star appliances will be utilized.

b. Potential Impacts and Mitigation Measures

While the majority of construction-related activities utilize diesel operated construction equipment, there may be short-term electrical energy needs while the project is in construction. After construction is completed, all equipment will be removed and energy consumption will be limited to what the building needs in its normal operation while the camp facilities are being utilized. The proposed actions, including the DOFAW parking lot, are not expected to have any long-term adverse effects on the energy and communication systems in the area.

E. CUMULATIVE AND SECONDARY IMPACTS

Cumulative effects are defined by Title 11, Chapter 200, Hawaii Administrative Rules (HAR), Environmental Impact Statement Rules as

> *"The impact on the environment which results from the incremental impact of an action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time."*

A "secondary impact" or "indirect effect" from the proposed action is defined by Title 11, Chapter 200, HAR, as

> *"effects which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable."*

As mentioned previously, the proposed dining hall is intended to replace the existing facility. The water system improvements are proposed to augment the existing system. The proposed parking lot is meant to accommodate the numbers of hikers that currently utilize the trail. These improvements are not part of a larger action. In this regard, the proposed dining hall, water system improvements, and parking lot are not anticipated to cumulatively have a negative effect on the environment.

In addition, there are no reasonably foreseeable effects associated with the proposed action which would be deemed a secondary impact.

III. RELATIONSHIP TO LAND USE PLANS, POLICIES, AND CONTROLS

III. RELATIONSHIP TO LAND USE PLANS, POLICIES, AND CONTROLS

A. STATE LAND USE DISTRICTS

Pursuant to Chapter 205, Hawaii Revised Statutes (HRS), all lands in the State have been placed into one (1) of four (4) land use districts by the State Land Use Commission. These land use districts have been designated "Urban", "Rural", "Agricultural", and "Conservation". The project site is classified "Agricultural" with a Land Study Bureau soil classification of "D" and "E", which allows for open land recreational facilities. See **Figure 14**.

B. CHAPTER 226, HRS, HAWAII STATE PLAN

Chapter 226, HRS, also known as the Hawaii State Plan, is a long-range comprehensive plan which serves as a guide for the future long-range development of the State by identifying goals, objectives, policies, and priorities, as well as implementation mechanisms. The proposed action is consistent with the following goals of the Hawaii State Plan:

- *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 Hawaii, that nourishes a sense of community responsibility, of caring, and of participation in community life.*

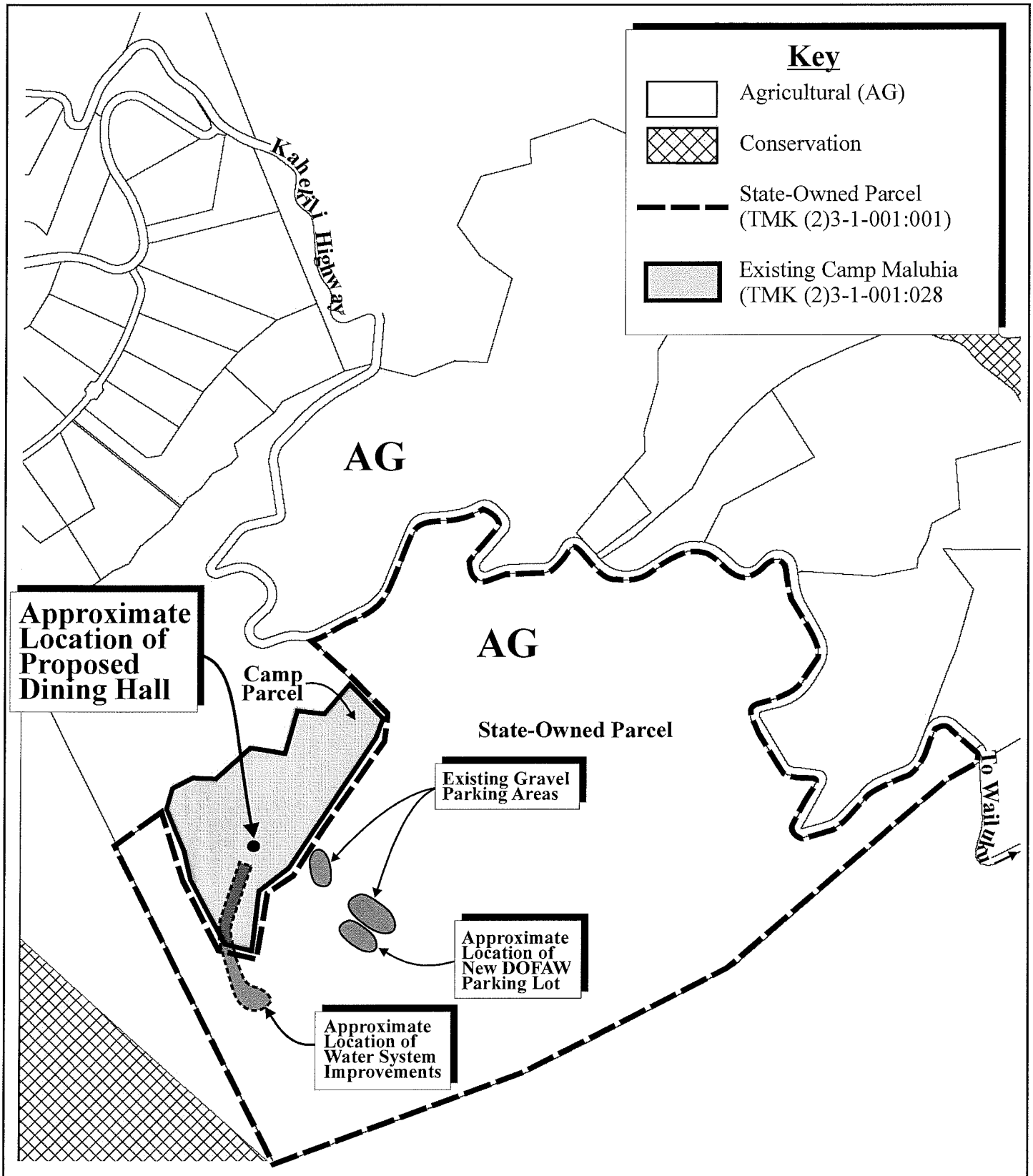
1. Objectives and Policies of the Hawaii State Plan

The proposed action is consistent with the following objectives and policies of the Hawaii State Plan:

Chapter 226-11, HRS, Objectives and Policies for the Physical Environment - Land-Based, Shoreline, and Marine Resources.

226-11(b)(1), HRS: *Exercise an overall conservation ethic in use of Hawaii's natural resources.*

226-11(b)(3), HRS: *Take into account the physical attributes of areas when planning and designing activities and facilities.*



Source: State Land Use Commission, 2010

Figure 14 Camp Maluhia and Related Area Improvements

State Land Use District Classifications

387.5
0 Feet
193.75 775

Prepared for: Maui County Council Boy Scouts of America and State of Hawaii, Department of Land and Natural Resources

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226-11(b)(4), HRS: *Manage natural resources and environs to encourage their beneficial and multiple use without generating costly or irreparable environmental damage.*

226-11(b)(8), HRS: *Pursue compatible relationships among activities, facilities, and natural resources.*

226-11(b)(9), HRS: *Promote increased accessibility and prudent use of inland and shoreline areas for public recreational, educational, and scientific purposes.*

Chapter 226-12, HRS, Objectives and Policies for the Physical Environment – Scenic, Natural Beauty, and Historic Resources.

226-12(b)(3), HRS: *Promote the preservation of views and vistas to enhance the visual and aesthetic enjoyment of mountains, ocean, scenic landscapes, and other natural features.*

226-12(b)(5), HRS: *Encourage the design of developments and activities that complement the natural beauty of the islands.*

Chapter 226-23, HRS, Objectives and Policies for Socio-Cultural Advancement – Leisure.

226-23(b)(1), HRS *Foster and preserve Hawaii's multi-cultural heritage through supportive cultural, artistic, recreational, and humanities-oriented programs and activities.*

226-23(b)(2), HRS: *Promote a wide range of activities and facilities to fulfill the cultural, artistic, and recreational needs of all diverse and special groups effectively and efficiently.*

226-23(b)(3), HRS: *Enhance the enjoyment of recreational experiences through safety and security measures, educational opportunities, and improved facility design and maintenance.*

226-23(b)(4), HRS: *Promote the recreational and educational potential of natural resources having scenic, open space, cultural, historical, geological, or biological values while ensuring that their inherent values are preserved.*

226-23(b)(5), HRS: *Ensure opportunities for everyone to use and enjoy Hawaii's recreational resources.*

226-23(b)(10), HRS: *Assure adequate access to significant natural and cultural resources in public ownership.*

C. GENERAL PLAN OF THE COUNTY OF MAUI

As indicated by the Maui County Charter, the purpose of the general plan shall be to:

> *... indicate desired population and physical development patterns for each island and region within the county; shall address the unique problems and needs of each island and region; shall explain opportunities and the social, economic, and environmental consequences related to potential developments; and shall set forth the desired sequence, patterns and characteristics of future developments. The general plan shall identify objectives to be achieved, and priorities, policies, and implementing actions to be pursued with respect to population density; land use maps, land use regulations, transportation systems, public and community facility locations, water and sewage systems, visitor destinations, urban design, and other matters related to development.*

Chapter 2.80B of the Maui County Code, relating to the General Plan and Community Plans, implements the foregoing Charter provision through enabling legislation which calls for a Countywide Policy Plan and a Maui Island Plan (MIP). The Countywide Policy Plan was adopted as Ordinance No. 3732 on March 24, 2010, while the Maui Island Plan, which delineates areas for future urban and rural growth as part of a Directed Growth Strategy, was adopted as Ordinance No. 4004 on December 21, 2012.

The following sections identify pertinent objectives, policies, implementing actions and related provisions set forth in the Countywide Policy Plan and the Maui Island Plan. It is recognized that both documents are comprehensive in nature and address a number of functional planning areas which apply to all programs, plans, and projects. However, for purposes of addressing General Plan compliance requirements, policy considerations which are deemed most relevant in terms of compatibility and consistency are addressed in this report section.

1. Countywide Policy Plan

With regard to the Countywide Policy Plan, Section 2.80B.030 of the Maui County Code states the following.

The countywide policy plan shall provide broad policies and objectives which portray the desired direction of the County's future. The countywide policy plan shall include:

1. *A vision for the County;*
2. *A statement of core themes or principles for the County; and*
3. *A list of countywide objectives and policies for population, land use, the environment, the economy, and housing.*

Core principles set forth in the Countywide Policy Plan are listed as follows:

1. *Excellence in the stewardship of the natural environment and cultural resources;*
2. *Compassion for and understanding of others;*
3. *Respect for diversity;*
4. *Engagement and empowerment of Maui County residents;*
5. *Honor for all cultural traditions and histories;*
6. *Consideration of the contributions of past generations as well as the needs of future generations;*
7. *Commitment to self-sufficiency;*
8. *Wisdom and balance in decision making;*
9. *Thoughtful, island appropriate innovation; and*
10. *Nurturance of the health and well-being of our families and our communities.*

Congruent with these core principles, the Countywide Policy Plan identifies goals objectives, policies and implementing actions for pertinent functional planning categories, which are identified as follows:

1. *Natural environment*
2. *Local cultures and traditions*
3. *Education*
4. *Social and healthcare services*
5. *Housing opportunities for residents*

6. *Local economy*

7. *Parks and public facilities*

8. *Transportation options*

9. *Physical infrastructure*

10. *Sustainable land use and growth management*

11. *Good governance*

With respect to the proposed actions, the following goals, objectives, policies and implementing actions are illustrative of the project's compliance with the Countywide Policy Plan.

PROTECT THE NATURAL ENVIRONMENT

Goal:

Maui County's natural environment and distinctive open spaces will be preserved, managed and cared for in perpetuity.

Objective 1:

Improve the opportunity to experience the natural beauty and native biodiversity of the islands for present and future generations.

Policy:

Preserve and provide ongoing care for important scenic vistas, view planes, landscapes, and open-space resources.

Objective 2:

Improve the quality of environmentally sensitive, locally valued natural resources and native ecology of each island.

Policy:

Improve the connection between urban environments and the natural landscape, and incorporate natural features of the land into urban design.

Objective 3:

Improve the stewardship of the natural environment.

Policies:

a. *Preserve and protect natural resources with significant scenic, economic, cultural, environmental, or recreational value.*

k. *Improve enforcement activities relating to the natural environment.*

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 1:

Expand access to recreational opportunities and community facilities to meet the present and future needs of residents of all ages and physical abilities.

Policies:

a. *Protect, enhance, and expand access to public shoreline and mountain resources.*

g. *Promote the development and enhancement of community centers, civic spaces, and gathering places throughout our communities.*

Objective 2:

Improve the quality and adequacy of community facilities.

Policies:

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.*

Objective 3:

3. *Enhance the funding, management, and planning of public facilities and park lands.*

Policy:

Develop partnerships to ensure proper stewardship of the islands' trails, public lands, and access systems.

2. Maui Island Plan

The MIP is applicable to the island of Maui only, providing more specific policy-based strategies for population, land use, transportation, public and community facilities, water and sewage systems, visitor destinations, urban design, and other matters related to future growth.

As provided by Chapter 2.80B, the MIP shall include the following components:

1. *An island-wide land use strategy, including a managed and directed growth plan.*

2. *A water element addressing supply, demand and quality parameters.*

3. *A nearshore ecosystem element addressing nearshore waters and requirements for preservation and restoration.*

4. *An implementation program which addresses the County's 20-year capital improvement requirements, financial program for implementation, and action implementation schedule.*

5. *Milestone indicators designed to measure implementation progress of the MIP.*

It is noted that Ordinance No. 4004 does not address the component relating to the implementation program. Chapter 2.80B of the Maui County Code, relating to the General Plan, was amended via Ordinance No. 3979 on October 5, 2012, to provide that the implementation program component be adopted no later than one (1) year following the effective date of Ordinance No. 4004. In December 2013 and March 2014, the Maui County Council approved the extensions for approval and adoption of the implementation chapter. At its meeting of May 27, 2014, the Council approved the MIP's implementation component.

The MIP addresses a number of planning categories with detailed policy analysis and recommendations which are framed in terms of goals, objectives, policies, and implementing actions. These planning categories address the following areas:

1. *Population*
2. *Heritage Resources*
3. *Natural Hazards*
4. *Economic Development*
5. *Housing*
6. *Infrastructure and Public Facilities*
7. *Land Use*

Additionally, an essential element of the MIP is its directed growth plan which provides a management framework for future growth in a manner that is fiscally, environmentally, and culturally prudent. Among the directed growth management tools developed through the MIP process are maps delineating urban growth boundaries (UGB), small town boundaries (SRB) and rural growth boundaries (RGB). The respective boundaries identify areas appropriate for growth and their corresponding intent with respect to development character.

The proposed actions are located on Agricultural lands and is not within a growth boundary area.

In addition, the proposed dining hall, water system improvements, and parking lot have been reviewed with respect to pertinent goals, objectives, policies and implementing actions of the MIP. A summary of these policy statements are provided below:

Heritage Resources-Scenic Resources

Goal: **2.5** Maui will continue to be a beautiful island steeped in coastal, mountain, open space, and historically significant views that are preserved to enrich the residents' quality of life, attract visitors, provide a connection to the past, and promote a sense of place.

Objective:

2.5.1 *A greater level of protection for scenic resources.*

Policy:

2.5.1.b *Identify, preserve, and provide ongoing management of important scenic vistas and open space resources, including mauka-to-makai and makai-to-mauka view planes.*

Infrastructure and Public Facilities-Parks

Goal: **6.6** Maui will have a diverse range of active and passive recreational parks, wilderness areas, and other natural-resource areas linked, where feasible, by a network of greenways, bikeways, pathways, and roads that are accessible to all.

Objective:

6.6.1 *More effective, long-range planning of parks and recreation programs able to meet community needs.*

Infrastructure and Public Facilities-Water

Goal: **6.3** Maui will have an environmentally sustainable, reliable, safe, and efficient water system.

Objective:

6.3.2 *Increase the efficiency and capacity of the water systems in striving to meet the needs and balance the island's water needs.*

Policies:

6.3.2.a *Ensure the efficiency of all water system elements including well and stream intakes, water catchment, transmission lines, reservoirs, and all other system infrastructure.*

In summary, the proposed action is consistent with the above-noted themes and principles of the Countywide Policy Plan and Maui Island Plan.

D. WAILUKU-KAHULUI COMMUNITY PLAN

The project site is located within the Wailuku-Kahului Community Plan region, one (1) of nine (9) community plan regions established in the County of Maui. Planning for each region is guided by the respective community plan, which is designed to implement the Maui County General Plan. Each community plan contains recommendations and standards which guide the sequencing, patterns and characteristics of future development in the region.

The Wailuku-Kahului Community Plan was adopted by the County of Maui and took effect in 2002. Land use guidelines are set forth by the Wailuku-Kahului Community Plan Land Use Map. The project area is designated within the Agriculture land use category by the Wailuku-Kahului Community Plan Map. See **Figure 15**.

The Agriculture category is defined as including uses indicative of areas for agricultural activity which would be in keeping with the economic base of the County and the requirements and procedures of Chapter 205, HRS, as amended.

The proposed actions are consistent with the following goals, objectives, and policies of the Wailuku-Kahului Community Plan.

ENVIRONMENT

Goal:

A clean and attractive physical and natural environment in which man-made developments or alterations to the natural environment relate to sound environmental and ecological practices, and important scenic and open space resources are maintained for public use and enjoyment.

Objective and Policy:

Preserve agricultural lands as a major element of the open space setting which borders the various communities within the planning region. The close relationship between open space and developed areas is an important characteristic of community form.

CULTURAL RESOURCES

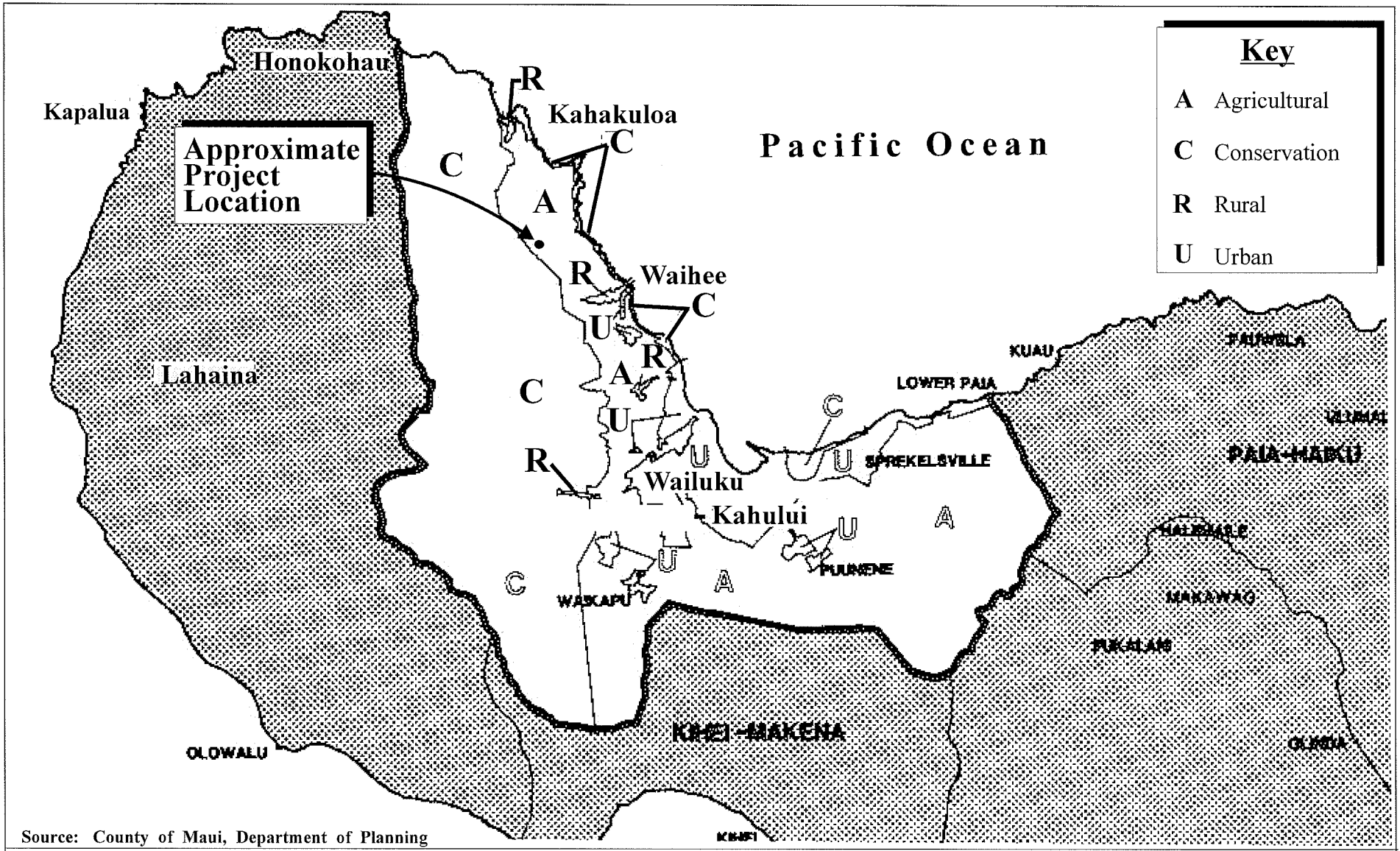
Goal:

Identification, protection, preservation, enhancement, and where appropriate, use of cultural practices and sites, historic sites and structures, and cultural landscapes and view planes that:

1. *Provide a sense of history and define a sense of place for the Wailuku-Kahului region.*

Objectives and Policies:

- *Recognize the importance of historically and archaeologically sensitive sites and encourage their preservation through development project review.*



Source: County of Maui, Department of Planning

Figure 15 Camp Maluhia and Related Area Improvements

Wailuku-Kahului Community Plan Map

NOT TO SCALE

Prepared for: Maui County Council Boy Scouts of America and State of Hawaii, Department of Land and Natural Resources

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- *Require development projects to identify all cultural resources located within the project area as part of initial project studies. Further, require that all proposed activity include recommendations to mitigate potential adverse impacts on cultural resources.*

E. COUNTY ZONING

1. County Special Use Permit Requirement

The project site is designated "Agricultural" according to Maui County zoning. The purpose of this category is to *"provide areas for agricultural activity which would be in keeping with the economic base of the County and the requirements and procedures of Chapter 205, Hawaii Revised Statutes, as amended."*

In a letter dated December 11, 2012, the County of Maui, Department of Planning responded to a question from the BSA regarding allowable uses within Agricultural lands. In that letter, the Department of Planning cited Chapter 205-2.d.12 as regulating agricultural land with an agricultural soil classification of C, D, E, and/or U and allowing for open area recreational facilities. See **Appendix "F"**. Because the project site has an agricultural soil classification of both D and E, open area recreational facilities are deemed an allowable use. Similarly, the Maui County Code (MCC) Section 19.30A.050.B.11 also allows for open land recreation. "Open Land Recreation" is defined in Section 19.04.040, MCC, as:

> *"...public or private recreational use or enjoyment, including, but not limited to, parks, picnic grounds, beaches, beach accesses, greenways and areas for hiking, fishing, hunting, camping, equestrian activities, and other scenic interests, on a parcel or area of land or water which may be improved but which contains no buildings and which is set, aside, designated, or reserved for such purposes."*

The Department of Planning determined that Camp Maluhia is a permitted use under the Chapter 205, HRS, and a non-conforming use under the Maui County Code, Chapter 19.30A. Refer to **Appendix "F"**. As such, a County Special Use Permit will be required for the construction and use of the proposed dining hall. The Department also notes that since the entirety of Camp Maluhia is an existing non-conforming use, the County Special Use Permit application should address the entire camp.

Camp Maluhia operates as a wilderness retreat, utilizing its remote location in the Kahakuloa vicinity and naturally vegetated landscape as a way of providing experiential learning opportunities in a nature-based environment. The camp's operations have minimal effect on the underlying and surrounding agricultural uses and productivity capacity. Moreover, while the construction activity proposed at Camp Maluhia is limited to the new dining hall and water system upgrades, the camp in its entirety is considered compatible with surrounding agricultural land uses and serves as a functional and beneficial camping and open land recreation facility. The County Special Use Permit application will address the entirety of Parcel 28, thereby establishing Camp Maluhia and all of its camp-related facilities as a permitted Special Use pursuant to Chapter 19.30A of the Maui County Code.

In addition, the Department of Land and Natural Resources (DLNR), Division of Forestry and Wildlife (DOFAW), intends to construct an unmarked, gravel parking lot, approximately 144 feet by 60 feet in area, and one (1) ADA-accessible stall on Parcel 1 for the use of hikers utilizing the Waihee Ridge Trail which originates on Parcel 1.

The underlying land use designations for Parcel 1 are as follows:

- State Land Use Classification: Agricultural
- Wailuku-Kahului Community Plan: Agriculture
- County Zoning: Agricultural

The trail is considered a permitted use under Chapter 205, HRS, as well as MCC 19.30A as open area recreation, and the parking lot is allowable as an ancillary use to said permitted use.

2. Off-Street Parking Considerations

The new dining hall, as well as a number of other structures at the camp, require the provision of off-street parking in accordance with Chapter 19.36A of the Maui County Code (MCC), relating to Off-Street Parking and Loading. While the Maui County Code also requires that every off-street parking stall shall be located on the same lot it serves, the parking which serves the camp is located just beyond the camp's boundaries on Parcel 1. The Applicant will coordinate with the Department of Planning to address applicable regulatory requirements to ensure that parking use and parking needs for Camp Maluhia are appropriately addressed.

3. Variance from Chapter 19.36A Relating to Off-Street Parking and Loading

The use of the existing parking areas on the State-owned Parcel 1 to satisfy parking requirements for the new dining hall required the granting of a variance from the following section of Chapter 19.36A relating to Off-Street Parking and Loading.

- **Section 19.36A.080** requires that every off-street parking space be paved with asphaltic or concrete surface or equivalent. The existing parking areas serving Camp Maluhia are gravel-surfaced. Accordingly, a variance from this section of the code will be requested to enable the use of a gravel surface in lieu of paved surface.

The variance request was heard and approved by the Board of Variances and Appeals at its regular meeting on October 10, 2013.

F. COASTAL ZONE MANAGEMENT OBJECTIVES AND POLICIES

Pursuant to Chapter 205-A, Hawaii Revised Statutes, projects should be evaluated with respect to Coastal Zone Management (CZM) objectives, policies and guidelines. The project site is approximately one (1) mile away from the coastline and will not involve work within the County of Maui's Special Management Area (SMA). However, coastal zone management considerations have been reviewed and assessed.

1. Recreational Resources

Objective:

Provide coastal recreational opportunities accessible to the public.

Policies:

a. Improve coordination and funding of coastal recreational planning and management; and

b. Provide adequate, accessible, and diverse recreational opportunities in the coastal zone management area by:

i. Protecting coastal resources uniquely suited for recreational activities that cannot be provided in other areas;

ii. Requiring replacement of coastal resources having significant recreational value, including but not limited to surfing sites, fishponds, and sand beaches, when such

resources will be unavoidably damaged by development; or requiring reasonable monetary compensation to the state for recreation when replacement is not feasible or desirable;

iii. *Providing and managing adequate public access, consistent with conservation of natural resources, to and along shorelines with recreational value;*

iv. *Providing an adequate supply of shoreline parks and other recreational facilities suitable for public recreation;*

v. *Ensuring public recreational use of county, state, and federally owned or controlled shoreline lands and waters having recreational value consistent with public safety standards and conservation of natural resources;*

vi. *Adopting water quality standards and regulating point and non-point sources of pollution to protect, and where feasible, restore the recreational value of coastal waters;*

vii. *Developing new shoreline recreational opportunities, where appropriate, such as artificial lagoons, artificial beaches, and artificial reefs for surfing and fishing; and*

viii. *Encouraging reasonable dedication of shoreline areas with recreational value for public use as part of discretionary approvals or permits by the land use commission, board of land and natural resources, county planning commissions; and crediting such dedication against the requirements of Section 46-6, HRS.*

Response: The project site is located inland, approximately one (1) mile from the coastline. Based on the limited scope of the project, there are no anticipated impacts on coastal recreational opportunities or existing public access to the shoreline.

2. **Historic Resources**

Objective:

Protect, preserve and, where desirable, restore those natural and manmade historic and prehistoric resources in the coastal zone management area that are significant in Hawaiian and American history and culture.

Policies:

a. *Identify and analyze significant archeological resources;*

b. *Maximize information retention through preservation of remains and artifacts or salvage operations; and*

c. *Support state goals for protection, restoration, interpretation, and display of historic resources.*

Response: A Cultural Impact Assessment (CIA) and an Archaeological Inventory Survey (AIS) have been completed for the project. The Cultural Impact Assessment reported that the project area has not been used for traditional cultural purposes within recent times. Similarly, the Archaeological Inventory Survey concluded that no surface cultural remains or historic surface features were identified. As such, the proposed project is not anticipated to have an adverse effect on any cultural or customary traditions, or on any significant historic properties.

3. **Scenic and Open Space Resources**

Objective:

Protect, preserve and, where desirable, restore or improve the quality of coastal scenic and open space resources.

Policies:

a. *Identify valued scenic resources in the coastal zone management area;*

b. *Ensure that new developments are compatible with their visual environment by designing and locating such developments to minimize the alteration of natural landforms and existing public views to and along the shoreline;*

c. *Preserve, maintain, and, where desirable, improve and restore shoreline open space and scenic resources; and*

d. *Encourage those developments which are not coastal dependent to locate in inland areas.*

Response: The project site itself is afforded scenic ocean, mountain, and open-space views. Camp Maluhia is surrounded by heavy vegetation which limits its visibility from Kahekili Highway. The new dining hall will maintain a low building profile, with its design and construction to be compatible with the

existing topographical conditions at the project site. The Waihee Ridge Trail also offers the hikers panoramic views of the Central Maui region and West Maui Mountains. Furthermore, the proposed parking lot is not deemed significant when compared to the vast amount of open lands in the region. The dining hall, water system upgrade, and trail parking lot elements of the project will not have an adverse effect on scenic and open space resources.

4. Coastal Ecosystems

Objective:

Protect valuable coastal ecosystems, including reefs, from disruption and minimize adverse impacts on all coastal ecosystems.

Policies:

a. Improve the technical basis for natural resource management;

b. Preserve valuable coastal ecosystems, including reefs, of significant biological or economic importance;

c. Minimize disruption or degradation of coastal water ecosystems by effective regulation of stream diversions, channelization, and similar land and water uses, recognizing competing water needs; and

d. Promote water quantity and quality planning and management practices which reflect the tolerance of fresh water and marine ecosystems and prohibit land and water uses which violate state water quality standards.

Response: The proposed project involves minimal grading to accommodate the new dining hall and parking lot. Best Management Practices (BMPs) will be implemented during construction to mitigate potential erosion-related impacts. Two (2) drainage sumps will be constructed to mitigate any increase in runoff generated by the new dining hall.

5. Economic Uses

Objective

Provide public or private facilities and improvements important to the State's economy in suitable locations.

Policies:

a. Concentrate coastal dependent development in appropriate areas;

b. Ensure that coastal dependent development such as harbors and ports, and coastal related development such as visitor facilities and energy generating facilities, are located, designed, and constructed to minimize adverse social, visual, and environmental impacts in the coastal zone management area; and

c. Direct the location and expansion of coastal dependent developments to areas presently designated and used for such developments and permit reasonable long-term growth at such areas, and permit coastal dependent development outside of presently designated areas when:

i. Use of presently designated locations is not feasible;

ii. Adverse environmental effects are minimized; and

iii. The development is important to the State's economy.

Response: The proposed improvements will generate short-term construction-related employment and spending which will benefit the local economy. The proposed actions do not contradict the objectives and policies for economic uses.

6. Coastal Hazards

Objective:

Reduce hazard to life and property from tsunami, storm waves, stream flooding, erosion, subsidence and pollution.

Policies:

a. Develop and communicate adequate information about storm wave, tsunami, flood, erosion, subsidence, and point and nonpoint source pollution hazards;

b. Control development in areas subject to storm wave, tsunami, flood, erosion, hurricane, wind, subsidence, and point and nonpoint pollution hazards;

c. Ensure that developments comply with requirements of the Federal Flood Insurance Program;

d. Prevent coastal flooding from inland projects; and

e. *Develop a coastal point and nonpoint source pollution control program.*

Response: The project site falls within Zone X, an area of minimal flooding, as indicated by the Flood Insurance Rate Map for the County of Maui. Refer to **Figure 12**. BMPs will be implemented during construction to mitigate potential erosion and stormwater impacts.

7. Managing Development

Objective:

Improve the development review process, communication, and public participation in the management of coastal resources and hazards.

Policies:

a. *Use, implement, and enforce existing law effectively to the maximum extent possible in managing present and future coastal zone development;*

b. *Facilitate timely processing of applications for development permits and resolve overlapping of conflicting permit requirements; and*

c. *Communicate the potential short and long-term impacts of proposed significant coastal developments early in their life-cycle and in terms understandable to the public to facilitate public participation in the planning and review process.*

Response: The Chapter 343, HRS EA involves review by governmental agencies and provides for public comment opportunity on the project. Applicable State and County requirements will be adhered to in the design and construction of the project. In addition, opportunities for review of the proposed action are offered through the review process for the County Special Use Permit.

8. Public Participation

Objective:

Stimulate public awareness, education, and participation in coastal management.

Policies:

a. *Maintain a public advisory body to identify coastal management problems and to provide policy advice and assistance to the coastal zone management program;*

b. *Disseminate information on coastal management issues by means of educational materials, published reports, staff contact, and public workshops for persons and organizations concerned with coastal-related issues, developments, and government activities; and*

c. *Organize workshops, policy dialogues, and site-specific mediations to respond to coastal issues and conflicts.*

Response: The project will meet County public awareness, education and participation objectives. Opportunities for agency and public review will be provided as part of the notification, review and comment process required for the EA and County Special Use Permit application.

9. **Beach Protection**

Objective:

Protect beaches for public use and recreation.

Policies:

a. *Locate new structures inland from the shoreline setback to conserve open space and to minimize loss of improvements due to erosion;*

b. *Prohibit construction of private erosion-protection structures seaward of the shoreline, except when they result in improved aesthetic and engineering solutions to erosion at the sites and do not interfere with existing recreational and waterline activities; and*

c. *Minimize the construction of public erosion-protection structures seaward of the shoreline.*

Response: The Camp Maluhia area is located inland, approximately one (1) mile from the shoreline. As a result, there are no anticipated adverse impacts on beach resources.

10. Marine Resources

Objective:

Implement the State's ocean resources management plan.

Policies:

a. *Exercise an overall conservation ethic, and practice stewardship in the protection, use, and development of marine and coastal resources;*

b. *Assure that the use and development of marine and coastal resources are ecologically and environmentally sound and economically beneficial;*

c. *Coordinate the management of marine and coastal resources and activities management to improve effectiveness and efficiency;*

d. *Assert and articulate the interests of the State as a partner with federal agencies in the sound management of ocean resources within the United States exclusive economic zone;*

e. *Promote research, study, and understanding of ocean processes, marine life, and other ocean resources in order to acquire and inventory information necessary to understand how ocean development activities relate to and impact upon ocean and coastal resources; and*

f. *Encourage research and development of new, innovative technologies for exploring, using, or protecting marine and coastal resources.*

Response: As previously stated, the project site is located inland and away from the ocean. Adverse impacts on marine and coastal resources are not anticipated from the proposed camp improvements.

IV. UNAVOIDABLE ADVERSE ENVIRONMENTAL EFFECTS AND IRREVERSIBLE AND IRRETRIVEABLE COMMITMENT OF RESOURCES

IV. UNAVOIDABLE ADVERSE ENVIRONMENTAL EFFECTS AND IRREVERSIBLE AND IRRETRIVEABLE COMMITMENT OF RESOURCES

In the short term, the proposed dining hall, water system, and trail parking lot improvements project will result in unavoidable construction-related impacts, including noise impacts generated by construction equipment and activities. In addition, there may be temporary air quality impacts associated with dust generated from site work and exhaust emissions from construction equipment and vehicles. These noise and air quality impacts will be temporary in nature, occurring only during the construction period, and will be mitigated to the extent practicable through implementation of Best Management Practices (BMPs).

The proposed actions commit a small area of land for construction. Other resources which will be committed in the implementation of the proposed actions include material and fuel resources. The projects will result in short-term beneficial impacts related to temporary construction employment and spending.

V. ALTERNATIVES TO THE PROPOSED ACTION

V. ALTERNATIVES TO THE PROPOSED ACTION

Alternatives to the preferred alternative, which is the proposed action, include the "no action", "renovation", and "replace existing dining hall" alternatives. These alternatives are addressed below. Furthermore, analysis is provided discussing the alternative of not providing a parking lot for Waihee Ridge Trail users. This is provided in Section D, "No Parking Lot Provided".

A. NO ACTION ALTERNATIVE

Originally constructed in 1938, the existing dining hall has not undergone a major renovation apart from a walk-in refrigerator addition just ten (10) years after the building's original construction. As such, the building is exhibiting signs of its age including rust and weathering of the corrugated metal roof and extensive termite damage to the building's wood frame.

A no action alternative would deny the Maui County Council BSA the opportunity to provide quality facilities to scouts and other camp users. Similarly, continued use of the existing dining hall in its current state represents potential future safety hazards for users of the facility and an economic and liability burden for the BSA.

B. RENOVATION ALTERNATIVE

Over the years, there has been much discussion among the leaders of the BSA regarding the future of Camp Maluhia. In particular, upgrades to and replacing of certain facilities was high on the list of priorities. The dining hall was a facility that many agreed needed to be examined for possible renovation or replacement. As time went on and funding constraints prevented action, time took its toll on the dining hall and the facility encountered additional deferred maintenance requirements. Extensive weathering to the roof and termite damage to the building's wood construction, as previously mentioned, ruled out renovation as a feasible alternative.

C. REPLACE EXISTING DINING HALL ALTERNATIVE

Another alternative that came out of the aforementioned discussions among camp leaders was demolition of and replacing the dining hall. In 2008, the then President of the Maui County Council BSA developed a long range plan for the camp, which included the demolition of the existing dining hall, camp office, and quartermaster's shed and replacing them with one building on the camp site that would house all three (3) facilities. Due to the age of the buildings, this alternative would require demolition approval from

the State Historic Preservation Division, a sometimes lengthy process. The time and economic costs associated with this more aggressive alternative was not considered feasible and practical from financial and operations standpoints.

D. NO PARKING LOT PROVIDED

As previously discussed, the Waihee Ridge Trail ("Trail") has long been used by Maui residents and visitors alike. Currently, no parking lot is provided for trail users and, as such, most park on the gravel parking lots on Parcel 1 which are designated for Camp Maluhia, or on the access road, which could cause the road to become congested, thereby making it difficult for emergency vehicles to pass should an incident occur at the camp. Refer to **Figure 2**. Because the parking lots are utilized by the hikers, they are unable to be secured by camp management staff of the Boy Scouts of America (BSA). Over the years Camp administrators have reported loitering, littering, and drug and alcohol use in the parking lots. The "no parking lot provided" alternative will result in the continued use of the BSA's parking lot for non-Boy Scout purposes. Such circumstances create both operational and security challenges for camp personnel, particularly with the high degree of youth activities occurring at Camp Maluhia. Identified through a collaborative effort of BSA and DOFAW representatives, the proposed parking lot will allow the BSA to regularly secure its two (2) parking lots with gated entries.

VI. SIGNIFICANCE CRITERIA ASSESSMENT

VI. SIGNIFICANCE CRITERIA ASSESSMENT

The proposed actions involve the construction of a new dining hall and improvements to the water systems at Camp Maluhia and adjacent State-owned parcel, as well as the construction of a parking lot for hikers utilizing the Waihee Ridge Trail in Kahakuloa, Maui, Hawaii.

Since the proposed actions will involve the use of County and State funds with a portion of the water system improvements and parking lot construction undertaken on State lands, compliance with Chapter 343, Hawaii Revised Statutes (HRS), and Chapter 200 (Title 11), Hawaii Administrative Rules, Environmental Impact Statement Rules is necessary. Every aspect of the proposed action, expected primary and secondary consequences, and the cumulative as well as the short-term and long-term effects of the action have been evaluated in accordance with the Significance Criteria of Section 11-200-12 of the Administrative Rules. Discussion of project conformance to the Significance Criteria follows:

1. **Involves an irrevocable commitment to loss or destruction of any natural or cultural resource.**

   The remote, densely vegetated nature and general topography of Parcel 28 have resulted in an area conducive to hosting a wilderness camp facility, such as Camp Maluhia. The proposed improvements are limited in scope and are intended to enhance the existing Boy Scout camp facility. There are no adverse effects to natural resources anticipated as a result of the project.

   Similarly, the mountainous nature of the region provides for a unique and scenic trail experience. The proposed parking lot will not be paved to urban standards, and is being proposed to be constructed in order to provide adequate parking facilities for hikers who travel from outside the Kahakuloa region to utilize the trail.

   As discussed previously in Chapter II, a Cultural Impact Assessment and Archaeological Inventory Survey have been completed for the proposed project. The Cultural Impact Assessment reported that the project area has not been used for traditional cultural purposes within recent times. Similarly, the Archaeological Inventory Survey concluded that no surface cultural remains or historic surface features were identified. As such, the proposed project is not anticipated to have an adverse effect on any cultural or customary traditions, or on any significant historic properties.

2. **Curtails the range of beneficial uses of the environment.**

The proposed actions involve lands designated as "Agricultural" at the State and County levels. As the site contains soils with relatively low agricultural productivity ratings, the lands have not been used for agricultural production apart from cattle grazing on a portion of the State-owned parcel (Parcel 1) adjacent to the camp parcel.

The proposed improvements are limited in scope and are intended to enhance the existing camp and trail facilities. Based on the foregoing facts, the proposed project will not curtail the beneficial use of the site.

3. **Conflicts 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 proposed improvements do not conflict with the State's Environmental Policy and Guidelines as set forth in Chapter 344, Hawaii Revised Statutes (HRS).

4. **Substantially affects the economic welfare, social welfare, and cultural practices of the community or State.**

The proposed improvements will directly benefit the local economy by providing construction and construction-related employment. Therefore, the proposed actions will have a positive short-term effect on the economy. The proposed actions will result in improved camp facilities for the Boy Scouts of America, as well as improved trail amenities to all who utilize it. These improvements contribute, in a positive way, to the social welfare of the island. Long-term adverse impacts to social welfare and cultural practices are not anticipated.

5. **Substantially affects public health.**

During the construction period, appropriate best management practices will be implemented to mitigate potential air quality and noise impacts. Following construction, there will be no long-term public health impacts resulting from the proposed actions.

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

The proposed actions are not anticipated to result in significant adverse secondary impacts. No significant population changes are anticipated as a result of the proposed project. There are no anticipated adverse effects on public services, such as police, fire, medical, educational, or solid waste collection, as service limits and service capacities will not be affected.

7. **Involves a substantial degradation of environmental quality.**

Construction activities will create temporary short-term nuisances related to noise and dust. Appropriate dust control and noise mitigation measures will be implemented by the contractor to ensure that fugitive dust and noise generated in connection with construction is minimized.

As previously discussed in Chapter II of this EA document, adverse impacts to natural resources and the natural environment are not anticipated.

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

The proposed new dining hall, water system upgrades and parking lot are stand-alone projects to improve the existing camp and trail facilities. As such, the project is not anticipated to cumulatively have a considerable effect upon the environment or involve a commitment for larger actions.

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

As discussed previously in Chapter II, a flora/fauna study has been completed. Refer to **Appendix "A"**. Based on the results of this study, the project is not expected to have an adverse effect on rare, threatened, or endangered species of flora, fauna, avifauna, or their habitats.

10. **Detrimentally affects air or water quality or ambient noise levels.**

Construction activities will result in short-term air quality and noise impacts. Best Management Practices (BMPs) for dust control will be implemented to minimize construction-related air quality impacts. Short-term noise impacts will occur primarily from construction equipment. Equipment mufflers or other noise attenuating equipment, as well as proper equipment and vehicle maintenance and

other BMPs are anticipated to mitigate adverse noise conditions from construction activities. Erosion control measures will mitigate silt and stormwater runoff flowing into downstream properties.

Based on the discussion provided above, the proposed actions are not anticipated to detrimentally affect air, water quality or ambient noise levels.

11. **Affects or is likely to suffer damage by being 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.**

The project area is not located within any environmentally sensitive areas and, as such, there are no anticipated hazard-related effects as a result of the proposed actions.

12. **Substantially affects scenic vistas and viewplanes identified in county or state plans or studies.**

The project site's location, nestled against the windward slopes of the West Maui Mountains, provides picturesque views of the Pacific Ocean and Kahakuloa region with the mountains as a backdrop to the camp. Kahekili Highway is noted by the County as possessing a high significant scenic-resource value. It provides ocean, mountain, agricultural, and island-wide views. The proposed actions will not obstruct views from the camp or from Kahekili Highway. The new dining hall building will be built into a slope on the camp grounds, and the parking lot will not include any vertical construction activities. The dense vegetation surrounding the area provides visual screening from Kahekili Highway. As such, the proposed project will not adversely affect scenic view corridors.

13. **Requires substantial energy consumption.**

While the majority of construction-related activities utilize diesel operated construction equipment, there may be short-term electrical energy needs while the projects are in construction. After construction is complete, all equipment will be removed and energy consumption will be limited to what the dining hall needs in its normal operation while the camp facilities are being utilized. The parking lot will not require electrical energy. As such, this project component is not expected to require substantial energy consumption.

Based on the aforementioned findings, the proposed project will result in a Finding of No Significant Impact (FONSI) determination.

VII. LIST OF PERMITS AND APPROVALS

VII. LIST OF PERMITS AND APPROVALS

The following permits and approvals will be required prior to the implementation of the project.

State of Hawaii

1. Chapter 343, HRS compliance
2. National Pollutant Discharge Elimination System (NPDES) Permit, as applicable
3. Community Noise Permit, as applicable

County of Maui

1. Construction Permits (i.e., grading permit, building permit)
2. Off-Site Parking Approval
3. County Special Use Permit
4. Variance from Chapter 19.36A Relating to Off-Street Parking and Loading

VIII. PARTIES CONSULTED DURING THE PREPARATION OF THE DRAFT ENVIRONMENTAL ASSESSMENT; LETTERS RECEIVED AND RESPONSES TO SUBSTANTIVE COMMENTS

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The following agencies were consulted during preparation of the Draft Environmental Assessment (EA). Agency comments and responses to substantive comments are included herein.

1. Larry Yamamoto, State Conservationist
U.S. Department of Agriculture
Natural Resources Conservation Service
P.O. Box 50004
Honolulu, Hawaii 96850-0001

2. Ranae Ganske-Cerizo, Soil Conservationist
Natural Resources Conservation Service
U.S. Department of Agriculture
77 Hookele Street, Suite 202
Kahului, Hawaii 96732

3. George Young, Chief, Regulatory Branch
U.S. Department of the Army
U.S. Army Engineer District, Honolulu
Regulatory Branch, Building 230
Fort Shafter, Hawaii 96858-5440

4. Loyal A. Mehrhoff, Field Supervisor
U. S. Fish and Wildlife Service
300 Ala Moana Blvd., Rm. 3-122
Box 50088
Honolulu, Hawaii 96813

5. Dean H. Seki, Comptroller
Department of Accounting and General Services
1151 Punchbowl Street, #426
Honolulu, Hawaii 96813

6. Russell Kokubun, Chair
Department of Agriculture
1428 South King Street
Honolulu, Hawaii 96814-2512

7. Kathryn Matayoshi, Superintendent
State of Hawaii
Department of Education
P.O. Box 2360
Honolulu, Hawaii 96804

8. Heidi Meeker, Planning Division
Office of Business Services
Department of Education
c/o Kalani High School
4680 Kalanianaole Highway, #T-B1A
Honolulu, Hawaii 96821

9. Loretta J. Fuddy, Director
State of Hawaii
Department of Health
919 Ala Moana Blvd., Room 300
Honolulu, Hawaii 96814

10. Alec Wong, P.E., Chief
Clean Water Branch
State of Hawaii
Department of Health
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Honolulu, Hawaii 96814

11. Patti Kitkowski, District Environmental Health Program Chief
State of Hawaii
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Wailuku, Hawaii 96793

12. Laura McIntyre, AICP, Office Manager
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13. Lene Ichinotsubo
Environmental Management Division
State of Hawaii
Department of Health
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Honolulu, Hawaii 96814

14. William J. Aila, Jr., Chairperson
State of Hawaii
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P. O. Box 621
Honolulu, Hawaii 96809

15. Puaalaokalani Aiu, Administrator
State of Hawaii
Department of Land and Natural Resources
State Historic Preservation Division
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Kapolei, Hawaii 96707

16. Jenny Pickett, Maui Archaeologist
State of Hawaii
Department of Land and Natural Resources
State Historic Preservation Division
130 Mahalani Street
Wailuku, Hawaii 96793

17. Glenn Okimoto, Director
State of Hawaii
Department of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96813

cc: Ferdinand Cajigal

18. Gary Gill, Acting Director
Office of Environmental Quality Control
235 S. Beretania Street, Suite 702
Honolulu, Hawaii 96813

19. Dr. Kamana`opono Crabbe, Chief Executive Officer
Office of Hawaiian Affairs
711 Kapiolani Boulevard, Suite 500
Honolulu, Hawaii 96813

20. Jesse Souki, Director
State of Hawaii
Office of Planning
P. O. Box 2359
Honolulu, Hawaii 96804

21. Dan Orodenker, Executive Officer
State of Hawaii
State Land Use Commission
P.O. Box 2359
Honolulu, Hawaii 96804

22. Anna Foust, Management Officer
Maui Civil Defense Agency
200 South High Street
Wailuku, Hawaii 96793

23. Jeffrey A. Murray, Fire Chief
County of Maui
Department of Fire and Public Safety
200 Dairy Road
Kahului, Hawaii 96732

24. Jo-Ann Ridao, Director
County of Maui
Department of Housing and Human Concerns
One Main Plaza
2200 Main Street, Suite 546
Wailuku, Hawaii 96793

25. Glenn Correa, Director
County of Maui
Department of Parks and Recreation
700 Halia Nakoa Street, Unit 2
Wailuku, Hawaii 96793

26. William Spence, Director
County of Maui
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250 South High Street
Wailuku, Hawaii 96793

27. Gary Yabuta, Chief
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55 Mahalani Street
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28. David Goode, Director
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29. Kyle Ginoza, Director
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30. Jo Anne Johnson Winer, Director
County of Maui
Department of Transportation
200 South High Street
Wailuku, Hawaii 96793

31. David Taylor, Director
County of Maui
Department of Water Supply
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Wailuku, Hawaii 96793

32. Dan Takahata, Manager – Engineering
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P.O. Box 398
Kahului, Hawaii 96733

33. Hawaiian Telcom
60 South Church Street
Wailuku, Hawaii 96793

FEB 12 2013

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Pacific Islands Fish and Wildlife Office
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawaii 96850

In Reply Refer To:
2013-TA-0115

FEB 08 2013

Mr. Michael T. Munekiyo
President
Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793

Subject: Technical Assistance for the Construction of a New Dining Hall and Fire Protection System at Boy Scouts of America, Camp Maluhia, Maui

Dear Mr. Munekiyo:

The U.S. Fish and Wildlife Service (Service) received your letter on January 11, 2013, requesting our comments on the proposed construction of a new dining hall and installation of required water storage tank and waterline at the Boy Scouts of America, Camp Maluhia, on Maui.

Project Description
The proposed action involves the construction of a new dining hall, and improvements to Camp Maluhia's fire protection system. Installation of a new water tank and water line are required to meet Maui County building code standards. The parcel [TMK (2) 3-1-001:001] is leased by the applicant from the State of Hawaii.

Species Affected
Based on information you provided and pertinent information in our files, including data compiled by the Hawaii Biodiversity and Mapping Program, three species protected by the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 *et seq.*), are known to occur within the proposed action area and could be impacted by the proposed action: the endangered Hawaiian hoary bat (*Lasiurus cinereus semotus*), Hawaiian petrel (*Pterodroma sandwichensis*), and the threatened Newell's shearwater (*Puffinus auricularis newelli*).

- The Hawaiian hoary bat is known to occur throughout the island of Maui. This bat roosts in both exotic and native woody vegetation and, while foraging, leaves young unattended in "nursery" trees and shrubs. If trees or shrubs suitable for bat roosting are cleared during the hoary bat breeding season (June 1 to September 15), there is a risk that young

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bats could inadvertently be harmed or killed. As a result, the Service recommends that woody plants greater than 15 feet tall should not be removed or trimmed during the Hawaiian hoary bat breeding season.

- The Hawaiian petrel and Newell's shearwater, collectively referred to as seabirds, are known to transit through the proposed action area while flying between the ocean and nesting sites in the nearby Makamakaole Gulch during their breeding season (March through December). Seabird fatalities resulting from collisions with artificial structures that extend above the surrounding vegetation have been documented in Hawaii where high densities of transiting seabirds occur. Additionally, artificial lighting, such as flood lighting for construction work, pedestrian illumination, and security can adversely impact seabirds by causing disorientation which may result in collision with utility lines, buildings, fences, and vehicles. Fledging seabirds are especially affected by artificial lighting and have a tendency to exhaust themselves while circling the light sources and become grounded. Too weak to fly, these birds become vulnerable to depredation by feral predators such as dogs, cats, and mongoose. Therefore, the Service recommends that no outdoor flood lighting be installed as part of the proposed action. Project-related lighting should be minimized. All project-related lights should be shielded so the bulb is not visible at or above bulb-height. Motion sensors and timers should be installed on any necessary project-related lighting to minimize periods of illumination.

If you are not able to include these recommendations in your project, please contact us for further information. If you have any questions concerning the recommendations provided in this letter please contact Ian Bordenave at (808) 792-9400 for further assistance.

Sincerely,

for Loyal Mehrhoff
Field Supervisor

MUNEKIYO & HIRAGA, INC.

MICHAEL T. MUNEKIYO
PRESIDENT

KARLYNN FUKUDA
EXECUTIVE VICE PRESIDENT

SWEN OHASHI HIRAGA
SENIOR VICE PRESIDENT

MITSURU "MICHI" HIRANO
SENIOR VICE PRESIDENT

MARK ALEXANDER ROY
VICE PRESIDENT

June 27, 2014

Loyal Mehrhoff, Field Supervisor
U.S. Fish and Wildlife Service
United States Department of the Interior
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawaii 96850

SUBJECT: Response to Early Consultation Comment Letter Regarding Proposed Dining Hall and Water System Improvements at the Boy Scouts of America's Camp Maluhia at TMKs (2) 3-1-001:028 and 001 (por.)

Dear Mr. Mehrhoff:

Thank you for your letter dated February 8, 2013, providing comments on the proposed dining hall and fire protection system at the Boy Scouts of America's Camp Maluhia. We offer the following information in response to your comments:

SPECIES AFFECTED

- Although the flora and fauna study did not indicate the presence of the Hawaiian hoary bat at the project site, your recommendation that woody plants greater than 15 feet tall will not be removed or trimmed during the Hawaiian hoary bat breeding season (June 1 to September 15) will be respected.

- In response to your recommendations regarding seabirds, the flora and fauna study indicated that while these birds may occasionally be found at the project site, the habitat is not suitable for seabirds, which generally are found at forests at higher elevations. However, with respect to your recommendations regarding the Hawaiian petrel and Newell's shearwater, no outdoor floodlighting will be installed. All other project-related lights will be minimized and shielded such that the bulb is not visible at or above bulb-height. Motion sensors and timers will be installed to minimize periods of illumination.

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Thank you again for your participation in the Chapter 343, Hawaii Revised Statutes review process. A copy of your letter will be included in the Draft Environmental Assessment. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at (808) 244-2015.

Very truly yours,

Bryan Esmeralda, Analyst

BE:tn
cc: Robert Nakagawa, Boy Scouts of America
Earl Kono, Riecke Sunnland Kono Architects Ltd.
K:\DATA\BSA\CampMaluhiaImpr\ECL Responses\USFWS response.doc

JAN 18 2013

NEIL ABERCROMBIE
GOVERNOR

Dean H. Seki
Comptroller

Maria E. Zielinski
Deputy Comptroller

STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P.O. BOX 119, HONOLULU, HAWAII 96810-0119

(P)1013.3

JAN 17 2013

Mr. Michael T. Munekiyo, AICP, President
Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Mr. Munekiyo:

Subject: Early Consultation Request for Proposed Dining Hall and Fire Protection Water System Improvements at Maui County Council Boy Scouts of America Camp Maluhia, Kahakuloa, Maui, Hawaii TMK: (2) 3-1-001:028; (2) 3-1-001:001

Thank you for the opportunity to provide comments for the subject project. The project does not impact any Department of Accounting and General Services' existing facilities in this area. We have no comments to offer at this time.

If you have any questions, please call me at 586-0400 or have your staff call Mr. Alva Nakamura of the Public Works Division at 586-0488.

Sincerely,

DEAN H. SEKI
Comptroller

c: Mr. David Victor, DAGS Maui
Mr. Daniel Ornellas, DLNR
Mr. Robert Nakagawa, Maui County Boy Scouts of America

NEIL ABERCROMBIE
GOVERNOR

KATHRYN S. MATAYOSHI
SUPERINTENDENT

JAN 17 2013

STATE OF HAWAI'I

DEPARTMENT OF EDUCATION

P.O. BOX 2360

HONOLULU, HAWAI'I 96804

OFFICE OF SCHOOL FACILITIES AND SUPPORT SERVICES

January 16, 2013

Munekiyo & Hiraga, Inc.
Attention: Michael T. Munekiyo, AICP
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Mr. Munekiyo:

Subject: Early Consultation Request for Proposed Dining Hall and Fire Protection Water System Improvements at Maui County Council Boy Scouts of America Camp Maluhia, Kahakuloa, Maui, Hawaii (TMK (2)3-1-001:028; (2)3-1-001:001)

The Department of Education (DOE) has reviewed your letter dated January 10, 2013 regarding the proposed dining hall and fire protection water system improvements at Maui County Council Boy Scouts of America Camp Maluhia.

The DOE has no comment to offer.

Thank you for the opportunity to provide comments. If you have any questions, please call Roy Ikeda of the Facilities Development Branch at (808) 377-8301.

Respectfully,

Kenneth G. Masden, II
Public Works Manager
Planning Section

KGM:jmb

JAN 29 2013

NEIL ABERCROMBIE
GOVERNOR OF HAWAII

LORETTA J. FUDDY, A.C.S.W., M.P.H.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
ENVIRONMENTAL MANAGEMENT DIVISION
SOLID AND HAZARDOUS WASTE BRANCH
919 ALA MOANA BOULEVARD, #212
HONOLULU, HAWAII 96814

In reply, please refer to:
EMD/SHWB

January 28, 2013

S0145LO

Mr. Michael T. Munekiyo, AICP
Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, HI 96793

Dear Mr. Munekiyo:

SUBJECT: Early Consultation Request for Proposed Dining Hall and Fire Protection Water System Improvements at Maui County Council Boy Scouts of America Camp Maluhia, Kahakuloa, Maui
TMK: (2) 3-1-001:028, (2) 3-1-001:001

Thank you for giving us the opportunity to review and provide comments on the subject document. It has been reviewed by the Office of Solid Waste Management, Solid Waste Section, Hazardous Waste Section, and Underground Storage Tank Section of the Solid and Hazardous Waste Branch.

We have no comments to offer on the project at this time.

If you have any questions regarding this letter, please contact Mr. Lane Otsu of the Office of Solid Waste Management at (808) 586-4226.

Sincerely,

STEVEN Y.K. CHANG, P.E., CHIEF
Solid and Hazardous Waste Branch

FEB 08 2013

NEIL ABERCROMBIE
GOVERNOR OF HAWAII

LORETTA J. FUDDY, A.C.S.W., M.P.H.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. BOX 3378
HONOLULU, HI 96801-3378

In reply, please refer to:
EMD/CWB

02010PMR.13

February 5, 2013

Mr. Michael T. Munekiyo, AICP
President
Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Mr. Munekiyo:

SUBJECT: Comments on the Early Consultation Request for the Proposed Dining Hall and Fire Protection Water System Improvements at Maui County Council Boy Scouts of America Camp Maluhia
Kahakuloa, Island of Maui, Hawaii
TMK: (2) 3-1-001:028 and 001

The Department of Health (DOH), Clean Water Branch (CWB), acknowledges receipt of your letter, dated January 10, 2013, requesting comments on your project. The DOH-CWB has reviewed the subject document and offers these comments. Please note that our review is based solely on the information provided in the subject document and its compliance with the Hawaii Administrative Rules (HAR), Chapters 11-54 and 11-55. You may be responsible for fulfilling additional requirements related to our program. We recommend that you also read our standard comments on our website at: http://www.hawaii.gov/health/environmental/env-planning/landuse/CWB-standardcomment.pdf.

1. Any project and its potential impacts to State waters must meet the following criteria:

   a. Antidegradation policy (HAR, Section 11-54-1.1), which requires that the existing uses and the level of water quality necessary to protect the existing uses of the receiving State water be maintained and protected.

   b. Designated uses (HAR, Section 11-54-3), as determined by the classification of the receiving State waters.

   c. Water quality criteria (HAR, Sections 11-54-4 through 11-54-8).

2. You may be required to obtain a National Pollutant Discharge Elimination System (NPDES) permit for discharges of wastewater, including storm water runoff, into State surface waters (HAR, Chapter 11-55). An application for an NPDES individual permit must be submitted at least 180 calendar days before the commencement of the discharge. The NPDES application forms may be picked up at our office or downloaded from our website at http://hawaii.gov/health/environmental/water/cleanwater/forms/environmental/water/cleanwater/forms/indiv-index.html.

3. If your project involves work in, over, or under waters of the United States, it is highly recommend that you contact the Army Corp of Engineers, Regulatory Branch (Tel: 438-9258) regarding their permitting requirements.

   Pursuant to Federal Water Pollution Control Act [commonly known as the "Clean Water Act" (CWA)], Paragraph 401(a)(1), a Section 401 Water Quality Certification (WQC) is required for "[a]ny applicant for Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may **result** in any discharge into the navigable waters..." (emphasis added). The term "discharge" is defined in CWA, Subsections 502(16), 502(12), and 502(6); Title 40 of the Code of Federal Regulations, Section 122.2; and Hawaii Administrative Rules (HAR), Chapter 11-54.

4. Please note that all discharges related to the project construction or operation activities, whether or not NPDES permit coverage and/or Section 401 WQC are required, must comply with the State's Water Quality Standards. Noncompliance with water quality requirements contained in HAR, Chapter 11-54, and/or permitting requirements, specified in HAR, Chapter 11-55, may be subject to penalties of $25,000 per day per violation.

If you have any questions, please visit our website at: http://www.hawaii.gov/health/environmental/water/cleanwater/index.html, or contact the Engineering Section, CWB, at (808) 586-4309.

Sincerely,

ALEC WONG, P.E., CHIEF
Clean Water Branch

MR:jst

c: DOH-EPO [via email only]

MUNEKIYO & HIRAGA, INC.

MICHAEL T. MUNEKIYO
PRESIDENT

KAROLYNN FUKUOKA
EXECUTIVE VICE PRESIDENT

BWEN ONAGAWA HIRAGA
SENIOR VICE PRESIDENT

MITSURU "MICH" HIRANO
SENIOR VICE PRESIDENT

MARK ALEXANDER ROY
VICE PRESIDENT

June 27, 2014

Alec Wong, P.E., Chief
Clean Water Branch
State of Hawaii
Department of Health
P.O. Box 3378
Honolulu, Hawaii 96801-3378

SUBJECT: Response to Early Consultation Comment Letter Regarding Proposed Dining Hall and Water System Improvements at the Boy Scouts of America's Camp Maluhia at TMKs (2) 3-1-001:028 and 001 (por.) (EMD/CWB 02010PMR.13)

Dear Mr. Wong:

Thank you for your letter dated February 5, 2013, providing comments on the proposed dining hall and fire protection system at the Boy Scouts of America's Camp Maluhia. We offer the following information in response to your comments:

- We note your comments that the proposed project must meet the criteria set forth in Sections 11-54-1.1 (Antidegradation Policy), 11-54-3 (Designated Uses), and 11-54-4 through 11-54-8 (Water Quality Criteria) of the Hawaii Administrative Rules (HAR).

- A National Pollutant Discharge Elimination System (NPDES) permit will be obtained for the project as needed, in accordance with applicable requirements of Section 11-55-38, HAR.

- The U.S. Department of the Army has been contacted for consultation.

- The project will comply with all applicable Water Quality Standards as specified in HAR, Chapter 11-54 and/or permitting requirements as specified in HAR, Chapter 11-55.

MAUI
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Thank you again for your participation in the Chapter 343, Hawaii Revised Statutes review process. A copy of your letter will be included in the Draft Environmental Assessment. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at (808) 244-2015.

Very truly yours,

Bryan Esmeralda, Analyst

BE:me
cc: Robert Nakagawa, Boy Scouts of America
Earl Kono, Riecke Sunnland Kono Architects Ltd.
Ronald Fukumoto, Ronald M. Fukumoto Engineering, Inc.
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JAN 23 2013

NEIL ABERCROMBIE
GOVERNOR OF HAWAII

LORETTA J. FUDDY, A.C.S.W., M.P.H.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
SAFE DRINKING WATER BRANCH
919 ALA MOANA BLVD., ROOM 308
HONOLULU, HI 96814-4920

In reply, please refer to:
File: SDWB
Maui Boy Scouts1.Doc

January 17, 2013

Mr. Michael T. Munekiyo, AICP, President
Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Mr. Munekiyo:

SUBJECT: EARLY CONSULTATION REQUEST FOR PROPOSED DINING HALL AND FIRE PROTECTION WATER SYSTEM IMPROVEMENTS AT MAUI COUNTY COUNCIL BOY SCOUTS OF AMERICA CAMP MALUHIA, KAHAKULOA, MAUI, HAWAII (TMK: (2) 3-1-001:001)

We received your request for early consultation under HRS 343 and have the following comments:

1. Please identify the source of water (supplying water system name and source wells) to be used for human consumption. EPA defines human consumption to include drinking, bathing, showering, cooking, dishwashing and maintaining oral hygiene.

2. The specific water system infrastructure improvements (new tanks and waterlines) and their potential impacts to the existing Camp system, and the supplying source system (increased system demands, new pressure zones) should be clearly and thoroughly described. The potential for cross connection control (backpressure and backsiphonage) should be discussed.

3. It is not clear at this early stage whether the dining hall improvements will need to be evaluated under the authority of the Department of Health Sanitation Branch. Please contact Mr. Peter Oshiro, Environmental Health Program Manager, at (808) 586-8020.

If there are any questions, please call Mr. Michael Miyahira, Engineering Section Supervisor, Safe Drinking Water Branch, at (808) 586-4258.

Sincerely,

FL JOANNA L. SETO, P.E., CHIEF
Safe Drinking Water Branch

MM:cb

c: Laura McIntyre, EPO (Ref. #13-009)

MUNEKIYO HIRAGA, INC.

MICHAEL T. MUNEKIYO
PRESIDENT

KARLYNN FUKUDA
EXECUTIVE VICE PRESIDENT

GWEN OHASHI HIRAGA
SENIOR VICE PRESIDENT

MITSURU "MICHI" HIRANO
SENIOR VICE PRESIDENT

MARK ALEXANDER ROY
VICE PRESIDENT

June 27, 2014

Joanna L. Seto, P.E., Chief
Attention: Michael Miyahira,
Engineering Section Supervisor
Safe Drinking Water Branch
State of Hawaii
Department of Health
919 Ala Moana Boulevard, Room 308
Honolulu, Hawaii 96814-4920

SUBJECT: Response to Early Consultation Comment Letter Regarding Proposed Dining Hall and Water System Improvements at the Boy Scouts of America's Camp Maluhia at TMKs (2) 3-1-001:028 and 001 (por.) (File: SDWB Maui Boy Scouts1.Doc)

Dear Ms. Seto:

Thank you for your letter dated January 17, 2013, providing comments on the proposed dining hall and fire protection system at the Boy Scouts of America's Camp Maluhia. We offer the following information, which addresses your comments in the order listed in your letter:

- The water source for this project will be discussed in the Draft Environmental Assessment (EA).
- Water system infrastructure improvements will include upgrades to the fire protection water system which serves the camp, including the construction for a new water tank and waterline, which are intended to augment the existing system and bring the system up to current design standards. Your comments have been forwarded to the project engineer for review and consideration.
- The Department of Health Sanitation Branch has been contacted for consultation.

Thank you again for your participation in the Chapter 343, Hawaii Revised Statutes review process. A copy of your letter will be included in the Draft EA. In the meantime,

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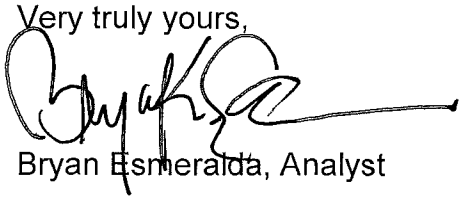
if there are any questions or if additional information is needed, please feel free to contact me at (808) 244-2015.

Very truly yours,



Bryan Esmeralda, Analyst

BE:me
cc: Robert Nakagawa, Boy Scouts of America
Earl Kono, Riecke Sunnland Kono Architects Ltd.
Ronald Fukumoto, Ronald M. Fukumoto Engineering, Inc.
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JAN 29 2013

NEIL ABERCROMBIE
GOVERNOR OF HAWAII

LORETTA J. FUDDY, A.C.S.W., M.P.H.
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
January 28, 2013

Mr. Michael T. Munekiyo, AICP
President
Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Mr. Munekiyo:

Subject: Early Consultation Request for Proposed Dining Hall and Fire Protection Water System Improvements at Maui County Council Boy Scouts of America Camp Maluhia, Kahakuloa, Maui, Hawaii TMK: (2) 3-1-001:028; (2) 3-1-001:001

Thank you for the opportunity to review this project. We have the following comments to offer:

National Pollutant Discharge Elimination System (NPDES) permit coverage maybe required for hydro-testing of water system. The Clean Water Branch should be contacted at 808 586-4309.

It is strongly recommended that the Standard Comments found at the Department's website: http://hawaii.gov/health/environmental/env-planning/landuse/landuse.html 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,

Patti Kitkowski
District Environmental Health Program Chief

c EPO

MUNEKIYO & HIRAGA, INC.

MICHAEL T. MUNEKIYO
PRESIDENT

KAROLYN FUKUDA
EXECUTIVE VICE PRESIDENT

GWEN OHASHI HIRAGA
SENIOR VICE PRESIDENT

MITSURU "MICH" HIRAGA
SENIOR VICE PRESIDENT

MARK ALEXANDER ROY
VICE PRESIDENT

June 27, 2014

Patti Kitkowski, District Environmental Health Program Chief
State of Hawaii
Department of Health
Maui District Health Office
54 High Street
Wailuku, Hawaii 96793

SUBJECT: Response to Early Consultation Comment Letter Regarding Proposed Dining Hall and Water System Improvements at the Boy Scouts of America's Camp Maluhia at TMKs (2) 3-1-001:028 and 001 (por.)

Dear Ms. Kitkowski:

Thank you for your letter dated January 28, 2013, providing comments on the proposed dining hall and fire protection system at the Boy Scouts of America's Camp Maluhia. We offer the following information in response to your comments:

- We acknowledge your comment that a National Pollutant Discharge Elimination System permit may be required for the hydro-testing of the water system for this project. Your comments have been forwarded to the project engineer for review and consideration.

We note that the standard comments of the Department of Health will be reviewed and adhered to, as applicable.

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Thank you again for your participation in the Chapter 343, Hawaii Revised Statutes review process. A copy of your letter will be included in the Draft Environmental Assessment. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at 244-2015.

Very truly yours,

Bryan Esmeralda, Analyst

BE:tn
cc: Robert Nakagawa, Boy Scouts of America
Earl Kono, Riecke Sunnland Kono Architects Ltd.
Ronald Fukumoto, Ronald M. Fukumoto Engineering, Inc.
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JAN 18 2013

NEIL ABERCROMBIE
GOVERNOR OF HAWAII

LORETTA J. FUDDY, A.C.S.W., M.P.H.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. BOX 3378
HONOLULU, HI 96801-3378

In reply, please refer to:
File:
13-009
BSA Camp Maluhia

January 11, 2013

Mr. Michael T. Munekiyo, AICP
Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Mr. Munekiyo:

SUBJECT: Early Consultation Request for Proposed Dining Hall and Fire Protection Water System Improvements at Maui County Council Boy Scouts of America Camp Maluhia, Kahakuloa, Maui, Hawaii, TMK: (2) 3-1-001: 028; (2) 3-1-001: 001

The Department of Health (DOH), Environmental Planning Office (EPO), acknowledges receipt of your letter dated January 10, 2013. Thank you for allowing us to review and comment on the subject document. The document was routed to the relevant Environmental Health divisions and offices. They will provide specific comments to you if necessary. EPO recommends that you review the Standard Comments (www.hawaii.gov/health/epo under the land use tab). You are required to adhere to all Standard Comments specifically applicable to this application.

EPO suggests that you examine the many sources available on strategies to support the sustainable design of communities, including the:
U.S. Environmental Protection Agency's sustainability programs: www.epa.gov/sustainability
U.S. Green Building Council's LEED program: www.new.usgbc.org/leed

The DOH encourages everyone to apply these sustainability strategies and principles early in the planning and review of projects. We also request that for future projects you consider conducting a Health Impact Assessment (HIA). More information is available at www.cdc.gov/healthyplaces/hia.htm. We request you share all of this information with others to increase community awareness on sustainable, innovative, inspirational, and healthy community design.

We request a written response confirming receipt of this letter and any other letters you receive from DOH in regards to this submission. You may mail your response to 919 Ala Moana Blvd., Ste. 312, Honolulu, Hawaii 96814. However, we would prefer an email submission to epo@doh.hawaii.gov. We anticipate that our letter(s) and your response(s) will be included in the final document. If you have any questions, please contact me at (808) 586-4337.

Mahalo,

Laura Leialoha Phillips McIntyre, AICP
Manager, Environmental Planning Office

MUNEKIYO & HIRAGA, INC.

MICHAEL T. MUNEKIYO
PRESIDENT

KAREN FURUTA
EXECUTIVE VICE PRESIDENT

GWEN OHASHI HIRAGA
SENIOR VICE PRESIDENT

MITSURU "MICH" HIRANO
SENIOR VICE PRESIDENT

MARK ALEXANDER ROY
VICE PRESIDENT

June 27, 2014

Laura Leialoha Phillips McIntyre, AICP, Manager
Environmental Planning Office
State of Hawaii
Department of Health
919 Ala Moana Boulevard, Suite 312
Honolulu, Hawaii 96814

SUBJECT: Response to Early Consultation Comment Letter Regarding Proposed Dining Hall and Water System Improvements at the Boy Scouts of America's Camp Maluhia at TMKs (2) 3-1-001:028 and 001 (por.) (File: 13-009 BSA Camp Maluhia)

Dear Ms. McIntyre:

Thank you for your letter dated January 11, 2013, providing comments on the proposed dining hall and fire protection system at the Boy Scouts of America's Camp Maluhia. We offer the following information in response to your comments:

- The project will comply with all Standard Comments applicable to this application.
- Sustainability strategies are being addressed as part of the project design process.

MAUI
305 High St., Suite 104 Wailuku, Hawaii 96793
PH: (808)244-2015 FAX: (808)244-8729
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Thank you again for your participation in the Chapter 343, Hawaii Revised Statutes review process. A copy of your letter will be included in the Draft Environmental Assessment. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at (808) 244-2015.

Very truly yours,

Bryan Esmeralda, Analyst

BE:tn
cc: Robert Nakagawa, Boy Scouts of America
Earl Kono, Riecke Sunnland Kono Architects Ltd.
Ronald Fukumoto, Ronald M. Fukumoto Engineering, Inc.
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JAN 31 2013

NEIL ABERCROMBIE
GOVERNOR OF HAWAII

WILLIAM J. AILA, JR.
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

January 30, 2013

Munekiyo & Hiraga, Inc.
Attention: Mr. Michael T. Munekiyo, AICP
305 High Street, Suite 104
Waikulu, Hawaii 96793

Dear Mr. Munekiyo:

SUBJECT: Early Consultation Request for Proposed Dining Hall and Fire Protection Water System Improvements at Maui County Council Boy Scouts of America Camp Maluhia; TMK: (2) 3-1-001:028 and 001

Thank you for the opportunity to review and comment on the subject matter. The Department of Land and Natural Resources' (DLNR) Land Division distributed or made available a copy of your report pertaining to the subject matter to DLNR Divisions for their review and comments.

At this time, enclosed are comments from the Engineering Division on the subject matter. Should you have any questions, please feel free to call Lydia Morikawa at 587-0410. Thank you.

Sincerely,

Russell Y. Tsuji
Land Administrator

Enclosure(s)
cc: Central Files

NEIL ABERCROMBIE
GOVERNOR OF HAWAII

'13 JAN 16 AM 10:06 ENGINEERING

CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

January 15, 2013

MEMORANDUM

TO: FP:

DLNR Agencies:
___Div. of Aquatic Resources
___Div. of Boating & Ocean Recreation
_X_ Engineering Division
_X_ Div. of Forestry & Wildlife
___Div. of State Parks
_X_ Commission on Water Resource Management
___Office of Conservation & Coastal Lands
_X_ Land Division – Maui District
_X_ Historic Preservation

FROM: P:
Russell Y. Tsuji, Land Administrator
SUBJECT: Early Consultation Request for Proposed Dining Hall and Fire Protection Water System Improvements at Maui County Council Boy Scouts of America Camp Maluhia
LOCATION: Kahakuloa, Island of Maui; TMK: (2) 3-1-001:028 and 001
APPLICANT: The Maui County Council Boy Scouts of America

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by January 29, 2013.

If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact Lydia Morikawa at 587-0410. Thank you.

Attachments

( ) We have no objections.
( ) We have no comments.
(X) Comments are attached.

Signed:
Print Name: Cody S. Chang, Chief Engineer
Date: 1/16/13

cc: Central Files

DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION

LD/LydiaMorikawa
RE:EarlyConsultDiningHallBoyScout
Maui.592

COMMENTS

( ) We confirm that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Flood Zone ___.

(X) **Please take note that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Flood Zone X. The National Flood Insurance Program does not have any regulations for developments within Zone X.**

( ) Please note that the correct Flood Zone Designation for the project site according to the Flood Insurance Rate Map (FIRM) is ___.

( ) Please note that the project must comply with the rules and regulations of the National Flood Insurance Program (NFIP) presented in Title 44 of the Code of Federal Regulations (44CFR), whenever development within a Special Flood Hazard Area is undertaken. If there are any questions, please contact the State NFIP Coordinator, Ms. Carol Tyau-Beam, of the Department of Land and Natural Resources, Engineering Division at (808) 587-0267.

Please be advised that 44CFR indicates the minimum standards set forth by the NFIP. Your Community's local flood ordinance may prove to be more restrictive and thus take precedence over the minimum NFIP standards. If there are questions regarding the local flood ordinances, please contact the applicable County NFIP Coordinators below:

( ) Mr. Mario Siu Li at (808) 768-8098 or Ms. Ardis Shaw-Kim at (808) 768-8296 of t he City and County of Honolulu, Department of Planning and Permitting.

( ) Mr. Frank DeMarco at (808) 961-8042 of the County of Hawaii, Department of Public Works.

( ) Ms. Carolyn Cortez at (808) 270-7813 of the County of Maui, Department of Planning.

( ) Mr. Wynne Ushigome at (808) 241-4890 of the County of Kauai, Department of Public Works.

( ) The applicant should include water demands and infrastructure required to meet project needs. Please note that projects within State lands requiring water service from the Honolulu Board of Water Supply system will be required to pay a resource development charge, in addition to Water Facilities Charges for transmission and daily storage.

( ) The applicant should provide the water demands and calculations to the Engineering Division so it can be included in the State Water Projects Plan Update.

( ) Additional Comments: _____

_____

( ) Other: _____

_____

Should you have any questions, please call Ms. Suzie S. Agraan of the Planning Branch at 587-0258.

Signed: _____
CARTY S. CHANG, CHIEF ENGINEER

Date: 1/18/17

FEB 12 2013

NEIL ABERCROMBIE
GOVERNOR OF HAWAII

WILLIAM J. AILA, JR.
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

February 11, 2013

Munekiyo & Hiraga, Inc.
Attention: Mr. Michael T. Munekiyo, AICP
305 High Street, Suite 104
Waikulu, Hawaii 96793

Dear Mr. Munekiyo:

SUBJECT: Early Consultation Request for Proposed Dining Hall and Fire Protection Water System Improvements at Maui County Council Boy Scouts of America Camp Maluhia; TMK: (2) 3-1-001:028 and 001

Thank you for the opportunity to review and comment on the subject matter. In addition to the comments previously sent you on January 30, 2013, enclosed are comments from the Commission of Water Resources Management on the subject matter. Should you have any questions, please feel free to call Lydia Morikawa at 587-0410. Thank you.

