## Final Environmental Assessment

## MĀKENA STATE PARK IMPROVEMENTS MAUI, HAWAI'I (TMK NO. (2)2-1-006:030(por.))

**Prepared for:** 

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

December 2022

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#### **Executive Summary**

Project Name:	Mākena State Park Improvements
Type of Document:	Final Environmental Assessment
Legal Authority:	Chapter 343, Hawaiʻi Revised Statutes Chapter 11-200.1, Hawaiʻi Administrative Rules
Determination:	Finding of No Significant Impact (FONSI)
Applicable Environmental Assessment review "Trigger":	Use of State Lands and Funds
Location:	Maui Island Mākena TMK No.: (2)2-1-006:030 (por.)
Landowner:	State of Hawai'i Department of Land and Natural Resources, Division of State Parks 1151 Punchbowl Street, Room 310 Honolulu, Hawai'i 96813 Contact: Curt Cottrell Phone: (808) 587-0300
Proposing and Determining Agency:	State of Hawai'i Department of Land and Natural Resources, Division of State Parks 1151 Punchbowl Street, Room 310 Honolulu, Hawai'i 96813 Contact: Curt Cottrell Phone: (808) 587-0300
Consultant:	Munekiyo Hiraga 305 High Street, Suite 104 Wailuku, Hawai'i 96793 Contact: Gwendolyn Leialoha Cheney Rivera, Senior Associate Phone: (808) 244-2015

**Project Summary:** 

The State of Hawai'i, Department of Land and Natural Resources (DLNR), Division of State Parks (DSP) ("Applicant") proposes to develop two (2) new comfort stations, outdoor showers, associated water and wastewater holding tank infrastructure improvements, and parking lot improvements at Mākena State Park ("Park"). The 165.725-acre Park comprises four (4) land parcels owned by the State of Hawai'i, identified by Tax Map Key (TMK) numbers (2)2-1-006:026, 030 ("Parcel 30"), 081, and 102. The proposed work is contained within two (2) existing parking areas which occupy a total area of approximately 1.75 acres within the 132.035-acre Parcel 30, and which currently provide approximately 97 parking stalls.

The Park features a prominent cinder cone, Pu'u Ōla'i, and two (2) white sand beaches frequented by beachgoers. It is bordered to the east by Mākena Road, which provides access to the Park. Surrounding uses include single-family residences, the Mākena Golf Course, and vacant lands. The Pacific Ocean borders the Park to the west.

Implementation of the project will enhance the Park's accessibility to the community and will improve the Park's environment by providing needed sanitation facilities. Further, additional parking stalls will be provided along unpaved/unmarked areas within both parking areas to reorganize existing parking patterns as well as improve overall access for Park users. Access to the parking areas from Mākena Road will remain unchanged.

The proposed Park improvements will involve the use of State funds and land. The use of State funds and land are triggers for the preparation of an Environmental Assessment (EA) pursuant to Chapter 343, Hawai'i Revised Statutes (HRS) and Section 11-200.1-8, Hawai'i Administrative Rules (HAR). Consequently, an EA has been prepared to evaluate the technical characteristics, environmental impacts and alternatives, as well as advance findings relative to the significance of the project. The Approving Agency for the EA will be the DSP as approved by the Board of Land and Natural Resources (BLNR).

The proposed project involves federal funding under a grant through the Land and Water Conservation Fund (LWCF), administered by the National Park Service (NPS). As such, DSP is coordinating compliance with

the National Environmental Policy Act (NEPA) and related consultation provisions.

Additionally, it is noted that the project sites are located within the County of Maui's Special Management Area (SMA). As such, an SMA Use Permit and Shoreline Setback Assessment/ Determination (SSA/D) will be required for the project. The EA will act as the primary supporting technical document for the SMA Use Permit and SSA/D applications.

#### List of Acronyms

AIS ALISH AMP AMSL BMP CFS CO2 EQ CIA	Archaeological Inventory Survey Agricultural Lands of Importance to the State of Hawai'i Archaeological Monitoring Plan Above Mean Sea Level Best Management Practice Cubic Feet per Second Carbon Dioxide Equivalent Cultural Impact Assessment
DA	U.S. Department of the Army
	Department of Land and Natural Resources
DOE	Division of State Parks
DWS	Department of Water Supply
FA	Environmental Assessment
EPA	Environmental Protection Agency
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FONSI	Finding of No Significant Impact
GHG	Greenhouse Gases
GPD	Gallons per Day
GPM	Gallons per Minute
HAR	Hawai'i Administrative Rules
HCZMP	Hawai'i Coastal Zone Management Program
HR5	Hawai'i Revised Statutes
MCC	Maul County Code
MID	Maui Island Plan
	Maui Blanning Commission
MPD	Maui Police Department
MPH	Miles Per Hour
MXC	Mākena Loam, Stony Complex (Soil Classification)
NEPA	National Environmental Policy Act
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
SHPD	State Historic Preservation Division
SMA	Special Management Area
SSA/D	Shoreline Setback Assessment/Determination
ТМК	Тах Мар Кеу
UGB	Urban Growth Boundary
USFWS	U.S. Fish and Wildlife Service
WWRF	Wastewater Reclamation Facility

# PROJECT OVERVIEW

## I. PROJECT OVERVIEW

#### A. <u>PROJECT LOCATION, EXISTING USE, AND LAND OWNERSHIP</u>

The State of Hawai'i, Department of Land and Natural Resources (DLNR), Division of State Parks (DSP, Applicant) proposes improvements within Mākena State Park, Mākena, Maui Island, Hawai'i. See **Figure 1**. These improvements include development of two (2) new comfort stations, outdoor showers, and parking lot improvements.

The proposed project involves a portion of the State-owned parcel identified by Tax Map Key (TMK) (2)2-1-006:030 (Parcel 30). See **Figure 2**. Parcel 30 is a 132.035-acre parcel which includes the eastern portion of the Pu'u Ōla'i cinder cone, One'uli Beach to the north of Pu'u Ōla'i, and Oneloa Beach (also known as Mākena Beach or Big Beach) to the south. The majority of the proposed work is contained within two (2) existing paved parking areas which occupy a total area of approximately 1.75 acres. Access to these areas is provided by two (2) existing driveways connecting to Mākena Road. As of January 2020, these parking areas provide paid parking for commercial vehicles and non-commercial, non-resident vehicles. Parking for Hawai'i residents is free of charge with State-issued photo identification. A small portion of the project extends into the Mākena Road right-of-way for the water lateral connections.

#### B. <u>PROJECT NEED</u>

There are currently no permanent restrooms or water supply infrastructure at the Park for drinking water or showers. While portable toilets are provided for Park users, they do not provide an adequate sanitation level. The lack of permanent sanitary facilities detracts from the Park users' experience. Some Park users may avoid the existing portable toilets. This results in a higher level of waste in other locations in the Park and in the ocean, potentially impacting the nearby environment and creating unsanitary conditions. The portable toilets also create an ongoing operational cost which is difficult for DSP to budget indefinitely.

In addition, the existing parking facilities are insufficient to accommodate the number of Park users, creating congestion as vehicles park outside of defined stalls within the parking lot or along the driveway or roadway. The proposed project would provide marked stalls to replace the improvised and disorganized parking of vehicles along the existing parking area driveway, and the number of vehicles in the lot will be limited to the capacity of the marked stalls to prevent overcrowding.





#### C. <u>PROPOSED ACTION</u>

The two (2) aforementioned paved parking areas, identified as the "North Site" and the "South Site", provide parking for beach users. Approximately 39 marked parking stalls are available at the South Site and approximately 58 marked parking stalls are available at the North Site, for a total of 97 marked parking stalls. Additional unmarked and unpaved parking is available on the gravel shoulders along the access driveways to the respective parking lots. The Park currently has no permanent restrooms and no running water or showers. The proposed project will provide shower and comfort station facilities, as well as additional marked and paved parking stalls. See **Appendix "A"**.

#### **Comfort Stations**

The following improvements are proposed at the North Site and the South Site (see **Figure 3** and **Figure 4**):

- Addition of two (2) new comfort station buildings located adjacent to the existing North Site and South Site parking lots. Each comfort station will include a storage room and men's and women's restrooms, a total of seven (7) water closets with flushing toilets, one (1) urinal, four (4) lavatory sinks, a water fountain, and a potable water bottle filling station. Each comfort station will have a roof-mounted solar photovoltaic system.
- Addition of two (2) new outdoor showers (or foot rinse stations) located adjacent to the two (2) new comfort stations. These facilities will drain via drainageway swales to new surface drainage basins.
- Installation of two (2) new water service laterals, each with a 2.5-inch waterline, and a 1.5-inch water meter with manhole connecting to the existing 12-inch Mākena Road waterline.

#### Wastewater Containment System

• Two (2) new below-ground fiberglass containment tanks for collection of wastewater generated by the two (2) new comfort stations. Wastewater will be periodically pumped out and trucked offsite for treatment. The capacity of the North Site containment tank is 13,000 gallons to accommodate a wastewater flow of approximately 5,000 gallons per day (GPD). The capacity of the South Site containment tank is 7,000 gallons to accommodate a wastewater flow of approximately 2,500 GPD.



RTTanakaiMakena Comfort Station/Applications/Figures/Site Plan North Parking



RTTanakaiMakena Corrfort Station/Applications/Figures/Site Plan South Parking

#### Parking Lot Improvements

• Paving, curb, walkway, and related improvements are proposed along the existing gravel shoulders of the North Site and South Site access driveways, which currently serve as unpaved parking areas for Park users. This work is proposed to primarily reorganize existing parking of vehicles by park users that is currently occurring on either side of the access roads. Although these proposed improvements will result in approximately 41 additional marked stalls at the South Site and approximately 97 additional marked stalls at the North Site (including new 5-foot wide accessible walkways to access these stalls), there will be no expansion in use as park users are already using these existing, unimproved areas for parking of vehicles.

#### Construction Staging

• Construction staging and storage will take place within the North Site and South Site project areas identified in **Figure 3** and **Figure 4**.

#### D. <u>REGULATORY CONTEXT</u>

#### 1. Land Use

The land use designations for the project sites are presented in **Table 1** below. The proposed action represents a continuation of the existing land use as a State beach park, and is consistent with the land use designations in place for the project area.

State Land Use District	Rural
Kihei-Makena Community Plan	Park
Maui County Zoning	North Parking Site: "PK, Park" and "OZ, Open Zone"
	South Parking Site: "R-3, Residential"

Table 1. Land Use Designations

#### 2. <u>SMA Permit Requirements</u>

The project sites fall within the County of Maui Special Management Area (SMA). As such, an SMA Use Permit will be required from the Maui Planning Commission (MPC). In addition, construction permits will need to be secured prior to initiation of construction. Parcel 30 is a shore-fronting parcel. As such, a Shoreline Setback Assessment/Determination has also been submitted to the Department of Planning to confirm the project improvements are beyond the County's shoreline setback area.

#### 3. Chapter 343, Hawai'i Revised Statutes

The Chapter 343, Hawai'i Revised Statutes (HRS) environmental review process specifies that an Environmental Assessment (EA) be prepared for actions that "propose the use of state or county lands or the use of state or county funds". The project involves improvements to the State-owned Mākena State Park, proposed and undertaken by the State of Hawai'i, DLNR-DSP. As such, this EA has been prepared to assess and document the project's technical characteristics, environmental impacts, mitigation measures, and alternatives.

#### 4. <u>National Environmental Policy Act</u>

The project will utilize a federal grant through the Land and Water Conservation Fund (LWCF) administered by the U.S. National Park Service (NPS). As a federally assisted activity, DSP is coordinating compliance pursuant with applicable National Environmental Policy Act (NEPA) requirements and associated federal consultation processes such as Section 7, Endangered Species Act, and Section 106, National Historic Preservation Act.

#### E. PROJECT DEVELOPMENT SCHEDULE AND COST

Based on the applicant's current design, permitting, and development schedule, construction is targeted to begin following receipt of all applicable entitlement and construction permit approvals, with an estimated duration of 12 months. The total construction cost of the project is estimated to be \$2,090,495.00.

## DESCRIPTION OF THE EXISTING ENVIRONMENT, POTENTIAL IMPACTS, AND MITIGATION MEASURES

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

#### A. <u>PHYSICAL ENVIRONMENT</u>

#### 1. <u>Surrounding Land Uses</u>

#### a. <u>Existing Conditions</u>

Mākena State Park (Park) is located within the Mākena region of southwest Maui, which contains a variety of uses from low-density rural residential lots to higher density resort-oriented apartment developments, as well as public/quasi-public and recreational uses. The Park, as well as the historic Keawala'i Church, Mākena North Golf Course, Mākena Landing, and Maluaka Beach, are representative of the public/quasi-public and recreational uses in the Mākena area. Refer to **Figure 1**.

The Park features a prominent cinder cone, Pu'u Ōla'i, and two (2) white sand beaches frequented by beachgoers. It is bordered to the east by Mākena Road, which provides access to the Park. Surrounding uses include single-family residences, the former Mākena South Golf Course, and vacant lands. The Pacific Ocean borders the Park to the west. Refer to **Figure 2**. Within the Park, the project sites are located at two (2) public parking areas to the south of Pu'u Ōla'i, which provide access to Oneloa Beach.

#### b. Potential Impacts and Mitigation Measures

The proposed action involves the development of comfort stations, outdoor showers (or foot rinse stations), and parking improvements at existing parking areas within the Park. The proposed project represents a continuation of the existing Park use and there are no anticipated adverse land use impacts associated with its implementation.

#### 2. <u>Climate</u>

#### a. <u>Existing Conditions</u>

Maui is characterized by a semi-tropical climate containing a multitude of individual microclimates. The mean annual temperature of the island at all locations near sea level is approximately 75 degrees Fahrenheit. A high

proportion of the rainfall that Maui receives each year falls on the northeast facing shores leaving the south and southwest coastal areas relatively dry.

The project sites are located within one of these drier areas of the southwest coast. The Kīhei-Mākena coast is generally sunny, warm, and dry throughout the entire year. Annual temperatures in the region average in the mid 70's. June through August are historically the warmer months of the year, while the cooler months are January through March. During the summer months, average daily temperatures in Kīhei are typically in the mid to upper 70's (County of Maui, Office of Economic Development, 2018).

Average rainfall distribution in the Kīhei-Mākena region varies from under 10 inches per year along the coastline to more than 20 inches per year in the higher elevations. Rainfall in the Kīhei-Mākena region is highly seasonal, with most of the precipitation occurring in the winter months (County of Maui, Office of Economic Development, 2018).

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

Due to the project's limited scope, it is not anticipated to present significant adverse impacts to the climate of the Mākena region.

#### 3. <u>Topography and Soil Characteristics</u>

#### a. <u>Existing Conditions</u>

The project sites slope gently in an east to west direction toward the ocean. Elevations at the project sites range from approximately 15 to 35 feet above mean sea level (amsl). See **Appendix "B"**.

Underlying the project sites is the Rock Land-Rough Mountainous Land soil association which characterizes the rocky land within and nearby to the Pu'u Ōla'i cinder cone. See **Figure 5**. The Soil Survey of the Islands of Kaua'i, O'ahu, Maui, Moloka'i and Lāna'i, State of Hawai'i characterizes the soils of this association as gently sloping to moderately steep, generally poorly drained, and very stony.

The soil series underlying the specific project sites, which lie somewhat afield of Pu'u Ōla'i, is the Mākena series. This series is characterized as having well-drained soils on uplands developed in volcanic ash. These soils are gently to moderate sloping and range in elevation from sea level to approximately 500 feet amsl. Black cinder soil deposits from Pu'u Ōla'i exist throughout much of Mākena State Park. The soil type underlying the



project sites is Mākena loam, stony complex (MXC), 3 to 15 percent slopes, which is typically found on the lower leeward slopes of Haleakalā between Mākena and Kama'ole. See **Figure 6**. This soil type generally exhibits slow to medium runoff and slight to moderate erosion hazards.

#### b. Potential Impacts and Proposed Mitigation Measures

The proposed project is compatible with the site's underlying soil characteristics.

To control runoff, sedimentation, and erosion, a program of Best Management Practices (BMPs) will be implemented during construction. The BMPs will include the following:

- 1. Control dust by means of water trucks.
- 2. Graded areas shall be thoroughly watered after construction activity has ceased for the day and during weekends and holidays.
- 3. All exposed areas shall be grassed as soon as finished grading is completed.
- 4. Minimize time of grading operations.
- 5. Installation of silt fence, gravel bag berms or other approved sediment trapping devices along the makai limits of the grading area and drainage basin.
- 6. Temporary control measures shall be in place and functional prior to grading and shall remain operational throughout the grading operations period or until permanent controls, such as grassing, are in place.

BMPs shall be in compliance with Section 20.08.035 of the Maui County Code (Ord. No. 2684) and "Construction Best Management Practices for the County of Maui" of the Department of Public Works, May 2001. Refer to **Appendix "B**".

#### 4. <u>Agricultural Productivity</u>

#### a. <u>Existing Conditions</u>

In 1977, the State Department of Agriculture developed a classification system to identify Agricultural Lands of Importance to the State of Hawai'i (ALISH). The classification system is based primarily, though not exclusively, upon the soil characteristics of the lands. The three (3) classes of ALISH lands are: "Prime", "Unique", and "Other Important" agricultural land, with all remaining lands termed "Unclassified".



When utilized with modern farming methods, "Prime" agricultural lands have a soil quality, growing season, and moisture supply necessary to produce sustained crop yields economically. "Unique" agricultural lands possess a combination of soil quality, growing season, and moisture supply to produce sustained high yields of a specific crop. "Other Important" agricultural lands include those that have not been rated as "Prime" or "Unique", but are of Statewide or local importance for agricultural use. As reflected by ALISH for the project region, the project sites are designated as "Unclassified". See **Figure 7**.

The Land Study Bureau's Detailed Land Classification rates the agricultural suitability of soils. A 5-class productivity rating scale is applied using letters A, B, C, D, and E, with "A" representing lands of the highest productivity, or very good, and "E" representing the lowest, or very poorly suited for agricultural production.

The Land Study Bureau identifies the land within the project sites as "E", indicating that the land is very poorly suited for agricultural production. See **Figure 8**.

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

The project sites do not provide favorable conditions for agriculture and is designated for use as a State Park. As such, implementation of the proposed action is not anticipated to present significant adverse impacts on agricultural land availability or productivity parameters.

#### 5. Flood, Tsunami, and Sea Level Rise Considerations

#### a. <u>Existing Conditions</u>

The Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map (FIRM) indicates that the project sites are located within Flood Zone X (unshaded), an area of minimal flooding located outside the 0.2 percent annual chance floodplain. See **Figure 9**. The project area is within the tsunami evacuation zone as defined by National Oceanic and Atmospheric Administration (NOAA). See **Figure 10**. The project area is not within the Sea Level Rise Exposure Area associated with a 3.2-foot sea level rise. See **Figure 11**.









RTTanaka/Makena Comfort StationiApplications/Figures/Tsunami



RTTanaka/Makena Comfort Station/Applications/Figures/Sea Level Rise

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

There are no restrictions on development associated with the Flood Zone X (unshaded) designation and the proposed project does not involve habitable structures in the tsunami evacuation zone, nor does it impact existing evacuation routes. Additionally, the project area is not located within the 3.2-foot sea level rise exposure area. As such, the proposed project is not anticipated to be significantly affected by flood, tsunami hazards, and sea level rise.

#### 6. Flora and Fauna

#### a. <u>Existing Conditions</u>

Based on the location of the proposed project, the U.S. Fish and Wildlife Service (USFWS) provided a list of threatened and endangered species that may occur within the project boundary. See **Table 2** and **Appendix** "**C**".

Category	Species	Status
Mammals	Hawaiian Hoary Bat (Lasiurus cinereus semotus)	Endangered
Birds	Band-rumped Storm-petrel (Oceanodroma castro)	Endangered
	Hawaiian (=koloa) Duck <i>(Anas wyvilliana)</i>	Endangered
	Hawaiian Coot (Fulica americana alai)	Endangered
	Hawaiian Goose (Branta (=Nesochen) sandi vicensis)	Threatened
	Hawaiian Petrel (Pterodroma sandwichensis)	Endangered
	Hawaiian Stilt (Himantopus mexicanus knudseni)	Endangered
	Newell's Townsend's Shearwater (Puffinus auricularis newelli)	Threatened
Reptiles	Green Sea Turtle (Chelonia mydas)	Threatened
Insects	Blackburn's Sphinx Moth (Manduca blackburni)	Endangered
Flowering Plants	'awikiwiki(Canavalia pubescens)	Endangered
	'ena'ena (Pseudognaphalium sandwicensium var. molokaiense)	Endangered
	Awiwi (Schenkia sebaeoides)	Endangered
	Carter's Panicgrass (Panicum fauriei var. carteri)	Endangered
	Dwarf Naupaka (Scaevola coriacea)	Endangered
	Ihi (Portulaca villosa)	Endangered
	Koʻoloaʻula (Abutilon menziesii)	Endangered
	Ohai (Sesbania tomentosa)	Endangered
	Popolo (Solanum nelsonii)	Endangered
	Round-leaved Chaff-flower (Achyranthes splendens var. rotundata)	Endangered

 Table 2.
 U.S. Fish and Wildlife Service (USFWS) List of Threatened and Endangered Species that May

 Occur Within the Project Area

Category	Species	Status
	Vigna o-wahuensis	Endangered
Source: USFWS, correspondence July 8, 2022.		

A biological survey of the project sites was conducted by Robert W. Hobdy in October 2019. See **Appendix "D**". The objectives of the survey were to document species that occur or are likely to occur in the study area, the status and abundance of each species within the study area, the presence or occurrence of any threatened or endangered flora or fauna, and the presence of any critical habitats. With respect to fauna, trails, tracks, scat, and signs of feeding were also noted, and an evening site visit was conducted to search for evidence of the Endangered Hawaiian hoary bat (*Lasiurus cinereus semotus*).

The biological survey report describes the project area as gently sloping coastal lands with vegetation characteristic of dry land forests with an understory of shrubs and grasses surrounding the two (2) developed parking areas. Two (2) non-native plant species, the kiawe tree (*Prosopis pallida*) and sourgrass (*Digitaria insularis*) were abundant throughout the project area, and the non-native shrub lantana (*Lantana camara*) was common throughout the forest understory. An additional 24 plant species were observed as rare or uncommon in the area, including nine (9) tree tobacco plants (*Manducca blackburni*). Only one (1) native plant species, the indigenous 'ilima (*Sida fallax*) was observed. 'Ilima is widespread throughout Hawai'i and is of little environmental concern. No federally listed endangered or threatened species of plants were observed.

The biological survey documented the presence of three (3) species of mammals and eight (8) species of birds. Mammals observed during the survey included the non-native Axis deer (Axis axis), domestic cats (Felis catus), and the Hawaiian hoary bat 'ope'ape'a (Lasiurus cinereus semotus), an endemic and endangered species. Non-native avifauna recorded during the survey included the zebra dove (Geopelia striata), the northern cardinal (Cardinalis cardinalis), the spotted dove (Streptopelia chinensis), the house sparrow (Passer domesticus), the gray francolin (Francolinus pondicerianus), and the common myna (Acridotheres tristis). One (1) indigenous migratory species, the kolea or Pacific golden plover (Pluvialis fulva), was seen. Although not observed during the biological survey, other observers have reported seeing the Ae'o (Hawaiian stilt) in the Oneloa wetland located between the two (2) project areas, but not within the project area itself. The project area was noted as unsuitable for seabirds, water birds, and native forest birds. No native, threatened, or endangered insects or mollusks were seen.

The Threatened Hawaiian Goose (*Branta (Nesochen) sandvicensis*) (Nene) was not identified within the Park or the project area during the biological survey, however, there is the potential for the Nene to enter or fly over the project area.

The Threatened Green Sea Turtle *(Chelonia mydas)* was not identified during the biological survey, and has not been observed within the project area, but has been reported on the beach within the Park.

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

The USFWS provided recommendations regarding the Hawaiian hoary bat, Hawaiian goose, Hawaiian waterbirds, Hawaiian seabirds, Blackburn's sphinx moth, and sea turtles. Refer to **Appendix "C"**. The project will comply with all mitigative measures as recommended by USFWS.

#### Hawaiian Hoary Bat

The USFWS provides guidelines to protect Hawaiian hoary bats during the summer months when young bats may be present. USFWS recommends that during project implementation, 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) and that barbed wire not be used for fencing.

#### Hawaiian Goose (Nene)

To avoid adverse effects to the threatened Hawaiian goose, USFWS recommends the following avoidance and minimization measures:

- Project personnel will not approach, feed, or disturb Hawaiian geese.
- If Hawaiian geese are observed loafing or foraging within the project area during the breeding season (September through April), a biologist familiar with Hawaiian goose nesting behavior will survey for nests in and around the project area prior to the resumption of any work. Repeat surveys after any subsequent delay of work of 3 or more days (during which the birds may attempt to nest).
- Cease all work immediately and contact the Service for further guidance if a nest is discovered within a radius of 150

feet (ft.) of proposed project, or a previously undiscovered nest is found within the 150-ft. radius after work begins.

• In areas where Hawaiian geese are known to be present, post and implement reduced speed limits and inform project personnel and contractors about the presence of endangered species onsite.

#### Hawaiian Waterbirds

To avoid adverse effects to Hawaiian waterbirds, USFWS recommends the following measures:

- In areas where waterbirds are known to be present, the project will post and implement reduced speed limits and inform project personnel and contractors about the presence of endangered species onsite.
- If water resources are located within or adjacent to the project site, the project will incorporate applicable best management practices for work in aquatic environments into the project design.
- A biological monitor that is familiar with the species' biology will conduct Hawaiian waterbird nest surveys where appropriate habitat occurs within the vicinity of the proposed project site prior to project initiation. The monitor will repeat surveys again within 3 days of project initiation and after any subsequent delay of work of 3 or more days (during which the birds may attempt to nest).
- If a nest or active brood is found, USFWS recommends contacting the USFWS within 48 hours, establishing and maintaining a 100-foot buffer around all active nests and/or broods until the chicks have fledged; and having a biological monitor familiar with the species' biology present on the project site during all construction or earth-moving activities until the chicks fledge.

#### <u>Hawaiian Seabirds</u>

USFWS recommends full shielding of all outdoor lights, automatic controls to turn off lights when human activity is not occurring in the lighted area, and avoidance of nighttime construction during the seabird fledging period, September 15 through December 15.

#### Sphinx Moth

Tree tobacco plants are a potential host plant for the Endangered sphinx moth *(Manducca blackburni)*. No sphinx moth, larvae or eggs were found, but may be present on these plants during the rainy months of the winter season. USFWS recommends a survey of the area within 4 to 6 weeks prior to initiation of construction.

#### Sea Turtles

The USFWS offered project-specific recommendations as summarized below, which the project will implement in order to avoid adverse effects to Hawaiian sea turtles, including the Green sea turtle *(Chelonia mydas)* and Hawksbill sea turtle *(Eretmochelys imbricata)*:

- Avoid nighttime work during the nesting and hatching season (May to December).
- No lighting will be installed in the parking lots.
- The exterior lighting associated with the comfort station will be installed solely on one side of the building which is the entry and northern facing side. The lighting will be set within the entryway which will minimize the light emanating from the building. No lighting will face directly makai (ocean).
- The exterior lighting on the northern entry side of the comfort station will be under the roof, facing *downward*, and fully shielded.All lighting will be on timers. The lights, both interior and exterior, will be turned off at 8:00 p.m. every night. This will allow the caretaker one hour to clean the facility after park closing. Although the park opens at 5:00 a.m., it is not anticipated that the caretaker will clean the facility until there is sufficient natural light in the morning.
• The lighting in the evenings will consist of a single exterior light and the interior lights will only be visible through the screen blocks in the upper walls.

With implementation of USFWS's recommended mitigative measures, the project is not anticipated to have any significant adverse impact on flora or fauna resources present in the area.

#### 7. <u>Streams and Wetlands</u>

### a. <u>Existing Conditions</u>

There are no streams or drainageways located within the project sites.

The USFWS, National Wetland Inventory Map, identifies a 2.34-acre Estuarine and Marine Wetland habitat located between the North Site and South Site of the project. This wetland is known locally as Oneloa Wetland. Oneloa Wetland has been characterized as a siltation basin for the area and it tends to have water only after heavy rains. All work proposed is located a minimum of 200 feet or or more away from Oneloa Wetland. e away from Oneloa Wetland. See **Figure 12**. A second, is located approximately 650 feet south of the South Site. A wetland feature known as Maluaka Pond is located in the northern portion of the Park, near Oneuli Beach. In addition, coastal waters in Mākena are designated as an estuarine and marine deepwater, which refers to open water estuary, bay, sound, or open ocean (U.S. Fish and Wildlife Service, 2012).

Correspondence with the Department of Army (DA) has confimed that a DA Permit is not required for the project. See **Appendix "E"**.

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

The proposed project will not present any significant adverse impacts on streams or wetlands. The nearby wetlands are located at distances 200 feet or greater from the project sites and will not be impacted by the proposed project.

To prevent potential impacts to the nearby environment, the proposed comfort station facilities will utilize wastewater containment tanks. Wastewater will be retained and removed via pumping and trucked offsite for treatment. Gray water from showers will be retained for evaporation in a contained area. BMPs will be employed to prevent construction-related impacts to the nearby environment.



# 8. <u>Air Quality and Noise</u>

# a. <u>Existing Conditions</u>

There are no point sources of airborne emissions in the immediate vicinity of the project sites. The air quality in the Mākena area is considered good with existing airborne pollutants attributed to automobile exhaust from the region's roadways.

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

Implementation of the project would include impacts from dust generated by short-term construction-related activities. Site work, such as clearing, grubbing, grading, and utilities improvements within the parking area, for example, will generate wind-blown particulates. A BMP plan will be implemented for the construction phase of the project. Examples of mitigation measures to be included in the BMP program include use of water trucks, dust control fencing and silt fencing, stabilized construction entrances, and drainage basins.

Once construction is completed, the proposed new facilities are not anticipated to present significant adverse impacts to local and regional ambient air quality conditions, as well as noise conditions. The comfort stations will utilize flushing toilets, which are designed to minimize nuisance odors.

# 9. <u>Greenhouse Gas Considerations</u>

# a. <u>Existing Conditions</u>

Greenhouse gases (GHG) (carbon dioxide, methane, nitrous oxide and fluorinated gases) trap heat in the earth's atmosphere. In the context of climate and ocean warming, increases in levels of atmospheric GHG have been attributed to human activity (IPCC, 2017). Within the State of Hawai'i, the energy sector (including fossil fuel burning to produce electricity, transportation, waste incineration, and natural gas systems) is identified as the source of 89.7 percent of GHG emissions (Hawaii Department of Health, 2019). Other sources of GHG emissions include industrial facilities, agriculture and forestry, and waste treatment such as landfills, composting, and wastewater treatment.

The Federal Greenhouse Gas Reporting Program (40, Code of Federal Regulations (CFR), Part 98) requires mandatory reporting of GHG

emissions from sources that emit 25,000 metric tons or more of carbon dioxide equivalent (CO2 EQ) per year in the United States. Categories of use which are generally associated with this level of reporting include power plants, petroleum and natural gas systems, refineries and other heavy manufacturing processes. On Maui, the facilities operating at or above the 25,000 metric ton level include Maui Electric Company's Kahului Power Plant, Maalaea Power Plant and the Central Maui Landfill (U.S. EPA, 2017).