Sincerely,

Russell Y. Tsuji
Land Administrator

Enclosure(s)
cc: Central Files

NEIL ABERCROMBIE
GOVERNOR OF HAWAII

WILLIAM J. AILA, JR.
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

RECEIVED
LAND DIVISION
2013 FEB -8 PM 12: 04
DEPT. OF LAND & NATURAL RESOURCES STATE OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

January 15, 2013

MEMORANDUM

TO: **DLNR Agencies:**
___Div. of Aquatic Resources
___Div. of Boating & Ocean Recreation
_X_Engineering Division
_X_Div. of Forestry & Wildlife
___Div. of State Parks
_X_Commission on Water Resource Management
___Office of Conservation & Coastal Lands
_X_Land Division – Maui District
_X_Historic Preservation

FROM: Russell Y. Tsuji, Land Administrator
SUBJECT: Early Consultation Request for Proposed Dining Hall and Fire Protection Water System Improvements at Maui County Council Boy Scouts of America Camp Maluhia
LOCATION: Kahakuloa, Island of Maui; TMK: (2) 3-1-001:028 and 001
APPLICANT: The Maui County Council Boy Scouts of America

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by January 29, 2013.

If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact Lydia Morikawa at 587-0410. Thank you.

Attachments

(✓) We have no objections.
( ) We have no comments.
(✓) Comments are attached.

Signed: W. Roy Hardy
Print Name: Roy Hardy
Date: 2/7/13

cc: Central Files

NEIL ABERCROMBIE
GOVERNOR OF HAWAII

WILLIAM J. AILA, JR.
CHAIRPERSON

WILLIAM D. BALFOUR, JR.
SUMNER ERDMAN
LORETTA J. FUDDY, A.C.S.W., M.P.H.
NEAL S. FUJIWARA
JONATHAN STARR
TED YAMAMURA

WILLIAM M. TAM
DEPUTY DIRECTOR

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
P.O. BOX 621
HONOLULU, HAWAII 96809

February 8, 2013

RECEIVED
LAND DIVISION
2013 FEB -8 PM 12:03
DEPT. OF LAND &
NATURAL RESOURCES
STATE OF HAWAII

TO: Russell Tsuji, Administrator
Land Division

FROM: William M. Tam, Deputy Director
Commission on Water Resource Management

SUBJECT: Camp Maluhia (Maui) Proposed New Dining Hall and Fire Protection Improvements

FILE NO.: N/A
TMK NO.: (2) 3-1-001:028 & 001

Thank you for the opportunity to review the subject document. The Commission on Water Resource Management (CWRM) is the agency responsible for administering the State Water Code (Code). Under the Code, all waters of the State are held in trust for the benefit of the citizens of the State, therefore, all water use is subject to legally protected water rights. CWRM strongly promotes the efficient use of Hawaii's water resources through conservation measures and appropriate resource management. For more information, please refer to the State Water Code, Chapter 174C, Hawaii Revised Statutes, and Hawaii Administrative Rules, Chapters 13-167 to 13-171. These documents are available via the Internet at http://www.hawaii.gov/dlnr/cwrm.

Our comments related to water resources are checked off below.

☒ 1. We recommend coordination with the county to incorporate this project into the county's Water Use and Development Plan. Please contact the respective Planning Department and/or Department of Water Supply for further information.

☐ 2. We recommend coordination with the Engineering Division of the State Department of Land and Natural Resources to incorporate this project into the State Water Projects Plan.

☐ 3. We recommend coordination with the Hawaii Department of Agriculture (HDOA) to incorporate the reclassification of agricultural zoned land and the redistribution of agricultural resources into the State's Agricultural Water Use and Development Plan (AWUDP). Please contact the HDOA for more information.

☐ 4. We recommend that water efficient fixtures be installed and water efficient practices implemented throughout the development to reduce the increased demand on the area's freshwater resources. Reducing the water usage of a home or building may earn credit towards Leadership in Energy and Environmental Design (LEED) certification. More information on LEED certification is available at http://www.usgbc.org/leed. A listing of fixtures certified by the EPA as having high water efficiency can be found at http://www.epa.gov/watersense/pp/index.htm.

☐ 5. We recommend the use of best management practices (BMP) for stormwater management to minimize the impact of the project to the existing area's hydrology while maintaining on-site infiltration and preventing polluted runoff from storm events. Stormwater management BMPs may earn credit toward LEED certification. More information on stormwater BMPs can be found at http://hawaii.gov/dbedt/czm/initiative/lid.php.

☒ 6. We recommend the use of alternative water sources, wherever practicable.

☐ 7. There may be the potential for ground or surface water degradation/contamination and recommend that approvals for this project be conditioned upon a review by the State Department of Health and the developer's acceptance of any resulting requirements related to water quality.

Permits required by CWRM:
Additional information and forms are available at http://hawaii.gov/dlnr/cwrm/resources_permits.htm.

☐ 8. The proposed water supply source for the project is located in a designated water management area, and a Water Use Permit is required prior to use of water. The Water Use Permit may be conditioned on the requirement to use dual line water supply systems for new industrial and commercial developments.

☐ 9. A Well Construction Permit(s) is (are) required before any well construction work begins.

☐ 10. A Pump Installation Permit(s) is (are) required before ground water is developed as a source of supply for the project.

☐ 11. There is (are) well(s) located on or adjacent to this project. If wells are not planned to be used and will be affected by any new construction, they must be properly abandoned and sealed. A permit for well abandonment must be obtained.

☐ 12. Ground water withdrawals from this project may affect streamflows, which may require an instream flow standard amendment.

☐ 13. A Stream Channel Alteration Permit(s) is (are) required before any alteration(s) can be made to the bed and/or banks of a stream channel.

☐ 14. A Stream Diversion Works Permit(s) is (are) required before any stream diversion works is (are) constructed or altered.

☐ 15. A Petition to Amend the Interim Instream Flow Standard is required for any new or expanded diversion(s) of surface water.

☒ 16. The planned source of water for this project has not been identified in this report. Therefore, we cannot determine what permits or petitions are required from our office, or whether there are potential impacts to water resources.

☐ OTHER:

If there are any questions, please contact Charley Ice at 587-0218.

MUNEKIYO & HIRAGA, INC.

MUNEKIYO
PRESIDENT

KAMLYNN FUKUDA
EXECUTIVE VICE PRESIDENT

JAN SHARMI HIRAGA
SENIOR VICE PRESIDENT

MITSURU "MICH" HIRANO
SENIOR VICE PRESIDENT

MARK ALEXANDER ROY
VICE PRESIDENT

June 27, 2014

Russell Y. Tsuji, Land Administrator
Department of Land and Natural Resources
Land Division
P.O. Box 621
Honolulu, Hawaii 96809

SUBJECT: Response to Early Consultation Comment Letter Regarding Proposed Dining Hall and Water System Improvements at the Boy Scouts of America's Camp Maluhia at TMKs (2) 3-1-001:028 and 001 (por.)

Dear Mr. Tsuji:

Thank you for the Department of Land and Natural Resources' comments dated January 30, 2013 and February 11, 2013, providing input on the proposed dining hall and fire protection system at the Boy Scouts of America's Camp Maluhia. We offer the following information in response to your comments:

ENGINEERING DIVISION

- We acknowledge the information provided on the Flood Insurance Rate Map designates the project site as Flood Zone X, areas subject to minimal flooding with no development regulations.

COMMISSION ON WATER RESOURCE MANAGEMENT

- We acknowledge your comment regarding coordination with the County to incorporate this project into the County's Water Use and Development Plan. Coordination is being undertaken with the Maui County Planning Department and Department of Water Supply.

- We acknowledge your comment regarding the use of alternative water sources, wherever practicable. Your comments have been forwarded to the project engineer for review and consideration.

305 High St., Suite 104 Wailuku, Hawaii 96793
PH: (808)244-2015 FAX: (808)244-8729
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735 Bishop St., Suite 238 Honolulu, Hawaii 96813 | PH: (808)983-1233

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- The water source for this project will be discussed in the Draft Environmental Assessment (EA).

Thank you again for your participation in the Chapter 343, Hawaii Revised Statutes review process. A copy of your letter will be included in the Draft EA. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at (808) 244-2015.

Very truly yours,

Bryan Esmeralda, Analyst

BE:tn
cc: Robert Nakagawa, Boy Scouts of America
Earl Kono, Riecke Sunnland Kono Architects Ltd.
Ronald Fukumoto, Ronald M. Fukumoto Engineering, Inc.
K:\DATA\BSA\CampMaluhiaImpr\ECL Responses\DLNR Land.doc

FEB 05 2013

NEIL ABERCROMBIE
GOVERNOR

GLENN M. OKIMOTO
DIRECTOR

Deputy Directors
JADE T. BUTAY
FORD N. FUCHIGAMI
RANDY GRUNE
JADINE URASAKI

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
869 PUNCHBOWL STREET
HONOLULU, HAWAII 96813-5097

IN REPLY REFER TO:
DIR 0058
STP 8.1091

January 29, 2013

Mr. Michael T. Munekiyo, AICP
President
Munekiyo & Hiraga, Inc
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Mr. Munekiyo:

Subject: Camp Maluhia Dining Hall and Fire Protection Water System Improvements
Early Consultation for Environmental Assessment
TMK: (2) 3-1-001:028 & 001 (por.)

Thank you for requesting the State Department of Transportation's (DOT) review of the subject project. DOT understands the applicant proposes to construct new dining hall improvements at Camp Maluhia. In order to support the new dining hall facility, improvements to the fire protection water system, including the installation of a new water tank and waterline, are required.

The Draft Environmental Assessment should discuss and evaluate project's contribution to the cumulative traffic impacts on State highways facilities in the area.

DOT appreciates the opportunity to provide comments. If there are any questions, including the need to meet with DOT staff, please contact Mr. Garrett Smith of the DOT Statewide Transportation Planning Office at telephone number (808) 831-7976.

Very truly yours,

GLENN M. OKIMOTO, Ph.D.
Director of Transportation

MUNEKIYO & HIRAGA, INC.

MICHAEL T. MUNEKIYO
PRESIDENT

KAREN FUKUDA
EXECUTIVE VICE PRESIDENT

GWEN OHASHI HIRABA
SENIOR VICE PRESIDENT

MITSURU "MICH" HIRANO
SENIOR VICE PRESIDENT

MARK ALEXANDER ROY
VICE PRESIDENT

June 27, 2014

Ford Fuchigami, Interim Director
Department of Transportation
State of Hawaii
869 Punchbowl Street
Honolulu, Hawaii 96813-5097

SUBJECT: Response to Early Consultation Comment Letter Regarding Proposed Dining Hall and Water System Improvements at the Boy Scouts of America's Camp Maluhia at TMKs (2) 3-1-001:028 and 001 (por.) (Refer to: DIR 0058 STP 8.1091)

Dear Mr. Fuchigami:

Thank you for your department's letter dated January 29, 2013, providing comments on the proposed dining hall and fire protection system at the Boy Scouts of America's Camp Maluhia. We offer the following information in response to your comments:

- The Draft Environmental Assessment (EA) will discuss and evaluate both the existing traffic conditions and any potential impacts and mitigation measures for State highway facilities in the project vicinity.

Thank you again for your participation in the Chapter 343, Hawaii Revised Statutes review process. A copy of your letter will be included in the Draft EA. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at (808) 244-2015.

Very truly yours,

Bryan Esmeralda, Analyst

BE:tn
cc: Robert Nakagawa, Boy Scouts of America
Earl Kono, Riecke Sunnland Kono Architects Ltd.
K:\DATA\BSA\CampMaluhiaImpr\ECL Responses\SDOT response.doc

305 High St., Suite 104 Wailuku, Hawaii 96793
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FEB 05 2013

NEIL ABERCROMBIE
GOVERNOR
RICHARD C. LIM
DIRECTOR
MARY ALICE EVANS
DEPUTY DIRECTOR
JESSE K. SOUKI
DIRECTOR
OFFICE OF PLANNING

DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

OFFICE OF PLANNING
235 South Beretania Street, 6th Floor, Honolulu, Hawaii 96813
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

Telephone: (808) 587-2846
Fax: (808) 587-2824

Ref. No. P-13861

February 1, 2013

Mr. Michael Munekiyo, President
Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Mr. Munekiyo:

Subject: Early Consultation Request for Proposed Dining Hall and Fire Protection Water System Improvements at Maui Council Boy Scouts of America Camp Maluhia, Kahakuloa, Maui, Hawaii
Tax Map Key (2)3-1-001: 028; (2)3-1-001:001

Thank you for the opportunity to provide comments on the Maui County Council Boy Scouts of America's proposal to construct new dining hall improvements at Camp Maluhia TMK: (2)3-1-001: 028; (2)3-1-001:001.

The Office of Planning has reviewed the subject and has the following comments to offer:

1. The entire state is defined to be within the Coastal Zone Management Area (Hawaii Revised Statutes (HRS) §205A-1 - definition of "coastal zone management area"). The Draft Environmental Assessment should include a discussion of the proposed project's consistency with the objectives and policies set forth in HRS §205A-2.

2. The construction project may have nonpoint pollution concerns, which may impact coastal waters. We invite the applicant to review the Hawaii Watershed Guidance, and specifically the sections on management measures for site development, existing development, and planning, siting and developing roads and highways, within the section entitled, "Urban Areas." The document provides a summary of and links to management measures that may be implemented to minimize coastal nonpoint pollution impact. The Hawaii Watershed Guidance document can be found on-line at http://hawaii.gov/dbedt/czm/initiative/nonpoint/HI Watershed Guidance Final.pdf.

3. The Final EA should include a list of required permits and approvals. Pursuant to Hawaii Administrative Rules §11-200-10, the Final EA should provide a list of all permits and approvals required for the proposed action.

If you have any questions regarding this comment letter, please contact Leo Asuncion, Coastal Zone Management Program Manager, at (808) 587-2875.

Sincerely,

Jesse K. Souki
Director

MUNEKIYO & HIRAGA, INC.

MICHAEL T. MUNEKIYO
PRESIDENT

KARLYNN FIKUDA
EXECUTIVE VICE PRESIDENT

GWEN OHASHI HIRAGA
SENIOR VICE PRESIDENT

MITSURU "MICH" HIRANO
SENIOR VICE PRESIDENT

MARK ALEXANDER ROY
VICE PRESIDENT

June 27, 2014

Leo Asuncion, Interim Director
Office of Planning
Department of Business, Economic
Development & Tourism
P.O. Box 2359
Honolulu, Hawaii 96804

SUBJECT: Response to Early Consultation Comment Letter Regarding Proposed Dining Hall and Water System Improvements at the Boy Scouts of America's Camp Maluhia at TMKs (2) 3-1-001:028 and 001 (por.) (Ref. No. P-13861)

Dear Mr. Asuncion:

Thank you for your Department's letter dated February 1, 2013, providing comments on the proposed dining hall and fire protection system at the Boy Scouts of America's Camp Maluhia. We offer the following information, which addresses your comments in the order listed in your letter:

- We note your comment regarding the Coastal Zone Management Area and will include in the Draft Environmental Assessment (EA), an evaluation of the project with respect to the objectives and policies set forth in the Hawaii Revised Statutes (HRS) 205A-1.

- We acknowledge your comments regarding nonpoint pollution concerns and also clarify that the project site lies within the "Agricultural" zone.

- In accordance with Hawaii Administrative Rules (HAR) 11-200-10, the Draft EA will include a list of permits and approvals required for this project.

MAUI
305 High St., Suite 104 Wailuku, Hawaii 96793
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Thank you again for your participation in the Chapter 343, HRS review process. A copy of your letter will be included in the Draft EA. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at (808) 244-2015.

Very truly yours,

Bryan Esmeralda, Analyst

BE:tn
cc: Robert Nakagawa, Boy Scouts of America
Earl Kono, Riecke Sunnland Kono Architects Ltd.
K:\DATA\BSA\CampMaluhiaImpr\ECL Responses\DBEDT response.doc

ALAN M. ARAKAWA
MAYOR

FEB 22 2013

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 20, 2013

To : Munekiyo & Hiraga, Inc.
Attention: Michael T. Munekiyo, AICP
305 High Street
Wailuku, HI 96793

Re : Early Consultation – Proposed Dining Hall and Fire Protection Water System Improvements at Camp Maluhia
Kahakuloa, HI
(2) 3-1-001: 028; (2) 3-1-001: 001

Aloha Michael,

Thank you for the opportunity to comment on the subject project. At this time, the Department of Fire & Public Safety has no comment in regards to the project EIS.

Our office does reserve the right to comment on the subject project during the plan review process when detailed plans are submitted as part of the building permit application process. At that time, fire and life safety requirements shall be reviewed. Please be sure that a qualified person designs the fire protection system because it will be important for building permit approval.

If there are any questions or comments, please feel free to contact me at 244-9161 ext. 23.

Regards,

Paul Haake
Captain, Fire Prevention Bureau
Department of Fire & Public Safety
313 Manea Place
Wailuku, HI 96793

MUNEKIYO & HIRAGA, INC.

MICHAEL T. MUNEKIYO
PRESIDENT

KAMLYNN FUKUDA
EXECUTIVE VICE PRESIDENT

WREN DHABHI HIRAGA
SENIOR VICE PRESIDENT

MITSURU "MICHAEL" HIRANO
SENIOR VICE PRESIDENT

MARK ALEXANDER ROY
VICE PRESIDENT

June 27, 2014

Paul Haake, Captain
Department of Fire and Public Safety
County of Maui
Fire Prevention Bureau
313 Manea Place
Wailuku, Hawaii 96793

SUBJECT: Response to Early Consultation Comment Letter Regarding Proposed Dining Hall and Water System Improvements at the Boy Scouts of America's Camp Maluhia at TMKs (2) 3-1-001:028 and 001 (por.)

Dear Mr. Haake:

Thank you for your letter dated February 20, 2013, providing comments on the proposed dining hall and fire protection system at the Boy Scouts of America's Camp Maluhia. We offer the following information in response to your comments:

- The fire protection system will be designed by a qualified professional.

Thank you again for your participation in the Chapter 343, Hawaii Revised Statutes review process. A copy of your letter will be included in the Draft Environmental Assessment. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at 244-2015.

Very truly yours,

Bryan Esmeralda, Analyst

BE:la
cc: Robert Nakagawa, Boy Scouts of America
Earl Kono, Riecke Sunnland Kono Architects Ltd.
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DEPARTMENT OF
HOUSING AND HUMAN CONCERNS
HOUSING DIVISION
COUNTY OF MAUI

ALAN M. ARAKAWA
Mayor
JO-ANN T. RIDAO
Director
JAN SHISHIDO
Deputy Director

35 LUNALILO STREET, SUITE 102 • WAILUKU, HAWAII 96793 • PHONE (808) 270-7351 • FAX (808) 270-6284

JAN 30 2013

January 22, 2013

Mr. Michael T. Munekiyo, AICP
Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Mr. Munekiyo:

Subject: Early Consultation Request for Proposed Dining Hall and Fire Protection Water System Improvements at Maui County Council Boy Scouts of America Camp Maluhia, Kahakuloa, Maui, Hawaii (TMK (2) 3-1-001:028; (2) 3-1-001:001)

The Department has reviewed the request for Early Consultation for the above subject project. Based on our review, we have determined that the subject project is not subject to Chapter 2.96, Maui County Code. At the present time, the Department has no additional comments to offer.

Please call Mr. Veranio Tongson Jr. of our Housing Division at (808) 270-1741 if you have any questions.

Sincerely,

Wayde T Oshiro

WAYDE T. OSHIRO
Housing Administrator

cc: Director of Housing and Human Concerns

ALAN M. ARAKAWA
Mayor

GLENN T. CORREA
Director

BRIANNE SAVAGE
Deputy Director

(808) 270-7230
FAX (808) 270-7934

JAN 24 2013

DEPARTMENT OF PARKS & RECREATION

700 Hali'a Nakoa Street, Unit 2, Wailuku, Hawaii 96793

January 18, 2013

Munekiyo & Hiraga
Michael T. Munekiyo, AICP
305 High Street, Suite 104
Wailuku, HI 96793

Dear Mr. Munekiyo:

SUBJECT: Early Consultation Request for Proposed Dining Hall and Fire Protection Water System Improvements at Maui County Council Boy Scouts of America Camp Maluhia, Kahakuloa, Maui, Hawaii TMK: (2) 3-1-001:028; (2) 3-1-001:001

Thank you for the opportunity to review and comment on the proposed Dining Hall and Fire Protection Water System Improvements at Maui County Council Boy Scouts of America Camp Maluhia. In accordance with the requirements of the Hawaii Administrative rules (HAR), Title 11, Chapter 200, Environmental Impact Statement Rules, our Department would like to review the project as it develops.

Please feel free to contact me or Robert Halvorson, Chief of Planning and Development, at 270-7931, should you have any questions.

Sincerely,

GLENN T. CORREA
Director of Parks and Recreation

c: Robert Halvorson, Chief of Planning and Development

GTC:RH:do

MUNEKIYO & HIRAGA, INC.

MICHAEL T. MUNEKIYO
PRESIDENT

KAREN FUNICIA
EXECUTIVE VICE PRESIDENT

GWEN DARBY HIRAGA
SENIOR VICE PRESIDENT

MITSURU "MICHI" HIRANO
SENIOR VICE PRESIDENT

MARK ALEXANDER ROY
VICE PRESIDENT

June 27, 2014

Glenn T. Correa, Director
Department of Parks and Recreation
700 Hali'a Nakoa Street, Unit 2
Wailuku, Hawaii 96793

SUBJECT: Response to Early Consultation Comment Letter Regarding Proposed Dining Hall and Water System Improvements at the Boy Scouts of America's Camp Maluhia at TMKs (2) 3-1-001:028 and 001 (por.)

Dear Mr. Correa:

Thank you for your letter dated January 18, 2013, providing comments on the proposed dining hall and fire protection system at the Boy Scouts of America's Camp Maluhia.

As requested, a copy of the Draft Environmental Assessment (EA) will be provided to you for review and comment.

Thank you again for your participation in the Chapter 343, Hawaii Revised Statutes review process. A copy of your letter will be included in the Draft EA. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at 244-2015.

Very truly yours,

Bryan Esmeralda, Analyst

BE:tn
cc: Robert Nakagawa, Boy Scouts of America
Earl Kono, Riecke Sunnland Kono Architects Ltd.
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ALAN M. ARAKAWA
Mayor

WILLIAM R. SPENCE
Director

MICHELE CHOUTEAU McLEAN
Deputy Director

MAR 05 2013

COUNTY OF MAUI
DEPARTMENT OF PLANNING

March 5, 2013

Mr. Michael T. Munekiyo, AICP
Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Mr. Munekiyo:

SUBJECT: EARLY CONSULTATION REQUEST FOR COMMENTS (RFC) ON THE PROPOSED DINING HALL AND FIRE PROTECTION WATER SYSTEM IMPROVEMENTS AT MAUI COUNTY COUNCIL BOY SCOUTS OF AMERICA CAMP MALUHIA, LOCATED AT KAHAKULOA, ISLAND OF MAUI, HAWAII; TMK(S): (2) 3-1-001:028 AND 001 (RFC 2013/0009)

The Department of Planning (Department) is in receipt of the above-referenced RFC for the proposed Maluhia Camp improvements. The Department understands the proposed action includes the following:

1. Construction of a new dining hall at a new location at the Camp and demolition of the existing dining hall;

2. Installation of new water tank and water lines on adjacent State owned parcel to meet Maui County Code for fire protection;

3. One (1) of the parcels is owned by the State of Hawaii while the other is owned by Maui County Council and Boy Scouts of America; and

4. The proposed project will utilize both State and County funds.

Our Department provides the following comments:

1. Please verify the land use and zoning designation(s) for both parcels. Contact the Department's Zoning Administration and Enforcement Division (ZAED) to get a Zoning and Flood Confirmation Form completed for accurate zoning and land use designations;

2. Although located in an area that may not be highly visible to the general public, please discuss visual screening methods for the new dining hall; and water tank structures;

3. If the dining room structure to be torn down is over 55 years old, please contact Cultural Resources Planner Stanley Solamillo of the Department's Long Range Division to determine its historic significance; and

4. Please be sure to evaluate the proposed project to the policies of the recently adopted Maui Island Plan (MIP). The MIP can be found at our County website or by contacting the Long Range Division at (808) 270-7214.

Thank you for the opportunity to comment. Should you require further clarification, please contact Staff Planner Joseph Prutch by email at joseph.prutch@mauicounty.gov or by phone at (808) 270-7512.

Sincerely,

CLAYTON I. YOSHIDA, AICP
Planning Program Administrator

for WILLIAM SPENCE
Planning Director

xc: Joseph M. Prutch, Staff Planner (PDF)
Project File
General File

WRS:CIY:JMP:vb
K:\WP_DOCS\PLANNING\RFC\2013\0009_Boyscoutsofamerica\Comments.Doc

MUNEKIYO & HIRAGA, INC.

MICHAEL T. MUNEKIYO
PRESIDENT

KAREN ORASHI HIRAGA
SENIOR VICE PRESIDENT

MARK ALEXANDER ROY
VICE PRESIDENT

June 27, 2014

William Spence, Director
Department of Planning
County of Maui
250 South High Street
Wailuku, Hawaii 96793

SUBJECT: Response to Early Consultation Comment Letter Regarding Proposed Dining Hall and Water System Improvements at the Boy Scouts of America's Camp Maluhia at TMKs (2) 3-1-001:028 and 001 (por.)

Dear Mr. Spence:

Thank you for your letter dated March 5, 2013, providing comments on the proposed dining hall and fire protection system at the Boy Scouts of America's Camp Maluhia. We offer the following information, which addresses your comments in the order listed in your letter:

- Zoning and Flood Confirmation Forms have been completed for both parcels involved in this project.

- Visual impacts associated with the new dining hall and water tank structures are discussed in the Draft Environmental Assessment (EA).

- Specific plans for the existing dining hall building have not yet been finalized. Should the final plans for the existing dining hall involve structural modification or removal, consultation with the Department's Long Range Division will be undertaken.

- An evaluation of this project with respect to the goals, objectives, policies, and implementing actions set forth in the Maui Island Plan (MIP) will be included in the Draft EA.

MAUI
305 High St., Suite 104 Wailuku, Hawaii 96793
PH: (808)244-2015 FAX: (808)244-8729
OAHU
735 Bishop St., Suite 238 Honolulu, Hawaii 96813 | PH: (808)983-1233
WWW.MHPLANNING.COM

Assistance in process management

Printed on Recycled Paper

Thank you again for your participation in the Chapter 343, Hawaii Revised Statutes review process. A copy of your letter will be included in the Draft EA. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at 244-2015.

Very truly yours,

Bryan Esmeralda, Analyst

BE:tn
cc: Robert Nakagawa, Boy Scouts of America
Earl Kono, Riecke Sunnland Kono Architects Ltd.
K:\DATA\BSA\CampMaluhiaImpr\ECL Responses\PlanningDept response.doc

FEB 04 2013

POLICE DEPARTMENT

COUNTY OF MAUI

ALAN M. ARAKAWA
MAYOR

OUR REFERENCE

YOUR REFERENCE

55 MAHALANI STREET
WAILUKU, HAWAII 96793
(808) 244-6400
FAX (808) 244-6411

GARY A. YABUTA
CHIEF OF POLICE

CLAYTON N.Y.W. TOM
DEPUTY CHIEF OF POLICE

January 25, 2013

Mr. Michael T. Munekiyo, AICP
President
Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, HI 96793

Dear Mr. Munekiyo:

SUBJECT: Early Consultation Request for Proposed Dining Hall and Fire Protection Water System Improvements at Maui County Council Boy Scouts of America Camp Maluhia, Kahakuloa, Maui at TMK (2) 3-1-001:028; (2) 3-1-001:001

This is in response to the request for comments on the above subject.

We have reviewed the information submitted for this project and have submitted our comments and/or recommendations. Thank you for giving us the opportunity to comment on this project.

Very truly yours,

Acting Assistant Chief Tivoli Faaumu
for: Gary A. Yabuta
Chief of Police

c: William Spence, Planning Department

TO	:	**GARY YABUTA, CHIEF OF POLICE, COUNTY OF MAUI**
VIA	:	**CHANNELS**
FROM	:	**AYLETT WALLWORK, POLICE OFFICER III, COMMUNITY POLICING, WAILUKU PATROL DIVISION**
SUBJECT	:	**RESPONSE TO A REQUEST FOR COMMENTS REGARDING PROPOSED NEW DINING HALL AND FIRE PROTECTION WATER SYSTEM IMPROVEMENTS**

Ack. 1/17/13

This communication is submitted as a response to a request for comments by the Maui County Council Boy Scouts Of America who is proposing to construct a new dining hall and fire protection improvements at Camp Maluhia.

PROJECT	:	**PROPOSED NEW DINING HALL AND FIRE PROTECTION WATER SYSTEM IMPROVEMENTS**
LOCATION	:	**KAHAKULOA, MAUI, HAWAII**
TMK	:	**(2) 3 – 1 – 001:028; (2)3 – 1 – 001:001**

RESPONSE:

In review of the submitted documents, the concern from the police perspective is the impacts upon vehicular and pedestrian movement as well as the public's safety. Maui County Council Boy Scouts Of America is proposing to construct a new dining hall and fire protection improvements at Camp Maluhia. Construction of the new dining hall should not have any impact to vehicular and pedestrian movements. The fire protection improvements, such as a new water tank and water lines, will bring the camp up to code. At this time it is undetermined when this project will commence.

There are no objections to the progression of this project. It must be stated that all those involved in this project must remain cognizant in maintaining the safety of the general public.

Respectfully submitted for your review and approval.

11764

Aylett Wallwork e#11764
P.O. III, Community Policing, Wailuku Patrol Division
01/16/2013 @ 1200 hours

Ack 1/17/13

NO OBJECTIONS AT THIS TIME.
Sgt. [illegible]
1-17-13 @ 0930

MUNEKIYO & HIRAGA, INC.

MICHAEL T. MUNEKIYO
PRESIDENT

KARLYNN FUKUDA
EXECUTIVE VICE PRESIDENT

GWEN OHASHI HIRAGA
SENIOR VICE PRESIDENT

MORGAN "MIKI" HIRANO
SENIOR VICE PRESIDENT

MARK ALEXANDER ROY
VICE PRESIDENT

June 27, 2014

Gary Yabuta, Chief
Police Department
County of Maui
55 Mahalani Street
Wailuku, Hawaii 96793

SUBJECT: Response to Early Consultation Comment Letter Regarding Proposed Dining Hall and Water System Improvements at the Boy Scouts of America's Camp Maluhia at TMKs (2) 3-1-001:028 and 001 (por.)

Dear Chief Yabuta:

Thank you for your letter dated January 25, 2013, providing comments on the proposed dining hall and fire protection system at the Boy Scouts of America's Camp Maluhia. We offer the following information in response to your comment:

- The Draft Environmental Assessment (EA) will address potential impact considerations related to vehicular and pedestrian movement, as well as public safety.

Thank you again for your participation in the Chapter 343, Hawaii Revised Statutes review process. A copy of your letter will be included in the Draft EA. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at 244-2015.

Very truly yours,

Bryan Esmeralda, Analyst

BE:tn
cc: Robert Nakagawa, Boy Scouts of America
Earl Kono, Riecke Sunnland Kono Architects Ltd.
K:\DATA\BSA\CampMaluhiaImpr\ECL Responses\MPD response.doc

MAUI
305 High St., Suite 104 Wailuku, Hawaii 96793
PH: (808)244-2015 FAX: (808)244-8729
OAHU
735 Bishop St., Suite 238 Honolulu, Hawaii 96813 | PH: (808)983-1233
WWW.MHPLANNING.COM

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ALAN M. ARAKAWA
Mayor

DAVID C. GOODE
Director

ROWENA M. DAGDAG-ANDAYA
Deputy Director

JAN 25 2013

RALPH M. NAGAMINE, L.S., P.E.
Development Services Administration

CARY YAMASHITA, P.E.
Engineering Division

BRIAN HASHIRO, P.E.
Highways Division

COUNTY OF MAUI
DEPARTMENT OF PUBLIC WORKS
DEVELOPMENT SERVICES ADMINISTRATION
250 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793

January 23, 2013

Mr. Michael T. Munekiyo, AICP
Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Maui, Hawaii 96793

Subject: EARLY CONSULTATION REQUEST FOR PROPOSED DINING HALL AND FIRE PROTECTION WATER SYSTEM IMPROVEMENTS AT MAUI COUNTY COUNCIL BOY SCOUTS OF AMERICA CAMP MALUHIA
TMK: (2) 3-1-001:028; 001

Dear Mr. Munekiyo:

We reviewed the subject application and have no comments at this time.

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

Sincerely,

for David C. Goode
Director of Public Works

ls S:\LUCA\CZM\prop_dining_hall_water_system_improv_camp_maluhia_ec_31001028_ls.wpd
xc: Highways Division
Engineering Division

FEB 19 2013

ALAN M. ARAKAWA
Mayor

KYLE K. GINOZA, P.E.
Director

MICHAEL M. MIYAMOTO
Deputy Director

TRACY TAKAMINE, P.E.
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

February 8, 2013

Mr. Michael Munekiyo
Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Mr. Munekiyo:

SUBJECT: MAUI COUNTY COUNCIL BOY SCOUTS OF AMERICA
CAMP MALUHIA – DINING HALL & FIRE PROTECTION WATER SYSTEM IMPROVEMENTS
EARLY CONSULTATION
TMK (2) 3-1-001:028 AND 001, KAHAKULOA

We reviewed the subject application and have the following comments:

1. Solid Waste Division comments:

   a. None.

2. Wastewater Reclamation Division (WWRD) comments:

   a. None. 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

FEB 05 2013

ALAN M. ARAKAWA
Mayor

JO ANNE JOHNSON-WINER
Director
MARC I. TAKAMORI
Deputy Director
Telephone (808) 270-7511

DEPARTMENT OF TRANSPORTATION

COUNTY OF MAUI
200 South High Street
Wailuku, Hawaii, USA 96793-2155

January 24, 2013

Mr. Michael Munekiyo
Munekiyo & Hiraga Inc.
305 High Street, Suite 104
Wailuku, Maui, Hawaii 96793

Subject: Boy Scouts of America Camp Maluhia Improvements

Dear Mr. Munekiyo,

Thank you for the opportunity to comment on this project. We have no comments to make at this time.

Please feel free to contact me if you have any questions.

Sincerely,

Jo Anne Johnson Winer
Director

ALAN M. ARAKAWA
Mayor

DAVID TAYLOR, P.E.
Director

PAUL J. MEYER
Deputy Director

DEPARTMENT OF WATER SUPPLY
COUNTY OF MAUI
200 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793-2155
www.mauiwater.org

FEB 07 2013

January 30, 2013

Mr. Michael T. Munekiyo. AICP
Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793

SUBJECT: Early Consultation Request for Proposed Dining Hall and Fire Protection Water System Improvements at Maui County Council Boy Scouts of America Camp Maluhia, Kahakuloa, Maui, Hawaii
TMK: 3-1-001:028, 3-1-001:001

Dear Mr. Munekiyo,

Thank you for the opportunity to comment on this project. The properties are not served by the county water system. The project is overlying the Waihee aquifer. Parcel 3-1-001:001 is located within the wellhead protection area (WHPA) of Maui County wells and parcel 3-1-001:028 immediately adjacent to the WHPA. We recommend that the mitigation measures below be implemented during construction in order to protect the wells and the underlying aquifer:

1. There shall be a designated person on site during operating hours who is responsible for supervising the use, storage, and handling of hazardous material and who shall take appropriate mitigating actions necessary in the event of fire or spill.
2. Hazardous materials left on site when the site is unsupervised must be inaccessible to the public. Locked storage sheds, locked fencing, locked fuel tanks on construction vehicles, or other techniques may be used if they will preclude access.
3. Construction vehicles and stationary equipment that are found to be leaking fuel, hydraulic fluid, and/or other hazardous materials shall be removed from the site and from the capture zone of potable wells. The vehicle or equipment may be repaired in place, provided the leakage is completely contained.
4. Hazardous materials shall not be allowed to enter stormwater systems.

In order to alleviate demand on the Waihee aquifer, we recommend that the following conservation measures be incorporated in the project:
Indoor Conservation Measures:

a. Use EPA WaterSense labeled plumbing fixtures.
b. Install flow reducers and faucet aerators in all plumbing fixtures where-ever possible.

c. Install dual flush toilets with high efficiency models that use 1.28 gallons per flush or less.
d. Install showerheads with a flow rate of 1.5 gpm at 60 psi or less.
e. Install bathroom sink faucets with fixtures that do not exceed 1 gpm at 60 psi. Laundry facilities and/or individual unit machines must use Energy Star labeled washers.
f. Limit the distance from the hot water source to the tap early in the design stage.

Exterior Areas:

a. Use Smart Approved WaterMark irrigation products. Examples include ET irrigation controllers, drip irrigation, and water saving spray heads.
b. Avoid plant fertilizing and pruning that would stimulate excessive growth. Time watering to occur in the early morning or evening to limit evaporation. Limit turf to as small an area as possible.

Should you have any questions please contact Staff Planner Eva Blumenstein at 463-3102 or eva.blumenstein@co.maui.hi.us.

Sincerely,

David Taylor, Director
emb

c: engineering

Attachment:
Water Conservation for Commercial Buildings

A Checklist of Water Conservation Ideas For

Commercial Buildings

This checklist provides water conservation tips successfully implemented by industrial and commercial users. This list has been revised from the original copy first published and distributed by the Los Angeles Department of Water and Power.

☐ General suggestions

Increase employee awareness of water conservation.

Install signs encouraging water conservation in employee and customer restrooms.

When cleaning with water is necessary, use budgeted amounts.

Determine the quantity and purpose of water being used.

Read water meter weekly to monitor success of water conservation efforts.

Assign an employee to monitor water use and waste.

Seek employee suggestions on water conservation; put suggestion boxes in prominent areas.

Determine other methods of water conservation.

☐ Building maintenance

Check water supply for leaks.

Turn off any unnecessary flows.

Repair dripping faucets and showers and continuously running or leaking toilets.

Install faucet aerators where possible.

Reduce toilet water use by adjusting flush valves or installing dams and flapper mechanisms.

As appliances or fixtures wear out, replace them with water-saving models.

Shut off water supply to equipment rooms not in use.

Minimize the water used in cooling equipment in accordance with manufacturers recommendations. Shut off cooling units when not needed.

☐ Cafeteria area

Turn off continuous flow used to clean the drain trays.

Turn off dishwasher when not in use. Wash full loads only.

Use water from steam tables to wash down cooking area.

Do not use running water to melt ice or frozen foods.

Use water-conserving ice makers.

Exterior areas

Convert from water intensive lawns, trees, and shrubs to Xeriscape -- Landscape design incorporating plants that provide beautiful color and require less water.

Inventory outdoor water use for landscaped areas.

Water landscape only when needed. Two-to-three times a week is usually sufficient.

Water in the early morning or evening.

Make sure that water does not run into the streets or alleys.

Stop hosing down sidewalks, driveways, and parking lots.

Use time controllers on sprinkler systems.

Do not water on windy days.

Water in winter only during prolonged hot and dry periods. (During spring and fall, most plants need approximately half the amount they need during the summer.)

For more information, contact:

California Department of Water Resources
Water Conservation Office
1416 Ninth Street
P.O. Box 942836
Sacramento, California 94236-0001
Telephone: (916) 323-5580

The ideas presented are not intended as an endorsement by the California Department of Water Resources of any method, process or specific product but are merely suggestions.

MUNEKIYO & HIRAGA, INC.

MICHAEL T. MUNEKIYO
PRESIDENT

KARLYNN FUKUDA
EXECUTIVE VICE PRESIDENT

OWEN OHASHI HIRAGA
SENIOR VICE PRESIDENT

MITSURU "MICHI" HIRANO
SENIOR VICE PRESIDENT

MARK ALEXANDER ROY
VICE PRESIDENT

June 27, 2014

David Taylor, Director
Department of Water Supply
County of Maui
200 South High Street
Wailuku, Hawaii 96793

SUBJECT: Response to Early Consultation Comment Letter Regarding Proposed Dining Hall and Water System Improvements at the Boy Scouts of America's Camp Maluhia at TMKs (2) 3-1-001:028 and 001 (por.)

Dear Mr. Taylor:

Thank you for your letter dated January 30, 2013, providing comments on the proposed dining hall and fire protection system at the Boy Scouts of America's Camp Maluhia. We offer the following information in response to your comments:

PROTECTION OF WELLS AND THE UNDERLYING AQUIFER

- We note your comments and concerns that the project site lies within the wellhead protection area (WHPA). Your recommendations regarding mitigation measures to be implemented during construction will be included in the Draft Environmental Assessment (EA) and reviewed as a part of the design and construction phase for the project.

CONSERVATION MEASURES

- We note your comments regarding water conservation measures including the use of low-flow plumbing fixtures and devices and water saving irrigation methods. This information will be included in the Draft EA and reviewed as a part of the design and construction phase for the project.

MAUI
305 High St., Suite 104 Wailuku, Hawaii 96793
PH: (808)244-2015 FAX: (808)244-8729
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735 Bishop St., Suite 238 Honolulu, Hawaii 96813 | PH: (808)983-1233
WWW.MHPLANNING.COM

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Thank you again for your participation in the Chapter 343, Hawaii Revised Statutes review process. A copy of your letter will be included in the Draft EA. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at 244-2015.

Very truly yours,

Bryan Esmeralda, Analyst

BE:tn
cc: Robert Nakagawa, Boy Scouts of America
Earl Kono, Riecke Sunnland Kono Architects Ltd.
Ronald Fukumoto, Ronald M. Fukumoto Engineering, Inc.
K:\DATA\BSA\CampMaluhiaImpr\ECL Responses\DWS response.doc

JAN 24 2013

Hawaiian Telcom

Network Engineering and Planning
OSP Engineering - Maui
60 South Church St.
Wailuku, HI 96793
Phone 808 242-5102
Fax 808 242-8899

January 18, 2013

Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, HI 96793

Attention: Michael T. Munekiyo, AICP

Subject: Proposed Dining Hall and Fire Protection Water System Improvements
@ Maui County Council Boy Scouts of America Camp Maluhia, Kahakuloa

Dear Michael,

Thank you for allowing us to review and comment on the subject project. Your plans have been received and put on file.

Hawaiian Telcom, Inc. has no comment, nor do we require any additional information at this time.

Should you require further assistance, please call me at 242-5107.

Sincerely,

Tom Hutchison
OSP Engineer

cc: Gerry Saguicio, Section Manager

BICS File No. 1301-003 (3080)

IX. LETTERS RECEIVED DURING THE DRAFT ENVIRONMENTAL ASSESSMENT REVIEW PERIOD AND RESPONSES TO SUBSTANTIVE COMMENTS

IX. LETTERS RECEIVED DURING THE DRAFT ENVIRONMENTAL ASSESSMENT REVIEW PERIOD AND RESPONSES TO SUBSTANTIVE COMMENTS

The following agencies were consulted during preparation of the Final Environmental Assessment (EA). Agency comments and responses to substantive comments are included herein.

1. Larry Yamamoto, State Conservationist
U.S. Department of Agriculture
Natural Resources Conservation Service
P.O. Box 50004
Honolulu, Hawaii 96850-0001

2. Ranae Ganske-Cerizo, Soil Conservationist
Natural Resources Conservation Service
U.S. Department of Agriculture
77 Hookele Street, Suite 202
Kahului, Hawaii 96732

3. Shelly Lynch, Chief, Regulatory Branch
U.S. Department of the Army
U.S. Army Engineer District, Honolulu
Regulatory Branch, Building 230
Fort Shafter, Hawaii 96858-5440

4. Loyal A. Mehrhoff, Field Supervisor
U. S. Fish and Wildlife Service
300 Ala Moana Blvd., Rm. 3-122
Box 50088
Honolulu, Hawaii 96813

5. Douglas G. Murdock, Comptroller
Department of Accounting and General Services
1151 Punchbowl Street, #426
Honolulu, Hawaii 96813

6. Scott Enright, Chair
Department of Agriculture
1428 South King Street
Honolulu, Hawaii 96814-2512

7. Kathryn Matayoshi, Superintendent
State of Hawaii
Department of Education
P.O. Box 2360
Honolulu, Hawaii 96804

8. Heidi Meeker, Planning Division
Office of Business Services
Department of Education
c/o Kalani High School
4680 Kalanianaole Highway, #T-B1A
Honolulu, Hawaii 96821

9. Dr. Virginia Pressler, MD, MDA, FACS, Director
State of Hawaii
Department of Health
919 Ala Moana Blvd., Room 300
Honolulu, Hawaii 96814

10. Alec Wong, P.E., Chief
Clean Water Branch
State of Hawaii
Department of Health
919 Ala Moana Blvd., Room 300
Honolulu, Hawaii 96814

11. Patti Kitkowski, District Environmental Health Program Chief
State of Hawaii
Department of Health
54 High Street
Wailuku, Hawaii 96793

12. Laura McIntyre, AICP, Office Manager
Environmental Planning Office
Department of Health
919 Ala Moana Blvd., Suite 312
Honolulu, Hawaii 96814

13. Lene Ichinotsubo
Environmental Management Division
State of Hawaii
Department of Health
919 Ala Moana Blvd., Room 212
Honolulu, Hawaii 96814

14. Carty Chang, Chairperson
State of Hawaii
Department of Land and Natural Resources
P. O. Box 621
Honolulu, Hawaii 96809

15. Alan Downer, Administrator
State of Hawaii
Department of Land and Natural Resources
State Historic Preservation Division
601 Kamokila Blvd., Room 555
Kapolei, Hawaii 96707

16. Jenny Pickett, Maui Archaeologist
State of Hawaii
Department of Land and Natural Resources
State Historic Preservation Division
130 Mahalani Street
Wailuku, Hawaii 96793

17. Ford Fuchigami, Director
State of Hawaii
Department of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96813

18. Jessica Wooley, Director
Office of Environmental Quality Control
235 S. Beretania Street, Suite 702
Honolulu, Hawaii 96813

19. Dr. Kamana'opono Crabbe, Chief Executive Officer
Office of Hawaiian Affairs
737 Iwilei Road
Honolulu, Hawaii 96817

20. Leo R Asuncion, Jr., Acting Director
State of Hawaii
Office of Planning
P. O. Box 2359
Honolulu, Hawaii 96804

21. Dan Orodenker, Executive Officer
State of Hawaii
State Land Use Commission
P.O. Box 2359
Honolulu, Hawaii 96804

22. Anna Foust, Management Officer
Maui Civil Defense Agency
200 South High Street
Wailuku, Hawaii 96793

23. Jeffrey A. Murray, Fire Chief
County of Maui
Department of Fire and Public Safety
200 Dairy Road
Kahului, Hawaii 96732

24. Jo-Ann Ridao, Director
County of Maui
Department of Housing and Human Concerns
One Main Plaza
2200 Main Street, Suite 546
Wailuku, Hawaii 96793

25. Kaala Buenconsejo, Director
County of Maui
Department of Parks and Recreation
700 Halia Nakoa Street, Unit 2
Wailuku, Hawaii 96793

26. William Spence, Director
County of Maui
Department of Planning
250 South High Street
Wailuku, Hawaii 96793

27. Tivoli Faaumu, Chief
County of Maui
Police Department
55 Mahalani Street
Wailuku, Hawaii 96793

28. David Goode, Director
County of Maui
Department of Public Works
200 South High Street
Wailuku, Hawaii 96793

29. Kyle Ginoza, Director
County of Maui
Department of Environmental Management
One Main Plaza
2200 Main Street, Suite 100
Wailuku, Hawaii 96793

30. Jo Anne Johnson Winer, Director
County of Maui
Department of Transportation
200 South High Street
Wailuku, Hawaii 96793

31. David Taylor, Director
County of Maui
Department of Water Supply
200 South High Street
Wailuku, Hawaii 96793

32. Mathew McNeff, Manager – Engineering
Maui Electric Company, Ltd.
P.O. Box 398
Kahului, Hawaii 96733

33. Hawaiian Telcom
60 South Church Street
Wailuku, Hawaii 96793

34. Susan Werner, Library Manager
Wailuku Public Library
251 High Street
Wailuku, Hawaii 96793

FEB 19 2015

DEPARTMENT OF THE ARMY
HONOLULU DISTRICT, U.S. ARMY CORPS OF ENGINEERS
FORT SHAFTER, HAWAII 96858-5440

February 19, 2015

SUBJECT: No Permit Required and Approved Jurisdictional Determination for Camp Maluhia and Related Area Improvements, Kahakuloa, Maui Island, Hawaii. DA File No. POH-2015-00030

Mr. Daniel Ornellas
State of Hawaii
Department of Land and Natural Resources
54 South High Street
Wailuku, HI 96793

Mr. Robert Nakagawa
Boy Scouts of America, Camp Maluhia
200 Liholiho Street,
Wailuku, HI 96793

Dear Messrs. Ornellas and Nakagawa:

This responds to a request letter, dated January 21, 2015, for draft environmental assessment (EA) review comments submitted on your behalf by Mr. Bryan Esmeralda of Munekiyo & Hiraga, Inc (MNI) for the above-referenced project. Department of the Army (DA) file number POH-2015-00030 is assigned this project Please reference this number in all future correspondence to our office concerning this project.

We have reviewed your submittal pursuant to Section 10 of the Rivers and Harbors Act of 1899 (Section 10) and Section 404 of the Clean Water Act (Section 404). Section 10 requires that a Department of the Army (DA) permit be obtained for certain structures or work in or affecting navigable waters of the U.S., prior to conducting the work (33 U.S.C. 403). Section 404 requires that a DA permit be obtained for the discharge of dredged and/or fill material into waters of the U.S., including wetlands, prior to conducting the work (33 U.S.C. 1344).

Based on the information provided and available resources, we have determined that the project sites for the Boy Scouts of America (BSA) new dining facility and water system improvements, and the State, Department of Land and Natural Resources (DLNR), Division of Forestry and Wildlife (DOFW) Waihee Ridge Trail new parking lot are absent of waters of the U.S., including wetlands, that are subject to the Corps' regulatory jurisdiction. Given the project descriptions and planning-level plans provided (Enclosure 1), the proposed projects are not anticipated to result in activities or discharges of fill material in waters of the U.S.; therefore, a DA permit is not required.

Please be advised, should the project scope change to involve work or discharges in waters of the U.S., we recommend you consult with our office again to ensure that the no permit required (NPR) determination issued for these projects are still valid. It is your responsibility to obtain any required federal, state, or local approvals for this project.

Enclosed are two (2) approved jurisdictional determinations (JDs) prepared for the projects proposed by each landowner (Enclosures 2 and 3). An approved JD is valid for a period of five (5) years unless new information warrants revision of the determination before the expiration date. Should you object to this determination, you may request an Administrative Appeal under 33 CFR 331. We have enclosed a Notification of Appeal Process and Request for Appeal (NAP/RFA) form (Enclosures 4 and 5). If you request to appeal this determination, you must submit a completed RFA form, according to instructions in the RFA, to the Corps' Pacific Ocean Division office at:

U.S. Army Corps of Engineers, Pacific Ocean Division
ATTN: Ms. Cindy Barger, CEPOD-PDC
Building 525
Fort Shafter, HI 96858-5440

Thank you for your cooperation with the Honolulu District Regulatory Program. Should you have any questions related to this determination, please contact Ms. Joy Anamizu my staff at (808) 835-4308 or via e-mail at joy.n.anamizu@usace.army.mil . You are encouraged to provide comments on your experience with the Honolulu District Regulatory Office by accessing our web-based customer survey form at http://corpsmapu.usace.army.mil/cm_apex/f?p=136:4:0.

Sincerely,

Michelle Lynch

Michelle R. Lynch
Chief, Regulatory Office

Enclosures

cc via email w/encls:
B. Esmeralda, MNI

I. PROJECT OVERVIEW

A. PROPERTY LOCATION, EXISTING USE, AND LAND OWNERSHIP

The Maui County Council Boy Scouts of America (BSA) is proposing to construct a new dining hall and related fire protection and domestic water system improvements at Camp Maluhia (Tax Map Key (TMK) (2)3-1-001:028) (Parcel 28) located at Kahakuloa, Maui, Hawaii. See **Figure 1** and **Figure 2**. This new facility will replace the existing aging dining hall which was originally built in 1938. The new dining hall will be located in proximity to other camp supporting facilities including the Long House, Camp Office, camp ground cabins and swimming pool. See **Figure 3**.

Situated on the northeastern slopes of the West Maui Mountains, the camp is located on a hilly, densely vegetated parcel of land which provides scenic views of the Kahakuloa area and the Pacific Ocean. Access to the BSA-owned Parcel 28 is via a paved local access road which traverses a State-owned parcel identified as TMK (2)3-1-001:001 (Parcel 1). Parcel 1 is leased by the BSA from the State of Hawaii and utilized for outdoor wilderness camp experiences. There are no camp-related buildings on Parcel 1, although an existing water tank which serves the camp (Parcel 28) is located within this State-owned lot. A portion of the State-owned parcel is used for cattle grazing.

In addition, the Department of Land and Natural Resources (DLNR), Division of Forestry and Wildlife (DOFAW), intends to construct an unmarked, gravel parking lot, approximately 144 feet by 60 feet in area, and one (1) Americans With Disabilities Act (ADA)-accessible stall on Parcel 1 for the use of hikers utilizing the Waihee Ridge Trail (Trail) which originates on Parcel 1. Refer to **Figure 2**. The Trail is an approximately 2.5 mile hike which climbs the windward slope of the West Maui Mountains and affords the hikers panoramic views of Wailuku and central Maui.

B. PROJECT NEED

1. Boy Scouts of America New Dining Hall and Water System Improvements

The camp parcel is owned and operated by the BSA, a 501(c)(3) non-profit organization. In this regard, the camp is operated as a non-commercial camp. The camp has been serving scouts as well as other community organizations since its original development in the 1930's. Currently, the camp is occupied 60 percent of the year and 95 percent of the weekends throughout the year, making it one of the most regularly used scout camps nationally.

Constructed in 1938, the existing dining hall is aging and has fallen into disrepair. The proposed dining hall is intended to better serve the scouting and local community and will not be used for commercial, profit ventures.

In order to support the new dining facility, improvements to the camp fire protection and domestic water systems including the construction of two (2) new water tanks, new booster pump system and waterlines are required to meet current design standards. A portion of the water system improvements will be on the State's Parcel 1. Refer to **Figure 2**.

2. Division of Forestry and Wildlife Parking Lot for Waihee Ridge Trail

The Waihee Ridge Trail has long been used by Maui residents and visitors alike. Currently, no parking lot is provided for trail users and, as such, most park on the gravel parking lots on Parcel 1 which are designated for Camp Maluhia. Refer to **Figure 2**. Because the Camp Maluhia parking lots are utilized daily by the hikers, issues relating to their management and security have been of concern. Over the years, Camp administrators have reported loitering, littering, and drug and alcohol use in the parking lots. These activities pose potential conflict with Boy Scouts and community members who utilize the Camp's facilities. The proposed Trail parking lot will allow the Camp to install a new gate to secure its two (2) parking lots and will allow for improved access management for Trail users.

C. PROPOSED ACTION

The proposed dining hall will be located at the core of the camp's building facilities, as shown in **Figure 3**. The proposed structure will total approximately 7,500 square feet (sq. ft.). It will feature approximately 1,400 sq. ft. in kitchen space; 3,300 sq. ft. in dining room space; 500 sq. ft. in restroom space, all on the main level; and 2,300 sq. ft. in open activity area space on the lower level. See **Figure 4**. As the camp is located in a hilly area, the building will be constructed into a slope, with the main level accessible by an existing roadway that traverses the camp. The lower level will be open to the slope below. The new dining hall will be centrally located in the camp, in close proximity to the Long House, swimming pool, and camp ground cabins.

This action triggered the need to provide off-street parking as per the Maui County Code, Section 19.36A. As such, the BSA is requesting formal designation of the two (2) existing gravel parking areas on Parcel 1 to fulfill the parking requirements of Camp Maluhia. An application for Off-Site Parking Approval for the two (2) parking areas has also been prepared for review and approval by the Maui Planning Commission. See **Figure 5**.

The proposed water system improvements will include the construction of two (2) glass-fused-to-steel bolted water tanks with sloped steel roofs and concrete foundations; one (1) 67,000-gallon fire protection water tank and one (1) 24,000-gallon drinking water tank, both to be constructed at the site of the camp's existing domestic water storage facility at an elevation of about 1,260 feet above mean sea level. In addition, approximately 850 feet of the existing 2-inch transmission pipeline in Makamakaole Gulch will be replaced with new heavy-wall, standard dimension ratio (SDR) 7, high density polyethylene (HDPE) pipe. This repair effort will be located on adjacent state-owned parcel TMK (2) 3-1-001:029. This measure will be taken to avoid breaks that often occur in the existing transmission pipeline due to high pressures which result in high water costs and inconvenience to campers. A new 20 gallons per minute (gpm) two-pump booster bump system and controls, 2,500-gallon polyethylene control tank, and 10-foot by 10-foot concrete masonry shed will also be constructed at an elevation of approximately 1,030 feet above mean sea level, replacing the existing booster pump system. The new system will draw water from the new control tank and pump the water to the new fire protection and drinking water tanks. Other requirements of this new system include radio controlled tank-level float switches, pressure switches, pump protection controls, and associated electrical system. Lastly, an 8-inch fire protection line from the new fire protection tank to the new dining hall, in addition to new 3-inch lines from the drinking water tank to the new dining hall and lines tying into the existing system in the vicinity of the dining hall would be constructed. All pipes, fittings, and other materials will conform to County of Maui, Department of Water Supply standards. See **Figure 6**.

In addition, the proposed parking lot will be located just above the existing gravel parking lots designated for Camp Maluhia. Refer to **Figure 2**. The parking lot will be unmarked and gravelled. There will also be one (1) paved ADA-accessible stall provided. See **Figure 7**. The parking lot, apart from the ADA-accessible stalls, will be constructed of gravel to maintain permeability during rainfall events, and to maintain design consistency with the adjacent Camp Maluhia parking lots.

6. **Streams and Wetlands**

a. **Existing Conditions**

There are two (2) streams on the State-owned parcel that are within the vicinity of the proposed project. The Makamakaole Stream is located approximately 1,500 feet to the north of the proposed new dining hall site, and the Maluhia Stream is approximately 900 feet east of the site of the proposed water system improvements. See **Figure 13**.

b. **Potential Impacts and Mitigation Measures**

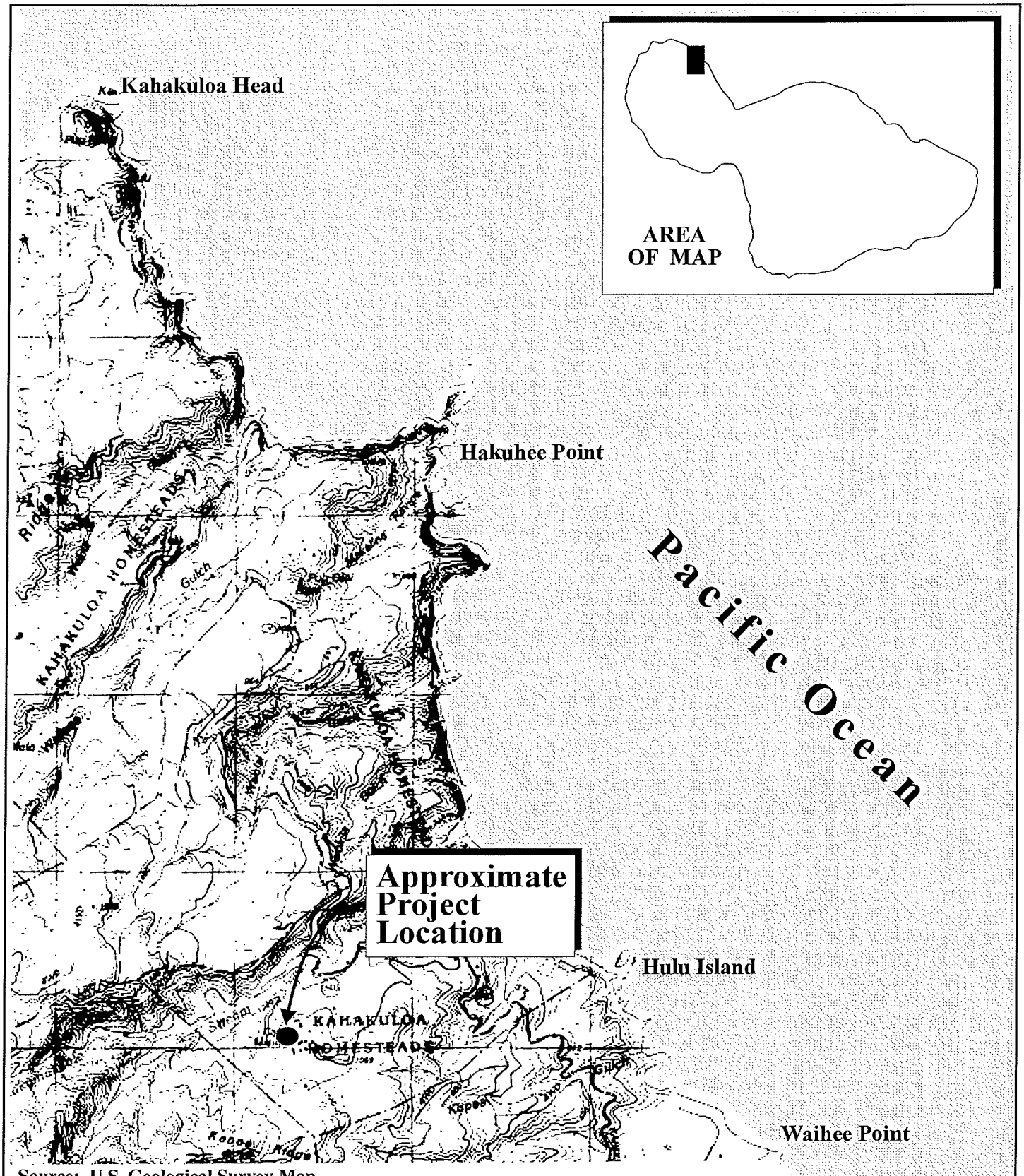
The project will utilize Best Management Practices (BMPs) to minimize soil erosion attributed to construction. Runoff will be managed so as not to affect downstream properties, resources, or nearby stream systems. In this regard, the proposed project is not anticipated to affect stream and wetland conditions in the area.

7. **Flora and Fauna**

a. **Existing Conditions**

A flora and fauna field survey of the entire Camp Maluhia parcel (Parcel 28) and a portion of the adjacent State-owned parcel (Parcel 1) (water system improvements and parking lot portion) was undertaken. The results of this study are documented in the report entitled "*Flora and Fauna Study, Camp Maluhia Improvements Project*" which is incorporated in this EA document as **Appendix "A"**. The report notes that 147 plant species were recorded during the survey. Of these, 131 were non-native, with the remaining species categorized as indigenous or endemic to Hawaii. None of the plant species identified were deemed endangered or threatened. Plant types found included ferns, conifers, monocots, and dicots.

The flora and fauna report also documents field findings related to mammals, birds, insects, and mollusks. Four (4) mammal species were observed (domestic cat, feral pig, mongoose, and axis deer). Birdlife was considered moderate. The observed species listed were the common myna, zebra dove, and chicken. Insects documented included the European garden spider, Australian hoverfly, and small rice grasshopper. The East African snail was the only mollusk identified.



Source: U.S. Geological Survey Map

Figure 1 Camp Maluhia and Related Area Improvements

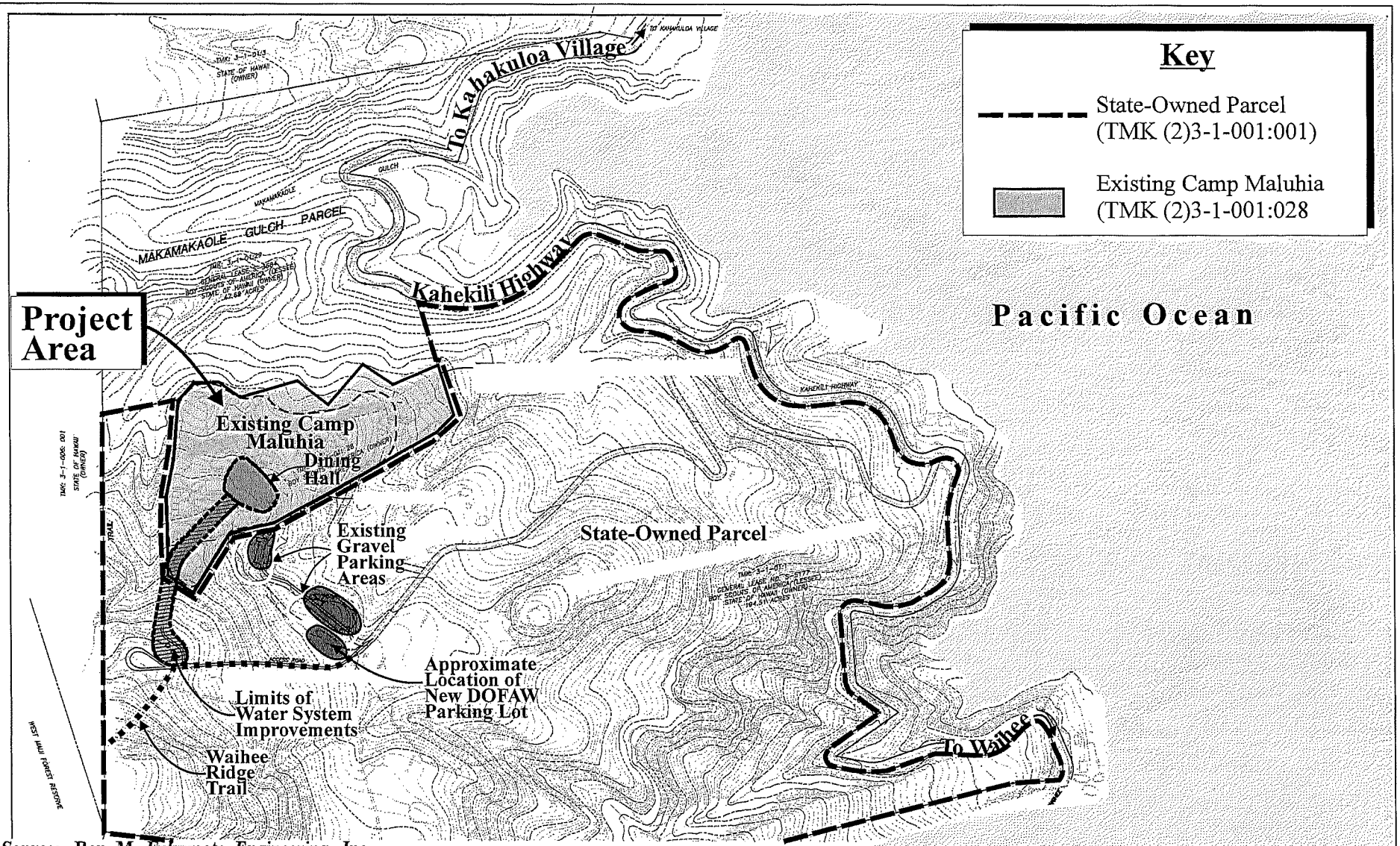
Regional Location Map

0 1,250 Feet
625 2,500

Prepared for: Maui County Council Boy Scouts of America and State of Hawaii, Department of Land and Natural Resources

MUNEKIYO & HIRAGA, INC.

BSA/CAmpMaluhiaImpr/DraftEA/regional.BW



Source: Ron M. Fukumoto Engineering, Inc.

Figure 2 Camp Maluhia and Related Area Improvements

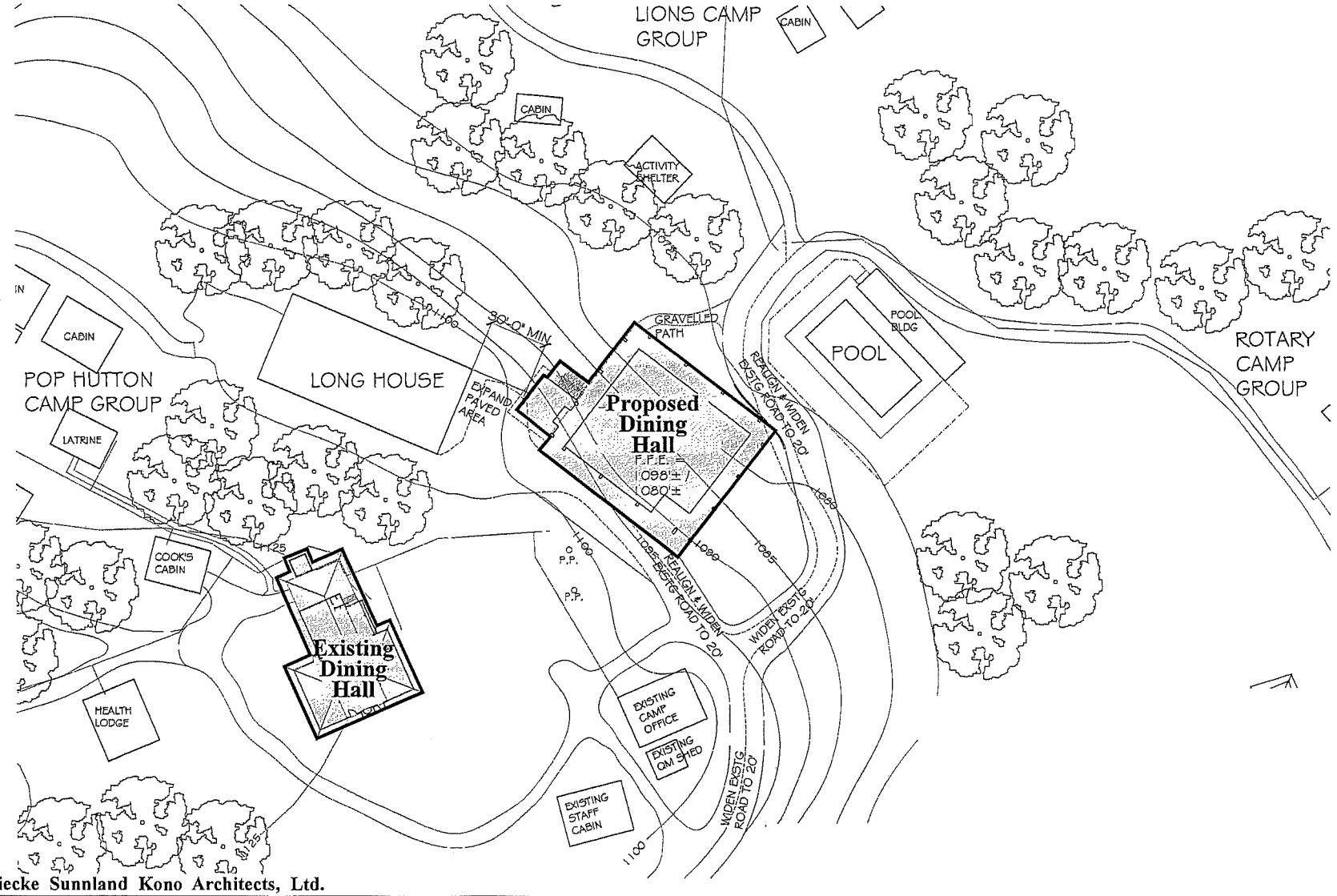
Property Location Map

NOT TO SCALE

Prepared for: Maui County Council Boy Scouts of America and State of Hawaii, Department of Land and Natural Resources

MUNEKIYO & HIRAGA, INC.

BSA/CampMaluhiaimpr/DraftEA/propertylocation.ea



Source: Riecke Sunnland Kono Architects, Ltd.

Figure 3 Camp Maluhia and Related Area Improvements

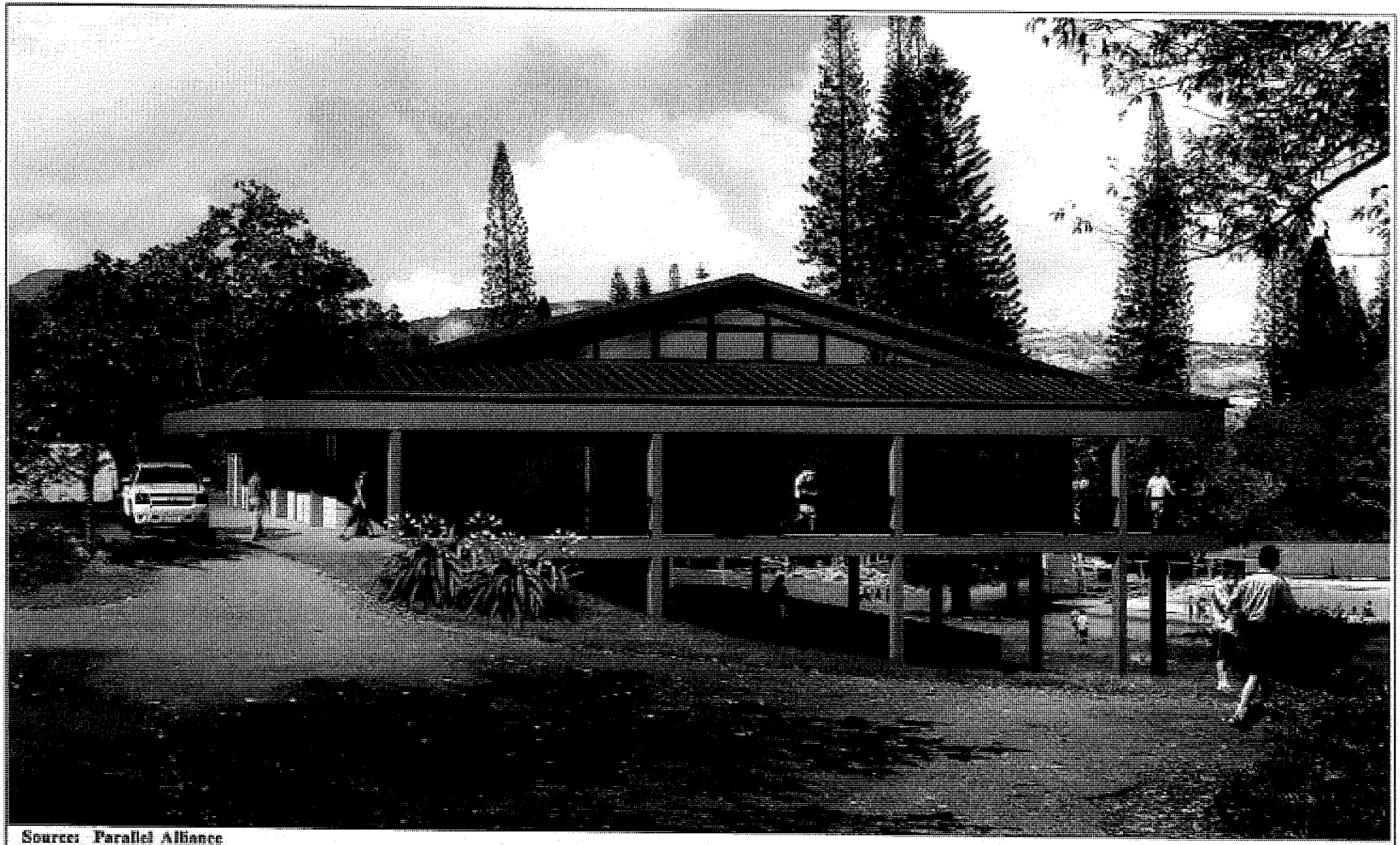
Site Plan

NOT TO SCALE

Prepared for: Maui County Council Boy Scouts of America and State of Hawaii, Department of Land and Natural Resources

MUNEKIYO & HIRAGA, INC.

BSA/CampMaluhiaimpr/Draft EA/SitePlan



Source: Parallel Alliance

Figure 4 Camp Maluhia and Related Area Improvements

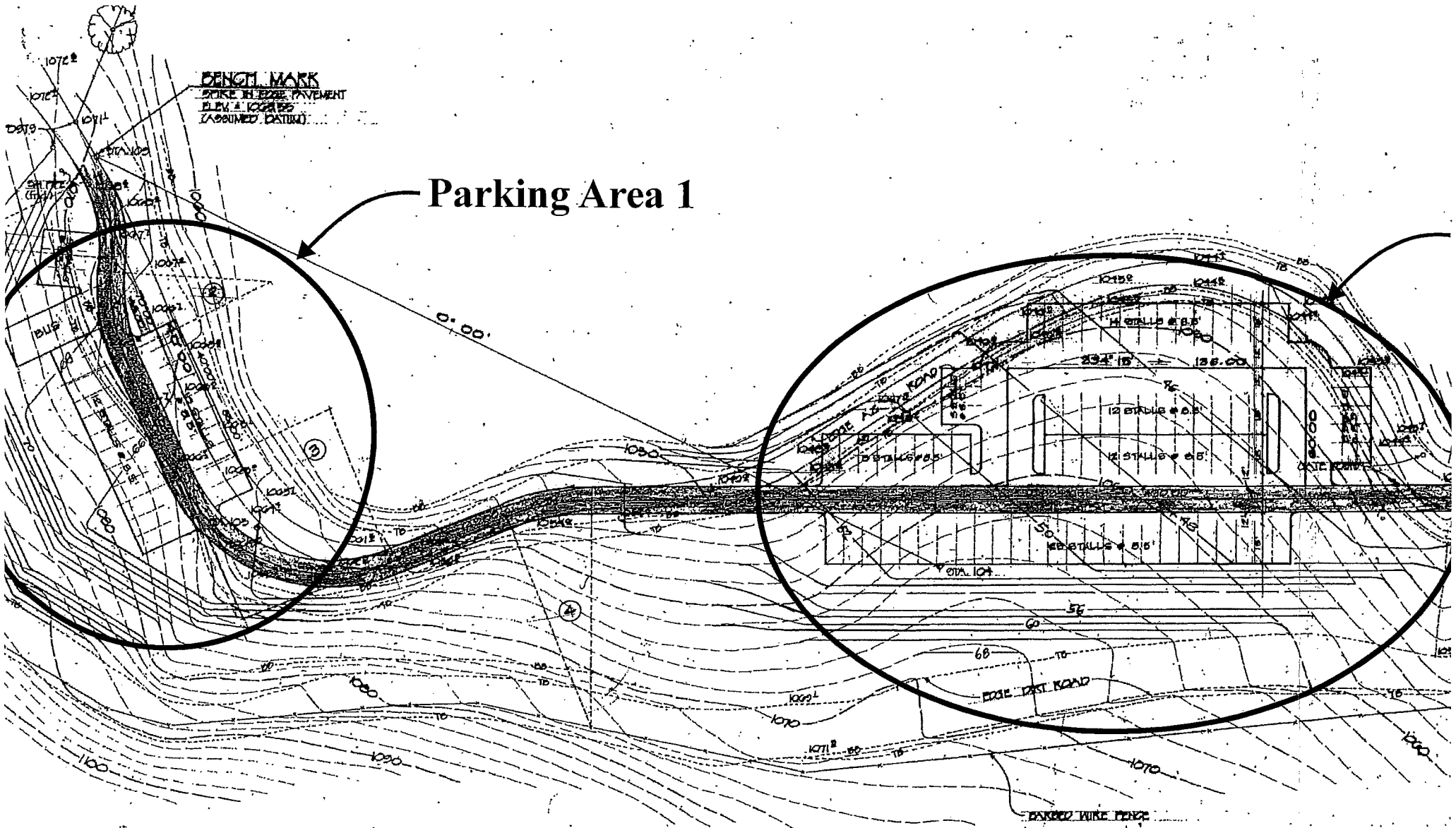
Architectural Rendering of Proposed Dining Hall

NOT TO SCALE

Prepared for: Maui County Council Boy Scouts of America and State of Hawaii, Department of Land and Natural Resources

MUNEKIYO & HIRAGA, INC.