### b. Potential Impacts and Mitigation Measures

The proposed action involves comfort station and parking improvements. While the proposed facilities will generate wastewater to be treated offsite, the project is not a population generator and is not anticipated to result in a net increase to wastewater treatment facilities on Maui (due to the current use of portable toilets at the park). The project does not include any components which generate direct GHG emissions onsite. As such, the main source of GHG emissions from the project will be related to fuel consumption by trucks used to remove wastewater from the site. Using the Environmental Protection Agency (EPA), emission factor of 1.467 Kg per vehicle-mile for a heavy duty truck, it is estimated that the vehicle trip required to remove an estimated 2,500 gallons per day of wastewater would generate on the order of 50 metric tons per year of carbon dioxide equivalent. In the context of the GHG Reporting Program, the relative effects of this emission level is not considered significant and is not subject to reporting requirements.

### 10. <u>Pesticides and Hazardous Materials</u>

#### a. <u>Existing Conditions</u>

Within the existing State Park, the predominant landscape is natural and undeveloped. The project sites have not been cultivated in plantation crops and, therefore, there has been minimal use of chemicals and fertilizers in recent years.

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

No adverse impacts to surface, underground, or marine resources are anticipated with implementation of the proposed project. The use of fertilizers, herbicides, and pesticides for landscape maintenance will be minimized through maximizing the use of native plant species. Any chemicals used in connection with the sanitary facilities will be properly contained and disposed of. Drainage improvements for the proposed project are designed to ensure that the increase in runoff due to the development is retained onsite so as to ensure there are no impacts on downstream properties or nearshore ocean water quality.

### 11. <u>Historic and Archaeological Resources</u>

### a. <u>Existing Conditions</u>

An Archaeological Inventory Survey (AIS) report was prepared for the project site by Division of State Parks (DSP). See **Appendix "F"**. Preparation of the AIS report involved surface surveys, test excavations, and a review of previous studies and surveys for Mākena State Park and adjacent areas.

The project site is located within the Mo'oiki and Mo'oloa ahupua'a within the moku of Honua'ula. The Park was named Mākena upon its establishment as a State Park in 1971. However, it is not actually within the area traditionally designated as Mākena in older documents. The name Mākena referred to the area further to the north in the area of Mākena Landing, but over time the designation expanded to include the area of the current State Park.

Based on traditional Hawaiian lore and cultural research, the cinder cone Pu'u Ōla'i within the State Park is understood to be a place of cultural significance. An origin story of the pu'u exists wherein Pu'u-o-inaina, a mo'o (lizard) takes Pele's husband Lohiau for herself. Pele becomes angry and punishes Pu'u-o-inaina by cutting her in half. The head of Pu'u-o-inaina becomes the islet Molokini, and the tail becomes Pu'u Ōla'i (Beckwith, 1970). A cave below Pu'u Ōla'i in other sources is referenced as a dwelling place for ancestral deities (Ashdown, 1970).

During the Pre-Contact and Early Western Contact periods, records suggest the Mākena area was characterized by scattered settlements, limited agricultural productivity with some cultivation of 'uala and dryland kalo in areas further upland, and relatively few heiau compared to more culturally significant areas on Maui such as Wailuku, Keanae, Waihe'e, and Nu'u (Cordy, 1988).

Historical references cited in the AIS indicate that the population in the Mākena area declined following the Great Māhele. Sizeable portions of what is now Mākena State Park were acquired by L.L. Torbert in the mid-1800s and utilized for ranching operations. Portions of the project area remained in use for ranching and pig farming throughout much of the 1900s. A radio antenna station was built in the 1930s south of Pu'u Ōla'i,

which included five (5) antenna towers and four (4) buildings, significantly altering the landscape of what would become the Park. During World War II, the United States military further utilized the nearby shoreline areas for amphibious assault and defense training, constructing structures such as barracks, bunkers, pillboxes, and gun mount platforms.

Previous archaeological inventory surveys in Mākena State Park were conducted by DSP archaeologists in 1993, 1999, and 2004. Additional surveys have been carried out in the vicinity of the Park in conjunction with other development projects. Previous archaeological investigations in and around the vicinity of the Park have documented a variety of sites associated with the Pre-Contact, Post-Contact, and Historic periods. Consistent with the previous use of the land, these sites included features associated with habitation structures, mounds or terraces, ceremonial sites, ranching and pig farming, and 20th-century uses related to the radio station and military facilities. A summary of sites identified within Mākena State Park by previous surveys is provided. See **Figure 13** and **Table 3**, and refer to **Appendix "F"**. None of the identified sites are located within the project areas.



SIHP* No. 50-50-14-#	TEMPORARY SITE #	SITE TYPE	LOCATION	COMMENTS
1814		Burials (4 from Pu'u; reinterred)	SW slope of Pu'u Ōla'i	
2938		Paniaka wetland/fishpond	S end of Oneloa Beach	
2939		Rock mounds (4 features)	East of Paniaka Pond	
3136		Complex of walls, platforms	W slope of Pu'u Ōla'i	
3137		Complex of 'a'ā structures	Center of Pu'u Ōla'i	
3138		Complex of walls, platforms	S end of Oneloa Beach	
4120		Burial (eroding dune; removed)	Central Oneloa Beach	Pre-contact
4205		Burial (eroding dune; removed)	Pu'u Ōla'i Beach	Pre-contact
4660A	DSP-TS-001	Concrete bldg – pig killing house	E of Pu'u Ōla'i	Ranching <sup>1</sup>
4660B	DSP-TS-002	Loading Ramp	E of Pu'u Ōla'i	
4661	DSP-TS-003	Concrete slab & box – pig pen	E of Pu'u Ōla'i	Radio Station <sup>2</sup>
4662	DSP-TS-015	Concrete slab – pump house	E of Pu'u Ōla'i	Ranching
4663	DSP-TS-014	Concrete structure - Housesite	E of Pu'u Ōla'i	Radio Station
4664	DSP-TS-013	Concrete trough	NE of Pu'u Ōla'i	Ranching
4665		Concrete bunker	Central Oneloa Beach	Demolished
4666		Rock mounds (2)	E of security residence	
4667		Rock mounds (2)	E of security residence	
5209		Maluaka Wetland with retaining wall around	E of Naupaka Beach	
5211		Stack wall enclosure at pond	E of Naupaka Beach	
8782	DSP-TS-004	Terraces on face of knoll	Mauka of Pu'u Ōla'i	
8783	DSP-TS-005	Terraced platform	SE of Maluaka Wetland	
8784	DSP-TS-006	Low-walled enclosure	SE of Maluaka Wetland	
8785	DSP-TS-007	Low wall with hearth	SE of Maluaka Wetland	
8786	DSP-TS-008	Complex of mounds, enclosure, retaining walls and alignments	SE of Maluaka Wetland	
8787	DSP-TS-009	Walled double enclosure w/coral	E of Maluaka Wetland	
8788	DSP-TS-010	Walls on slope above Maluaka	E of Maluaka Wetland	Ranching
8789	DSP-TS-011	Platform within upright outcrop	E of Maluaka Wetland	
8790	DSP-TS-012	Alignment of upright boulders	SE of Maluaka Wetland	
8791	DSP-TS-019	Rock and mortar structure; road	On ledge; S of parking lot	Radio Station
8792	DSP-TS-020	Rock wall	On ledge; S of parking lot	Ranching
8793	DSP-TS-024	Rock wall and rock-lined trail	S of ledge; S of parking lot	20 <sup>th</sup> Century <sup>3</sup>

## **Table 3.** Inventory of Archaeological Sites at Mākena State Park

SIHP* No. 50-50-14-#	TEMPORARY SITE #	SITE TYPE	LOCATION	COMMENTS
8794	DSP-TS-025	Terrace, retaining walls on knoll	Mauka of Pu'u Ōla'i	
8795	DSP-TS-026	Rock wall	Makai side of Mākena Road	20 <sup>th</sup> Century
8796	DSP-TS-027	Furo? Inscribed Otani 1929	N of Paniaka Pond	20 <sup>th</sup> Century
8797	DSP-TS-028	Burial	S end of Oneloa Beach	Pre-contact
8798	DSP-TS-029	Small platform with upright slabs	SE of Maluaka Wetland	20 <sup>th</sup> Century

\*State Inventory of Historic Places Site (SIHP).

<sup>1</sup> Ranching refers to both cattle (ca. 1900) and pigs (ca. 1950s)

<sup>2</sup> Radio Station dates to the period late 1930s to 1950s.

<sup>3</sup> 20<sup>th</sup> Century sites from 1930s to recent. Temporary Sites 16, 17, 18 not given SIHP # due to recent age, function, and integrity.

Source: State of Hawai'i, Department of Land and Natural Resources, 2021.

The location of the North project site comfort station is approximately 200 feet southeast of the base of Pu'u Ōla'i and approximately 200 feet northeast of the Oneloa wetland. The nearest archaeological site, approximately 300 feet to the east of the comfort station, is Site 4661, a concrete slab from a former pig pen and cook house feature dating to the 1950s-1960s. Site 4660, a concrete structure (slab and walls) identified as a pig killing house, also dating to the 1950s-1960s, is located approximately 400 feet to the east of Site 4661. The sites at Pu'u Ōla'i include complete and fragmented burials at Site 1814 on the southwestern slope of the Pu'u, approximately 600 feet from the proposed North Site improvements; and a complex of stone structures at the center of the Pu'u at Site 3137 approximately 600 feet distant from the improvements.

The South project site is located roughly at the southern end of the former radio antenna station dating from the 1930s. The nearest archaeological sites to the proposed improvements are Site 8791, a rock and mortar fireplace associated with the radio antenna station, and Site 3138, a complex of stone walls and platforms. The proposed comfort station is approximately 100 feet and approximately 150 feet distant from these sites, respectively.

DSP conducted excavations of eight (8) test units in the project areas to determine the potential for cultural remains and subsurface deposits. Five (5) units placed in the location of the North Site and South Site comfort stations and containment tanks measured one (1) meter by one (1) meter. Three (3) units placed along the waterline alignments measured 50 centimeters by 50 centimeters. Each unit was excavated to a depth sufficient to determine the presence of cultural remains. No cultural

deposits were identified in these test units apart from a scattering of modern materials near the surface.

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

DSP recommends avoidance and preservation with buffers established and marked for sites in proximity to the project areas. The proposed project does not impact any known archaeological sites or subsurface cultural deposits. The AIS conducted by DSP states that the potential for burials in the project area is low. Archaeological testing in the project areas did not locate any sand deposits and no discovery of burials in the cinder deposits outside of the Pu'u. The cultural significance of Pu'u Ōla'i and concerns from the community regarding potential undiscovered burials in the Pu'u have prompted DSP to site the North Site comfort station on the south side of the parking lot to accommodate the largest buffer from the base of Pu'u Ōla'i.

DSP anticipates that there will be a determination of "no historic properties affected" per HRS, Chapter 6E-8 and 36 CFR 800.5(b). DSP proposes archaeological monitoring as a precautionary measure for identification purposes. As such, an archaeological monitoring plan for the project has been prepared and submitted to SHPD for review and acceptance. See **Appendix "G"**.

With implementation of the foregoing mitigation measures, the proposed project is not anticipated to present significant adverse impacts on archaeological resources.

# 12. <u>Cultural Resources</u>

# a. Existing Conditions

A Cultural Impact Assessment (CIA) was completed for the project by 'Aina Archaeology in May, 2021. See **Appendix "H"**. The purpose of the CIA was to identify past and present traditional and customary practices within and adjacent to the proposed project footprint within the Park to identify potential impacts that may result from the proposed action. The CIA considered both the construction footprint of the proposed project, referred to as the "project area", as well as the "study area" which encompasses the lands and resources within the Park boundary as well as the surrounding ahupua'a. The CIA included an analysis of the study area's cultural and historical background and traditional practices based upon archival and literature research, as well as consultation with knowledgeable individuals with familial, cultural or genealogical ties to the study area.

Traditional settlement and land use patterns in the study area were significantly influenced by the dry climate of southwest Maui. Native Hawaiian residents were said to migrate seasonally from the coastal area where fish were abundant but crop cultivation was limited to relatively small pockets of vegetables such as sweet potato and kalo, to upland areas where a greater variety and quantity of food crops could be cultivated (Matsuoka, 1996). Reports also suggest continuous populations of people living in the area who relied upon fishing to sustain themselves and to trade for other foods and resources from those living upland from the coast (Handy, 1991).

The ahupua'a of Honua'ula features a number of traditionally-recognized fishing grounds and fishponds, as well as cultural features related to the area's fishing heritage. At least four (4) sites in the vicinity of Mākena State Park have been identified by researchers and informants as culturally significant fishing ko'a or ku'ula sites, including a site at the base of the Pu'u Ōla'i cinder cone (Sterling, 1998). Ko'a had multiple functions. They were landmarks used by fishermen out at sea to help identify the location of fishing grounds. Some were used as places to observe ocean and weather conditions and to sight schools of fish. They could also be places of spirituality and ritual. The presence of an upright stone at a ko'a is referred to as a ku'ula, where fish may be dedicated to Ku'ula, the principal deity of fishing (Beckwith, 1970; Keliipio, 1900).

The Pu'u Ōla'i cinder cone features prominently in the fishing traditions of the area. Certain manō (sharks) are considered to be ancestral gods in Hawaiian tradition. As also referenced in the AIS, Pu'u Ōla'i is reported to be the site of a large underwater cave, which was considered a sacred dwelling place for the ancestral shark deities (Ashdown, 1970). Many families of this region claim the shark as their 'aumakua (ancestral god), and this cave is where they would interact with their 'aumakua and carry out their duties (Tau'a and Kapahulehua, 2007).

A number of traditional heiau or temple sites are reported to have once existed in the vicinity of Mākena State Park according to the historical records cited in the CIA. Within the present-day Park, references exist to heiau sites atop Pu'u Ōla'i and on a ridge behind Pu'u Ōla'i, known as Mo'oiki (Sterling, 1998; de Naie and Donham, 2007).

As reported in the AIS, population in the vicinity of the project was impacted greatly first by arrival of Western vessels and trade, then by commercial agricultural and ranching activities, by the military presence of the mid 20th century, and by nearby resort development in the 1970s. However, fishing

and gathering practices as well as small-scale cultivation continued in the area, as recounted by the kama'āina interviewed for the CIA. In the 1980s, the State acquired the lands to create Mākena State Park. The State identified the following goals for the Park (DLNR, 1981).

- 1. Preserve the ecological balance of a valuable natural area of the Eastern Maui coast.
- 2. Preserve and protect for future reference to the Hawaiian heritage, significant historic and archaeological sites, both those discovered and as yet undiscovered sites.
- 3. Promote preservation of a local "Hawaiian Way of Life", i.e. fishing and opihi picking in rugged areas both for recreation and livelihood.

## Community Consultation

Consultation was undertaken through in-person interviews or via email with kama'āina, Hawaiian cultural advisors, and Hawaiian organizations with personal knowledge of the study area. The testimony of individuals who have provided their consent to share their comments is recounted as follows.

### Mr. Abner Kauwekane DeLima:

Mr. Abner Kauwekane DeLima was born in 1937 at Kula Sanatorium and grew up on the Oneloa Beach (Big Beach) side of Pu'u Ōla'i. At age 13, when he was in his 7th grade year, Mr. DeLima moved to Pu'unēnē to attend Pu'unēnē School followed by Lahainaluna as a boarder until he graduated in 1955. From Lahainaluna, Mr. DeLima attended the University of Hawai'i at Mānoa on a football scholarship, eventually married, joined the Honolulu Police Department, and raised his family on O'ahu. While away at school in Lāhainā he would return to Pu'u Ōla'i periodically and after he began his family he would return to Maui periodically to visit with his parents who moved to Kahului in the mid-1960s but still maintained property in the Mākena area.