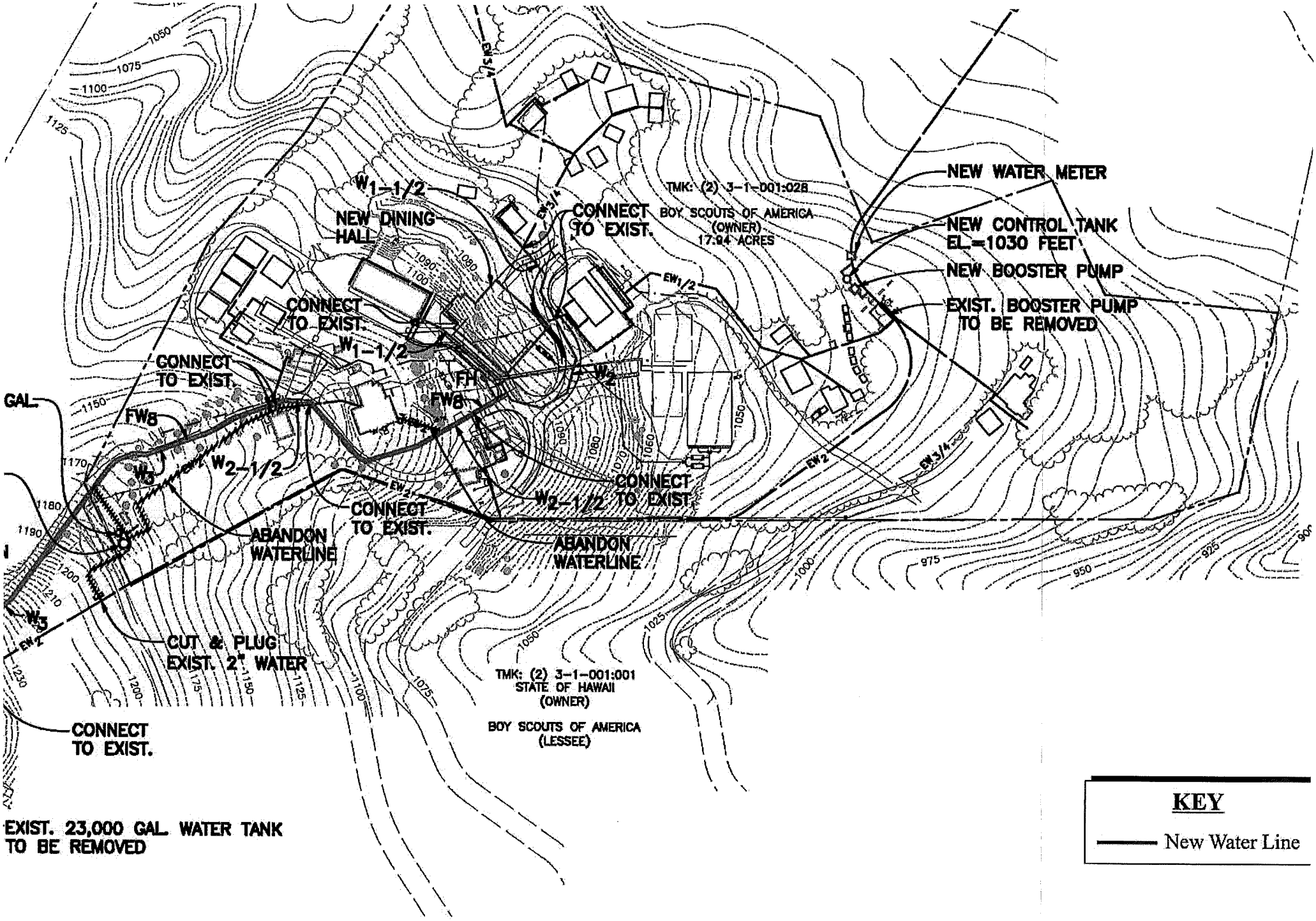
BSA/CampMaluhia/mpr/Draft EA/rendering2



nts, Inc.

Camp Maluhia and Related Area Improvements

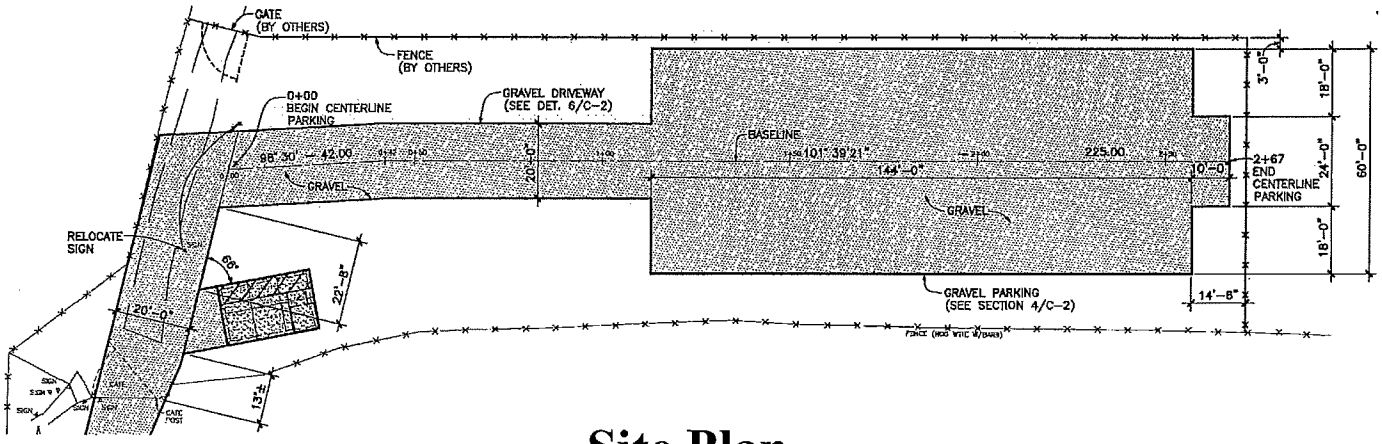
Existing Parking Areas



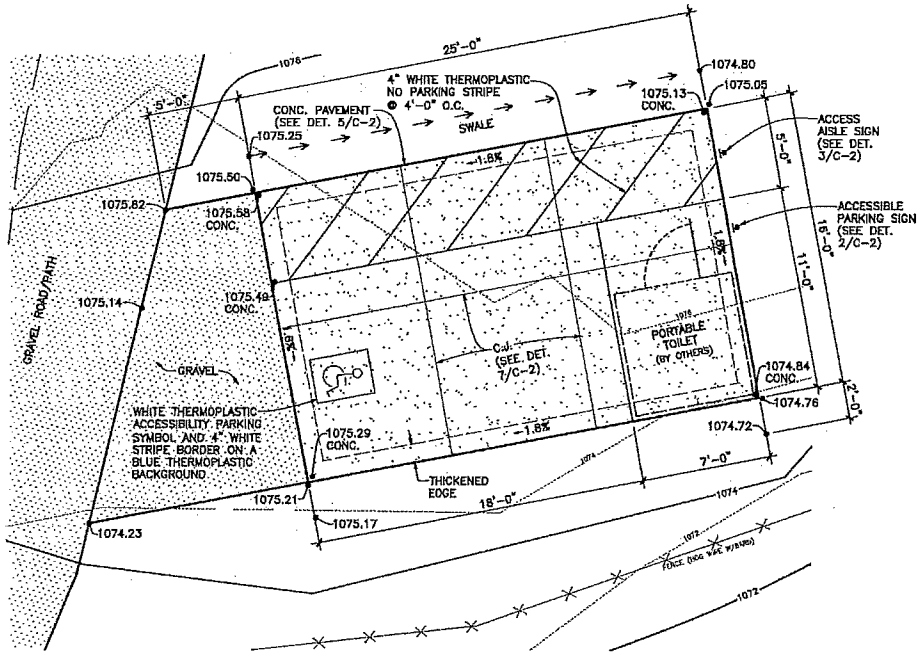
Camp Maluhia and Related Area Improvements

NOT TO SCALE

matic Engineering Plan for Proposed Camp Maluhia Water System Improvements



Site Plan



Accessible Parking Detail

Source: Fukumoto Engineering, Inc.

Figure 7

Camp Maluhia and Related Area Improvements

Proposed Waihee Ridge Trail Parking Lot

NOT TO SCALE

Prepared for: Maui County Council Boy Scouts of America and State of Hawaii, Department of Land and Natural Resources

MUNEKIYO & HIRAGA, INC.

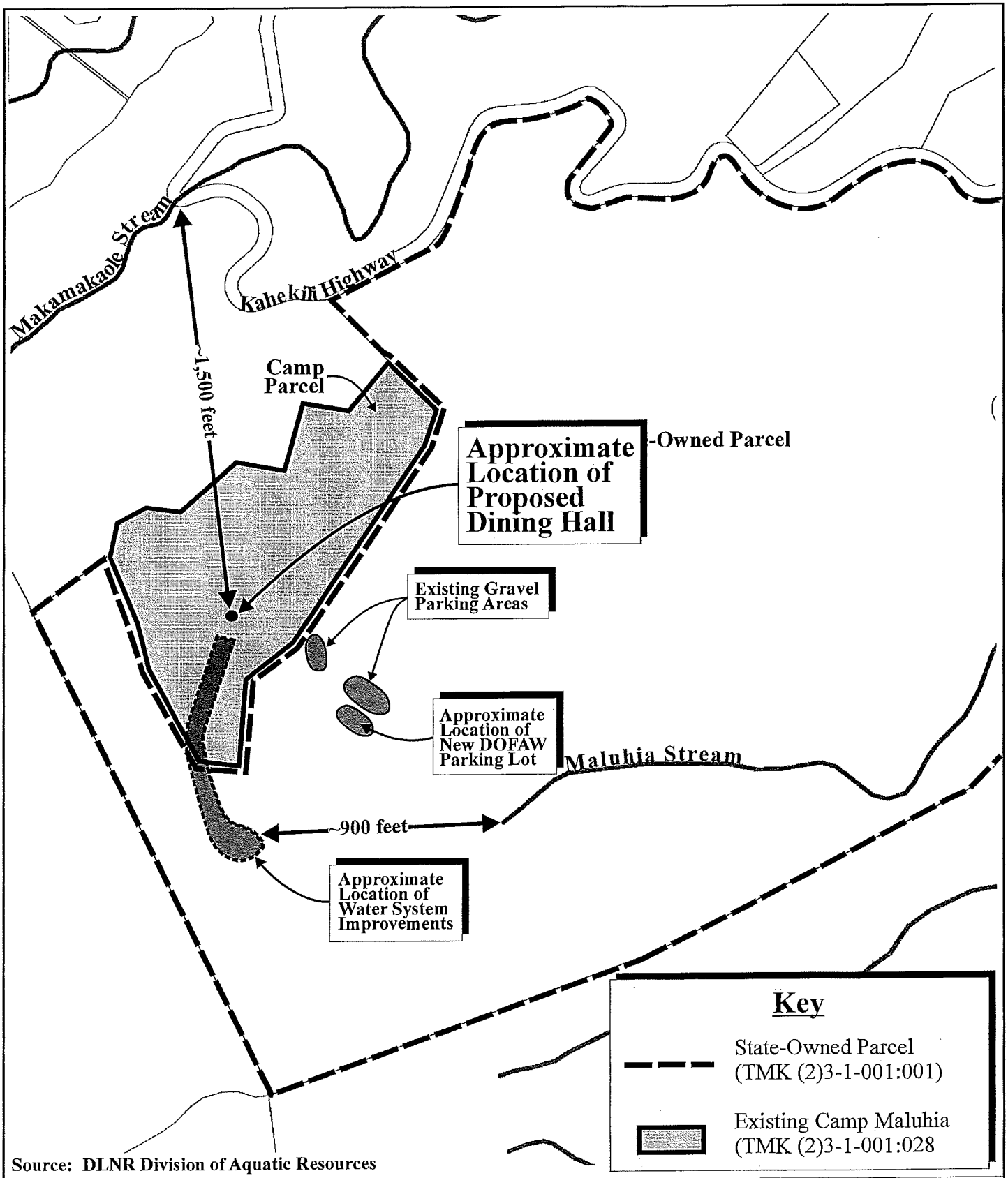


Figure 13 Camp Maluhia and Related Area Improvements

Streams and Wetlands

0 250 Feet
125 500

Prepared for: Maui County Council Boy Scouts of America and State of Hawaii, Department of Land and Natural Resources

MUNEKIYO & HIRAGA, INC.

BSA/CampMaluhiaImpr/DraftEA/StreamsandWet

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 19 Feb 2015

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:
Honolulu District (CEPOH-RO); Camp Maluhia and Related Area Improvements; POH-2015-00030-A (BSA-Camp Maluhia)

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: HI County/parish/borough: Maui City: Kahakuloa
Center coordinates of site (lat/long in degree decimal format): Lat. 20.954301° N, Long. 156.534098° W.
Universal Transverse Mercator: UTM Zone 4
Name of nearest waterbody: Makamakaole Stream and Maluhia Stream
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Pacific Ocean
Name of watershed or Hydrologic Unit Code (HUC): 200600000506
☒ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
☒ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc…) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):
☒ Office (Desk) Determination. Date: 12 Feb 2015
☐ Field Determination. Date(s):

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Are no** *"navigable waters of the U.S."* within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [*Required*]
☐ Waters subject to the ebb and flow of the tide.
☐ Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
Explain: .

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **Are no** *"waters of the U.S."* within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [*Required*]

1. **Waters of the U.S.**
   a. **Indicate presence of waters of U.S. in review area (check all that apply):** [1]
      ☐ TNWs, including territorial seas
      ☐ Wetlands adjacent to TNWs
      ☐ Relatively permanent waters[2] (RPWs) that flow directly or indirectly into TNWs
      ☐ Non-RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
      ☐ Impoundments of jurisdictional waters
      ☐ Isolated (interstate or intrastate) waters, including isolated wetlands

   b. **Identify (estimate) size of waters of the U.S. in the review area:**
      Non-wetland waters: linear feet: width (ft) and/or acres.
      Wetlands: acres.

   c. **Limits (boundaries) of jurisdiction** based on: **Pick List**
      Elevation of established OHWM (if known): .

2. **Non-regulated waters/wetlands (check if applicable):**[3]

[1] Boxes checked below shall be supported by completing the appropriate sections in Section III below.
[2] For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).
[3] Supporting documentation is presented in Section III.F.

☐ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: .

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. TNW
Identify TNW: .

Summarize rationale supporting determination: .

2. Wetland adjacent to TNW
Summarize rationale supporting conclusion that wetland is "adjacent": .

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:
Watershed size: **Pick List**
Drainage area: **Pick List**
Average annual rainfall: inches
Average annual snowfall: inches

(ii) Physical Characteristics:
(a) Relationship with TNW:
☐ Tributary flows directly into TNW.
☐ Tributary flows through **Pick List** tributaries before entering TNW.

Project waters are **Pick List** river miles from TNW.
Project waters are **Pick List** river miles from RPW.
Project waters are **Pick List** aerial (straight) miles from TNW.
Project waters are **Pick List** aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: .

Identify flow route to TNW[5]: .
Tributary stream order, if known: .

[4] Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.
[5] Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

(b) General Tributary Characteristics (check all that apply):

Tributary is:
- ☐ Natural
- ☐ Artificial (man-made). Explain: .
- ☐ Manipulated (man-altered). Explain: .

Tributary properties with respect to top of bank (estimate):
- Average width: feet
- Average depth: feet
- Average side slopes: **Pick List.**

Primary tributary substrate composition (check all that apply):

☐ Silts	☐ Sands	☐ Concrete
☐ Cobbles	☐ Gravel	☐ Muck
☐ Bedrock	☐ Vegetation. Type/% cover:	
☐ Other. Explain: .		

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: .
Presence of run/riffle/pool complexes. Explain: .
Tributary geometry: **Pick List**
Tributary gradient (approximate average slope): %

(c) Flow:

Tributary provides for: **Pick List**
Estimate average number of flow events in review area/year: **Pick List**
Describe flow regime: .
Other information on duration and volume: .

Surface flow is: **Pick List**. Characteristics: .

Subsurface flow: **Pick List**. Explain findings: .
- ☐ Dye (or other) test performed: .

Tributary has (check all that apply):
- ☐ Bed and banks
- ☐ OHWM[6] (check all indicators that apply):

☐ clear, natural line impressed on the bank	☐ the presence of litter and debris
☐ changes in the character of soil	☐ destruction of terrestrial vegetation
☐ shelving	☐ the presence of wrack line
☐ vegetation matted down, bent, or absent	☐ sediment sorting
☐ leaf litter disturbed or washed away	☐ scour
☐ sediment deposition	☐ multiple observed or predicted flow events
☐ water staining	☐ abrupt change in plant community
☐ other (list):	

- ☐ Discontinuous OHWM.[7] Explain: .

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

☐ High Tide Line indicated by:	☐ Mean High Water Mark indicated by:
☐ oil or scum line along shore objects	☐ survey to available datum;
☐ fine shell or debris deposits (foreshore)	☐ physical markings;
☐ physical markings/characteristics	☐ vegetation lines/changes in vegetation types.
☐ tidal gauges	
☐ other (list):	

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).
Explain: .
Identify specific pollutants, if known: .

[6]A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.
[7]Ibid.

(iv) Biological Characteristics. Channel supports (check all that apply):

- ☐ Riparian corridor. Characteristics (type, average width): .
- ☐ Wetland fringe. Characteristics: .
- ☐ Habitat for:
  - ☐ Federally Listed species. Explain findings: .
  - ☐ Fish/spawn areas. Explain findings: .
  - ☐ Other environmentally-sensitive species. Explain findings: .
  - ☐ Aquatic/wildlife diversity. Explain findings: .

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Properties:

Wetland size: acres

Wetland type. Explain: .

Wetland quality. Explain: .

Project wetlands cross or serve as state boundaries. Explain: .

(b) General Flow Relationship with Non-TNW:

Flow is: **Pick List**. Explain: .

Surface flow is: **Pick List**

Characteristics: .

Subsurface flow: **Pick List**. Explain findings: .

- ☐ Dye (or other) test performed: .

(c) Wetland Adjacency Determination with Non-TNW:

- ☐ Directly abutting
- ☐ Not directly abutting
  - ☐ Discrete wetland hydrologic connection. Explain: .
  - ☐ Ecological connection. Explain: .
  - ☐ Separated by berm/barrier. Explain: .

(d) Proximity (Relationship) to TNW

Project wetlands are **Pick List** river miles from TNW.

Project waters are **Pick List** aerial (straight) miles from TNW.

Flow is from: **Pick List.**

Estimate approximate location of wetland as within the **Pick List** floodplain.

(ii) Chemical Characteristics:

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: .

Identify specific pollutants, if known: .

(iii) Biological Characteristics. Wetland supports (check all that apply):

- ☐ Riparian buffer. Characteristics (type, average width): .
- ☐ Vegetation type/percent cover. Explain: .
- ☐ Habitat for:
  - ☐ Federally Listed species. Explain findings: .
  - ☐ Fish/spawn areas. Explain findings: .
  - ☐ Other environmentally-sensitive species. Explain findings: .
  - ☐ Aquatic/wildlife diversity. Explain findings: .

3. Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis: **Pick List**

Approximately ( ) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)

Summarize overall biological, chemical and physical functions being performed: .

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: .

2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
   - ☐ TNWs: linear feet width (ft), Or, acres.
   - ☐ Wetlands adjacent to TNWs: acres.

2. **RPWs that flow directly or indirectly into TNWs.**
   - ☐ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: .
   - ☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: .

Provide estimates for jurisdictional waters in the review area (check all that apply):
- ☐ Tributary waters: linear feet width (ft).
- ☐ Other non-wetland waters: acres.
  Identify type(s) of waters: .

3. **Non-RPWs[8] that flow directly or indirectly into TNWs.**
   ☐ Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

   Provide estimates for jurisdictional waters within the review area (check all that apply):
   - ☐ Tributary waters: linear feet width (ft).
   - ☐ Other non-wetland waters: acres.
     Identify type(s) of waters: .

4. **Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**
   ☐ Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
   ☐ Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

   ☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

   Provide acreage estimates for jurisdictional wetlands in the review area: acres.

5. **Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**
   ☐ Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.

   Provide acreage estimates for jurisdictional wetlands in the review area: acres.

6. **Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.**
   ☐ Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

   Provide estimates for jurisdictional wetlands in the review area: acres.

7. **Impoundments of jurisdictional waters.[9]**
   As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.
   - ☐ Demonstrate that impoundment was created from "waters of the U.S.," or
   - ☐ Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
   - ☐ Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):[10]
- ☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.
- ☐ from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- ☐ which are or could be used for industrial purposes by industries in interstate commerce.
- ☐ Interstate isolated waters. Explain: .
- ☐ Other factors. Explain: .

Identify water body and summarize rationale supporting determination: .

[8]See Footnote # 3.
[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
[10] **Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

Provide estimates for jurisdictional waters in the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .
☐ Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):
☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
☐ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
☐ Prior to the Jan 2001 Supreme Court decision in "*SWANCC*," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
☐ Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: .
☒ Other: (explain, if not covered above): **Project sites for the Boy Scouts of America (BSA) Camp Maluhia new dining facility 0(.184 acre) and proposed water system improvements (5.32 acres) consist entirely of uplands.**

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):
☐ Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: .
☐ Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):
☐ Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: .
☐ Wetlands: acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):
☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Draft EA, Jan 2015 prepared by Munekiyo & Hiraga, Inc.
☐ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
☐ Office concurs with data sheets/delineation report.
☐ Office does not concur with data sheets/delineation report.
☐ Data sheets prepared by the Corps: .
☐ Corps navigable waters' study: .
☐ U.S. Geological Survey Hydrologic Atlas: .
☐ USGS NHD data.
☐ USGS 8 and 12 digit HUC maps.
☒ U.S. Geological Survey map(s). Cite scale & quad name: 7.5-min Wailuku and Kahakuloa Quads.
☐ USDA Natural Resources Conservation Service Soil Survey. Citation: .
☒ National wetlands inventory map(s). Cite name: USFWS NWI e-mapper.
☐ State/Local wetland inventory map(s): .
☐ FEMA/FIRM maps: .
☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date):Google Earth, 16 Aug 2014.
or ☐ Other (Name & Date): .
☐ Previous determination(s). File no. and date of response letter: .
☐ Applicable/supporting case law: .
☐ Applicable/supporting scientific literature: .
☒ Other information (please specify): This approved JD evaluates both (2) individual project work sites (new dining facility, water system improvements) for the Boy Scouts of America, Camp Maluhia (landowner)..

B. ADDITIONAL COMMENTS TO SUPPORT JD: .

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 19 Feb 2015

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:
Honolulu District (CEPOH-RO); Camp Maluhia and Related Area Improvements; POH-2015-00030-B (DLNR-DOFAW))

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: HI County/parish/borough: Maui City: Kahakuloa
Center coordinates of site (lat/long in degree decimal format): Lat. 20.952583° N, Long. -156.531778° W.
Universal Transverse Mercator: UTM Zone 4
Name of nearest waterbody: Makamakaole Stream and Maluhia Stream
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Pacific Ocean
Name of watershed or Hydrologic Unit Code (HUC): 200600000506
☒ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
☒ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc…) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):
☒ Office (Desk) Determination. Date: 12 Feb 2015
☐ Field Determination. Date(s):

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Are no** *"navigable waters of the U.S."* within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [*Required*]
☐ Waters subject to the ebb and flow of the tide.
☐ Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
Explain: .

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **Are no** *"waters of the U.S."* within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [*Required*]

1. **Waters of the U.S.**
   a. **Indicate presence of waters of U.S. in review area (check all that apply):** [1]
      ☐ TNWs, including territorial seas
      ☐ Wetlands adjacent to TNWs
      ☐ Relatively permanent waters[2] (RPWs) that flow directly or indirectly into TNWs
      ☐ Non-RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
      ☐ Impoundments of jurisdictional waters
      ☐ Isolated (interstate or intrastate) waters, including isolated wetlands

   b. **Identify (estimate) size of waters of the U.S. in the review area:**
      Non-wetland waters: linear feet: width (ft) and/or acres.
      Wetlands: acres.

   c. **Limits (boundaries) of jurisdiction** based on: **Pick List**
      Elevation of established OHWM (if known): .

2. **Non-regulated waters/wetlands (check if applicable):**[3]

[1] Boxes checked below shall be supported by completing the appropriate sections in Section III below.
[2] For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).
[3] Supporting documentation is presented in Section III.F.

☐ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: .

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. **TNW**
   Identify TNW: .

   Summarize rationale supporting determination: .

2. **Wetland adjacent to TNW**
   Summarize rationale supporting conclusion that wetland is "adjacent": .

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. **Characteristics of non-TNWs that flow directly or indirectly into TNW**

   (i) **General Area Conditions:**
   Watershed size: **Pick List**
   Drainage area: **Pick List**
   Average annual rainfall: inches
   Average annual snowfall: inches

   (ii) **Physical Characteristics:**
   (a) Relationship with TNW:
   ☐ Tributary flows directly into TNW.
   ☐ Tributary flows through **Pick List** tributaries before entering TNW.

   Project waters are **Pick List** river miles from TNW.
   Project waters are **Pick List** river miles from RPW.
   Project waters are **Pick List** aerial (straight) miles from TNW.
   Project waters are **Pick List** aerial (straight) miles from RPW.
   Project waters cross or serve as state boundaries. Explain: .

   Identify flow route to TNW[5]: .
   Tributary stream order, if known: .

[4] Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.
[5] Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

(b) General Tributary Characteristics (check all that apply):

Tributary is: ☐ Natural
☐ Artificial (man-made). Explain: .
☐ Manipulated (man-altered). Explain: .

Tributary properties with respect to top of bank (estimate):
Average width: feet
Average depth: feet
Average side slopes: **Pick List.**

Primary tributary substrate composition (check all that apply):

☐ Silts	☐ Sands	☐ Concrete
☐ Cobbles	☐ Gravel	☐ Muck
☐ Bedrock	☐ Vegetation. Type/% cover:	
☐ Other. Explain: .		

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: .
Presence of run/riffle/pool complexes. Explain: .
Tributary geometry: **Pick List**
Tributary gradient (approximate average slope): %

(c) Flow:

Tributary provides for: **Pick List**
Estimate average number of flow events in review area/year: **Pick List**
Describe flow regime: .
Other information on duration and volume: .

Surface flow is: **Pick List.** Characteristics: .

Subsurface flow: **Pick List**. Explain findings: .
☐ Dye (or other) test performed: .

Tributary has (check all that apply):
☐ Bed and banks
☐ OHWM[6] (check all indicators that apply):

☐ clear, natural line impressed on the bank	☐ the presence of litter and debris
☐ changes in the character of soil	☐ destruction of terrestrial vegetation
☐ shelving	☐ the presence of wrack line
☐ vegetation matted down, bent, or absent	☐ sediment sorting
☐ leaf litter disturbed or washed away	☐ scour
☐ sediment deposition	☐ multiple observed or predicted flow events
☐ water staining	☐ abrupt change in plant community
☐ other (list):	

☐ Discontinuous OHWM.[7] Explain: .

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

☐ High Tide Line indicated by:	☐ Mean High Water Mark indicated by:
☐ oil or scum line along shore objects	☐ survey to available datum;
☐ fine shell or debris deposits (foreshore)	☐ physical markings;
☐ physical markings/characteristics	☐ vegetation lines/changes in vegetation types.
☐ tidal gauges	
☐ other (list):	

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).
Explain: .
Identify specific pollutants, if known: .

[6]A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.
[7]Ibid.

(iv) Biological Characteristics. Channel supports (check all that apply):

- ☐ Riparian corridor. Characteristics (type, average width): .
- ☐ Wetland fringe. Characteristics: .
- ☐ Habitat for:
  - ☐ Federally Listed species. Explain findings: .
  - ☐ Fish/spawn areas. Explain findings: .
  - ☐ Other environmentally-sensitive species. Explain findings: .
  - ☐ Aquatic/wildlife diversity. Explain findings: .

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Properties:

Wetland size: acres

Wetland type. Explain: .

Wetland quality. Explain: .

Project wetlands cross or serve as state boundaries. Explain: .

(b) General Flow Relationship with Non-TNW:

Flow is: **Pick List**. Explain: .

Surface flow is: **Pick List**

Characteristics: .

Subsurface flow: **Pick List**. Explain findings: .

- ☐ Dye (or other) test performed: .

(c) Wetland Adjacency Determination with Non-TNW:

- ☐ Directly abutting
- ☐ Not directly abutting
  - ☐ Discrete wetland hydrologic connection. Explain: .
  - ☐ Ecological connection. Explain: .
  - ☐ Separated by berm/barrier. Explain: .

(d) Proximity (Relationship) to TNW

Project wetlands are **Pick List** river miles from TNW.

Project waters are **Pick List** aerial (straight) miles from TNW.

Flow is from: **Pick List.**

Estimate approximate location of wetland as within the **Pick List** floodplain.

(ii) Chemical Characteristics:

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: .

Identify specific pollutants, if known: .

(iii) Biological Characteristics. Wetland supports (check all that apply):

- ☐ Riparian buffer. Characteristics (type, average width): .
- ☐ Vegetation type/percent cover. Explain: .
- ☐ Habitat for:
  - ☐ Federally Listed species. Explain findings: .
  - ☐ Fish/spawn areas. Explain findings: .
  - ☐ Other environmentally-sensitive species. Explain findings: .
  - ☐ Aquatic/wildlife diversity. Explain findings: .

3. Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis: **Pick List**

Approximately ( ) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)

Summarize overall biological, chemical and physical functions being performed: .

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: .

2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
   - ☐ TNWs: linear feet width (ft), Or, acres.
   - ☐ Wetlands adjacent to TNWs: acres.

2. **RPWs that flow directly or indirectly into TNWs.**
   - ☐ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: .
   - ☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: .

Provide estimates for jurisdictional waters in the review area (check all that apply):
- ☐ Tributary waters: linear feet width (ft).
- ☐ Other non-wetland waters: acres.
  Identify type(s) of waters: .

3. **Non-RPWs[8] that flow directly or indirectly into TNWs.**
   ☐ Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

   Provide estimates for jurisdictional waters within the review area (check all that apply):
   - ☐ Tributary waters: linear feet width (ft).
   - ☐ Other non-wetland waters: acres.
     Identify type(s) of waters: .

4. **Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**
   ☐ Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
   - ☐ Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

   - ☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

   Provide acreage estimates for jurisdictional wetlands in the review area: acres.

5. **Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**
   ☐ Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.

   Provide acreage estimates for jurisdictional wetlands in the review area: acres.

6. **Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.**
   ☐ Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

   Provide estimates for jurisdictional wetlands in the review area: acres.

7. **Impoundments of jurisdictional waters.[9]**
   As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.
   - ☐ Demonstrate that impoundment was created from "waters of the U.S.," or
   - ☐ Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
   - ☐ Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):[10]
- ☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.
- ☐ from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- ☐ which are or could be used for industrial purposes by industries in interstate commerce.
- ☐ Interstate isolated waters. Explain: .
- ☐ Other factors. Explain: .

Identify water body and summarize rationale supporting determination: .

[8]See Footnote # 3.
[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
[10] **Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

Provide estimates for jurisdictional waters in the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .
☐ Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):
☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
☐ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
☐ Prior to the Jan 2001 Supreme Court decision in "*SWANCC*," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
☐ Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: .
☒ Other: (explain, if not covered above): **Project sites for the Boy Scouts of America (BSA) Camp Maluhia new dining facility 0(.184 acre) and proposed water system improvements (5.32 acres) consist entirely of uplands.**

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):
☐ Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: .
☐ Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):
☐ Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: .
☐ Wetlands: acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):
☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Draft EA, Jan 2015 prepared by Munekiyo & Hiraga, Inc.
☐ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
☐ Office concurs with data sheets/delineation report.
☐ Office does not concur with data sheets/delineation report.
☐ Data sheets prepared by the Corps: .
☐ Corps navigable waters' study: .
☐ U.S. Geological Survey Hydrologic Atlas: .
☐ USGS NHD data.
☐ USGS 8 and 12 digit HUC maps.
☒ U.S. Geological Survey map(s). Cite scale & quad name: 7.5-min Wailuku and Kahakuloa Quads.
☐ USDA Natural Resources Conservation Service Soil Survey. Citation: .
☒ National wetlands inventory map(s). Cite name: USFWS NWI e-mapper.
☐ State/Local wetland inventory map(s): .
☐ FEMA/FIRM maps: .
☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date):Google Earth, 16 Aug 2014.
or ☐ Other (Name & Date): .
☐ Previous determination(s). File no. and date of response letter: .
☐ Applicable/supporting case law: .
☐ Applicable/supporting scientific literature: .
☒ Other information (please specify): This approved JD evaluates one (1) project work site [new (#3) parking lot) for the State, Dept. of Land and Natural Resources (DNLR), Division of Forestry and Wildlife (DOFAW) (landowner).

B. ADDITIONAL COMMENTS TO SUPPORT JD: .

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: Boy Scouts of America – Camp Maluhia (R. Nakagawa)	File Number: POH-2015-00030-A	Date: **February 19, 2015**

Attached is:		See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of Permission)	A
	PROFFERED PERMIT (Standard Permit or Letter of Permission)	B
	PERMIT DENIAL	C
XX	**APPROVED JURISDICTIONAL DETERMINATION**	**D**
	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://www.usace.army.mil/CECW/Pages/reg_materials.aspx or Corps regulations at 33 CFR Part 331.

A. INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- ACCEPT: If you received a Standard Permit or a Letter of Permission (LOP), you may sign the permit document and return it to the district commander for final authorization. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district commander. Your objections must be received by the district commander within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district commander will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district commander will send you a proffered permit for your reconsideration, as indicated in Section B below.

B. PROFFERED PERMIT: You may accept or appeal the permit

- ACCEPT: If you received a Standard Permit or a Letter of Permission (LOP), you may sign the permit document and return it to the district commander for final authorization. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division commander. This form must be received by the division commander within 60 days of the date of this notice.

C. PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division commander. This form must be received by the division commander within 60 days of the date of this notice.

D. APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- **ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.**
- **APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division commander. This form must be received by the division commander within 60 days of the date of this notice.**

E. PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:	If you only have questions regarding the appeal process you may also contact:
Honolulu District, U.S. Army Corps of Engineers Regulatory Office, CEPOH-RO Building 230 Fort Shafter, Hawaii 96858-5440 Phone: (808) 835-4303	Pacific Ocean Division, U.S. Army Corps of Engineers Cindy Barger, CEPOD-PDC Building 525 Fort Shafter, Hawaii 96858-5440 Phone: (808) 835-4626

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Commanders personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15-day notice of any site investigation, and will have the opportunity to participate in all site investigations.

	Date:	Telephone number:
_____ Signature of appellant or agent.		

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: State, Dept. of Land and Natural Resources (D. Ornellas)	File Number: POH-2015-00030-B	Date: **February 19, 2015**
Attached is:		See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of Permission)	A
	PROFFERED PERMIT (Standard Permit or Letter of Permission)	B
	PERMIT DENIAL	C
XX	**APPROVED JURISDICTIONAL DETERMINATION**	**D**
	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://www.usace.army.mil/CECW/Pages/reg_materials.aspx or Corps regulations at 33 CFR Part 331.

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- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district commander. Your objections must be received by the district commander within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district commander will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district commander will send you a proffered permit for your reconsideration, as indicated in Section B below.

B. PROFFERED PERMIT: You may accept or appeal the permit

- ACCEPT: If you received a Standard Permit or a Letter of Permission (LOP), you may sign the permit document and return it to the district commander for final authorization. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division commander. This form must be received by the division commander within 60 days of the date of this notice.

C. PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division commander. This form must be received by the division commander within 60 days of the date of this notice.

D. APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- **ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.**
- **APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division commander. This form must be received by the division commander within 60 days of the date of this notice.**

E. PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

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ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:	If you only have questions regarding the appeal process you may also contact:
Honolulu District, U.S. Army Corps of Engineers Regulatory Office, CEPOH-RO Building 230 Fort Shafter, Hawaii 96858-5440 Phone: (808) 835-4303	Pacific Ocean Division, U.S. Army Corps of Engineers Cindy Barger, CEPOD-PDC Building 525 Fort Shafter, Hawaii 96858-5440 Phone: (808) 835-4626

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Commanders personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15-day notice of any site investigation, and will have the opportunity to participate in all site investigations.

	Date:	Telephone number:
_____ Signature of appellant or agent.		

Source: Parallel Alliance

Figure 4 Camp Maluhia and Related Area Improvements

Architectural Rendering of Proposed Dining Hall

NOT TO SCALE

Prepared for: Maui County Council Boy Scouts of America and State of Hawaii, Department of Land and Natural Resources

MUNEKIYO & HIRAGA, INC.

BSA/CampMaluhiaimpr/Draft EA/rendering2

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Karlynn K. Fukuda
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Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

Gwen Ohashi Hiraga
SENIOR ADVISOR
Mitsuru "Mich" Hirano
SENIOR ADVISOR

March 11, 2015

Michelle R. Lynch, Chief
Regulatory Office
Department of the Army
Honolulu District
U.S. Army Corps of Engineers
Fort Shafter, Hawaii 96858-5440

SUBJECT: County Special Use Permit Application and Draft Environmental Assessment for Camp Maluhia and Related Improvements, Wailuku, Maui, Hawaii, TMK (2)3-1-001:028 (CUP 2015/0001)
File: POH-2015-00030

Dear Ms. Lynch:

Thank you for your letter dated February 19, 2015, providing comment on the County Special Use Permit application and Draft Environmental Assessment (EA) for the Camp Maluhia and Related Improvements project. On behalf of the Applicants, Maui County Council Boy Scouts of America and the Department of Land and Natural Resources, Division of Forestry and Wildlife, we offer the following information in response to the comments in your letter.

We acknowledge that the U.S. Army Corps of Engineers (USACE) has reviewed the proposed project pursuant to Section 10 of the Rivers and Harbors Act of 1899 (Section 10) which requires that a Department of the Army (DA) permit be obtained for certain structures or work in or affecting navigable waters of the U.S. prior to conducting the work (33 United States Constitution (U.S.C.) 403), and Section 404 of the Clean Water Act (Section 404) which requires that a DA permit be obtained for the discharge of dredged and/or fill material into waters of the U.S., including wetlands, prior to conducting the work (33 U.S.C. 1344).

We understand that based on the information provided and available resources, the USACE has determined that that project sites for the Boy Scouts of America's new dining facility and water system improvements, and the State Department of Land and Natural Resources, Division of Forestry and Wildlife's new Waihee Ridge Trail parking lot are absent of waters of the U.S., including wetlands, that are subject to USACE's

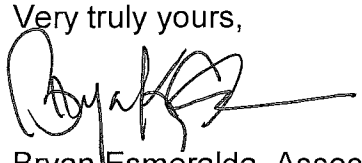
jurisdiction, and as such, are not anticipated to result in activities which require a DA permit.

Furthermore, we acknowledge and understand that should the project scope change, we should consult with the USACE to ensure that the no permit required (NPR) determination is applicable to the new scope of work. We understand that it is the Applicants' responsibility to obtain any federal, state, or local approvals for the proposed project.

We confirm that we are in receipt of the two (2) jurisdictional determinations enclosed with your letter for each of the project components, and that the approved JDs are valid for five (5) years.

Thank you again for your review of and input to this project. Should you have any questions or require additional information, please feel free to contact me at (808) 244-2015.

Very truly yours,



Bryan Esmeralda, Associate

BE:yp
cc: Robert Nakagawa, Maui County Council Boy Scouts of America
Torrie Nohara, Department of Land and Natural Resources
Daniel Ornellas, Department of Land and Natural Resources
Evelyn Aako, Department of Planning
Ronald Fukumoto, Fukumoto Engineering, Inc.
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FEB 05 2015

DAVID Y. IGE
GOVERNOR

DOUGLAS MURDOCK
Comptroller

STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P.O. BOX 119, HONOLULU, HAWAII 96810-0119

(P)1013.5

FEB - 3 2015

MEMORANDUM

TO: The Honorable Carty Chang, Acting Chairperson
Department of Land and Natural Resources

ATTENTION: Mr. Daniel Ornellas, Maui District Land Agent
Department of Land and Natural Resources

FROM: Douglas Murdock
Comptroller

SUBJECT: Draft Environmental Assessment for
Camp Maluhia and Related Improvements
Wailuku, Maui
TMK: (2) 3-1-001: 028 (CUP 2015/0001)

Thank you for the opportunity to provide comments for the subject project. The proposed location does not impact any of the Department of Accounting and General Services' existing facilities in the area, and we have no comments to offer at this time.

If you have any questions, please call me at 586-0400 or your staff may call Ms. Gayle Takasaki of the Public Works Division at 586-0584.

c: Mr. Bryan Esmeralda, Munekiyo & Hiraga, Inc.

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Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

Gwen Ohashi Hiraga
SENIOR ADVISOR
Mitsuru "Mich" Hirano
SENIOR ADVISOR

March 11, 2015

Douglas Murdock, Comptroller
Department of Accounting and General Services
State of Hawaii
P.O. Box 119
Honolulu, Hawaii 96810-0119

SUBJECT: County Special Use Permit Application and Draft Environmental Assessment for Camp Maluhia and Related Improvements, Wailuku, Maui, Hawaii, TMK (2)3-1-001:028 (CUP 2015/0001) (P)1013.5)

Dear Mr. Murdock:

Thank you for your memorandum dated February 03, 2015, providing comment on the County Special Use Permit application and Draft Environmental Assessment (EA) for the Camp Maluhia and Related Improvements project. On behalf of the Applicants, Maui County Council Boy Scouts of America and the Department of Land and Natural Resources, Division of Forestry and Wildlife, we acknowledge that the proposed project's location does not impact any of the Department of Accounting and General Services' (DAGS) existing facilities in the area and as such, DAGS does not have any comments to offer on the proposed project at this time.

Maui: 305 High Street, Suite 104 ▪ Wailuku, Hawaii 96793 ▪ Tel: 808.244.2015 ▪ Fax: 808.244.8729
Oahu: 735 Bishop Street, Suite 238 ▪ Honolulu, Hawaii 96813 ▪ Tel: 808.983.1233
www.munekiyohiraga.com

Thank you again for your input. Should you have any questions or require additional information, please feel free to contact me at (808) 244-2015.

Very truly yours,

Bryan Esmeralda, Associate

BE:yp
cc: Robert Nakagawa, Maui County Council Boy Scouts of America
Torrie Nohara, Department of Land and Natural Resources
Daniel Ornellas, Department of Land and Natural Resources
Evelyn Aako, Department of Planning
Ronald Fukumoto, Fukumoto Engineering, Inc.
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JAN 30 2015

DAVID Y. IGE
GOVERNOR

KATHRYN S. MATAYOSHI
SUPERINTENDENT

STATE OF HAWAI`I

DEPARTMENT OF EDUCATION

P.O. BOX 2360

HONOLULU, HAWAI`I 96804

OFFICE OF SCHOOL FACILITIES AND SUPPORT SERVICES

January 28, 2015

TO: Mr. Daniel Ornellas
District Land Agent
Department of Land and Natural Resources

FROM: Kenneth G. Masden
Public Works Manager
Planning Section, Facilities Development Branch

SUBJECT: Draft Environmental Assessment for Camp Maluhia and Related Improvements
TMK (2)3-1-001:028, (CUP 2015/0001)

The Department of Education has reviewed the Draft Environmental Assessment for Camp Maluhia and related improvements.

The DOE has no comment to offer regarding this project.

We appreciate the opportunity to provide comments. If you have any questions, please call Heidi Meeker of the Facilities Development Branch at (808) 377-8301.

KGM:jmb

c: Bryan Esmeralda, Munekiyo & Hiraga, Inc.

AN AFFIRMATIVE ACTION AND EQUAL OPPORTUNITY EMPLOYER

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Karlynn K. Fukuda
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Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

Gwen Ohashi Hiraga
SENIOR ADVISOR
Mitsuru "Mich" Hirano
SENIOR ADVISOR

March 11, 2015

Kenneth G. Masden, Public Works Manager
Planning Section, Facilities Development Branch
Department of Education
State of Hawaii
P.O. Box 2360
Honolulu, Hawaii 96804

SUBJECT: County Special Use Permit Application and Draft Environmental Assessment for Camp Maluhia and Related Improvements, Wailuku, Maui, Hawaii, TMK (2)3-1-001:028 (CUP 2015/0001)

Dear Mr. Masden:

Thank you for your letter dated January 28, 2015 providing comment on the County Special Use Permit application and Draft Environmental Assessment (EA) for the Camp Maluhia and Related Improvements project. On behalf of the Applicants, Maui County Council Boy Scouts of America and the Department of Land and Natural Resources, Division of Forestry and Wildlife, we acknowledge that the Department of Education has no comment on the proposed project.

Thank you again for your input. Should you have any questions or require additional information, please feel free to contact me at (808) 244-2015.

Very truly yours,

Bryan Esmeralda, Associate

BE:yp
cc: Robert Nakagawa, Maui County Council Boy Scouts of America
Torrie Nohara, Department of Land and Natural Resources
Daniel Ornellas, Department of Land and Natural Resources
Evelyn Aako, Department of Planning
Ronald Fukumoto, Fukumoto Engineering, Inc.
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FEB 10 2015

DAVID Y. IGE
GOVERNOR OF HAWAII

VIRGINIA PRESSLER, M.D.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. BOX 3378
HONOLULU, HI 96801-3378

In reply, please refer to:
File:

EPO 15-018

February 10, 2015

Daniel Ornellas, District Land Agent
Dept. of Land and Natural Resources
54 South High Street
Wailuku, HI 96793

Dear Mr. Ornellas:

SUBJECT: Draft Environmental Assessment (DEA) for Camp Maluhia and Related Improvements
TMK: (2)3-1-001:028, (CUP 2015/0001)

The Department of Health (DOH), Environmental Planning Office (EPO), acknowledges receipt of the consultant DEA letter dated January 21, 2015. Thank you for allowing us to review and comment on the proposed DEA for Camp Maluhia and Related Improvements available on the OEQC website at: http://oeqc.doh.hawaii.gov/Shared%20Documents/EA_and_EIS_Online_Library/Maui/2010s/2015-01-23-MA-5B-DEA-Camp-Maluhia-and-Related-Area-Improvements.pdf

The DEA was routed to the Clean Water, Wastewater and Safe Drinking Water Branches. They will provide specific comments to you if necessary. I understand that on February 4, 2015 the CWB sent you comments. EPO recommends that you review the standard comments and available strategies to support sustainable and healthy design provided at: http://health.hawaii.gov/epo/home/landuse-planning-review-program/. Projects are required to adhere to all applicable standard comments.

We encourage you to examine and utilize the Hawaii Environmental Health Portal. The portal provides links to our e-Permitting Portal, Environmental Health Warehouse, Groundwater Contamination Viewer, Hawaii Emergency Response Exchange, Hawaii State and Local Emission Inventory System, Water Pollution Control Viewer, Water Quality Data, Warnings, Advisories and Postings. The Portal is continually updated. Please visit it regularly at: https://eha-cloud.doh.hawaii.gov

You may also wish to review the revised Water Quality Standards Maps that have been updated for all islands. The Water Quality Standards Maps can be found at: http://health.hawaii.gov/cwb/site-map/clean-water-branch-home-page/water-quality-standards/.

We request that you utilize all of this information on your proposed project to increase sustainable, innovative, inspirational, transparent and healthy design.

Mahalo nui loa,

Laura Leialoha Phillips McIntyre, AICP
Program Manager, Environmental Planning Office

c: Mr. Bryan Esmeralda, Munekiyo & Hiraga, Inc. (via email only bryan@mhplanning.com)

FEB 18 2015

From: "McIntyre, Laura" <Laura.McIntyre@doh.hawaii.gov>
To: <evelyn.aako@mauicounty.gov>
CC: "Narimatsu, Noella" <Noella.Narimatsu@doh.hawaii.gov>, "Rodrigues, Darle...
Date: 2/12/2015 10:10 AM
Subject: DOH-EPO No Comment - Camp Maluhia Dining Hall
Attachments: 15-024_Camp_Maluhia_Dining_Hall.pdf

<<15-024_Camp_Maluhia_Dining_Hall.pdf>> Thank you for the opportunity to review this project.
If the project involves any demolition EPO recommends that you contact the Indoor and Radiological Health Branch regarding possible lead based paint and/or asbestos.
Please refer to: http://health.hawaii.gov/irhb

Mahalo,
Laura

Laura Leialoha Phillips McIntyre AICP
Program Manager, Environmental Planning Office
Hawaii State Department of Health
919 Ala Moana Blvd. Rm. 312
Honolulu, Hawaii 96814
Direct Phone: (808) 586-4338
Email: laura.mcintyre@doh.hawaii.gov
Website: http://health.hawaii.gov/epo
Ua mau ke ea o ka aina I ka pono

Notice: This information and attachments are intended only for use of the individual(s) or entity to which it is addressed, and may contain information that is privileged and/or confidential. If the reader of this message is not the intended recipient, then dissemination, distribution, or copying of this communication is strictly prohibited and may be punishable under state and federal law. If you have received this communication and/or attachments in error, please notify the sender via e-mail immediately and destroy all electronic and paper copies.

ALAN M ARAKAWA
Mayor

WILLIAM R SPENCE
Director

MICHELE CHOUTEAU McLEAN
Deputy Director

COUNTY OF MAUI

DEPARTMENT OF PLANNING

TRANSMITTAL

January 23, 2015

	STATE AGENCIES
X	Dept of AG, Honolulu
	Dept of Hawaiian Home ands
X	Dept of Health Hono u u
	Dept of Health, Maui (2)
	Dept of Human Services
X	DLNR-Planning (5)
X	DLNR-SHPD, Oahu (Architectural Only)
X	DLNR-SHPD, Maui
X	DOT Statewide Planning Office (4)
	Land Use Commission (Hard Copy)
	OEQC
X	Office of Hawaiian Affairs
X	Office of Planning
	Civil Defense

	COUNTY AGENCIES
	Civil Defense
X	Dept of Environmental Management (2)
	Dept of Finance – Real Property Division
	Dept of Housing & Human Concerns
	Dept of Parks & Recreation
X	Dept Public Works (1 CD 2 Hard Copies)
X	Dept of Transportation
X	Dept of Water Supply
X	Fire & Public Safety
X	Police Department
X	ZAED, Zoning & Enforcement Division
	OTHER
X	Hawaiian Telcom (Hard Copy)
X	Maui Electric Company

PROJECT:	**CAMP MALUHIA DINING HALL**
APPLICANT:	**Maui County Council Ltd., Boy Scouts of America**
STREET ADDRESS:	**Kahekili Highway, Wailuku, Maui, Hawaii**
PROJECT DESCRIPTION:	**Construction of a new dining hall to replace existing; improvements to fire protection and domestic water systems.**
CONSULTANT:	**Munekiyo & Hiraga, Inc.**
TMK:	**(2) 3-1-001:028**
PERMIT NO.:	**CUP 2015/0001**

TRANSMITTED TO YOU ARE THE FOLLOWING:

X	Application(s)

THESE ARE TRANSMITTED AS CHECKED BELOW:

X	For your Comment and Recommendation

Please identify any comments you would like the Department of Planning to propose as conditions of project approval. Please also provide any previous comments, letters, etc., pertinent to this application Submit your comments directly to me by February 25, 2014. A comment box is also provided to assist you. If no comment, please sign the "No Comment" box and fax to (808) 270-1775.

Thank you for your time and assistance. For additional clarification, please contact me via email at evelyn.aako@mauicounty.gov or at (808) 270-7378

Sincerely,

EVELYN A AAKO, Staff Planner

ONE MAIN PLAZA BUILDING / 2200 MAIN STREET, SUITE 315 / WAILUKU, MAUI, HAWAII 967 3
MAIN LINE (808) 270-7735 / FACSIMILE (808) 270-7634
CURRENT DIVISION (808) 270-8205 / LONG RANGE DIVISION (808) 270-7214 / ZONING DIVISION (80 270-7253

AGENCY NAME		PHONE	

Attachments
xc Clayton I Yoshida, AICP, Planning Program Administrator (PDF)
Evelyn A Aako, Staff Planner (PDF)
Project File
General File

EAA:ls
K:\WP_DOCS\PLANNING\CUP\2015\0001_CampMaluhia\AgencyTransmittal.doc

NO COMMENT			
Signed.	[signature]	Dated:	2/5/2015
Print Name:	Laura McIntyre	Title:	Prgm Mgr. EHO DOH

COMMENT/RECOMMENDATION BOX			
Signed:		Dated:	
Print Name		Title:	

MUNEKIYO HIRAGA
Planning. Project Management. Sustainable Solutions.

Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

Gwen Ohashi Hiraga
SENIOR ADVISOR
Mitsuru "Mich" Hirano
SENIOR ADVISOR

March 11, 2015

Laura Leialoha Phillips McIntyre, AICP, Program Manager
Environmental Planning Office
Department of Health
State of Hawaii
P.O. Box 3378
Honolulu, Hawaii 96801-3378

SUBJECT: County Special Use Permit Application and Draft Environmental Assessment for Camp Maluhia and Related Improvements, Wailuku, Maui, Hawaii, TMK (2)3-1-001:028 (CUP 2015/0001)
File: EPO 15-018

Dear Ms. Phillips McIntyre:

Thank you for your letter dated February 10, 2015 and email dated February 12, 2015, providing comments on the County Special Use Permit application and Draft Environmental Assessment (EA) for the Camp Maluhia and Related Improvements project. On behalf of the Applicants, Maui County Council Boy Scouts of America and the Department of Land and Natural Resources, Division of Forestry and Wildlife, we offer the following information in response to the comments in your letter and email.

We acknowledge that the Draft EA for the project was routed to the Clean Water, Wastewater, and Safe Drinking Water Branches for review, and that each branch will provide specific comments, if necessary.

We will review the standard comments and available strategies to support sustainable and healthy design located on your website. The project will adhere to standard comments, as applicable.

Similarly, information and tools provided on the Hawaii Environmental Health Portal website will be reviewed and utilized, as applicable.

The revised Water Quality Standards Maps available on your website will also be reviewed, and any applicable standards will be adhered to.

We also understand that the Indoor and Radiologic Health Branch should be contacted regarding the proper removal of possible lead-based paint and/or asbestos during demolition activities. It is noted that no demolition is being proposed as part of the project.

We acknowledge that the information and tools provided in your letter increase sustainable, innovative, inspirational, transparent, and healthy design.

Thank you again for your input. Should you have any questions or require additional information, please feel free to contact me at 244-2015.

Very truly yours,

Bryan Esmeralda, Associate

BE:yp
cc: Robert Nakagawa, Maui County Council Boy Scouts of America
Torrie Nohara, Department of Land and Natural Resources
Daniel Ornellas, Department of Land and Natural Resources
Evelyn Aako, Department of Planning
Ronald Fukumoto, Fukumoto Engineering, Inc.
K:\DATA\BSA\CampMaluhiaImpr\Draft EA Responses\DOH.EPO.doc

FEB 04 2015

DAVID Y. IGE
GOVERNOR OF HAWAII

VIRGINIA PRESSLER, M.D.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. BOX 3378
HONOLULU, HI 96801-3378

In reply, please refer to:
File:

02002PCTM.15

February 4, 2015

Mr. Daniel Ornellas
District Land Agent
Department of Land and Natural Resources
54 South High Street
Wailuku, Hawaii 96793

Dear Mr. Ornellas:

SUBJECT: Comments on Draft Environmental Assessment (DEA) for Camp Maluhia and Related Improvements, TMK (2)3-1-001:028 Wailuku, Island of Maui, Hawaii

The Department of Health (DOH), Clean Water Branch (CWB), acknowledges receipt of your letter, dated January 21, 2015, requesting comments on your project. The DOH-CWB has reviewed the subject document and offers these comments. Please note that our review is based solely on the information provided in the subject document and its compliance with the Hawaii Administrative Rules (HAR), Chapters 11-54 and 11-55. You may be responsible for fulfilling additional requirements related to our program. We recommend that you also read our standard comments on our website at: http://health.hawaii.gov/epo/files/2013/05/Clean-Water-Branch-Std-Comments.pdf

1. Any project and its potential impacts to State waters must meet the following criteria:

   a. Antidegradation policy (HAR, Section 11-54-1.1), which requires that the existing uses and the level of water quality necessary to protect the existing uses of the receiving State water be maintained and protected.

   b. Designated uses (HAR, Section 11-54-3), as determined by the classification of the receiving State waters.

   c. Water quality criteria (HAR, Sections 11-54-4 through 11-54-8).

2. You may be required to obtain National Pollutant Discharge Elimination System (NPDES) permit coverage for discharges of wastewater, including storm water runoff, into State surface waters (HAR, Chapter 11-55).

For NPDES general permit coverage, a Notice of Intent (NOI) form must be submitted at least 30 calendar days before the commencement of the discharge. An application for a NPDES individual permit must be submitted at least 180 calendar days before the commencement of the discharge. To request NPDES permit coverage, you must submit the applicable form ("CWB Individual NPDES Form" or "CWB NOI Form") through the e-Permitting Portal and the hard copy certification statement with the respective filing fee ($1,000 for an individual NPDES permit or $500 for a Notice of General Permit Coverage). Please open the e-Permitting Portal website located at: https://eha-cloud.doh.hawaii.gov/epermit/. You will be asked to do a one-time registration to obtain your login and password. After you register, click on the Application Finder tool and locate the appropriate form. Follow the instructions to complete and submit the form.

3. If your project involves work in, over, or under waters of the United States, it is highly recommended that you contact the Army Corp of Engineers, Regulatory Branch (Tel: 835-4303) regarding their permitting requirements.

   Pursuant to Federal Water Pollution Control Act [commonly known as the "Clean Water Act" (CWA)], Paragraph 401(a)(1), a Section 401 Water Quality Certification (WQC) is required for "[a]ny applicant for Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may **result** in any discharge into the navigable waters..." (emphasis added). The term "discharge" is defined in CWA, Subsections 502(16), 502(12), and 502(6); Title 40 of the Code of Federal Regulations, Section 122.2; and Hawaii Administrative Rules (HAR), Chapter 11-54.

4. Please note that all discharges related to the project construction or operation activities, whether or not NPDES permit coverage and/or Section 401 WQC are required, must comply with the State's Water Quality Standards. Noncompliance with water quality requirements contained in HAR, Chapter 11-54, and/or permitting requirements, specified in HAR, Chapter 11-55, may be subject to penalties of $25,000 per day per violation.

5. It is the State's position that all projects must reduce, reuse, and recycle to protect, restore, and sustain water quality and beneficial uses of State waters. Project planning should:

   a. Treat storm water as a resource to be protected by integrating it into project planning and permitting. Storm water has long been recognized as a source of irrigation that will not deplete potable water resources. What is often overlooked is that storm water recharges ground water supplies and feeds streams and estuaries; to ensure that these water cycles are not disrupted, storm water cannot be relegated as a waste product of impervious surfaces. Any project planning must recognize storm water as an asset that sustains and protects natural ecosystems and traditional beneficial uses of State waters, like community beautification, beach going, swimming, and fishing. The approaches

necessary to do so, including low impact development methods or ecological bio-engineering of drainage ways must be identified in the planning stages to allow designers opportunity to include those approaches up front, prior to seeking zoning, construction, or building permits.

b. Clearly articulate the State's position on water quality and the beneficial uses of State waters. The plan should include statements regarding the implementation of methods to conserve natural resources (e.g. minimizing potable water for irrigation, gray water re-use options, energy conservation through smart design) and improve water quality.

c. Consider storm water Best Management Practice (BMP) approaches that minimize the use of potable water for irrigation through storm water storage and reuse, percolate storm water to recharge groundwater to revitalize natural hydrology, and treat storm water which is to be discharged.

d. Consider the use of green building practices, such as pervious pavement and landscaping with native vegetation, to improve water quality by reducing excessive runoff and the need for excessive fertilization, respectively.

e. Identify opportunities for retrofitting or bio-engineering existing storm water infrastructure to restore ecological function while maintaining, or even enhancing, hydraulic capacity. Particular consideration should be given to areas prone to flooding, or where the infrastructure is aged and will need to be rehabilitated.

If you have any questions, please visit our website at:http://health.hawaii.gov/cwb/, or contact the Engineering Section, CWB, at (808) 586-4309.

Sincerely,

ALEC WONG, P.E., CHIEF
Clean Water Branch

CTM:bk

c: DOH-EPO #15-018 [via e-mail only]
Mr. Bryan Esmeralda, Munekiyo & Hiraga, Inc.
[via e-mail only bryan@mhplanning.com only]

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Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

Gwen Ohashi Hiraga
SENIOR ADVISOR
Mitsuru "Mich" Hirano
SENIOR ADVISOR

March 11, 2015

Alec Wong, P.E., Chief
Clean Water Branch
Department of Health
State of Hawaii
P.O. Box 3378
Honolulu, Hawaii 96801-3378

SUBJECT: County Special Use Permit Application and Draft Environmental Assessment for Camp Maluhia and Related Improvements, Wailuku, Maui, Hawaii, TMK (2)3-1-001:028 (CUP 2015/0001) (File: 02002PCTM.15)

Dear Mr. Wong:

Thank you for your letter dated February 4, 2015, providing comment on the County Special Use Permit application and Draft Environmental Assessment (EA) for the Camp Maluhia and Related Improvements project. On behalf of the Applicants, Maui County Council Boy Scouts of America and the Department of Land and Natural Resources, Division of Forestry and Wildlife, we offer the following information in response to the comments in your letter.

1. We understand that any project with potential impacts to State waters must meet the criteria under the antidegradation policy (Hawaii Revised Statutes (HAR), Section 11-54-1.1), designated uses (HAR, Section 11-54-3), and water quality criteria (HAR, Sections 11-54-4 through 11-54-8). It is noted that the proposed project is not anticipated to have a negative impact on State waters.

2. Coordination will be undertaken with the Clean Water Branch (CWB) to pursue a National Pollutant Discharge Elimination System (NPDES) permit, as applicable.

3. Coordination will be undertaken with the United States Army Corps of Engineers (USACE) regarding permitting requirements, as applicable.

4. We acknowledge that all project construction or operational activity discharges must comply with the State's Water Quality Standards, whether or not NPDES permit coverage and/or Section 401 Water Quality Certification are required.

5. We acknowledge the State's position that all projects must reduce, reuse, and recycle to protect, restore, and sustain water quality and beneficial uses of State waters. As such, we will review and take into consideration the CWB's project planning guidelines provided in your letter.

Thank you again for your input. Should you have any questions or require additional information, please feel free to contact me at (808) 244-2015.

Very truly yours,

Bryan Esmeralda, Associate

BE:yp
cc: Robert Nakagawa, Maui County Council Boy Scouts of America
Torrie Nohara, Department of Land and Natural Resources
Daniel Ornellas, Department of Land and Natural Resources
Evelyn Aako, Department of Planning
Ronald Fukumoto, Fukumoto Engineering, Inc.
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MAR 02 2015

DAVID Y. IGE
GOVERNOR OF HAWAII

CARTY S. CHANG
INTERIM CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

DANIEL S. QUINN
INTERIM FIRST DEPUTY

W. ROY HARDY
ACTING DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

February 24, 2015

Munekiyo & Hiraga, Inc.
Attention: Mr. Bryan Esmeralda
305 High Street, Suite 104
Wailuku, Hawaii 96793

via email: planning@mhplanning.com

Dear Mr. Esmeralda:

SUBJECT: Draft Environmental Assessment for Camp Maluhia and Related Improvements, TMK: (2) 3-1-001:028, (CUP 2015/0001)

Thank you for the opportunity to review and comment on the subject matter. The Department of Land and Natural Resources' (DLNR) Land Division distributed or made available a copy of your report pertaining to the subject matter to DLNR Divisions for their review and comments.

At this time, enclosed are comments from the Division of Forestry and Wildlife on the subject matter. Should you have any questions, please feel free to call Lydia Morikawa at 587-0410. Thank you.

Sincerely,

Kevin E. Moore
Acting Land Administrator

Enclosure

cc: Central Files

DAVID Y. IGE
GOVERNOR OF HAWAII

CARTY S. CHANG
INTERIM CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

February 4, 2015

MEMORANDUM

~~TO:~~ From **DLNR Agencies:**
X Div. of Aquatic Resources
___ Div. of Boating & Ocean Recreation
X Engineering Division
X Div. of Forestry & Wildlife
___ Div. of State Parks
___ Commission on Water Resource Management
___ Office of Conservation & Coastal Lands
X Land Division – Maui District
X Historic Preservation

~~FROM:~~ To Russell Y. Tsuji, Land Administrator
SUBJECT: Draft Environmental Assessment (DEA) for Camp Maluhia and Related Improvements; and County of Maui Department of Planning Special Use Permit CUP 2015/0001
LOCATION: Kahakuloa, Maui: TMKs: (2) 3-1-001:001 (por.) and 028
APPLICANT: Munekiyo & Hiraga, Inc. for Boy Scouts of America

Transmitted for your review and comment is information on the above-referenced project. The DEA may be viewed on line at the Office of Environmental Quality Control's website at:
http://oeqc.doh.hawaii.gov/Shared%20Documents/EA_and_EIS_Online_Library/Maui/2010s/2015-01-23-MA-5B-DEA-Camp-Maluhia-and-Related-Area-Improvements.pdf

One compact disc of the DEA is also available for review at the Land Division office in Honolulu. We would appreciate your comments on this project. Please submit any comments by February 22, 2015. If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact Kevin Moore at 587-0426. Thank you.

( ) We have no objections.
(✓) We have no comments.
( ) Comments are attached.

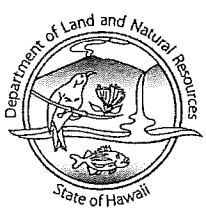
Signed: [signature]

Print name: LISA HADWAY
Date: 2/5/15

cc: Central Files

MAR 02 2015

DAVID Y. IGE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

CARTY S. CHANG
INTERIM CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

DANIEL S. QUINN
INTERIM FIRST DEPUTY

W. ROY HARDY
ACTING DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

February 27, 2015

Munekiyo & Hiraga, Inc.
Attention: Mr. Bryan Esmeralda
305 High Street, Suite 104
Wailuku, Hawaii 96793

via email: planning@mhplanning.com

Dear Mr. Esmeralda:

SUBJECT: Draft Environmental Assessment for Camp Maluhia and Related Improvements, TMK: (2) 3-1-001:028, (CUP 2015/0001)

Thank you for the opportunity to review and comment on the subject matter. In addition to the comments previously sent you on February 24, 2015 and February 25, 2015, enclosed are comments from the Division of Aquatic Resources on the subject matter. Should you have any questions, please feel free to call Lydia Morikawa at 587-0410. Thank you.

Sincerely,

Kevin E. Moore
Acting Land Administrator

Enclosure
cc: Central Files

DAVID Y. IGE
GOVERNOR OF HAWAII

CARTY S. CHANG
INTERIM CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

RECEIVED
FEB 05 2015
AQUATIC RESOURCES

DAR # 5071

February 4, 2015

MEMORANDUM

TO: **DLNR Agencies:**
X Div. of Aquatic Resources
__Div. of Boating & Ocean Recreation
X Engineering Division
X Div. of Forestry & Wildlife
__Div. of State Parks
__Commission on Water Resource Management
__Office of Conservation & Coastal Lands
X Land Division – Maui District
X Historic Preservation

FROM: Russell Y. Tsuji, Land Administrator

SUBJECT: Draft Environmental Assessment (DEA) for Camp Maluhia and Related Improvements; and County of Maui Department of Planning Special Use Permit CUP 2015/0001

LOCATION: Kahakuloa, Maui: TMKs: (2) 3-1-001:001 (por.) and 028

APPLICANT: Munekiyo & Hiraga, Inc. for Boy Scouts of America

Transmitted for your review and comment is information on the above-referenced project. The DEA may be viewed on line at the Office of Environmental Quality Control's website at:
http://oeqc.doh.hawaii.gov/Shared%20Documents/EA_and_EIS_Online_Library/Maui/2010s/2015-01-23-MA-5B-DEA-Camp-Maluhia-and-Related-Area-Improvements.pdf

One compact disc of the DEA is also available for review at the Land Division office in Honolulu. We would appreciate your comments on this project. Please submit any comments by February 22, 2015. If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact Kevin Moore at 587-0426. Thank you.

( ) We have no objections.
(✓) We have no comments.
( ) Comments are attached.

Signed: _____

Print name: Carty S. Ching
Date: 2/20/15

cc: Central Files

MUNEKIYO HIRAGA
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Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

Gwen Ohashi Hiraga
SENIOR ADVISOR
Mitsuru "Mich" Hirano
SENIOR ADVISOR

March 11, 2015

Kevin E. Moore, Acting Land Administrator
Department of Land and Natural Resources
State of Hawaii
P.O. Box 621
Honolulu, Hawaii 96809

SUBJECT: County Special Use Permit Application and Draft Environmental Assessment for Camp Maluhia and Related Improvements, Wailuku, Maui, Hawaii, TMK (2) 3-1-001:028 (CUP 2015/0001)

Dear Mr. Moore:

Thank you for your letters dated February 24 and February 27, 2015, providing comment on the County Special Use Permit application and Draft Environmental Assessment (EA) for the Camp Maluhia and Related Improvements project. On behalf of the Applicants, Maui County Council Boy Scouts of America and the Department of Land and Natural Resources, Division of Forestry and Wildlife, we offer the following information in response to the comments in your letter.

We acknowledge that the Department of Land and Natural Resources' (DLNR) Land Division distributed the report to DLNR Divisions for review and comment. Below are our response to comments received.

Division of Forestry and Wildlife

We acknowledge that the Division of Forestry and Wildlife has no comments to offer on the proposed project.

Division of Aquatic Resources

We acknowledge that the Division of Aquatic Resources has no comments to offer on the proposed project.

Thank you again for your input. Should you have any questions or require additional information, please feel free to contact me at (808) 244-2015.

Very truly yours,

Bryan Esmeralda, Associate

BE:lh
cc: Robert Nakagawa, Maui County Council Boy Scouts of America
Torrie Nohara, Department of Land and Natural Resources
Daniel Ornellas, Department of Land and Natural Resources
Evelyn Aako, Department of Planning
Ronald Fukumoto, Ronald M. Fukumoto Engineering, Inc.
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FEB 19 2015

DAVID Y. IGE
GOVERNOR

FORD N. FUCHIGAMI
DIRECTOR

Deputy Directors
JADE T. BUTAY
ROSS M. HIGASHI
EDWIN H. SNIFFEN
DARRELL T. YOUNG

IN REPLY REFER TO:
STP 8.1750

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
869 PUNCHBOWL STREET
HONOLULU, HAWAII 96813-5097

February 11, 2015

TO: THE HONORABLE CARTY CHANG, ACTING CHAIRPERSON
DEPARTMENT OF LAND AND NATURAL RESOURCES (DLNR)

ATTN: DANIEL ORNELLAS, DISTRICT LAND AGENT

FROM: FORD N. FUCHIGAMI
DIRECTOR OF TRANSPORTATION

SUBJECT: CAMP MALUHIA AND RELATED IMPROVEMENTS
DRAFT ENVIRONMENTAL ASSESSMENT (DEA)
WAILUKU, MAUI, HAWAII
TMK: (2) 3-1 001:028

The subject project is not expected to significantly impact the State highway facility. However, the developer is required to obtain a permit from Department of Transportation (DOT) Highways Division, Maui District Office for the transport of oversized and/or overweight materials and equipment on State highway facilities.

If there are any questions, please contact Mr. Norren Kato of the DOT Statewide Transportation Planning Office at telephone number (808) 831-7976.

c: ✓ Bryan Esmeralda, Munekiyo & Hiraga, Inc.

15/SD 3

MAR 0 4 2015

DAVID Y. IGE
GOVERNOR

FORD N. FUCHIGAMI
DIRECTOR

Deputy Directors
JADE T. BUTAY
ROSS M. HIGASHI
EDWIN H. SNIFFEN
DARRELL T. YOUNG

IN REPLY REFER TO:
STP 8.1748

COUNTY OF MAUI
DEPT OF PLANNING
CURRENT DIV RECEIVED

'15 FEB 20 A10 :07

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
869 PUNCHBOWL STREET
HONOLULU, HAWAII 96813-5097

February 11, 2015

Ms. Evelyn A. Aako
Staff Planner
County of Maui
Department of Planning
One Main Plaza Building
2200 Main Street, Suite 315
Wailuku, Hawaii 96793

Dear Ms. Aako:

Subject: Camp Maluhia Dining Hall
Special Use Permit (CUP 2015/0001)
Wailuku, Maui, Hawaii
TMK: (2) 3-1-001:028

The subject project is not expected to significantly impact the State highway facility. However, the developer is required to obtain a permit from Department of Transportation (DOT) Highways Division, Maui District Office for the transport of oversized and/or overweight materials and equipment on State highway facilities.

If there are any questions, please contact Mr. Norren Kato of the DOT Statewide Transportation Planning Office at telephone number (808) 831-7976.

Sincerely,

FORD N. FUCHIGAMI
Director of Transportation

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Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

Gwen Ohashi Hiraga
SENIOR ADVISOR
Mitsuru "Mich" Hirano
SENIOR ADVISOR

March 11, 2015

Ford Fuchigami, Director
Department of Transportation
State of Hawaii
869 Punchbowl Street
Honolulu, Hawaii 96813-5097

SUBJECT: County Special Use Permit Application and Draft Environmental Assessment for Camp Maluhia and Related Improvements, Wailuku, Maui, Hawaii, TMK (2)3-1-001:028 (CUP 2015/0001)
STP 8.1750

Dear Mr. Fuchigami:

Thank you for your memorandum and letter both dated February 11, 2015, providing comment on the County Special Use Permit application and Draft Environmental Assessment (EA) for the Camp Maluhia and Related Improvements project. On behalf of the Applicants, Maui County Council Boy Scouts of America and the Department of Land and Natural Resources, Division of Forestry and Wildlife, we offer the following information in response to the comments in your letter.

We acknowledge the Department of Transportation's (DOT) determination that the subject project is not expected to significantly impact the State highway facility. However, the Applicants will obtain a permit from DOT Highways Division, Maui Office for the transport of oversized and/or overweight materials and equipment on State highway facilities, as applicable.

Maui: 305 High Street, Suite 104 ◦ Wailuku, Hawaii 96793 ◦ Tel: 808.244.2015 ◦ Fax: 808.244.8729
Oahu: 735 Bishop Street, Suite 238 ◦ Honolulu, Hawaii 96813 ◦ Tel: 808.983.1233
www.munekiyohiraga.com

Thank you again for your input. Should you have any questions or require additional information, please feel free to contact me at (808) 244-2015.

Very truly yours,

Bryan Esmeralda, Associate

BE:yp
cc: Robert Nakagawa, Maui County Council Boy Scouts of America
Torrie Nohara, Department of Land and Natural Resources
Daniel Ornellas, Department of Land and Natural Resources
Evelyn Aako, Department of Planning
Ronald Fukumoto, Fukumoto Engineering, Inc.
K:\DATA\BSA\CampMaluhialmpr\Draft EA Responses\SDOT.doc

FEB 23 2015

OFFICE OF PLANNING
STATE OF HAWAII

DAVID Y. IGE
GOVERNOR

LEO R. ASUNCION
ACTING DIRECTOR
OFFICE OF PLANNING

235 South Beretania Street, 6th Floor, Honolulu, Hawaii 96813
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

Telephone: (808) 587-2846
Fax: (808) 587-2824
Web: http://planning.hawaii.gov/

Ref. No. P-14654

February 18, 2015

Mr. Daniel Ornellas
District Land Agent
Department of Land and Natural Resources
54 S. High Street
Wailuku, Hawaii 96793

Dear Mr. Ornellas:

Subject: Draft Environmental Assessment for Camp Maluhia and Related Improvements, Kahakuloa, Maui
Tax Map Key: (2)3-1-001:001(por), (2)3-1-001:028,

Thank you for the opportunity to provide comments on the Draft Environmental Assessment (Draft EA) for the Camp Maluhia improvements which was transmitted to our office by letter dated January 21, 2015. It is our understanding that the Maui County Council, Boy Scouts of America proposes to replace the existing dining hall (originally built in 1938) with a new structure, as well as planned upgrades to the fire protection system, installation of new water tanks, booster pumps, and waterlines. Additionally, the State Department of Land and Natural Resources will construct an unmarked gravel parking lot for users of Waihee Ridge Trail.

The Draft EA addresses our comments made in a previous letter dated February 1, 2013 (reference number P-13861) in regards to Coastal Zone Management Act objectives, the Hawaii Watershed Guidance, and to include a list of federal, state, and county permits for this project. In addition, the Draft EA has included a discussion on the Hawaii State Plan's policies, objectives, and priority guidelines listed in Hawaii Revised Statutes Chapter 226, as well as best management practices to control the damaging effects of storm water impact. We have no further comments at this time.

If you have any questions regarding this comment letter, please contact Josh Hekekia of our office at 587-2845.

Sincerely,

Leo R. Asuncion
Acting Director

c: Bryan Esmeralda, Munekiyo & Hiraga

15/895

MAR 0 4 2015

OFFICE OF PLANNING
STATE OF HAWAII

DAVID Y. IGE
GOVERNOR

LEO R. ASUNCION
ACTING DIRECTOR
OFFICE OF PLANNING

235 South Beretania Street, 6th Floor, Honolulu, Hawaii 96813
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

Telephone: (808) 587-2846
Fax: (808) 587-2824
Web: http://planning.hawaii.gov/

RECEIVED
2015 FEB 25 P 3:17
COUNTY OF MAUI
DEPT. OF PLANNING
ADMINISTRATION

Ref. No. P-14658

February 23, 2015

Mr. William R. Spence, Director
County of Maui
Department of Planning
One Main Plaza Building
2200 Main Street, Suite 315
Wailuku, Maui, Hawaii 96793

Dear Mr. Spence:

Subject: State Special Use Permit
Applicant: Boy Scouts of America, Maui County Council, LTD.
Project: Camp Maluhia Dining Hall
TMK: 3-1-001: 001, 028
Request: Special Permit for New Dining Hall and Water Systems Improvements Kahakuloa, Maui, Hawaii

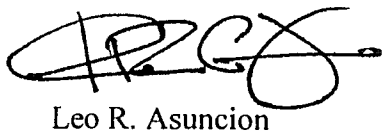
Thank you for the opportunity to review the proposal for a State Special Use Permit to construct a new dining hall, which will replace an existing dining hall, and improvements to the fire protection and domestic water systems on a portion of the adjacent State-owned parcel. The original boy scout camp was constructed in the 1930's and is nonconforming, however, the applicant proposes to replace the dining hall in a different location on the 18-acre campground site. Required parking will also be provided. Water system facilities will include the construction of two water tanks, one for fire protection and one for potable water. Transmission lines, a pump station, and appurtenant structures will also be constructed.

The Office of Planning (OP) has the following comments:

1. The use is a non-conforming use, however, the applicant is requesting a special permit for the entire site in order to construct a new dining hall and water systems on site and within the adjacent State parcel.
2. An Environmental Assessment was prepared for the project because the water improvements will traverse State owned lands.
3. The intent of the Special permit is to ensure that future improvements to the Camp will be in conformance.
4. The lands are designated D and E, according to the Land Study Bureau, and is unclassified in ALISH.

Thank you for the opportunity to review this project. If you have any questions, please call Lorene Maki of our Land Use Division at (808) 587-2888.

Sincerely,



Leo R. Asuncion
Acting Director

c: Land Use Commission

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Michael T. Munekiyo
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VICE PRESIDENT

Gwen Ohashi Hiraga
SENIOR ADVISOR
Mitsuru "Mich" Hirano
SENIOR ADVISOR

March 11, 2015

Leo Asuncion, Acting Director
Office of Planning
State of Hawaii
P.O. Box 2359
Honolulu, Hawaii 96804

SUBJECT: County Special Use Permit Application and Draft Environmental Assessment for Camp Maluhia and Related Improvements, Wailuku, Maui, Hawaii, TMK (2)3-1-001:028 (CUP 2015/0001)
Ref. No. P-14654

Dear Mr. Asuncion:

Thank you for your letters dated February 18 and 23, 2015 providing comment on the County Special Use Permit application and Draft Environmental Assessment (EA) for the Camp Maluhia and Related Improvements project. On behalf of the Applicants, Maui County Council Boy Scouts of America and the Department of Land and Natural Resources, Division of Forestry and Wildlife, we offer the following information in response to the comments in your letters.

Letter Dated February 18, 2015

We acknowledge that the Draft EA addresses the Office of Planning's (OP) comments made in a previous letter dated February 1, 2013 (reference number P-13861) in regards to Coastal Zone Management Act objectives and the Hawaii Watershed Guidance, and the recommendation that the Draft EA include a list of Federal, State, and County permits for the proposed project. In addition, we acknowledge that the Draft EA has included a discussion on the Hawaii State Plan's policies, objectives, and priority guidelines listed in Hawaii Revised Statutes Chapter 226, as well as best management practices to control the damaging effect of storm water impact. Based on the foregoing, we understand that OP has no further comments on the proposed project at this time.

Letter Dated February 23, 2015

1. We acknowledge with your comment that the use is a non-conforming use with regards to Maui County zoning, and confirm that the request for a Special Use Permit includes the construction of the proposed dining hall and water system improvements, as well as pertains to the camp operation as a whole.

2. We confirm that an Environmental Assessment is being prepared as the project will utilize State-owned lands.

3. We confirm that the requested Special Use Permit request is also to ensure that future improvements at the camp will be in conformance with the Maui County Code.

4. We confirm that the lands are designated as D and E according to the Land Study Bureau, and are unclassified according to the Agricultural Lands of Importance to the State of Hawaii standards.

Thank you again for your input. Should you have any questions or require additional information, please feel free to contact me at (808) 244-2015.

Very truly yours,

Bryan Esmeralda
Associate

BE:tn
cc: Robert Nakagawa, Maui County Council Boy Scouts of America
Torrie Nohara, Department of Land and Natural Resources
Daniel Ornellas, Department of Land and Natural Resources
Evelyn Aako, Department of Planning
Ronald Fukumoto, Fukumoto Engineering, Inc.
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Evelyn Aako - Camp Maluhia Dining Hall - CUP 2015/0001 - (2) 3-1-001: 028

MAR 0 4 2015

From: Paul Haake
To: Evelyn Aako
Date: 2/25/2015 4:01 PM
Subject: Camp Maluhia Dining Hall - CUP 2015/0001 - (2) 3-1-001: 028

Hi Evelyn,

Below are our office's comments regarding the referenced subject. Please feel free to contact me if there are any questions or comments.

Thanks,

Paul

****

February 25, 2015

Evelyn A. Aako, Staff Planner
Department of Planning
2200 Main Street, Suite 315
Wailuku, HI 96793

Re: Camp Maluhia Dining Hall
Wailuku, Maui, HI
(2) 3-1-001: 028
CUP 2015/0001

Dear Evelyn:

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

- Our office has no objection to the subject CUP.

- Our office does reserve the right to comment during the building permit review process when detailed plans for the Camp Maluhia Dining Hall are submitted. At that time, fire department access, water supply for fire protection, and fire and life safety requirements will be addressed.

If there are any questions or comments, please feel free to contact me at 244-9161 ext. 23. Thank you for your attention to fire prevention and public safety.

Sincerely,

Paul Haake

Paul Haake
Captain, Fire Prevention Bureau
Dept. of Fire & Public Safety
Maui County

313 Manea Place Wailuku, HI 96793
244-9161 ext. 23
244-1363 fax

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VICE PRESIDENT

Gwen Ohashi Hiraga
SENIOR ADVISOR
Mitsuru "Mich" Hirano
SENIOR ADVISOR

March 11, 2015

Paul Haake, Captain
Fire Prevention Bureau
Department of Fire and Public Safety
County of Maui
313 Manea Place
Wailuku, Hawaii 96793

SUBJECT: County Special Use Permit Application and Draft Environmental Assessment for Camp Maluhia and Related Improvements, Wailuku, Maui, Hawaii, TMK (2)3-1-001:028 (CUP 2015/0001)

Dear Mr. Haake:

Thank you for your letter dated February 25, 2015 providing comment on the County Special Use Permit application and Draft Environmental Assessment (EA) for the Camp Maluhia and Related Improvements project. On behalf of the Applicants, Maui County Council Boy Scouts of America and the Department of Land and Natural Resources, Division of Forestry and Wildlife, we acknowledge that the Fire Prevention Bureau has no comment on the proposed project at this time.

We also acknowledge that your office reserves the right to comment on the proposed project during the building permit review process when detailed construction plans are submitted. We understand that during the building permit process, the Fire Prevention Bureau will be reviewing the plans to ensure that Fire Department access, water supply for fire protection, and fire and life safety requirements are addressed. We would also like to note that part of the scope for the proposed project involves upgrades to the fire protection water system for the camp.

Thank you again for your input. Should you have any questions or require additional information, please feel free to contact me at 244-2015.

Very truly yours,

Bryan Esmeralda, Associate

BE:tn

cc: Robert Nakagawa, Maui County Council Boy Scouts of America
Torrie Nohara, Department of Land and Natural Resources
Daniel Ornellas, Department of Land and Natural Resources
Evelyn Aako, Department of Planning
Ronald Fukumoto, Fukumoto Engineering, Inc.
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MAR 2 3 2015

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

March 19, 2015

Department of Land & Natural Resources
Attn: Daniel Ornellas, District Land Agent
54 South High Street
Wailuku, HI 96793

Re: Camp Maluhia and Related Improvements
Wailuku, Maui, HI
(2) 3-1-001: 028
CUP 2015/0001

Dear Mr. Ornellas:

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

- Our office has no objection to the subject CUP.

- Our office does reserve the right to comment during the building permit review process when detailed plans for the Camp Maluhia Dining Hall and any other proposed structures are submitted. At that time, fire department access, water supply for fire protection, and fire and life safety requirements will be addressed.

If there are any questions or comments, please feel free to contact me at 244-9161 ext. 23.
Thank you for your attention to fire prevention and public safety.

Sincerely,

Paul Haake
Captain, Fire Prevention Bureau

cc: Bryan Esmeralda, Munekiyo & Hiraga, Inc.

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Michael T. Munekiyo
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Mark Alexander Roy
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Tessa Munekiyo Ng
VICE PRESIDENT

Gwen Ohashi Hiraga
SENIOR ADVISOR
Mitsuru "Mich" Hirano
SENIOR ADVISOR

March 27, 2015

Paul Haake, Captain
Fire Prevention Bureau
Department of Fire and Public Safety
County of Maui
313 Manea Place
Wailuku, Hawaii 96793

SUBJECT: County Special Use Permit Application and Draft Environmental Assessment for Camp Maluhia and Related Improvements, Wailuku, Maui, Hawaii, TMK (2)3-1-001:028 (CUP 2015/0001)

Dear Captain Haake:

Thank you for your letter dated March 19, 2015 providing comment on the County Special Use Permit Application and Draft Environmental Assessment (EA) for the Camp Maluhia and Related Improvements project. On behalf of the Applicants, Maui County Council Boy Scouts of America and the Department of Land and Natural Resources, Division of Forestry and Wildlife, we acknowledge that the Fire Prevention Bureau has no objection to the proposed project at this time.

We also acknowledge that your office reserves the right to comment on the proposed project during the building permit review process when detailed construction plans are submitted. We understand that during the building permit process, the Fire Prevention Bureau will be reviewing the plans to ensure that Fire Department access, water supply for fire protection, and fire and life safety requirements are addressed. We would also like to note that part of the scope for the proposed project involves upgrades to the fire protection water system for the camp.

Thank you again for your input. Should you have any questions or require additional information, please feel free to contact me at 244-2015.

Very truly yours,

Bryan Esmeralda, Associate

BE:tn
cc: Robert Nakagawa, Maui County Council Boy Scots of America
Torrie Nohara, Department of Land and Natural Resources
Daniel Ornellas, Department of Land and Natural Resources
Evelyn Aako, Department of Planning
Ronald Fukumoto, Fukumoto Engineering, Inc.
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ALAN M. ARAKAWA
Mayor

KA'ALA BUENCONSEJO
Director

BRIANNE L. SAVAGE
Deputy Director

(808) 270-7230
FAX (808) 270-7934

FEB 20 2015

DEPARTMENT OF PARKS & RECREATION

700 Hali'a Nakoa Street, Unit 2, Wailuku, Hawaii 96793

February 6, 2015

Mr. Daniel Ornellas, District Land Agent
Department of Land and Natural Resources
54 South High Street
Wailuku, HI 96793

Dear Mr. Ornellas:

SUBJECT: Draft Environmental Assessment for Camp Maluhia and Related Improvements, Wailuku, Maui, Hawaii; TMK (2) 3-1-001:028 (CUP 2015/0001)

Thank you for the opportunity to review and comment on the subject project.

The Department of Parks & Recreation has no comment at this time and looks forward to reviewing the Environmental Assessment when it is available.

Should you have any questions or concerns, please feel free to call me, or Robert Halvorson, Chief of Parks Planning and Development, at 270-7931.

Sincerely,

KA'ALA BUENCONSEJO
Director of Parks & Recreation

c: Bryan Esmeralda, Munekiyo & Hiraga, Inc.
Robert Halvorson, Chief of Planning and Development

KB:RH:csa
S:\PLANNING\CSA\County Reviews\EA & EIS Reviews\Camp Maluhia & Improvements DEA.doc

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Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

Gwen Ohashi Hiraga
SENIOR ADVISOR
Mitsuru "Mich" Hirano
SENIOR ADVISOR

March 11, 2015

Kaala Buenconsejo, Director
Department of Parks and Recreation
County of Maui
700 Halia Nakoa Street, Unit 2
Wailuku, Hawaii 96793

SUBJECT: County Special Use Permit Application and Draft Environmental Assessment for Camp Maluhia and Related Improvements, Wailuku, Maui, Hawaii, TMK (2)3-1-001:028 (CUP 2015/0001)

Dear Mr. Buenconsejo:

Thank you for your letter dated February 6, 2015 providing comment on the County Special Use Permit application and Draft Environmental Assessment (EA) for the Camp Maluhia and Related Improvements project. On behalf of the Applicants, Maui County Council Boy Scouts of America and the Department of Land and Natural Resources, Division of Forestry and Wildlife, we acknowledge that the Department of Parks and Recreation has no comment on the proposed project at this time. A copy of the Final EA will be made available for your review.

Thank you again for your input. Should you have any questions or require additional information, please feel free to contact me at 244-2015.

Very truly yours,

Bryan Esmeralda
Associate

BE:tn
cc: Robert Nakagawa, Maui County Council Boy Scouts of America
Torrie Nohara, Department of Land and Natural Resources
Daniel Ornellas, Department of Land and Natural Resources
Evelyn Aako, Department of Planning
Ronald Fukumoto, Fukumoto Engineering, Inc.
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FEB 17 2015

POLICE DEPARTMENT
COUNTY OF MAUI

ALAN M. ARAKAWA
MAYOR

OUR REFERENCE

YOUR REFERENCE

55 MAHALANI STREET
WAILUKU, HAWAII 96793
(808) 244-6400
FAX (808) 244-6411

TIVOLI S. FAAUMU
CHIEF OF POLICE

DEAN M. RICKARD
DEPUTY CHIEF OF POLICE

February 11, 2015

Mr. Daniel Ornellas
District Land Agent
Department of Land and Natural Resources
54 S. High Street
Wailuku, HI 96793

Dear Mr. Ornellas:

SUBJECT: Draft EA for Camp Maluhia and Related Improvements
TMK (2) 3-1-001:028, (CUP 2015/0001)

We have reviewed the information submitted for this project and have submitted our comments and/or recommendations. Thank you for giving us the opportunity to comment on this project.

Very truly yours,

Assistant Chief Victor K. Ramos
for: Tivoli S. Faaumu
Chief of Police

c: William Spence, Dept. of Planning
√Bryan Esmeralda, Munekiyo & Hiraga, Inc.

TO	:	TIVOLI FAAUMU, CHIEF OF POLICE, COUNTY OF MAUI
VIA	:	CHANNELS
FROM	:	AYLETT WALLWORK, POLICE OFFICER III, COMMUNITY POLICING, WAILUKU PATROL DIVISION
SUBJECT	:	RESPONSE TO A REQUEST FOR COMMENTS REGARDING DRAFT ENVIRONMENTAL ASSESSMENT FOR CAMP MALUHIA AND RELATED IMPROVEMENTS

This communication is submitted as a response to a request for comments by the Department Of Land and Natural Resources, regarding the Maui County Council Boy Scouts Of America Camp Maluhia.

PROJECT	:	DRAFT ENVIRONMENTAL ASSESSMENT FOR CAMP MALUHIA AND RELATED IMPROVEMENTS
LOCATION	:	KAHAKULOA, MAUI, HAWAII
TMK	:	(2) 3 – 1 – 001:028

RESPONSE:

In review of the submitted documents, the concern from the police perspective is the impacts upon vehicular and pedestrian movement as well as the public's safety. Maui County Council Boy Scouts Of America is proposing to construct a new dining hall and other related improvements at Camp Maluhia. Construction of the new dining hall should not have any impact to vehicular and pedestrian movements. The other related improvements will bring the camp up to code.

There are no objections to the progression of this project. It must be stated that all those involved in this project must remain cognizant in maintaining the safety of the general public.

Respectfully submitted for your review and approval.

#11764

Aylett Wallwork e#11764
P.O. III, Community Policing, Wailuku Patrol Division
02/04/2015 @ 1430 hours

Concur with Ofc Aylett Wallworks' comments.
Work will not interfere with vehicular / pedestrian traffic.
Sgt [illegible] 10802
2.10.15 @ 0745 hrs

FEB 18 2015

POLICE DEPARTMENT

COUNTY OF MAUI

ALAN M. ARAKAWA
MAYOR

OUR REFERENCE

YOUR REFERENCE

15/712

55 MAHALANI STREET
WAILUKU, HAWAII 96793
(808) 244-6400
FAX (808) 244-6411

TIVOLI S. FAAUMU
CHIEF OF POLICE

DEAN M. RICKARD
DEPUTY CHIEF OF POLICE

February 11, 2015

MEMORANDUM

TO : EVELYN A. AAKO, STAFF PLANNER
DEPARTMENT OF PLANNING

FROM : TIVOLI S. FAAUMU, CHIEF OF POLICE

SUBJECT :

PERMIT NO.	:	CUP 2015/0001
TMK	:	(2) 3-1-001: 028
Project Name	:	Camp Maluhia Dining Hall
Applicant	:	Maui County Council Ltd., Boy Scouts of America

____ No recommendation or comment to offer.

__x__ Refer to enclosed comments and/or recommendations.

Thank you for giving us the opportunity to comment on this project.

Assistant Chief Victor K. Ramos
For: TIVOLI S. FAAUMU
Chief of Police

Enclosure

'15 FEB 12 P4:02

COUNTY OF MAUI
DEPT. OF PLANNING
CURRENT DIV. RECEIVED

15/172

COUNTY OF MAUI
DEPT. OF PLANNING - CURRENT
FEB 12 2015
RECEIVED

TO : TIVOLI FAAUMU, CHIEF OF POLICE, COUNTY OF MAUI

VIA : CHANNELS

FROM : AYLETT WALLWORK, POLICE OFFICER III, COMMUNITY POLICING, WAILUKU PATROL DIVISION

SUBJECT : RESPONSE TO A REQUEST FOR COMMENTS REGARDING CAMP MALUHIA SPECIAL USE PERMIT

Concur 2/11/15

This communication is submitted as a response to a request for comments by the Department of Planning regarding the Maui County Council Boy Scouts Of America who is proposing to obtain a Special Use Permit to construct a new dining hall, improvements to their fire protection, and improvements to their domestic water systems at Camp Maluhia.

PROJECT : TO OBTAIN A SPECIAL USE PERMIT TO CONSTRUCT A NEW DINING HALL, IMPROVEMENTS TO FIRE PROTECTION, AND DOMESTIC WATER SYSTEM

LOCATION : KAHAKULOA, MAUI, HAWAII

TMK : (2) 3 – 1 – 001:028

RESPONSE:

Maui County Council Boy Scouts Of America is proposing to construct a new dining hall, fire protection, and domestic water system improvements at Camp Maluhia, to do so they need to obtain a Special Use Permit for the zoning of the property as Camp Maluhia is built in an agricultural zoned area.

In review of the submitted documents, the concern from the police perspective is the impacts upon vehicular and pedestrian movement as well as the public's safety. Construction of the new dining hall should not have any impact to vehicular and pedestrian movements. The fire protection and domestic water improvements will bring the camp up to code.

There are no objections to the approval of a Special Use Permit or the progression of this project. There are no proposed conditions of the project's approval for a Special Use Permit. It must be stated that all those involved in this project must remain cognizant in maintaining the safety of the general public.

Respectfully submitted for your review and approval.

Aylett Wallwork e#12764
P.O. III, Community Policing, Wailuku Patrol Division
02/04/2015 @ 1445 hours

Concur with the Wallwork's Comments. Due to remote location, work will not interfere w/ vehicular & pedestrian traffic.
Sgt 10862
2.10.15 @ 0805 hrs

Concur
2/10/15

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Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

Gwen Ohashi Hiraga
SENIOR ADVISOR
Mitsuru "Mich" Hirano
SENIOR ADVISOR

March 11, 2015

Tivoli Faaumu, Chief
Police Department
County of Maui
55 Mahalani Street
Wailuku, Hawaii 96793

SUBJECT: County Special Use Permit Application and Draft Environmental Assessment for Camp Maluhia and Related Improvements, Wailuku, Maui, Hawaii, TMK (2)3-1-001:028 (CUP 2015/0001)

Dear Chief Faaumu:

Thank you for your letters dated February 11, 2015, providing comment on the County Special Use Permit application and Draft Environmental Assessment (EA) for the Camp Maluhia and Related Improvements project. On behalf of the Applicants, Maui County Council Boy Scouts of America and the Department of Land and Natural Resources, Division of Forestry and Wildlife, we offer the following information in response to the comments in your letter.

We understand that the concern from the Police Department's perspective is the potential impacts upon vehicular and pedestrian movement and public safety as a result of the project.

We acknowledge your determination that the construction of the proposed dining hall will not impact vehicular or pedestrian movements, and appreciate your understanding that the other related improvements are aimed at bringing the camp up to code standards.

Furthermore, we acknowledge that all those who will be involved in the project must remain cognizant in maintaining the general safety of the public.

Thank you again for your input. Should you have any questions or require additional information, please feel free to contact me at 244-2015.

Very truly yours,

Bryan Esmeralda, Associate

BE:yp
cc: Robert Nakagawa, Maui County Council Boy Scouts of America
Torrie Nohara, Department of Land and Natural Resources
Daniel Ornellas, Department of Land and Natural Resources
Evelyn Aako, Department of Planning
Ronald Fukumoto, Fukumoto Engineering, Inc.
K:\DATA\BSA\CampMaluhiaImpr\Draft EA Responses\Police.doc

FEB 12 2015

From: Michelle Makii
To: Evelyn Aako
Date: 2/6/2015 12:27 PM
Subject: Camp Maluhia Dining Hall Comments
Attachments: CUP 20150001 231001028 Camp Maluhia Dining Hall.pdf

Aloha Evelyn,
Attached is DEM's response to your transmittal regarding Camp Maluhia Dining Hall.

Thank you,
Michelle

Michelle T. Makii
Private Secretary
Dept. of Environmental Management
Office: (808)270-8230
2050 Main Street, Suite 1C
Wailuku, Hawaii 96793

AGENCY TRANSMITTAL RESPONSE e-FORM

FOR DEPARTMENT OF PLANNING, COUNTY OF MAUI

January 29, 2015

AGENCY NAME	Department of Environmental Mgmt.	PHONE	270-8230
PROJECT: APPLICANT: PERMIT NO: TMK: STREET ADDRESS: PROJECT DESCRIPTION: SECURITY CODE:	Camp Maluhia Dining Hall Maui County Council Ltd., Boy Scouts of America CUP 2015/0001 (2) 3-1-001:028 Kahekili Highway, Wailuku, Maui, Hawaii Construction of a new dining hall to replace existing; improvements to fire protection and domestic water systems.		

☐ COMMENTS/RECOMMENDATIONS ☒ NO COMMENTS

WASTEWATER RECLAMATION DIVISION COMMENTS

☐ COMMENTS/RECOMMENDATIONS ☒ NO COMMENTS

SOLID WASTE DIVISION COMMENTS

Signed:		
Print Name:	**Michael M. Miyamoto, Deputy Director**	**Date 2/6/15**

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Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

Gwen Ohashi Hiraga
SENIOR ADVISOR
Mitsuru "Mich" Hirano
SENIOR ADVISOR

March 11, 2015

Kyle Ginoza, Director
Department of Environmental Management
County of Maui
2200 Main Street, Suite 100
Wailuku, Hawaii 96793

SUBJECT: County Special Use Permit Application and Draft Environmental Assessment for Camp Maluhia and Related Improvements, Wailuku, Maui, Hawaii, TMK (2)3-1-001:028 (CUP 2015/0001)

Dear Mr. Ginoza:

Thank you for your Department's comment form dated February 6, 2015, providing input on the County Special Use Permit application and Draft Environmental Assessment (EA) for the Camp Maluhia and Related Improvements project. On behalf of the Applicants, Maui County Council Boy Scouts of America and the Department of Land and Natural Resources, Division of Forestry and Wildlife, we acknowledge that the Department of Environmental Management has no comment on the proposed project.

Thank you again for your input. Should you have any questions or require additional information, please feel free to contact me at 244-2015.

Very truly yours,

Bryan Esmeralda, Associate

BE:yp
cc: Robert Nakagawa, Maui County Council Boy Scouts of America
Torrie Nohara, Department of Land and Natural Resources
Daniel Ornellas, Department of Land and Natural Resources
Evelyn Aako, Department of Planning
Ronald Fukumoto, Fukumoto Engineering, Inc.

MAR 12 2015

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

Department of Land and Natural Resources
State of Hawaii
Attn: Daniel Ornellas, District Land Agent
54 South High Street
Wailuku, Hawaii 96793

SUBJECT: CAMP MALUHIA AND RELATED IMPROVEMENTS
DRAFT ENVIRONMENTAL ASSESSMENT
TMK (2) 3-1-001:028, WAILUKU

We reviewed the subject application and have the following comments:

1. Solid Waste Division comments:

   a. Estimate quantities of construction waste to be disposed of or recycled.

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,

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

xc: ✓Mr. Bryan Esmeralda
Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793

MUNEKIYO HIRAGA
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Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
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Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

Gwen Ohashi Hiraga
SENIOR ADVISOR
Mitsuru "Mich" Hirano
SENIOR ADVISOR

March 17, 2015

Kyle Ginoza, Director
Department of Environmental Management
County of Maui
2200 Main Street, Suite 100
Wailuku, Hawaii 96793

SUBJECT: County Special Use Permit Application and Draft Environmental Assessment for Camp Maluhia and Related Improvements, Wailuku, Maui, Hawaii, TMK (2)3-1-001:028 (CUP 2015/0001)

Dear Mr. Ginoza:

Thank you for your Department's letter dated March 6, 2015, providing comment on the County Special Use Permit Application and Draft Environmental Assessment (EA) for the Camp Maluhia and Related Improvements project. On behalf of the Applicants, Maui County Council Boy Scouts of America and the Department of Land and Natural Resources, Division of Forestry and Wildlife, we offer the following information in response to the comments in your letter.

1. SOLID WASTE DIVISION

a. The proposed project involves the demolition of approximately 2,210 cubic feet of existing pavement. To the extent possible, the pavement may be recycled on site as fill for the proposed construction, with any excess being disposed of at an approved construction waste landfill. However, construction details have not been finalized for the project. As such, actual quantities of waste and disposal and/or recycling processes implemented may change as construction of the proposed project commences.

2. ***WASTEWATER RECLAMATION DIVISION***

a. We acknowledge that there is no wastewater system in the area of the subject project. The camp is, and will continue to be serviced by a private wastewater system.

Thank you again for your input. Should you have any questions or require additional information, please feel free to contact me at 244-2015.

Very truly yours,

Bryan Esmeralda, Associate

BE:yp
cc: Robert Nakagawa, Maui County Council Boy Scouts of America
Torrie Nohara, Department of Land and Natural Resources
Daniel Ornellas, Department of Land and Natural Resources
Evelyn Aako, Department of Planning
Ronald Fukumoto, Fukumoto Engineering, Inc.
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ALAN M. ARAKAWA
Mayor

DAVID C. GOODE
Director

ROWENA M. DAGDAG-ANDAYA
Deputy Director

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

FEB 04 2015

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

CARY YAMASHITA, P.E.
Engineering Division

BRIAN HASHIRO, P.E.
Highways Division

COUNTY OF MAUI
DEPARTMENT OF PUBLIC WORKS
200 SOUTH HIGH STREET, ROOM NO. 434
WAILUKU, MAUI, HAWAII 96793

February 4, 2015

Department of Land and Natural Resources
54 South High Street
Wailuku, Maui, Hawaii 96793

ATTENTION: Daniel Ornellas, District Land Agent

Dear Mr. Ornellas:

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT FOR CAMP MALUHIA AND RELATED IMPROVEMENTS;
TMK: (2) 3-1-001:028
CUP 2015/0001

We reviewed the subject application and have the following comments:

1. The applicant shall be responsible for all required improvements, as required by Hawaii Revised Statutes, Maui County Code and rules and regulations.

2. As applicable, construction plans shall be designed in conformance with Hawaii Standard Specifications for Road and Bridge Construction dated 2005 and Standard Details for Public Works Construction, 1984, as amended.

3. As applicable, worksite traffic-control plans/devices shall conform to "Manual on Uniform Traffic Control Devices for Streets and Highways", 2003.

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

Sincerely,

DAVID C. GOODE
Director of Public Works

DCG:RMDA:da
xc: Highways Division
Engineering Division
Munekiyo & Hiraga
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FEB 12 2015

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
DEPT. OF PLANNING - CURRENT

FEB 11 2015

RECEIVED

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

CARY YAMASHITA, P.E.
Engineering Division

BRIAN HASHIRO, P.E.
Highways Division

COUNTY OF MAUI
DEPARTMENT OF PUBLIC WORKS
200 SOUTH HIGH STREET, ROOM NO. 434
WAILUKU, MAUI, HAWAII 96793

February 6, 2015

MEMO TO: WILLIAM R. SPENCE, PLANNING DIRECTOR

FROM: DAVID C. GOODE, DIRECTOR OF PUBLIC WORKS

SUBJECT: **COUNTY SPECIAL USE PERMIT APPLICATION FOR CAMP MALUHIA DINING HALL; TMK: (2) 3-1-001:028 CUP 2015/0001**

We reviewed the subject application and have the following comments:

Comments from the Development Services Administration (DSA), Engineering Division:

1. The applicant shall be responsible for all required improvements as required by Hawaii Revised Statutes, Maui County Code and rules and regulations.

2. As applicable, construction plans shall be designed in conformance with Hawaii Standard Specifications for Road and Bridge Construction dated 2005 and Standard Details for Public Works Construction, 1984, as amended.

3. As applicable, worksite traffic-control plans/devices shall conform to "Manual on Uniform Traffic Control Devices for Streets and Highways", 2003.

If you have any questions regarding this memorandum, please call Rowena M. Dagdag-Andaya at 270-7845.

DCG:RMDA:da
xc: Highways Division
Engineering Division
S:\DSA\Engr\CZM\Draft Comments\31001028_camp_maluhia_dining_hall_cup.wpd

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Michael T. Munekiyo
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VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

Gwen Ohashi Hiraga
SENIOR ADVISOR
Mitsuru "Mich" Hirano
SENIOR ADVISOR

March 11, 2015

David Goode, Director
Department of Public Works
County of Maui
200 South High Street, Room No. 434
Wailuku, Hawaii 96793

SUBJECT: County Special Use Permit Application and Draft Environmental Assessment for Camp Maluhia and Related Improvements, Wailuku, Maui, Hawaii, TMK (2)3-1-001:028 (CUP 2015/0001)

Dear Mr. Goode:

Thank you for your letters dated February 4 and February 6, 2015, providing comment on the County Special Use Permit Application and Draft Environmental Assessment (EA) for the Camp Maluhia and Related Improvements project. On behalf of the Applicants, Maui County Council Boy Scouts of America and the Department of Land and Natural Resources, Division of Forestry and Wildlife, we offer the following information in response to the comments in your letter.

1. We acknowledge and understand that the Applicant(s) shall be responsible for all required improvements, as required, by the Hawaii Revised Statutes, Maui County Code, and other applicable rules and regulations.

2. As applicable, construction plans will be designed in conformance with Hawaii Standard Specifications for Road and Bridge Construction dated 2005, and Standard Details for Public Works Construction, 1984, as amended.

3. As applicable, worksite traffic control plans and/or devices will conform to the "Manual on Uniform Traffic Control Devices for Streets and Highways", 2003.

Thank you again for your input. Should you have any questions or require additional information, please feel free to contact me at 244-2015.

Very truly yours,

Bryan Esmeralda, Associate

BE:yp
cc: Robert Nakagawa, Maui County Council Boy Scouts of America
Torrie Nohara, Department of Land and Natural Resources
Daniel Ornellas, Department of Land and Natural Resources
Evelyn Aako, Department of Planning
Ronald Fukumoto, Fukumoto Engineering, Inc.
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ALAN M. ARAKAWA
Mayor

WILLIAM R. SPENCE
Director

MICHELE CHOUTEAU McLEAN
Deputy Director

FEB 12 2015

COUNTY OF MAUI

DEPARTMENT OF PLANNING

TRANSMITTAL

January 23, 2015

	STATE AGENCIES
X	Dept of AG, Honolulu
	Dept of Hawaiian Homelands
X	Dept of Health, Honolulu
	Dept of Health, Maui (2)
	Dept of Human Services
X	DLNR-Planning (5)
X	DLNR-SHPD, Oahu (Architectural Only)
X	DLNR-SHPD, Maui
X	DOT, Statewide Planning Office (4)
	Land Use Commission (Hard Copy)
	OEQC
X	Office of Hawaiian Affairs
X	Office of Planning
	Civil Defense

	COUNTY AGENCIES
	Civil Defense
X	Dept of Environmental Management (2)
	Dept of Finance – Real Property Division
	Dept of Housing & Human Concerns
	Dept of Parks & Recreation
X	Dept Public Works (1 CD, 2 Hard Copies)
X	Dept of Transportation
X	Dept of Water Supply
X	Fire & Public Safety
X	Police Department
X	ZAED, Zoning & Enforcement Division
	OTHER
X	Hawaiian Telcom (Hard Copy)
X	Maui Electric Company

PROJECT:	**CAMP MALUHIA DINING HALL**
APPLICANT:	**Maui County Council Ltd., Boy Scouts of America**
STREET ADDRESS:	**Kahekili Highway, Wailuku, Maui, Hawaii**
PROJECT DESCRIPTION:	**Construction of a new dining hall to replace existing; improvements to fire protection and domestic water systems.**
CONSULTANT:	**Munekiyo & Hiraga, Inc.**
TMK:	**(2) 3-1-001:028**
PERMIT NO.:	**CUP 2015/0001**

TRANSMITTED TO YOU ARE THE FOLLOWING:

X	Application(s)

THESE ARE TRANSMITTED AS CHECKED BELOW:

X	For your Comment and Recommendation

Please identify any comments you would like the Department of Planning to propose as conditions of project approval. Please also provide any previous comments, letters, etc., pertinent to this application. Submit your comments directly to me by February 25, 2014. A comment box is also provided to assist you. If no comment, please sign the "No Comment" box and fax to (808) 270-1775.

Thank you for your time and assistance. For additional clarification, please contact me via email at evelyn.aako@mauicounty.gov or at (808) 270-7378.

Sincerely,

EVELYN A. AAKO, Staff Planner

RCVD JAN 28 2015

AGENCY NAME		PHONE	

Agency Transmittal – **CAMP MALUHIA DINING HALL (CUP 2015/0001)**
January 23, 2015
Page 2

Attachments
xc: Clayton I. Yoshida, AICP, Planning Program Administrator (PDF)
Evelyn A. Aako, Staff Planner (PDF)
Project File
General File

EAA:ls
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NO COMMENT			
Signed:	Jim Ostel	Dated:	1-29-15
Print Name:	JIM OSTEL	Title:	ENGINEER

COMMENT/RECOMMENDATION BOX

COUNTY OF MAUI
DEPT OF TRANSPORTATION
CURRENT PLANNING DIVISION
RECEIVED
'15 JAN 30 A7:57

Signed:		Dated:	
Print Name:		Title:	

ALAN M. ARAKAWA
Mayor

JO ANNE JOHNSON-WINER
Director
MARC I. TAKAMORI
Deputy Director
Telephone (808) 270-7511

FEB 23 2015

DEPARTMENT OF TRANSPORTATION

COUNTY OF MAUI
200 South High Street
Wailuku, Hawaii, USA 96793-2155

February 18, 2015

Mr. Michael Munekiyo
Munekiyo & Hiraga Inc.
305 High Street, Suite 104
Wailuku, Maui, Hawaii 96793

Subject: Boy Scouts of America Camp Maluhia Improvements

Dear Mr. Munekiyo,

Thank you for the opportunity to comment on this project. We have no comments to make at this time.

Please feel free to contact me if you have any questions.

Sincerely,

Jo Anne Johnson Winer
Director

MUNEKIYO HIRAGA
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Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

Gwen Ohashi Hiraga
SENIOR ADVISOR
Mitsuru "Mich" Hirano
SENIOR ADVISOR

March 11, 2015

Jo Anne Johnson Winer, Director
Department of Transportation
County of Maui
2145 Kaohu Street, Suite 102
Wailuku, Hawaii 96793

SUBJECT: County Special Use Permit Application and Draft Environmental Assessment for Camp Maluhia and Related Improvements, Wailuku, Maui, Hawaii, TMK (2)3-1-001:028 (CUP 2015/0001)

Dear Ms. Johnson Winer:

Thank you for your Department's comment form dated January 29, 2015 and your letter dated February 18, 2015, providing input on the County Special Use Permit application and Draft Environmental Assessment (EA) for the Camp Maluhia and Related Improvements project. On behalf of the Applicants, Maui County Council Boy Scouts of America and the Department of Land and Natural Resources, Division of Forestry and Wildlife, we acknowledge that the Department of Transportation has no comment on the proposed project.

Thank you again for your input. Should you have any questions or require additional information, please feel free to contact me at 244-2015.

Very truly yours,

Bryan Esmeralda, Associate

BE:yp
cc: Robert Nakagawa, Maui County Council Boy Scouts of America
Torrie Nohara, Department of Land and Natural Resources
Daniel Ornellas, Department of Land and Natural Resources
Evelyn Aako, Department of Planning
Ronald Fukumoto, Fukumoto Engineering, Inc.
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FEB 02 2015

ALAN M. ARAKAWA
Mayor

DAVID TAYLOR, P.E.
Director

PAUL J. MEYER
Deputy Director

DEPARTMENT OF WATER SUPPLY
COUNTY OF MAUI
200 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793-2155
www.mauiwater.org

January 23, 2015

Munekiyo & Hiraga, Inc.
Attention: Mr. Bryan Esmeralda, Associate
305 High Street, Ste. 104
Wailuku, HI 96793

Dear Mr. Esmeralda:

RE:	Project:	Camp Maluhia and Related Area Improvements
	Applicant:	Maui County Council Boy Scouts of America and State of Hawaii, Department of Land and Natural Resources, Division of Forestry and Wildlife
	Address:	Kahakuloa, Maui, Hawaii
		Description: Construct a new dining hall and related fire protection and domestic water system improvements
	TMK:	(2) 3-1-001:028
	Permit No.:	Draft Environmental Assessment

Thank you for the opportunity to provide the following comments on the referenced project.

The referenced project's water source is the Kahakuloa Acres Private Water Company.

The project will not have a negative impact on the Department of Water Supply's Central Maui Water System.

The DWS, however, recommends that the applicant include the following conservation measures in the Environmental Assessment and implement them in the project:

Indoor Conservation Measures
- Use EPA WaterSense labeled plumbing fixtures.
- Install flow reducers and faucet aerators in all plumbing fixtures wherever possible.

- Install dual flush toilets with high efficiency models that use 1.28 gallons per flush or less.
- Install bathroom sink faucets with fixtures that do not exceed 1 gpm at 60 psi.

Outdoor Conservation Measures

- Use Smart Approved WaterMark irrigation products. Examples include ET irrigation controllers, drip irrigation, and water saving spray heads.
- Avoid plant fertilizing and pruning that would stimulate excessive growth. Time watering to occur in the early morning or evening to limit evaporation. Limit turf to as small an area as possible.
- Use native climate-adapted plants for landscaping. Native plants adapted to the area conserve water and protect the watershed from degradation due to invasive alien species.
- Dust control: Reclaimed water for dust control is available from the Kihei and Kahului sewage treatment plants at a reasonable cost. It should be considered as an alternative source of water for dust control during construction.

Should you have any questions, please contact Arnold Y. Imaye, Staff Planner, at Arnold.Imaye@co.maui.hi.us or at (808) 463-3107.

Sincerely,

Dave Taylor, P.E., Director
ayi
c: DWS Engineering Division
DWS Water Resources & Planning Division files

FEB 12 2015

ALAN M. ARAKAWA
Mayor

DAVID TAYLOR, P.E.
Director

PAUL J. MEYER
Deputy Director

DEPARTMENT OF WATER SUPPLY
COUNTY OF MAUI
200 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793-2155
www.mauiwater.org

COUNTY OF MAUI
DEPT OF PLANNING
CURRENT RECEIVED

'15 FEB -4 A9:59

January 29, 2015

Ms. Evelyn A. Aako, Staff Planner
County of Maui, Department of Planning
2200 Main St., Ste. 315
Wailuku, HI 96793

Dear Ms. Evelyn A. Aako:

RE: Project: Camp Maluhia Dining Hall
Applicant: Maui County Council Boy Scouts of America
Address: Kahekili Highway, Wailuku, Maui, Hawaii
Description: Construction of a new dining hall to replace existing; improvements to fire protection and domestic water systems
TMK: (2) 3-1-001:028
Permit No.: CUP 2015/0001

Thank you for the opportunity to provide the following comments on the referenced project.

The reference project's water source is the Kahakuloa Acres Private Water Company. The project overlies the Waihee aquifer.

The Department of Water Supply (DWS) acknowledges that the applicant will implement appropriate construction mitigation measures to ensure the protection of the Waihee aquifer.

As a condition of approval, the DWS recommends that the Maui Planning Commission require that the applicant implement the following conservation measures:

Indoor Conservation Measures
- Use EPA WaterSense labeled plumbing fixtures.
- Install flow reducers and faucet aerators in all plumbing fixtures wherever possible.

"By Water All Things Find Life"

Printed on recycled paper

- Install dual flush toilets with high efficiency models that use 1.28 gallons per flush or less.
- Install bathroom sink faucets with fixtures that do not exceed 1 gpm at 60 psi.

Outdoor Conservation Measures

- Use Smart Approved WaterMark irrigation products. Examples include ET irrigation controllers, drip irrigation, and water saving spray heads.
- Avoid plant fertilizing and pruning that would stimulate excessive growth. Time watering to occur in the early morning or evening to limit evaporation. Limit turf to as small an area as possible.
- Use native climate-adapted plants for landscaping. Native plants adapted to the area conserve water and protect the watershed from degradation due to invasive alien species.
- Dust control: Reclaimed water for dust control is available from the Kihei and Kahului sewage treatment plants at a reasonable cost. It should be considered as an alternative source of water for dust control during construction.

Should you have any questions, please contact Arnold Y. Imaye, Staff Planner, at Arnold.Imaye@co.maui.hi.us or at (808) 463-3107.

Sincerely,

Dave Taylor, P.E., Director
Ayi
c: DWS Engineering Division
DWS Water Resources & Planning Division files

MUNEKIYO HIRAGA
Planning. Project Management. Sustainable Solutions.

Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

Gwen Ohashi Hiraga
SENIOR ADVISOR
Mitsuru "Mich" Hirano
SENIOR ADVISOR

March 11, 2015

David Taylor, P.E., Director
Department of Water Supply
County of Maui
200 South High Street
Wailuku, Hawaii 96793

SUBJECT: County Special Use Permit Application and Draft Environmental Assessment for Camp Maluhia and Related Improvements, Wailuku, Maui, Hawaii, TMK (2)3-1-001:028 (CUP 2015/0001)

Dear Mr. Taylor:

Thank you for your letters dated January 23 and January 29, 2015, providing comment on the County Special Use Permit application and Draft Environmental Assessment (EA) for the Camp Maluhia and Related Improvements project. On behalf of the Applicants, Maui County Council Boy Scouts of America and the Department of Land and Natural Resources, Division of Forestry and Wildlife, we offer the following information in response to the comments in your letter.

We acknowledge the Department of Water Supply's (DWS) understanding that the project's water source is the Kahakuloa Acres Private Water Company and that the project will not have a negative impact on the DWS' Central Maui Water System.

We also acknowledge the DWS' recommended water conservation measures. The conservation measures will be forwarded to the Applicant and project design team for review and consideration.

Thank you again for your input. Should you have any questions or require additional information, please feel free to contact me at 244-2015.

Very truly yours,

Bryan Esmeralda, Associate

BE:yp
cc: Robert Nakagawa, Maui County Council Boy Scouts of America
Torrie Nohara, Department of Land and Natural Resources
Daniel Ornellas, Department of Land and Natural Resources
Evelyn Aako, Department of Planning
Ronald Fukumoto, Fukumoto Engineering, Inc.
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FEB 18 2014

Munekiyo & Hiraga
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Mr. Michael Munekiyo:

CONCERNING: DRAFT ENVIRONMENTAL ASSESSMENT for the new Camp Maluhia Boy Scout facility plans

Public Access Trails Hawaii (PATHMaui.org) is a 501(c)(3) non-profit organization certified on 21 September 2007. PATH's mission is to do research, education, and advocacy to obtain public access to public lands. PATH respects the rights of private landowners. PATH just opened up Haleakala Trail to the public.

Public Access Trails Hawaii OPPOSES this Boy Scout $11 million project BECAUSE THE BOY SCOUTS CONTINUE TO LOCK THE ENTRANCE GATE OFF KAHEKILI HIGHWAY.

This access problem dates back years, but came to a head in September 2013.
See Maui News articles of September 2013 and letter to the editor.

CONSIDERING THE DRAFT EVIRONMENTAL ASSESSMENT:

Page 5. "The proposed Trail parking lot will allow the Camp to install a new gate to secure its two (2) parking lots and will allow for improved access management for Trail users".

"...and will allow for improved access management for Trail users." THIS IS A COMPLETE LIE. The Boy Scouts have closed off the road from Kahekili Highway which ESSENTIALLY keeps people from hiking Waihee Trail when they want to. The road is about a mile long and uphill and I sincerely doubt if any Boy Scouts have hiked it. If the Boy Scouts put up a gate before their two (2) parking lots, then they are secure and there is no reason to have a lower gate near Kahekili Highway.

Page 115. Chief of Police Gary Yabuta, through his assistant, has no real comment about this project.

Page 116. Community Policing Officer Aylett Wallwork has no real comment about this project.

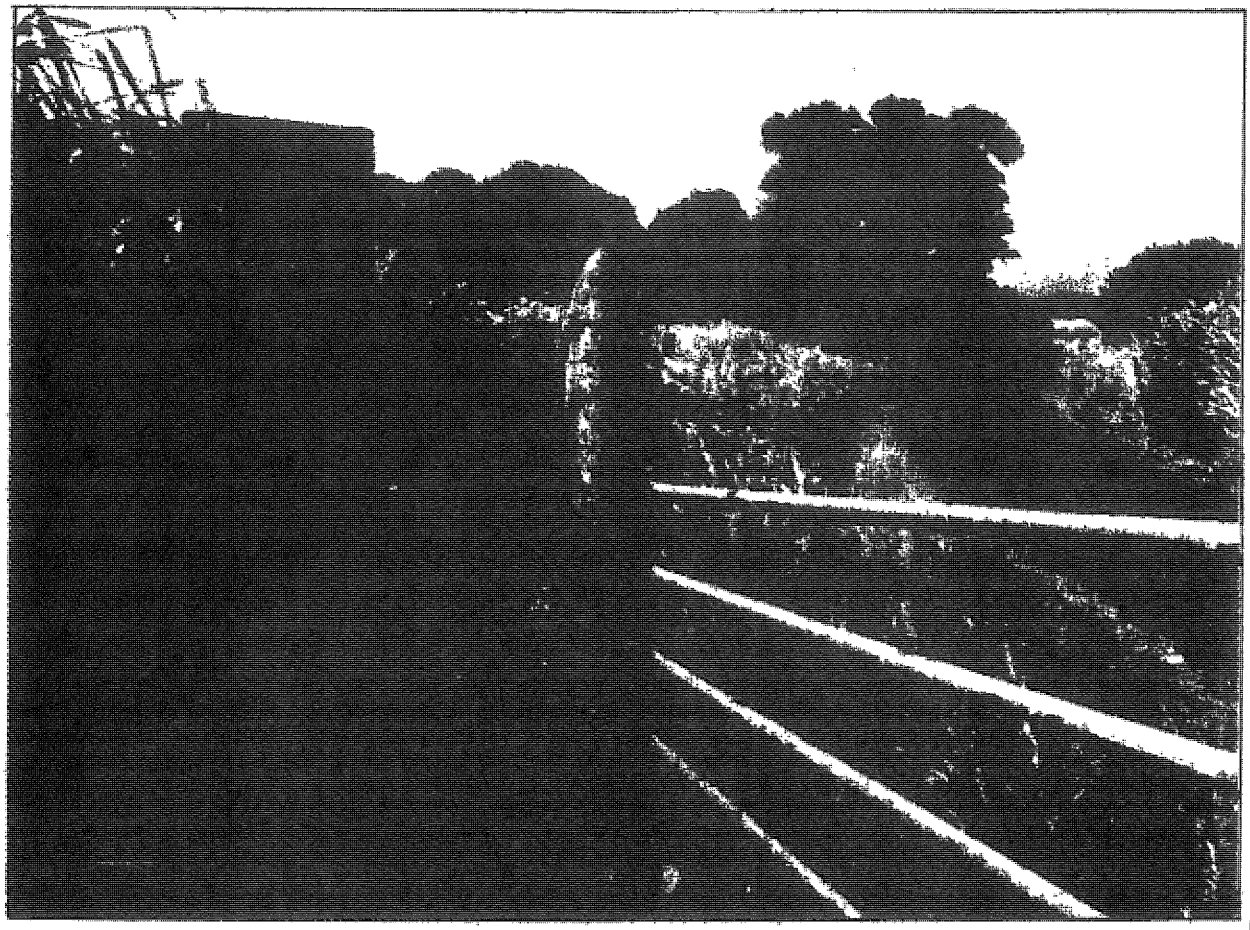
These two statements by police officers are very important. The Boy Scouts early in the DEA report loitering, littering, and drug and alcohol use in the parking lot. These two honest police officers report nothing at all like those crimes. This is terribly important as the Boy Scouts used the same justification to put a gate down at Kahekili Highway. No police reports or even anecdotes from the police officers are available.

Public Access Trails Hawaii asks the Boy Scouts of Maui to remove the gate on the entrance road from Kahekili Highway. This would allow 24 hour use of Waihee Ridge Trail, the most used state trail on Maui. The Boy Scouts will have their own gate for their two parking lots. PATH can then support this project.

David H Brown

DAVID HENDERSON BROWN EXECUTIVE DIRECTOR, PUBLIC ACCESS TRAILS HAWAII 235
2525 Kahekili Highway, Wailuku, Hawaii 808 244-5721

MAUI NEWS SEPT. 2013



The Maui News / TRESSA VERBER photo

The Maui County Boy Scouts of America has posted closing times for the access road to Waihee Ridge Trail. Previously, the road had no formal or posted times, but because of trespassing and vandalism, the Scouts close the gate at 5 p.m. and open it at 7 a.m.

Scouts issue formal closing times for Waihee Ridge Trail

By CHRIS SUGIDONO
Staff Writer

The access road to Waihee Ridge Trail, one of Maui's most popular trails, has formal closing times now posted by the Maui County Boy Scouts of America because of late-night partying and destruction of the trail, according to Scout officials.

The state owns the trail and leases land to the Scout group, which has begun opening and closing a gate above Kahekili Highway from 7 a.m. to 5 p.m. daily. The gate blocks visitors from driving up the access road and parking near the trail.

"A trail that's closed is not a trail," said Waihee Valley resident David Henderson Brown, Scouts to extend the gate's regular opening hours.

"They have to provide access, but they do not have to require vehicular access," Nohara said. "They're not doing anything wrong. I wish we had the stick to say leave the gate open . . . because for people to walk up the road, by the time you get up to the trail you'll want to turn back because that road is about a mile and it's steep."

Scout Executive Robert Nakagawa said that the reasons for the posted closing times stem from repeated loitering and vandalism in the trail parking lot and near Camp Maluhia, which is heavily used by the Scouts.

Cooney, who has been with the division for nearly 20 years. "I just went up there . . . and (trash) was all over the place. One of the pullouts had rubbish and cans and graffiti, strewn out all over the road.

"It's a quiet place where all the kids like to go and party," he said.

The Scouts' leased land extends from an entry road off the highway, past the gate and ends up at an additional gate above the trail's parking area, Nakagawa said. Since the scheduled closing times went into effect, "there has been a lot less car break-ins and drug (activity)," he added.

"A lot of this happens after dark, so we tend to close it dur-

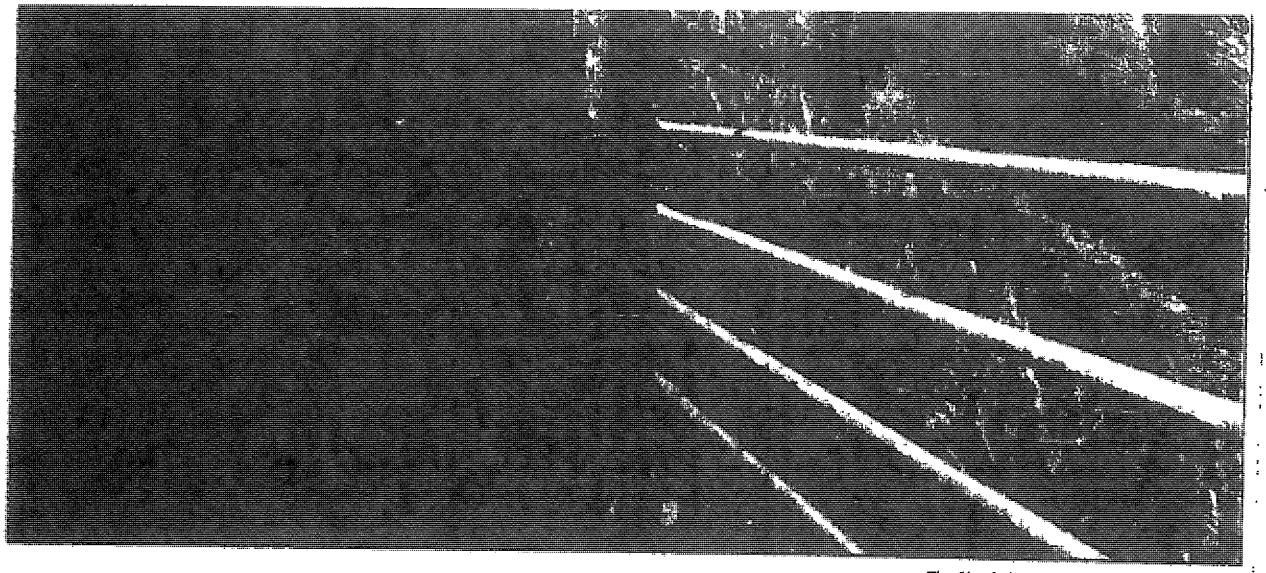
to that would let you out after closing, but not let you in. If we could do that then we could solve this problem so (the Scouts) could feel safe, and they don't have to close the gate off."

Nakagawa reiterated that the trail is open and that only the access road for cars is closed.

"If people want to hike for a sunrise trail hike they just have to hike a little farther than the bottom gate," he said.

Brown, a regular on the trail and executive director of Public Access Trails Hawaii, said that he has sympathy for the Scouts' caretakers' concerns about vandalism, but he called

MAUI NEWS SEPT. 2013



The Maui News / TRESSA VERBER photo

The Maui County Boy Scouts of America has posted closing times for the access road to Waihee Ridge Trail. Previously, the road had no formal or posted times, but because of trespassing and vandalism, the Scouts close the gate at 5 p.m. and open it at 7 a.m.

Scouts issue formal closing times for Waihee Ridge Trail

By CHRIS SUGIDONO
Staff Writer

The access road to Waihee Ridge Trail, one of Maui's most popular trails, has formal closing times now posted by the Maui County Boy Scouts of America because of late-night partying and destruction of the trail, according to Scout officials.

The state owns the trail and leases land to the Scout group, which has begun opening and closing a gate above Kahekili Highway from 7 a.m. to 5 p.m. daily. The gate blocks visitors from driving up the access road and parking near the trail.

"A trail that's closed is not a trail," said Waihee Valley resident David Henderson Brown. "I've been there and . . . the trail opens whenever (the caretaker) opens it. It was open at 7:30 a.m. two or three weeks ago and it's not just me that's going up there, it's a very used trail."

Scout officials said that the opening and closing of the gate is nothing new, but officials with the Department of Land and Natural Resources only became aware of the formal times last month.

Torrie Nohara, trails and access specialist with the department's Division of Forestry and Wildlife, oversees the trail and said she is in talks with the Scouts to extend the gate's regular opening hours.

"They have to provide access, but they do not have to require vehicular access," Nohara said. "They're not doing anything wrong. I wish we had the stick to say leave the gate open . . . because for people to walk up the road, by the time you get up to the trail you'll want to turn back because that road is about a mile and it's steep."

Scout Executive Robert Nakagawa said that the reasons for the posted closing times stem from repeated loitering and vandalism in the trail parking lot and near Camp Maluhia, which is heavily used by the Scouts.

"According to my caretaker, he's basically cleaning up that parking lot every day due to all the trash and bottles," Nakagawa said. "We get a lot of people wandering around the campground, loitering and trespassing on the Scouts' property."

Kevin Cooney, trails and access technician and volunteer coordinator with the division, said that he regularly sees garbage leading up to and along the trail.

"When you have places like that, where gates aren't closed, you have kids going up and trashing the place," said Cooney, who has been with the division for nearly 20 years. "I just went up there . . . and (trash) was all over the place. One of the pullouts had rubbish and cans and graffiti, strewn out all over the road.

"It's a quiet place where all the kids like to go and party," he said.

The Scouts' leased land extends from an entry road off the highway, past the gate and ends up at an additional gate above the trail's parking area, Nakagawa said. Since the scheduled closing times went into effect, "there has been a lot less car break-ins and drug (activity)," he added.

"A lot of this happens after dark, so we tend to close it during that," he said. "But we're weighing a lot of options."

One of the long-term options Nakagawa and Nohara are weighing is an electronic fence that would automatically open and close. Wildlife officials believe the fence could extend the access road's opening and closing times for the trail that can see anywhere from 30 to 40 people per day.

"I don't have the numbers but . . . it's one of, if not our busiest trail," she said. "We're talking about getting an electronic gate that can automatically open and close. The gate would have a pad you drive up to that would let you out after closing, but not let you in. If we could do that then we could solve this problem so (the Scouts) could feel safe, and they don't have to close the gate off."

Nakagawa reiterated that the trail is open and that only the access road for cars is closed.

"If people want to hike for a sunrise trail hike they just have to hike a little farther than the bottom gate," he said.

Brown, a regular on the trail and executive director of Public Access Trails Hawaii, said that he has sympathy for the Scouts' caretakers' concerns about vandalism, but he called the decision to close the access road "bad management."

"Even our National Park System is closed now, and all their trails are still open," he said, referring to the government shutdown and subsequent Haleakala National Park closing. "The problem is not the hikers. Their problem is people doing bad things in the parking lot, and that's the police's problem. At some point you have to draw a line, and there is no gate that works for me."

■ *Chris Sugidono can be reached at* [redacted]

Access to Waihee Ridge Trail has been locked off

The Maui Council of the Boy Scouts of America has put a gate on the access road to Waihee Ridge Trail. Waihee Ridge Trail is the most used state trail on Maui and may see 100 users a day. The trail is in excellent condition due to the Na Ala Hele program of the state Department of Land and Natural Resources.

However, the Boy Scouts are being very bad stewards of the state of Hawaii-leased land.

I am asking the Boy Scouts to move the gate back to their own fee-simple property. The Boy Scouts should encourage the hiking public instead of locking off access.

David Henderson Brown
Wailuku

MAUI NEWS 2008 2013

BOY SCOUTS OF AMERICA®
MAUI COUNTY COUNCIL

March 12, 2015

David Henderson Brown, Executive Director
Public Access Trails Hawaii
2525 Kahekili Highway
Wailuku, Hawaii 96793

SUBJECT: County Special Use Permit Application and Draft Environmental Assessment for Camp Maluhia and Related Improvements, Wailuku, Maui, Hawaii, TMK (2)3-1-001:028 (CUP 2015/0001)

Dear Mr. Brown:

Thank you for your letter, which we received on February 18, 2015, providing comment on the County Special Use Permit application and Draft Environmental Assessment (EA) for the Camp Maluhia and Related Improvements project. On behalf of the Applicants, Maui County Council Boy Scouts of America (BSA) and the Department of Land and Natural Resources, Division of Forestry and Wildlife (DOFAW), we acknowledge Public Access Trails Hawaii's (PATH) concerns regarding the proposed project. We offer the following information in response to the comments in your letter.

We understand your frustration due to the BSA's maintenance of a gate at the bottom of the access road from Kahekili Highway to Camp Maluhia ("camp") and the Waihee Ridge Trail ("trail"). As you know, the trail does not currently have a designated parking area, and as such, trail users often park in the parking lots designated for the camp or directly on the access road. This presents a potential safety concern as emergency vehicles would be unable to travel up the one-lane access road if vehicles are parked in the right-of-way.

In addition, the gate affords the BSA proper stewardship of the area to promote safety and proper maintenance. Currently, the gate is locked at 5:00pm and opened at 7:00am. As you may be aware, the camp itself is heavily used by scouts and community groups alike. The gate is used as a management tool to help ensure that the properties are not vandalized or abused and that safety of camp users is not compromised. Please note that outside of these hours, the trail may still be accessed by foot.

Maui County Council-BSA
200 Liholiho Street
Wailuku, HI 96793

In regards to the quotes from former Maui Police Department Chief Gary Yabuta and Community Policing Officer Aylett Wallwork you provided in your letter, we would like to note that when Draft Environmental Assessments are circulated to agencies for review, the agencies typically provide comments most pertinent to the proposed project and the potential impact the development may have. While the Department was silent with respect to unauthorized activities in the parking lots, our observations are based on reports from scouts, community users, and members of our staff.

As was stated in the Draft EA, following the implementation of the proposed project, DOFAW intends to replace the gate off Kahekili Highway with an electronic gate which will open and close at set times. The BSA also plans to install a gate securing their two (2) parking lots as the trail will then have a designated parking area.

Thank you again for your input. Should you have any questions or require additional information, please feel free to contact me at 244-3724.

Very truly yours,

Robert Nakagawa
Maui County Council Boy Scouts of America

RN
cc: Bryan Esmeralda, Munekiyo Hiraga
Torrie Nohara, Department of Land and Natural Resources
Daniel Ornellas, Department of Land and Natural Resources
Evelyn Aako, Department of Planning
Ronald Fukumoto, Fukumoto Engineering, Inc.
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From: Richard Spacer <rspacer@yahoo.com>
Date: February 20, 2015 at 8:32:41 PM CST
To: "planning@mhplanning.com" <planning@mhplanning.com>
Subject: Waihee Ridge Trail, Maui
Reply-To: Richard Spacer <rspacer@yahoo.com>

FEB 20 2015

Aloha Mike:

This email was broadcast to those like me who advocate for public access to trails. I am cutting and pasting the relevant portion for your benefit. I do activism for public trail access on Kauai where we have multi-millionaire land owners who have blocked access to historic trails and unduly influenced DLNR and county planning. I trust those on the ground on Maui to advocate for their position to remove the gate next to Kahekili Highway. Thank you for listening to us.

Regards,

Richard Spacer
Kauai

I hope every one saw this article about the Boy Scout renovation of Camp Maluhia. This is an $11 million renovation which includes improving their two parking lots and a GATE before them. The State of Hawaii through the DLNR will improve or build a new parking lot for Waihee Ridge Trail. THIS IS THE MOST USED STATE TRAIL ON THE ISLAND. THEREFORE, THERE IS NO LONGER A NEED TO HAVE A SEPARATE GATE AT THE ACCESS ROAD OFF KAHEKILI HIGHWAY. Maui Hikers really need your help on this. Please contact Mike Munekiyo the planner to REMOVE THE GATE NEAR KAHEKILI HIGHWAY. I read every word of this environmental assessment: on page 115 and 116 the chief of police and the local community policing officer said they had no real comments. The Boy Scouts say many bad things happen in their parking lot. Both view points can not be right. Who do you trust?

PLEASE CONTACT MIKE MENEKIYO.

TELL HIM THAT THE GATE NEXT TO KAHEKILI HIGHWAY IS NO LONGER NEEDED.

BOY SCOUTS OF AMERICA
MAUI COUNTY COUNCIL

March 12, 2015

Richard Spacer
Via email to: rspacer@yahoo.com

SUBJECT: County Special Use Permit Application and Draft Environmental Assessment for Camp Maluhia and Related Improvements, Wailuku, Maui, Hawaii, TMK (2)3-1-001:028 (CUP 2015/0001)

Dear Mr. Spacer:

Thank you for your e-mail dated February 20, 2015, providing comment on the County Special Use Permit application and Draft Environmental Assessment (EA) for the Camp Maluhia and Related Improvements project. On behalf of the Applicants, Maui County Council Boy Scouts of America (BSA) and the Department of Land and Natural Resources, Division of Forestry and Wildlife (DOFAW), we offer the following information in response to the comments in your letter.

We would like to respectfully clarify that the proposed project does not include improvements to the BSA's two (2) existing parking lots. The project involves the proposed construction of a new dining hall and improvements to the domestic and fire water systems servicing Camp Maluhia ("camp") by the BSA, and the construction of a new parking lot for Waihee Ridge Trail ("trail") users by DOFAW.

We acknowledge that the trail is heavily used, and understand your frustration due to the BSA's maintenance of a gate at the bottom of the access road from Kahekili Highway to the camp and the trail. As you know, the trail does not currently have a designated parking area, and as such, trail users often park in the parking lots designated for the camp or directly on the access road. This presents a potential safety concern as emergency vehicles would be unable to travel up the one-lane access road if vehicles are parked in the right-of-way.

Maui County Council-BSA
200 Liholiho Street
Wailuku, HI 96793

www.mauibsa.org

In addition, the gate affords the BSA proper stewardship of the area to promote safety and proper maintenance. Currently, the gate is locked at 5:00 p.m. and opened at 7:00 a.m. As you may be aware, the camp itself is heavily used by scouts and community groups alike. The gate is used as a management tool to help ensure that the properties are not vandalized or abused and that safety of camp users is not compromised. Please note that outside of these hours, the trail may still be accessed by foot.

In regards to the quotes from former Maui Police Department Chief Gary Yabuta and Community Policing Officer Aylett Wallwork you provided in your letter, we would like to note that when Draft Environmental Assessments are circulated to agencies for review, the agencies typically provide comments most pertinent to the proposed project and the potential impact the development may have. While the Department was silent with respect to unauthorized activities in the parking lots, our observations are based on reports from scouts, community users, and members of our staff.

As was stated in the Draft EA, following the implementation of the proposed project, DOFAW intends to replace the gate off Kahekili Highway with an electronic gate which will open and close at set times. The BSA also plans to install a gate securing their two (2) parking lots as the trail will then have a designated parking area.

Thank you again for your input. Should you have any questions or require additional information, please feel free to contact me at 244-3724.

Sincerely,

Robert Nakagawa
Maui County Council Boy Scouts of America

RN
cc: Bryan Esmeralda, Munekiyo Hiraga
Torrie Nohara, Department of Land and Natural Resources
Daniel Ornellas, Department of Land and Natural Resources
Evelyn Aako, Department of Planning
Ronald Fukumoto, Fukumoto Engineering, Inc.
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APPENDIX A.

Flora and Fauna Study

FLORA AND FAUNA STUDY

CAMP MALUHIA IMPROVEMENTS PROJECT

KUKUIPUKA, KAHAKULOA, WEST MAUI

by:

Robert W. Hobdy
Environmental Consultant
Kokomo, Maui
January 2013

Prepared for:
Boy Scouts of America, Maui County Council

MALUHIA BOY SCOUTS CAMP
FLORA AND FAUNA STUDY
KUKUIPUKA, KAHAKULOA, WEST MAUI

INTRODUCTION

The Camp Maluhia Improvements Project is located 3.5 miles north of Waihe'e Town and 1 mile mauka of Kahekili Highway in Kukuipuka, Kahakuloa, Wailuku District, West Maui on 17.94 acres of land TMK (2) 3-1-01:28 plus a small adjacent water tank and water line TMK (2) 3-1-01:01 (see Figure 1). It is proposed that a new dining hall and related fire protection water system improvements be made at this Boy Scout Camp. This study was initiated by the Boy Scouts of America in fulfillment of environmental requirements of the planning process.

SITE DESCRIPTION

The project area is situated on a ridgetop on the south side of Makamaka'ole Gulch between the elevations of 940 feet and 1,260 feet above sea level. Camp facilities include administrative structures, a Long house, a dining hall, cabins, a swimming pool, a ball field, a firing range, an archery range and vehicular parking. The soil is classified as Honolua Silty Clay, 15% to 25% slopes (Foote et al, 1972). Rainfall averages around 40 inches per year with winter maximums (Armstrong, 1983). The property is forested with a variety of trees and shrubs around openings with grassy lawns and structures. The adjacent water tank and water line easement lies in open pasture.

SURVEY OBJECTIVES

This report summarizes the findings of a flora and fauna study of the proposed Camp Maluhia Improvements project that was conducted in January 2013. The objectives of the survey were to:

1. Document what plant and animal species occur on the property or may likely occur in the existing habitat.

2. Document the status and abundance of each species.

3. Determine the presence or likely occurrence of any native flora and fauna, particularly any that are Federally listed as Threatened or Endangered. If such occur, identify what features of the habitat may be essential for these species.

4. Determine if the project area contains any special habitats which if lost or altered might result in a significant negative impact on the native flora and fauna in this part of the island.

BOTANICAL SURVEY REPORT

SURVEY METHODS

A walk-through botanical survey method was used to cover this 17.94 acre project area and a portion of TMK (2) 3-1-01:01, where the water system work will be undertaken. All representative habitats were assessed. An inventory of all plant species was made documenting species, status, distribution and abundance. Close attention was given to ascertaining whether any native plants or Endangered species were present.

DESCRIPTION OF THE VEGETATION

The vegetation in the project area consists of a great variety of mostly non-native trees, shrubs, vines, grasses and ferns. A total of 147 plant species were recorded during the survey. Of these 131were non-native species, 4 species were endemic to Hawaii only, 8 species were indigenous to Hawaii as-well-as to other Pacific islands, and 4 species were brought to Hawaii during the Polynesian migrations (see plant inventory and below).

Species endemic to Hawaii
kilau fern (*Pteridium aquilinum* var. decompositum)
koa (*Acacia koa*)
'ōhi'a (*Metrosideros polymorpha*)
'akia (*Wikstroemia oahuensis*)

Species indigenous in Hawaii and other Pacific islands
pala'ā fern (*Sphenomeris chinensis*)
ni'ani'au (*Nephrolepis exaltata*)
uluhe fern (*Dicranopteris linearis*)
pilipili'ula (*Chrysopogon aciculatus*)
'uhaloa (*Waltheria indica*)
'ilima (*Sida fallax*) - recent planting
hala (*Pandanus tectorius*) old planting
pōpolo (*Solanum americanum*)

Species introduced by Polynesians
niu, coconut (*Cocos nucifera*)
kī, ti leaf (*Cordyline fruticosa*)
kukui (*Aleurites moluccana*)
'ihi'ai (*Oxalis corniculata*)

Eighteen of the most common plants species that were found in the project area were all non-native species.

DISCUSSION AND RECOMMENDATIONS

The vegetation in this project area is dominated by non-native plants that have no special status or conservation focus. There were, however, twelve species of native plants (itemized above) found during the survey that received further analysis. All of these twelve species are found commonly on most of the main Hawaiian islands, and the eight indigenous species occur on other Pacific islands as well. None of the native plant species are Endangered or Threatened species, nor are any of them candidates for such status. No special native plant habitats occur within the project area either.

There are some Endangered plants that occur along the sea cliffs over a mile below this area, and others that occur in the wet forests and bogs two miles and more above this area, but these species are well separated from the project area and in quite different habitats.

Because the vegetation in this project area is dominated by common non-native plants, and because there are no rare or protected native species in or near this area, there is little of botanical concern with regard to this project. The proposed project is not expected to have a significant negative impact on the botanical resources in this part of West Maui.

PLANT SPECIES LIST

Following is a checklist of all those vascular plant species inventoried during the field studies. Plant families are arranged alphabetically within each of four groups: Ferns, Conifers, Monocots and Dicots. Taxonomy and nomenclature of the flowering plants (Monocots and Dicots) are in accordance with Wagner et al. (1999) and Staples and Herbst (2005).

For each species, the following information is provided:

1. Scientific name with author citation.

2. Common English or Hawaiian name.

3. Bio-geographical status. The following symbols are used:

   endemic = native only to the Hawaiian Islands; not naturally occurring anywhere else in the world.

   indigenous = native to the Hawaiian Islands and also to one or more other geographic area(s).

   non-native = all those plants brought to the islands intentionally or accidentally after western contact.

   polynesian = brought by the Hawaiians during Polynesian migrations.

4. Abundance of each species within the project area:

   abundant = forming a major part of the vegetation within the project area.

   common = widely scattered throughout the area or locally abundant within a portion of it.

   uncommon = scattered sparsely throughout the area or occurring in a few small patches.

   rare = only a few isolated individuals within the project area.

SCIENTIFIC NAME	COMMON NAME	STATUS	ABUNDANCE
FERNS			
BLECHNACEAE (Chain Fern Family)			
Blechnum appendiculatum Willd.	palm fern	non-native	uncommon
DENNSTAEDTIACEAE (Bracken Fern Family)			
Pteridium aquilinum (L.) Kuhn var. *decompositum* (Gaud.) Tryon	kilau	endemic	rare
GLEICHENIACEAE (False Staghorn Fern Family)			
Dicranopteris linearis (Burm.f.) Underw.	uluhe	indigenous	rare
LINDSAEACEAE (Lindsaea Fern Family)			
Sphenomeris chinensis (L.) Maxon	pala'ā	indigenous	uncommon
NEPHROLEPIDACEAE (Sword Fern Family)			
Nephrolepis brownii (Desv.) Hovencamp & Miyamoto	Asian sword fern	non-native	common
Nephrolepis exaltata (L.) Schott	ni'ani'au	indigenous	rare
POLYPODIACEAE (Polypody Fern Family)			
Phymatosorus grossus (Langsd.&Fisch.) Brownsey	laua'e	non-native	uncommon
THELYPTERIDACEAE (Marsh Fern Family)			
Christella parasitica (L.) H. Lev.	----------	non-native	common
CONIFERS			
ARAUCARIACEAE (Araucaria Family)			
Araucaria columnaris (G. Forster) J.D. Hooker	Cook pine	non-native	common
Araucaria cunninghamii D. Don	hoop pine	non-native	uncommon
CUPRESSACEAE (Cypress Family)			
Cupressus macrocarpa Gordon	Monterey cypress	non-native	rare
PINACEAE (Pine Family)			
Pinus elliottii Engelmann	slash pine	non-native	uncommon
MONOCOTS			
ARACEAE (Aroid Family)			
Epipremnum pinnatum (L.) Engelm.	taro vine	non-native	uncommon
ARECACEAE (Palm Family)			
Archontophoenix alexandrae (Muell.) Wendl.&Drude	Alexandra palm	non-native	rare
Cocos nucifera L.	niu, coconut	Polynesian	rare
ASPARAGACEAE (Asparagus Family)			
Cordyline fruticosa (L.) A. Chev.	kī, ti leaf	Polynesian	uncommon
Fucraea foetida (L.) Haw.	Mauritius hemp	non-native	uncommon
CYPERACEAE (Sedge Family)			
Cyperus rotundus L.	nut sedge	non-native	rare
DRACAENACEAE (Dracaena Family)			
Dracaena marginata Lamarck	money tree	non-native	rare
HELICONIACEAE (Heliconia Family)			
Heliconia bihai (L.) L.	lobster-claw	non-native	rare
IRIDACEAE (Iris Family)			
Iris x	iris cultivar	non-native	rare
MUSACEAE (Banana Family)			
Musa acuminata x balbisiana Colla	banana	non-native	uncommon

SCIENTIFIC NAME	COMMON NAME	STATUS	ABUNDANCE
ORCHIDACEAE (Orchid Family)			
Spathoglottis plicata Blume	Phillipine ground orchid	non-native	rare
PANADANACEAE (Screwpine Family)			
Pandanus tectorius Parkinson ex Z.	hala	indigenous	uncommon
POACEAE (Grass Family)			
Andropogon virginicus L.	broomsedge	non-native	uncommon
Axonopus compressus (Sw.) P. Beauv.	broad-leaved carpetgrass	non-native	common
Axonopus fissifolius (Raddi) Kulm	narrow leaved carpetgrass	non-native	common
Bambusa vulgaris Wendland	common bamboo	non-native	uncommon
Cenchrus echinatus L.	common sandbur	non-native	rare
Cenchrus purpureus (Schumach.) Morrone	Napier grass	non-native	rare
Chloris barbata (L.) Sw.	swollen fingergrass	non-native	rare
Chloris gayana Kunth	Rhodes grass	non-native	rare
Chrysopogon aciculatus (Retz.) Trin.	pilipili'ula	indigenous	rare
Cynodon dactylon (L.) Pers.	Bermuda grass	non-native	uncommon
Digitarias ciliaris (Retz.) Koeler	Henry's crabgrass	non-native	uncommon
Digitaria violascens Link	kukaepua'a	non-native	rare
Eleusine indica (L.) Gaertn.	wiregrass	non-native	rare
Eragrostis pectinacea (Michx.) Nees	Carolina lovegrass	non-native	common
Eremochloa ophiuroides (Munro) Hackel	centidpede grass	non-native	rare
Megathyrsus maximus (Jacq.) Simon & Jacobs	Guinea grass	non-native	common
Melinis minutiflora P. Beauv.	molasses grass	non-native	uncommon
Melinis repens (Willd.) Zizka	Natal redtop	non-native	rare
Paspalum conjugatum Bergius	Hilo grass	non-native	common
Paspalum dilatatum Poir.	Dallis grass	non-native	rare
Paspalum paniculatum L.	arrocillo	non-native	uncommon
Paspalum scrobiculatum L.	ricegrass	non-native	rare
Paspalum urvillei Steud.	Vasey grass	non-native	rare
Phyllostachys aurea A.&C. Riviere	dwarf bamboo	non-native	uncommon
Sacciolepis indica (L.) Chase	Glenwood grass	non-native	rare
Setaria parviflora (Poir.) Kerguelen	yellow foxtail	non-native	rare
Sporobolus africanus (Poir.) Robyns & Tournay	smutgrass	non-native	uncommon
Urochloa mutica (Forssk.) T.Q. Nguyen	California grass	non-native	rare
ZINGIBERACEAE (Ginger Family)			
Alpinia zerumbet (Persoon) Burtt & Smith	shell ginger	non-native	uncommon
Etlingera elatior (Jack) R.M. Smith	torch ginger	non-native	rare
Hedychium flavescens Roscoe	yellow ginger	non-native	uncommon
DICOTS			
ACANTHACEAE (Acanthus Family)			
Justicia betonica L.	white shrimp plant	non-native	rare
ADOXACEAE (Muskroot Family)			
Sambucus mexicana K. Presl ex DC.	Mexican elderberry	non-native	rare
ANACARDIACEAE (Mango Family)			
Mangifera indica L.	mango	non-native	common
Schinus terebinthifolius Raddi	Christmas berry	non-native	common

SCIENTIFIC NAME	COMMON NAME	STATUS	ABUNDANCE
APIACEAE (Parsley Family)			
Centella asiatica (L.) Urb.	Asiatic pennywort	non-native	uncommon
Ciclospermum leptophyllum (Pers.) Sprague	fir-leaved celery	non-native	rare
APOCYNACEAE (Dogbane Family)			
Allamanda cathartica L.	allamanda	non-native	rare
Alstonia scholaris R. Br.	devil tree	non-native	uncommon
Asclepias physocarpa (E.Mey.) Schlect.	baloon plant	non-native	rare
ARALIACEAE (Panax Family)			
Schefflera actinophylla (Endl.) Harms	octopus tree	non-native	uncommon
ASTERACEAE (Sunflower Family)			
Ageratum conyzoides L.	maile hohono	non-native	common
Bidens pilosa L.	Spanish needle	non-native	rare
Calyptocarpus vialis Less.	----------	non-native	uncommon
Conyza bonariensis (L.) Cronq.	hairy horseweed	non-native	uncommon
Crassocephalum crepidioides (Benth.) S.Moore	redflower ragleaf	non-native	rare
Cyanthillium cinereum (L.) H. Rob.	little ironweed	non-native	rare
Elephantopus Mollis Kunth	elephantopus	non-native	uncommon
Emilia fosbergii Nicolson	red pualele	non-native	rare
Erigeron bellioides DC.	----------	non-native	uncommon
Hypochoeris radicata L.	gosmore	non-native	uncommon
Pluchea carolinensis (Jacq.) G. Don	sour bush	non-native	common
Sonchus oleraceus L.	pualele	non-native	uncommon
Sphagneticola trilobata (L.) Pruski	wedelia	non-native	uncommon
Synedrella nodiflora (L.) Gaertn.	nodeweed	non-native	rare
Taraxacum officinale W.W.Weber ex Wigg.	common dandelion	non-native	rare
Verbesina encelioides (Cav.) Benth. & Hook.	golden crown-beard	non-native	rare
Youngia japonica (L.) DC.	oriental hawksbeard	non-native	rare
BERBERIDACEAE (Barberry Family)			
Nandina domestica L.	sacred bamboo	non-native	rare
BIGNONIACEAE (Catalpa Family)			
Spathodea campanulata P. Beauv.	African tulip tree	non-native	uncommon
CASUARINACEAE (She-oak Family)			
Casuarina equisetifolia L.	common ironwood	non-native	rare
Gymnostoma papuanum (Moore) Johnson	Papuan she-oak	non-native	rare
EUPHORBIACEAE (Spurge Family)			
Aleurites moluccana (L.) Willd.	kukui	Polynesian	rare
Ricinus communis L.	Castor bean	non-native	rare
FABACEAE (Pea Family)			
Acacia confusa Merr.	Formosa koa	non-native	uncommon
Acacia koa A. Gray	koa	endemic	rare
Calliandra haematocephala Hasskarl	lehua haole	non-native	rare
Chamaecrista nictitans (L.) Moench	partridge pea	non-native	common
Cassia x nealiae Irwin & Barneby	rainbow shower	non-native	rare
Crotalaria pallida Aiton	smooth rattlepod	non-native	rare
Desmodium incanum DC.	ka'imi clover	non-native	uncommon

SCIENTIFIC NAME	COMMON NAME	STATUS	ABUNDANCE
Desmodium intortum (Mill.) Urb.	greenleaf desmodium	non-native	uncommon
Desmodium triflorum (L.) DC.	three-flowered beggarweed	non-native	uncommon
Indigofera suffruticosa Mill.	inikō	non-native	rare
Leucaena leucocephala (Lam.) de Wit	koa haole	non-native	uncommon
Macroptilium lathyroides (L.) Urb.	wild bean	non-native	rare
Mimosa pudica L.	hilahila	non-native	uncommon
Neonotonia wightii (Wight & Arnott) Lackey	glycine	non-native	common
Senna alata (L.) Roxb.	candle bush	non-native	rare
LAMIACEAE (Mint Family)			
Vitex trifolia L.	blue vitex	non-native	uncommon
LAURACEAE (Laurel Family)			
Persea americana Mill.	avocado	non-native	uncommon
LYTHRACEAE (Loosestrife Family)			
Cuphea carthagenensis (Jacq.) Macbr.	tarweed	non-native	rare
MALVACEAE (Mallow Family)			
Abutilon grandifolium (Willd.) Sweet	hairy abutilon	non-native	rare
Hibiscus x rosa-sinensis	hybrid hibiscus	non-native	uncommon
Sida fallax Walpers	'ilima	indigenous	rare
Sida rhombifolia L.	Cuban jute	non-native	rare
Taliparitti elatum Fryxell	blue mahoe	non-native	rare
Triumfetta semitriloba Jacq.	Sacramento bur	non-native	rare
Waltheria indica L.	'uhaloa	indigenous	rare
MELASTOMATACEAE (Melastoma Family)			
Clidemia hirta (L.) D. Don	Koster's curse	non-native	common
Tibouchina herbacea (DC.) Cogn.	cane tibouchina	non-native	rare
Tibouchina urvilleana (DC.) Cogn.	lasiandra	non-native	rare
MELIACEAE (Mahogany Family)			
Toona ciliata M. Roem.	Australian red cedar	non-native	rare
MORACEAE (Mulberry Family)			
Artocarpus heterophyllus Lamarck	jakfruit	non-native	uncommon
Ficus microcarpa L. fil.	Chinese banyan	non-native	uncommon
MYRTACEAE (Myrtle Family)			
Corymbia citriodora (Hooker) Hill & Johnson	lemon-scented gum	non-native	uncommon
Eucalyptus botryoides Sm.	bangalay	non-native	rare
Eucalyptus robusta J.E. Smith	swamp mahogany	non-native	common
Melaleuca quinquenervia (Cav.) S.T. Blake	paper bark	non-native	uncommon
Metrosideros polymorpha Gaudichaud	'ōhi'a	endemic	rare
Psidium cattleianum Sabine	strawberry guava	non-native	common
Psidium guajava L.	common guava	non-native	uncommon
Syzygium cumini (L.) Skeels	Java plum	non-native	common
OXALIDACEAE (Wood Sorrel Family)			
Oxalis corniculata L.	'ihi'ai	Polynesian	uncommon
PAPAVERACEAE (Poppy Family)			
Argemone mexicana L.	Mexican poppy	non-native	rare
PASSIFLORACEAE (Passion Flower Family)			

SCIENTIFIC NAME	COMMON NAME	STATUS	ABUNDANCE
Passiflora edulis Sims	passion fruit	non-native	rare
Passiflora subpeltata Ort.	white passion flower	non-native	rare
PHYLLANTHACEAE (Phyllanthus Family)			
Phyllanthus debilis Klein ex Willd.	niruri	non-native	uncommon
PLANTAGINACEAE (Plantain Family)			
Buddleja asiatica Lour.	dog tail	non-native	rare
Buddleja madagascariensis Lamarck	smoke bush	non-native	rare
Plantago lanceolata L.	narrow-leaved plantain	non-native	rare
Plantago major L.	broad-leaved plantain	non-native	uncommon
POLYGALACEAE (Milkwort Family)			
Polygala paniculata L.	fragrant polygala	non-native	uncommon
SOLANACEAE (Nightshade Family)			
Solanum americanum Mill.	pōpolo	indigenous	rare
Solanum torvum Sw.	pea aubergine	non-native	rare
RUBIACEAE (Coffee Family)			
Spermacoce assurgens Ruiz & Pav.	buttonwweed	non-native	uncommon
RUTACEAE (Citrus Family)			
Casimiroa edulis La Llave & Lexarza	white sapote	non-native	rare
Citrus jambhiri Lushington	rough skin lemon	non-native	rare
THYMELAEACEAE ('Akia Family)			
Wikstroemia oahuensis (A.Gray) Rock	'akia	endemic	rare
VERBENACEAE (Verbena Family)			
Lantana camara L.	lantana	non-native	rare
Stachytarpheta australis Moldenke	'ōwi	non-native	rare
Stachytarpheta cayennensis (Rich.) Vahl	nettle-leaved vervain	non-native	uncommon
Verbena littoralis Kunth	ha'uowī	non-native	rare

FAUNA SURVEY REPORT

SURVEY METHODS

A walk-through survey method was conducted in conjunction with the botanical survey. All parts of the project area were covered. Field observations were made with the aid of binoculars and by listening to vocalizations. Notes were made on species, abundance, activities and location as well as observations of trails, tracks, scat and signs of feeding. In addition an evening visit was made to the area to record crepuscular activities and vocalizations and to see if there was any evidence of occurrence of the Hawaiian hoary bat (*Lasiurus cinereus semotus*) in the area.