With regard to his early childhood at Oneloa, Mr. DeLima shared the stories of his grandfather, Kauwekane Kukahiko, who built his childhood home, the foundation for which is located adjacent to the DLNR caretaker's cottage, and the generational knowledge that was passed down through him: Kauwekane (built the house). We just moved in. I don't know who else helped him, but I remember him working as a carpenter. You know, he got one mūmū (rounded) hand right?

Grandpa Kauwekane used to do tomatoes. Had a small little garden at the Makena house, Pu'u Ōla'i house until he was too old. I was about four or five years old when he was still raising the tomatoes, tomato patches and stuff. I was nine years old when he passed away. Yeah, I was very close to him. I used to make him mad sometimes... Just play around. The pigs come in the yard, I chase them all over the place. He's yelling at me. That's how I learn how to talk Hawaijan. I used to talk Hawaijan to him. He wants something or do this or that. Physically he was able to walk until he died. He wasn't bedridden or anything. But he used to get aches and pains ... He still could walk until the day he died. And he was slim and trim. we used to travel. Go to town or go sightseeing someplace. Visit family. He always had his hat and his dress clothes. Coat, hat, dress shirt, pants.

Besides being fisherman and whatever else. He was like the man for Makena. I mean when old folks came Makena, they always came to see him. That's the Hawaiian custom. All the old timers. When they came to Makena. Came all the way to the house. Sit down, talk story, eat something, then they go. In fact, I don't know if you heard about the Hinau family? They used to come and we used to go there. I remember going with him [Grandpa Kauwekane] all the way to Lāhainā one time. Woo, that was a ride. I was young. I remember them coming once. It was good. And my grandpa, my father, that's how he learned how to fish. Grandpa Kauwekane. He taught them everything, how to lay the net, the spots to fish, taught him all. He used to make net too. My father learned how to make net, patch net. That's one thing I've never learned, patch net. Oh, I could sew, help make net but not patch. That's another story though.

(When) the net rip, you got to cut them all up and then you got to know how to sew. My dad used to do that. That was too much for me. I'd go fish, I'd go fix the lau, and then all that stuff, load the boat or whatever. But patching it, not me.

When visiting Oneloa as it is today, Mr. DeLima expressed surprise at all the kiawe growth and changes. He goes on to explain that his family also raised pigs at Oneloa for subsistence purposes where part of his tasks as a boy was to gather the leaf of the pānini (prickly pear) for slop and noted that the wetland swamp areas were where the pigs would go when it rained:

> I used to feed pigs by myself. Oh wow. They all still home (referring to his siblings), in the dark and I'm out feeding them. I started feeding pigs when I was 7, 8 years old. I used to go drive to get pāninis for the pigs with the truck along Makena road. I had my own sickel with a long rod and I had my little thing where I could poke the (young) pānini leaf and throw it in the truck... then I used to cook them and feed them to the pigs

> And this swamp that you're talking about (the wetland areas within the park). The swamp was this area right inside here. Our pigs used to go over there, when it rained this whole area filled with water, but over here, always had water over there (the wetland area at second entrance). The small little area over here, so the pigs used to go over there, lie in the water, sleeping in the mud and stuff. But over here had all kiawe tree stumps. And I think it was because, you know they had the radio station and my dad took care of the radio station with the tower and stuff. So I had that, that whole area they had to dig out all the kiawe trees and the later on it's all kiawe stumps over here. I think that's how they cleared it out. But now you go over there and all the kiawe trees are back again. You would never think that there was a radio station over there.

Mr. DeLima also recalled that in addition to his own family, the neighboring Nakasone family and a gentleman referred to as Ito

Man also raised hogs on lands around Pu'u Ōla'i. The Nakasone's maintained a more formal pig farm while Ito Man raised hogs and served as the caretaker for the Kapohakimohewa family property while primary owner, Duke Kapohakimohewa, was living in Honolulu. Other nearby families included another pig farmer on the Oneloa side of Pu'u Ōla'i by the name of Nagamine, who resided there up until he left for Pu'unēnē School, and the Poepoe's near Maluaka Beach and Oneuli (Onouli). He provides the following recollection:

Okay. Makena Beach (Oneloa), this is the house? (indicating the remnant concrete foundation near the DLNR caretaker's cottage) Yeah, this is the area. It would be someplace down this side.

... There was a slaughter house up here and below the slaughter house. That's, that's where Nakasone and Ito Man he used to stay ... near the pig pen was right inside this area. And that had concrete slabs over there too. And the slaughter house had concrete slab too. So if nobody demolished it I could find a slaughterhouse and a pig pen area for Ito Man, that was his. Now further down was the Nakasone's pig farm. Okay. How did the name come up? They weren't there that long.

Ito Man was the one that came there, yeah, I used to cut his hair. Yeah my grandpa Kauwekane. I used to cut it with clippers.

He was the one taking care of the ... Duke Kapohakimohewa property as the same family with a Makua on the other side. But Duke, him and his wife were living in Honolulu, and that was the old man, Ito, use to take care of the property for them.

Well, um they had a pig farm up here at one time (indicating an area in the more southern portion of the park). Nagamine was his name, but he was there for a few years and when I left (to go to Pu'unēnē School) he was still there. But when after that... I never did see him.

Mr. DeLima recalled that the sandy beach at Maluaka was owned entirely by the Baldwin family who had a house on the beach that was also taken care of by Poepoe. Other 'ohana who also lived in the general Makena area during his time included the Shavs who were just before the hotel, the John Buck family who preceded the Garcia's, and the Auweloa family. Next to Keawala'i church (likely at Apuakehau) Mr. DeLima recalled that there was a man named Gifford who had a pond that they called Gifford's Pond (possibly the old fishpond at Apuakehau) where there used to be clams and from there, he pointed out his family kuleana at Mokolea in Ka'eo, noting that they would go kapapai between 'Apuakehau and Mokolea. The other place he knew for kapapai was south of Oneloa at a place called Kalua in Kanahena near where his mother, Caroline Kauwekane Antone Bechtle (DeLima), was raised by her hanai father Kauwekane. Mr. DeLima shared that the kapapai style of fishing at Kalua was carried out as follows:

> .... it's a small bay. We set the net right across point to point here. And then the guys who stand. The road was close to the ocean. So over here guys, two or three guys would swim towards the net this way. And then if get extra guys, they can throw stones from this side and then chase the fish up to here. And that's where we'd go underneath, grab the net, then wrap the net on the fish. Well that was easy. That was fun.

> .... you need divers. It's not a one man, you need at least, I would say two guys to pull the net and three guys to slap the water. If you get five guys, easy. But they all gotta know how to swim. So the three guys come in, they straight up the middle, grab the net, pull em up. And then the guys ... the two guys on each end grabbed up the end spot, wrap em. And then we all come up with the net.

In the area of Kalua, Mr. DeLima also recalled the presence of a fishpond that was a place to find uhu (parrot fish, Scaridae):

... at one time had uhu in this pond. Oh the thing was big and you could see the fins. Yeah. Top of the back going. Oh my father (Abner W. DeLima) was so excited. He couldn't do nothing because you want to go home and get the net and the tide was coming up, but we never went. But just to see that and the water wasn't that deep, like maybe this (indicating a low waterline). Yeah. That was the exciting part for that pond. I never forget that.

When asked about the difference between kapapai and hukilau, Mr. DeLima noted that for hukilau you needed a rope with lau kī (tī leaf) attached and that is referred to as the lau. The lau would be loaded into the boat and you would extend the lau from point to point and the people on the shoreline would pull the lau that was strung with wiliwili floaters to keep the lau about three (3) feet above the bottom of the ocean floor. Mr. DeLima describes dried wiliwili as being very good for net floats and specifically stated that these floats were used by his father for hukilau with the following description:

... that was the floaters for hukilau, wiliwili tree. And then the rocks, we would tie them on the rope too, between the floaters so many feet ... you would have two floaters here, then place one rock here below, so the rock goes on and then you could adjust it and set the floater. So you have the rock here and tied a rope with a rock and then the clearance between the rock and a rope is about 6 inches ... and then you place the floater and then the lau. So that's how you raised the rope with the floater... or you loosen the ties up so that the lau goes down because you get the peaks and valleys on the ground. So you adjust for that.

The divers would then be out in the water to help carry the lau over rocks in case it got caught up, the lau being the mechanism that chased the fish inside. When the lau would reach an area of sand, the people would huki (pull or tug) the lau until the fish starts to circle the sand area. When the fish had been corralled into the sandy area, the fishermen would get the boat with the net, surround the fish, and push the net toward and into the bag net that contained a small opening that sat on the bottom of the ocean. The divers would then go down to the bottom to pull bag net up and load it on to the boat. So in hukilau there is no need to slap the water to chase the fish into the net, the lau goes deep and brings all the fish inside to be surrounded resulting in a much bigger catch. Mr. DeLima noted that there were all kinds of fish during his time like uhu, palani, weke, papio and when they would hukilau people from Mākena, 'Ulupalakua, and Pu'unēnē would come to help his father and brothers, along with the Chang 'ohana and his larger Kukahiko 'ohana. At the end of the catch, his father would divide the fish with whoever would help to bring the lau in to take home for their individual families.

With regard to the differences between Oneloa and Oneuli (Onouli), the black sand beach on the north side of Pu'u Ōla'i, Mr. DeLima recalls that this bay was an area that the families would go for hukilau. He went on to share the following description of hukilau at Oneuli (Onouli) and his love of spearfishing:

> ... by Onouli side, that's another place we used to go hukilau. Plenty fish over there, plenty holes too. When the lau comes past, you check the holes that's loaded with fish inside there. So after we go inside, as soon as they bagged the fish, put them on the boat, there's another boat, I get my spear and poke the fish in the hole. I shoot one time I catch about two, three in one crack, loaded and them dump them on the boat, I would go back I'd say for about a good five to 10 minutes. After a while I stop to look around, then you see the eels coming out from the rocks. I grabbed my spear, then jump on a boat and pau. That's it. That's when I stop. That [the spear fishing] after the lau went through] was the best part of the hukilau. Big kine holes, with fish just running like that [gesturing to reflect plentiful fish]. Wow! [Imitating spearfishing sounds]. Caught my spear, go down again. That was fun.

> The other side [Oneloa (Big Beach)], not much holes, but on the Onouli side, good for fish and plenty of holes. Plenty, plenty eels. We call that puhi, the brown ones. I would look, I would see one, then another one or two, then I'm gone. I see two, three here, forget it. That's it [for spearfishing]. So that was my experience.

> 9-10 a.m. we would lay the lau and you would pull toward the sandy spot. The people on shore and in the canoe or skiff would be guided and orchestrated

by the diver. When you would get to the sand spot then the diver would get the bag to guide the fish in. You know its time when the fish started swirling in one spot. When you do hukilau here you would have to lay out the lau way out ... if your lau wasn't long enough then you tie it to a rope so that your lau could go out 30-50 feet more.

Specific to Oneloa, Mr. DeLima spoke of the abundance of moi (*Polydactylus sexfilis*) and the presence of a moi hole that required immense skill to fish with a net, an accomplishment which was otherwise dangerous and life threatening for those that were not schooled in the behavior of the water at certain times of the day:

There was a season for that (moi).. I know when my father used to go fishing, he took me with him and the pond (hole) was about the size of this area here (gesturing to a portion of the living room we were in), but it was kinda rough.... When he would throw the net, he'd come up, I would say maybe anywhere from eighty to a hundred (fish) fill up the ice box. You got to know how to swim to go in that hole.

Not anybody.... You gotto know how to swim. It was rough! Yeah, it was rough. But you gotta know the spot. Like you know Hawaiian fishermen, you gotto know the area. You just don't go in there blind. That wave will knock you out. The wave come in series right. So as the waves come you watching, and then when it starts really getting rough, then you go down and still working on then net and you come up for air, grabbing. You gotta know when to come out. You can ride the wave and come right out.

I just stayed up and watched. But he would, he would know when to come out cause he get steps (to follow) and stuff. So when the wave, come up, he come right out. It takes a while. After he throw the net it would take about, I don't know, maybe 8, 10 minutes to get all the net and come up. Not that easy. You gotta know what you're doing. He was superstitious too, you know? Oh yeah. When you go fishing like that, I would say where you going? Oh, he got all upset. 'Don't ask me, just follow me.' I know already we going fishing someplace. He don't take bag nothing. Was bad luck. But you know, everybody get their own ways of doing things. And he'd go up to the hole. He checked, and if he sees (fish), he takes a few step back and then he set up his net and then he'd crouch down then as a wave of come, boom, throw his net in there. You got all that takes timing. I just stand on the side and I watch. One time I went in the front (laughing) and he yelled, 'get out!' I was chase the fish away, cause they can see yeah. So you gotta know all that kine stuff so I just stayed back. When he'd throw the net, go in, I'd walk close and I'd watch him bring up the net and help carry the fish back. I was a young boy at that time. I was maybe 6, 7 years old.

And then Big Beach when the moi was running. I tried it one time. Just blind throw (from the shore). I caught about four or five moi. Yeah. Cause I heard stories. 'Hey, you try go throw the net, just blind throw.' So I did. I was about, I don't know, nine, 10 years old by myself. You gotta pick your own area where it's flat and safe. Whoomp! (demonstrating a throw) Caught four or five on a blind throw. That was it. Just to see right? That was it. I never did throw again. I was satisfied to see.

Mr. DeLima also recalled laying *moemoe* net at a beach colloquially referred to as Little or Small Beach, which is a smaller sandy beach on the western most coastline of Pu'u Ōla'i and directly south and west of Oneuli (Onouli). He explained that they would lay the net down the night before then pick it up the next morning. To illustrate what it was like, Mr. DeLima relayed the following experience which shows that the seas in this area were rough to navigate and fishing would require a high level of familiarity with the nature of the swells, the presence of a rip current, and the Ma'alaea winds:

... we lay net across here and then the next morning we went in to pick up the, it was kinda rough. The boat flipped. Yeah, was rough. I don't know what happened, but the guy that was supposed to steer the boat, the boat was sideways, the wave was coming, you gotto keep the nose up facing the wave. But, by the time the wave came he started to turn too late, and the wave caught him sideways. My father them was in the water picking the net right there. I was picking up the net too, but the guy that was in charge of the boat needed to keep the boat straight, but the boat flipped. And then, uh, Uncle Richard ... he was just like my brother, he was one year older than me. He started swimming out this way (pointing to an aerial photo). The boat was about here. And he panicked. He and two other guys started swimming this way. They got caught in the current...

So they got caught in the current ... we started yelling to them, don't fight it, you know, just go with the current but edge your way out as you go. And finally they caught on, by time they was out here already. So they had to come around like this. It was spooky man, but we picked up the boat that flipped over. By the time the boat was up shore we had about six, eight guys. So he flipped up boat, put up the net ... came around this way towards the church way. So that's my experience with Little Beach.

At Little Beach, you can catch weke or any kind of other fish.

At Oneloa, even to the experienced swimmer who was raised on this beach and instilled with generational knowledge of the resources and conditions, the power of the waves and current were still something to be revered and respected:

> I did go out there (Big Beach) to swim and you know, I dive in deep, but just to see. The water was clean. You could see a good 10, 20 feet deep. But see when I go up Big Beach I always took my fins with me. And if the waves are rough, all you gotta do is go down. You're underneath. Nice, quiet. But if you come up, the wave hit you, you're going to be tumbling over. Pound you in the sand. I experienced all of that with Big Beach. I was lucky. But I ride the wave right? If you fight the wave that wave will pound you into the sand. And then I tried, when I see the

wave coming, I went underneath, it passed me right over. I swam in the deep too.

With regard to the wind that comes across 'Alalākeiki Channel, Mr. DeLima shared the following story with the wind rising when returning by boat toward Pu'u Ōla'i from Kanahena:

... if we go Kanahena to hukilau. Ho man. When we come back, once we pass Pu'u Ōla'i, coming to the bay by the [Mākena] landing, you see the Ma'alaea wind coming. White caps. Where you see white caps it's like monsters. So you go down, you look up, the wave just start breaking the boat down. Up and down and when you go down, you no see land. I don't see nothing. I grabbed my fins and I sat on the side of the boat think that if the boat does down I'm bailing out of the side of the boat with my fins ... when I see the white cap, I'm like, God, I grabbed my fins and goggles and I just wait. But they [the boat operators] know how to ride the waves. But when you see the white caps that means the wave breaking. When you go Kanehana fishing, I look at the time, oh I know after 12 that's it. And that is when it's [the Ma'alaea wind] is coming.

At the time of World War II, Mr. DeLima was four (4) or five (5) years old and recalled how the military would practice maneuvers at Oneloa, further recalling the presence of military camps in the area near the second entrance, as well as the shift in how folks went about their daily lives in Mākena:

> And then during the war, the military used to come over and we had military camps here here (pointing to the area near second entrance). Yeah. And they used to uh, do maneuvers over here. The barges. The big boats would be out here. They come with the landing barge, drive up to the shore, drop the ledge, and then the guys run off. Like how you see in the movie.

> When the war broke out, the day that they bombed Pearl Harbor, I didn't know what was going on, but man, my father, Chang, and all those guys, they

were all alerted so they had to go up Pu'u Ōla'i to be on the lookout watching. They cut down kiawe trees to block the road. The road going towards Kanahena. That was right after Big Beach, inside this area. Cut down the trees just to block the road. We were in a car moving around, and they went back home. The night that, that Pearl Harbor was bombed. I didn't know the specifics, but all I know was that Pearl Harbor was bombed. The Japanese are here, they're going to attack us. Oh God. And my father and them had to go up Pu'u Ōla'i at night on the top and then Uncle Eddie Chang (Sr.) and few other guys. I forget who he was, but that was their job at night.

(To watch for) anything unusual and stuff like that. But nothing happened, just a thought, you know. And then after a while ... the military started and moving in, then they had maneuvers over there, and then they had a military camp right inside here (in the beach vicinity of second entrance). I would say, I don't know, six months, maybe a year. They put up barracks, slept there. Yeah. Had about, I don't know, four or five barracks and slept overnight. And we all were up here right at our house. You could see the lights at night working. That was the during the war. And they even came to our place. Makena. One night they had maneuvers. They came here during the day, they dug foxhole right around our house, that whole area. The place didn't have Kiawe trees, it was clean and they had maneuvers at night. Big search lights, and they had one plane flew out by the ocean, by Big Beach, put in one target, and then had machine guns. Guys are shooting at the target. Just that one night.

They just came in and took over. I dunno, maybe they told grandma (Caroline DeLima) and I don't know. But grandpa Kauwekane was over there watching. They all come in by the yard and fill up the canteen with water. I'm on a step sitting watching them. Some guys come by and give me a quarter to pay for the water. That was my experience. Mr. DeLima also shared his memories of the Park landmark of Pu'u  $\overline{O}$ la'i, from climbing the *Pu'u* and harvesting cinder, to the presence of sheep atop the *Pu'u*:

I climbed the mountain three times in my young days. We used to have sheep on Pu'u Ōla'i. In the evening time you see them coming up, line up. They have their own trails. Wild. I don't know ..... somebody, I'm sure somebody put them up there, but yeah ...

They would come down to the side... eat kiawe beans and get water. I don't know where they get the water from, but there wasn't there was self sustaining until eventually, I don't know. I don't know when, by the time I left for high school, they were gone already.

I was in shape. You take one step (up) you come down half step, one step (up) come down half step. And then go sideways. Yeah, you go straight up, cannot. You've got to go sideways walk. Yeah. And then, uh, let me see, you know, Big Beach. I used to haul cinders back here inside here someplace. Wait, no, the parking lot here (first entrance), maybe about here. You see one driveway, go up small hill and I used to go with a truck and fill up the truck with cinders and take it to the house and drop it for the road for the yard. And then you come down a few more feet on the level spot. There's a big side of the hill. Black cinders. Good for orchids and stuff. So I used to, my dad had friends at Pu'unene that this one guy ... Poison (his name). I filled up his military Jeep trailer with black cinders. He used to raise orchids. He owned one service station, him and my father was good friends with all those guys and they came down to help re-roof the house, the Makena house (near the landing) ... So they helped my father re-roof the whole the house one day and my job was to fill up that trailer with black cinders. I was driving already at that time. I was about 9, 10 years old.

With regard to the *mauka* view plane from Pu'u  $\overline{O}$ la'i, Mr. DeLima noted that on clear days, when he was atop the *Pu'u*, he could see his grandmother's (Francis Wilcox) home at 'Ulupalakua:

So I just roam the top on one side, went down to other side. See what it's like ... if you know 'Ulupalakua, Grandma Wilcox, she had a house, in 'Ulupalakua. And was straight up from the house (at Oneloa), you could look straight down (from 'Ulupalakua) and you could see Pu'u Ōla'i and Makena house. That close. So when I was up there ('Ulupalakua), you know, I could see Pu'u Ōla'i. So when I went up there (to the pu'u) I could see how close it was. And I remember they had a porch door and, at a certain time, the door would be open at the 'Ulupalakua, six miles apart. So I could tell when the doors open or not. You could see it. Yeah. You could see! Cause when the door is closed, it was a white door. So if I look up. I don't see the white I know the door is open. And there's a little porch over there with a bench. And then my grandma sit over there. But I couldn't see her, but I know that the door was open.

Finally, when asked about the differences between now and his childhood with regard to the popularity of Oneloa with residents and visitors, Mr. DeLima shared the following memory and closing thoughts on recreational use of Maui's shoreline areas:

Nobody. Not like now. That place when I grew up over there, it was only me on the beach. That's where I worked on my, my senior year... (the Lahainaluna football) coach told my dad that he wanted to put me as a running back for football, I was playing end, but my dad didn't tell me that part. He just said, I want you to come home. Stay home and work out and get ready for football the next year. But somebody else told me that the coach is thinking of putting you as a running back... but my dad knew so I went home and that's where I trained, Big Beach. On the sand, morning and afternoon. One lap down, one lap back. From end to end. Yeah. In the middle I would be sprinting hundred yards. That's in the morning. And then afternoon, same thing. For one month... But I used to sprint on the sand, like hundred yard sprints...

(Now) no more enforcement. Of all these guys kayaking, how many are legal? They just ripping off the state. I'm sure they get business taking all these kayakers out there, right? I think DLNR should be the one controlling that. Where's your business license? Let me check where you working. Doing investigation. Now that's in Makena, what about the other places? Lahaina. In Lahaina yesterday, all the boats, you know, taking people to ride, scuba diving. I saw about four, five. Some going Molokini. Some right around by (the) Pali. You get about 50 people, diving, snorkeling. Calm looking area, calm waters, anybody checking on them?

### Mr. Ashford DeLima:

Mr. Ashford DeLima was raised at Pu'u Ola'i and is the youngest brother of both Mr. Abner DeLima and Ms. Carol-Marie Lee (DeLima), as well as, the President of Ho'oponopono o Mākena, a Native Hawaiian Organization. During an informal phone call on September 10, 2019, Mr. DeLima expressed project specific concerns regarding the potential for increasing recreational use of Oneloa as a result of the proposed comfort station creating greater accessibility and more amenities for both the general and visiting population. Mr. DeLima noted that with increasing use, there is increasing pressure on resources. During the June 25, 2019 meeting of the Oneloa Coalition, Mr. DeLima wanted to be sure that the proper wahi 'inoa of Oneloa, rather than the colloquial name of Big Beach, was recognized and used in conversation and planning. He further expressed concerns with regard to the placement of the proposed future sewerline from the comfort stations to the County sewer system and wanted to know what the procedures would be in the event of sewerline break.

### Ms. Carol-Marie Ka'onohiokalā Lee (Delima):

Ms. Carol-Marie 'Ka'onohi' Lee is the youngest sibling of Mr. Abner DeLima (junior) and Mr. Ashford DeLima. Ms. DeLima was born at Kula Sanatorium and raised at Pu'u Ōla'i, residing in both the home that was constructed by their maternal grandfather Kauwekane Kukahiko, as well as, the FAA house at Oneloa. Kauwekane Kukahiko, obtained the land by exchanging his Kanahena land with 'Ulupalakua Ranch while their fraternal great-great grandfather was William Slocum Wilcox, a whaling captain and the patriarch of a strong Hawaiian family, thus laying the foundation of generational ties throughout Maui and particularly along the south shore from Kanahena to Kīhei.

Where her brothers recalled the active leadership role and expertise of their father in offshore fishing, Ms. Lee recalled that their mother would gather the ocean resources that were available in the waters near their home:

There is a papa in the front of Pu'u Ōla'i, not on the Little Beach side, but in the front, off the point. Had limu līpoa there and I would go with my mother with the rice bag and collect limu, 'opihi, and hā'uke'uke (urchin). While she picked 'opihi, I would watch for the waves, the sets to come in, to be able to warn her when they were coming. There is a spring there, freshwater spring, at the papa, where the limu grew.

Ms. Lee also recalled being tasked with harvesting from the pānini, although unlike her brother Abner who picked the leaves, Ms. Lee gathered the fruit of the pānini as a food resource. She shared the following description of what the fruit was like and how it was collected off of the cactus plant:

... (we) gathered pānini to eat because it was cooling and it tasted like watermelon. It was hell to pick because of the heu, the prickly part or needles, but it was worth it. We would need to put a bag like old rice bag, the old muslin type of bags, at the end of a stick and then put it at the end of a stick like fruit picker. When the fruit was in the bag you would need to swish around the bag to remove heu and put it in the bucket. To prepare the fruit you would cut the skin off and the fruit is inside - like dragon fruit. We would gather pānini at Moʻoloa mauka of Keoneʻoio-Mākena Road. Don't see too much of it anymore.

As the Moku representative for Honua'ula, Ms. Lee also participated in discussions related to the proposed project as a member of the Oneloa Coalition in seeking to balance the needs of the Park with the cultural resources and mo'olelo of her childhood home. Important in this is understanding the wahi 'inoa of a place. Ms. Lee wanted to be sure that those who were in those meetings, as well as those who use the area knew that the placename of Oneloa translated to long sand or beach which is descriptive of the place itself.

## Mr. Leslie Kuloloio (Aka Kuloloi'a):

The late Mr. Leslie Kuloloio was genealogically connected to Honua'ula and Makena through the familial lines of both his mother and father. Also, a founding member of Hui Alanui o Makena, a Hawaiian Organization and non-profit that was organized in 1985 in response to the then proposed closure of a section of the traditional Alaloa and blockade of shoreline access fronting the former Maui Prince Hotel, Mr. Kuloloio actively consulted and advised on various issues as they related to the traditional cultural resources of Honua'ula Moku to ensure preservation of the Alaloa and recognition of resources in the area. In e-mail correspondence and follow up conversations, Mr. Kuloloio expressed strong opposition to the expansion of parking and placement of additional asphalt which would result in a loss and destruction of natural resources. He went on to note that the manner in which folks were using the area, specifically Little or Small Beach for nude sunbathing and other activities, was disrespectful and not in-line with cultural uses and practices of the area. He went on to name the prominent landmarks of Pu'u Ōla'i and the lava flow at Ahihi-Kina'u, along with the places of Mo'oiki, Mo'oloa, and Mo'omuku between the two (2) as being a large and continuously significant shoreline of volcanic and coral papa (shelves) that retained historic significance prior to 1700 and deserving of a listing on the National Register of Historic Places.

#### Mr. Cody Nemet Tuivaiti:

Mr. Cody 'Koko' Nemet Tuivaiti was born in Upolu, Samoa and came to Hawai'i at six-months old. Mr. Tuivaiti was fostered by Aunty Rose Hapakuka at Hawaiian Homes, Uncle Kenneth Kahalekai for a time in Waihe'e, with the Akina Ohana in Kula Kai, and finally Ms. Myra Nemet who would formally adopt him into her Kīhei home. Throughout his upbringing with these well-known Hawaiian ohana, he learned about traditional Hawaiian mahi 'ai (farming) and hana lawai'a (fishing) with much time spent in Kīhei, or South Maui, being raised on the fishing stories of the region. Throughout his childhood and early adulthood, Mr. Tuivaiti would continue to go to Waihe'e in the summer while staying with the Akina Ohana in Kīhei during the school year. He had fond memories of fishing at Po'olenalena, colloquially known as Chang's Beach, and Palauea with the ohana. At Palauea, Mr. Tuivaiti remembers the heiau being a place of reverence and a constant through life, with the changes to the area, which appears to have happened overnight, he wonders what has happened to this heiau, the place which led to his interest in cultural issues.

With regard to Oneloa and Pu'u Ōla'i, Mr. Tuivaiti recalls that his connection to the Pu'u began while he was being fostered. He also remembers gathering limu and 'opihi in the area as a youth while also trying to manage Western influences. As a youth, he would hitchhike to Oneloa to spend all day at the beach and with his increasing cultural awareness as an adult following his acceptance into the Nā Koa Pā and mentorship by Ke'eaumoku Kapu he understood that by bringing practices to life you begin to revive a place. It was at this time that he started to dive into the mo'olelo of areas and started huaka'i (travels or visits) through Keone'o'io. Gathering ho'okupu or makana (gifts or offerings), he would bring these to the ohana of the places he would go. His interest in regional moʻolelo and traditional spaces would lead him to Pu'u Ōla'i where he acknowledges the mo'olelo of Puuoinaina, Puuhele, the rising of Makali'i (known in Western astronomy as Pleiades) and the opening of Makahiki Season. For Mr. Tuivaiti, the Pu'u is important for kilo (study, observe, forecast, examine) where you can begin to understand wind and cloud patterns, the landscape surrounding you, as well as a grounding space.

With regard to the proposed project, Mr. Tuivaiti believes that adding built features degrades the spiritual feel of the place knowing

that Pu'u Ōla'i is also a resting place for 'iwi kūpuna (ancestral burials). He also wanted to stress that Oneloa should not be considered a family beach as it is dangerous and records the highest frequency of injuries. Mr. Tuivaiti points out that when you create comfort stations, you can also create a sense of safety and false security. Cumulatively, he notes that developments contribute to the need for improvements in these types of spaces and wonders what that will hold for the future of our natural areas. For the Park at large, Mr. Tuivaiti stresses the implementation of online information bases that provide injury statistics for Oneloa, as well as basic ocean safety and cultural education. He goes on to assert that nearby developments which may contribute to increased use of Oneloa (Makena) State Park by visitors and new residents alike should be responsible for contributing to the development and maintenance of such information, noting that such points of information dissemination could be through social media, the Maui tourist channel, Maui and Hawaii Visitors Bureau, hotel information centers, rental car kiosks and centers, and other visitor platforms like Yelp and Trip Advisor.

## Oneloa Coalition

Comments were received during meetings with the Oneloa Coalition during the period spanning October 2018 to April 2019. See **Appendix "I"**. The mission statement of the Oneloa Coalition (Coalition) states that those who make up the Coalition are a consortium of stakeholders working in the spirit of cooperation and collaboration to ensure the preservation of historical and cultural sites and the restoration and management of the natural ecology of Oneloa State Park, while enhancing the stewardship of traditional and recreational uses for future generations.

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

DSP has undertaken extensive community consultation and refined the project design in order to avoid impacts to the surrounding larger study area including Pu'u Ōla'i and the shoreline. Previous designs included a comfort station located in closer proximity to Pu'u Ōla'i; this has been since relocated in the present design to the opposite side of the parking area. Additionally, concerns have been taken into account regarding onsite wastewater treatment design alternatives, with respect to both the physical environment and overall natural setting. The currently proposed action will not include a wastewater treatment component, as wastes generated by

the comfort stations will be stored in wastewater containment tanks and regularly removed for treatment offsite.