RESULTS

MAMMALS

Four mammal species or their signs were observed during three site visits to the project area: domestic cat (*Felis catus*), feral pig (*Sus scrofa*), mongoose (*Herpestes auropunctatus*) and axis deer (*Axis axis*).

A special effort was made to look for the native Hawaiian hoary bat which is a federally listed Endangered species. An evening survey was conducted using both visual and electronic techniques. When present in an area these bats are clearly visible in the glow of twilight as they forage for insects that become active during evening hours. In addition a bat detecting device (Batbox IIID) was used, set to the frequencies of 27,000 to 28,000 hertz which these bats are known to use for echolocation. No evidence of presence of Hawaiian hoary bat was detected.

Other mammals one might expect to see here include rats (*Rattus* spp.), mice (*Mus domesticus*), and occasionally domestic dogs (*Canis familiaris*). The rats and mice feed on seeds, fruits and herbaceous vegetation and are preyed upon by the mongoose and cats.

BIRDS

Birdlife was moderate both in species and in number of individuals seen. Eleven species of non-native birds were observed during three site visits to the area. Identifications were made visually and with the aid of binoculars and by listening to their vocalizations. Taxonomy and nomenclature follow American Ornitholigist's Union (2011).

Just three species were of common occurrence: common myna (*Acridotheres tristis*), zebra dove (*Geopelia striata*) and chicken (*Gallus gallus*). One barn owl (*Tyto alba*) was seen during the evening survey. The remaining species were all of uncommon or rare occurrence.

While not seen during the survey, the endemic pueo or Hawaiian owl (*Asio flammeus sandwichensis*) has occasionally been seen by the Camp caretaker during the day flying over the adjacent pastures or resting on fence posts. He also reports once seeing a pair of the Endangered nene or Hawaiian goose flying high overhead but these large birds have not been seen in this largely forested project area.

A few other non-native birds may also occasionally use the property. The habitat, however, is not suitable for West Maui's native forest birds which are presently restricted to good quality native forests at higher elevations. The habitat is also not suitable for native seabirds such as the Endangered ua'u (*Pterodroma sanwichensis*) and the Threatened a'o (*Puffinus newelli*) which are known to nest in dense, wet, fern shrubland near the summit of the mountain.

INSECTS

Insect life was moderate in this forested project area. Thirteen insect species were seen representing seven different insect Orders. Taxonomy and nomenclature follow (Nishida et al, 1992). Just one species was common, the small rice grasshopper (*Oxya japonica*). One native insect was seen, the globe skimmer (*Pantala flavescens*). No Endangered insects were seen. None of the insects seen are of any special environmental focus or concern.

MOLLUSK

Just one non-native mollusk species, the giant East African snail (*Achatina fulica*), was observed during the survey.

DISCUSSION AND RECOMMENDATIONS

The fauna observed during this survey included just one native insect species, the globe skimmer. This indigenous dragonfly is common throughout Hawaii and has a native range throughout the tropics worldwide. It has no special conservation focus. The remainder of the observed fauna are non-native species. No Threatened or Endangered fauna species were recorded in the project area, and no special fauna habitats were identified here.

The proposed Camp improvements are not expected to have a significant negative impact on the fauna resources in this part of West Maui. No special recommendations with regard to the fauna on this project area are offered.

ANIMAL SPECIES LIST

Following is a checklist of the animal species inventoried during the field work. Animal species are arranged in descending abundance within five groups: Mammals, Insects, Birds, Amphibians and Mollusks. For each species the following information is provided:

1. Common name
2. Scientific name
3. Bio-geographical status. The following symbols are used:

   endemic = native only to Hawaii; not naturally occurring anywhere else in the world.

   indigenous = native to the Hawaiian Islands and also to one or more other geographic area(s).

   migratory = bird species that spend the fall and winter months in Hawaii and the spring and summer months breeding in the arctic.

   non-native = all those animals brought to Hawaii intentionally or accidentally after western contact.

4. Abundance of each species within the project area:

   abundant = many flocks or individuals seen throughout the area at all times of day.

   common = a few flocks or well scattered individuals throughout the area.

   uncommon = only one flock or several individuals seen within the project area.

   rare = only one or two seen within the project area.

SCIENTIFIC NAME	COMMON NAME	STATUS	ABUNDANCE
MAMMALS			
Sus scrofa L.	feral pig	non-native	uncommon
Felis catus L.	domestic cat	non-native	uncommon
Herpestes auropunctatus Hodgson	mongoose	non-native	rare
Axis axis Erxleben	axis deer	non-native	rare
BIRDS			
Acridotheres tristis L.	common myna	non-native	common
Geopelia striata L.	zebra dove	non-native	common
Gallus gallus L.	chicken	non-native	common
Cardinalis cardinalis L.	northern cardinal	non-native	common
Streptopelia chinensis Scopoli	spotted dove	non-native	uncommon
Passer domesticus L.	house sparrow	non-native	uncommon
Lonchura punctulata L.	nutmeg mannikin	non-native	uncommon
Cetia diphone Kittlitz	Japanese bush warbler	non-native	rare
Paroaria coronata Miller	red-crested cardinal	non-native	rare
Tyto alba Scopoli	barn owl	non-native	rare
Leucodioptron canorum L.	hwamei	non-native	rare
AMPIHBIANS			
Bufo marinus L.	American toad	non-native	rare
MOLLUSKS			
Achatina fulica Ferussac	giant East African snail	non-native	rare

SCIENTIFIC NAME	COMMON NAME	STATUS	ABUNDANCE
INSECTS			
Order ARANAE - true spiders			
ARANEIDAE (Orb Weaver Family)			
Argiope appensa Walkenear	European garden spider	non-native	rare
Gasteracantha mammosa Koch	Asian spiny-backed spider	non-native	uncommon
Order DIPTERA - flies			
MUSCIDAE (House Fly Family)			
Musca sorbens Wiedemann	dung fly	non-native	rare
SYRPHIDAE (Hoverfly Family)			
Eristalenus arvorum Fabricius	eristalinus hoverfly	non-native	rare
Simosyrphus grandicornis Macquart	Australian hoverfly	non-native	rare
Order HEMIPTERA - true bugs			
CERCOPIDAE (Spittle Bug Family)			
Philaenus spumarius L.	spittle bug	non-native	rare
Order HYMENOPTERA - bees, wasps & ants			
APIDAE (Honey Bee Family)			
Apis mellifera L.	honey bee	non-native	uncommon
Xylocopa sonorina Mayr	Sonoran carpenter bee	non-native	uncommon
FORMICIDAE (Ant Family)			
Pheidole megacephala Fabricius	big-headed ant	non-native	uncommon
Order LEPIDOPTERA - butterflies & moths			
HESPERIIDAE (Skipper Butterfly Family)			
Hylephila phyleus Drury	fiery skipper	non-native	rare
LYCAENIDAE (Gossamer-winged Butterfly Family)			
Lampides boeticus L.	long-tailed blue butterfly	non-native	rare
Order ODONATA - dragonflies & damselflies			
LIBELLULIDAE (Skimmer Dragonfly Family)			
Pantala flavescens Fubricus	globe skimmer	indigenous	rare
Order ORTHOPTERA - grasshoppers & crickets			
ACRIDIDAE (Grasshopper Family)			
Oxya japonica Thunberg	small rice grasshopper	non-native	common

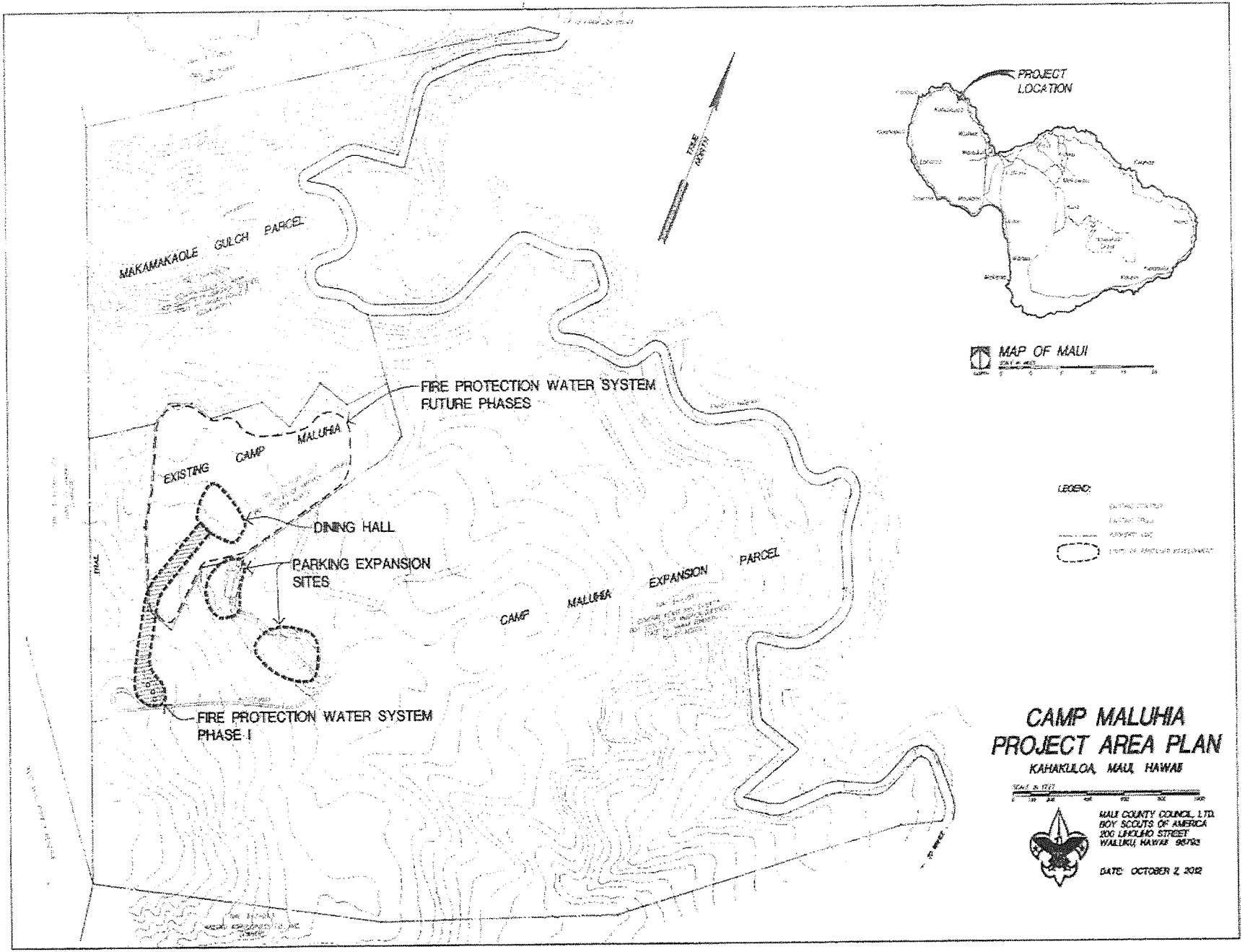

Figure 1 – Project Area

Figure 2 Upper portion of Camp Maluhia with the Dining Hall on the left.

Figure 3 Middle portion of Camp Maluhia looking makai toward the swimming pool.

Figure 4 View northwest across Makamaka'ole Valley from the Water tank site.

Figure 5 View north from the Water tank site down toward the Camp Maluhia parcel.

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APPENDIX B.

Archaeological Assessment Report

SCS Project Number 1369-3 AA

AN ARCHAEOLOGICAL ASSESSMENT OF APPROXIMATELY 20 ACRES IN 'ILI O KUKUIPUKA, KAHAKULOA AHUPUA'A, WAILUKU DISTRICT, ISLAND OF MĀUI, HAWAI'I [TMK (2) 3-1-001:028-001]

Prepared by:
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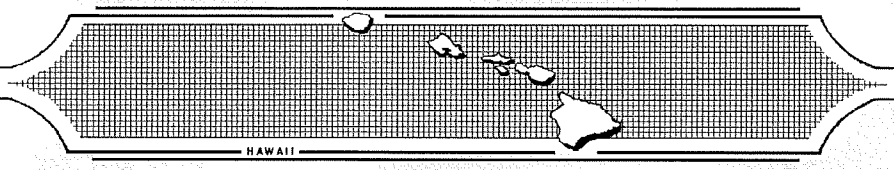
David Perzinski, B.A.,
and
Michael Dega, Ph.D.

September 2013
FINAL

Prepared for:
Boy Scouts of America
Maui County Council, LTD.
200 Liholiho St.
Wailuku, HI 96793

SCIENTIFIC CONSULTANT SERVICES Inc.



1347 Kapiolani Blvd., Suite 408 Honolulu, Hawai`i 96814

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ABSTRACT

At the request of Munekiyo and Hiraga, Inc. representing the Boy Scouts of America Maui County Council, Scientific Consultant Services, Inc. (SCS) conducted Archaeological Inventory Survey on an approximately 20-acre parcel in Kahakuloa Ahupua'a, Wailuku District, Māui (TMK: (2) 3-1-001:028-001).

The Archaeological Inventory Survey included archival and background research and a comprehensive pedestrian survey. Fieldwork did not lead to the identification of any historic properties beyond existing buildings, this most likely a function of previous large-scale grading and development on the parcels. Currently, the project area contains camp infrastructure and pastureland, with some undeveloped and heavily vegetated areas near the fence lines that define a project boundary.

Based on the information obtained during this survey and background research, the subject parcel does not contain any significant historic (pre- or post-Contact) archaeological sites or features. Historic (pre-1950) buildings which occur on the parcel were previously recorded by architectural historians, with sufficient data being documented in the form of maps, photos, and notes to address potential adverse impacts upon these resources. Per the architectural report, on file at the SHPD-Architectural Branch, no further documentation is recommended for the existing buildings. Based on the location of Camp Maluhia and its use over the years, no further work is recommended for the project area.

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INTRODUCTION

At the request of Munekiyo and Hiraga, Inc., representing the property owner and lessee Boy Scouts of America, Maui County Council, LTD., Scientific Consultant Services, Inc. conducted an Archaeological Inventory Survey (AIS) on an approximately 20-acre parcel in Kahakuloa Ahupua'a, Wailuku District, Māui (Figures 1 and 2). David Perzinski (Project Supervisor) and Rachel Hodara conducted the fieldwork in February 2013, under the overall direction of Michael Dega, Ph.D. (Principal Investigator). This research precedes proposed infrastructure work in the project area. The Boy Scouts of America, Maui County Council (Boy Scouts) proposes construction of a new dining hall on their property, as well as installation of a new waterline and water storage tank for fire protection purposes (Figures 3 and 4).

The goals of the AIS were to perform thorough archival and background research of the project area and vicinity, determine the presence or absence of archaeological sites within the project area, and to document sites (if any) that were identified. While Inventory Survey-level investigations were completed, this report is being written as an Archaeological Assessment in lieu of a determination of "no findings" during fieldwork. The current report has been revised, per a SHPD letter dated September 11, 2013 (Log No:2013.2177; Doc No:1307LO04).

PROJECT AREA DESCRIPTION AND ENVIRONMENTAL SETTING

The project area is located in the southernmost region of Kahakuloa Ahupua'a, on the windward side of the West Māui Mountain range (Mauna Kahalawai) in Wailuku District (TMK: 3-1-01: 28). Historically, Kahakuloa Ahupua'a was part of Ka'anapali District. Samuel P. Kalama's "Na Mokupuni O Hawaii Nei" 1838 map indicates that Camp Maluhia may actually have been located in Makaliua Ahupua'a, but this name is no longer used (Figure 5). Sterling's (1998) compilation *Sites of Maui* indicates that this area is the *'Ili* of Kukuipuka, part of Kahakuloa Ahupua'a, Ka'anapali District.

The parcel is approximately 20-acres, including 17.94 acres owned by the Boy Scouts, and *ca.* 2 acres under long-term lease by the Boy Scouts from the State of Hawai'i. The project area occurs approximately 800 feet *mauka* of Kahekili Highway, and 5,000 feet *mauka* of the coastline (roughly 0.95 miles), sloping northeast down towards the coastline. Project area elevations range from 297 meters (975 feet) to 381 meters (1250 feet) (Figures 6 and 7) precipitation is 1201 mm, measured at the Kahakuloa station by HydroNet, roughly 2,800 feet southeast of Camp Maluhia, at 334-meter elevation (Giambelluca *et al.,* 2012).

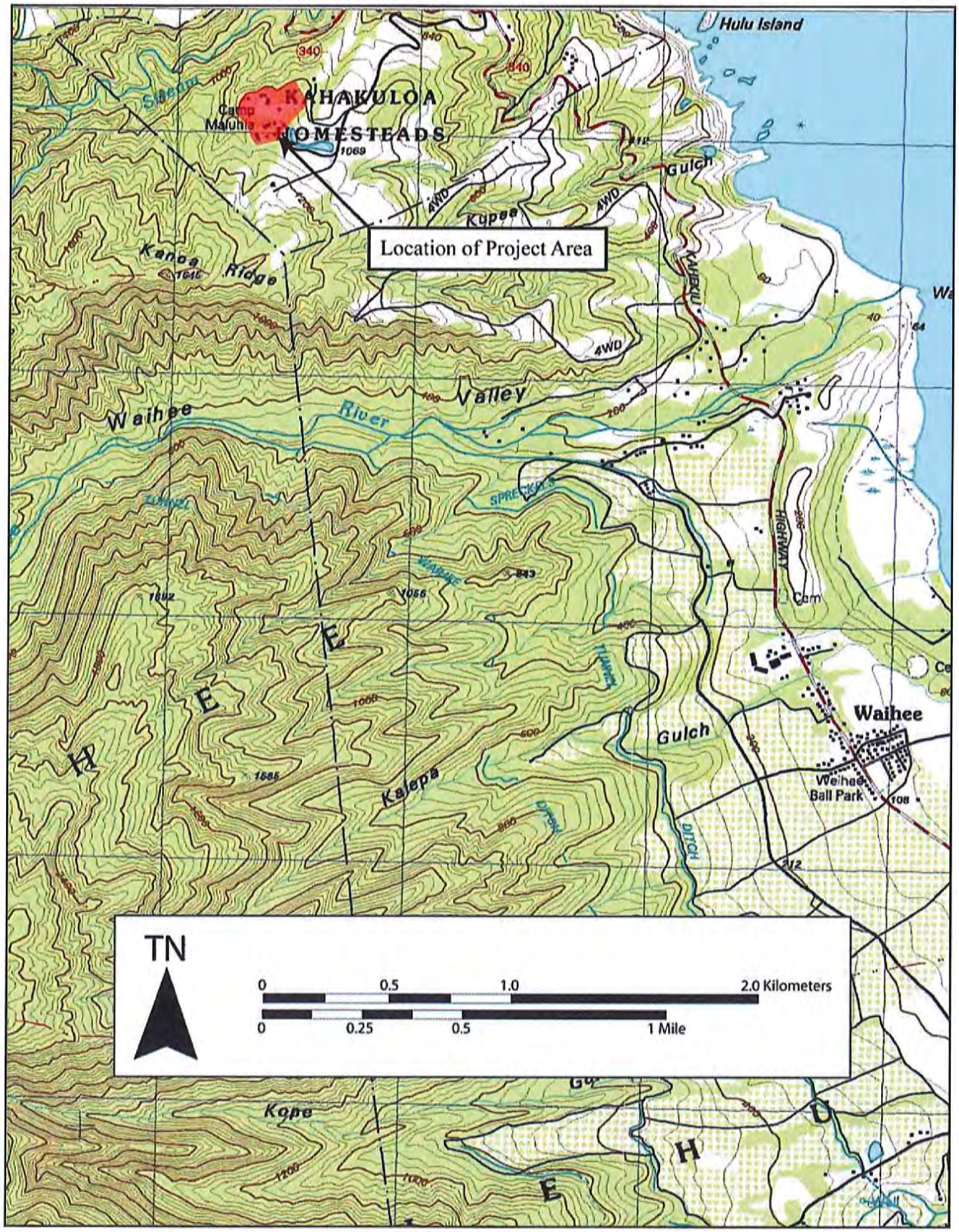
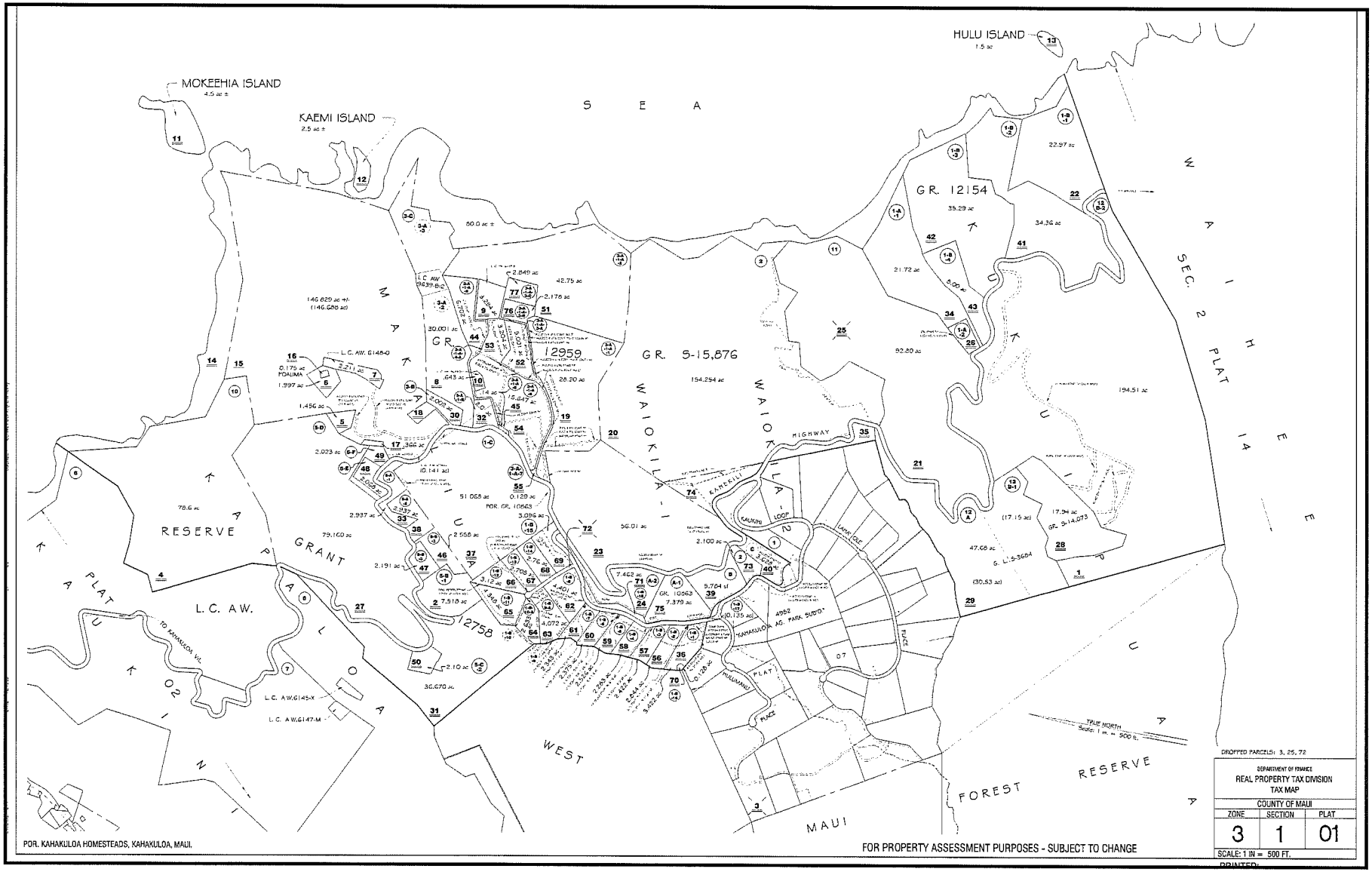


Figure 1: Portion of USGS Map (Wailuku Quad) Showing Location of Project Area.



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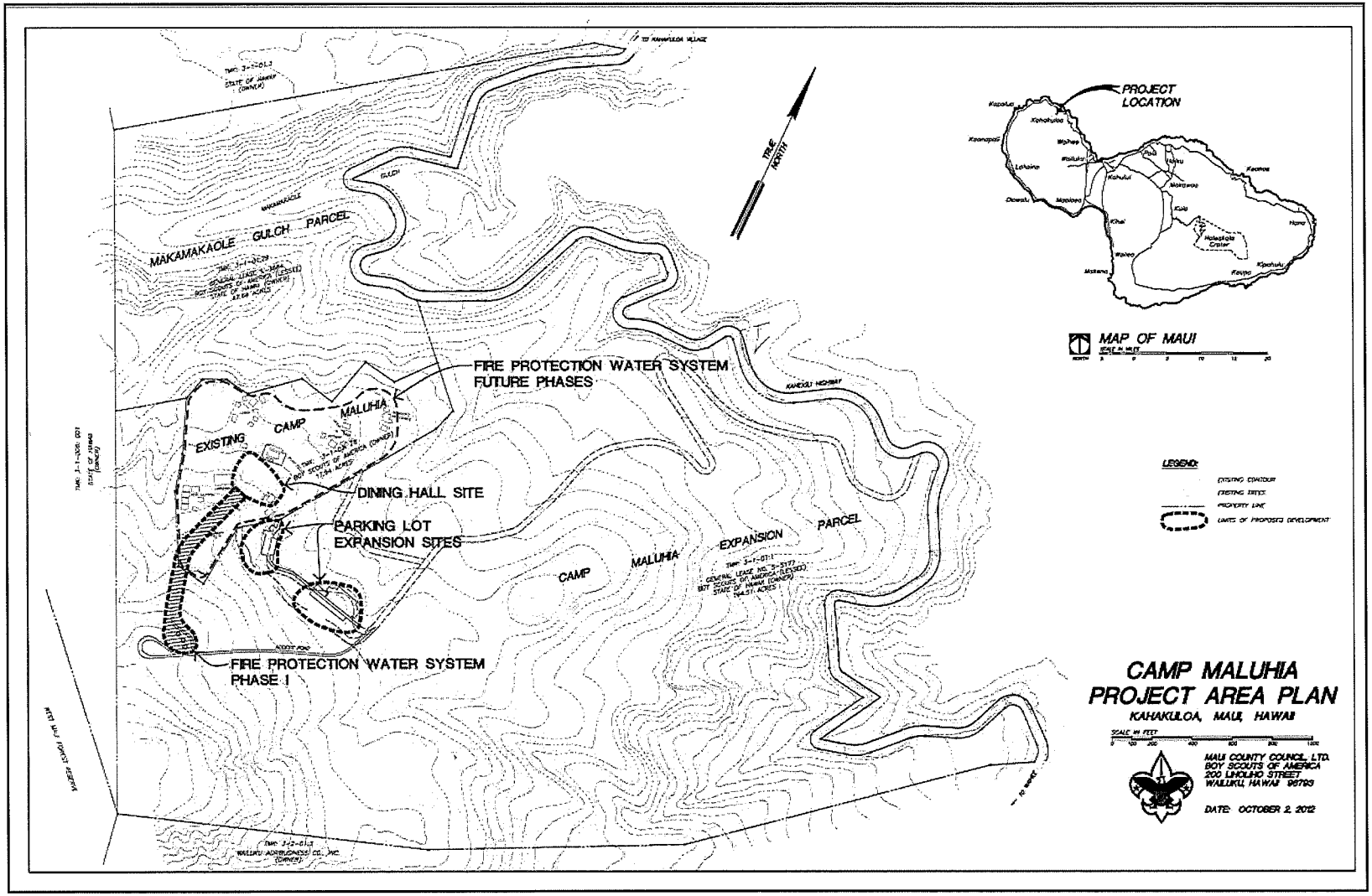

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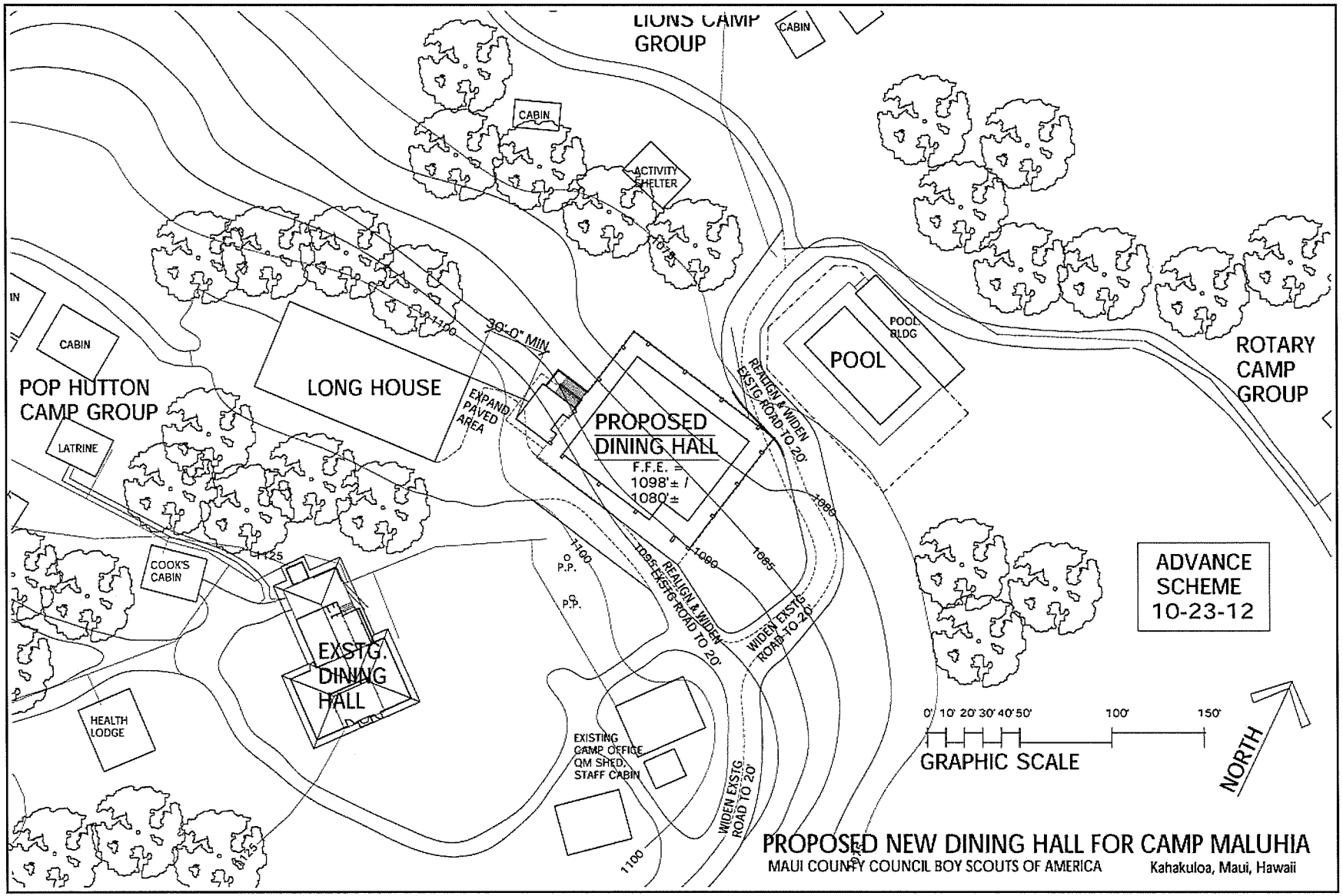

Figure 4: Plan of Proposed Dining Hall (Courtesy of Munekiyo and Hiraga).

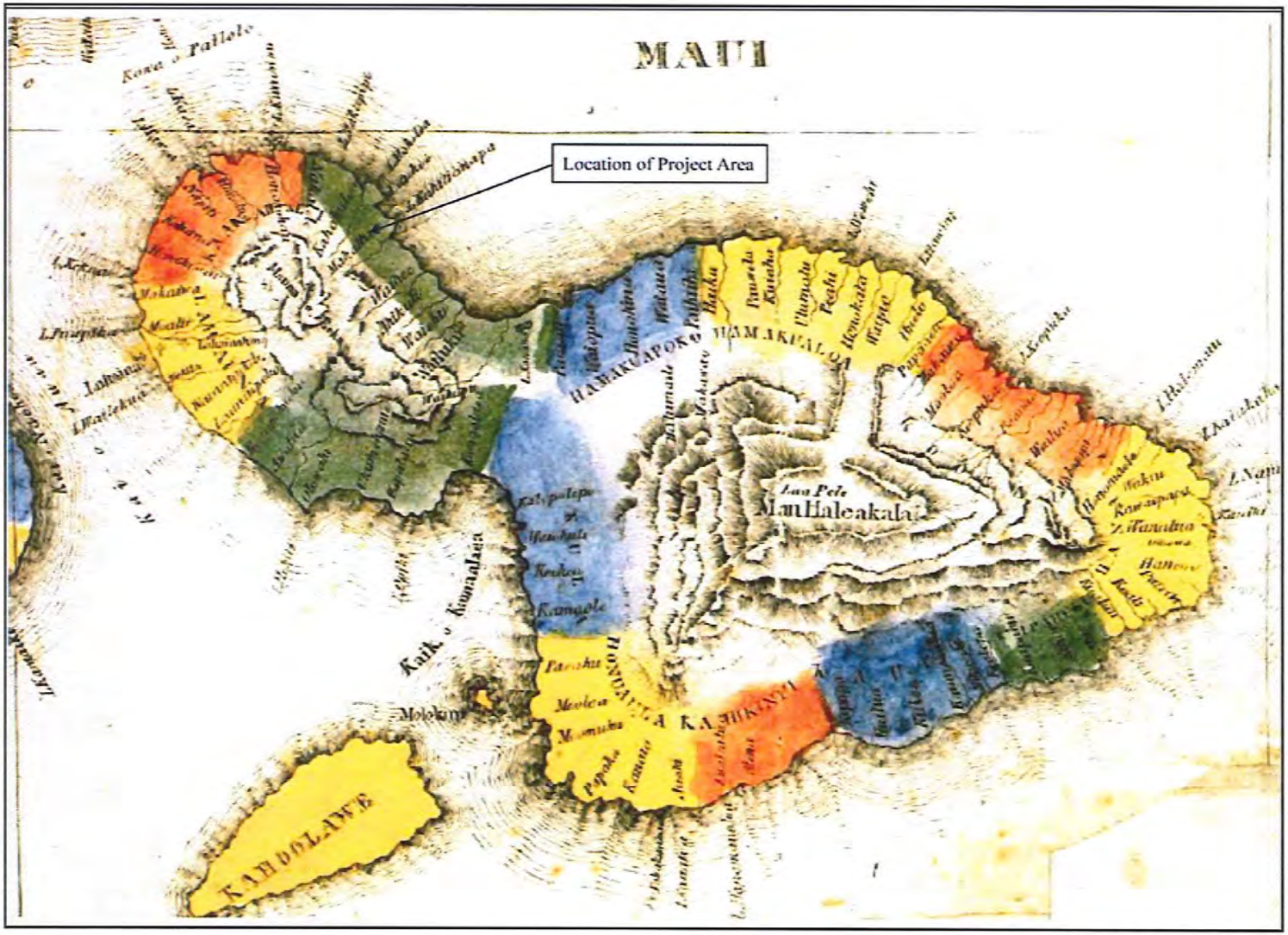

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Figure 6: View Northeast of Pastureland *Makai* of Camp Maluhia. Foreground of Photo is Access Road to Waihe'e Ridge Trail and Upper Water Tank.

Figure 7: View Southwest Across Makamaka`ole Gulch from North Side of Project Area.

The boundaries of the project area are largely defined by the existing Camp Maluhia area, which was developed in 1937 for community use through a three-way partnership between Alexander House, The Maui County Council-Girl Scouts, and the Boy Scouts. The parcel was purchased from the state in 1958 by the Boy Scouts, and is surrounded by a further 240-acres under long-term lease by the Boy Scouts from the State of Hawai'i (Nakagawa 2012). The remaining *c.*2 acres surveyed under this AIS are part of the 194.51 acre parcel leased by the Boy Scouts, which lies south and east of Camp Maluhia proper; the small 2-acre portion surveyed here is directly adjacent to Camp Maluhia's southern border, where an existing water tank and gate are situated. Camp Maluhia's western boundary is defined by a steep drop-off to Makamaka'ole gulch and stream.

In addition to Makamaka'ole Gulch and stream, the land under lease from the State of Hawai'i includes Kukuipuka Heiau, which is located on a bluff approximately 500 meters (1600 feet) east of the Camp, as well as part of the Waihe'e Ridge Trail. Former land-use on the parcel includes cattle grazing, and much of the land is still under pasture today. Southwest and west of the parcel lies the West Māui Forest Reserve, part of the State Forest Reserve System established in 1903. Southeast of the parcel lies agricultural land owned by Wailuku Agribusiness Co., Inc., formerly under sugarcane and pasturage. Pineapple cultivation and cattle ranching took place on lands surrounding Camp Maluhia by now defunct agribusiness companies, including Waihe'e Dairy and Farm and Ha'iku Fruit & Packing Company. The Kahakuloa Agricultural Estates Subdivision (Maluhia Country Estates and The Cliffs at Kahakuloa) and Mendes Ranch are the nearest residential developments to the project area.

GEOLOGY

There are at least six major, and one minor, volcanoes now moderately covered by shallow sea water which form four separate islands: Māui, Kaho'olawe, Lāna' i, and Moloka'i (Macdonald *et al.*, 1983). At lower sea levels, these now separated islands were collectively known as " Māui Nui" due to the single landform that composed nearly 5,200 square kilometers (*ibid.*). Today, Māui is the second largest island of the eight main islands in the Hawaiian archipelago, encompassing 1,873 square kilometres (729 square miles). Two volcanoes formed the island - Mt. Kukui in the west and Haleakalā in the east. West Māui (Mt. Kukui) was formed over two million years ago; the highest point is 1,765 meters (5,788 feet) above sea level (asl) at Pu'u Kukui (Hazlett and Hyndman, 1996: 129).

Slow moving flows of *pahoehoe* lava formed Mt. Kukui's volcanic shield. Rift zones extended north and south, and volcanic activity declined into more explosive eruptions during

the late stage of shield volcano formation. According to Macdonald *et al.* (1983), West Māui is composed of three distinct flows consisting of the Wailuku, Lahaina, and Honolua series. The northeastern slopes of West Māui are composed of Honolua series, which are younger and therefore have undergone less weathering and erosion than the older eastern and southwestern slopes of West Māui formed by the Wailuku series (Sinton, 1979). The youngest Lahaina series flows are limited to a small area in Lahaina; broad alluvial fans have developed on the older series flows (Sinton, 1979). In contrast, narrow, deep gulches and rugged slopes define the project area. The steep drop-offs to the ocean floor on the northeastern coast have disallowed the formation of broad, flat alluvial fans, while northeast trade winds and Pacific gales cause high waves to break against the coast, resulting in steep shoreline cliffs (Hazlett and Hyndman 1996: 144). This topography affected ancient settlement patterns, limiting the ability to practice wetland taro cultivation in the vicinity of the project area, as discussed below (Kirch, 2010).

SOILS

The project parcel lies on the border between multiple Māui soil types, including HwD, HID and rRK (Foote *et al.*, 1972). The majority of the parcel is characterized by HwD, part of the Honolua silty clay soil series, which are well-drained upland Māui soils developed on basic igneous rock. HwD is moderately sloping to moderately steep (15-25%), and used for pineapple, pasture and water supply (all activities practiced in project area). Runoff is medium, and erosion hazard is moderate. Pebble-size rock fragments are common in the surface layer and subsoil.

Camp Maluhia is also partially built on HID soil, part of the Halawa silty clay soil series. Halawa soils are well-drained, upland soils, developed in material weathered from basic igneous rock as well as volcanic ash. These are largely pasture soils, with some suitability for pineapple and woodland. HID occurs on "narrow tracts bounded by gulches" and is slightly acidic, with moderately rapid permeability, slow-medium runoff and slight-moderate erosion hazard. Soils of this series occur on Māui, Molokai and Oahu (Foote *et al.*, 1972).

Finally, Camp Maluhia is directly adjacent to rRK soil, part of the Rock Land soil series, which is soil formed on areas where exposed rock covers 25-90% of the surface, occurring on all five Hawaiian Islands (Foote *et al.*, 1972). These soils are very shallow, with basalt and andesite rock outcrops throughout. Rock Land is used for pasture, wildlife habitat and water supply, and the high shrink swell potential of this soil makes it risky for building on, as sliding may occur when the soil is wet.

VEGETATION

Hawaiian foliage evolved in isolation over millions of years, with plants arriving from the Indo-Pacific, the Americas and the South Pacific, as well as the pantropic and arctic regions (Myers, 1997). The first humans to settle in the Hawaiian Islands, Polynesian voyagers, introduced at least 30 different varieties of plants. The western colonization of the islands, and further waves of migration to the islands introduced many more foreign plant species and resulted in the current plant population.

The current project area contains a variety of native and introduced plant species, but it is largely dominated by introduced plant species, including Norfolk pine (*Araucaria heterophylla*) and eucalyptus (*Eucalyptus camaldulensis*), as well as fewer numbers of paperbark (*Melaleuca)* and Christmas berry (*Schinus terebinthifolius*) (see Figure 7). Polynesian-introduced species include stands of banana (*Musa* sp.) and *ti* plants (Cordyline) and *Hau* (*Hibiscus tiliaceus*). There are isolated examples of native Hawaiian tree species at Camp Maluhia, including *Koa* (*Acacia koa*).

Outside of the maintained areas at Camp Maluhia, thickets of strawberry guava (*Psidium cattleianum*) and a number of exotic pasture grasses, including dallis grass (*Paspalum dilatatum*), *maile honohono* or billygoat weed (*Ageratum conyzoides*), soft elephants foot (*Elephantopus mollis*) and lantana (*Lantana camara*) dominate the vegetation.

Native Hawaiian ferns were observed at Camp Maluhia, but rare and endangered species are not present on the project parcel, due to extensive development at the camp, and agricultural and ranching impact just off the project parcel. Rare native and/or endemic plant species can be found in the adjacent (undeveloped) Makamaka'ole Gulch.

HISTORICAL SETTING

MYTHOLOGY AND LEGEND

Due to the proximity of the project parcel to both the Kahakuloa and Waihe'e *ahupua'a*, this report reviews the historical setting for both of these areas, beginning with *mo'olelo* (oral story or history) for the island of Māui itself. Numerous heiau and legendary battles accounted to in oral tradition attest to the importance of the Wai'ehu/Waihe'e/Kahakuloa area in pre-contact times.

The ancient Hawaiian view of creation is partially understood through the *Kumulipo*, which consists of long oral traditions that have been passed down for generations. It is a narrative abundant with pre-historic events and hundreds of genealogies. In this chant, Sky father Wākea and Earth mother Papa gave birth to the island of Māui. Translation by Beckwith (1971)

yields further information regarding the island of Māui, which was named after the great demigod.

A popular story refers to demigod Māui who snared the sun and slowed it in order for his mother to have more daylight to dry her *kapa*. The story unfolds near the project area where Māui and his mother Hina lived above Kahakuloa in a place called Makalia. Thrum (1998: 31) writes:

> He first went to Wailohi, in Hamakua, on East Maui, to observe the motions of the Sun. There he saw that it rose toward Hana. He then went up on Haleakala, and saw that the Sun in its course came directly over that mountain. He then went home again, and after a few days went to a place called Paeloko, at Waihee…

Māui proceeded to capture the sun on the east crater with rope made from *niu* (coconut), which he threw around the rays of the sun and tied them to a *wiliwili* tree. When this occurred, the crater was named *'Alehe-ka-lā* (sun snarer) however (as noted above) is currently referred to as *Haleakalā* (*ibid.*). It is not known how long Māui and his mother resided near Kahakuloa, but the general area evidently plays an important role as Kahakuloa is mentioned within different versions of this story.

A story found in Walker's manuscript (1931) has been passed through generations, which involves a large pōhaku (rock, stone) somewhere near Kahakuloa. The rock was sacred with special curative powers and is connected to a legend involving the goddess Hi'iaka (Pele's sister). Hi'iaka and her companion named Wahine-o-mao were passing through and stopped to rest at this rock. Hi'iaka noticed a woman walking along the beach and removed her *lauhala lei* then threw it to the woman. The woman picked it up and ran away to announce the arrival of the chiefs from the Big Island. Hi'iaka and her friend arrived at the village where they came upon the woman's "family mourning for a body which was wrapped in a mat and suspended from the roof" (Walker, 1931: 40). It was the woman's spirit that they saw along the beach and Hi'iaka preceded to bring the woman back to life. Walker claims that this is the reason for the sacredness of the rock. Many stories are told about *pōhaku* and their importance to ancient Hawaiians.

Traditional *mo'olelo* of the lands between Waihe'e and Kahakuloa are sparse and are usually mentioned only as places traveled through. Kiha-a-Pi'ilani, son of Pi'ilani (16th century) reportedly passed along this way when he was chief of Māui: "…he went on to Waihee, Waiehu and Kahakuloa. There in that land called Makalina [Makaliua] he planted three clumps of

Awa..." (Manu 1884 quoted in Sterling 1998: 56).

There are also references to Makamaka'ole Valley to the west of the project area. Alexander stated:

> ... those desiring to ascend this part of the mountain should take the road from Waiehu towards Kahakuloa. The first part of this route is a long wearisome climb up barren ridges, till the trail suddenly leads into a deep romantic ravine called Makamaka'ole. The natives say that once a party of Hawaiians traveling this way were attacked by robbers, and overwhelmed by a stream turned upon them from an aqueduct on the eastern side, and all destroyed; whence the name Makamaka'ole [Alexander 1884: 32].

Handy (1940: 107) also references Makamaka'ole Gulch, as well as neighboring Waiolai Gulch, stating, "there are said to be abandoned terraces in these two gulches on either side of Puu Ola, both seaward of the highroad and high up toward the mountains." Kukuipuka *'ili,* on the other hand, the closest reference to Camp Maluhia ("between Makamaka'ole and Waiehu"), was said to have "several small gulches in which water flows in rainy weather, but there is no evidence that it ever supported taro...pineapples now flourish on the upland slopes" (Handy, 1940: 107).

Further to the northwest of the project area lies the village of Kahakuloa described by Winslow Walker in the 1920s:

> "Not only thirty years ago (ca. 1890) Kahakuloa was a village almost entirely of grass houses ... The best preserved is one standing at the edge of a large taro patch on the west side of the stream and just a few rods south of the main trail through the village ... It was inhabited up to three years ago" [Walker 1931: 73].

In traditional times it was reported that there were numerous settlements, primarily of fishermen, along the cliff-lined coast from Honokohau to Kahakuloa (Handy 1940: 106). Pu'u Koa'e (Kahakuloa Head) was associated with feats of daring by the great chief Kahekili and was used as a lookout for the armies of Kalaniōpu'u of Hawai'i Island (Sterling, 1998). Kahakuloa takes its name from a famous *lo'i* patch, a small, fertile, irrigated patch of *kalo c.*0.5 miles inland from the coast at the bottom of Kahakuloa Valley. It belonged to the *haku* or lord of the land. Since the area was quite isolated, the name *ka haku loa* was used. According to Handy's observations from his 18 months of fieldwork commencing in 1931, Kahakuloa was "one of the

most genuinely native communities still extant in the islands" (1940: 106). The Kahakuloa Valley complex includes both wetland and dryland cultivation, and today is a designated historical district (Site 50-50-02-1502).

Many *mo'olelo* include references to the Waihe'e area, which is defined by Waihe'e stream, the northernmost of "The Four Streams," or Na Wai 'Ehā of Wailuku District (*moku*). According to Handy's account in *Hawaiian Planter* (1940: 107), "From Waihe'e to Wailuku Valley, in ancient times, was the largest continuous area of wet taro cultivation in the islands...in ancient times the terraces were more or less continuous in a belt between the sand dunes and the present irrigation ditch". Similar to Kahakuloa, Waihe'e also takes its name from a historic *lo'i* patch, which belonged to the *ali'i* and is near to the sea. Waihe'e is still partially planted in taro, but sugarcane and modern infrastructure has altered the ancient irrigation and terrace system (Handy, 1940; E.P. Sterling, 1998).

It is said that the last ruling chief of Māui, Kahekili, and his forces battled Moloka'i chiefs and their forces over the distribution of abundant agricultural resources from Waihe'e Valley in the mid-18th century, demonstrating the importance of this area (Donham, 1989: 12).

LAND-USE AND AGRICULTURE

The division of Maui's lands into districts (*moku*) and subdistricts was supposedly performed by a *kahuna* named Kalaiha'ōhi'a, during the time of the *ali'i* Kaka'alaneo (c. 1500s) (Beckwith 1940: 383). Traditionally, Maui consisted of twelve political districts: Honua'ula, Kula, Hāmākuapoko, Hāmākualoa, Kahikinui, Kaupō, Kīpahulu, Hāna, and Ko'olau in East Māui and Wailuku, Ka'anapali, and Lahaina in West Māui. In historic times, the original twelve traditional districts were reduced to four: Lahaina, Wailuku, Hana, and Makawao.

Traditional Hawaiian subsistence was based on agricultural production, marine exploitation, animal husbandry, and wild plant and bird collecting. Extended household groups settled in various *ahupua'a*, smaller land divisions within a district that customarily continued inland from the ocean (Figure 8). Within the *ahupua'a*, residents were able to harvest from both the land and the sea. Ideally, this situation allowed each *ahupua'a* to be self-sufficient by supplying needed resources from different environmental zones (Lyons, 1875: 111).

In pre-Contact Hawai'i there were primarily two types of agriculture: wetland and dryland, both of which are dependent upon particular geographies. Conditions in windward West Māui with its perennial streams were ideal for wetland *kalo* (taro, *Colocasia esculenta*) agriculture incorporating pond fields and irrigation canals. Other cultigens such as *kō* (sugar cane, *Saccharum officinarum*) and *mai'a* (bananas, *Musa* sp.) were also grown and where appropriate, the production of such crops as *'uala* (sweet potato, *Ipomoea batatas*) occurred. This was a typical agricultural pattern seen during traditional times on all the islands of Hawai'i (Kirch and Sahlins 1992: 5,119; Kirch 1985). "Alluvial and gentler colluvial slopes were terraced and divided into sometimes quite extensive arrays of flooded pondfields, fed by stream diversions and irrigation channels (or, on coastal plains, by springs)" (Kirch, 2010: 51). This agricultural practice depended upon a constant flow of water through an irrigation system, and the older land surfaces, carved by erosion of the volcanic shield surfaces provided the drainages for permanent streams. Older and more weathered westerly land surfaces were characterized by "large valleys and developed soils, especially on alluvial floodplains" (Kirch, 1985: 220). In the wetter and topographically suitable areas, Hawaiians built irrigation systems (*'auwai*) to carry stream flows to taro fields under nearly constant cultivation. Both Waihe'e Valley, approximately 0.5 km southeast of the project area, and Kahakuloa Valley, approximately 5 km northwest of the project area, were prominent areas of wetland agriculture in ancient Hawai'i (Fredericksen, 2008). The project area, on the other hand, lacking a perennial watercourse and situated on a rugged slope, was unsuitable for wetland taro cultivation.

Easterly and leeward areas, on the other hand, "with intermittent stream flow" and young soils were less suited for irrigation agriculture. Dryland cultivation was more common on these "younger land surfaces" (Kirch, 2010: 51; Handy and Handy, 1972). The dry leeward slopes of East Māui (chiefly Kaupō and Kahikinui) and Hawai'i Island, lacking perennial watercourses and dependent upon intermittent rainfall, were extensively cultivated with sweet potato, yams (to a lesser degree) and some sugar cane and taro in wetter, higher elevations (Kirch, 2010: 51). It is important to keep in mind that the dichotomy between wetland and dryland agricultural systems was not "sharply drawn," and both were part of a whole system (Kirch, 1985: 218).

While dryland cultivation does not seem to have been practiced extensively in the Camp Maluhia area, the young volcanic geology of the area, defined by small, deep, narrow gulches, and rugged cliffs, is not suitable for wetland taro cultivation either. Instead, a limited degree of dryland crop cultivation was probably practiced in this area, on the flatter and more gradually sloping coastal bluffs, as noted by several of the previous researchers in the area and discussed further below (Fredericksen, 2008; Pickett and Spear, 2002; Calis, 2002b).

Handy and Handy (1972: 495) summarize the land-use in the area quite well, writing,

> Southeastward from Kahakuloa stretches the windward coast of West Māui, with elevated *kula* lands above high sea cliffs, an inhospitable region. In recent years pineapples have been grown here. Waiolai had a small stream in a deep gulch and a few *lo'i.* Wailena is a good stream, but in too deep a gulch for terracing. South of this is Makamaka'ole, a large stream flowing out of upland bog-land, but the gulch is too deep for *lo'i* unless perhaps on a very small scale. Between Makamaka'ole and Waiehu is an *'ili* called Kukuipuka that had two small gulches in which water flows only in wet weather; there are no evidences of *lo'i,* but the high *kula* land would have been good for sweet potatoes. Quite likely that this region in West Māui was utilized only by people from nearby Kahakuloa and Waiehu.

THE MĀHELE AND LATER DEVELOPMENTS

Immense changes began to occur in traditional Hawaiian society with the discovery of the islands by Capt. James Cook in 1778, and the subsequent arrival of the island's first westerners. Much of the knowledge of traditional land use patterns is based on what was recorded at the time of, and shortly after, western Contact. Early records, such as journals kept by travelers and missionaries, and surviving Hawaiian traditions, as well as archaeological investigations, have assisted in understanding the past.

In the 1840s, traditional land tenure changed drastically with the introduction of private land ownership based on western law. While it is a complex issue, many scholars believe that in order to protect Hawaiian sovereignty from foreign powers, Kauikeaouli (Kamehameha III) was forced to establish laws changing the traditional Hawaiian society to that of a market economy (Daws, 1968: 111; Kuykendall, Vol. 1, 1938: 145 footnote 47,152,165-6,170; Kame'eleihiwa, 1992: 169-70, 176; Kelly, 1983: 45, 1998).

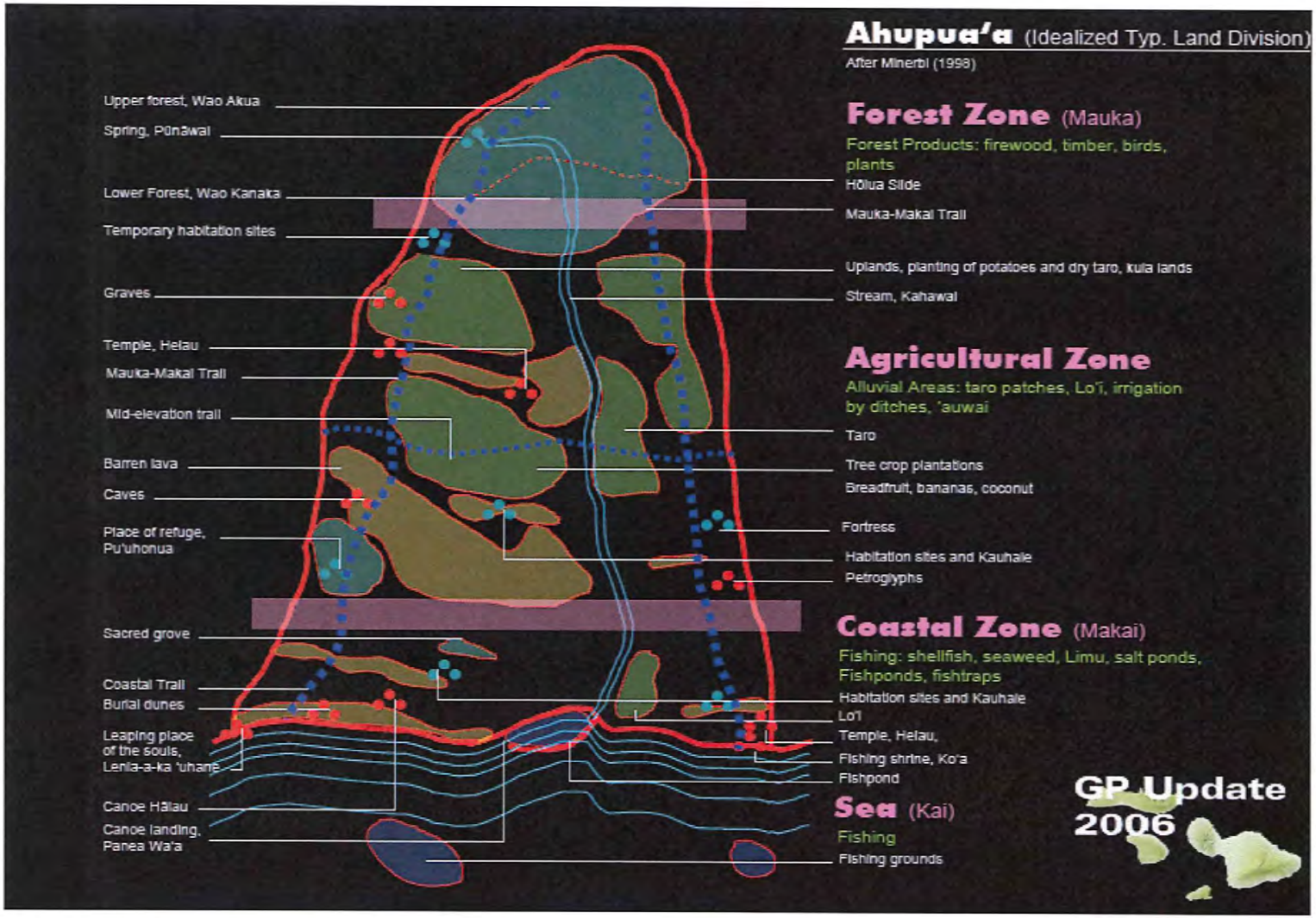

Figure 8: Idealized plan of the traditional Hawaiian *ahupua'a* system (County of Maui, 2006).

Among other things, the foreigners demanded private ownership of land to secure their island investments (Kuykendall, Vol. 1, 1938: 138, 145, 178, 184, 202, 206, 271; Kame'eleihiwa, 1992: 178). The Great Māhele of 1848 divided Hawaiian lands between the king, the chiefs, and the government. Thus began the process of private ownership of lands. Once lands were made available and private ownership instituted, the *maka'āinana* (commoners), if they had been made aware of the procedures, were able to claim the plots on which they had been cultivating and living. These claims, however, could not include any previously cultivated or presently fallow land, stream fisheries, or many other resources traditionally necessary for survival (Kelly, 1983, Kame'eleihiwa, 1992: 295, Kirch and Sahlins, 1992). The subsequently awarded parcels were called Land Commission Awards (LCAs). If occupation could be established through the testimony of two witnesses, the petitioners were awarded the claimed LCA and issued a Royal Patent after which they could then take possession of the property (Chinen 1961: 16).

Much of the land in the vicinity of the project area (Kahakuloa and Waiokila *'Ili* in Kahakuloa Ahupua'a) became Crown Land (Indices 1929: 27). At the time of the overthrow of the monarchy in 1893, the Crown Lands shifted in ownership to the Republic of Hawai'i, and then with annexation, they came under the aegis of the Territory of Hawai'i. Portions of the lands of Waiokila and Kukuipuka *'Ili* became Hawaiian homestead land known as "Kahakuloa Homesteads" and other sections were sold as government grants to individuals. In 1937, a three-way partnership between Alexander House, The Maui County Council-Girl Scouts and the Boy Scouts developed Camp Maluhia for community use. It was purchased from the state in 1958 by the Boy Scouts, and is surrounded by a further 240-acres under long-term lease by the Boy Scouts from the State of Hawai'i (Nakagawa, 2012).

Much of the coastal Waihe'e lands to the southeast of the project area were awarded to Victoria Kamamalu, the acting *kuhina-nui,* a position inherited from Ka'ahumanu-LCA 7713, (Donham, 1989: 12). Many *kuleana* lands were awarded to commoners in the heavily irrigated and farmed Waihe'e Ahupua'a, some of which continues to the present day. A similar pattern can be traced in Kahakuloa Valley proper (Fredericksen, 2008).

The project area is located on rugged terrain, likely utilized by the now defunct Waihe'e Dairy and Farm as pasture for cattle. Ha'iku Fruit & Packing Company cultivated pineapple on the rugged terrain of Kahakuloa and Waihe'e, near to Camp Maluhia (Fredericksen, 2008; Major and Kleiger, 1996). Wailuku Sugar Company (later Wailuku Agribusiness Company, Inc.) owns a parcel southeast of Camp Maluhia, which was most likely used for grazing cattle (Pickett and

Spear, 2002). Wailuku Agribusiness Co. produced sugarcane and macadamia nut production further away in Waihe'e and Waiehu until 2002, when the final landowner, C. Brewer and Company ceased operations (Fredericksen, 2008: 5).

PREVIOUS ARCHAEOLOGY

Given that the project area lies close to the boundary between Kahakuloa Ahupua'a and Waihe'e Ahupua'a, this report includes a review of archaeological work in the southern and northern portions of each *ahupua'a*, respectively. Very few archaeological studies have been conducted in the immediate area, due to the area's agricultural limitations (discussed above), and the implications for human settlement during the traditional Hawaiian period.

Early work in the Kahakuloa and Waihe'e areas by Thrum (1908), Walker (1928 published in 1931), Handy (1931, published in 1940) and Sterling (1964, published in 1998) recorded a number of important structures. Walker (1931) recorded five *heiau* in Waiehu, eight in Waihe'e, and seven in Kahakuloa, including the Kukuipuka Heiau below Camp Maluhia.

Waipiliamoo Heiau, (Walker Site 26) is at the mouth of Makamaka'ole Gulch, roughly 50 yards from the shore. It is heavily altered and overgrown with lantana, with a *hala* tree nearby; remnants of an old village called Lahaole stood here with remnants of *lo'i* and platforms, rifled burial caves, and a stone/driftwood roofed fishing *hale* (Sterling, 1998: 59).

There are also said to be abandoned terraces in two gulches on either side of Pu'u Ola, *mauka* of Kahekili highway, high up in the mountains, but below the trail that comes down from Camp Maluhia. The terraces are in good condition, besides being overgrown and abandoned (Sterling, 1998: 59). These are listed as site "Kahakuloa 53 Cultivation at Waiolai and Makamaka'ole" in Sterling's compilation, first published in Handy's *Hawaiian Planter* (1940).

Sterling's compilation (1998: 61) describes a "Land of Refuge" in 'Ili o Kukuipuka, where a blind man called Paki escapes from Waihe'e after killing a canoe-making *kahuna*, crawling "a distance of half a mile to a place of refuge called Kukuipuka, sacred to Kuka'ili-moku, Kamehameha's god" (Kamakau, 1961:313). There is no evidence of taro cultivation in this *'ili,* as pineapples now flourish on the upland slopes. Walker's Site 27 identifies the Kukuipuka *heiau* on a knoll below the Boy Scout Camp, a *pu'uhonua*, or place of refuge for West Māui, on a hill overlooking the road and largely destroyed by pineapple fields. However, Sterling (1998) believed the Kukuipuka *heiau* to be further west, on a plateau between Waiolai

and Waiokila streams overlooking Kahekili Hwy, past Makamaka'ole Gulch in Kahakuloa Ahupua'a. She observed a site on this plateau, which she called Waiolai Stream Heiau Site, in May, 1964.

However, later work by Major and Klieger (1996) of the Bishop Museum posited that this site was not a *heiau*, but rather a habitation site. They suggested that Walker's site 27 was indeed somewhere in the area below Camp Maluhia, south of Makamaka'ole Stream. The known Kukuipuka *heiau,* approximately 1500 feet *makai* of Camp Maluhia, has recently been cared for by volunteers involved in a rehabilitative project under the care of *kahuna* Lei'ohu Ryder.

Major and Klieger's (1996) work was part of a major Inventory Survey on a 245-acre parcel of land northwest of the current project area (across Makamaka'ole Gulch) slated for development of the Kahakuloa Agricultural Park Subdivision, later called "Maluhia Country Ranches" and "The Cliffs at Kahakuloa". The AIS yielded ten archaeological sites. Twenty-one surface features were recorded including mounds, terraces, partial enclosures, alignments, an old Government Road, and a possible *'auwai*. Subsurface test results revealed evidence of pre- and post-Contact use of the location.

In 2001, SCS completed an Inventory Survey on land owned by the Molina family, also northwest of the current project area. The results documented one previously unrecorded remnant agricultural terrace feature (McGerty and Spear 2001). Calis (2002a) provided results from another Inventory Survey completed by SCS in February 2002 on a 51.068-acre parcel also northwest of the current project area. There were no significant archaeological remains identified throughout the investigation, which Calis argues is a consequence of heavy impact caused by nearly 100 years of ranching activities in the immediate area.

Xamanek Researches (Fredericksen, 2008) completed a 34-acre Inventory Survey on land owned by the Mendes family, north (*makai* of Kahekili Highway) of the present project area. The survey found two historic era sites.

Pickett and Spear (2002) completed an Inventory Survey of two adjacent parcels of 8.351 acres (part of the Kahakuloa Agricultural Park Subdivision, "The Cliffs at Kahakuloa"), northwest of the current project area, finding no significant cultural sites.

A number of very small surveys have been completed in the immediate project area at Camp Maluhia (see Table below). In 1974, a single human cranium was located by boy scouts

within a cave near Camp Maluhia at site 50-50-02-1466 (Douglas, 1991). The cranium was recorded, analyzed, and determined to be a 50-55 year old Polynesian male. Calis (2002b) provided an AIS of a proposed waterline starting near to Kukuipuka Heiau below Camp Maluhia, identifying only a historic retaining wall. Dega (2002) provided archaeological reconnaissance for a proposed water tank site near the project area, finding no new cultural sites. Apart from those studies, the only findings have been the historic 1930s era buildings at Camp Maluhia. An architectural review was completed in 2012 (SHPD document, pers. comm. Ross Stephenson) and should be referred to for detailed documentation of these buildings.

SETTLEMENT PATTERNS

A survey of Waihe'e Valley to the south conducted in 1978 by Ross Cordy resulted in a model to predict variation in settlement patterns (Cordy 1978). Cordy divided the sites into upper valley and lower valley zones depending upon the general landscape morphology. As the upper valley is more narrow and constricted, it was predicted to contain a few temporary habitations amid some agricultural features and burial caves in the cliffs. The lower valley with its broad alluvial plains was expected to contain permanent habitation, religious, and agricultural features. Cordy suggested the coastal region might have been occupied as early as A.D. 300 to 600.

The immediate project area does not contain any broad alluvial planes. However, remnants of dryland agricultural features may be present on the slopes immediately surrounding Camp Maluhia, along with temporary habitations. If agricultural features were located here during the pre-contact era, they have been altered and destroyed by post-contact agricultural activities, as well as the development of Camp Maluhia itself, and its associated infrastructure.

Table 1: Previous Archaeology

Author	Year	Ahupua'a	Type of Study	Results
Thrum, T.	1908	Waihe'e and Kahakuloa	Survey *(Sites of Maui)*	*Heiau*
Walker, W.	1931	Waihe'e and Kahakuloa	Survey *(Archaeology of Maui)*	Numerous *heiau*, temporary/scattered habitation sites; *Site 27 Kukuipuka heiau*, Kahakuloa Ahupua'a
Sterling, E.P.	1998	Waihe'e and Kahakuloa	Compilation *(Sites of Maui)*	Archaeological sites and associated cultural histories
Major and Klieger, 1996 (Bishop Museum Archaeologists)	1996	Waiokila *'Ili*, Kahakuloa	AIS, 245-acre Kahakuloa Agricultural Park Subdivision, (*later named Maluhia Country Ranches and Cliffs at Kahakuloa*)	10 historic sites, 21 component features; historic habitation, animal corral, ag. clearing mounds, 4 ag. terrace complexes, water channel, wall, old government rd.
Livermore, A.M.B. (Architecture Branch Chief, SHPD)	2009	Waihe'e	Chapter 6E-42 (HRS) Review—"After-the-Fact" Submittal, Camp Maluhia	Eight structures built c.1938 were altered without prior historic resources inventory survey; letter recommends that buildings and camp be considered for inclusion on the Hawai'i or National Registers of Historic Places.
Douglas, M. University of Hawaii	1991	Waihe'e	Report on single cranium.	Single cranium found in cave near Camp Maluhia, 1974.
Hibbard, D. (Administrator, SHPD)	1994	Kahakuloa	Historic Preservation Review, Camp Maluhia	SHPD Archaeologist Theresa K. Donham conducted a review of a

Author	Year	Ahupua'a	Type of Study	Results
				proposed parking lot, finding no historic sites.
Hibbard, D. (Administrator, SHPD)	1997	Waihe'e	Historic Preservation Review, Camp Maluhia	SHPD reviewed plans for a proposed new camp ranger's residence at Camp Maluhia using archives (no field check); review determined that the Camp was likely the location of pre-Contact farmlands, with some scattered houses. New residence site altered by early 20th century archaeology agriculture and existing residence, therefore proposal determined no effect on historic sites.
McGerty, L. and Spear, R.L. (SCS Archaeology)	2001	Kahakuloa	AIS, 14-acre Molina parcel	One site identified, remnant terrace feature Site 5069, significant under Criterion D of the National Register of Historic Places. No further archaeological work was recommended.
Dega, M. (SCS Archaeology)	2002	Waihe'e	Archaeological Reconnaissance, 70x70ft tract	Evaluation of an area for proposed water tank; Kukuipuka Heiau and historic retaining wall, 750m southwest

Author	Year	Ahupua'a	Type of Study	Results
				and 100m north of proposed project, respectively; no adverse impact in water tank project location.
Calis, I. (SCS Archaeology)	2002a	Kahakuloa	AIS, 51.068 acre Kahakuloa Acres Agricultural Subdivision	No significant archaeology.
Calis, I. (SCS Archaeology)	2002b	Waihe'e	AIS, 2800 foot Waterline	One historic retaining wall recorded.
Fredericksen, E.M. (Xamanek Researches, LLC)	2008	Kahakuloa	AIS, 34-acre Mendes parcel	2 previously unrecorded historic properties located, including a plantation/ranch era road retaining wall and a ranch era retaining wall.
Pickett, J.L. and Spear, R.L. (SCS Archaeology)	2002	Waiokila *'Ili*, Kahakuloa Ahupua'a	AIS, 8.351-acre, 2 adjacent parcels in Kahakuloa Agricultural Park subdivision ("The Cliffs at Kahakuloa")	No significant cultural architecture or deposits (most likely because property was previously grubbed); no mitigation deemed necessary.

METHODS

Inventory Survey involved archival work prior to fieldwork, survey in the field, and laboratory work. Archival research entailed investigating the historic and archaeological background of the general project area. This examination included a documentary search of previous archaeological research conducted in this region of Maui, as well as a review of archival literature relating to Land Commission Awards and local mythology. The review of historical documents was mainly accomplished in order to understand the impact of post-Contact events on the cultural and archaeological landscape of the region and to assess what types of sites could be present in the project area. Fieldwork was conducted intermittently during the week of February 8, 2013 by D. Perzinski, B.A. and R. Hodara, M.S, under the overall direction of Michael Dega, Ph.D.

A 100% systematic pedestrian survey of the current project area was completed in order to identify the presence or absence of historic properties. The two crew members conducted the survey spaced approximately 2-3 meters apart, walking in transect sweeps. During the inventory survey numerous photographs were taken and written descriptions were recorded to document the terrain, vegetation and historic structures. In addition, the camp manager was consulted for his knowledge of the camp and surrounding area. No subsurface tests were completed during the scope of Inventory Survey due to the lack of any maps or plans that outlined the existing subsurface utility lines and the lack of surface features/areas thought to potentially contain subsurface deposits. While existing subsurface cultural remains may be present, the lack of reliable maps of subsurface utility lines (and at the request of the camp manager), mechanical trenching was judged to be too risky of an endeavor.

Laboratory work, which was conducted at SCS facilities in Honolulu, consisted of digitally drafting all maps, cataloguing all project area photographs, and reporting. All documentation pertaining to this project is currently being curated at SCS facilities in Honolulu.

FIELD RESULTS

The results of Inventory Survey in the approximately 20-acre project area were negative. No archaeological sites, artifacts or cultural deposits were identified on the surface of the project area (Figures 9-11). No testing was conducted during the project as no areas were amenable to testing obvious topographic anomalies and due to absence of maps, etc. marking underground utilities running the camp. Given the nature of soil in the area (red silty clay), as well as the

underground utility presence, it is unlikely that cultural deposits would occur in, at least, upper stratum.

A number of historic buildings have been identified at Camp Maluhia within the project area, which were assessed as significant under Criterion C of the National Register (see Figure 9; SHPD document, pers. comm. Ross Stephenson). These buildings were not recorded during the current project and will not be adversely affected by the proposed work. In addition, an important *heiau*, Kukuipuka Heiau (Figure 12), is located *c.* 1500 feet *makai* of Camp Maluhia, and is well documented in the literature. The important site is currently maintained and protected by the registered 501c3 nonprofit Kukuipuka 'Ohana.

Apart from the historic architecture, evidence of pre- and post-Contact cultural activities at the Camp and adjacent parcel slated for development of the Fire Protection System were not identified, most likely due to alterations of the project parcel by agricultural and ranching use and previous development of the Camp itself.

Figure 9: View Southwest of Historic Buildings at Camp Maluhia (existing 1938 Dining Hall on right).

Figure 10: Area Surveyed Surrounding the Upper Water Tank on Property Leased by the Boy Scouts from the State of Hawai'i, Slated for Development of the "Fire Protection System Phase I".

Figure 11: Area to be Utilized for the new Dining Hall at Camp Maluhia.

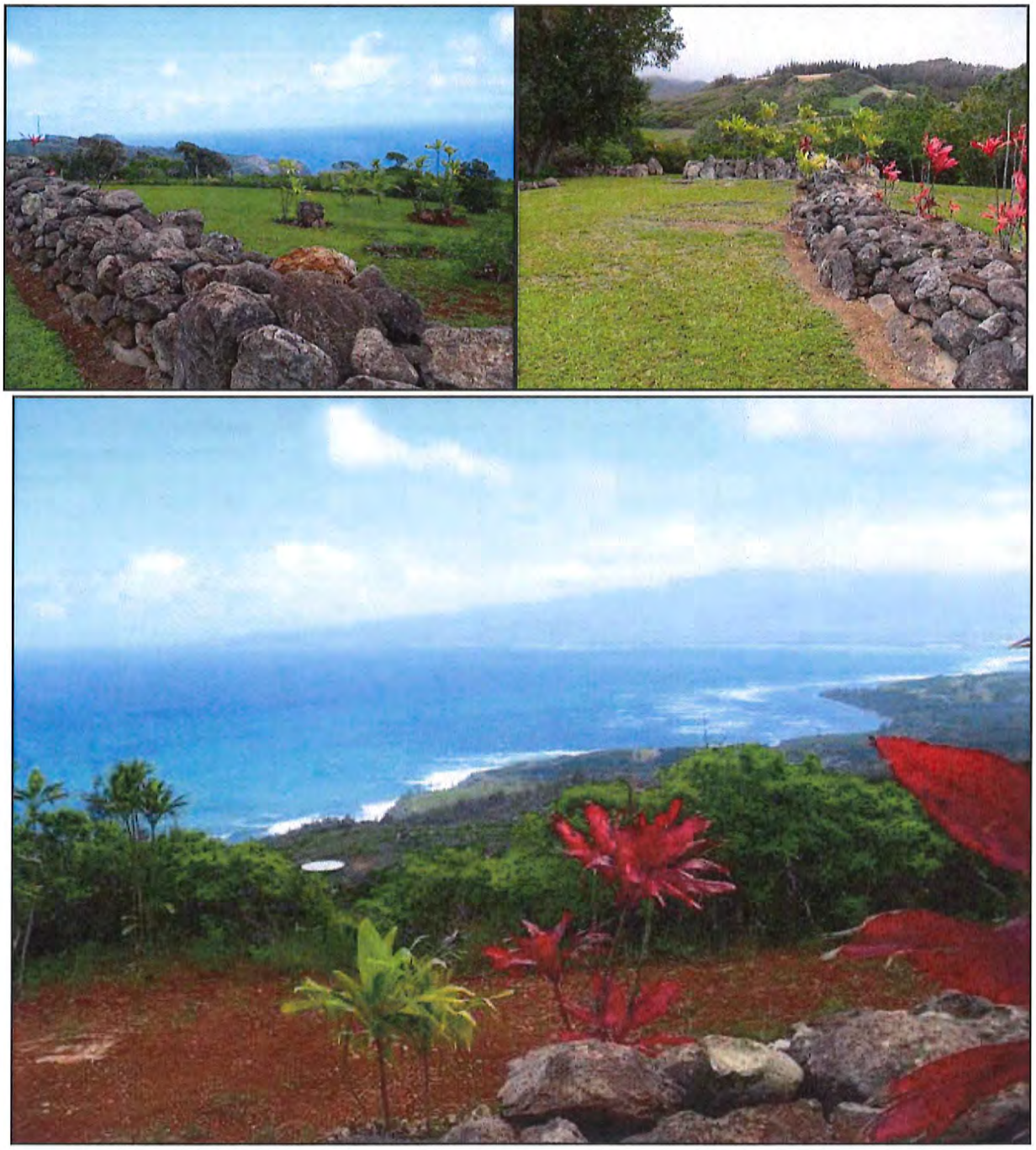

Figure 12: (*clockwise from top left*): Views North, South and Northeast from Kukuipuka Heiau, on a bluff *makai* of the Boy Scout Camp.

CONCLUSION AND RECOMMENDATIONS

The area of Camp Maluhia and its immediate surroundings is characterized by rugged slopes adjacent to deep, narrow gulches, and is not conducive to intensive wetland or extensive dryland agricultural cultivation. Thus, it is unlikely that this area was a major permanent settlement in the pre-contact era, in contrast to the more important nearby settlements of Kahakuloa to the northwest and Waihe'e to the southeast.

Limited, traditional dryland agricultural features for the cultivation of such produce as sweet potato and taro are often found on slopes above watered gulches and ravines, and may have been located in the project area in the past. The nearby *heiau* of Kukuipuka attests to at least some important use of the area surrounding the immediate project site. However, modern agriculture such as sugarcane and pineapple cultivation and cattle ranching was more likely to be located on ridgetops amongst rugged mountain terrain. These historic activities, especially pasture for cattle grazing, as well as clearing and grading, have heavily impacted portions of the project area. Finally, the previous development of Camp Maluhia itself may have altered or destroyed traces of traditional use of the immediate project area.

No surface or subsurface cultural remains were identified during the archaeological assessment. A 100% pedestrian survey of the parcel failed to lead to the identification of historic surface features. Modern era clearing and grading in the parcel for the existing structures and grounds have likely disturbed any previously existing sites or surface deposits. Due to the lack of visible surface historic properties and the extensive impact of modern agriculture and cattle, buried historic properties are not anticipated to be present.