Furthermore, as the CIA has identified Pu'u Ōla'i as one of the main geological features of the Traditional Cultural Property of Puuoinaina, DSP is supportive of designating Pu'u Ōla'i as a Traditional Cultural Property (TCP) and nominating it to the National Register of Historic Places in order to identify and protect its historic and archaeological resources. The CIA did not identify specific traditional cultural practices within the project areas which would be impacted by the proposed action. As such, the proposed project is not anticipated to present significant adverse impacts on cultural resources. Refer to **Appendix "H"**.

## 13. <u>Scenic and Open Space Resources</u>

## a. <u>Existing Conditions</u>

The project sites are situated within Mākena State Park, in the area of two (2) existing parking lots. The parking lots are surrounded by a kiawe forest, which limits ocean views from Mākena Road.

### b. Potential Impacts and Mitigation Measures

The proposed project is limited in scope to comfort stations, showers (or foot rinse stations), associated utilities, and parking lot improvements. Due to the nature of the proposed improvements and their location which is surrounded by vegetation, the proposed project is not anticipated to present significant adverse impacts on views. To mitigate potential effects to the viewshed to and from Pu'u Ōla'i, as well as viewsheds to and from the beach, the comfort stations at the North and South parking sites have been designed with low pitched roofing and with exterior colors blending with and complementing the natural landscape. Landscaping may be incorporated to shield the comfort stations as much as possible from view and blend in with the surrounding landscape, with preference given to native plantings to the extent practicable.

# B. <u>SOCIO-ECONOMIC ENVIRONMENT</u>

# 1. <u>Regional Setting</u>

# a. <u>Existing Conditions</u>

From a regional standpoint, the project sites are located within the Kihei-Makena Community Plan region which stretches from Māʻalaea in the north to La Perouse Bay in the south. The region contains a diverse range of physical and socio-economic environments. With this region's dry, mild climate, and proximity to recreation-oriented shoreline resources, the visitor-based economy has grown steadily over the years. The town of Kīhei serves as the commercial and residential center of the region with the master-planned communities of Wailea and Mākena serving as the focal point for the majority of visitor activities.

### b. Potential Impacts and Mitigation Measures

The proposed project involves improvements to Mākena State Park, a popular recreational area for visitors and residents. The project is compatible with the existing State Park and surrounding resort and residential land uses. The project will enhance the experience of Park users and will be a benefit to the local socio-economic environment.

## 2. <u>Population and Demography</u>

## a. <u>Existing Conditions</u>

The population of the Maui County has exhibited growth over the past several decades. According to the U.S. Census, the resident population of Maui County in 2020 was 164,754, an increase of 6.4 percent from the 2010 population of 154,834 (U.S. Census 2020). The population of Maui County is projected to increase to 211,537 by the year 2045 (Maui County Data Book, 2020).

The project area is located on the southwestern part of Maui, within the Kihei-Makena Community Plan region. Just as Maui County's population has grown, the resident population of the Kīhei-Mākena region has also increased. The population of the Kīhei-Mākena region (including Kīhei, Mākena, Wailea Census Designated Places (CDP)) is estimated to be 28,371 in 2020 (Gale Cengage Learning, 2020), comprising 16.9 percent of the County's population. According to the 2010 Census, the resident population of the Kīhei-Mākena region was 26,917. The resident population for this region in 2020 increased by 5.4 percent since 2010. By 2025, the population for the region is projected to reach approximately 28,757 (Gale Cengage Learning, 2020).

# b. Potential Impacts and Mitigation Measures

The proposed project is limited in scope and is not a population generator. As such, it is not anticipated to impact the region's population or demographics.

## 3. Economy and Labor Force

## a. <u>Existing Conditions</u>

The economy of Maui is heavily dependent upon the visitor industry and, in turn, this industry fosters the retail and service industries. The dependency on the visitor industry is especially evident in the Kīhei-Mākena region, which is one of the State's major resort destination areas. The foundation for the region's visitor strength lies in the availability of vacation rentals, hotel condominiums, world-class resorts, and recreational facilities throughout Kīhei, Wailea, and Mākena. Service support for the visitor industry is also found in Kīhei, where numerous retail commercial centers are located.

Hawai'i's economy through 2019 was strong, with record-setting visitor arrivals and low unemployment. Unemployment was under four (4) percent statewide and on Maui island at the beginning of 2020. However, the COVID-19 pandemic has had far-reaching impacts on the economy on Maui, in Hawai'i, and across the nation and world. Stay-at-home regulations and travel regulations implemented to curb the spread of the COVID-19 virus in Hawai'i caused many businesses to shut down or drastically reduce operations. Unemployment claims soared to over 20 percent statewide and in excess of 30 percent on Maui island during 2020. By mid-2022, however, the County's and State's economy have made a substantial recovery. The unemployment rate in June 2022 was 4.9 percent (Department of Labor and Industrial Relations, July 2022), returning almost to prepandemic levels.

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

The proposed project will generate short-term economic benefits associated with construction spending and employment. The development of the proposed improvements may require addition of labor for maintenance within the Division of State Parks (DSP).

# C. <u>PUBLIC SERVICES</u>

# 1. Police and Fire Protection

# a. <u>Existing Conditions</u>

The headquarters of the County of Maui Police Department (MPD) are located at its Wailuku Station. The department consists of several patrol,

support, administrative, and investigative divisions that service the Hāna, Lāna'i, Lāhainā, Moloka'i, Wailuku, and Kīhei regions.

The MPD's Kīhei Patrol, which covers the Kīhei-Mākena region, operates from a station located on Pi'ilani Highway, approximately 5.2 miles north of the project sites, in the vicinity of Kamali'i Elementary School.

Fire prevention, protection, and suppression services are provided by the County of Maui, Department of Fire and Public Safety. The Wailea Fire Station is located about 3.5 miles to the north of the project sites on Kilohana Drive. The Wailea Station services the area from Kama'ole Beach Park II to Mākena.

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

The proposed project represents a continuation of the existing use of the State Park with improvements to existing facilities and addition of comfort stations. The proposed project will not extend the service area for emergency service providers. Access to the parking areas will remain through the existing driveways.

As such, significant adverse impacts on police and fire protection services are not anticipated from project implementation.

### 2. <u>Medical Facilities</u>

### a. <u>Existing Conditions</u>

The only major medical facility on the island is Maui Memorial Medical Center, which is located in Wailuku about 20 miles from the project sites. This 213-bed facility provides general, acute, and emergency care services.

Clinics and doctors' offices are situated throughout the Kīhei and Wailea areas, however these offer medical services on a lesser scale. Such clinics include Kihei Clinic and Wailea Medical Services, Kihei Pediatric Clinic, Kihei Physicians, the Kihei-Wailea Medical Center, Maui Medical Group, and Kaiser Permanente.

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

The proposed project is not anticipated to affect the service capabilities of emergency medical or general care operations. As noted above, medical services are available throughout the Kīhei-Wailea region.

## 3. <u>Education Facilities</u>

### a. <u>Existing Conditions</u>

The State Department of Education (DOE) operates four (4) schools in South Maui. Kīhei Elementary School and Kamali'i Elementary School each covers grades Kindergarten to 5, and Lokelani Intermediate School covers grades 6 to 8. Maui High School, which covers grades 9 to 12 and is located in Kahului, is currently the designated public high school for South Maui residents. The new Kūlanihāko'i High School is currently under construction and is expected to open in 2023. Kīhei Public Charter School covers grades K to 12. The approximate enrollments for these schools are presented in **Table 4**.

	Actual Enrollment				
School	SY 20-21	SY 21-22	SY 22-23		
Maui High	2,100	2,058	1,999		
Lokelani Intermediate	480	454	473		
Kamali'i Elementary	444	403	369		
Kīhei Elementary	656	712	703		
Kīhei Charter	713	723	693		
Source: Department of Education, 2020-2022.					

 Table 4.
 Enrollments at Department of Education Schools

 Serving South Maui Residents

The University of Hawai'i Maui College (UHMC), located in Kahului, is a branch of the University of Hawai'i system. UHMC is the primary higher education institution serving Maui.

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

The proposed project is not a population generator and is not expected to impact the region's educational facilities.

# 4. <u>Recreational Facilities</u>

# a. <u>Existing Conditions</u>

Diverse recreational opportunities are available in the Kihei-Makena Community Plan region. Shoreline activities, such as fishing, surfing, jogging, camping, picnicking, snorkeling, swimming, and scuba diving, are by far the predominant forms of recreation in the area. In the wake of the COVID-19 pandemic, the availability of outdoor recreational activities which allow for ample social distancing and opportunities for exercise is increasingly important for residents and visitors. Mākena State Park provides over a mile of sandy beaches over 100 feet wide and is an extremely popular recreational destination.

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

The proposed improvements will provide enhanced sanitary facilities to improve the experience of recreational Park users, while also adding additional parking stalls for greater access. As such, the proposed project will represent a positive impact on recreational resources.

#### 5. <u>Solid Waste Disposal</u>

#### a. <u>Existing Conditions</u>

Solid waste within Mākena State Park is currently collected into a dumpster by DSP staff and removed by a private waste hauler for disposal at the Central Maui Landfill.

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

Construction waste and recyclable materials will be transported to appropriate processing facilities. Post-construction, the proposed project areas will continue to be served by private waste collection companies. The proposed project is, therefore, not anticipated to affect the service capabilities of the County's residential waste collection operations.

The new comfort stations will feature bottle filling stations to encourage use of reusable water bottles and reduce the volume of plastic bottles discarded.

The proposed project is not anticipated to present significant adverse impacts on the County's solid waste disposal facilities at the Central Maui Landfill.

# D. INFRASTRUCTURE

#### 1. <u>Roadways</u>

### a. <u>Existing Conditions</u>

Access to the project sites are provided by Mākena Road via two (2) access driveways. South Kīhei and North Kīhei Roads provide access to the South
Maui region from the West Maui and Wailuku areas, and Pi'ilani Highway and Maui Veteran's Highway provide access from the Kahului and Upcountry areas.

#### b. Potential Impacts and Mitigation Measures

The proposed project will continue to utilize the two (2) existing access points from Mākena Road.

Traffic management measures will be evaluated by DSP to minimize construction-related trips and to reduce impacts of the construction phase of the project. Coordination with MPD regarding road closures or redirecting of traffic will be undertaken, as applicable.

The proposed project is anticipated to benefit traffic conditions associated with over crowding in the existing parking lots, including circling and standing vehicles and vehicles parked outside of designated stalls.

Due to its limited scope, the project is not anticipated to present significant adverse impacts on regional roadway infrastructure.

#### 2. <u>Water System</u>

#### a. <u>Existing Conditions</u>

The project sites currently have no existing domestic water service. The County of Maui Department of Water Supply (DWS) currently services the Mākena area via an existing 1.5 million gallon (MG) water tank located mauka of Mākena Alanui Drive at 265 feet amsl. The tank has a 12-inch inlet line and an 18-inch outlet line. The 12-inch inlet line conveys water from DWS's Central Maui Water Source and Transmission System via a connection to a 20-inch transmission pipeline within Mākena Alanui Road, approximately 700 feet south of the Wailea-Mākena boundary. A 12-inch waterline runs along Mākena Road adjacent to the project area.

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

According to the Preliminary Engineering Report, the potable water demand for the proposed project, including domestic and fire protection, is estimated to be 62 gallons per minute (GPM) for each of the two (2) new comfort stations and shower facilities. Potable water service for the project is proposed via connection to the County of Maui's Central Maui water system. Two (2) new water service laterals, two (2) new 1.5-inch water meters (100 GPM capacity), backflow preventers, and 2.5-inch waterlines will supply water from the 12-inch waterline along Mākena Road to the new facilities. Refer to **Figure 3**, **Figure 4**, and **Appendix "B"**. Coordination will be carried out with the Department of Water Supply to ensure water service capacity is available prior to construction.

#### 3. <u>Wastewater System</u>

#### a. <u>Existing Conditions</u>

Domestic wastewater from residences and other uses within the Mākena Resort is treated at the privately owned Mākena Wastewater Reclamation Facility (WWRF). There is currently no wastewater infrastructure available at Mākena State Park.

#### b. Potential Impacts and Mitigation Measures

According to the Preliminary Engineering Report, average daily wastewater flow for the proposed project is estimated to be 5,000 GPD from the North Site and 2,500 GPD from the South Site. Wastewater from the comfort stations will be stored in onsite containment tanks and removed from the project sites via pump trucks for treatment at a wastewater treatment facility. Refer to **Appendix "B"**.

While the proposed facilities will generate wastewater to be treated offsite, the project is not a population generator and is not anticipated to result in a net increase to wastewater treatment facilities on Maui (due to the current use of portable toilets at the park). As such, the project does not present a significant impact to County-owned wastewater infrastructure.

#### 4. Drainage System

#### a. <u>Existing Conditions</u>

The project sites currently do not have any drainage improvements. The existing drainage flow pattern is characterized by surface flow in an east to west direction toward the ocean. Refer to **Appendix "B"**.

#### b. Potential Impacts and Mitigation Measures

Based on the drainage analysis presented in the Preliminary Engineering Report, the post-development onsite runoff from the North Site is calculated at 2.5 cubic feet per second (cfs) which is an increase of 1.8 cfs over existing conditions. From the South Site, the post-development onsite runoff is calculated at 1.2 cfs, an increase of 0.9 cfs over existing conditions.

The proposed project will not present any drainage impacts on downstream properties. It is anticipated that the runoff generated by the development will be contained in surface drainage basins adjacent to the proposed structures.

#### 5. <u>Electrical, Telephone, and Cable Television Services</u>

#### a. <u>Existing Conditions</u>

Electrical power, telephone, and cable television services to the region are provided by Hawaiian Electric Company, Hawaiian Telcom, and Spectrum, respectively. There are existing overhead electrical distribution lines along Mākena Road.

#### b. Potential Impacts and Mitigation Measures

No electrical, telephone, or cable improvements are proposed as part of the project. Electrical power for low-level night lighting in the comfort stations is anticipated to be provided via onsite photoelectric panels.

Significant adverse impacts to electrical, telephone, and cellular service systems are not anticipated with implementation of the proposed improvements.

#### E. <u>CUMULATIVE AND SECONDARY IMPACTS</u>

 Cumulative impacts are defined by Title 11, Chapter 200.1, Hawai'i Administrative Rules (HAR), Environmental Impact Statement Rules as:

[T]he impact on the environment which results from the incremental impact of the 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.

 "Secondary impacts" or "indirect effects" are defined by Title 11, Chapter 200.1, HAR as:

[E]ffects which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density, or growth rate, and related effects on air and water and other natural systems including ecosystems.

 The context for analyzing cumulative and secondary impacts is defined by actions within the "reasonably foreseeable future". The proposed project is limited to provision of adequate sanitary and parking facilities at Mākena State Park. The project, therefore, represents a continuation of the existing land use as a State Park. The project is not a phase or increment of a larger total undertaking; a necessary precedent for a larger project; a commitment to some larger project; or one of a series of individual actions planned by DSP in the reasonably foreseeable future. The proposed project will stand on its own and is not reliant upon or a trigger for any other development at Mākena State Park or elsewhere in the region.

Given the foregoing, there are no significant adverse cumulative or secondary impacts anticipated with implementation of the proposed project.

# RELATIONSHIP TO GOVERNMENTAL PLANS, POLICIES, AND CONTROLS

## III. RELATIONSHIP TO GOVERNMENTAL PLANS, POLICIES, AND CONTROLS

This section discusses the relationship between the proposed project and County land use plans, policies, and controls for the Kihei-Mākena region.

### A. <u>STATE LAND USE DISTRICTS</u>

Pursuant to Chapter 205, Hawai'i Revised Statutes (HRS), all lands in the State have been placed into one (1) of four (4) major land use districts by the State Land Use Commission. These land use districts are designated "Urban", "Rural", "Agricultural", and "Conservation". The proposed project is located within the "Rural" district. See **Figure 14**. Pursuant to Section 205-5.(c), HRS, the authorized uses in the "Rural" district shall include:

(4) Public, quasi-public, and public utility facilities.