It is our estimation, based on this archaeological assessment, that the proposed undertaking, noted above, would not have an adverse impact on any significant sites in the project area or nearby the project area. No further archaeological work is recommended.

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APPENDIX B-1.

State Historic Preservation Division Letter Dated March 24, 2015

DAVID Y. IGE
GOVERNOR OF HAWAII

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INTERIM CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

DANIEL S. QUINN
INTERIM FIRST DEPUTY

W. ROY HARDY
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AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
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March 24, 2015

Michael F. Dega, Ph.D.
Scientific Consultant Services, Inc.
mike@scshawaii.com

LOG NO: 2013.0437
DOC NO: 1503JP12
Archaeology

Aloha Dr. Dega:

SUBJECT: **Chapter 6E-8 and 6E-42 Historic Preservation Review-**
Final Archaeological Assessment Report for Camp Maluhia in the 'Ili of Kukuipuka
Kahakuloa Ahupua'a, Wailuku District, Island of Maui
TMK (2) 3-1-001:001 (por.) and 028

Thank you for the opportunity to review the submittal entitled *An Archaeological Assessment of Approximately 20 acres in 'Ili O Kukuipuka, Kahakuloa Ahupua'a, Wailuku District, Island of Maui, Hawai'i [TMK (2) 3-1-001:028-001]* by Hodara *et al.* (September 2013). We received the subject report in September 2013, which was in response to a request for revisions in a draft report review letter dated September 11, 2013 (*Log 2013.2177, Doc 1307LO04*).

The assessment report was conducted for the Boy Scouts of America, Maui County Council's proposed construction of a new dining hall and installation of a new waterline and water storage tank for fire protection purposes. The subject area is a combination of land owned by the Boy Scouts (Parcel 028: 17.94 acres) and approximately two acres leased by the Boy Scouts from the State of Hawai'i (Parcel 001 por.). The new dining hall and associated infrastructure will be on Parcel 028, while a portion of the fire-protection system will be located on Parcel 001, at a higher elevation necessary for the water system operation.

The report contains information regarding the nature of the proposed project, location maps, description of the environment, previous archaeological studies, and expected findings. No evidence of historic properties was found during the 100% pedestrian survey of the project area. Archaeological monitoring of the groundwork phase of the construction project was initially recommended, but has since been revised. We concur with your updated recommendation in the final document indicating no further archaeological work is recommended.

The report adequately addresses the issues raised in our original draft review (*Log 2013.2177, Doc 1307LO04*). The report meets the standards set forth in Hawai'i Administrative Rule §13-276-5 and is accepted as Final. Please contact Jenny Pickett at (808) 243-5169 or Jenny.L.Pickett@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)

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APPENDIX C.

Cultural Impact Assessment

SCS Project Number 1370-1 CIA

A CULTURAL IMPACT ASESSMENT FOR THE BOY SCOUTS OF AMERICA CAMP MALUHIA `ILI O KUKUIPUKA, KAHAKULOA AHUPUA`A WAILUKU DISTRICT, ISLAND OF MAUI [TMK: (2) 3-1-001:028 AND 029]

Prepared by:
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November 2013
Draft

Prepared for:
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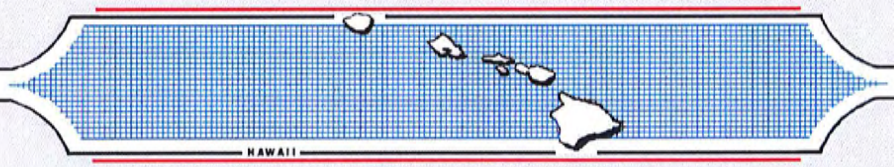

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INTRODUCTION

At the request of Michael Munekiyo, of Munekiyo and Hiraga, Inc., Scientific Consultant Services, Inc. (SCS), has prepared a Cultural Impact Assessment (CIA) for the proposed improvements at Camp Maluhia, to be located on approximately 20 acres of land located in `Ili o Kukuipuka, Kahakuloa Ahupua`a, Wailuku District, Island of Maui [TMK: (2) 3-1-001:028 and 029] (Figures 1 through 3). The proposed improvements will include a new dining hall and the installation of a fire protection system.

The Constitution of the State of Hawai`i clearly states the duty of the State and its agencies is to preserve, protect, and prevent interference with the traditional and customary rights of Native Hawaiians. Article XII, Section 7 (2000) requires the State to "protect all rights, customarily and traditionally exercised for subsistence, cultural and religious purposes and possessed by *ahupua`a* tenants who are descendants of Native Hawaiians who inhabited the Hawaiian Islands prior to 1778." In spite of the establishment of the foreign concept of private ownership and western-style government, Kamehameha III (Kauikeaouli) preserved the peoples traditional right to subsistence. As a result in 1850, the Hawaiian Government confirmed the traditional access rights to Native Hawaiian *ahupua`a* tenants to gather specific natural resources for customary uses from undeveloped private property and waterways under the Hawaiian Revised Statutes (HRS) 7-1. In 1992, the State of Hawai`i Supreme Court, reaffirmed HRS 7-1 and expanded it to include, "native Hawaiian rights...may extend beyond the *ahupua`a* in which a Native Hawaiian resides where such rights have been customarily and traditionally exercised in this manner" (Pele Defense Fund v. Paty, 73 Haw.578, 1992).

Act 50, enacted by the Legislature of the State of Hawai`i (2000) with House Bill (HB) 2895, relating to Environmental Impact Statements, proposes that:

> ...there is a need to clarify that the preparation of environmental assessments or environmental impact statements should identify and address effects on Hawaii's culture, and traditional and customary rights... [H.B. NO. 2895].

Articles IX and XII of the state constitution, other state laws, and the courts of the State impose on government agencies a duty to promote and protect cultural beliefs and practices, and resources of Native Hawaiians as well as other ethnic groups. Act 50 also requires state agencies and other developers to assess the effects of proposed land use or shoreline developments on the "cultural practices of the community and State" as part of the HRS Chapter 343 (2001) environmental review process.

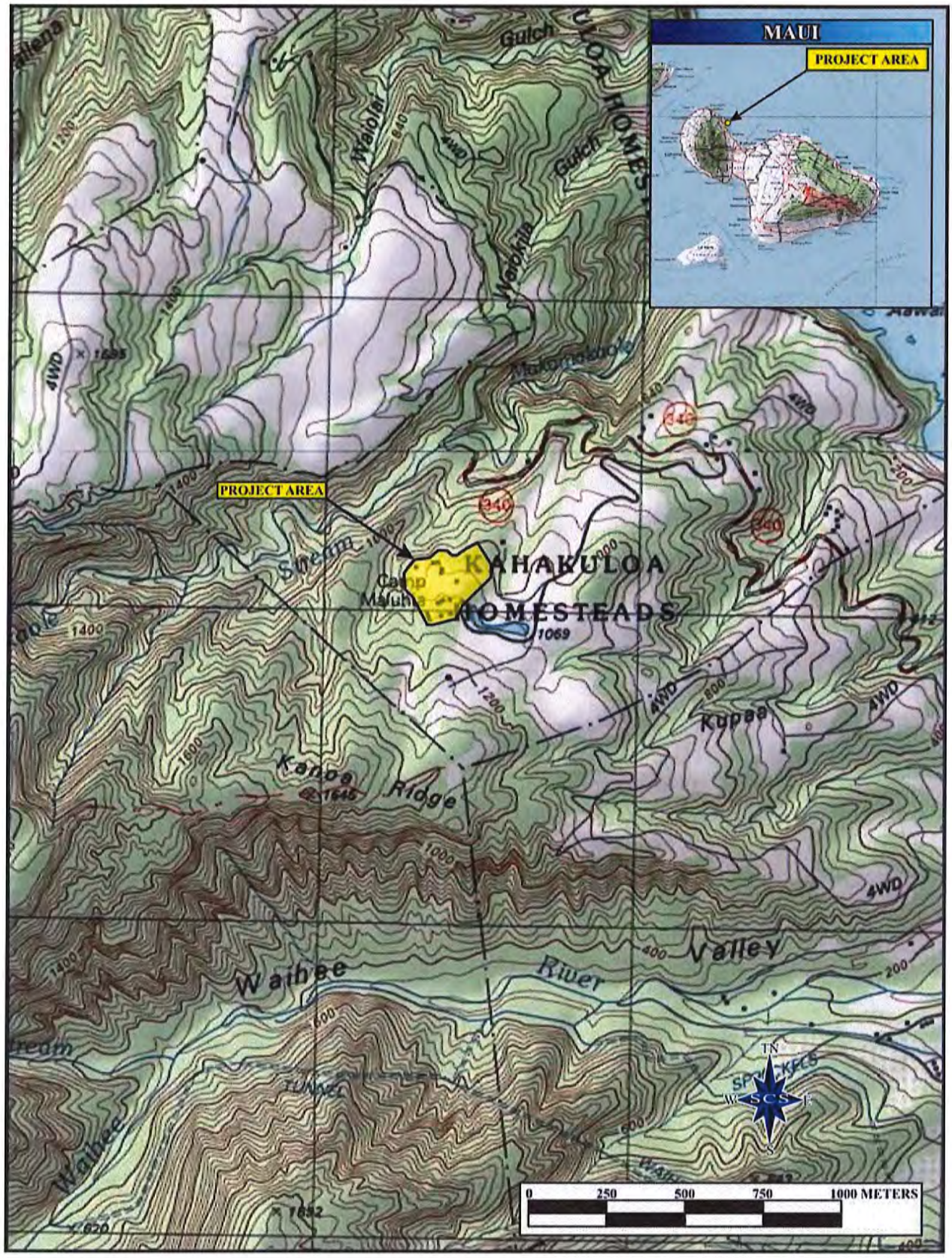

Figure 1: USGS Quadrangle (Wailuku 1997) Map Showing Project Area Location.

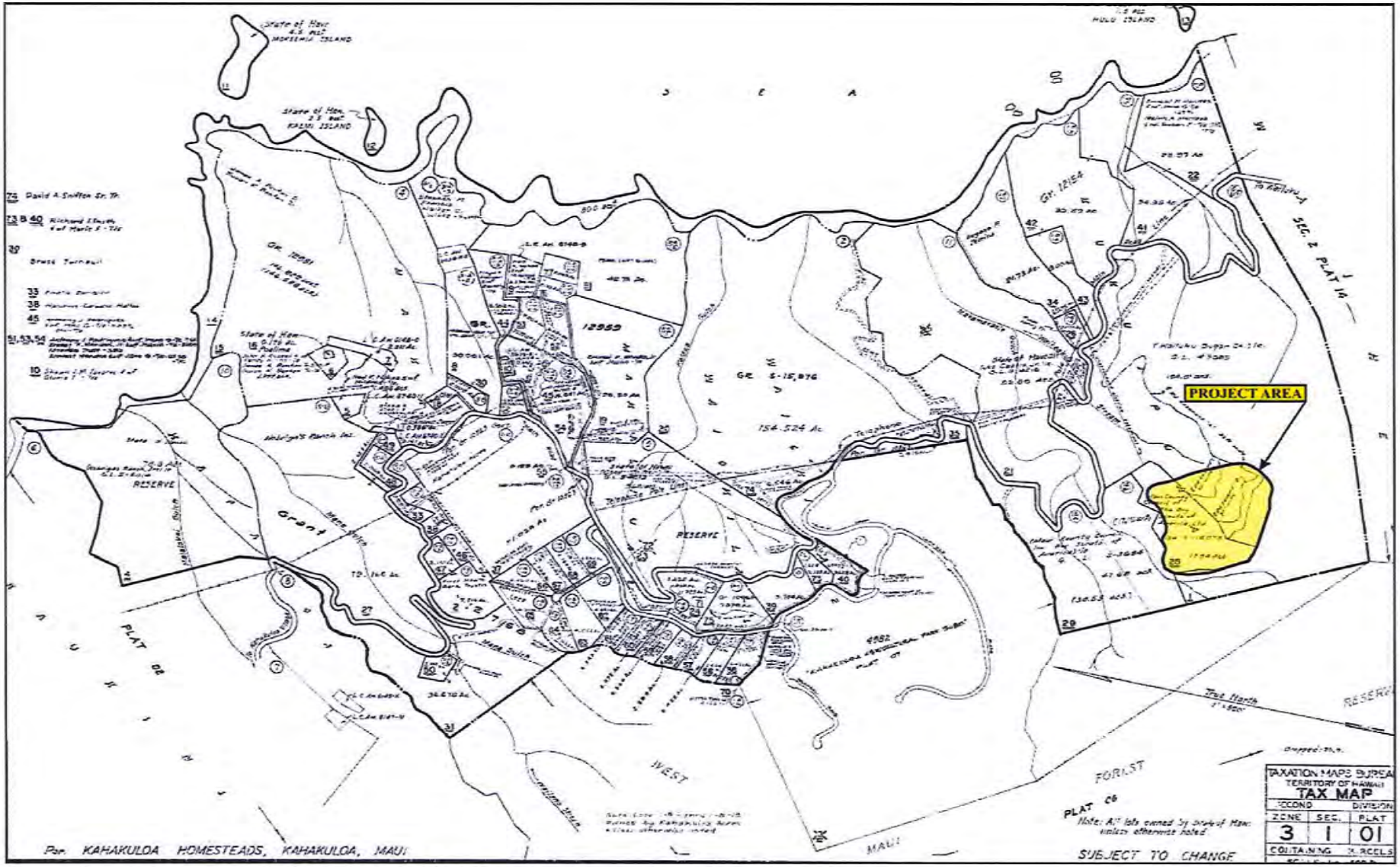

Figure 2: Tax Map Key [TMK: (2) 3-1-001] Showing Project Area Location.

Figure 3: Photographic View of Pastureland East of Camp Maluhia. Access Road to Waihe`e Ridge Trail and Upper Water Tank is in Foreground. View to Northeast.

It also re-defined the definition of "significant effect" to include "the sum of effects on the quality of the environment including actions impact a natural resource, limit the range of beneficial uses of the environment, that are contrary to the State's environmental policies . . . or adversely affect the economic welfare, social welfare or cultural practices of the community and State" (H.B. 2895, Act 50, 2000). Cultural resources can include a broad range of often overlapping categories, including places, behaviors, values, beliefs, objects, records, stories, etc. (H.B. 2895, Act 50, 2000).

Thus, Act 50 requires that an assessment of cultural practices and the possible impacts of a proposed action be included in Environmental Assessments and Environmental Impact Statements, and to be taken into consideration during the planning process. As defined by the Hawaii State Office of Environmental Quality Control (OEQC), the concept of geographical expansion is recognized by using, as an example, "the broad geographical area, e.g. district or *ahupua`a*" (OEQC 1997). It was decided that the process should identify 'anthropological' cultural practices, rather than 'social' cultural practices. For example, *limu* (edible seaweed) gathering would be considered an anthropological cultural practice, while a modern-day marathon would be considered a social cultural practice.

Therefore, the purpose of a Cultural Impact Assessment is to identify the possibility of on-going cultural activities and resources within a project area, or its vicinity, and then assessing the potential for impacts on these cultural resources. The CIA is not intended to be a document of in depth archival-historical land research, or a record of oral family histories, unless these records contain information about specific cultural resources that might be impacted by a proposed project.

According to the Guidelines for Assessing Cultural Impacts established by the Hawaii State Office of Environmental Quality Control (OEQC 1997):

> The types of cultural practices and beliefs subject to assessment may include subsistence, commercial, residential, agricultural, access-related, recreational, and religions and spiritual customs. The types of cultural resources subject to assessment may include traditional cultural properties or other types of historic sites, both manmade and natural, which support such cultural beliefs.

The meaning of "traditional" was explained in *National Register Bulletin*:

> Traditional" in this context refers to those beliefs, customs, and practices of a living community of people that have been passed down through the generations', usually orally or through practice. The traditional cultural significance of a historic property then is significance derived from the role the property plays in a community's historically rooted beliefs, customs, and practices. . . . [Parker and King 1990:1]

METHODOLOGY

This Cultural Impact Assessment was prepared as much as possible in accordance with the suggested methodology and content protocol in the Guidelines for Assessing Cultural Impacts (OEQC 1997). In outlining the "Cultural Impact Assessment Methodology", the OEQC states that:

> "...information may be obtained through scoping, community meetings, ethnographic interviews and oral histories..."

This report contains archival and documentary research, as well as communication with organizations having knowledge of the project area, its cultural resources, and its practices and beliefs. An example letter of inquiry is presented below in Appendix A, copies of posted legal notices are presented in Appendix B, an example the follow-up letters of inquiry is presented below in Appendix C, responses to the letters of Inquiry are presented in Appendix D, and the signed information release form is presented in Appendix E. This Cultural Impact Assessment was prepared in accordance with the suggested methodology and content protocol provided in the Guidelines for Assessing Cultural Impacts (OEQC 1997), whenever possible. The assessment concerning cultural impacts may include, but not be limited to, the following matters:

(1) if consultation is available, a discussion of the methods applied and results of consultation with individuals and organizations identified by the preparer as being familiar with cultural practices and features associated with the project area, including any constraints of limitations which might have affected the quality of the information obtained;

(2) a description of methods adopted by the preparer to identify, locate, and select the persons interviewed, including a discussion of the level of effort undertaken;

(3) if conducted, interview procedures, including the circumstances under which the interviews were conducted, and any constraints or limitations which might have affected the quality of the information obtained;

(4) biographical information concerning the individuals and organizations consulted, their particular expertise, and their historical and genealogical relationship to the project area, as well as information concerning the persons submitting information or being interviewed, their particular knowledge and cultural expertise, if any, and their historical and genealogical relationship to the project area;

(5) a discussion concerning historical and cultural source materials consulted, the institutions and repositories searched, and the level of effort undertaken, as well as the particular perspective of the authors, if appropriate, any opposing views, and any other relevant constraints, limitations or biases;

(6) a discussion concerning the cultural resources, practices and beliefs identified, and for the resources and practices, their location within the broad geographical area in which the proposed action is located, as well as their direct or indirect significance or connection to the project site;

(7) a discussion concerning the nature of the cultural practices and beliefs, and the significance of the cultural resources within the project area, affected directly or indirectly by the proposed project;

(8) an explanation of confidential information that has been withheld from public disclosure in the assessment;

(9) a discussion concerning any conflicting information in regard to identified cultural resources, practices and beliefs;

(10) an analysis of the potential effect of any proposed physical alteration on cultural resources, practices, or beliefs; the potential of the proposed action to isolate cultural resources, practices, or beliefs from their setting; and the potential of the proposed action to introduce elements which may alter the setting in which cultural practices take place, and;

(11) the inclusion of bibliography of references, and attached records of interviews which were allowed to be disclosed.

If on-going cultural activities and/or resources are identified within the project area, assessments of the potential effects on the cultural resources in the project area and recommendations for mitigation of these effects can be proposed.

ARCHIVAL RESEARCH

Archival research focused on a historical documentary study involving both published and unpublished sources. These included legendary accounts of native and early foreign writers; early historical journals and narratives; historic maps, land records, such as Land Commission

Awards, Royal Patent Grants, and Boundary Commission records; historic accounts, and previous archaeological reports.

INTERVIEW METHODOLOGY

Interviews are conducted in accordance with Federal and State laws, and guidelines, when knowledgeable individuals are able to identify cultural practices in, or in close proximity to, the project area. If they have knowledge of traditional stories, practices and beliefs associated with a project area or if they know of historical properties within the project area, they are sought out for additional consultation and interviews. Individuals who have particular knowledge of traditions passed down from preceding generations and a personal familiarity with the project area are invited to share their relevant information concerning particular cultural resources. Often people are recommended for their expertise, and indeed, organizations, such as Hawaiian Civic Clubs, the Island Branch of Office of Hawaiian Affairs (OHA), historical societies, Island Trail clubs, and Planning Commissions are depended upon for their recommendations of suitable informants. These groups are invited to contribute their input, and suggest further avenues of inquiry, as well as specific individuals to interview. It should be stressed again that this process does not include formal or in-depth ethnographic interviews or oral histories as described in the OEQC's *Guidelines for Assessing Cultural Impacts* (1997). The assessments are intended to identify potential impacts to on-going cultural practices, or resources, within a project area or in its close vicinity.

If knowledgeable individuals are identified, personal interviews are sometimes taped and then transcribed. These draft transcripts are returned to each of the participants for their review and comments. After corrections are made, each individual signs a release form, making the interview available for this study. When telephone interviews occur, a summary of the information is usually sent for correction and approval, or dictated by the informant and then incorporated into the document. If no cultural resource information is forthcoming and no knowledgeable informants are suggested for further inquiry, interviews are not conducted.

ENVIRONMENTAL SETTING

The project area is located in the southernmost region of Kahakuloa Ahupua`a, on the windward side of the West Maui Mountain range (Mauna Kahalawai) in Wailuku District (TMK: (2) 3-1-001:028). Historically, Kahakuloa Ahupua`a was part of Kā`anapali District, Island of Maui. Samuel P. Kalama's "Na Mokupuni O Hawaii Nei" 1838 map indicates that Camp Maluhia may actually have been located in Makaliua Ahupua`a, but

this name is no longer used (Figure 4). Sterling's (1998) compilation *Sites of Maui* indicates that this area is the *`Ili* of Kukuipuka, part of Kahakuloa Ahupua`a, Kā`anapali District (Figure 5).

The parcel is approximately 20-acres, including 17.94 acres owned by the Boy Scouts, and *ca.* 2 acres under long-term lease by the Boy Scouts from the State of Hawai`i. The project area occurs approximately 800 feet *mauka* of Kahekili Highway, and 5,000 feet *mauka* (west) of the coastline (roughly 0.95 miles), sloping northeast down towards the coastline. Project area elevations range from 297 meters (975 feet) to 381 meters (1250 feet) precipitation is 1201 mm, measured at the Kahakuloa station by HydroNet, roughly 2,800 feet southeast of Camp Maluhia, at 334-meter elevation (Giambelluca *et al.* 2012).

The boundaries of the project area are largely defined by the existing Camp Maluhia area, which was developed in 1937 for community use through a three-way partnership between Alexander House, The Maui County Council-Girl Scouts, and the Boy Scouts. The parcel was purchased from the state in 1958 by the Boy Scouts, and is surrounded by 240-acres under long-term lease by the Boy Scouts from the State of Hawai`i (Nakagawa 2012). The remaining *c.*2 acres are part of the 194.51 acre parcel leased by the Boy Scouts, which lies south and east of Camp Maluhia proper; the small 2-acre portion surveyed here is directly adjacent to Camp Maluhia's southern border, where an existing water tank and gate are situated. Camp Maluhia's western boundary is defined by a steep drop-off to Makamaka`ole gulch and stream.

In addition to Makamaka`ole Gulch and Makamaka`ole Stream, the land under lease from the State of Hawai`i includes Kukuipuka Heiau, which is located on a bluff approximately 500 meters (1600 feet) east of the Camp, as well as part of the Waihe`e Ridge Trail. Former land-use on the parcel includes cattle grazing, and much of the land is still under pasture today. Southwest and west of the parcel lies the West Maui Forest Reserve, part of the State Forest Reserve System established in 1903. Southeast of the parcel lies agricultural land owned by Wailuku Agribusiness Company, Inc., formerly under sugarcane and pasturage. Pineapple cultivation and cattle ranching took place on lands surrounding Camp Maluhia by now defunct agribusiness companies, including Waihe`e Dairy and Farm and Haiku Fruit & Packing Company. The Kahakuloa Agricultural Estates Subdivision (Maluhia Country Estates and The Cliffs at Kahakuloa) and Mendes Ranch are the nearest residential developments to the project area.

Figure 4: Photographic View Across Makamaka`ole Gulch from North Portion of Project Area. View to Southwest.

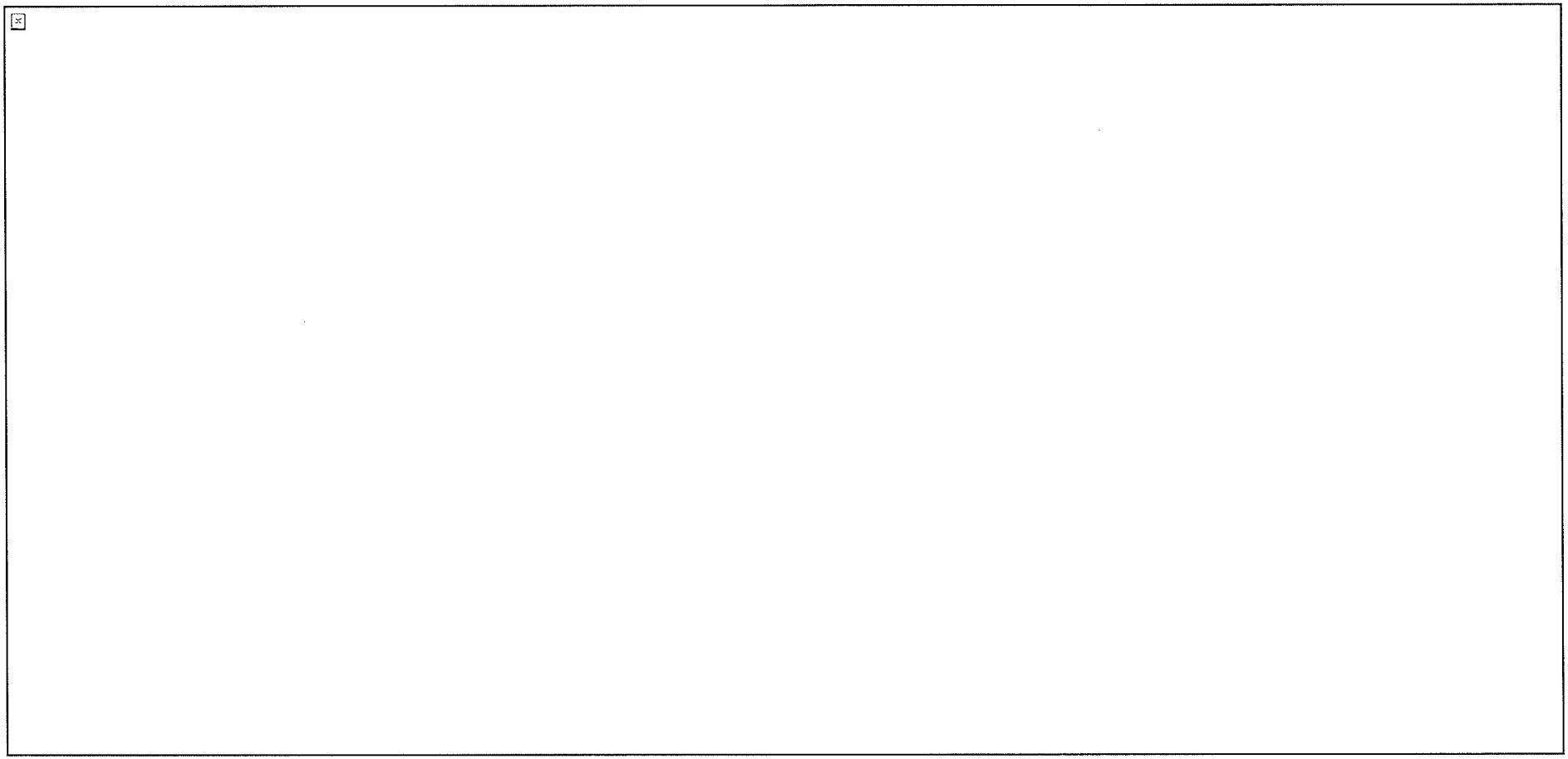

Figure 5: Public Lands Map No. 9a (1896).

GEOLOGY

There are at least six major, and one minor, volcanoes now moderately covered by shallow sea water which form four separate islands: Maui, Kaho`olawe, Lāna` i, and Moloka`i (Macdonald *et al.* 1983). At lower sea levels, these now separated islands were collectively known as " Maui Nui" due to the single landform that composed nearly 5,200 square kilometers (*ibid.*). Today, Maui is the second largest island of the eight main islands in the Hawaiian archipelago, encompassing 1,873 square kilometers (729 square miles). Two volcanoes formed the island - Mt. Kukui in the west and Haleakalā in the east. West Maui (Mt. Kukui) was formed over two million years ago; the highest point is 1,765 meters (5,788 feet) above sea level (asl) at Pu`u Kukui (Hazlett and Hyndman, 1996: 129).

Slow moving flows of *pahoehoe* lava formed Mt. Kukui's volcanic shield. Rift zones extended north and south, and volcanic activity declined into more explosive eruptions during the late stage of shield volcano formation. According to Macdonald *et al.* (1983), West Maui is composed of three distinct flows consisting of the Wailuku, Lahaina, and Honolua series. The northeastern slopes of West Maui are composed of Honolua series, which are younger and therefore have undergone less weathering and erosion than the older eastern and southwestern slopes of West Maui formed by the Wailuku series (Sinton 1979). The youngest Lahaina series flows are limited to a small area in Lāhainā; broad alluvial fans have developed on the older series flows (Sinton 1979). In contrast, narrow, deep gulches and rugged slopes define the project area. The steep drop-offs to the ocean floor on the northeastern coast have disallowed the formation of broad, flat alluvial fans, while northeast trade winds and Pacific gales cause high waves to break against the coast, resulting in steep shoreline cliffs (Hazlett and Hyndman 1996: 144). This topography affected ancient settlement patterns, limiting the ability to practice wetland taro cultivation in the vicinity of the project area, as discussed below (Kirch 2010).

SOILS

The project parcel lies on the border between multiple Maui soil types, including HwD, HID and rRK (Foote *et al.* 1972: Sheet Map 98). The majority of the parcel is characterized by HwD, part of the Honolua silty clay soil series, which are well-drained upland Māui soils developed on basic igneous rock. HwD is moderately sloping to moderately steep (15-25%), and used for pineapple, pasture and water supply (all activities practiced in project area). Runoff is medium, and erosion hazard is moderate. Pebble-size rock fragments are common in the surface layer and subsoil (*ibid*: 42).

Camp Maluhia is also partially built on HID soil, part of the Halawa silty clay soil series. Halawa soils are well-drained, upland soils, developed in material weathered from basic igneous rock as well as volcanic ash. These are largely pasture soils, with some suitability for pineapple and woodland. HID occurs on "narrow tracts bounded by gulches" and is slightly acidic, with moderately rapid permeability, slow-medium runoff and slight-moderate erosion hazard. Soils of this series occur on Maui, Moloka`i and O`ahu (*ibid*: 32-33).

Finally, Camp Maluhia is directly adjacent to rRK soil, part of the Rock Land soil series, which is soil formed on areas where exposed rock covers 25-90% of the surface, occurring on all five Hawaiian Islands(*ibid*: 119). These soils are very shallow, with basalt and andesite rock outcrops throughout. Rock Land is used for pasture, wildlife habitat and water supply, and the high shrink swell potential of this soil makes it risky for building on, as sliding may occur when the soil is wet.

VEGETATION

Hawaiian foliage evolved in isolation over millions of years, with plants arriving from the Indo-Pacific, the Americas and the South Pacific, as well as the pantropic and arctic regions (Myers 1997). The first humans to settle in the Hawaiian Islands, Polynesian voyagers, introduced at least 30 different varieties of plants. The western colonization of the islands, and further waves of migration to the islands introduced many more foreign plant species and resulted in the current plant population.

The current project area contains a variety of native and introduced plant species, but it is largely dominated by introduced plant species, including Norfolk pine (*Araucaria heterophylla*) and eucalyptus (*Eucalyptus camaldulensis*), as well as fewer numbers of paperbark (*Melaleuca)* and Christmas berry (*Schinus terebinthifolius*). Polynesian-introduced species include stands of banana (*Musa* sp.) and *ti* plants (Cordyline) and *Hau* (*Hibiscus tiliaceus*). There are isolated examples of native Hawaiian tree species at Camp Maluhia, including *Koa* (*Acacia koa*).

Outside of the maintained areas at Camp Maluhia, thickets of strawberry guava (*Psidium cattleianum*) and a number of exotic pasture grasses, including dallis grass (*Paspalum dilatatum*), *maile honohono* or billygoat weed (*Ageratum conyzoides*), soft elephants foot (*Elephantopus mollis*) and lantana (*Lantana camara*) dominate the vegetation.

Native Hawaiian ferns were observed at Camp Maluhia, but rare and endangered species are not present on the project parcel, due to extensive development at the camp, and agricultural and ranching impact just off the project parcel. Rare native and/or endemic plant species can be found in the adjacent (undeveloped) Makamaka`ole Gulch.

CULTURAL HISTORICAL CONTEXT

Of the Hawaiian Islands, the Island of Maui is second in size, with the island of Hawai`i being the largest (Handy and Handy 1972:485). Pu`u Kukui, forming the west end of the island (1,215m above mean sea level), is composed of large, heavily eroded amphitheater valleys that contain well-developed permanent stream systems that watered fertile agricultural lands extending to the coast. The deep valleys of West Maui and their associated coastal regions have been witness to many battles in ancient times and were coveted productive landscapes..

PAST POLITICAL BOUNDARIES

Approximately 600 years ago, the Hawaiian population had expanded throughout the Hawaiian Islands to a point where large, political districts could be formed (Lyons 1903; Kamakau 1991; Moffat and Fitzpatrick 1995). At that time, Maui consisted of four districts, or *moku*: Lāhainā, Wailuku, Makawao, and Hāna. The division of Maui's lands into districts (*moku*) and sub-districts was performed by a *kahuna* (priest, expert) named Kalaiha`ōhia, during the time of the *ali`i* Kaka`alaneo (Beckwith 1940:383); Fornander (Fornander 1919-20, Vol. 6:248) places Kaka`alaneo at the end of the 15th century or the beginning of the 16th century. Traditionally, Maui consisted of twelve political districts: Honua`ula, Kula, Hāmākuapoko, Hāmākualoa, Kahikinui, Kaupō, Kīpahulu, Hāna, and Ko`olau in East Maui and Wailuku, Ka`anapali, and Lāhainā in West Maui. In historic times, the original twelve traditional districts were reduced to four: Lāhainā, Wailuku, Hāna, and Makawao. Land was considered the property of the king or *ali`i `ai moku* (the *ali`i* who eats the island/district), which he held in trust for the gods. The title of *ali`i `ai moku* ensured rights and responsibilities pertaining to the land, but did not confer absolute ownership. The king kept the parcels he wanted, his higher chiefs received large parcels from him and, in turn, distributed smaller parcels to lesser chiefs. The *maka`āinana* (commoners) worked the individual plots of land.

In general, several terms, such as *moku, ahupua`a, `ili or `ili`āina* were used to delineate various land sections. A district (*moku*) contained smaller land divisions (*ahupua`a*) that customarily continued inland from the ocean and upland into the mountains. Extended household groups living within the *ahupua`a* were, therefore, able to harvest from both the land and the sea. Ideally, this situation allowed each *ahupua`a* to be self-sufficient by supplying the needed resources from different environmental zones (Lyons 1875:111). The *`ili* or *`ili `āina* were smaller land divisions next in importance to the *ahupua`a* and were administered by the chief who controlled the *ahupua`a* in which it was located (Lyons 1875:33; Lucas 1995:40). The

mo`o`āina were narrow strips of land within an *`ili*. The land holding of a tenant or *hoa `āina* residing in an *ahupua`a* was called a *kuleana* (Lucas 1995:61).

TRADITIONAL SETTLEMENT PATTERN

The Hawaiian economy was based on agricultural production and marine exploitation, as well as raising livestock and collecting wild plants and birds. Extended household groups settled in various *ahupua`a*. During pre-Contact times, there were primarily two types of agriculture, wetland and dry land, both of which were dependent upon geography and physiography. River valleys provided ideal conditions for wetland *kalo* (*Colocasia esculenta*) agriculture that incorporated pond fields and irrigation canals (*`auwai*). Other cultigens, such as *kō* (sugar cane, *Saccharum officinaruma*) and *mai`a* (banana, *Musa* sp.), were also grown and, where appropriate, such crops as *`uala* (sweet potato, *Ipomoea batatas*) were cultivated. This was the typical agricultural pattern seen during traditional times on all the Hawaiian Islands (Kirch and Sahlins 1992 Vol. 1:5, 119; Kirch 1985). Agricultural development on Maui was likely to have begun early in what is referred to as the Expansion Period (A.D. 1200-1400, Kirch 1985).

"Alluvial and gentler colluvial slopes were terraced and divided into sometimes quite extensive arrays of flooded pondfields, fed by stream diversions and irrigation channels (or, on coastal plains, by springs)" (Kirch 2011: 51). This agricultural practice depended upon a constant flow of water through an irrigation system, and the older land surfaces, carved by erosion of the volcanic shield surfaces provided the drainages for permanent streams. Older and more weathered westerly land surfaces were characterized by "large valleys and developed soils, especially on alluvial floodplains" (Kirch 1985: 220). In the wetter and topographically suitable areas, Hawaiians built irrigation systems (*`auwai*) to carry stream flows to taro fields under nearly constant cultivation. Both Waihe`e Valley and Kahakuloa Valley were prominent areas of wetland agriculture in ancient Hawai`i (Fredericksen 2008). The project area, on the other hand, lacking a perennial watercourse and situated on a rugged slope, was unsuitable for wetland taro cultivation.

Easterly and leeward areas, on the other hand, "with intermittent stream flow" and young soils were less suited for irrigation agriculture. Dryland cultivation was more common on these "younger land surfaces" (Kirch 2010: 51; Handy and Handy 1972). The dry leeward slopes of East Maui (chiefly Kaupō and Kahikinui) and Hawai`i Island, lacking perennial watercourses and dependent upon intermittent rainfall, were extensively cultivated with sweet potato, yams (to a lesser degree) and some sugar cane and taro in wetter, higher elevations (Kirch 2010: 51). It is important to keep in mind that the dichotomy between wetland and dryland agricultural systems was not "sharply drawn," and both were part of a whole system (Kirch 1985: 218).

While dryland cultivation does not seem to have been practiced extensively in the Camp Maluhia area, the young volcanic geology of the area, defined by small, deep, narrow gulches, and rugged cliffs, is not suitable for wetland taro cultivation either. Instead, a limited degree of dryland crop cultivation was probably practiced in this area, on the flatter and more gradually sloping coastal bluffs, as noted by several of the previous researchers in the area and discussed further below (Fredericksen, 2008; Pickett and Spear, 2002; Calis, 2002b).

Handy and Handy (1972: 495) summarize the land-use in the area quite well, writing,

> Southeastward from Kahakuloa stretches the windward coast of West Māui, with elevated *kula* lands above high sea cliffs, an inhospitable region. In recent years pineapples have been grown here. Waiolai had a small stream in a deep gulch and a few *lo`i.* Wailena is a good stream, but in too deep a gulch for terracing. South of this is Makamaka`ole, a large stream flowing out of upland bog-land, but the gulch is too deep for *lo`i* unless perhaps on a very small scale. Between Makamaka`ole and Waiehu is an *`ili* called Kukuipuka that had two small gulches in which water flows only in wet weather; there are no evidences of *lo`i,* but the high *kula* land would have been good for sweet potatoes. Quite likely that this region in West Māui was utilized only by people from nearby Kahakuloa and Waiehu.

WAHI PANA (LEGENDARY PLACES)

There are a variety of ideas associated with ancient Hawaiian's view of creation. One of them is the Kumulipo (translated by Beckwith 1971),which consists of extensive oral traditions which have been passed down from generation to generation. It is a narrative abundant with pre-Contact events and hundreds of genealogies. In this chant, Sky father, Wākea, and Earth mother, Papa, gave birth to the island of Maui. Translation by Beckwith(1971) yields further information regarding the island of Maui, which was named after the great demigod. There are different versions of the creation of islands within the Pacific as well as a variety of orally recorded adventures of great demigods but one thing remains the same. Māui, the demigod, is known rampantly throughout, as an unforgettable fragment of culture.

Stories pertaining to Māui, the trickster demigod, are "localized for each island." For example, in West Maui, the focal point for the legends of Māui the demigod is an area above Kahakuloa (Beckwith 1985: 226). In the West Maui version

> [Māui]is the son of HIna-lau-ae and Hina. The family lives at Makalia above Kahakuloa. While [Māui] is still unborn, some men out fishing see a handsome child diving from a high cliff into the sea, and the pursue. The child makes for home and returns to his mother's womb. Thus they know a magician is to be born (*ibid*: 230).

Another popular story refers to the demigod Māui who snared the sun and slowed it's passage across the sky in order for his mother to have more daylight to dry her *kapa*. The story also unfolds near the project area where Māui and his mother Hina lived above Kahakuloa in a place called Makalia. Thrum (1998: 31) writes:

> He first went to Wailohi, in Hamakua, on East Maui, to observe the motions of the Sun. There he saw that it rose toward Hana. He then went up on Haleakala, and saw that the Sun in its course came directly over that mountain. He then went home again, and after a few days went to a place called Paeloko, at Waihee...

Māui proceeded to capture the sun on the east crater with rope made from *niu* (coconut) which he threw around the rays of the sun and tied them to a *wiliwili* tree. When this occurred, the crater was named *`Alehe-ka-lā* (sun snarer) however (as noted above) is currently referred to as *Haleakalā* (*ibid.*). It is not known how long Māui and his mother resided near Kahakuloa, but the general area evidently plays an important role as Kahakuloa is mentioned within different versions of this story.

A story found in Walker's (1931) manuscript has been passed through generations that involves a large *pōhaku* (rock, stone) somewhere near Kahakuloa. The rock was sacred with special curative powers and is connected to a legend involving the goddess Hi`iaka (Pele's sister). Hi`iaka and her companion named Wahine-o-mao were passing through and stopped to rest at this rock. Hi`iaka noticed a woman walking along the beach and removed her *lauhala* lei then threw it to the woman. The woman picked it up and ran away to announce the arrival of the chiefs from the Big Island. Hi`iaka and her friend arrived at the village where they came upon the woman`s "family mourning for a body which was wrapped in a mat and suspended from the roof" (*ibid.*: 40). It was the woman's spirit that they saw along the beach and Hi`iaka proceeded to bring the woman back to life. Walker claims that this is the reason for the sacredness of the rock. Many stories are told about *pōhaku* and their importance to ancient Hawaiians.

Maui was ruled by two related *mō`ī* (king, sovereign) named Kamaloohua and Wakalana. Kamaloohua ruled over the larger portion of the island while Wakalana, who resided in Wailuku, ruled over the windward side (Fornander 1996). White people with bright shining eyes appeared on the shore in Wailuku during their rule. These fair people came in a vessel called "Mamala" that contained both men and women. This event occurred at least twenty generations ago (c.1300s) and has remained in various family tradition over the years through oral communications (*ibid.*).

Traditional *mo`olelo* (stories) of the lands between Waihe`e and Kahakuloa are sparse and are usually mentioned only as places traveled through. Kiha-a-Pi`ilani, son of Pi`ilani (16th century) reportedly passed along this way when he was chief of Maui: "...he went on to Waihee, Waiehu and Kahakuloa. There in that land called Makalina [Makaliua] he planted three clumps of Awa..." (Manu 1884 quoted in Sterling 1998: 56).

There are also references to Makamaka`ole Valley to the west of the project area. Alexander (1884: 32) stated:

> "... those desiring to ascend this part of the mountain should take the road from Waiehu towards Kahakuloa. The first part of this route is a long wearisome climb up barren ridges, till the trail suddenly leads into a deep romantic ravine called Makamaka`ole. The natives say that once a party of Hawaiians traveling this way were attacked by robbers, and overwhelmed by a stream turned upon them from an aqueduct on the eastern side, and all destroyed; whence the name Makamaka`ole ."

Handy (1940: 107) also references Makamaka`ole Gulch, as well as neighboring Waiolai Gulch, stating, "there are said to be abandoned terraces in these two gulches on either side of Puu Ola, both seaward of the highroad and high up toward the mountains." Kukuipuka `Ili, on the other hand, the closest reference to Camp Maluhia ("between Makamaka`ole and Waiehu"), was said to have "several small gulches in which water flows in rainy weather, but there is no evidence that it ever supported taro...pineapples now flourish on the upland slopes" (*ibid*).

Further to the northwest of the project area lies the village of Kahakuloa described by Winslow Walker (Walker 1931: 73):

> Not only thirty years ago (ca. 1890) Kahakuloa was a village almost entirely of grass houses ... The best preserved is one standing at the edge of a large taro patch on the west side of the

> stream and just a few rods south of the main trail through the village ... It was inhabited up to three years ago.

In traditional times it was reported that there were numerous settlements, primarily of fishermen, along the cliff-lined coast from Honokohau to Kahakuloa (Handy 1940: 106). Pu`u Koa`e (Kahakuloa Head) was associated with feats of daring by the great chief Kahekili and was used as a lookout for the armies of Kalaniōpu`u of Hawai`i Island (Sterling,1998). Kahakuloa takes its name from a famous *lo`i* patch, a small, fertile, irrigated patch of *kalo c.*0.5 miles inland from the coast at the bottom of Kahakuloa Valley. It belonged to the *haku* or lord of the land. Since the area was quite isolated, the name *ka haku loa* was used. According to Handy's (1940: 106) observations from his 18 months of fieldwork commencing in 1931, Kahakuloa was "one of the most genuinely native communities still extant in the islands." The Kahakuloa Valley complex includes both wetland and dryland cultivation, and today is a designated historical district (State Site 50-50-02-1502).

Many *mo`olelo* include references to the Waihe`e area, which is defined by Waihe`e stream, the northernmost of "The Four Streams," or Na Wai e`Ehā of Wailuku District (*moku*). According to Handy's account in *Hawaiian Planter* (1940: 107), "From Waihe`e to Wailuku Valley, in ancient times, was the largest continuous area of wet taro cultivation in the islands...in ancient times the terraces were more or less continuous in a belt between the sand dunes and the present irrigation ditch." Similar to Kahakuloa, Waihe`e also takes its name from a historic *lo`i* patch, which belonged to the *ali`i* and is near to the sea. Waihe`e is still partially planted in taro, but sugarcane and modern infrastructure has altered the ancient irrigation and terrace system (Handy, 1940; E.P. Sterling, 1998).

It is said that the last ruling chief of Maui, Kahekili, and his forces battled Moloka`i chiefs and their forces over the distribution of abundant agricultural resources from Waihe`e Valley in the mid-18th century, demonstrating the importance of this area (Donham 1989: 12).

THE MĀHELE AND LATER DEVELOPMENTS

Immense changes began to occur in traditional Hawaiian society with the discovery of the islands by Captain James Cook in 1778, and the subsequent arrival of the island's first westerners. Much of the knowledge of traditional land use patterns is based on what was recorded at the time of, and shortly after, western Contact. Early records, such as journals kept

by travelers and missionaries, and surviving Hawaiian traditions, as well as archaeological investigations, have assisted in understanding the past.

In the 1840s, traditional land tenure changed drastically with the introduction of private land ownership based on western law. While it is a complex issue, many scholars believe that in order to protect Hawaiian sovereignty from foreign powers, Kauikeaouli (Kamehameha III) was forced to establish laws changing the traditional Hawaiian society to that of a market economy (Daws, 1968: 111; Kuykendall, Vol. 1, 1938: 145 footnote 47,152,165-6,170; Kame`eleihiwa, 1992: 169-70, 176; Kelly, 1983: 45, 1998).

Among other things, the foreigners wanted private ownership of land to secure their island investments (Kuykendall, Vol. 1, 1938: 138, 145, 178, 184, 202, 206, 271; Kame`eleihiwa, 1992: 178). The Māhele of 1848 divided Hawaiian lands between the king, the chiefs, and the government. Thus began the process of private ownership of lands. Once lands were made available and private ownership instituted, the *maka`āinana* (commoners), if they had been made aware of the procedures, were able to claim the plots on which they had been cultivating and living. These claims, however, could not include any previously cultivated or presently fallow land, stream fisheries, or many other resources traditionally necessary for survival (Kelly, 1983, Kame`eleihiwa, 1992: 295, Kirch and Sahlins 1992). The subsequently awarded parcels were called Land Commission Awards (LCAs). If occupation could be established through the testimony of two witnesses, the petitioners were awarded the claimed LCA and issued a Royal Patent after which they could then take possession of the property (Chinen 1961: 16).

Much of the land in the vicinity of the project area (Kahakuloa and Waiokila *`Ili* in Kahakuloa Ahupua`a) became Crown Land (Indices 1929: 27). At the time of the overthrow of the monarchy in 1893, the Crown Lands shifted in ownership to the Republic of Hawai`i, and then with annexation, they came under the aegis of the Territory of Hawai`i. Portions of the lands of Waiokila and Kukuipuka `Ili became Hawaiian homestead land known as "Kahakuloa Homesteads" and other sections were sold as government grants to individuals. In 1937, a three-way partnership between Alexander House, The Maui County Council-Girl Scouts and the Boy Scouts developed Camp Maluhia for community use. It was purchased from the state in 1958 by the Boy Scouts, and is surrounded by a further 240-acres under long-term lease by the Boy Scouts from the State of Hawai`i (Nakagawa 2012).

Much of the coastal Waihe`e lands to the southeast of the project area were awarded to

Victoria Kamamalu, the acting *kuhina-nui,* a position inherited from Ka`ahumanu-LCA 7713, (Donham 1989: 12). Many *kuleana* lands were awarded to commoners in the heavily irrigated and farmed Waihe`e Ahupua`a, some of which continues to the present day. A similar pattern can be traced in Kahakuloa Valley proper (Fredericksen, 2008).

The project area is located on rugged terrain, likely utilized by the now defunct Waihe`e Dairy and Farm as pasture for cattle. Ha`iku Fruit & Packing Company cultivated pineapple on the rugged terrain of Kahakuloa and Waihe`e, near to Camp Maluhia (Fredericksen 2008; Major and Klieger 1996). Wailuku Sugar Company (later Wailuku Agribusiness Company, Inc.) owns a parcel southeast of Camp Maluhia, which was most likely used for grazing cattle (Pickett and Spear 2002). Wailuku Agribusiness Co. produced sugarcane and macadamia nut production further away in Waihe`e and Waiehu until 2002, when the final landowner, C. Brewer and Company ceased operations (Fredericksen 2008: 5).

PREVIOUS ARCHAEOLOGY

Given that the project area lies close to the boundary between Kahakuloa Ahupua`a and Waihe`e Ahupua`a, this report includes a review of archaeological work in the southern and northern portions of each *ahupua`a*, respectively. Very few archaeological studies have been conducted in the immediate area, due to the area's agricultural limitations (discussed above), and the implications for human settlement during the traditional Hawaiian period.

Early work in the Kahakuloa and Waihe`e areas by Thrum (1908), Walker (1928 published in 1931), Handy 1940) and Sterling (1998) recorded a number of important structures. Walker (1931) recorded five *heiau* in Waiehu, eight in Waihe`e, and seven in Kahakuloa, including the Kukuipuka Heiau below Camp Maluhia.

Waipiliamoo Heiau, (Walker Site 26) is at the mouth of Makamaka`ole Gulch, roughly 50 yards from the shore. It is heavily altered and overgrown with lantana, with a *hala* tree nearby; remnants of an old village called Lahaole stood here with remnants of *lo`i* and platforms, rifled burial caves, and a stone/driftwood roofed fishing *hale* (Sterling 1998: 59).

There are also said to be abandoned terraces in two gulches on either side of Pu`u Ola, *mauka* of Kahekili highway, high up in the mountains, but below the trail that comes down from Camp Maluhia. The terraces are in good condition, besides being overgrown and abandoned

(Sterling 1998: 59). These are listed as site "Kahakuloa 53 Cultivation at Waiolai and Makamaka`ole" in Sterling's compilation, first published in Handy's *Hawaiian Planter* (1940).

Sterling's compilation (1998: 61) describes a "Land of Refuge" in `Ili o Kukuipuka, where a blind man called Paki escapes from Waihe`e after killing a canoe-making *kahuna*, crawling "a distance of half a mile to a place of refuge called Kukuipuka, sacred to Kuka`ili-moku, Kamehameha's god" (Kamakau 196: 313). There is no evidence of taro cultivation in this *`ili,* as pineapples now flourish on the upland slopes. Walker's Site 27 identifies the Kukuipuka Heiau on a knoll below the Boy Scout Camp, a *pu`uhonua*, or place of refuge for West Maui, on a hill overlooking the road and largely destroyed by pineapple fields. However, Sterling (1998) believed the Kukuipuka Heiau to be further west, on a plateau between Waiolai and Waiokila streams overlooking Kahekili Highway, past Makamaka`ole Gulch in Kahakuloa Ahupua`a. She observed a site on this plateau, which she called Waiolai Stream Heiau Site, in May, 1964.

However, later work by Major and Klieger (1996) of the Bishop Museum posited that this site was not a *heiau*, but rather a habitation site. They suggested that Walker's site 27 was indeed somewhere in the area below Camp Maluhia, south of Makamaka`ole Stream. The known Kukuipuka Heiau, approximately 1500 feet *makai* (north) of Camp Maluhia, has recently been cared for by volunteers involved in a rehabilitative project under the care of Kahuna Lei`ohu Ryder.

Major and Klieger's (1996) work was part of a major Inventory Survey on a 245-acre parcel of land northwest of the current project area (across Makamaka`ole Gulch) slated for development of the Kahakuloa Agricultural Park Subdivision, later called "Maluhia Country Ranches" and "The Cliffs at Kahakuloa". The Archaeological Inventory Survey yielded ten archaeological sites. Twenty-one surface features were recorded including mounds, terraces, partial enclosures, alignments, an old Government Road, and a possible *`auwai*. Subsurface test results revealed evidence of pre- and post-Contact use of the location.

In 2001, SCS completed an Inventory Survey on land owned by the Molina family, also northwest of the current project area. The results documented one previously unrecorded remnant agricultural terrace feature (McGerty and Spear 2001). Calis (2002a) provided results from another Inventory Survey completed by SCS in February 2002 on a 51.068-acre parcel also northwest of the current project area. There were no significant archaeological remains identified throughout the investigation, which Calis argues is a consequence of heavy impact caused by nearly 100 years of ranching activities in the immediate area.

Xamanek Researches, Inc. (Fredericksen 2008) completed a 34-acre Inventory Survey on land owned by the Mendes family, north (*makai*) of Kahekili Highway and of the present project area. The survey found two historic era sites.

Pickett and Spear (2002) completed an Inventory Survey of two adjacent parcels of 8.351 acres (part of the Kahakuloa Agricultural Park Subdivision, "The Cliffs at Kahakuloa"), northwest of the current project area, finding no significant cultural sites.

A number of very small surveys have been completed in the immediate project area at Camp Maluhia. A summary of these surveys are presented in Table 1. In 1974, a single human cranium was located by boy scouts within a cave near Camp Maluhia at site 50-50-02-1466 (Douglas 1991). The cranium was recorded, analyzed, and determined to be a 50-55 year old Polynesian male. Calis (2002b) provided an AIS of a proposed waterline starting near to Kukuipuka Heiau below Camp Maluhia, identifying only a historic retaining wall. Dega (2002) provided archaeological reconnaissance for a proposed water tank site near the project area, finding no new cultural sites. Apart from those studies, the only findings have been the historic 1930s era buildings at Camp Maluhia. An architectural review was completed in 2012 and should be referred to for detailed documentation of these buildings.

Table 1: Previous Archaeology

Author	Year	Ahupua`a	Type of Study	Results
Thrum, T.	1908	Waihe`e and Kahakuloa	Survey *(Sites of Maui)*	*Heiau*
Walker, W.	1931	Waihe`e and Kahakuloa	Survey *(Archaeology of Maui)*	Numerous *heiau*, temporary/scattered habitation sites; Site 27 Kukuipuka Heiau, Kahakuloa Ahupua`a
Sterling, E.P.	1998	Waihe`e and Kahakuloa	Compilation *(Sites of Maui)*	Archaeological sites and associated cultural histories
Major and Klieger, 1996 (Bishop Museum Archaeologists)	1996	Waiokila `Ili, Kahakuloa	AIS, 245-acre Kahakuloa Agricultural Park Subdivision, (*later named Maluhia Country Ranches and Cliffs at Kahakuloa*)	10 historic sites, 21 component features; historic habitation, animal corral, agricultural clearing mounds, 4 agricultural terrace complexes, water channel, wall, old government rd.
Livermore, A.M.B. (Architecture Branch Chief, SHPD)	2009	Waihe`e	Chapter 6E-42 (HRS) Review—"After-the-Fact" Submittal, Camp Maluhia	Eight structures built c.1938 were altered without prior historic resources inventory survey; letter recommends that buildings and camp be considered for inclusion on the Hawai`i or National Registers of Historic Places.
Douglas, M. University of Hawaii	1991	Waihe`e	Report on single cranium.	Single cranium found in cave near Camp Maluhia, 1974.
Hibbard, D. (Administrator, SHPD)	1994	Kahakuloa	Historic Preservation Review, Camp Maluhia	SHPD Archaeologist Theresa K. Donham conducted a review of a proposed parking lot, finding no historic sites.
Hibbard, D. (Administrator, SHPD)	1997	Waihe`e	Historic Preservation Review, Camp Maluhia	SHPD reviewed plans for a proposed new camp ranger's residence at Camp Maluhia using archives (no field check); review determined that the Camp was likely the location of pre-Contact farmlands, with some scattered houses. New residence site altered by early 20th century archaeology agriculture and existing residence, therefore proposal determined no effect on historic sites.
McGerty, L. and Spear, R.L. (SCS Archaeology)	2001	Kahakuloa	AIS, 14-acre Molina parcel	One site identified, remnant terrace feature Site 5069, significant under Criterion D of the National Register of Historic Places. No further archaeological work was recommended.
Dega, M. (SCS Archaeology)	2002	Waihe`e	Archaeological Reconnaissance, 70x70ft tract	Evaluation of an area for proposed water tank; Kukuipuka Heiau and historic retaining wall, 750m southwest and 100m north of proposed project, respectively; no adverse impact in water tank project location.
Calis, I. (SCS Archaeology)	2002a	Kahakuloa	AIS, 51.068 acre Kahakuloa Acres Agricultural Subdivision	No significant archaeology.
Calis, I. (SCS Archaeology)	2002b	Waihe`e	AIS, 2800 foot Waterline	One historic retaining wall recorded.
Fredericksen, E.M. (Xamanek Researches, LLC)	2008	Kahakuloa	AIS, 34-acre Mendes parcel	2 previously unrecorded historic properties located, including a plantation/ranch era road retaining wall and a ranch era retaining wall.
Pickett, J.L. and Spear, R.L. (SCS Archaeology)	2002	Waiokila `Ili, Kahakuloa Ahupua`a	AIS, 8.351-acre, 2 adjacent parcels in Kahakuloa Agricultural Park subdivision ("The Cliffs at Kahakuloa")	No significant cultural architecture or deposits (most likely because property was previously grubbed); no mitigation deemed necessary.

SETTLEMENT PATTERNS

A survey of Waihe`e Valley to the south conducted in 1978 by Ross Cordy resulted in a model to predict variation in settlement patterns (Cordy 1978). Cordy (1998) divided the sites into upper valley and lower valley zones depending upon the general landscape morphology. As the upper valley is more narrow and constricted, it was predicted to contain a few temporary habitations amid some agricultural features and burial caves in the cliffs. The lower valley with its broad alluvial plains was expected to contain permanent habitation, religious, and agricultural features. Cordy suggested the coastal region might have been occupied as early as A.D. 300 to 600.

The project area does not contain any broad alluvial planes or deep, watered gulches. However, remnants of dryland agricultural features may be present on the slopes immediately surrounding Camp Maluhia, along with temporary habitations. If agricultural features were located here during the pre-contact era, they have been altered and destroyed by post-contact agricultural activities, as well as the development of Camp Maluhia itself, and its associated infrastructure.

CONSULTATION

Consultation was conducted via telephone, e-mail, and the U.S. Postal Service. Consultation was sought from Dr. Kamana`opono M. Crabbe, Chief Executive Officer, Office of Hawaiian Affairs; Thelma Shimaoka, Office of Hawaiian Affairs, Maui; Roy Newton, Office of Hawaiian Affairs, Maui; Perry Artates, County of Maui Cultural Resources Commission; Raymond Hutaff, County of Maui Cultural Resources Commission; Central Maui Hawaiian Civic Club; V. H. Rodrigues, State Historic Preservation Division, Maui; William Ho`ohuli, community member; Lei`ohu Ryder, Kukuipuka `Ohana; Torrie Nohara, Na Ala Hele, Trails and Access Specialist; Leslie Kuloloio, community member and former member of the Maui and Lana`i Island Burial Council; Maui Tomorrow; Ke`eaumoku Kapu, Chair Maui/Lana`i Islands Burial Council; Robert Lu`uwai, community member; Dave "Buddy" Nobriga, community resident, Les Dunn, community member and taro farmer; Cliff Nae`ole, Cultural Advisor at the Ritz-Carlton, Kapalua; Jahana and Kaniloa Kamaunu, community members; Clyde Kahalehau, community; Michelle Ho`opi`i, community member; and the Maui Sierra Club.

A Cultural Impact Assessment Notice was published on March 10, 13, and 14, 2013 in *The Honolulu Star-Advertiser*, the Maui News on March 10, 13, and 14, 2013, and the April 2013 issue of the OHA newspaper, *Ka Wai Ola* (Lisa Asato, Office of Hawaiian Affairs,

personal communication) (see Appendix C). These notices requested information of cultural resources or activities in the area of the proposed project, stated the Tax Map Key (TMK) number, and where to respond with pertinent information.

Based on the responses of the individuals consulted, an assessment of the potential effects on cultural resources in the project area and recommendations for mitigation of these effects can be proposed.

CULTURAL IMPACT ASSESSMENT INQUIRY RESPONSES

Analysis of the potential effect of the project on cultural resources, practices or beliefs, the potential to isolate cultural resources, maintain practices or beliefs in their original setting, and the potential of the project to introduce elements that may alter the setting in which cultural practices take place is a requirement of the OEQC (No. 10, 1997). As stated earlier, this includes the cultural resources of the different groups comprising the multi-ethnic community of Hawai`i.

As stated above, consultation was sought from local community organizations; County of Maui and State of Hawai`i agencies, and knowledgeable community Commissioners and local residents (Appendix A). In addition, legal notices were placed in *The Maui News*, *The Honolulu Star-Advertiser*, and the OHA newspaper, *Ka Wai Ola* (Appendix B). Follow-up letters of inquiry were mailed to the above-mentioned individuals, as necessary (see Appendix C). A summary of the responses are presented below and the written responses to the letters of inquiry are presented in Appendix D.

Oral interviews were conducted with Lei`ohu Ryder, the *kahu* (keeper) of Kukuipuka Heiau; Dave "Buddy" Nobriga, community member and long-time resident;

Torrie Nohara,

Torrie Nohara, Na Ala Hele, Trails and Access Specialist suggested, via a series of e-mails dated March 19, 2013, contacting Buddy Nobriga. Ms. Nohara stated that she believed that Mr. Nobriga would be "... a good source of information...He's in his 80s and very sharp. He's had a homestead in the area forever and is currently sub-leasing the pastures surrounding the Pu`uhonua from the Boy Scouts". Ms, Nohara also mentioned that the Waihee Ridge Trail, the Pu`uhonua, Kukuipuka [Heiau],and the King's Highway are in the vicinity of Camp Maluhia. Ms Nohara stated that she wasn't sure of the age of the Waihee Ridge Trail. But "[t]he forest reserve was created in the early 1900s, probably around 1920". Ms. Nohara thought the trail

might have been used "...as an access route to Eke Crater and also as a gathering and hunting area."

Lucienne de Naie

Lucienne de Naie stated that Kukuipuka Heiau had been restored and recommended, via e-mail dated March 16, 2013, contacting Lei`ohu Ryder, the *kahu* of the heiau.

Cathy McDuff

Cathy McDuff responded, via a series of e-mails dated March 19, 2013, also recommended contacting Lei`ohu Ryder, the *kahu* of Kukuipuka Heiau, as " Aunty Lei`ohu knows much of the history if the *heiau* and area". Ms. McDuff stated that Lei`ohu Ryder and Maydeen `Iao relocated and restored Kukuipuka Heiau over 15 years ago.

Lei`ohu Ryder

On April 23, 2013, an oral interview was conducted, via telephone, with Lei`ohu Ryder, *kahu* of Kukuipuka Heiau. According to Ms. Ryder, like every community in every land everywhere, every human being offered prayers, Kahakuloa was no different. History has modified and influenced these traditional-cultural practices, but they are on-going, even today. The land surrounding Camp Maluhia belonged to Queen Keōpūolani, Kamehameha's most sacred wife. The lands surrounding Kukuipuka Heiau include significant sites (such as Mauna Eke), extend over Mauna Kahalawai (the West Maui Mountains), connect to `Iao Valley, and go all the way to Moku`ula in Lāhainā District, which was the capital of the Islands from 1820 to 1845. Traditionally, many Hawaiians had a connection to the Kahakuloa area because of the *taro* that was grown there and the other *heiau* in the area that are no longer in existence. According to Ms. Ryder, Makama`ole ("the friendless") Gulch was not unfriendly, the inhabitants just did not want people going in there because of the proximity to the ancient, sacred sites that were in the area. People currently walk up the trail in order to connect with the native environment because there are many native plants, including *lehua* (*Metrosideros polymorpha*), in the area. Ms. Ryder states that Kahakuloa is a significant area and her main concern with regards to the current project is that as an increasing number of people are drawn to the area the potential for damage to Kukuipuka Heiau and natural resources (including native plants) increases. However, Ms. Ryder stated that activities at Camp Maluhia will not impact Kukuipuka Heiau as long as the Boy Scouts stay within the camp. Ms. Ryder would like to see individuals knowledgeable about Hawaiian culture brought in to educate the Boy Scouts about the spiritual and cultural aspects of the area as well as to increase their awareness of cultural sensitivity of Native Hawaiian practices.

Dave "Buddy" Nobriga

On May 20, 2013, an oral interview was conducted, via telephone, with long-time community resident, Dave "Buddy" Nobriga. Mr. Nobriga leases land outside of Camp Maluhia as ranchland for his cattle. According to Mr. Nobriga, Wailuku Sugar leased land within what is now Camp Maluhia and eventually leased land to the Boy Scouts for the camp. Mr. Nobriga did not know of any traditional cultural practices conducted in the vicinity of Camp Maluhia. However, Mr. Nobriga suggested that two individuals ("German John" and Juanita, who lives near the Catholic Church) living in Kahakuloa Village may have information pertaining to traditional cultural practices in the area.

Les Dunn

On May 22, 2013, an oral interview was conducted, via telephone, with Les Dunn. Since 1976, Mr. Dunn, a resident of Kahakuloa Village, has been using traditional methods to farm wetland *taro*, bananas, mangos, papaya and animals. His farm does not permit access by motorized vehicles and he uses a hydro-electric generator to produce electricity. During the interview Mr. Dunn stated that he grows taro using traditional-type *lo`i*, farming fish (to provide fertilizer) and watercress in the pondfields along with the taro. In addition, Mr. Dunn makes *poi* with hand-made *poi* boards and *poi* pounders, which he makes himself. Mr. Dunn recommended his brother, Colin Dunn, and his teacher, John Wittenburg, as individuals knowledgeable about traditional cultural practices conducted in the Kahakuloa Village.

Colin Dunn

A brief telephone interview was conducted with Colin Dunn on May 22, 2013. However, Mr. Dunn did not know of any traditional cultural practices conducted previously or currently in the area.

John Wittenburg

John Wittenburg was interviewed in Kahakuloa Village on May 29th, 2013. Mr. Wittenburg is a German-born immigrant. Mr. Wittenburg arrived in the US via Canada in 1958. Mr. Wittenburg spent 5 years in the Navy stationed at Pearl Harbor. In 1966 he moved to Maui, directly to Kahakuloa Village. He has been living in Kahakuloa Village for 46 years, save for some years in Kihei where he had a woodworking shop/gallery. He lives in a cabin at the end of the dirt road just before the bridge in Kahakuloa Village. He is a master woodworker and founding board member of the Maui Woodworkers Guild. Mr. Wittenburg uses Big Island and Waikamoi (Maui) native *koa* wood, *kamani,* Japanese black pine, pheasant wood, etc. (both native and introduced).

Mr. Wittenburg has a strong connection to the area; he has lived nearly 50 years in Kahakuloa Village, and in his younger days, he spent time in the Camp Maluhia area horseback riding the hill trails there and hunting for wild boar in the forest of Pu`ulanikila (often confused with `Eke crater). He showed me a very large boar tusk from a boar he killed up in the Maluhia area (Figure 6). He also knew the Portuguese caretaker at the Camp nearly 30 years ago, but had a difficult time remembering his name.

In terms of Kahakuloa, Mr. Wittenburg called it a "breadbasket" during pre-contact Hawaiian times, with nearly 2,000 people living in the village. The protected bay at Kahakuloa, the ample fresh stream water for *lo`i kalo,* and sloping beach for canoe landing made Kahakuloa an ideal place for Hawaiians to settle. You can hike 6 hours up the valley and still find abandoned taro terraces. Old *kukui* trees indicate that it was also a sacred place.

The village was not divided up in the Māhele until 1891. The 1896 Public Lands Map (Mr. Wittenburg has a large copy of this map) clearly shows that the majority of Kahakuloa *kuleana* LCA were awarded along the streambed, confined by the valley ridges; Mr. Wittenburg infers from this that the Ahupua`a is defined by Kaukini Ridge and Waihali Ridge, which means Camp Maluhia falls outside of the traditional Kahakuloa Ahupua`a, as suspected. He did not know what the Hawaiians called the Camp Maluhia area. The 1945 tidal wave "cleared out" Kahakuloa valley.

Mr. Wittenburg was quite knowledgeable regarding the Hawaiian Homestead Act and the various landowners in the Maluhia area. He named Allan Mendes (Mendes Ranch, 2 parcels, ½ land has been sold), Buddy Nobriga (Nobriga's Ranch, 2 parcels, for sale), Johnny Pastado (bought out by Sniffens; Pastado was a horticulturalist and protégé of Dr. Fleming), Eddy Chang (still owns parcel). These homesteads were awarded in 1939 and each homestead was approximately 150 acres, with the agreement that the owner would maintain the properties as ranchland. This was around the same time Camp Maluhia was developed for community use.

The Camp Maluhia area was also used for pasture, sugarcane and pineapple in the historic era; both Waihe`e Dairy and Wailuku Sugar Co. used land in this area (pasture/sugar). Wailuku Sugar land was converted to luxury Maluhia Country Ranches, while Waihe`e Dairy land is now used as the property of Camp Maluhia. The original native dryland forest of Maluhia is long gone.

Mr. Wittenburg has many strong memories of Kahakuloa and the Camp Maluhia project area. Mr. Wittenburg showed me many of the Hawaiian artifacts he had found on his land (the *poi* pounder; Figure 7) and in the valley (*ulumaika* stones, *poi* pounding board made of *ulu* wood, Hawaiian adze, etc.; see Figures 2; Figure 8). The *poi* pounder was especially memorable as it was found just 2 feet down in a posthole he dug for the shed he built on his land. There was

Figure 6: Wild boar tusk from boar John Wittenburg hunted in the Pu`ulanikila forest above Camp Maluhia.

Figure 7: From left to right: Hawaiian *ulumaika* stone and adze (found by Mr. Wittenburg in Kahakuloa Valley) and *poi* pounder (John Wittenburg found while digging a posthole on his land).

Figure 8: *Ulu* wood *poi* pounding board John Wittenburg found in Kahakuloa Valley.

an existing old Hawaiian wall on his property, and he built many rock walls in the traditional Hawaiian style. Mr. Wittenburg also built a rock dam on the Kahakuloa stream in 1994, in order to divert water for the *kalo* farmers along the stream. He showed me the dam and the *lo`i* along the stream, which are currently under cultivation.

In terms of cultural practices, Mr. Wittenburg mentioned that the *awa*, pandanus (*hala*) and groves of *kukui* nut trees growing in the uplands near Maluhia are indicators that that place was occupied by Hawaiians. The habitat was mainly dryland forest, not suitable for *lo`i,* but used for hunting and gathering. The water from Makamaka`ole and Wailena River valleys allowed a concentration of people to use this area. Mr. Wittenburg also mentioned that the area was used for traditional medicinal plants, *maile* gathering and bird catching. But he emphasized that he is not an expert on these things.

There is a *pu`uhonua* (place of refuge) on the *pu`u* next to the Boy Scout Camp. Mr. Wittenburg referred to Lei`ohu Ryder as a reference about this *pu`uhonua* (Kukuipuka). Mr. Wittenburg mentioned that there are many legends associated with Kahekili throughout Kahakuloa Valley. Mr. Wittenburg referred to Kahekili throughout the interview. He also referred to an adze quarry in Kahakuloa Valley. Finally, he talked about gathering of *imu* stones (*pukapuka* stones) in Kahakuloa Valley, as well as two other places on Maui: Nu`u Bay and the area between Lahaina and Olowalu.

In terms of major issues having to do with the project area, Mr. Wittenburg emphasized the shortage of water throughout Maui Island and rampant development as Maui's biggest issues. Of 27 streams in the West Maui Mountains, only two still run to the ocean (Makamaka`ole and Kahakuloa). These two watersheds have never been touched. Hawaiians have no word for rich man (except for "*Kanaka wai wai*"—telling of the importance of water). To Mr. Wittenburg, the terrible road to Kahakuloa is the savior of the village. This is the reason it still remains untouched by development, like Nāhiku or Keanae villages.

Mr. Wittenburg talked for sometime about unnecessary developments that will overtax our water resources, like the new shopping malls in Kahului and Kīhei. He says these have an effect across the island in terms of how much water is ultimately available.

Mr. Wittenburg also talked about the loss of traditional knowledge of Hawaiian cultural practices. The fourth generation of Hawaiians living in Kahakuloa now (since Contact with the West) are not interested in farming taro or practicing old subsistence/cultural practices. However, he said "there will be a renaissance". In terms of Camp Maluhia improvements, water resources and the preservation of traditional cultural practices are his main concerns.

Finally, Mr. Wittenburg urged me to look at the thesis from Kathy Oliveira "Ohu Ohu `O Kahakuloa Ku`u Kulāiwi, which is a 1999 study of the place names of Kahakuloa for an MA in Geography. The Oliveira family has resided in Kahakuloa village since before the *Māhele*.

SUMMARY

The "level of effort undertaken" to identify potential effect by a project to cultural resources, places or beliefs (OEQC 1997) has not been officially defined and is left up to the investigator. A good faith effort can mean contacting agencies by letter, interviewing people who may be affected by the project or who know its history, research identifying sensitive areas and previous land use, holding meetings in which the public is invited to testify, notifying the community through the media, and other appropriate strategies based on the type of project being proposed and its impact potential. Sending inquiring letters to organizations concerning development of a piece of property that has already been totally impacted by previous activity and is located in an area previously impacted by commercial agriculture may be a "good faith effort". However, when many factors need to be considered, such as in coastal or mountain development, a good faith effort might mean an entirely different level of research activity.

Historical and cultural source materials were extensively used and can be found listed in the References Cited portion of the report. Such scholars as Samuel Kamakau, Martha Beckwith, Jon J. Chinen, Lilikalā Kame`eleihiwa, R. S. Kuykendall, Marion Kelly, E. S. C. Handy and E.G. Handy, Elspeth P. Sterling, and Mary Kawena Puku`i and Samuel H. Elbert and continue to contribute to our knowledge and understanding of Hawai`i, past and present. The works of these and other authors were consulted and incorporated in the report where appropriate. Land use document research was supplied by the Waihona `Aina 2013 Database, the REDI Realty Tax Map Key, and the State of Hawai`i Archives..

In the case of the current undertaking, letters of inquiry were sent to individuals and organizations that may have knowledge or information pertaining to the collection of cultural resources and/or practices currently, or previously conducted in the *ahupua`a* of Kahakuloa and the District Wailuku, Maui. Dr. Kamana`opono M. Crabbe, Chief Executive Officer, Office of Hawaiian Affairs; Thelma Shimaoka, Office of Hawaiian Affairs, Maui; Roy Newton, Office of Hawaiian Affairs, Maui; Perry Artates, County of Maui Cultural Resources Commission; Raymond Hutaff, County of Maui Cultural Resources Commission; Central Maui Hawaiian Civic Club; V. H. Rodrigues, State Historic Preservation Division, Maui; William Ho`ohuli, community member; Lei`ohu Ryder, Kukuipuka `Ohana; Torrie Nohara, Na Ala Hele, Trails and

Access Specialist; Leslie Kuloloio, community member and former member of the Maui and Lana`i Island Burial Council; Maui Tomorrow; Ke`eaumoku Kapu, Chair Maui/Lana`i Islands Burial Council; Robert Lu`uwai, community member; and the Maui Sierra Club. In addition, a Cultural Impact Assessment Legal Notices were published in *The Maui News*, *The Honolulu Star-Advertiser* and the OHA newspaper, *Ka Wai Ola* (see Appendix C).

With the exception of an anonymous individual, none of the persons consulted indicated the proposed improvements to Camp Maluhia would impact traditional cultural practices. The anonymous individual stated that Kahakuloa is a significant area and is mainly concerned that the increasing number of people who are drawn to the area increases the potential for damage to occur to Kukuipuka Heiau and to the natural resources (including native plants) in the area. However, the anonymous individual stated that activities at Camp Maluhia will not impact Kukuipuka Heiau as long as the Boy Scouts stay within the camp. The anonymous individual would like to see individuals knowledgeable about Hawaiian culture brought in to educate the Boy Scouts about the spiritual and cultural aspects of the area as well as to increase their awareness of cultural sensitivity of Native Hawaiian practices.

CULTURAL ASSESSMENT AND RECOMMENDATIONS

Analysis of the potential effect of the project on cultural resources, practices or beliefs, its potential to isolate cultural resources, practices or beliefs from their setting, and the potential of the project to introduce elements which may alter the setting in which cultural practices take place is also a suggested guideline of the OEQC (No. 10, 1997). To our knowledge, the project area has not been used for traditional cultural purposes within recent times.

With the exception of Lei`ohu Ryder, none of the persons consulted indicated the proposed improvements to the wells would impact traditional cultural practices. Ms. Ryder stated that Kahakuloa is a significant area and her main concern with regards to the current project is that as an increasing number of people are drawn to the area the potential for damage to Kukuipuka Heiau and natural resources (including native plants) increases. However, Ms. Ryder stated that activities at Camp Maluhia will not impact Kukuipuka Heiau as long as the Boy Scouts stay within the camp. Ms. Ryder would like to see individuals knowledgeable about Hawaiian culture brought in to educate the Boy Scouts about the spiritual and cultural aspects of the area as well as to increase their awareness of cultural sensitivity of Native Hawaiian practices.

Based on the above research, it is reasonable to conclude that, pursuant to Act 50, the exercise of Native Hawaiian rights, or any ethnic group, related to gathering, access or other customary activities will not be affected by the proposed improvements at Camp Maluhia, to be located on approximately 20 acres of land located in the Kahakuloa Ahupua`a, Wailuku District, Island of Maui [TMK: (2) 3-1-001:028 and 029], provided the Boy Scouts conduct their activities within the confines of Camp Maluhia.

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APPENDIX A: EXAMPLE LETTER OF INQUIRY

In compliance with the State of Hawai'i Revised Statutes (HRS) Chapter 343 Environmental Impact Statement Law and in accordance with the State of Hawai`i Department of Health's Office of Environmental Quality Control (OEQC) Guidelines for Assessing Cultural Impacts as adopted by the Environmental Council, State of Hawai`i on November 19, 1997, Scientific Consultant Services, Inc. (SCS) is in the process of preparing a Cultural Impact Assessment (CIA) pertaining to proposed improvements at Camp Maluhia, to be located on approximately 20 acres of land located in `Ili o Kukuipuka, Kahakuloa Ahupua`a, Wailuku District, Island of Maui [TMK: (2) 3-1-001:028 (por.) and 029 (por.)] (Figures 1 and 2).

Scientific Consultant Services has recently completed an Archaeological Inventory Survey of the approximately 20 acre project area (Hodara *et al.*, 2013 in preparation) in order to determine the presence of archaeological cultural materials. No archaeological sites were identified during the Archaeological Inventory Survey.

According to the *Guidelines for Assessing Cultural Impacts* (Office of Environmental Quality Control, Nov. 1997):

> The types of cultural practices and beliefs subject to assessment may include subsistence, commercial, residential, agricultural, access-related, recreational, and religious and spiritual customs...The types of cultural resources subject to assessment may include traditional cultural properties or other types of historic sites, both man made and natural which support such cultural beliefs...

We are asking you for any information that you, or other individuals, have which might contribute to the knowledge of traditional cultural activities that were, or are currently, conducted in the vicinity of the Boy Scouts of America camp. We are also asking for any information pertaining to traditional cultural activities or traditional rights which may be impacted by the proposed improvements at Camp Maluhia. The results of the cultural impact assessment are dependent on their responses and contributions made by organizations, such as the Office of Hawaiian Affairs.

Enclosed are maps showing the proposed project area. Please contact me at the Scientific Consultant Services, Honolulu, office at (808) 597-1182 or via e-mail cathy@scshawaii.com) with any information or recommendations concerning this Cultural Impact Assessment.

Sincerely yours,

Cathleen Dagher
Senior Archaeologist
Enclosures (2)

Cc:

APPENDIX B: LEGAL NOTICES

AFFIDAVIT OF PUBLICATION

IN THE MATTER OF
CULTURAL IMPACT ASSESSMENT NOTICE

STATE OF HAWAII)
) SS.
City and County of Honolulu)

Doc. Date: MAR 1 4 2013 **# Pages:** 1

Notary Name: Patricia K. Reese First Judicial **Circuit**

Doc. Description: Affidavit of Publication

Notary Signature — MAR 1 4 2013 Date

PATRICIA K. REESE NOTARY PUBLIC Comm. No. 86-467 STATE OF HAWAII

Rose Rosales being duly sworn, deposes and says that she is a clerk, duly authorized to execute this affidavit of Oahu Publications, Inc. publisher of The Honolulu Star-Advertiser and MidWeek, that said newspapers are newspapers of general circulation in the State of Hawaii, and that the attached notice is true notice as was published in the aforementioned newspapers as follows:

Honolulu Star-Advertiser 3 times on:
03/10, 03/13, 03/14/2013

Midweek Wed. 0 times on:

_____ times on:

And that affiant is not a party to or in any way interested in the above entitled matter.

Rose Rosales

Subscribed to and sworn before me this 14th day
of March A.D. 2013

Patricia K. Reese, Notary Public of the First Judicial Circuit, State of Hawaii

My commission expires: Oct 07 2014

PATRICIA K. REESE NOTARY PUBLIC Comm. No. 86-467 STATE OF HAWAII

Ad # 0000499676

LN:_____

TO: Suann Baker
FAX#/EMAIL: 597-1193
CONTACT #: 597-1182
DATE: 3/4/13
ACCOUNT #: 59454
FROM: Star-Advertiser/MidWeek-Legal Advertising Dept.

FAX: 808-529-4829

	Lisa Kaukani (808-529-4344) Email: lkaukani@staradvertiser.com
X	Rose Rosales (808-529-4825) Email: rrosales@staradvertiser.com

Remit Payment to:
Honolulu Star-Advertiser/Midweek
500 Ala Moana Blvd., 7 Waterfront Plaza, Ste. 500
Honolulu, HI 96813

PUBLICATION: 3/10, 3/13, 3/14/13
CLASSIFICATION: Legal / Notices
Paper: (Star Advertiser) (Staradvertiser.com)
Midweek Monster.com
SIZE: 2 column(s) x 1.25"
(Affidavit 1)
TOTAL COST $ 615.18
Proof Enlarged 125%/150%(175%)

SEE ATTACHED FOR PROOF

AD # 499676

■ AD PROOF ■

******APPROVAL BY******
10 (am/pm) Fri 3/8/13
_____ Correction(s) noted on proof
_____ Proof OK as is Date_____

Payment Method (Circle):

Prepayment:_____Invoice:_____
P.O.#_____ Check# _____
PCARD/CC_____
EXP_____ CID Code_____
CARD HOLDER_____
Ad will not be released for publication unless payment & signature is received by above date and time*
***Signature:**_____
Please proof read thoroughly.
Oahu Publications, Inc. will not be responsible for any errors, typographical or otherwise, once the proof has been approved and signed by the customer.

CULTURAL IMPACT ASSESSMENT NOTICE POSTED IN THE MAUI NEWS, AND IN THE STAR-ADVERTISER NEWSPAPER

Information requested by Scientific Consultant Services, Inc. (SCS) on cultural resources and traditional, or on-going, cultural activities on or near Camp Maluhia located in `Ili o Kukulpuka, Kahakuloa Ahupua`a, Wailuku District, Island of Maui [TMK: (2) 3-1-001:028 and 029]. Please respond within 30 days to Cathleen Dagher at (808) 597-1182.
(SA499676 3/10, 3/13, 3/14/13)

PROJECT
1370

AFFIDAVIT OF PUBLICATION

STATE OF HAWAII, } ss.
County of Maui. }

Rhonda M. Kurohara being duly sworn deposes and says,that she is in Advertising Sales of the Maui Publishing Co., Ltd., publishers of THE MAUI NEWS, a newspaper published in Wailuku, County of Maui, State of Hawaii; that the ordered publication as to Information requested by Scientific Consultant

of which the annexed is a true and correct printed notice, was published 3 times in THE MAUI NEWS, aforesaid, commencing on the 10th day of March, 2013, and ending on the 14th day of March, 2013, (both days inclusive), to-wit: on March 10, 13, 14, 2013

and that affiant is not a party to or in any way interested in the above entitled matter.

This 1 page Information requested, dated March 10, 13, 14, 2013, was subscribed and sworn to before me this _____ day of March, 2013, in the Second Circuit of the State of Hawaii, by Rhonda M. Kurohara

Notary Public, Second Judicial Circuit, State of Hawaii
BETTY E. UEHARA
My Commission expires 09-26-15

BETTY E. UEHARA NOTARY PUBLIC No. 83-344 STATE OF HAWAII

Information requested by Scientific Consultant Services, Inc. (SCS) on cultural resources and traditional, or on-going, cultural activities on or near Camp Maluhia located in 'Ili o Kukuipuka, Kahakuloa Ahupua'a, Wailuku District, Island of Maui [TMK: (2) 3-1-001:028 and 029]. Please respond within 30 days to Cathleen Daglier at (808) 597-1182.
(MN: March 10, 13, 14, 2013)

APPENDIX C: EXAMPLE FOLLOW-UP LETTER

This is our follow-up letter to our March 5, 2013 letter which was in compliance with the statutory requirements of the State of Hawai'i Revised Statute (HRS) Chapter 343 Environmental Impact Statements Law, and in accordance with the State of Hawai`i Department of Health's Office of Environmental Quality Control (OEQC) Guidelines for Assessing Cultural Impacts as adopted by the Environmental Council, State of Hawai`i, on November 19, 1997.

Scientific Consultant Services, Inc. (SCS) is in the process of preparing a Cultural Impact Assessment (CIA) pertaining to proposed improvements at Camp Maluhia, to be located on approximately 20 acres of land located in `Ili o Kukuipuka, Kahakuloa Ahupua`a, Wailuku District, Island of Maui [TMK: (2) 3-1-001:028 (por.) and 029 (por.)].

We are asking you for any information that you, or other individuals you know, have which might contribute to the knowledge of traditional cultural activities that were, or are currently, conducted in the vicinity of the proposed undertaking. We are also asking for any information pertaining to traditional cultural activities or traditional rights which may be impacted by the proposed undertaking. The results of the cultural impact assessment are dependent on the response and contributions made by individuals and organizations, such as yourself and the Office of Hawaiian Affairs.

Please contact me at the Scientific Consultant Services, Honolulu, office at (808) 597-1182 or via e-mail (cathy@scshawaii.com) with any information or recommendations concerning this Cultural Impact Assessment.

Sincerely yours,

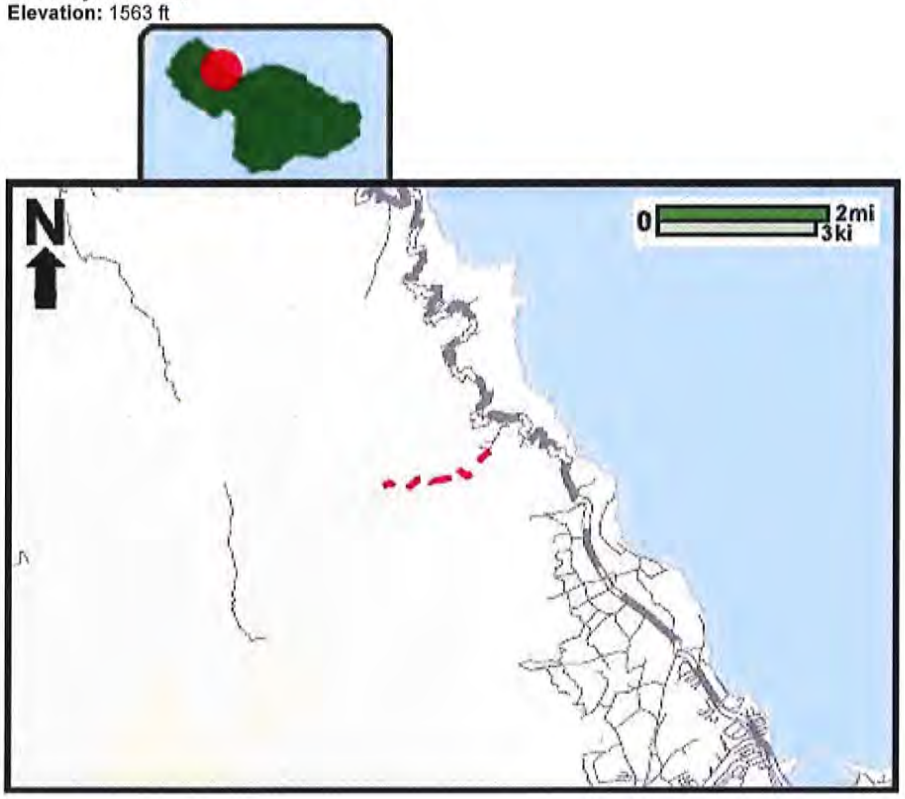
Cathleen Dagher
Senior Archaeologist
Enclosures (2)

Cc:

APPENDIX D: RESPONSES

Waihee Ridge Trail

Trail Length: 2.5 mi.
Activity: Pedestrian
Difficulty: Moderate
Elevation: 1563 ft



Route: Printable Map: Beginning at 1,000` elevation, trail climbs the windward slope of west Maui through a brushy guava thicket, a young stand of planted trees, and wet native scrub forest. Views of Waihee Gorge and Makamaka`ole Gulch can be seen along the way. On the peak, at 2,563` are panoramic views of Wailuku and central Maui, the Kahakuloa slopes, and Mount Eke. Weather at the summit varies from clear to overcast with showers. No drinking water is available along the trail. Camping is not permitted. Wear bright colored clothing. Be aware that you may encounter hunters who may be hunting off trail. Stay on trail.
Island of Maui: Roads

Directions: From Kahekili Highway (340), turn up Maluhia Road and go 0.9 miles. A sign on a fence marks the trail head. Follow right-of-way markers through pasture before entering forest.

Do not use any trail or access road that is not delineated by name and color and that may also be displayed on these maps. The marked features are managed for public recreational use. Other trails or roads that branch off from the public features may be on private property, and are not managed for any public recreational use. Access is subject to adjacent landowner approval, and if used without authorization, you will be trespassing and possibly putting yourself at risk.

PHONE (808) 594-1888

FAX (808) 594-1865

STATE OF HAWAI'I
OFFICE OF HAWAIIAN AFFAIRS
711 KAPI'OLANI BOULEVARD, SUITE 500
HONOLULU, HAWAI'I 96813

HRD13/6647

April 26, 2013

Cathleen Dagher
Senior Archaeologist
711 Kapi'olani Blvd, Suite 975
Honolulu, HI 96813

RE: Cultural Impact Assessment consultation
Improvements at Camp Maluhia, Kahakuloa Ahupua'a
Tax Map Key: (2) 3-1-001:028, (2) 3-1-001:029

Aloha e Ms. Dagher:

The Office of Hawaiian Affairs (OHA) is in receipt of your March 5, 2013 letter initiating consultation and seeking comments ahead of a cultural impact assessment (assessment) for the proposed improvements at Camp Maluhia. According to the information in your letter, the proposed development is located in the Kahakuloa Ahupua'a, Ka'anapali District on the island of Maui on the above tax map key parcel mentioned above.

According to your letter, the project area is planned for proposed improvements located on approximately 20 acres of land located in 'Ilio Kukuipaka, Kahakuloa. OHA applauds your efforts for completing an Archaeological Inventory Survey. As your letter mentions, no archaeological sites were identified during the Archaeological Inventory Survey.

OHA recommends consultation be initiated with the following individuals and who may be willing to share their mana'o on the assessment with you: Mr. Oliver Dukelow, resident and kama'ina of Kahakuloa as well as taro farmer and Mr. Cliff Nae'ole, Cultural Adviser with the Ritz Carlton Kapalua. Please know that this list is not all encompassing and we are sure additional individual will be identified as you move forward with your consultation process.

OHA does request assurances that should iwi kūpuna or Native Hawaiian cultural or traditional deposits be identified during ground altering activities related to this project, all work will immediately cease and the appropriate agencies will be contacted pursuant to applicable law. OHA would also like to be notified and consulted if burials are found.

Thank you for initiating consultation at this early stage and we look forward to the opportunity to review the draft assessment and provide additional comments. Should you have any questions, please contact Kathryn Keala, at (808) 594-0272 or kathyk@oha.org.

'O wau iho nō me ka 'oia'i'o,

Kamana'opono M. Crabbe, Ph.D.
Ka Pouhana, Chief Executive Officer
Office of Hawaiian Affairs

KMC:kk

APPENDIX E: RELEASE FORM

INFORMATION RELEASE FORM

I, the undersigned participated in an interview with Scientific Consultant Services, Inc. on _April 23_ of the year 2013. Scientific Consultant Services, Inc., Senior Archaeologist, Cathleen Dagher conducted the interview via telephone.

I understand that the information I have provided to Scientific Consultant Services, Inc., shall be submitted as part of a Cultural Impact Assessment report on proposed improvements at Camp Maluhia, located in Ili o Kukuipuka, Kahakuloa Ahupua'a, Wailuku District, Island of Maui [TMK: (2) 3-1-001:028 and 029].

I have read the transcript of the interview and the information is true and accurate to the best of my knowledge. By signing this release form, I am providing my approval for the release of the information to Scientific Consultant Services, Inc., for the purpose outlined above.

Date of recorded interview: _____

Print Name: L. Ryder

Signature: _____

Release Dated: _____

APPENDIX D.

Preliminary Design Report for Camp Maluhia Water System

Preliminary Design Report for Camp Maluhia Water System

Kahakuloa, Maui, Hawaii
Tax Map Key (2) 3-1-001:028

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Owner:

Boy Scouts of America
Maui County Council, Ltd.
200 Liholiho Street
Wailuku, Hawaii 96793

Date: March 15, 2013

Consultant:

Ronald M. Fukumoto Engineering, Inc.
1721 Wili Pa Loop, Suite 203
Wailuku, Hawaii 96793
Phone: (808) 242-8611
Fax: (808) 244-7510
E-Mail: office@rfemaui.com

I. PURPOSE

The purpose of this report is to provide recommendations for upgrading the water system for Camp Maluhia.

II. DESCRIPTION

The Boy Scouts of America, Maui County Council, Ltd. (BSA) will construct a new dining hall at Camp Maluhia in Kahakuloa, Maui. To obtain a building permit for the new dining hall, various infrastructure systems, including a fire protection water system, must be provided.

The camp lies on a 17.94-acre parcel owned by the BSA and designated as Tax Map Key (2) 3-1-001: 028 on the tax maps. Portions of the camp, including the access road from Kahekili Highway to the site, parking areas, and water system, lie on an adjoining 194.51-acre parcel owned by the State of Hawaii and leased to the BSA. This 194.51-acre parcel is known as the Camp Expansion lot. The tax map designates the lease parcel as Tax Map Key (2) 3-1-001: 001. In addition, a water transmission pipeline serving the camp traverses another State-owned 47.68-acre parcel to the North of the camp leased to the BSA. The tax map designates this lease parcel as Tax Map Key (2) 3-1-001: 029. This 47.68-acre parcel is known as the Makamakaole Gulch lot.

III. BACKGROUND

The camp currently receives water from the Kahakuloa Acres Private Water Company (KAPWC) through a 5/8-inch meter located in the Maluhia Country Ranches (MCR) subdivision. A 2-inch transmission pipeline runs from the meter through an easement on one of the MCR lots, traverses the Makamakaole Gulch lot, and enters the lower end of the camp near the Rotary campsite. A booster pump at the Rotary campsite pumps water to a 23,000-gallon storage tank on the Camp Expansion lot above the camp. Distribution pipelines connected to the storage tank provide water to the buildings in camp. There is no fire protection water system in the camp.

From the establishment of the camp to about 20 years ago, the camp water system consisted of a stream water source, transmission pipeline, redwood storage tanks at the upper end of the site, and distribution lines within the camp. Between 20 and 30 years ago, BSA installed equipment to disinfect the water. Such equipment included a closed vessel ultraviolet reactor which treats water by exposing it to ultraviolet light and a chlorine pump for injecting sodium hypochlorite solution into the water. During this period, the Federal Government mandated stricter drinking water regulations for surface water sources, and for operating and maintaining private water systems. BSA was unable to comply with these regulations and decided to pursue an alternative means of providing water to the camp.

The alternative means of providing water consisted of hauling in drinking water, storing

it, and distributing it to the camp. The system consisted of a 23,000-gallon corrugated steel water tank with a vinyl liner, an access road to the tank site, and a pipeline from the new tank to the on-site camp water system. The location of the tank was selected to provide more pressure to the upper areas of the camp and to receive water from a tanker truck by gravity flow. Due to the steep terrain, portions of the access road were paved with concrete to allow the tanker truck to drive up to the unloading area.

In 1992, BSA initiated the planning and permitting of the alternative water delivery system. Documentation included construction plans, an environmental assessment, a permit for use of State lands, a grading permit for the access road and tank site, and a building permit for the tank. BSA received approvals in 1993 and initiated construction in 1994. Due to funding constraints, most of the project was constructed by volunteer labor. The system was completed and placed in service in 1997. BSA then contracted with a trucking company to haul in drinking water. Although the cost of hauling water was initially reasonable, the cost increased substantially due to a change in pricing and increased water usage. This alternative water delivery system was intended as an interim solution until a more permanent, less expensive alternative became available. (See Camp Maluhia Water Tank construction plans in Appendix B.)

In 1999, BSA approached the developer of the agricultural subdivision to the North of the camp to ask about obtaining a water meter for the camp. The Kahakuloa Acres Private Water Company provided water for the agricultural subdivision and other lots in the area. In a letter dated April 14, 2000, KAPWC authorized a water meter for the camp with certain conditions. Key conditions included a limit of 850 gallons per day and the right to terminate service if the board of directors of KAPWC determined that an inadequacy exists that adversely affects other members of the KAPWC. Construction drawings were then prepared, improvements were constructed, and service was activated in 2002. The improvements consisted of a transmission pipeline, booster pump, and a connection to the existing 23,000-gallon tank. (See Figure 1 - Existing Off-Site Water System, page 8 and Camp Maluhia Waterline construction plans in Appendix C.)

IV. ANALYSIS

A. Existing Water System

The Camp Maluhia water system consists of an off-site transmission pipeline, booster pump, and storage tank, and an on-site distribution system. The system is unique. It required the installation of a 2,200-foot long off-site transmission pipeline through gulches and rugged terrain to reach the site, a reduction in pressure to convey the water through the gulches, and a boost in pressure to pump water to a storage tank above the camp to handle peak system demands.

Components of the off-site system between the subdivision and the camp include a 5/8-inch water meter on Lahaole Place in the Maluhia Country Ranches subdivision, a 2-inch high density polyethylene (HDPE) transmission pipeline, and a pressure reducing valve

and two air and vacuum valves on the transmission pipeline. The water meter on Lahaole Place is at an elevation of about 1,090 feet above mean sea level. The pressure reducing valve at the meter drops the inlet pressure of about 87 pounds per square inch (psi) to about 15 psi. From its connection point on Lahaole Place, the transmission pipeline extends about 770 feet across an easement on a pedestrian access lot between Lot 12 and Lot 13 of MCR to the Makamakaole Gulch lot. From this point, the transmission pipeline traverses about 1,470 feet through the gulch lot and enters the lower part of the camp. The terrain in the gulch is very rough including a drop of about 300 feet from the top of the gulch to the bridge that spans Makamakaole Gulch at Kahekili Highway. The low point in the gulch is at an elevation of about 725 feet above mean sea level. The pressure in the pipeline at the low point is about 173 psi. The pipeline also crosses a tributary of the gulch as it makes its way up a steep bank to the lower part of the camp. The high pressures in the pipeline have resulted in many breaks. (See Figure 1 - Existing Off-Site Water System, page 8.)

After entering the lower part of the camp, the pipeline continues about 200 feet to a booster pump enclosure in the bathhouse of the Rotary campsite. The pump enclosure is at an elevation of about 1,030 feet above mean sea level. The booster pump system consists of a single 3-horsepower Grundfos CR4-80/7U multi-stage centrifugal pump and control system. The system pumps water to a 23,000-gallon storage tank 220 feet above the pump. Inlet pressure at the pump is about 30 pounds per square inch (psi). According to the original pump supplier, the pump was designed for 20 gallons per minute (gpm) at 280 feet of head. The system was initially activated in 2002. About two years ago, the pump motor was replaced.

The booster pump conveys water to the storage tank through 1,550 feet of 2-inch HDPE pipeline. The storage tank consists of a bolted corrugated galvanized steel tank with a vinyl liner at an elevation of about 1,250 feet above mean sea level. The tank rests on a compacted gravel and sand base. The tank has a wood-framed roof structure with a ribbed-steel metal roof. The tank, constructed in 1994 and put into service in 1997, has been in service for about 16 years. It was initially equipped with a gravity-fed inlet line to receive water from a tanker truck. Maintenance work on the tank has included installing an auxiliary tank, re-leveling the base, painting the exterior, and replacing the vinyl liner. Previous leaks in the vinyl liner eroded the soil below the gravel and sand base which required re-leveling the base. The vinyl liner is leaking again and needs to be patched or replaced.

The on-site distribution system consists of pipelines that serve the buildings in camp. Static water pressures at the buildings range from 48 psi at the Director's Cabin to about 108 psi at the Caretaker Residence. The pipelines within the camp range in size from ½-inch diameter to 2-inch diameter lines and consist of different pipe materials including HDPE, polyvinyl chloride (PVC), copper, and galvanized iron. Most of the pipes are either HDPE or PVC. Many of the pipes are old and should be replaced. Maintenance of the existing lines is difficult due to inconsistencies between the plan locations and the actual locations. (See Figure 2 - Existing On-Site Water System, page 9.)

B. Existing Water Use

BSA provided annual water and camp use data for the past four years. The data for 2012 included only the first nine months of the year. The data will be reviewed to determine average daily demand during peak usage of camp.

Table 1 below shows the annual water use for the past four years. During 2009, 2010, and 2011, there were many breaks in the transmission pipeline resulting in high water use and costs. Table 1 also includes the actual data for the first nine months of 2012 and extrapolated data for 12 months. During 2012, there was a substantial reduction of pipeline breaks resulting in a substantial reduction of water use and costs.

TABLE 1
Annual Water Usage

Year	Annual Use in gallons	Water Cost	Average Daily Use in gallons	Camper – days	Overnight Camp Use in days	Average Daily Use per Camper in gallons
2009	1,703,000	$10,135	4,666	5,991	68	4
2010	1,932,000	$11,498	5,293	5,562	83	4
2011	1,682,000	$11,063	4,608	7,698	87	4
2012 - 9 months actual	952,000	$5,664	2,608	5,724	50	3
2012 - 12 months extrapolated	1,269,000	$7,552	---	---	---	---

Peak water use generally occurs during Boy Scouts summer camp. During summer camp, about 200 to 240 campers use all the facilities at camp which maximizes water use. Based on water use and attendance data, an average daily demand of 12,000 gallons per day will be adopted. This average daily demand equates to an average use of 50 to 60 gallons per camper per day. This value is high in comparison to the average daily use of about 4 gallons per camper per day on an annual basis as noted in Table 1. However, this value is low in comparison to an average household use of 100 gallons per person per day.

C. Design Criteria

Fire Protection Water System Capacity: Provisions in the *Maui County Code* will be used for sizing the fire protection water system. *MCC* Chapter 16.04B – Fire Code adopted the *Uniform Fire Code, 1997 Edition* with modifications. Section 903 – Water Supplies of the *UFC* states that fire flow, hydrant spacing, and duration shall be determined by land use. The project lies within the agricultural zoning district. For agricultural zoning, fire flow is 500 gallons per minute, hydrant spacing is 500 feet, and duration

of fire flow is 2 hours. Required fire protection water storage volume is therefore 60,000 gallons (500 gallons/minute x 2 hours x 60 minutes/hour = 60,000 gallons).

Drinking Water System Capacity: Provisions in the *Water System Standards 2002* of the County of Maui Department of Water Supply will be used for sizing various components of the drinking water system. Required drinking water storage volume is equal to maximum daily demand. Maximum daily demand is 1.5 times average daily demand. Based on an average daily demand of 12,000 gallons, the maximum daily demand is 18,000 gallons. Since the required storage volume of drinking water is small in comparison to the required fire protection storage, separate reservoirs will be constructed to prevent stagnation of drinking water.

Distribution Lines Capacity: Provisions in the *Maui County Code* and the *Water System Standards 2002* will be used for sizing water distribution lines. *MCC* Chapter 16.20A – Plumbing Code adopted the *Uniform Plumbing Code, 1991 Edition* with modifications. Distribution lines will be sized by evaluating the number of existing and proposed plumbing fixtures, determining their fixture unit values, and computing peak flow rates.

Booster Pump Capacity: Size booster pump to meet maximum day demand with an operating time of 16 hours with the largest pumping unit on standby. Based on a maximum daily demand of 18,000 gallons, a booster pump with a capacity of 19 gallons per minute is required (18,000 gallons/16 hours/60 minutes/hour = 18.75 ≈ 19 gallons per minute).

V. RECOMMENDATIONS

The following is a list of recommendations for upgrading the water system. In addition to these improvements, operations and maintenance procedures should be established to manage the water system. Such procedures would involve inspecting the system at regular intervals, logging water meter readings to document water use and to identify leaks, collecting and analyzing camp usage data, and repairing leaks in the system.

A. Off-Site Transmission Pipeline

Replace about 850 feet of 2-inch transmission pipeline in Makamakaole Gulch with new heavy-wall, SDR 7, HDPE pipe. Due to high pressures, there have been many breaks in this section of the existing transmission pipeline which has resulted in high water costs and inconvenience to campers. (See Figure 3 - Proposed Off-Site Water System Upgrades, page 10.)

B. Booster Pump

Replace existing booster pump with a new 20-gpm two-pump booster pump system and controls, 2,500-gallon polyethylene control tank, and 10-foot by 10-foot concrete masonry unit pump shed. The new booster pump system would draw water from a new 2,500-gallon control tank instead of the current in-line setup. The new control tank and booster pump

enclosure will be at an elevation of about 1,030 feet above mean sea level. The system will pump to new tanks at an elevation of about 1,260 feet above mean sea level. Static head is 230 feet and total dynamic head is about 260 to 280 feet with a pumping rate of 20 gpm. Other requirements of the new booster pump system include radio controlled tank-level float switches, pressure switches, pump protection controls, and electrical system. Upon completion of the new booster pump system, remove the existing booster pump system. The current vendor who maintains the existing booster pump system is familiar with the overall water system and should be contracted to install the new booster pump system. (See Figure 4 - Proposed On-Site Water System–Phase 1, page 11.)

C. Tanks

Construct a 67,000-gallon fire protection water tank and a 24,000-gallon drinking water tank at an elevation of about 1,260 feet above mean sea level. Both tanks are Aquastore glass-fused-to-steel bolted steel tanks manufactured by CST Industries, Inc. with sloped steel roofs and concrete foundations. The 67,000-gallon tank has a diameter of 27.97 feet and a sidewall height of 14.68 feet. The 24,000-gallon tank has a diameter of 16.78 feet and a sidewall height of 14.68 feet. Tank accessories include roof hatch, interior and exterior ladders, sidewall access port, sidewall inlet port, and bottom outlet port. Alternative products with similar characteristics as the Aquastore glass-fused-to-steel bolted steel tanks should also be considered. Tank site improvements consist of tank pad grading; inlet, outlet, and drain piping; graveled service yard, and chain link security fencing. Upon completion of the new tanks, dismantle and remove the existing corrugated steel tank, gravity-fed inlet line and supports, and auxiliary tank. (See Figure 4 - Proposed On-Site Water System–Phase 1, page 11.)

D. On-Site Distribution Lines

Install an 8-inch fire protection line from the new fire protection water tank to the site of the new dining hall and install a fire hydrant. Provide Ductile Iron, Class 52, pipe, fittings, and other materials for the fire protection line conforming to County of Maui Department of Water Supply standards. Install the first phase of drinking water lines from the new drinking water tank to the site of the new dining hall. Also extend the drinking water lines to connect to the existing system in the vicinity of the new dining hall. Provide PVC pipe, HDPE pipe, or other pipe material conforming to plumbing code standards. (See Figure 4 - Proposed On-Site Water System–Phase 1, page 11.)

For future phases, extend 8-inch fire protection lines and drinking water lines to the future development areas. The sizes of the drinking water lines for the first phase and future phases were determined and shown on the attached diagram. (See Figure 5 - Proposed Pipe Sizing Diagram, page 12.)

VI. PROBABLE CONSTRUCTION COSTS

Based on the conceptual plans, the improvements will cost about $1,025,000. (See Figure 6

- Conceptual Opinion of Probable Construction Costs, page 13.) These budgetary costs were confirmed by a general engineering contractor. If cost reductions are needed, alternative materials will be considered. For example, a savings of about $10,000 can be achieved by changing the 8-inch fire protection line to C-900 PVC pipe.

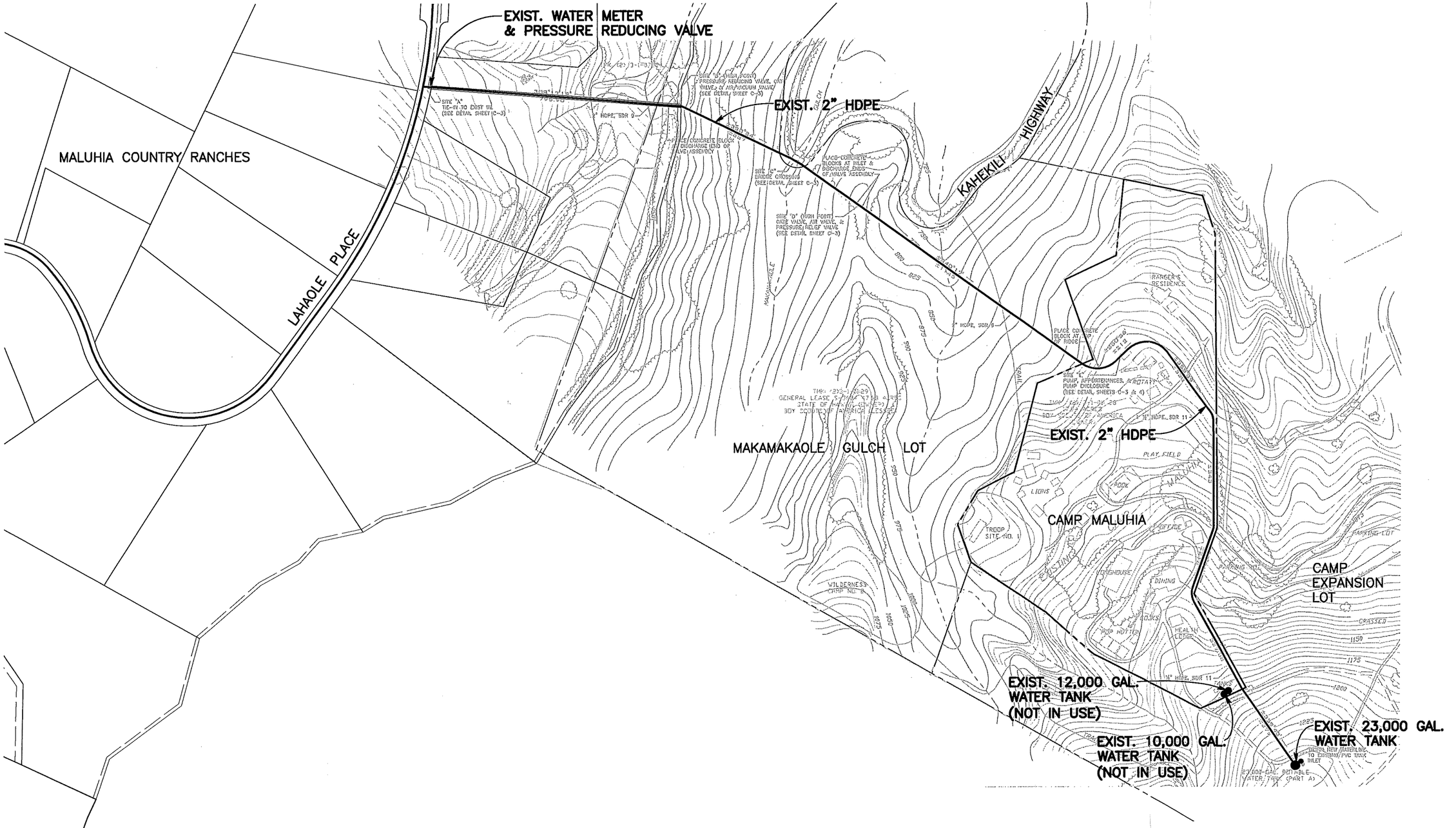
VII. REFERENCES

1. Ronald M. Fukumoto Engineering, Inc., Camp Maluhia Water Tank construction plans, prepared for Boy Scouts of America, Maui County Council, Ltd., February 1993.

2. C. Takumi Engineering, Inc., Camp Maluhia Waterline construction plans, prepared for Boy Scouts of America, Maui County Council, Ltd., July 2001.

3. International Association of Plumbing and Mechanical Officials, *Uniform Plumbing Code 1991 Edition*, Walnut, California.

4. Department of Water Supply, County of Maui, *Water System Standards 2002*, Wailuku, Hawaii.



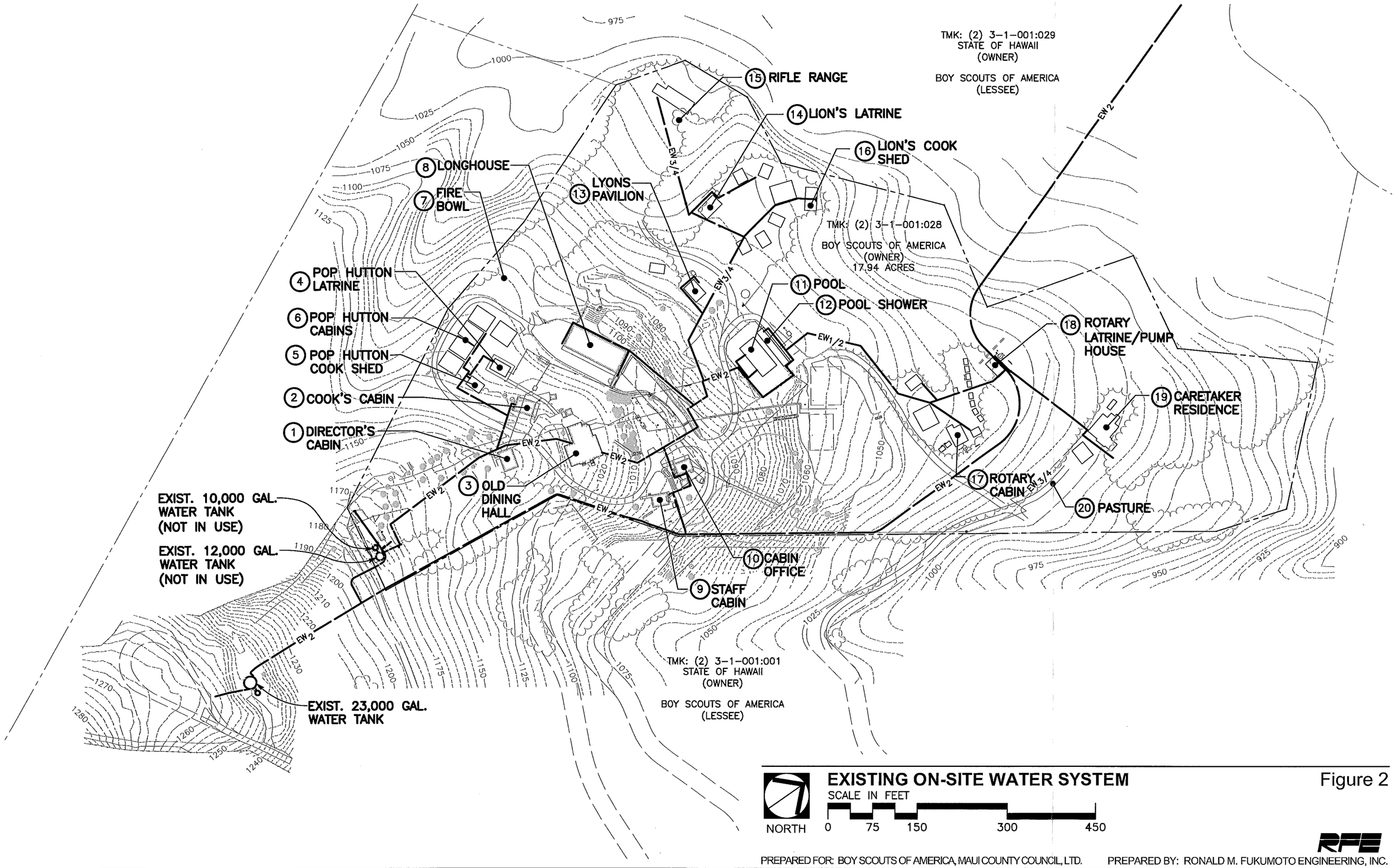
NORTH

EXISTING OFF-SITE WATER SYSTEM

SCALE IN FEET

0 150 300 600 900

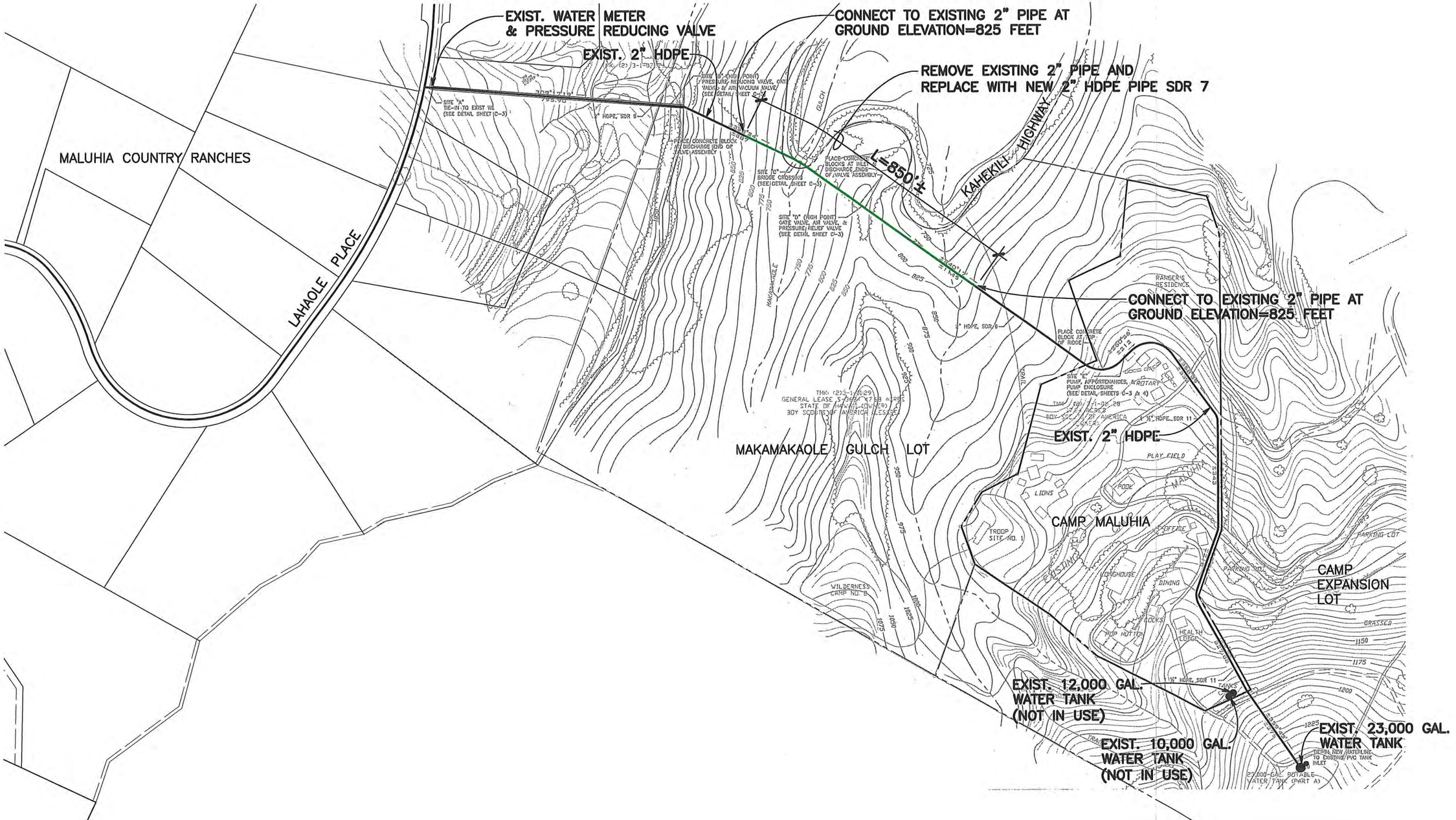
Figure 1



EXISTING ON-SITE WATER SYSTEM

SCALE IN FEET

Figure 2

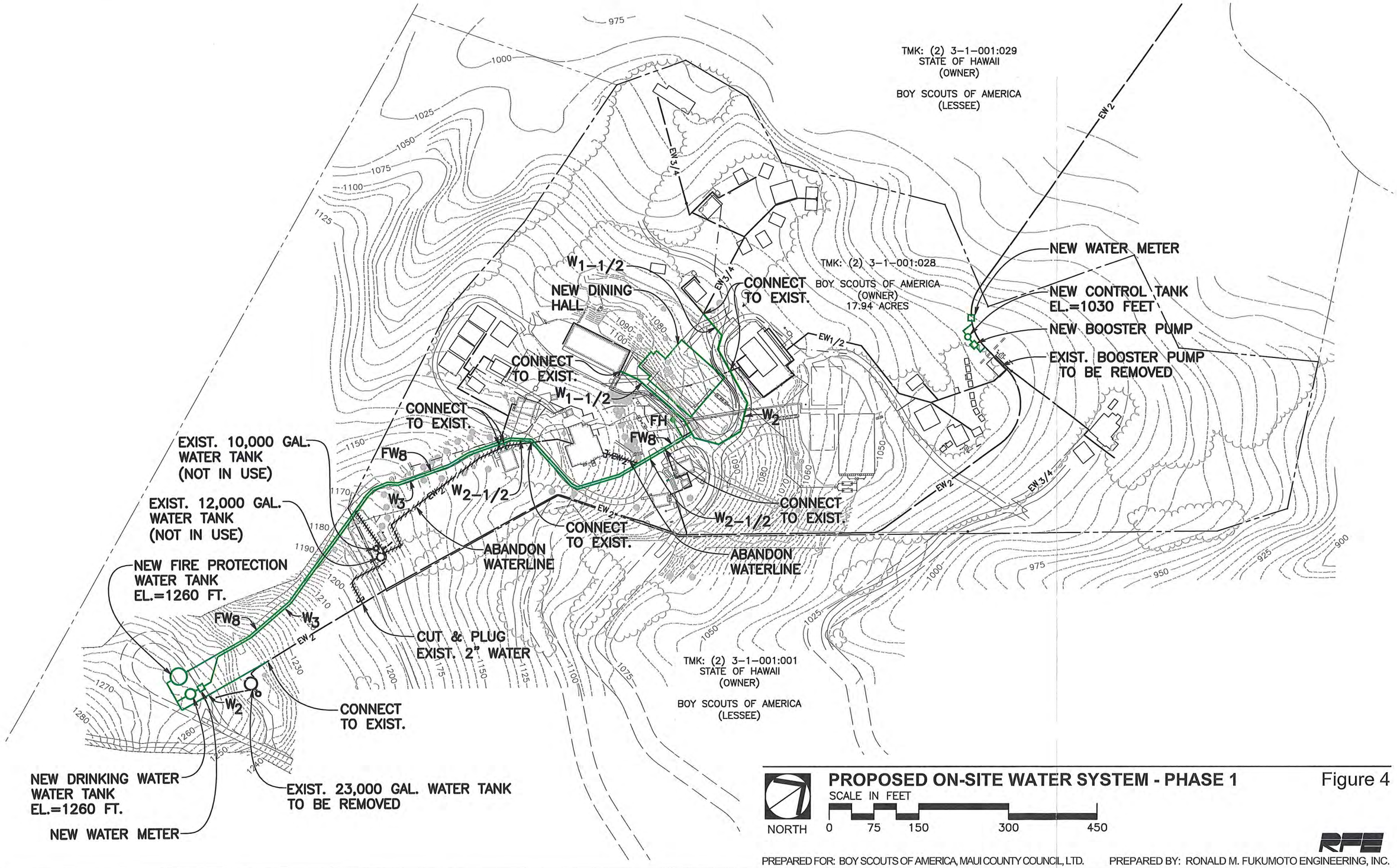


PROPOSED OFF-SITE WATER SYSTEM UPGRADES

Figure 3

SCALE IN FEET

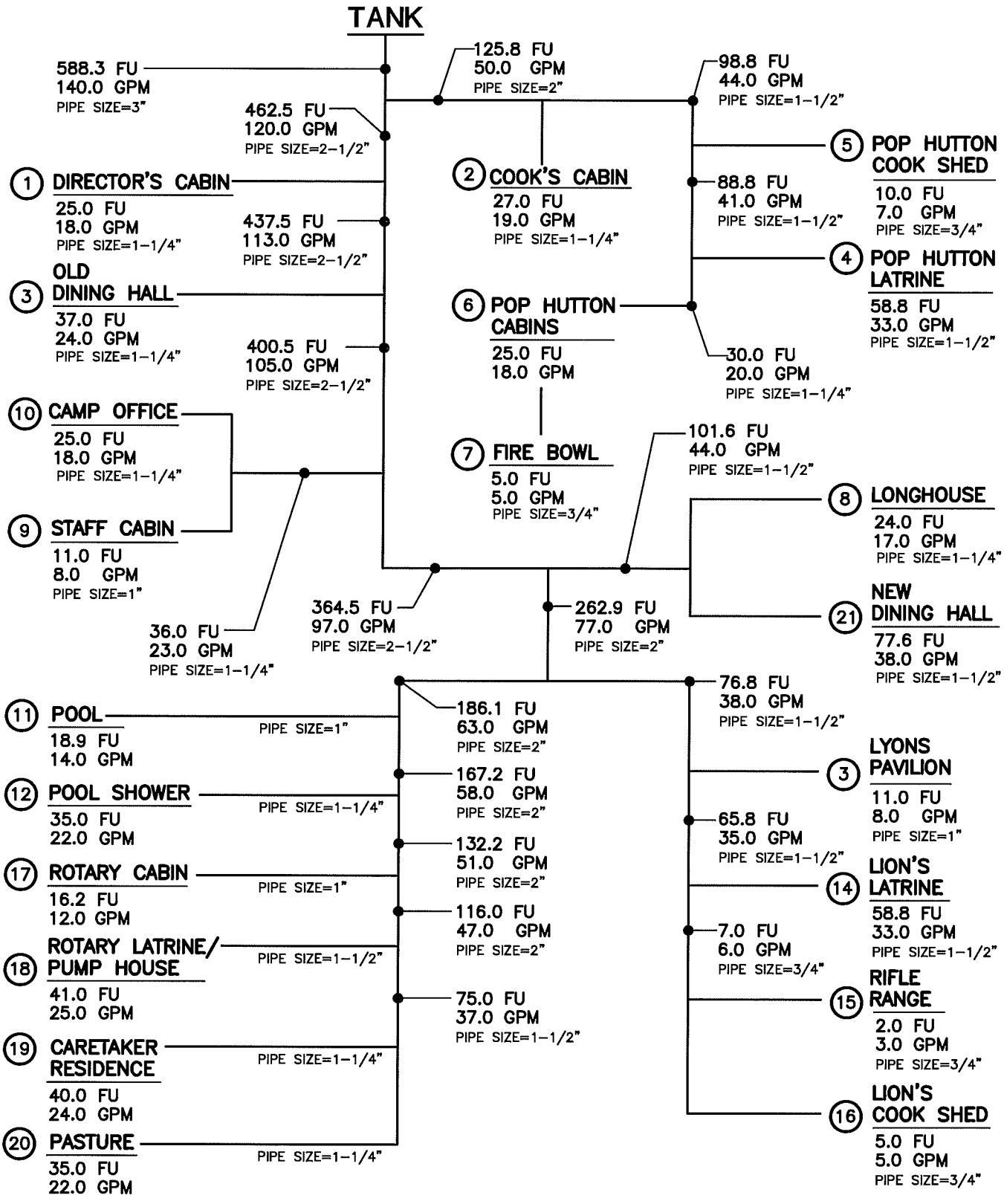
NORTH 0 150 300 600 900



PROPOSED ON-SITE WATER SYSTEM - PHASE 1

SCALE IN FEET

Figure 4



PROPOSED PIPE SIZING DIAGRAM Figure 5

CONCEPTUAL OPINION OF PROBABLE CONSTRUCTION COSTS March 15, 2013

Project: Camp Maluhia Water System
Prepared for: Boy Scouts of America, Maui County Council, Ltd.
Prepared by: Ronald M. Fukumoto Engineering, Inc.

Item	Description	Quantity	Unit	Unit Price	Total
1	Mobilization and demobilization	1	l.s.	$ 20,000	$ 20,000
2	Tank site preparation and grading (60' x 100')	6,000	sq. ft.	5	30,000
3	6' high chain link fence	320	lin. ft.	50	16,000
4	67,000-gallon glass-lined bolted steel tank	67,000	gal.	5.0	335,000
5	24,000-gallon glass-lined bolted steel tank	24,000	gal.	8.5	204,000
6	2" HDPE, SDR 7 transmission pipeline	850	lin. ft.	50	42,500
7	Booster pump site preparation and grading (20' x 40')	800	sq. ft.	10	8,000
8	Booster pump system (20 gpm, 260 ft. TDH) and controls	1	ea.	25,000	25,000
9	2,500-gallon polyethylene control tank	2,500	gal.	2.0	5,000
10	10' x 10' CMU booster pump shed	100	sq. ft.	300	30,000
11	8" DI Pipe, Class 52	1,040	lin. ft.	130	135,200
12	6" DI Pipe, Class 52	30	lin. ft.	120	3,600
13	Fire Hydrant Assembly	1	ea.	4,000	4,000
14	3" PVC or HDPE Pipe	700	lin. ft.	40	28,000
15	2-1/2" PVC or HDPE Pipe	380	lin. ft.	40	15,200
16	2" PVC or HDPE Pipe	320	lin. ft.	40	12,800
17	1-1/2" PVC or HDPE Pipe	180	lin. ft.	40	7,200
18	Waterline testing and chlorination	1	l.s.	10,000	10,000
	Subtotal				931,500
	Contingencies @ 10%±				93,200
	TOTAL				1,024,700

APPENDIX A

FIXTURE COUNT SPREADSHEET

FIXTURE COUNT FOR CAMP MALUHIA

3/15/2013

Kahakuloa, Maui, Hawaii

Tax Map Key (2) 3-1-001: 028

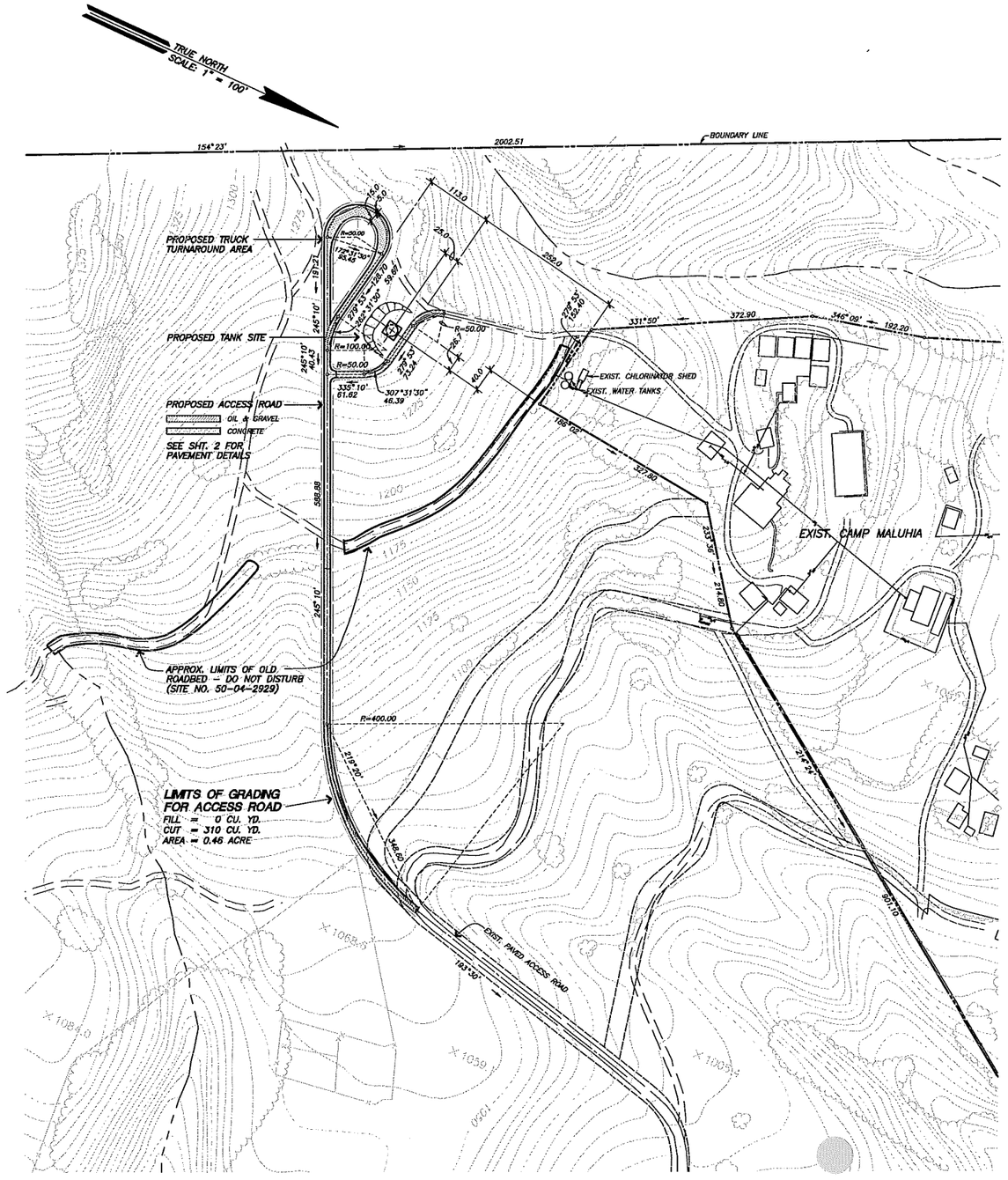
Camp Maluhia Water System

Prepared for: Boy Scouts of America, Maui County Council, Ltd.

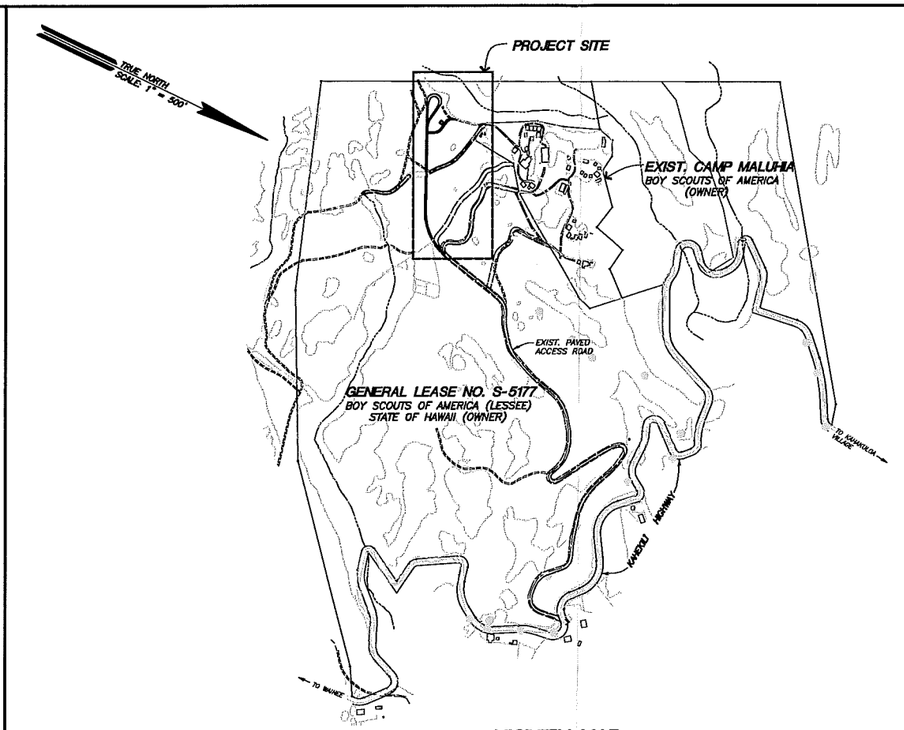
Fixture	Fixture Units per Fixture	(1) Director's Cabin	(2) Cook's Cabin	(3) Old Dining Hall	(4) Pop Hutton Latrine	(5) Pop Hutton Cook Shed	(6) Pop Hutton Cabins	(7) Fire Bowl	(8) Longhouse	(9) Staff Cabin	(10) Camp Office	(11) Pool	(12) Pool Shower	(13) Lyons Pavilion	(14) Lion's Latrine	(15) Rifle Range	(16) Lion's Cook Shed	(17) Rotary Cabin	(18) Rotary Latrine / Pump House	(19) Caretaker Residence	(20) Pasture	(21) New Dining Hall	Total Number of Fixtures	Total FU
Shower (Public)	4.0	-	2	-	-	-	-	-	-	1	1	-	4	-	-	-	-	-	3	-	-	-	11	44.0
Shower (Private)	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-		2	4.0
Shower (New Public)	3.2	2	-	-	4	-	-	-	-	-	-	-	-	-	4	-	-	1	-	-	-	-	11	35.2
Toilet (Flushometer Tank Public)	5.0	-	2	-	-	-	-	-	2	1	2	-	2	-	-	-	-	1	3	-	-	-	13	65.0
Toilet (Flushometer Tank Private)	3.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	2	6.0
Toilet (Low Flow Tank Public)	2.8	2	-	-	5	-	-	-	-	-	-	-	-	-	5	-	-	-	-	-	-	6	18	50.4
Urinal (Low Flow Public)	2.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	2.8
Lavatory (Public)	2.0	2	2	-	-	-	-	-	2	1	2	-	2	-	-	-	-	2	3	-	-	-	16	32.0
Lavatory (Private)	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-		2	2.0
Lavatory (New Public)	1.2	-	-	-	5	-	-	-	-	-	-	-	-	-	5	-	-	-	-	-	-	5	15	18.0
Kitchen Sink (Public)	4.0	1	-	3	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	5	20.0
Kitchen Sink (Private)	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	2.0
Kitchen Sink (New Public)	3.2	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	3	3	9.6
Hand Sink (Public)	4.0	-	-	4	4	-	-	-	-	-	-	-	-	-	4	-	-	1	2	-	-	1	16	64.0
Hand Sink (New Public)	3.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	7	22.4
Hose Bib (Public)	5.0	1	1	1	2	2	5	1	2	-	1	2	1	1	2	-	1	-	-	-	1	1	25	125.0
Hose Bib (Private)	3.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	-	-	8	24.0
Washing Machine (Public)	4.0	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	8.0
Washing Machine (Private)	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	2.0
Laundry Tray (New Public)	3.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	3.0
Drinking Fountain (New Public)	2.0	-	-	-	-	-	-	-	-	-	1	-	-	1	-	1	-	-	-	-	-	2	5	10.0
1-inch Float Valve	8.9	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	8.9
3/4-inch Float Valve	5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	6	30.0
FU per Building		25.0	27.0	37.0	58.8	10.0	25.0	5.0	24.0	11.0	25.0	18.9	35.0	11.0	58.8	2.0	5.0	16.2	41.0	40.0	35.0	77.6	172.0	588.3
GPM for FU noted above		18.0	19.0	24.0	33.0	7.0	18.0	5.0	17.0	8.0	18.0	14.0	22.0	8.0	33.0	3.0	5.0	12.0	25.0	24.0	22.0	38.0	-	140

APPENDIX B

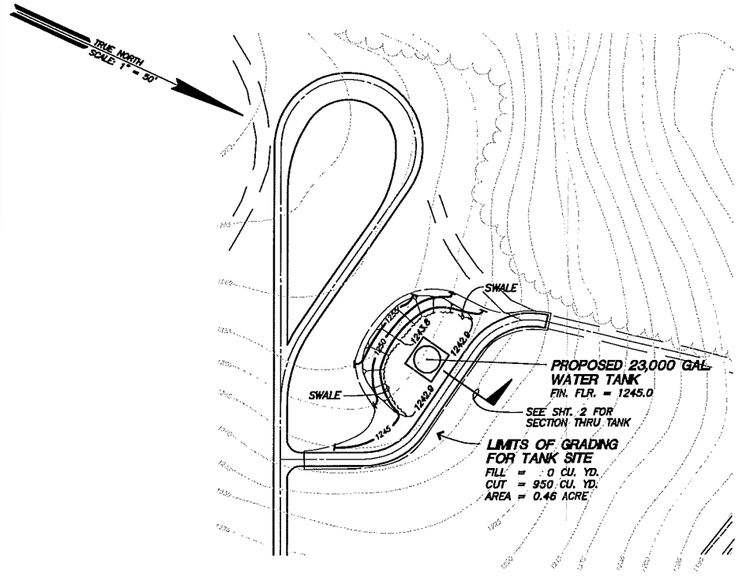
CAMP MALUHIA WATER TANK
CONSTRUCTION PLANS



SITE PLAN
SCALE: 1" = 100'



VICINITY MAP
SCALE: 1" = 500'



TANK SITE - GRADING PLAN
SCALE: 1" = 50'

RONALD M. FUKUMOTO ENGINEERING INC.
CIVIL ENGINEERING & SURVEYING CONSULTANTS

RFE
840 ALUA STREET, SUITE 202
WAILUKU, MAUI, HAWAII 96793-1442
PHONE (808) 242-8611

PREPARED FOR:
BOY SCOUTS OF AMERICA
MAUI COUNTY COUNCIL, LTD.
200 LIHOLIHO STREET
WAILUKU, HAWAII 96793

CAMP MALUHIA WATER TANK

KAHAKULOA, MAUI, HAWAII
TMK: 3-1-01:1

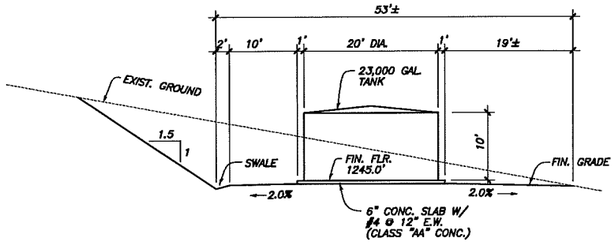
VICINITY MAP, SITE PLAN & TANK GRADING PLAN

RONALD M. FUKUMOTO
REGISTERED PROFESSIONAL ENGINEER
No. 4935-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

DESIGNED BY:	R.F.
DRAWN BY:	S.W.
CHECKED BY:	R.F.
DATE:	FEBRUARY 23, 1993
FILE NO:	SCOUT

SHEET
1 OF 2

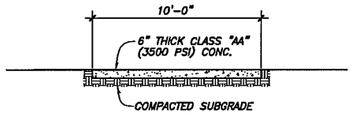


SECTION THRU TANK

SCALE: 1" = 10'

GRADING NOTES

1. OBTAIN A GRADING PERMIT FROM THE LAND USE AND CODES ADMINISTRATION BEFORE ANY GRADING WORK.
2. REMOVE ALL SILT AND DEBRIS DEPOSITED IN DRAINAGE FACILITIES, ROADWAYS, AND OTHER AREAS RESULTING FROM THIS WORK. BE RESPONSIBLE FOR ALL COSTS FOR ANY NECESSARY REMEDIAL ACTION.
3. KEEP PROJECT AREA AND SURROUNDING AREA FREE OF DUST NUISANCE IN ACCORDANCE WITH THE AIR POLLUTION CONTROL STANDARDS AND REGULATIONS OF THE STATE DEPARTMENT OF HEALTH.
4. PERFORM THIS WORK IN ACCORDANCE WITH APPLICABLE PROVISIONS OF THE WATER POLLUTION CONTROL AND WATER QUALITY STANDARDS CONTAINED IN THE PUBLIC HEALTH REGULATIONS OF THE STATE DEPARTMENT OF HEALTH.
5. GRASS ALL EXPOSED AREAS IMMEDIATELY AFTER GRADING WORK HAS BEEN COMPLETED.
6. QUANTITIES FOR GRADING PERMIT PURPOSES:
   FILL = 0
   CUT = 310 CU. YD. + 950 CU. YD. = 1260 CU.YD.
   AREA = 0.46 ACRE + 0.46 ACRE = 0.92 ACRE

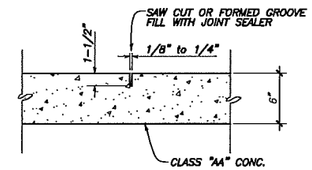


TYPICAL SECTION

SCALE: 1/4" = 1'-0"

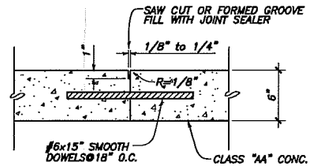
NOTES:

1. CONCRETE: CLASS "AA" (3500 PSI) CONFORMING WITH STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
2. STEEL: ASTM A615.
3. JOINT SEALER: PAVING ASPHALT, GRADE 85-100, AASHTO DESIGNATION M-20.
4. PROVIDE TRANSVERSE CONTRACTION JOINTS OR TRANSVERSE CONSTRUCTION JOINTS WITH DOWELS AT 10' O.C.



TRANSVERSE CONTRACTION JOINT

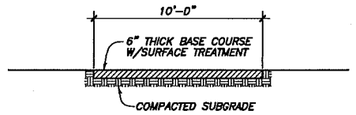
SCALE: 1-1/2" = 1'-0"



TRANSVERSE CONSTRUCTION JOINT WITH DOWELS

SCALE: 1-1/2" = 1'-0"

CONCRETE PAVEMENT DETAILS



TYPICAL SECTION

SCALE: 1/4" = 1'-0"

NOTES:

1. PRIME COAT (SS-1) SHALL BE APPLIED AT THE RATE OF APPROXIMATELY 0.35 GAL. PER SQ. YD. AFTER BASE COURSE HAS BEEN COMPACTED.
2. AFTER THE BITUMINOUS MATERIAL HAS BEEN ABSORBED, RS-1 SHALL BE APPLIED AT THE RATE OF 0.35 GAL. PER SQ. YD.
3. SIZE 8 ROCKS (CHIPS) SHALL THEN BE SPREAD IN A UNIFORM LAYER AT THE RATE OF APPROXIMATELY 20 LBS. PER SQ. YD. AND ROLLED.

OIL & GRAVEL PAVEMENT DETAIL

RONALD M. FUKUMOTO ENGINEERING INC.
CIVIL ENGINEERING & SURVEYING CONSULTANTS

RFE
840 ALUA STREET, SUITE 202
WAILUKU, MAUI, HAWAII 96793-1442
PHONE (808) 242-8611

PREPARED FOR:
BOY SCOUTS OF AMERICA
MAUI COUNTY COUNCIL, LTD.
200 LIHOLIHO STREET
WAILUKU, HAWAII 96793

CAMP MALUHIA WATER TANK

KAHAKULOA, MAUI, HAWAII

TMK: 3-1-01:1

DETAILS & NOTES

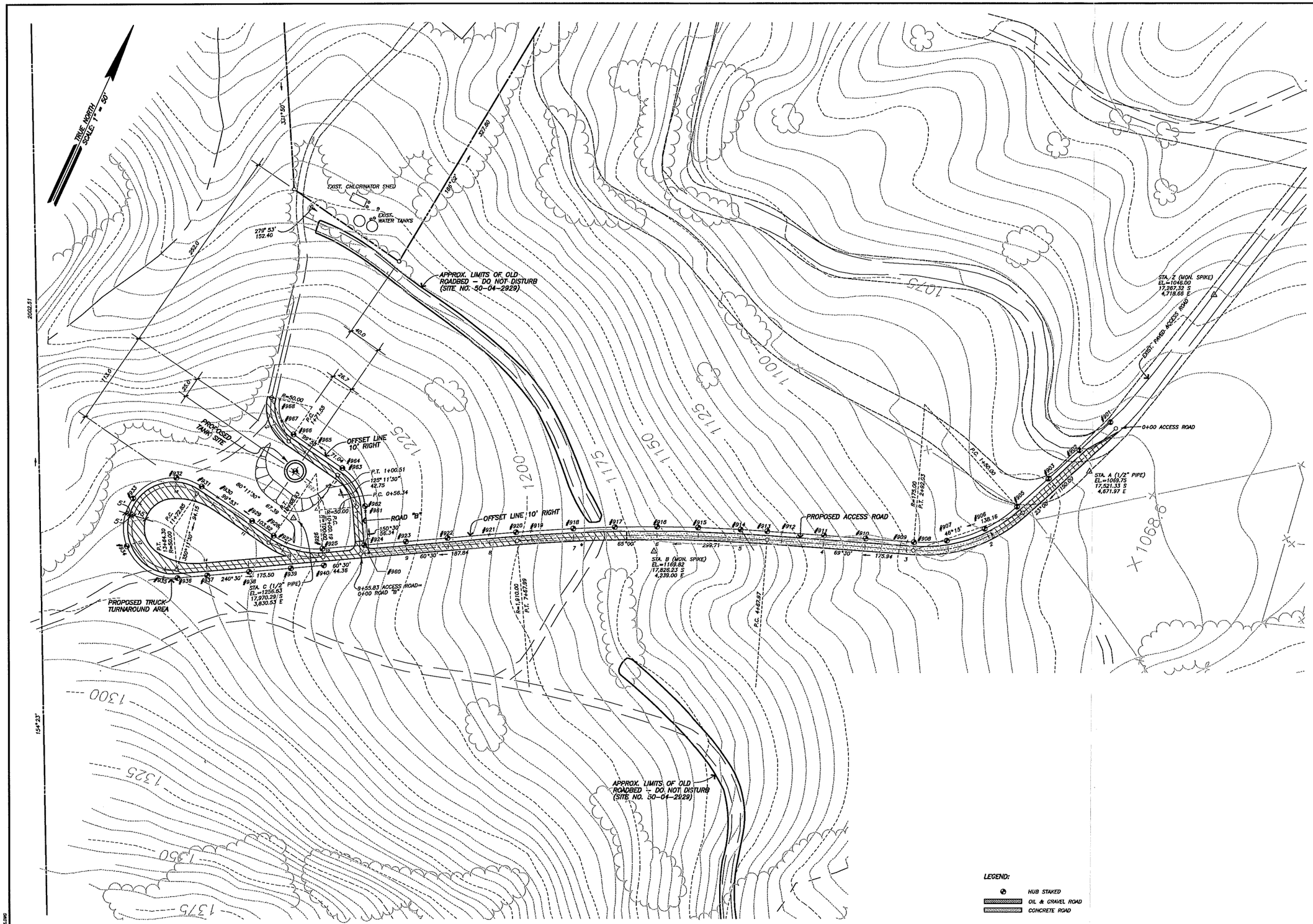
RONALD M. FUKUMOTO
REGISTERED PROFESSIONAL ENGINEER
No. 4935-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

DESIGNED BY:	R.F.
DRAWN BY:	S.B.
CHECKED BY:	R.F.
DATE:	FEBRUARY 23, 1993
FILE NO:	SCOUT

SHEET 2 OF 2

2/23/93 - WSCOUT4.DWG



DETAILED SITE PLAN

SCALE: 1" = 50'

RONALD M. FUKUMOTO ENGINEERING INC.
CIVIL ENGINEERING & SURVEYING CONSULTANTS

RFE
840 ALUA STREET, SUITE 202
WAILUKU, MAUI, HAWAII 96793-1442
PHONE (808) 242-8611

PREPARED FOR:
BOY SCOUTS OF AMERICA
MAUI COUNTY COUNCIL, LTD.
200 LIHOLIHO STREET
WAILUKU, HAWAII 96793

CAMP MALUHIA WATER TANK

KAHAKULOA, MAUI, HAWAII

TMK: 3-1-01:1

DETAILED SITE PLAN

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

DESIGNED BY:	R.F.
DRAWN BY:	S.W.
CHECKED BY:	R.F.
DATE:	JULY 20, 1993
FILE NO:	SCOUT

SHEET 3 OF 3

APPENDIX C

CAMP MALUHIA WATERLINE CONSTRUCTION PLANS

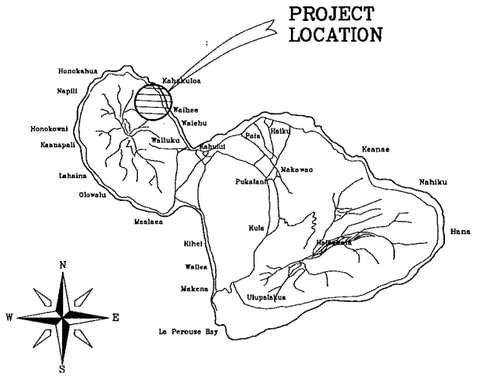
CAMP MALUHIA WATERLINE

MALUHIA, MAUI, HAWAII

TMK: (2) 3-1-01: 28, 29
(2) 3-1-06: 01
(2) 3-1-07: 12

PREPARED FOR: BOY SCOUTS OF AMERICA
200 LIHOLIHO STREET
WAILUKU, HAWAII 96793

PREPARED BY: C. TAKUMI ENGINEERING, INC.
18 CENTRAL AVE.
WAILUKU, HAWAII 96793



ISLAND OF MAUI

VICINITY MAP

INDEX TO DRAWINGS:

SHEET NO.	DESCRIPTION
T-1	TITLE SHEET
C-1	CONSTRUCTION NOTES
C-2	GENERAL SITE PLAN
C-3	PIPING DETAILS
C-4	PUMP ENCLOSURE DETAILS
E-1	ELECTRICAL SITE PLAN
E-2	ELECTRICAL DETAILS

APPROVALS:

DIRECTOR, DATE
DEPARTMENT OF PUBLIC WORKS & WASTE MANAGEMENT
COUNTY OF MAUI (FOR WORK WITHIN THE COUNTY
RIGHT-OF-WAY ONLY)

DEPARTMENT OF PUBLIC WORKS CONSTRUCTION NOTES

1. THE CONTRACTOR SHALL OBTAIN A PERMIT TO PERFORM WORK ON COUNTY HIGHWAYS FROM THE DIVISION OF LAND USE & CODES ADMINISTRATION TWO WEEKS PRIOR TO THE COMMENCEMENT OF WORK.
2. ALL CONSTRUCTION WORK SHALL STRICTLY CONFORM TO THE APPLICABLE SECTIONS OF THE 1994 HAWAII STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND PUBLIC WORKS CONSTRUCTION, AND THE SEPTEMBER 1984 "STANDARD DETAILS" FOR PUBLIC WORKS CONSTRUCTION OF THE DEPARTMENT OF PUBLIC WORKS.
3. IF EXISTING UTILITIES, WHETHER OR NOT SHOWN ON PLANS, ARE DAMAGED DURING CONSTRUCTION, THE CONTRACTOR SHALL AT HIS OWN EXPENSE BE REQUIRED TO REPAIR SUCH UTILITIES.
4. CONTRACTOR SHALL PROVIDE, INSTALL AND MAINTAIN ALL NECESSARY SIGNS, LIGHTS, FLARES, BARRICADES, AND OTHER PROTECTIVE DEVICES FOR THE PROTECTION, SAFETY AND CONVENIENCE OF THE PUBLIC, ACCORDING TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICE FOR STREETS AND HIGHWAYS", 1988, AND TO THE RULES AND REGULATIONS GOVERNING THE USE OF TRAFFIC CONTROL DEVICES AT WORKSITES AND/OR ADJACENT TO PUBLIC STREETS AND HIGHWAYS ADOPTED BY THE HIGHWAY SAFETY COORDINATOR AND THE U.S. FEDERAL HIGHWAY ADMINISTRATION "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR HIGHWAY CONSTRUCTION AND MAINTENANCE OPERATIONS", DATED 1980.
5. THE DIRECTOR OF PUBLIC WORKS AND/OR THE DIRECTOR OF THE DEPARTMENT OF WATER SUPPLY HAS THE RIGHT TO STOP CONSTRUCTION SHOULD ANY WORK BE FOUND CONTRARY TO THE APPROVED CONSTRUCTION PLAN OR DETRIMENTAL TO THE PUBLIC'S INTEREST.
6. THE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE LAND USE & CODES ADMINISTRATION FIVE (5) DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
7. THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, KEEP THE PROJECT AREA AND SURROUNDING AREA FREE FROM DUST NUISANCE. THE WORK SHALL BE IN CONFORMANCE WITH AIR POLLUTION CONTROL STANDARDS AND REGULATIONS OF THE STATE DEPARTMENT OF HEALTH AND COUNTY GRADING ORDINANCE.
8. THE CONTRACTOR SHALL REMOVE ALL SILT AND DEBRIS RESULTING FROM HIS WORK AND DEPOSITED IN DRAINAGE FACILITIES, ROADWAYS AND OTHER AREAS. THE COST INCURRED FOR ANY NECESSARY REMEDIAL ACTION ORDERED BY THE DIRECTOR OF PUBLIC WORKS SHALL BE PAID BY THE CONTRACTOR.
9. CONSTRUCTION DEBRIS AND WASTES SHALL BE DEPOSITED AT AN APPROPRIATE WORK SITE. THE CONTRACTOR SHALL INFORM THE DIRECTOR OF PUBLIC WORKS OF THE LOCATION OF THE DISPOSAL SITES. THE DISPOSAL SITE MUST FULFILL THE REQUIREMENTS OF THE GRADING ORDINANCE.
10. THE CONTRACTOR SHALL SUBMIT A MICROFILM AND SIX (6) COPIES OF THE "AS-BUILT" DRAWING PRIOR TO THE FINAL APPROVAL OF THE IMPROVEMENTS.
11. IF THE CLEARANCE BETWEEN A WASTEWATER LINE AND A NEW OR EXISTING WATERLINE IS EIGHTEEN INCHES (18") OR LESS, THE WASTEWATER LINE SHALL BE CONCRETE-JACKETED IN ACCORDANCE WITH THE "STANDARD DETAILS" OF PUBLIC WORKS CONSTRUCTION DATED SEPTEMBER 1984.
12. SHOULD HISTORIC SITES SUCH AS WALLS, PLATFORMS, PAVEMENTS, OR MOUNDS, OR REMAINS SUCH AS ARTIFACTS, BURIALS, CONCENTRATION OF SHELL OR CHARCOAL BE ENCOUNTERED DURING CONSTRUCTION ACTIVITIES, WORK SHALL CEASE IMMEDIATELY IN THE IMMEDIATE VICINITY OF THE FIND AND THE FIND SHALL BE PROTECTED FROM FURTHER DAMAGE. THE CONTRACTOR AND/OR LANDOWNER SHALL IMMEDIATELY CONTACT THE STATE HISTORIC PRESERVATION DIVISION (808-692-8023), WHICH WILL ASSESS THE SIGNIFICANCE OF THE FIND AND RECOMMEND AN APPROPRIATE MITIGATION MEASURE, IF NECESSARY.
13. PURSUANT OF MAUI COUNTY CODE SECTION 3.44.015(C), THE COUNTY OF MAUI IS NOT RESPONSIBLE FOR ANY PARK, ROADWAY, EASEMENT (INCLUDING BUT NOT LIMITED TO DRAINAGE, SEWER, ACCESS, RECLAIMED WATER, OR AVIATION EASEMENT), OR ANY OTHER INTEREST IN REAL PROPERTY SHOWN ON THIS MAP OR SHOWN ON THESE PLANS, UNLESS THE MAUI COUNTY COUNCIL HAS ACCEPTED ITS DEDICATION BY A RESOLUTION APPROVED BY A MAJORITY OF COUNCIL'S MEMBERS AT A REGULAR OR SPECIAL MEETING OF THE MAUI COUNTY COUNCIL.