As such, the proposed comfort station and parking improvements at Mākena State Park are permitted uses in the "Rural" district. While the adjacent Pu'u Ōla'i cinder cone is within the "Conservation" District, the project sites are located outside of Conservation Lands. See **Figure 15**.

#### B. <u>HAWAI'I STATE PLAN</u>

Chapter 226, HRS, also known as the Hawai'i State Plan, is a long-range comprehensive plan which serves as a guide for the future long-term development of the State by identifying goals, objectives, policies, and priorities, as well as implementation mechanisms. The Plan consists of three (3) parts. Part I includes the Overall Theme, Goals, Objectives, and Policies; Part II includes Planning, Coordination, and Implementation; and Part III establishes Priority Guidelines. Inasmuch as Part II of the State Plan covers its administrative structure and implementation process, discussion of the proposed project's applicability to Part II is not appropriate. Below is an analysis of the project's applicability to Part I and Part III of the Hawai'i State Plan.





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RTTanaka/Makena Corrfort Station/Applications/Figures/Conservation District

HAWAI'I STATE PLAN, Chapter 226, HRS Part I. Overall Themes, Goals, Objectives and Policies (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
HRS 226-1: Findings and Purpose			
HRS 226-2: Definitions			
HRS 226-3: Overall Theme			
<ul> <li>HRS 226-4: State Goals. In order to guarantee, for the present and future gener of choice and mobility that insure that individuals and groups may approach their reliance and self determination, it shall be the goal of the State to achieve:</li> <li>(1) A strong, viable economy, characterized by stability, diversity, and grown fulfillment of the needs and expectations of Hawaii's present and future gener.</li> <li>(2) A desired physical environment, characterized by beauty, cleanliness, quiet, and uniqueness, that enhances the mental and physical well-being of the peed (3) Physical, social, and economic well-being, for individuals and families in H sense of community responsibility, of caring, and of participation in community</li> </ul>	rations, t ir desired th, that erations. stable na ople. awaii, th ty life.	hose ele d levels o enables atural sy at nouris	ements of self- the stems, shes a
Analysis: The proposed comfort station improvements at Mākena Sta desired physical environment characterized by beauty and cleanliness physical well-being of the people.	te Park that en	suppor hances	ts a the
Chapter 226-5 Objective and Policies for Population			
<b>Objective:</b> It shall be the objective in planning for the State's population to guide population growth to be consistent with the achievement of physical, economic and social objectives contained in this chapter.	1		
Policies:			
(1) Manage population growth statewide in a manner that provides increased opportunities for Hawaii's people to pursue their physical, social, and economic aspirations while recognizing the unique needs of each county.			✓
(2) Encourage an increase in economic activities and employment opportunities on the neighbor islands consistent with community needs and desires.			~
(3) Promote increased opportunities for Hawaii's people to pursue their socio- economic aspirations throughout the islands.			~
(4) Encourage research activities and public awareness programs to foster an understanding of Hawaii's limited capacity to accommodate population needs and to address concerns resulting from an increase in Hawaii's population.			✓
(5) Encourage federal actions and coordination among major governmental agencies to promote a more balanced distribution of immigrants among the states, provided that such actions do not prevent the reunion of immediate family members.			~
(6) Pursue an increase in federal assistance for states with a greater proportion of foreign immigrants relative to their state's population.			✓
(7) Plan the development and availability of land and water resources in a coordinated manner so as to provide for the desired levels of growth in each geographic area.	<ul> <li>✓</li> </ul>		
<i>Analysis:</i> The proposed project provides needed sanitary facil improvements for Park uses in support of the management objectives for <b>N</b>	lities a Iākena \$	ind rela	ated irk.
Chapter 226-6 Objectives and policies for the economy – – in general			
<b><u>Objectives</u></b> : Planning for the State's economy in general shall be directed toward following objectives:	ard achi	evement	of the

HAWAI'I STATE PLAN, Chapter 226, HRS Part I. Overall Themes, Goals Objectives and Policies (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	, S	N/S	N/A
(1) Increased and diversified employment opportunities to achieve full employment, increased income and job choice, and improved living standards for Hawaii's people, while at the same time stimulating the development and expansion of economic activities capitalizing on defense, dual-use, and science and technology assets, particularly on the neighbor islands where employment opportunities may be limited.			✓
(2) A steadily growing and diversified economic base that is not overly dependent on a few industries, and includes the development and expansion of industries on the neighbor islands.			~
Policies:		_	
(1) Promote and encourage entrepreneurship within Hawaii by residents and nonresidents of the State.			✓
(2) Expand Hawaii's national and international marketing, communication, and organizational ties, to increase the State's capacity to adjust to and capitalize upon economic changes and opportunities occurring outside the State.			~
(3) Promote Hawaii as an attractive market for environmentally and socially sound investment activities that benefit Hawaii's people.			~
(4) Transform and maintain Hawaii as a place that welcomes and facilitates innovative activity that may lead to commercial opportunities.			✓
(5) Promote innovative activity that may pose initial risks, but ultimately contribute to the economy of Hawaii.			✓
(6) Seek broader outlets for new or expanded Hawaii business investments.			✓
(7) Expand existing markets and penetrate new markets for Hawaii's products and services.			~
(8) Assure that the basic economic needs of Hawaii's people are maintained in the event of disruptions in overseas transportation.			✓
(9) Strive to achieve a level of construction activity responsive to, and consistent with, state growth objectives.	~		
(10) Encourage the formation of cooperatives and other favorable marketing arrangements at the local or regional level to assist Hawaii's small scale producers, manufacturers, and distributors.			~
(11) Encourage labor-intensive activities that are economically satisfying and which offer opportunities for upward mobility.			✓
(12) Encourage innovative activities that may not be labor-intensive, but may otherwise contribute to the economy of Hawaii.			✓
(13) Foster greater cooperation and coordination between the government and private sectors in developing Hawaii's employment and economic growth opportunities.			✓
(14) Stimulate the development and expansion of economic activities which will benefit areas with substantial or expected employment problems.			✓
(15) Maintain acceptable working conditions and standards for Hawaii's workers.			✓

HAWAI'I STATE PLAN, Chapter 226, HRS Part I. Overall Themes, Goals Objectives and Policies (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	, S	N/S	N/A
(16) Provide equal employment opportunities for all segments of Hawaii's population through affirmative action and nondiscrimination measures.			✓
(17) Stimulate the development and expansion of economic activities capitalizing on defense, dual-use, and science and technology assets, particularly on the neighbor islands where employment opportunities may be limited.			<b>~</b>
(18) Encourage businesses that have favorable financial multiplier effects within Hawaii's economy, particularly with respect to emerging industries in science and technology.			✓
(19) Promote and protect intangible resources in Hawaii, such as scenic beauty and the aloha spirit, which are vital to a healthy economy.	✓		
(20) Increase effective communication between the educational community and the private sector to develop relevant curricula and training programs to meet future employment needs in general, and requirements of new or innovative potential growth industries in particular.			~
(21) Foster a business climate in Hawaiiincluding attitudes, tax and regulatory policies, and financial and technical assistance programs that is conducive to the expansion of existing enterprises and the creation and attraction of new business and industry.			<
Analysis: The proposed project will help stimulate the economy opportunities during the construction phase of the project. The proportation and related drainage improvements will also help protect the environappropriate collection/disposal of wastewater and stormwater runoff.	/ and o sed com onment l	employn Ifort sta by provie	nent ition ding
Chapter 226-7 Objectives and policies for the economy – – agriculture.			
Chapter 226-7 Objectives and policies for the economy – – agriculture. <u>Objectives</u> : Planning for the State's economy with regard to agriculture sha achievement of the following objectives:	all be di	ected to	owards
Chapter 226-7 Objectives and policies for the economy – – agriculture.         Objectives:       Planning for the State's economy with regard to agriculture sha achievement of the following objectives:         (1) Viability of Hawaii's sugar and pineapple industries.	all be di	rected to	owards ✔
Chapter 226-7 Objectives and policies for the economy – – agriculture.         Objectives:       Planning for the State's economy with regard to agriculture share achievement of the following objectives:         (1) Viability of Hawaii's sugar and pineapple industries.         (2) Growth and development of diversified agriculture throughout the State.	all be dii	rected to	owards ✓ ✓
<ul> <li>Chapter 226-7 Objectives and policies for the economy – – agriculture.</li> <li><u>Objectives</u>: Planning for the State's economy with regard to agriculture sha achievement of the following objectives:</li> <li>(1) Viability of Hawaii's sugar and pineapple industries.</li> <li>(2) Growth and development of diversified agriculture throughout the State.</li> <li>(3) An agriculture industry that continues to constitute a dynamic and essential component of Hawaii's strategic, economic, and social well-being.</li> </ul>	all be dii	ected to	owards
<ul> <li>Chapter 226-7 Objectives and policies for the economy – agriculture.</li> <li><u>Objectives</u>: Planning for the State's economy with regard to agriculture share achievement of the following objectives:         <ul> <li>(1) Viability of Hawaii's sugar and pineapple industries.</li> <li>(2) Growth and development of diversified agriculture throughout the State.</li> <li>(3) An agriculture industry that continues to constitute a dynamic and essential component of Hawaii's strategic, economic, and social well-being.</li> </ul> </li> <li>Policies:</li> </ul>	all be dii	rected to	owards
<ul> <li>Chapter 226-7 Objectives and policies for the economy – – agriculture.</li> <li><u>Objectives</u>: Planning for the State's economy with regard to agriculture shat achievement of the following objectives:         <ul> <li>(1) Viability of Hawaii's sugar and pineapple industries.</li> <li>(2) Growth and development of diversified agriculture throughout the State.</li> <li>(3) An agriculture industry that continues to constitute a dynamic and essential component of Hawaii's strategic, economic, and social well-being.</li> </ul> </li> <li>Policies:         <ul> <li>(1) Establish a clear direction for Hawaii's agriculture through stakeholder commitment and advocacy.</li> </ul> </li> </ul>	all be di	rected to	owards
<ul> <li>Chapter 226-7 Objectives and policies for the economy – – agriculture.</li> <li><u>Objectives</u>: Planning for the State's economy with regard to agriculture sha achievement of the following objectives: <ul> <li>(1) Viability of Hawaii's sugar and pineapple industries.</li> <li>(2) Growth and development of diversified agriculture throughout the State.</li> <li>(3) An agriculture industry that continues to constitute a dynamic and essential component of Hawaii's strategic, economic, and social well-being.</li> </ul> </li> <li>Policies: <ul> <li>(1) Establish a clear direction for Hawaii's agriculture through stakeholder commitment and advocacy.</li> <li>(2) Encourage agriculture by making the best use of natural resources.</li> </ul> </li> </ul>	all be di	rected to	owards
<ul> <li>Chapter 226-7 Objectives and policies for the economy – agriculture.</li> <li>Objectives: Planning for the State's economy with regard to agriculture shat achievement of the following objectives:         <ul> <li>(1) Viability of Hawaii's sugar and pineapple industries.</li> <li>(2) Growth and development of diversified agriculture throughout the State.</li> <li>(3) An agriculture industry that continues to constitute a dynamic and essential component of Hawaii's strategic, economic, and social well-being.</li> </ul> </li> <li>Policies:         <ul> <li>(1) Establish a clear direction for Hawaii's agriculture through stakeholder commitment and advocacy.</li> <li>(2) Encourage agriculture by making the best use of natural resources.</li> <li>(3) Provide the governor and the legislature with information and options needed for prudent decision-making for the development of agriculture.</li> </ul> </li> </ul>	all be di	rected to	owards
<ul> <li>Chapter 226-7 Objectives and policies for the economy – agriculture.</li> <li>Objectives: Planning for the State's economy with regard to agriculture shat achievement of the following objectives:</li> <li>(1) Viability of Hawaii's sugar and pineapple industries.</li> <li>(2) Growth and development of diversified agriculture throughout the State.</li> <li>(3) An agriculture industry that continues to constitute a dynamic and essential component of Hawaii's strategic, economic, and social well-being.</li> <li>Policies:</li> <li>(1) Establish a clear direction for Hawaii's agriculture through stakeholder commitment and advocacy.</li> <li>(2) Encourage agriculture by making the best use of natural resources.</li> <li>(3) Provide the governor and the legislature with information and options needed for prudent decision-making for the development of agriculture.</li> <li>(4) Establish strong relationships between the agricultural and visitor industries for mutual marketing benefits.</li> </ul>	all be di		owards
<ul> <li>Chapter 226-7 Objectives and policies for the economy – agriculture.</li> <li>Objectives: Planning for the State's economy with regard to agriculture shat achievement of the following objectives:</li> <li>(1) Viability of Hawaii's sugar and pineapple industries.</li> <li>(2) Growth and development of diversified agriculture throughout the State.</li> <li>(3) An agriculture industry that continues to constitute a dynamic and essential component of Hawaii's strategic, economic, and social well-being.</li> <li>Policies:</li> <li>(1) Establish a clear direction for Hawaii's agriculture through stakeholder commitment and advocacy.</li> <li>(2) Encourage agriculture by making the best use of natural resources.</li> <li>(3) Provide the governor and the legislature with information and options needed for prudent decision-making for the development of agriculture.</li> <li>(4) Establish strong relationships between the agricultural and visitor industries for mutual marketing benefits.</li> <li>(5) Foster increased public awareness and understanding of the contributions and benefits of agriculture as a major sector of Hawaii's economy.</li> </ul>	all be dii		owards
<ul> <li>Chapter 226-7 Objectives and policies for the economy – agriculture.</li> <li>Objectives: Planning for the State's economy with regard to agriculture sha achievement of the following objectives: <ol> <li>Viability of Hawaii's sugar and pineapple industries.</li> <li>Growth and development of diversified agriculture throughout the State.</li> <li>An agriculture industry that continues to constitute a dynamic and essential component of Hawaii's strategic, economic, and social well-being.</li> </ol> </li> <li>Policies: <ol> <li>Encourage agriculture by making the best use of natural resources.</li> <li>Provide the governor and the legislature with information and options needed for prudent decision-making for the development of agriculture.</li> <li>Establish strong relationships between the agricultural and visitor industries for mutual marketing benefits.</li> </ol> </li> <li>Foster increased public awareness and understanding of the contributions and benefits of agriculture as a major sector of Hawaii's economy.</li> <li>Seek the enactment and retention of federal and state legislation that benefits Hawaii's agricultural industries.</li> </ul>			owards

HAWAI'I STATE PLAN, Chapter 226, HRS Part I. Overall Themes, Goals, Objectives and Policies (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
consumers in the State, nation, and world.			
(8) Support research and development activities that strengthen economic productivity in agriculture, stimulate greater efficiency, and enhance the development of new products and agricultural by-products.			✓
(9) Enhance agricultural growth by providing public incentives and encouraging private initiatives.			$\checkmark$
(10) Assure the availability of agriculturally suitable lands with adequate water to accommodate present and future needs.			✓
(11) Increase the attractiveness and opportunities for an agricultural education and livelihood.			$\checkmark$
(12) In addition to the State's priority on food, expand Hawaii's agricultural base by promoting growth and development of flowers, tropical fruits and plants, livestock, feed grains, forestry, food crops, aquaculture, and other potential enterprises.			✓
(13) Promote economically competitive activities that increase Hawaii's agricultural self-sufficiency, including the increased purchase and use of Hawaii-grown food and food products by residents, businesses, and governmental bodies as defined under section 103D-104.			✓
(14) Promote and assist in the establishment of sound financial programs for diversified agriculture.			$\checkmark$
(15) Institute and support programs and activities to assist the entry of displaced agricultural workers into alternative agricultural or other employment.			$\checkmark$
(16) Facilitate the transition of agricultural lands in economically nonfeasible agricultural production to economically viable agricultural uses.			$\checkmark$
(17) Perpetuate, promote, and increase use of traditional Hawaiian farming systems, such as the use of loko i'a, māla, and irrigated lo'i, and growth of traditional Hawaiian crops, such as kalo, 'uala, and 'ulu.			~
(18) Increase and develop small-scale farms.			$\checkmark$
Analysis: Not Applicable			
Chapter 226-8 Objective and policies for the economy – – visitor industry.	T	Γ	
<b>Objective:</b> Planning for the State's economy with regard to the visitor industry shall be directed towards the achievement of the objective of a visitor industry that constitutes a major component of steady growth for Hawaii's economy.	<b>~</b>		
Policies:			
(1) Support and assist in the promotion of Hawaii's visitor attractions and facilities.	✓		
(2) Ensure that visitor industry activities are in keeping with the social, economic, and physical needs and aspirations of Hawaii's people.	✓		
(3) Improve the quality of existing visitor destination areas by utilizing Hawaii's strengths in science and technology.			$\checkmark$
(4) Encourage cooperation and coordination between the government and private sectors in developing and maintaining well-designed, adequately serviced visitor industry and related developments which are sensitive to			~