COMPACTION REQUIREMENTS

1. TESTING OF MATERIALS SHALL BE CONDUCTED BY AN APPROVED INDEPENDENT TESTING AGENCY IN ACCORDANCE WITH ASTM STANDARD METHOOS OR AS SPECIFIED BY THE DEPARTMENT OF PUBLIC WORKS, ENGINEERING DIVISION, AS FOLLOWS:
   - A. EMBANKMENT/SELECT BORROW AND SUBGRADE MATERIALS: ONE (1) COMPACTION TEST PER 600 SQUARE YARDS PER LIFT;
   - B. AGGREGATE SUBBASE COURSE: ONE (1) COMPACTION TEST PER 400 SQUARE YARDS PER LIFT; ONE (1) GRADATION AND SAND EQUIVALENT TEST PER PROJECT;
   - C. AGGREGATE BASE COURSE: ONE (1) COMPACTION TEST PER 300 SQUARE YARDS PER LIFT; ONE (1) GRADATION AND SAND EQUIVALENT TEST PER PROJECT;
   - D. ASPHALT CONCRETE PAVEMENT OR ASPHALT TREATED BASE COURSE: THREE (3) A.C. CORES FOR THICKNESS AND DENSITY TESTS PER PROJECT;
   - E. TRENCH BACKFILL MATERIAL: ONE (1) TEST FOR EACH 300 LINEAL FEET OF TRENCH PER LIFT OF MATERIAL.
2. CONTRACTOR SHALL SUBMIT ALL TESTING REPORTS INCLUDING RESULTS TO THE COUNTY'S INSPECTION AGENCY FOR REVIEW AND APPROVAL PRIOR TO COUNTY'S ACCEPTANCE OF WORK.
3. THE CONTRACTOR SHALL BE REQUIRED TO NOTIFY THE COUNTY OF ANY TESTING FAILURES AND CORRECT EACH FAILURE PRIOR TO PROCEEDING TO THE NEXT PHASE OF CONSTRUCTION. NONCOMPLIANCE WILL REQUIRE REMOVAL OF ALL SUBSEQUENT WORK TO CORRECT THE AREA OF FAILURE. ALL COSTS OF TESTING, REMOVAL, AND RECONSTRUCTION, SHALL BE BORNE BY THE CONTRACTOR.

WATER SYSTEM NOTES

1. WATER SERVICE LATERAL CONNECTION:
   - A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING ALL MATERIAL, EQUIPMENT AND LABOR FOR RECONNECTING CONSUMER'S PIPE TO NEW SERVICE LATERAL AND COMPLETE INSTALLATION OF SERVICE LATERAL, TO THE SATISFACTION OF THE BSA REPRESENTATIVE.
   - B. THE CONTRACTOR SHALL COORDINATE WATER METER INSTALLATION WITH THE BSA REPRESENTATIVE.
   - C. AUTHORIZED BSA REPRESENTATIVE SHALL MAKE THE WATER METER RELOCATION FROM EXISTING SERVICE LATERAL TO NEW SERVICE LATERAL.
   - D. CONNECTION TO CONSUMER'S PIPE SHALL BE MADE USING SIZE OF COPPER PIPE AND FITTINGS AS SPECIFIED ON PLANS. IF CONSUMER'S PIPE IS COPPER OR PVC, USE BRONZE PACK JOINT COUPLING. IF CONSUMER'S PIPE IS ANY METAL, USE APPROPRIATE DIELECTRIC COUPLING.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING WATER SERVICE TO CONSUMERS AT ALL TIMES. IF WATER SERVICE DISRUPTION IS NECESSARY, THE CONTRACTOR SHALL COORDINATE ALL DISRUPTIONS OF SERVICE WITH THE CONSUMER.
3. THE CONTRACTOR SHALL RESTORE ALL EXISTING IMPROVEMENTS DISTURBED OR DAMAGED DURING CONSTRUCTION TO ITS ORIGINAL CONDITION AND TO THE SATISFACTION OF THE BSA.
4. THE CONTRACTOR SHALL RESTORE ALL ROAD IMPROVEMENTS, DISTURBED OR DAMAGED DURING CONSTRUCTION TO THE SATISFACTION OF THE BSA AND DEPARTMENT OF PUBLIC WORKS. ROAD IMPROVEMENTS INCLUDE, BUT ARE NOT LIMITED TO PAVEMENT, PAVEMENT MARKERS AND STRIPING, AND SPEED BUMPS.
5. THE CONTRACTOR SHALL FURNISH TEMPORARY CLEANOUTS AS NEEDED TO TEST, FLUSH AND CHLORINATE THE NEW WATERLINES. THE COST SHALL BE CONSIDERED INCIDENTAL TO THE WORK.
6. THE CONTRACTOR SHALL SUBMIT 2 SETS OF RECORD DRAWINGS VIA A CONSULTANT PRIOR TO ACCEPTANCE OF THE WATER SYSTEM.
7. THE EXACT DEPTH AND LOCATION OF EXISTING WATERLINES, SERVICE LATERALS AND OTHER UTILITIES ARE NOT KNOWN. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE SAME PRIOR TO TRENCHING FOR THE NEW WATERLINE. THE COST OF LOWERING, RELOCATING OR ADJUSTING EXISTING WATERLINES, SERVICE LATERALS AND OTHER UTILITIES SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE NEW WATERLINE, UNLESS NOTED OTHERWISE, AND WILL NOT BE PAID FOR SEPARATELY.

CHLORINATION OF WATER SYSTEMS:

1. LIQUID CHLORINE OR CALCIUM HYPOCHLORITE, CONFORMING TO AWWA STANDARDS SHALL BE USED FOR THE CHLORINATION OF THE PROJECT.
2. PRIOR TO CHLORINATION, THE PROJECT SHALL BE THOROUGHLY FLUSHED.
3. THE INTERIOR SURFACES OF THE PROJECT SHALL BE EXPOSED TO THE CHLORINATING SOLUTION FOR A MINIMUM OF 24 HOURS AND THE CHLORINE RESIDUAL SHALL NOT BE LESS THAN 10 PPM AFTER SUCH TIME.
4. SHOULD CALCIUM HYPOCHLORITE BE USED, NO SOLID AND/OR UNDISSOLVED PORTION OF THE COMPOUND SHALL BE INTRODUCED INTO ANY SECTION OF THE PROJECT TO BE CHLORINATED.
5. AT THE END OF THE 24-HOUR DISINFECTION PERIOD, REPRESENTATIVE SAMPLES SHALL BE TAKEN AND ANALYZED TO ASSURE A CHLORINE RESIDUAL OF AT LEAST 10 PPM.
6. SHOULD THE RESULTS INDICATE ADEQUATE CHLORINATION, THE PROJECT SHALL BE THOROUGHLY FLUSHED AND FILLED WITH WATER FROM THE EXISTING SYSTEM AND AGAIN TESTED FOR CHLORINE RESIDUAL. THE FLUSHING SHALL BE CONSIDERED ADEQUATE IF THE TEST RESULTS INDICATE THAT THE WATER IN THE PROJECT HAS A COMPARABLE CHLORINE RESIDUAL AS THE WATER IN THE EXISTING SYSTEM.
7. FOLLOWING THE ACCEPTABLE FLUSHING OF THE PROJECT, TWO CONSECUTIVE SETS OF ACCEPTABLE SAMPLES, TAKEN AT LEAST 24 HOURS APART, FROM REPRESENTATIVE POINTS IN THE PROJECT SHALL BE TAKEN AND SUBJECTED TO MICROBIOLOGICAL TESTS. AT LEAST ONE SET OF SAMPLES SHALL BE COLLECTED FROM EVERY 1,200 FEET OF THE NEW WATER MAIN, PLUS ONE FROM THE END OF THE LINE AND AT LEAST ONE SET FROM EACH BRANCH. POSITIVE RESULTS WILL NOT BE ACCEPTABLE ANO THE PROCESS WILL BE REPEATED.
8. ANALYSIS FOR RESIDUAL CHLORINE SHALL BE MADE IN ACCORDANCE WITH "STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER," AMERICAN PUBLIC HEALTH ASSOCIATION, 18TH EDITION.
9. MICROBIOLOGICAL TESTS SHALL BE MADE IN ACCORDANCE WITH "STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER," AMERICAN PUBLIC HEALTH ASSOCIATION, 18TH EDITION.
10. ALL MEASUREMENTS FOR CHLORINE RESIDUAL AND MICROBIOLOGICAL TESTS SHALL BE PERFORMED BY A LABORATORY APPROVED BY THE DIRECTOR.
11. THE DEVELOPER/CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH ALL OF THE FOREGOING.

EROSION CONTROL

THE FOLLOWING MEASURES SHALL BE TAKEN TO CONTROL EROSION DURING THE SITE DEVELOPMENT PERIOD:

1. MINIMIZE TIME OF CONSTRUCTION.
2. RETAIN EXISTING GROUND COVER UNTIL LATEST DATE TO COMPLETE CONSTRUCTION.
3. EARLY CONSTRUCTION OF DRAINAGE CONTROL FEATURES.
4. USE TEMPORARY AREA SPRINKLERS IN NON-ACTIVE CONSTRUCTION AREAS WHEN GROUND COVER IS REMOVED.
5. STATION WATER TRUCKS ON SITE DURING CONSTRUCTION PERIOD TO PROVIDE FOR IMMEDIATE SPRINKLING, AS NEEDED, IN ACTIVE CONSTRUCTION ZONES (WEEKENDS AND HOLIDAYS INCLUDED).
6. USE TEMPORARY BERMS AND CUT-OFF DITCHES, WHERE NEEDED, FOR CONTROL OF EROSION.
7. GRADING AREAS SHALL BE THOROUGHLY WATERED AFTER CONSTRUCTION ACTIVITY HAS CEASED FOR THE DAY AND ON WEEKENDS.
8. ALL CUT AND FILL SLOPES SHALL BE SODDED OR PLANTED IMMEDIATELY AFTER GRADING WORK HAS BEEN COMPLETED.

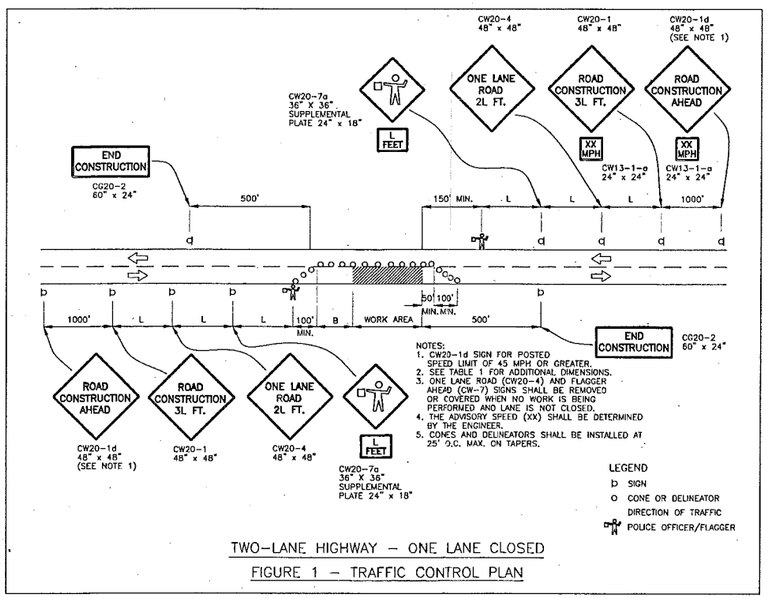
GENERAL NOTES FOR TRAFFIC CONTROL PLAN

1. THE PERMITTEE SHALL MAKE MINOR ADJUSTMENTS AT INTERSECTIONS, DRIVEWAYS, BRIDGES, STRUCTURES, ETC., TO FIT FIELD CONDITIONS.
2. CONES OR DELINEATORS SHALL BE EXTENDED TO A POINT WHERE THEY ARE VISIBLE TO APPROACHING TRAFFIC.
3. TRAFFIC CONTROL DEVICES SHALL BE INSTALLED SUCH THAT THE SIGN OR DEVICE FARTHEST FROM THE WORK AREA SHALL BE PLACED FIRST. THE OTHERS SHALL THEN BE PLACED PROGRESSIVELY TOWARD THE WORK AREA.
4. REGULATORY AND WARNING SIGNS WITHIN THE CONSTRUCTION ZONE THAT ARE IN CONFLICT WITH THE TRAFFIC CONTROL PLANS SHALL BE REMOVED OR COVERED. ALL SIGNS SHALL BE RESTORED UPON COMPLETION OF THE WORK.
5. FLAGGERS AND/OR POLICE OFFICERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES.
6. WHEN REQUIRED BY THE ISSUING OFFICE, THE PERMITTEE SHALL INSTALL A FLASHING ARROW SIGNAL AS SHOWN ON THE TRAFFIC CONTROL PLANS.
7. SIGN SPACINGS (L), TAPER LENGTHS (T) AND SPACINGS OF CONES OR DELINEATORS SHALL BE AS SHOWN IN TABLE 1, UNLESS OTHERWISE NOTED ON THE TRAFFIC CONTROL PLANS.
8. ALL TRAFFIC LANES SHALL BE A MINIMUM OF 10 FEET WIDE.
9. ALL CONSTRUCTION WARNING SIGNS SHALL BE PROMPTLY REMOVED OR COVERED WHENEVER THE MESSAGE IS NOT APPLICABLE OR NOT IN USE.
10. THE BACKS OF ALL SIGNS USED FOR TRAFFIC CONTROL SHALL BE APPROPRIATELY COVERED TO PRECLUDE THE DISPLAY OF INAPPLICABLE SIGN MESSAGES (I.E., WHEN SIGNS HAVE MESSAGES ON BOTH FACES).
11. AT THE END OF EACH DAY'S WORK OR AS SOON AS THE WORK IS COMPLETED, THE PERMITTEE SHALL REMOVE ALL TRAFFIC CONTROL DEVICES NO LONGER NEEDED TO PERMIT FREE AND SAFE PASSAGE OF PUBLIC TRAFFIC. REMOVAL SHALL BE IN THE REVERSE ORDER OF INSTALLATION.
12. REPLACE PERMANENT PAVEMENT MARKINGS AND TRAFFIC SIGNS UPON COMPLETION OF EACH PHASE OF WORK.

TABLE I FOR TRAFFIC CONTROL PLAN

POSTED SPEED LIMIT ① (MPH)	SIGN SPACING (L) (FEET)	TAPER LENGTH (T) (FEET) W=12' OR LESS ②	TAPER LENGTH (T) (FEET) W=GREATER THAN 12' ②	LONGITUDINAL BUFFER SPACE (B) (FEET)	SPACING OF CONES OR DELINEATORS (FEET) ③ TAPER	TANGENT	WORK AREA
20	250	200	W x 17	35	20	20	10
25	250	200	W x 17	55	25	25	10
30	250	250	W x 20	85	30	30	10
35	250	250	W x 20	120	35	35	10
40	500	350	W x 30	170	40	40	10
45	500	550	W x 45	220	45	45	10
50	1000	600	W x 50	280	50	50	10
55	1000	700	W x 55	335	55	55	10

NOTES:
① USE ADVISORY SPEED WHEN POSTED
② W = WIDTH OF LANE OR OFFSET
③ NOT APPLICABLE FOR TWO-LANE HIGHWAYS



TWO-LANE HIGHWAY – ONE LANE CLOSED

FIGURE 1 – TRAFFIC CONTROL PLAN

REVISIONS:

DATE:

WATER SERVICE FOR CAMP MALUHIA
MALUHIA, MAUI, HAWAII

BOY SCOUTS OF AMERICA

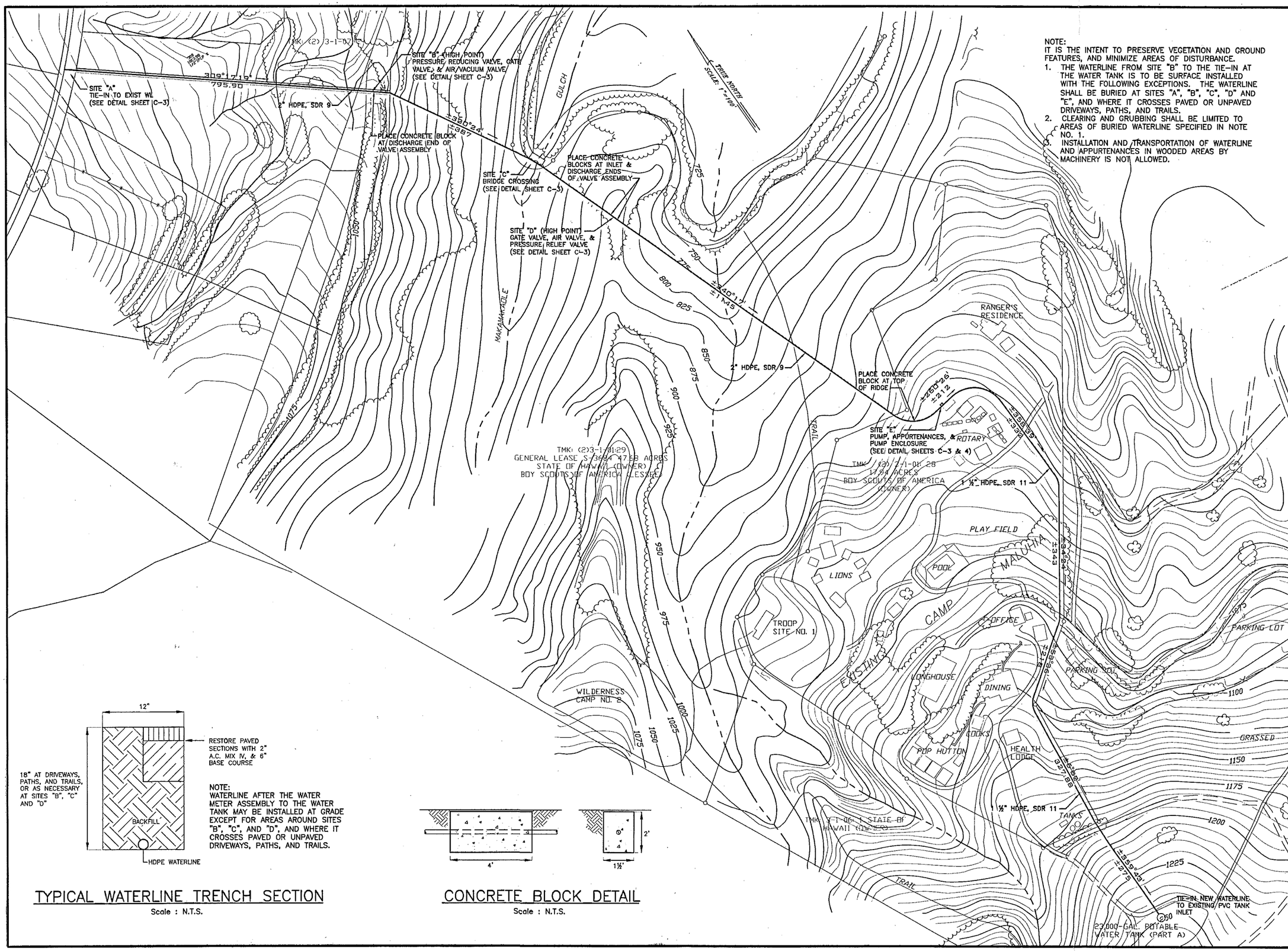
CONSTRUCTION NOTES

C. TAKUMI ENGINEERING, INC.
18 CENTRAL AVENUE
WAILUKU, MAUI, HAWAII

LICENSED PROFESSIONAL ENGINEER No. 3455 C. TAKUMI HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

DATE:	07/02/01
SCALE:	As Noted
FILE NO.:	055-001
DESIGN BY:	C.F.
DRAWN BY:	C.F.
CHECKED BY:	C.T.
SHEET	C-1
OF	17 SHEETS



NOTE:
IT IS THE INTENT TO PRESERVE VEGETATION AND GROUND FEATURES, AND MINIMIZE AREAS OF DISTURBANCE.

1. THE WATERLINE FROM SITE "B" TO THE TIE-IN AT THE WATER TANK IS TO BE SURFACE INSTALLED WITH THE FOLLOWING EXCEPTIONS. THE WATERLINE SHALL BE BURIED AT SITES "A", "B", "C", "D" AND "E", AND WHERE IT CROSSES PAVED OR UNPAVED DRIVEWAYS, PATHS, AND TRAILS.
2. CLEARING AND GRUBBING SHALL BE LIMITED TO AREAS OF BURIED WATERLINE SPECIFIED IN NOTE NO. 1.
3. INSTALLATION AND TRANSPORTATION OF WATERLINE AND APPURTENANCES IN WOODED AREAS BY MACHINERY IS NOT ALLOWED.

NOTE:
WATERLINE AFTER THE WATER METER ASSEMBLY TO THE WATER TANK MAY BE INSTALLED AT GRADE EXCEPT FOR AREAS AROUND SITES "B", "C", AND "D", AND WHERE IT CROSSES PAVED OR UNPAVED DRIVEWAYS, PATHS, AND TRAILS.

TYPICAL WATERLINE TRENCH SECTION

Scale : N.T.S.

CONCRETE BLOCK DETAIL

Scale : N.T.S.

REVISIONS:

DATE:

WATER SERVICE FOR CAMP MALUHIA
MALUHIA, MAUI, HAWAII

BOY SCOUTS OF AMERICA

GENERAL SITE PLAN

C. TAKUMI ENGINEERING, INC.
18 CENTRAL AVENUE
WAILUKU, MAUI, HAWAII

CARL K. TAKUMI LICENSED PROFESSIONAL ENGINEER No. 3465 C HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

DATE:	07/02/01
SCALE:	1" = 100'
FILE NO.:	055-001
DESIGN BY:	C.F.
DRAWN BY:	C.F.
CHECKED BY:	C.T.
SHEET	C-2
OF	7 SHEETS

MAUI

SINGLE SERVICE LATERAL (TYPE A, 5/8" & 3/4" METERS)

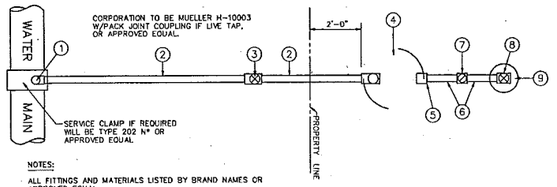
SCALE: N.T.S.

STANDARD DETAILS

81R

REVISION 1985 1989 1997

RECOMMENDED INSTALLATION FOR 5/8" x 3/4" & 3/4" x 3/4" METER TYPE A (SINGLE)



NOTES:

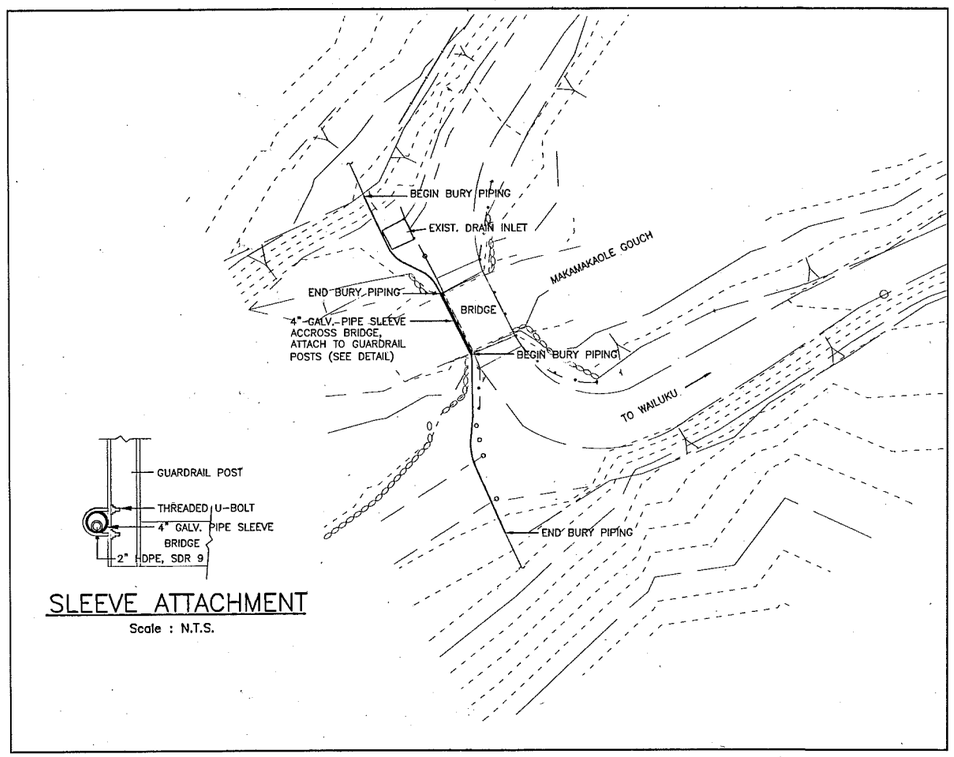
ALL FITTINGS AND MATERIALS LISTED BY BRAND NAMES OR APPROVED EQUAL.

*FORD METER BOX MANUFACTURING CO'S. NO.

TYPE	METER SIZE	① CORP. STOP	② SERVICE TUBING	③ BALL VALVE	④ C.I. METER BOX W/ READING LID	⑤ BUSHING	⑥ BRASS I.P.T. NIPPLE	⑦ BRASS CHECK VALVE	⑧ BRONZE BALL VALVE	⑨ PLASTIC VALVE BOX
A	5/8" x 3/4"	3/4" x 1" AWWA THREAD x P.J. (F-1000) *	1" COPPER	1" x 1" P.J. x P.J. (B-44-4444) *	1" x 3/4" P.J. INLET W/ FEMALE I.P.T. OUTLET YMB141-243-TP *	NOT REQUIRED	3/4" x 8"	3/4" MAMMOND (904) OR STOCKHAM (B-319)	3/4" FEMALE I.P.T. (B11-333) (H8-343) *	10" AMETEK (10-181-014) W/ GREEN COVER (10-181-015)
B	3/4" x 3/4"	3/4" x 1" AWWA THREAD x P.J. (F-1000) *	1" COPPER	1" x 1" P.J. x P.J. (B-44-4444) *	1" x 3/4" P.J. INLET W/ FEMALE I.P.T. OUTLET YMB141-344-TP *	1" x 3/4"	3/4" x 8"	3/4" MAMMOND (904) OR STOCKHAM (B-319)	3/4" FEMALE I.P.T. (B11-333) (H8-343) *	10" AMETEK (10-181-014) W/ GREEN COVER (10-181-015)

SITE "A" DETAIL

Scale : N.T.S.



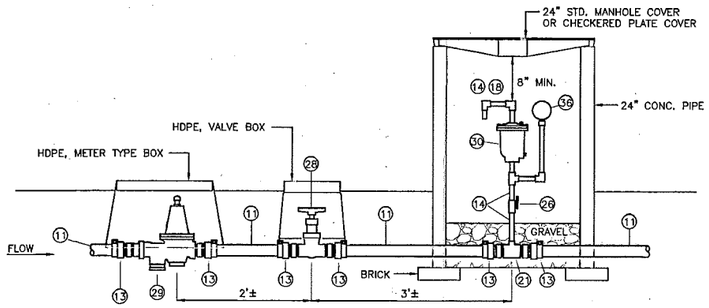
SLEEVE ATTACHMENT

Scale : N.T.S.

SITE "C" DETAIL

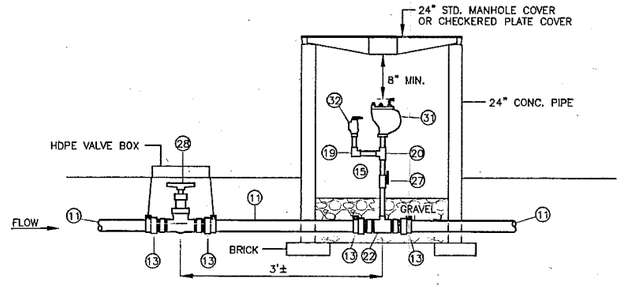
Scale : 1" = 20'

10 2" HDPE, SDR 11
11 2" HDPE, SDR 9
12 2" PACK JOINT & INSERT (HDPE, SDR 11)
13 2" PACK JOINT & INSERT (HDPE, SDR 9)
14 1/2" BRASS NIPPLE
15 3/4" BRASS NIPPLE
16 1 1/4" BRASS NIPPLE
17 2" BRASS NIPPLE
18 1/2" BRASS ELBOW
19 3/4" BRASS ELBOW
20 3/4" BRASS TEE
21 2" x 1/2" BRASS TEE
22 2" x 3/4" BRASS TEE
23 2" x 1 1/4" BRASS REDUCER
24 2" BRASS UNION
25 1 1/4" ANSI, 250 LB. COMPANION FLANGE
26 1/2" BALL VALVE
27 3/4" BALL VALVE
28 2" GATE VALVE
29 2" PRESSURE REDUCING VALVE, 110 PSI (IN), 30 PSI (OUT)
30 1/2" AIR/VACUUM VALVE
31 3/4" AIR VALVE
32 3/4" PRESSURE RELIEF VALVE, 150 PSI
33 2" CHECK VALVE, W/ NO-SLAM OPERATION
34 LOW PRESSURE SWITCH, ADJUSTABLE, 5 PSI
35 HIGH/LOW PRESSURE SWITCH, ADJUSTABLE, 60 PSI (LOW), 220 PSI (HIGH)
36 PRESSURE GAGE, 100 PSI



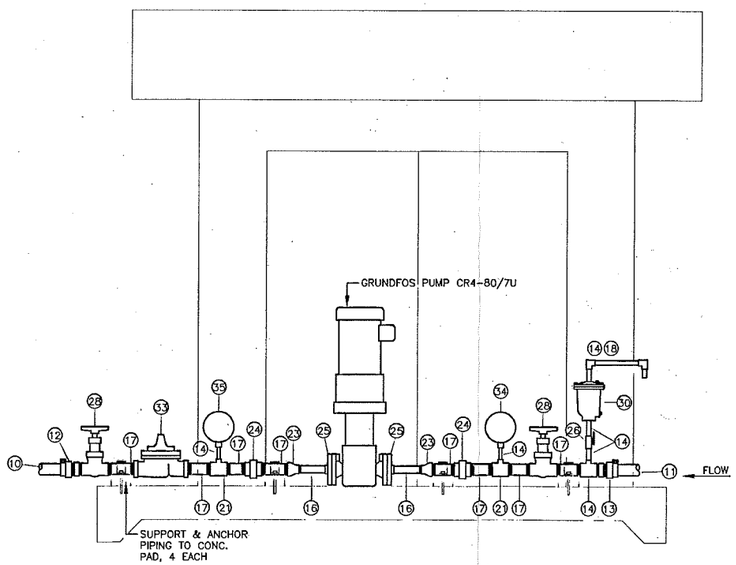
SITE "B" DETAIL

Scale : N.T.S.



SITE "D" DETAIL

Scale : N.T.S.



SITE "E" DETAIL

Scale : N.T.S.

REVISIONS:

DATE:

WATER SERVICE FOR CAMP MALUHIA

MALUHIA, MAUI, HAWAII

BOY SCOUTS OF AMERICA

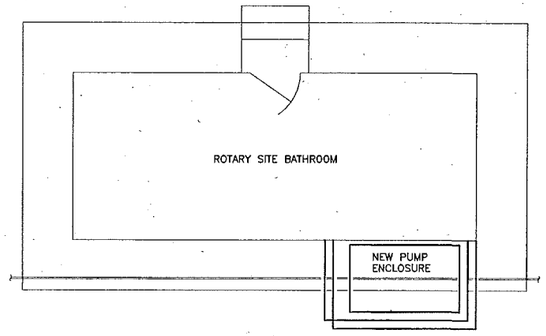
PIPING DETAILS

C. TAKUMI ENGINEERING, INC.
18 CENTRAL AVENUE
WAILUKU, MAUI, HAWAII

CARL TAKUMI LICENSED PROFESSIONAL ENGINEER No. 5465 HAWAII, U.S.A.

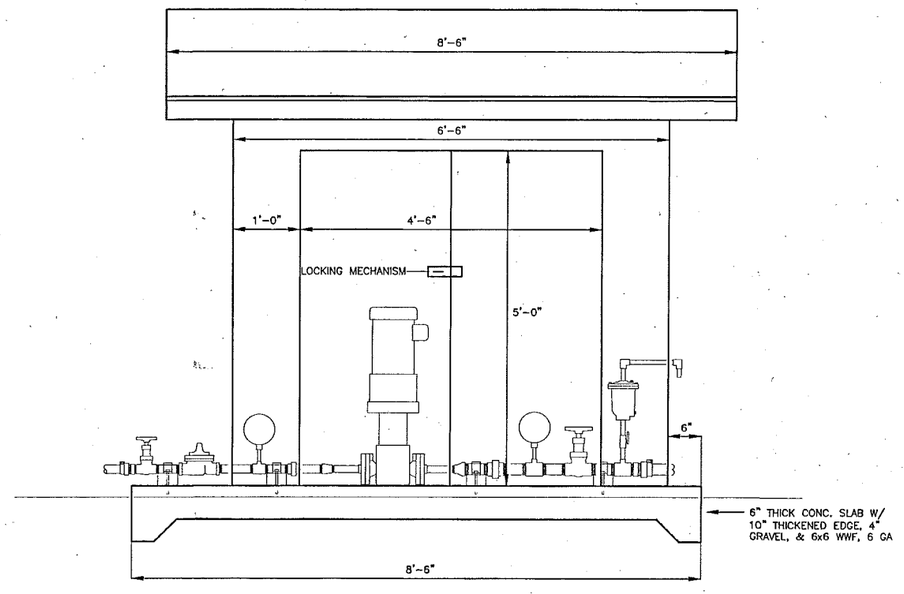
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION. 4.9.2007

DATE:	07/02/01
SCALE:	As Noted
FILE NO.:	055-001
DESIGN BY:	C.F.
DRAWN BY:	C.F.
CHECKED BY:	C.T.
SHEET	C-3
OF	7 SHEETS



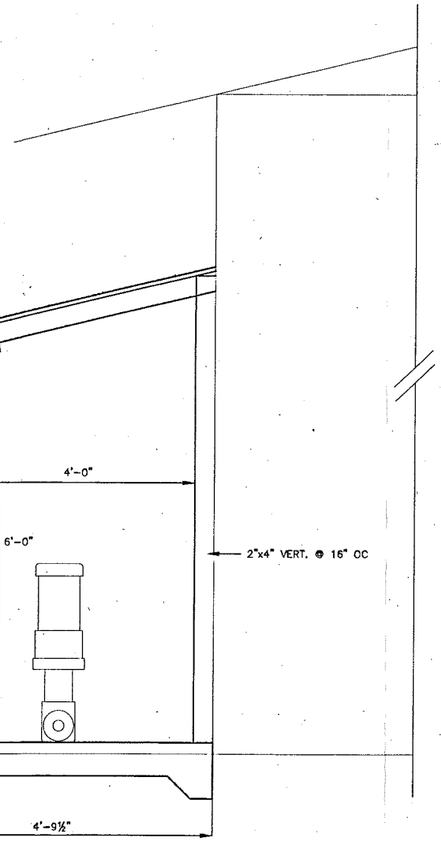
PUMP ENCLOSURE – PLAN VIEW

Scale : N.T.S.



PUMP ENCLOSURE – FRONT VIEW

Scale : 1" = 1'



PUMP ENCLOSURE – SIDE VIEW

Scale : 1" = 1'

REVISIONS:

DATE:

WATER SERVICE FOR CAMP MALUHIA

MALUHIA, MAUI, HAWAII

BOY SCOUTS OF AMERICA

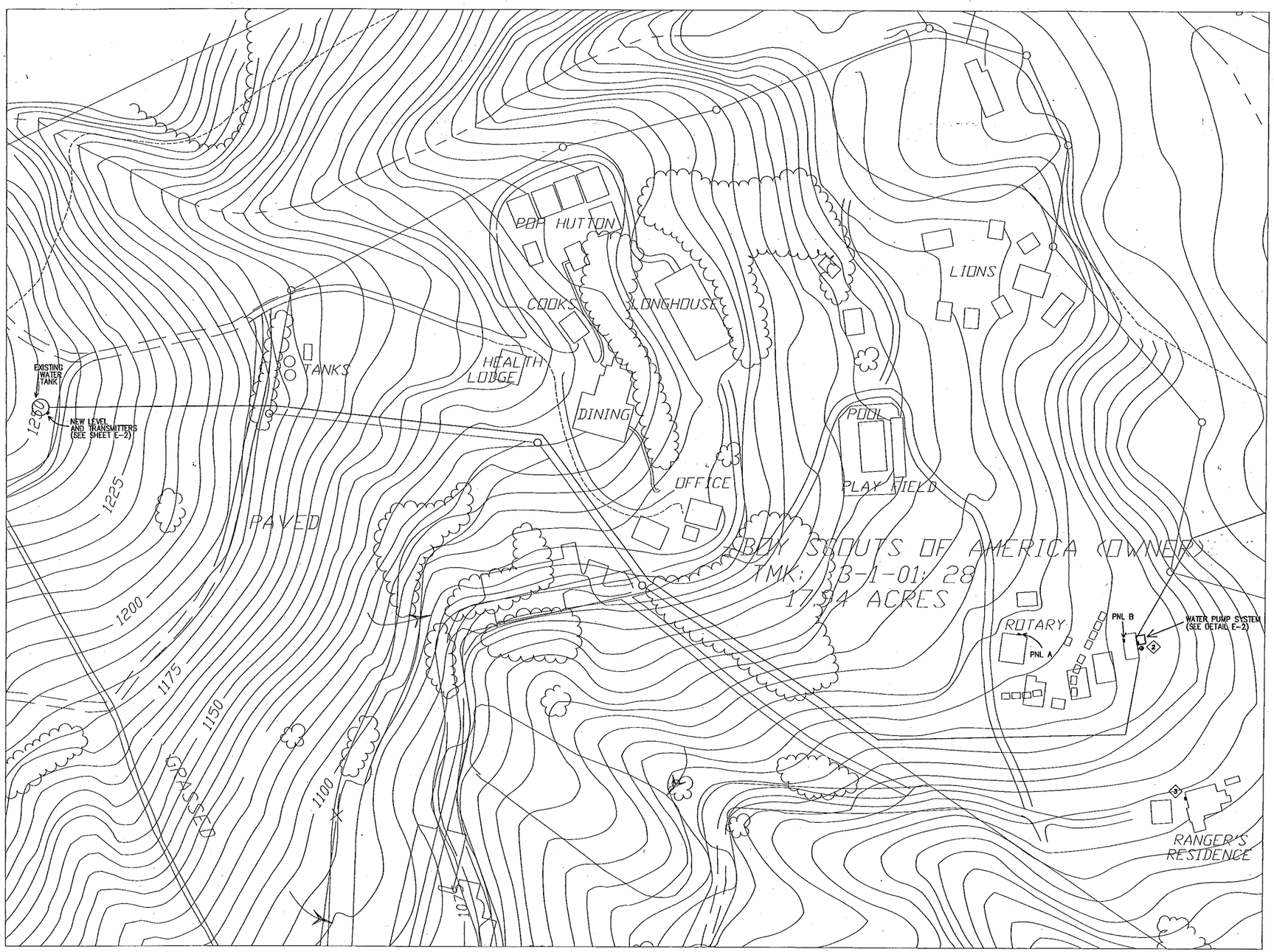
PUMP ENCLOSURE DETAILS

C. TAKUMI
ENGINEERING, INC.
18 CENTRAL AVENUE
WAILUKU, MAUI, HAWAII

CARL TAKUMI * LICENSED PROFESSIONAL ENGINEER No. 3465 C * HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

DATE:	07/02/01
SCALE:	As Noted
FILE NO.:	055-001
DESIGN BY:	C.F.
DRAWN BY:	C.F.
CHECKED BY:	C.T.
SHEET	C-4
OF	7 SHEETS



ELECTRICAL SITE PLAN

SCALE: 1" = 100'-0"

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SYMBOL LEGEND

- BRANCH CIRCUITS CONCEALED IN CEILING OR WALL, 2 NO. 12 WIRES UNLESS OTHERWISE NOTED. HASH MARKS INDICATE NUMBER OF WIRES WHEN MORE THAN TWO.
- BRANCH CIRCUITS AS ABOVE CONCEALED IN FLOOR OR GROUND
- BRANCH CIRCUITS AS ABOVE EXPOSED
- AUXILIARY CIRCUITS (T = TELEPHONE, S = SOUND, ETC.)
- ELECTRICAL EQUIPMENT
- DISTRIBUTION PANEL
- EXIT LIGHT AS ABOVE, WALL MOUNTED
- JUNCTION BOX INSTALLED IN WALL.
- DISCONNECT SWITCH, HP RATED.
- GROUND
- EMERGENCY EXIT SIGN, WALL MOUNTED
- (A) LIGHT FIXTURE INDICATOR, SEE LIGHT FIXTURE SCHEDULE
- CD — CONDUIT WITH PULL WIRE ONLY
- BC — BARE COPPER
- G/GRD — GROUND CONDUCTOR
- GFCI — DENOTES A GROUND FAULT CIRCUIT INTERRUPTER DEVICE
- +18" — INDICATES MOUNTING HEIGHT OF DEVICE ABOVE FINISHED FLOOR/GRADE
- WP — DENOTES WATERPROOF DEVICE

NOTE OF SYMBOLS
MOUNTING ELEVATIONS ARE AS NOTED ABOVE. ELEVATIONS PROVIDED ON PLANS TAKE PRECEDENCE.

PLAN NOTES

1. WP J-BOX AT TANK FOR FLOAT CONTROL CONNECTION (SEE DETAIL E-2)
2. J-BOX AT PUMPING STATION FOR CONNECTION TO PUMP CONTROL PANEL. (SEE DETAIL E-2)
3. TROUBLE ALARM (SEE DETAIL E-2) VERIFY MOUNTING LOCATION WITH OWNERS PRIOR TO INSTALLATION

GENERAL NOTES

1. COMPLY WITH THE LATEST APPLICABLE RULES, REGULATIONS, REQUIREMENTS, AND SPECIFICATIONS OF THE LOCAL LAWS AND ORDINANCES, STATE AND FEDERAL LAWS, NATIONAL ELECTRICAL CODE, COUNTY OF MAUI ELECTRICAL CODE, STATE FIRE MARSHAL, UNDERWRITER'S LABORATORY, NATIONAL ELECTRICAL SAFETY CODE, LIFE SAFETY CODE.
2. CONTRACTOR TO OBTAIN AND PAY THE ELECTRICAL PERMIT AS REQUIRED BY LOCAL ORDINANCES AND ARRANGE FOR PERIODIC INSPECTION BY LOCAL AUTHORITIES AS WORK PROGRESSES.
3. PROVIDE PROTECTION FOR MATERIAL AND EQUIPMENT FROM LOSS, DAMAGE, CORROSION, AND EFFECTS OF MOISTURE. REPAIR OR REPLACE DAMAGED ITEMS AT NO ADDITIONAL COST TO THE OWNER.
4. VISIT PROJECT SITE PRIOR TO BID SUBMITTAL TO ASCERTAIN CONDITIONS AND COST ALLOWANCES THAT AFFECT THE PROPOSED WORK.
5. CHECK THE APPROXIMATE LOCATIONS OF WIRING DEVICES AND ELECTRICAL EQUIPMENT FOR CONFLICTS WITH STRUCTURAL MEMBERS, OTHER SYSTEM COMPONENTS, AND FIXED EQUIPMENT. CONSULT ENGINEER IN EVENTS OF CONFLICTS AND MAKE NECESSARY CHANGES AT NO ADDITIONAL COST TO THE OWNER.
6. INSTALL MATERIALS AND EQUIPMENT IN A WORKMANLIKE MANNER AND IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS, UNLESS OTHERWISE SPECIFIED OR DIRECTED BY ENGINEER.
7. TEST SITE WITH APPROPRIATE EQUIPMENT TO VERIFY THAT RADIO EQUIPMENT WITH WORK AND TO DETERMINE EXACT MOUNTING LOCATION AND HEIGHT
8. MATERIALS AND WORKMANSHIP SUBJECT TO INSPECTION AT ANY TIME BY OWNER OR HIS REPRESENTATIVES. CORRECT ANY WORK OR MATERIALS NOT IN ACCORDANCE WITH DRAWINGS OR FOUND TO BE DEFICIENT OR DEFICIENT OR DEFECTIVE IN A MANNER SATISFACTORY TO OWNER AT NO ADDITIONAL COST.
9. PROVIDE ALL FIRST QUALITY, NEW MATERIALS, FREE FROM DEFECTS, SUITABLE FOR SPACE PROVIDED, AND APPROVED BY UL WHEREVER STANDARD HAVE BEEN PROVIDED BY THAT AGENCY.
10. PROVIDE STANDARD MATERIALS AND EQUIPMENT OF MANUFACTURERS REGULARLY ENGAGED IN THE PRODUCTION OF THESE PRODUCTS. PROVIDE PRODUCTS OF A SINGLE MANUFACTURER WHERE TWO OR MORE UNITS OF THE SAME CLASS ARE REQUIRED.
11. ALL WIRING TO BE TYPE THW COPPER, UNLESS NOTED OTHERWISE. #12 AWG MINIMUM. ALL WIRING SHALL BE IN CONDUIT, 1/2" MIN. NON-METALLIC SHEATHED CABLE MAY BE USED WHERE ALLOWED BY NEC.

EDM Inc.
Electrical Engineering Consultants

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HILTON H. UNEMORI — LICENSED PROFESSIONAL ENGINEER — No. 5578-E — HAWAII, U.S.A.

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Note: Contractor shall check and verify all dimensions at job before proceeding with work.

REVISIONS		
NO	DATE	DESCRIPTION
		INI

JOB NO. 21010
DATE: 3/01
DRAWN BY: RMB
DESIGNED BY: MPR
CHECKED BY: HHU

ELECTRIC PLANS FOR:
CAMP MALUHIA WATER SYSTEM
BOY SCOUTS OF AMERICA
T.M.K.: 3-1-01 : 28
MALUHIA, MAUI, HAWAII

SHEET NO.
E-1
OF SHEETS

EXISTING PANEL "B" (RESTROOM)

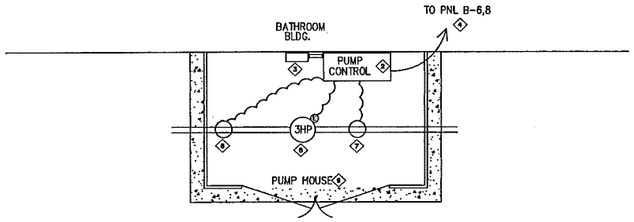
VOLTAGE: 120/240 PHASE: 1 WIRE: 3WSN CIRCUITS: 8

MOUNTING: SURFACE MAIN BRKR: 2P50 BREAKER: MAIN BUS: 100

CKT	DESCRIPTION	PHASE A	PHASE B	BRKR	WIRE	CKT	DESCRIPTION	PHASE A	PHASE B	BRKR	WIRE
1	MAIN	——		2P50	#10	2	LIGHTS	0.1		1P20	#12
3			——			4	RCPT		0.2	1P20	#12
5	WATER HEATER	2.2		2P30	#10	6	WATER PUMP	2.0		2P35	#8 **
7			2.2			8			2.0		
TOTALS		2.2	2.2			TOTALS		2.1	2.2		

TOTAL CONNECTED LOAD: 8.7 KVA
ESTIMATED DEMAND: 1.0
TOTAL EST. DEMAND LOAD: 8.7 KVA = 36.25 A @ 240V, 1 PHASE

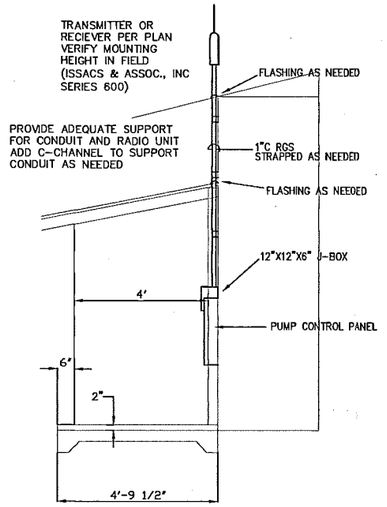
** DENOTES ADDED CIRCUIT BREAKER AND LOAD



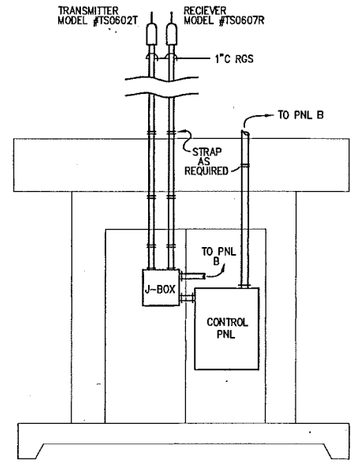
PUMP SYSTEM LAYOUT
SCALE: 1/2" = 1'-0"

PLAN NOTES

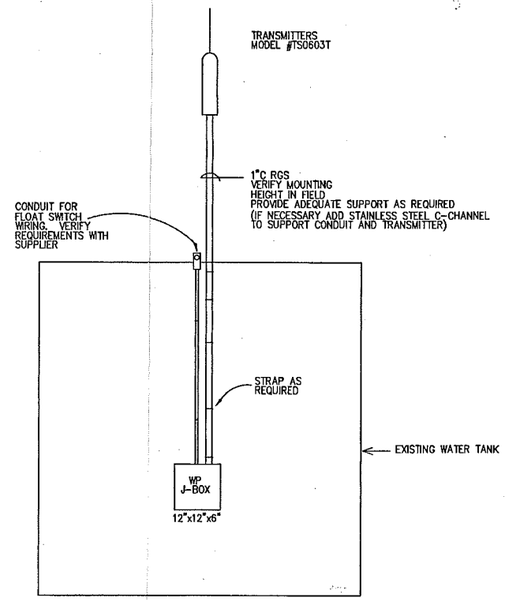
1. 3 HP WATER PUMP VERIFY LOCATION WITH MECH. PLANS
2. PUMP CONTROL PANEL W/ CIRCUIT BREAKER SUPPLIED BY OTHERS
3. WP J-BOX TRANSMITTER/RECIEVER WIRING SURFACE MOUNTED
4. HOMERUN TO PANEL B
5. HIGH/LOW PRESSURE WIRED TO CONTROL PANEL VERIFY REQUIREMENTS WITH VENDOR
6. LOW PRESSURE SWITCH WIRED TO CONTROL PANEL. VERIFY REQUIREMENTS WITH VENDOR
7. 3HP PUMP WIRED TO CONTROL PANEL 3/4"C, 2-#8 1-#10 GRD
8. PUMP HOUSE SEE CIVIL PLAN FOR PUMP HOUSE AND PIPE LAYOUT PLANS.



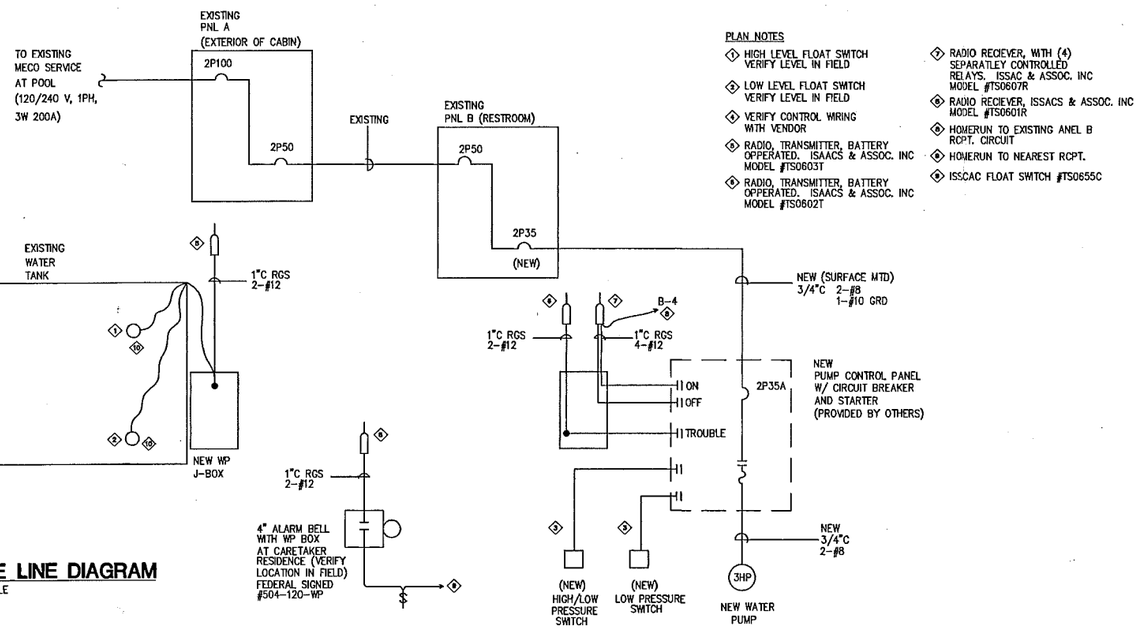
PUMP ENCLOSURE - SIDE VIEW
SCALE: 1/2" = 1'-0"



INTERIOR PUMP ENCLOSURE DETAIL
NOT TO SCALE



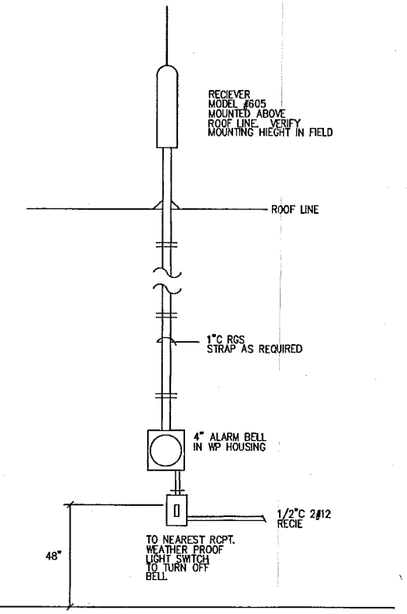
TANK DETAIL
NOT TO SCALE



PLAN NOTES

1. HIGH LEVEL FLOAT SWITCH VERIFY LEVEL IN FIELD
2. LOW LEVEL FLOAT SWITCH VERIFY LEVEL IN FIELD
3. VERIFY CONTROL WIRING WITH VENDOR
4. RADIO, TRANSMITTER, BATTERY OPPERATED. ISAACS & ASSOC. INC MODEL #TS0603T
5. RADIO, TRANSMITTER, BATTERY OPPERATED. ISAACS & ASSOC. INC MODEL #TS0602T
6. RADIO RECIEVER, WITH (4) SEPARATLEY CONTROLLED RELAYS. ISSAC & ASSOC. INC MODEL #TS0607R
7. RADIO RECIEVER, ISSACS & ASSOC. INC MODEL #TS0601R
8. HOMERUN TO EXISTING ANEL B RCPT. CIRCUIT
9. HOMERUN TO NEAREST RCPT.
10. ISSCAC FLOAT SWITCH #TS0655C

SINGLE LINE DIAGRAM
NOT TO SCALE



TROUBLE ALARM (AT CARETAKER RES)
NOT TO SCALE

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HAWAII, U.S.A.

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Note: Contractor shall check and verify all dimensions at job before proceeding with work.

REVISIONS

NO	DATE	DESCRIPTION	INI

JOB NO. 21010
DATE: 3/01
DRAWN BY: RMB
DESIGNED BY: MPR
CHECKED BY: HHU

ELECTRIC PLANS FOR:
CAMP MALUHIA WATER SYSTEM
BOY SCOUTS OF AMERICA
T.M.K: 3-1-01 : 28
MALUHIA, MAUI, HAWAII

SHEET NO.
E-2
OF SHEETS

APPENDIX E.

Preliminary Drainage Report

PRELIMINARY DRAINAGE REPORT

Camp Maluhia Dining Hall
Kahakuloa, Maui, Hawaii
Tax Map Key (2) 3-1-001:028

Contents Page

I. Purpose 1
II. Project Description 1
III. Drainage System 1
IV. References 3

List of Figures

Figure 1 – Drainage Area Map 4
Figure 2 – Preliminary Grading and Drainage Plan 5

Appendix

Drainage Computations
A. Flow Rate (Rational Method) A-1
B. Retention Volume (TR-55 Method) A-2
C. Drainage Sump Sizing A-3

Flood Hazard Assessment Report
A. Tax Map Key (2) 3-1-001:028 ..... B-1

Owner:

Boy Scouts of America
Maui County Council, Ltd.
200 Liholiho Street
Wailuku, Hawaii 96793

Date: February 4, 2013

Consultant:

Ronald M. Fukumoto Engineering, Inc.
1721 Wili Pa Loop, Suite 203
Wailuku, Hawaii 96793
Phone: (808) 242-8611
Fax: (808) 244-7510
E-Mail: office@rfemaui.com

I. PURPOSE

The purpose of this report is to present preliminary storm drainage design information for incorporation into an environmental assessment for the project.

II. PROJECT DESCRIPTION

A. General Location

The project is located at Camp Maluhia in Kakakuloa, Maui. The tax map designates the parcel as Tax Map Key (2) 3-1-001:028. The access road to Camp Maluhia is located approximately 100 feet West of Mendes Ranch and Trail Rides along Kahekili Highway.

B. Project Components

The project involves the development of a new dining hall at Camp Maluhia in Kahakuloa, Maui. The new dining hall consists of a 7,500-square foot main upper level, a 4,700-square foot lower level, and related site improvements. Site improvements include a paved access road, two van accessible parking stalls, retaining walls, accessible paths, a trash enclosure, and site utilities.

Site utilities include water, wastewater, drainage, and electrical systems. Water improvements include water service to the new building and relocation of existing water lines. Wastewater systems improvements include sewer connections to the new building, a grease interceptor, septic tanks, 4,000-square foot absorption field, and relocation of existing sewer lines. Drainage system improvements include grassed swales, grased berms, and gravel and grassed sumps. Electrical systems improvements include the relocation of an existing power pole and distribution lines and electrical service to the new building.

III. DRAINAGE SYSTEM

A. Topography

The project site is a developed camp site with various camp facilities and fair vegetation. The camp site is surrounded by undeveloped land. Generally, the site slopes down from South to North. Elevations in the graded area range from 1,110 feet to 1,050 feet above mean sea level. Slopes range from 6 to 50 percent.

B. Soil

According to the Soil Conservation Service, the on-site soil is Honolua silty clay, 15 to 25 percent slopes (HwD). The Honolua series consists of well-drained soils on the uplands on the island of Maui. The survey characterizes the soil as having medium runoff and moderate erosion hazard. This soil is generally used for pineapple, pasture, and water supply.

C. Flood and Tsunami Hazard

The flood insurance rate map of the area shows there are no flood hazard areas on the site. The flood insurance rate map designates the site as Zone X, an area subject to minimal flooding. (See Appendix B – Flood Hazard Assessment Report)

D. Existing Drainage Improvements

There are no existing drainage improvements within the project site. A ridge borders the southwesterly portion of the property that prevents off-site runoff from entering the site. On-site runoff sheet flows through the site from the southerly side of the site, across undeveloped land, and eventually enters a tributary of Makamakaole Gulch, located North of the project site. (See Figure 1 - Drainage Area Map, page 4.)

E. Proposed Drainage Improvements

The increase in the rate of runoff and volume of runoff will be mitigated by two drainage sumps. The drainage sumps will collect runoff and retain a portion of the collected runoff. Grassed berms will be used to control the outflow of runoff.

As shown in the computations, a detention volume of 1,220 cubic feet is required to reduce the peak outflow from 7.72 cubic feet per second to 5.24 cubic feet per second. Also as shown in the computations, a retention volume of 385 cubic feet is required to keep runoff volumes at pre-development levels.

Drainage improvements that involve transmission of storm flows will conform to the "Rules for the Design of Storm Drainage Facilities in the County of Maui." The rules will be applied to the sizing of the drainage sumps. The Preliminary Grading and Drainage Plan shows the proposed grading and drainage improvements. (See Figure 2 – Preliminary Grading and Drainage Plan, page 5.)

F. Conclusion

There will be no adverse effects on the adjacent or downstream properties due to this project.

VII. REFERENCES

1. City and County of Honolulu, Department of Public Works, Division of Engineering, *Storm Drainage Standards*, Honolulu, Hawaii, May 1988.

2. County of Maui, "Title MC-15, Department of Public Works and Waste Management, Chapter 4, Rules for the Design of Storm Drainage Facilities in the County of Maui," Wailuku, Hawaii, November 1995.

3. Federal Emergency Management Agency, Federal Insurance Administration, *Flood Insurance Study, Maui County, Hawaii*, December 1, 1980.

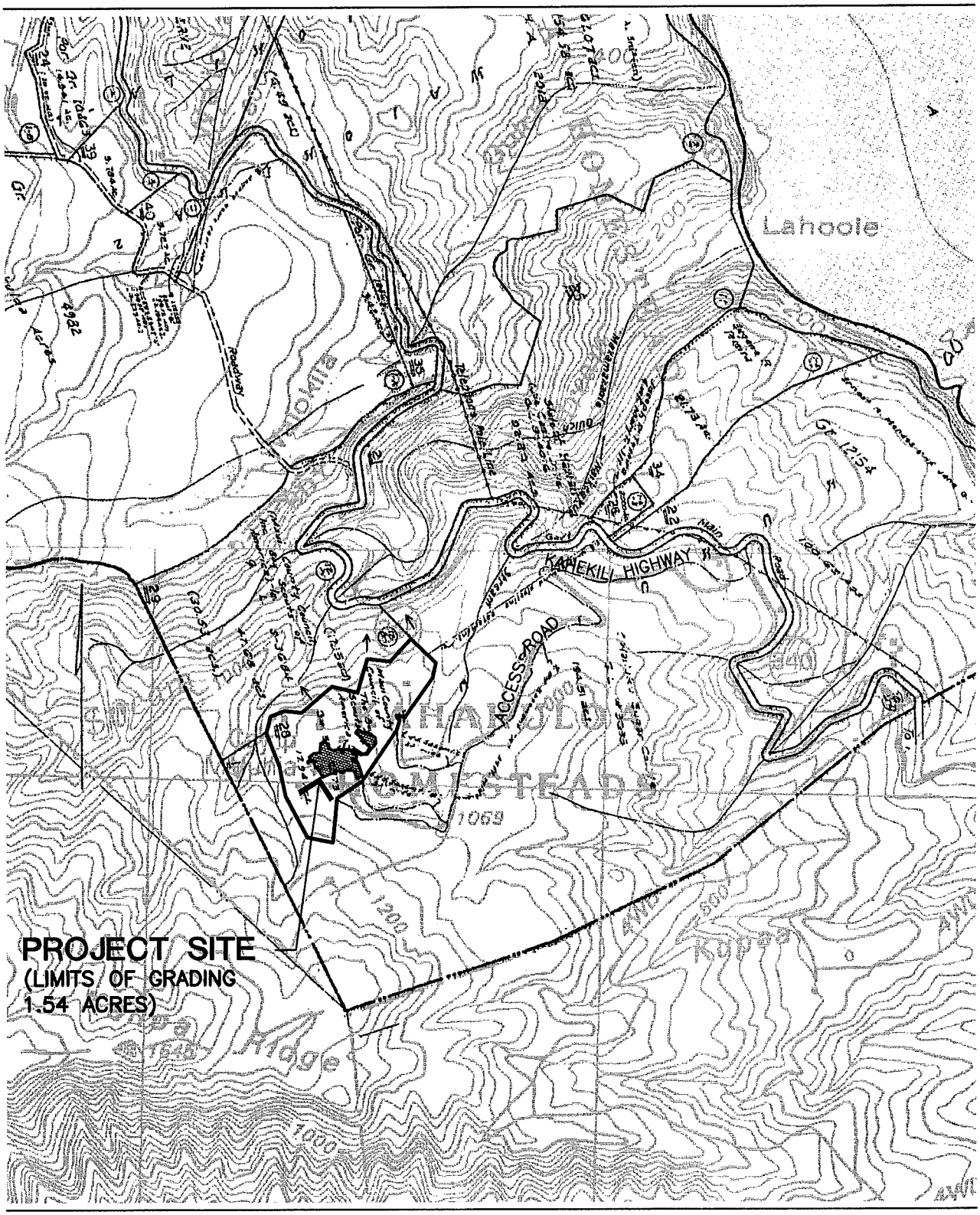
4. R. M. Towill Corporation, *Drainage Master Plan for the County of Maui*, Honolulu, Hawaii, October 1971.

5. U. S. Department of Agriculture, Soil Conservation Service, *Erosion and Sediment Control Guide for Hawaii*, Honolulu, Hawaii, March 1981.

6. U. S. Department of Agriculture, Soil Conservation Service, *Soil Survey of Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii*, Washington, D.C., August 1972.

7. U. S. Department of Agriculture, Soil Conservation Service, *Urban Hydrology for Small Watersheds*, Technical Release 55, Second Edition, Washington, D.C., June 1986.

8. U. S. Department of Commerce, Weather Bureau, *Rainfall-Frequency Atlas of the Hawaiian Islands for Areas to 200 Square Miles, Durations to 24 Hours, and Return Periods from 1 to 100 Years*, Technical Paper No. 43, Washington, D.C., 1962.

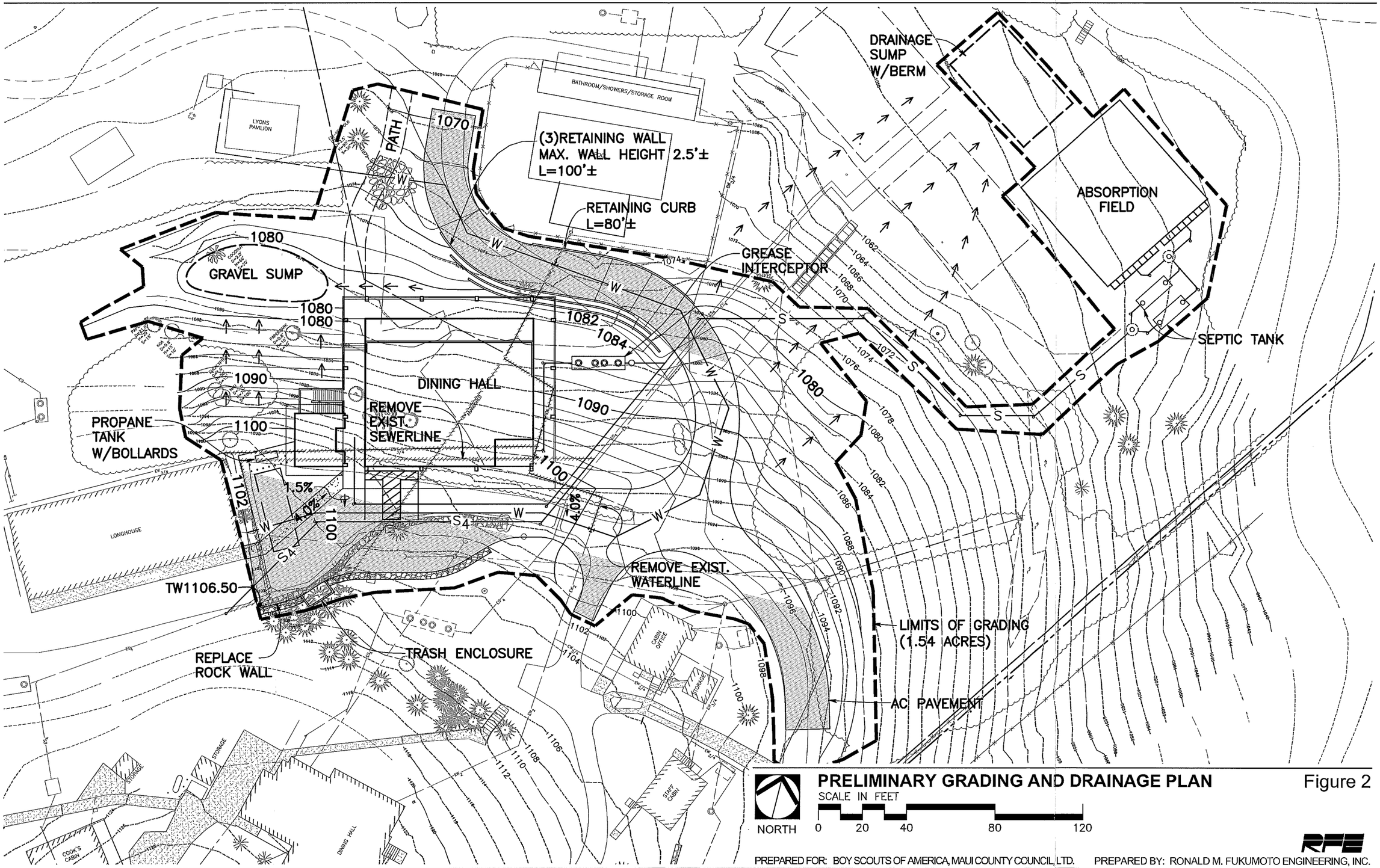


DRAINAGE AREA MAP

SCALE IN FEET

Figure 1

PREPARED FOR: BOY SCOUTS OF AMERICA, MAUI COUNTY COUNCIL, LTD. PREPARED BY: RONALD M. FUKUMOTO ENGINEERING, INC.



PRELIMINARY GRADING AND DRAINAGE PLAN Figure 2

SCALE IN FEET

PREPARED FOR: BOY SCOUTS OF AMERICA, MAUI COUNTY COUNCIL, LTD. PREPARED BY: RONALD M. FUKUMOTO ENGINEERING, INC.

DRAINAGE INFORMATION

A. FLOW RATE (RATIONAL METHOD)

1. AREA
   Existing and Developed Conditions: Area = 1.54 acres

2. RUNOFF COEFFICIENT
   a. Existing

Grassed / Landscaped	Area = 1.33 acres	C = 0.30
Building /Roadways/Walkways	Area = 0.21 acre	C = 0.90
	Total Area = 1.54 acres	

$C_{COMPOSITE} = [(1.31 \times 0.30) + (0.21 \times 0.90)]/1.54 = 0.38$

   b. Developed

Grassed / Landscaped	Area = 0.98 acres	C = 0.25
Building /Roadways/Walkways	Area = 0.56 acre	C = 0.90
	Total Area = 1.54 acres	

$C_{COMPOSITE} = [(0.98 \times 0.25) + (0.56 \times 0.90)]/1.54 = 0.49$

3. RECURRENCE INTERVAL & RAINFALL
   a. Recurrence interval $T_m = 50$ years (due to sump conditions)
   b. One-hour rainfall $I_{50} = 4.0$ inches

4. TIME OF CONCENTRATION
   a. Existing Conditions $T_c = 7$ minutes
   b. Developed Conditions $T_c = 5$ minutes

5. EXISTING RUNOFF (Rational Method)
   C = 0.38
   $I_{50} = 4.0 \times 2.2374 = 8.95$ inches/hour
   a = 1.54 acre
   $Q = Cia = 0.38 \times 8.95 \times 1.54 = 5.24$ cfs

6. DEVELOPED RUNOFF (Rational Method)
   C = 0.49
   $I_{50} = 4.0 \times 2.5575 = 10.23$ inches/hour
   a = 1.54 acre
   $Q = Cia = 0.49 \times 10.23 \times 1.54 = 7.72$ cfs

7. INCREASE DUE TO DEVELOPMENT (Rational Method)
   $\Delta Q = 7.72 - 5.24 = 2.48$ cfs

8. DETENTION VOLUME

IDF CURVE DETENTION DESIGN CALCULATIONS (based off Rational Method)

Design Data

Drainage Area = A =	1.54	acres
Developed Runoff Coefficient = C =	0.49	
Design Storm =	50	year
One Hour Rainfall = i =	4.00	inches
Present Peak Discharge = QOUT =	5.24	cfs
Developed Peak Discharge = QIN =	7.72	cfs
QOUT / QIN =	0.68	
Outflow Adjustment Coefficient = k =	0.82	

Storm Duration, minutes	Correction Factor	Rainfall Intensity, in./hr.	Runoff Volume, cu. ft.	Outflow Volume, cu. ft.	Storage Volume, cu. ft.	
T	*f*	*I = fi*	*CIAT*	*kQOUTT*	(4) - (5)	
(1)	(2)	(3)	(4)	(5)	(6)	
5	2.5575	10.230	2,335	1,289	1,046	
10	2.0576	8.230	3,757	2,578	1,179	
11	2.0135	8.054	4,045	2,836	1,209	
12	1.9689	7.876	4,315	3,094	1,221	PEAK
13	1.9244	7.698	4,568	3,352	1,216	
14	1.8807	7.523	4,808	3,609	1,199	
15	1.8381	7.352	5,035	3,867	1,168	
16	1.7971	7.188	5,251	4,125	1,126	
17	1.7578	7.031	5,457	4,383	1,074	
18	1.7205	6.882	5,655	4,641	1,014	
19	1.6855	6.742	5,848	4,898	950	
20	1.6529	6.612	6,037	5,156	881	
21	1.6227	6.491	6,223	5,414	809	
22	1.5946	6.378	6,406	5,672	734	
23	1.5684	6.274	6,587	5,930	657	
24	1.5438	6.175	6,766	6,187	579	
25	1.5206	6.082	6,942	6,445	497	

Required Detention Volume = 1,221 ≈ 1,220 cubic feet to reduce developed flow from 7.72 cfs to pre-development flow of 5.24 cfs.

B. RETENTION VOLUME (TR-55 METHOD)

1. AREA
   Existing and Developed Conditions Area = 1.54 acres

2. RAINFALL DATA
   50 -year, 1-hour: P = 4.0 inches

3. CURVE NUMBER
   Soil: HwD Honolua
   Hydrologic Soil Group B

   a. Existing Conditions

Open Range/Pasture Good Condition	Area = 1.33 acre	CN = 69
Building, Parking, & Walkways	Area = 0.21 acre	CN = 98
	Total Area = 1.54 acre	

   $CN_{WEIGHTED} = [(1.33x\ 69) + (0.21 \times 98) /1.54] = 73$

   b. Developed Conditions

Open Range/Pasture Good Condition	Area = 0.98 acre	CN = 61
Building, Parking, & Walkways	Area = 0.56 acre	CN = 98
	Total Area = 1.54 acre	

   $CN_{WEIGHTED} = [(0.98 \times 61) + (0.56 \times 98) /1.54] = 74$

   a. Existing
   $S = (1000/CN)-10 = (1000/73) - 10 = 3.70$
   $Q = (P - 0.2S)^2/(P + 0.8S) = (4.0 - 0.2 \times 3.70)^2/(4.0 + 0.8 \times 3.70) = 1.53$ inches
   Volume = (Q/12) x A x 43560 = (1.53/12) x 1.54x 43560 = 8,539 cu. ft.

   b. Developed
   $S = (1000/CN)-10 = (1000/74) - 10 = 3.51$
   $Q = (P - 0.2S)^2/(P + 0.8S) = (4.0- 0.2 \times 3.51)^2/(4.0 + 0.8 \times 3.51) = 1.60$ inches
   Volume = (Q/12) x A x 43560 = (1.60/12) x 1.54 x 43560 = 8,924 cu. ft.

   c. Retention Volume Required
   V = developed – existing
   V = 8,924 – 8,539 = 385 cu. ft. ≈ 385 cu. ft.

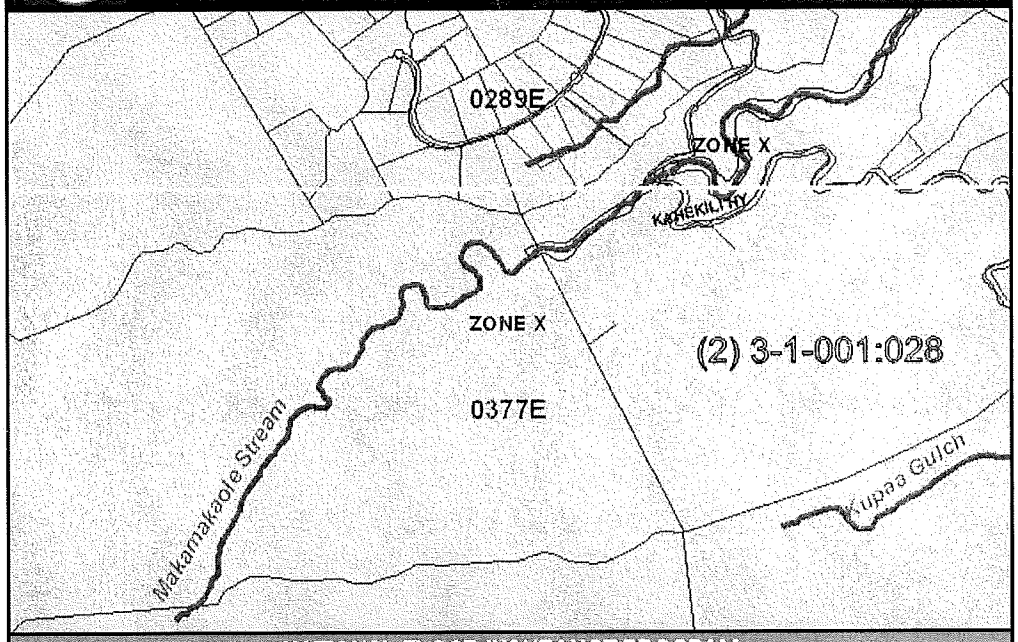
C. DRAINAGE SUMP SIZING
   The total required volume = 1,220 (detention) + 385(retention) = 1,605 cu. ft.

FLOOD HAZARD ASSESSMENT REPORT

A. TAX MAP KEY (2) 3-1-001:028

State of Hawaii

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) 3-1-001:028
PARCEL ADDRESS:	KAHEKILI HWY WAILUKU, HI 96793
FIRM INDEX DATE:	SEPTEMBER 19, 2012
LETTER OF MAP CHANGE(S):	NONE
FEMA FIRM PANEL (S):	1500030377E
PANEL EFFECTIVE DATE:	SEPTEMBER 25, 2009

PARCEL DATA FROM:	MAY 2012
IMAGERY DATA FROM:	MAY 2005

IMPORTANT PHONE NUMBERS

County NFIP Coordinator	
County of Maui	
Francis Cerizo, CFM	(808) 270-7771
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. Viewer/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.

APPENDIX F.

Department of Planning Letter (Dated December 11, 2012) Regarding Clarification of Land Use Approval Requirements

ALAN M. ARAKAWA
Mayor

WILLIAM R. SPENCE
Director

MICHELE CHOUTEAU McLEAN
Deputy Director

COUNTY OF MAUI

DEPARTMENT OF PLANNING

December 11, 2012

Mr. Robert Nakagawa
200 A Liholiho Street
Wailuku, Hawaii 96793

Dear Mr. Nakagawa:

SUBJECT: PROPOSED NEW DINING HALL AT CAMP MALUHIA
WAIHEE, MAUI, HAWAII
TMK: (2) 3-1-001:028

Thank you for your November 15, 2012 letter seeking clarification for a proposed new dining hall at Camp Maluhia. The Department of Planning (Department) offers the following response:

1. The above property contains the following designations:
   A. State Land Use Agriculture (soil classification D & E),
   B. Community Plan Agriculture, and
   C. County Zoning Agriculture.

2. Chapter 205-2.d.12, Hawaii Revised Statutes (HRS), regulates agricultural land with an agricultural soil classification of C, D, E, and/or U and allows for open area recreational facilities.

3. Chapter 205-4.5.a.9, HRS, regulates agricultural land with an agricultural soil classification of A and/or B and allows for open area recreational uses but specifically prohibits overnight camps.

4. Section 19.30A.050.B.11, Maui County Code (MCC), allows for open land recreation such as non-commercial camping and accessory restroom facilities.

5. Section 19.30A.060(H), MCC, allows with a County Special Use Permit, open land recreation uses, structures, or facilities which do not meet the criteria of subsection 19.30A.050.B.11 such as commercial camping and associated structures.

6. Section 19.04.040, MCC defines open land recreation to mean "*...public or private recreational use or enjoyment, including, but not limited to, parks, picnic grounds, beaches, beach accesses, greenways and areas for hiking, fishing, hunting, camping, equestrian activities, and other scenic interests, on a parcel or area of land or water which may be improved but which contains no buildings and which is set aside, designated, or reserved for such purposes.*" (underlined for emphasis)

7. Section 19.500.110.C.1, MCC, states that a "*...nonconforming use shall not extend to any part of the structure or lot which was not arranged or designed for such use at the time the use became nonconforming...*"

The Department considers the Camp Maluhia operation to be a permitted use under the State HRS and a nonconforming use under the Maui County Code. For a new dining hall to be built and used a part of the Camp Maluhia operation, a County Special Use Permit is required. To avoid this challenge from coming up again in the future with another structure, we would suggest that the County Special Use Permit application (application enclosed) include the whole camping operation and associated structures.

Should you have any questions or concerns, you may contact Paul Critchlow, Planner, at paul.critchlow@mauicounty.gov or 270-5795.

Sincerely,

JOSEPH ALUETA
Acting Planning Program Administrator

For: WILLIAM SPENCE
Planning Director

Enclosure
xc: Paul Critchlow, Staff Planner (PDF via email)
TMK (2) 3-1-001:028 (KIVA Related Documents & Project File)
12/General File
WRS:JWA:CEC:PBC:ckk
K:\WP_DOCS\PLANNING\LTR\2012\6416_CampMaluhia\Response-UseDetermination.doc