HAWAI'I STATE PLAN, Chapter 226, HRS Part I. Overall Themes, Goals Objectives and Policies (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	, S	N/S	N/A
neighboring communities and activities.			
(5) Develop the industry in a manner that will continue to provide new job opportunities and steady employment for Hawaii's people.			✓
(6) Provide opportunities for Hawaii's people to obtain job training and education that will allow for upward mobility within the visitor industry.			✓
(7) Foster a recognition of the contribution of the visitor industry to Hawaii's economy and the need to perpetuate the aloha spirit.	✓		
(8) Foster an understanding by visitors of the aloha spirit and of the unique and sensitive character of Hawaii's cultures and values.	✓		
Analysis: The proposed improvements will provide two (2) convenier stations and related improvements for Park visitors and will improve the experience at Mākena State Park.	ntly loca ne quali	ted con ty of vis	ıfort sitor
Chapter 226-9 Objective and policies for the economy – – federal expenditu	res.		
<b>Objective:</b> Planning for the State's economy with regard to federal expenditures shall be directed towards achievement of the objective of a stable federal investment base as an integral component of Hawaii's economy.	✓		
Policies:	-		1
<ol> <li>Encourage the sustained flow of federal expenditures in Hawaii that generates long-term government civilian employment;</li> </ol>			✓
(2) Promote Hawaii's supportive role in national defense, in a manner consistent with Hawaii's social, environmental, and cultural goals by building upon dual-use and defense applications to develop thriving ocean engineering, aerospace research and development, and related dual-use technology sectors in Hawaii's economy;			<b>√</b>
(3) Promote the development of federally supported activities in Hawaii that respect statewide economic concerns, are sensitive to community needs, and minimize adverse impacts on Hawaii's environment;	~		
(4) Increase opportunities for entry and advancement of Hawaii's people into federal government service;			~
(5) Promote federal use of local commodities, services, and facilities available in Hawaii;			~
(6) Strengthen federal-state-county communication and coordination in all federal activities that affect Hawaii; and			•
(7) Pursue the return of federally controlled lands in Hawaii that are not required for either the defense of the nation or for other purposes of national importance, and promote the mutually beneficial exchanges of land between federal agencies, the State, and the counties.			✓
<i>Analysis:</i> The proposed improvements are federally supported, while reconomic concerns, are sensitive to community needs, and minimize a Hawai'i's environment.	espectin adverse	g statev impacts	vide s on

HAWAI'I STATE PLAN, Chapter 226, HRS Part I. Overall Themes, Goals, Objectives and Policies (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
Chapter 226-10 Objective and policies for the economy – – potential eactivities.	growth	and inno	ovative
<b><u>Objective</u></b> : Planning for the State's economy with regard to potential growth and innovative activities shall be directed towards achievement of the objective of development and expansion of potential growth and innovative activities that serve to increase and diversify Hawaii's economic base.			✓
Policies:	1	1	
(1) Facilitate investment and employment growth in economic activities that have the potential to expand and diversify Hawaii's economy, including but not limited to diversified agriculture, aquaculture, renewable energy development, creative media, health care, and science and technology- based sectors;			•
(2) Facilitate investment in innovative activity that may pose risks or be less labor-intensive than other traditional business activity, but if successful, will generate revenue in Hawaii through the export of services or products or substitution of imported services or products;			~
(3) Encourage entrepreneurship in innovative activity by academic researchers and instructors who may not have the background, skill, or initial inclination to commercially exploit their discoveries or achievements;			~
(4) Recognize that innovative activity is not exclusively dependent upon individuals with advanced formal education, but that many self-taught, motivated individuals are able, willing, sufficiently knowledgeable, and equipped with the attitude necessary to undertake innovative activity;			✓
(5) Increase the opportunities for investors in innovative activity and talent engaged in innovative activity to personally meet and interact at cultural, art, entertainment, culinary, athletic, or visitor-oriented events without a business focus;			<
(6) Expand Hawaii's capacity to attract and service international programs and activities that generate employment for Hawaii's people;			✓
(7) Enhance and promote Hawaii's role as a center for international relations, trade, finance, services, technology, education, culture, and the arts;			✓
(8) Accelerate research and development of new energy-related industries based on wind, solar, ocean, underground resources, and solid waste;			~
(9) Promote Hawaii's geographic, environmental, social, and technological advantages to attract new or innovative economic activities into the State;			✓
(10) Provide public incentives and encourage private initiative to attract new or innovative industries that best support Hawaii's social, economic, physical, and environmental objectives;			✓
(11) Increase research and the development of ocean-related economic activities such as mining, food production, and scientific research;			✓
(12) Develop, promote, and support research and educational and training programs that will enhance Hawaii's ability to attract and develop economic activities of benefit to Hawaii;			✓

Objectives and Policies (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	, S	N/S	N/A
(13) Foster a broader public recognition and understanding of the potential benefits of new or innovative growth-oriented industry in Hawaii;			✓
(14) Encourage the development and implementation of joint federal and state initiatives to attract federal programs and projects that will support Hawaii's social, economic, physical, and environmental objectives;			✓
(15) Increase research and development of businesses and services in the telecommunications and information industries;			✓
(16) Foster the research and development of nonfossil fuel and energy efficient modes of transportation; and			✓
(17) Recognize and promote health care and health care information technology as growth industries.			✓
Analysis: Not Applicable			
Chapter 226-10.5 Objectives and policies for the economy – – information i	ndustry.		
<b>Objective</b> : Planning for the State's economy with regard to telecommunications and information technology shall be directed toward recognizing that broadband and wireless communication capability and infrastructure are foundations for an innovative economy and positioning Hawaii as a leader in broadband and wireless communications and applications in the Pacific Region.			~
Policies:			
(1) Promote efforts to attain the highest speeds of electronic and wireless communication within Hawaii and between Hawaii and the world, and make high speed communication available to all residents and businesses in			✓
Hawaii;			
<ul> <li>Hawaii;</li> <li>(2) Encourage the continued development and expansion of the telecommunications infrastructure serving Hawaii to accommodate future growth and innovation in Hawaii's economy;</li> </ul>			✓
<ul> <li>Hawaii;</li> <li>(2) Encourage the continued development and expansion of the telecommunications infrastructure serving Hawaii to accommodate future growth and innovation in Hawaii's economy;</li> <li>(3) Facilitate the development of new or innovative business and service ventures in the information industry which will provide employment opportunities for the people of Hawaii;</li> </ul>			<ul> <li>✓</li> <li>✓</li> </ul>
<ul> <li>Hawaii;</li> <li>(2) Encourage the continued development and expansion of the telecommunications infrastructure serving Hawaii to accommodate future growth and innovation in Hawaii's economy;</li> <li>(3) Facilitate the development of new or innovative business and service ventures in the information industry which will provide employment opportunities for the people of Hawaii;</li> <li>(4) Encourage mainland- and foreign-based companies of all sizes, whether information technology-focused or not, to allow their principals, employees, or contractors to live in and work from Hawaii, using technology to communicate with their headquarters, offices, or customers located out-of-state;</li> </ul>			✓ ✓ ✓
<ul> <li>Hawaii;</li> <li>(2) Encourage the continued development and expansion of the telecommunications infrastructure serving Hawaii to accommodate future growth and innovation in Hawaii's economy;</li> <li>(3) Facilitate the development of new or innovative business and service ventures in the information industry which will provide employment opportunities for the people of Hawaii;</li> <li>(4) Encourage mainland- and foreign-based companies of all sizes, whether information technology-focused or not, to allow their principals, employees, or contractors to live in and work from Hawaii, using technology to communicate with their headquarters, offices, or customers located out-of-state;</li> <li>(5) Encourage greater cooperation between the public and private sectors in developing and maintaining a well-designed information industry;</li> </ul>			<ul> <li>✓</li> <li>✓</li> <li>✓</li> <li>✓</li> </ul>
<ul> <li>Hawaii;</li> <li>(2) Encourage the continued development and expansion of the telecommunications infrastructure serving Hawaii to accommodate future growth and innovation in Hawaii's economy;</li> <li>(3) Facilitate the development of new or innovative business and service ventures in the information industry which will provide employment opportunities for the people of Hawaii;</li> <li>(4) Encourage mainland- and foreign-based companies of all sizes, whether information technology-focused or not, to allow their principals, employees, or contractors to live in and work from Hawaii, using technology to communicate with their headquarters, offices, or customers located out-of-state;</li> <li>(5) Encourage greater cooperation between the public and private sectors in developing and maintaining a well-designed information industry;</li> <li>(6) Ensure that the development of new businesses and services in the industry are in keeping with the social, economic, and physical needs and aspirations of Hawaii's people;</li> </ul>			✓ ✓ ✓ ✓

HAWAI'I STATE PLAN, Chapter 226, HRS Part I. Overall Themes, Goals, Objectives and Policies (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	q	N/S	N/A
<ul> <li>(8) Foster a recognition of the contribution of the information industry to Hawaii's economy; and</li> </ul>	0	N/O	$\checkmark$
(9) Assist in the promotion of Hawaii as a broker, creator, and processor of information in the Pacific.			~
Analysis: Not Applicable			
Chapter 226-11 Objectives and policies for the physical environment – – I and marine resources.	and bas	ed, sho	reline,
<b><u>Objectives:</u></b> Planning for the State's physical environment with regard to land marine resources shall be directed towards achievement of the following objective	l-based, /es:	shorelin	e, and
(1) Prudent use of Hawaii's land-based, shoreline, and marine resources.	$\checkmark$		
(2) Effective protection of Hawaii's unique and fragile environmental resources.	✓		
Policies:			
(1) Exercise an overall conservation ethic in the use of Hawaii's natural resources.	✓		
(2) Ensure compatibility between land-based and water-based activities and natural resources and ecological systems.	✓		
(3) Take into account the physical attributes of areas when planning and designing activities and facilities.	✓		
(4) Manage natural resources and environs to encourage their beneficial and multiple use without generating costly or irreparable environmental damage.	✓		
(5) Consider multiple uses in watershed areas, provided such uses do not detrimentally affect water quality and recharge functions.			✓
(6) Encourage the protection of rare or endangered plant and animal species and habitats native to Hawaii.	✓		
(7) Provide public incentives that encourage private actions to protect significant natural resources from degradation or unnecessary depletion.			✓
(8) Pursue compatible relationships among activities, facilities, and natural resources.	✓		
(9) Promote increased accessibility and prudent use of inland and shoreline areas for public recreational, educational, and scientific purposes.	✓		
Analysis: The proposed project makes prudent use of the area to inte station and related improvements that are convenient to the Park users w unique and fragile environmental resources in the Park. The facilities have b	egrate n vhile pro een loca	ew com otecting ited to a	nfort the void

station and related improvements that are convenient to the Park users while protecting the unique and fragile environmental resources in the Park. The facilities have been located to avoid involvement of State Conservation Lands. Applicable Best Management Practices (BMPs) will be implemented in order to protect the physical environment and natural habitats. A biological resources study was carried out to ensure the proposed project will not adversely impact any rare or endangered species or their habitats. The physical attributes of the Park were taken into account in planning and designing the comfort station facilities and their related improvements. As such, due to the location of the project in the coastal environment, the wastewater system was designed with no discharge of the effluent to a leach field. Rather, the wastewater from the comfort stations will be held in containment tanks and regularly pumped into a truck for disposal at a permitted wastewater treatment facility. The proposed improvements promote increased accessibility and prudent use of shoreline areas for public recreation purposes.

Objectives and Policies (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
Chapter 226-12 Objective and policies for the physical environment beauty, and historic resources.	sc	enic, n	atural
<b><u>Objective</u></b> : Planning for the State's physical environment shall be directed towards achievement of the objective of enhancement of Hawaii's scenic assets, natural beauty, and multi-cultural/historical resources.	✓		
Policies:			
(1) Promote the preservation and restoration of significant natural and historic resources.	✓		
(2) Provide incentives to maintain and enhance historic, cultural, and scenic amenities.			<b>~</b>
(3) Promote the preservation of views and vistas to enhance the visual and aesthetic enjoyment of mountains, ocean, scenic landscapes, and other natural features.	✓		
(4) Protect those special areas, structures, and elements that are an integral and functional part of Hawaii's ethnic and cultural heritage.	✓		
(5) Encourage the design of developments and activities that complement the natural beauty of the islands.	✓		
Analysis: An Archaeological Inventory Survey (AIS) and Cultural Impact were carried out to ensure the proposed project will not adversely impact I resources at the Park. The proposed project will not present significant adv visual resources and natural beauty of the Park.	t Asses historic erse imp	sment ( and culf pacts or	CIA) tural h the
Chapter 226-13 Objectives and policies for the physical environment – -	land		
quality.	- ianu, a	air, and	water
quality.         Objectives:       Planning for the State's physical environment with regard to lanshall be directed towards achievement of the following objectives:	d, air, ar	nd water	water quality
quality.         Objectives:       Planning for the State's physical environment with regard to land shall be directed towards achievement of the following objectives:         (1) Maintenance and pursuit of improved quality in Hawaii's land, air, and water resources.	d, air, ar	nd water	water quality
quality.         Objectives:       Planning for the State's physical environment with regard to land shall be directed towards achievement of the following objectives:         (1) Maintenance and pursuit of improved quality in Hawaii's land, air, and water resources.         (2) Greater public awareness and appreciation of Hawaii's environmental resources.	d, air, ar	nd water	water quality
quality.         Objectives:       Planning for the State's physical environment with regard to land shall be directed towards achievement of the following objectives:         (1) Maintenance and pursuit of improved quality in Hawaii's land, air, and water resources.         (2) Greater public awareness and appreciation of Hawaii's environmental resources.         Policies:	d, air, ar	nd water	water quality
quality.         Objectives:       Planning for the State's physical environment with regard to land shall be directed towards achievement of the following objectives:         (1) Maintenance and pursuit of improved quality in Hawaii's land, air, and water resources.         (2) Greater public awareness and appreciation of Hawaii's environmental resources.         Policies:         (1) Foster educational activities that promote a better understanding of Hawaii's limited environmental resources.	d, air, ar	nd water	water quality ✓
quality.         Objectives:       Planning for the State's physical environment with regard to land shall be directed towards achievement of the following objectives:         (1) Maintenance and pursuit of improved quality in Hawaii's land, air, and water resources.         (2) Greater public awareness and appreciation of Hawaii's environmental resources.         Policies:         (1) Foster educational activities that promote a better understanding of Hawaii's limited environmental resources.         (2) Promote the proper management of Hawaii's land and water resources.	d, air, ar	air, and	water quality ✓
quality.         Objectives:       Planning for the State's physical environment with regard to land shall be directed towards achievement of the following objectives:         (1) Maintenance and pursuit of improved quality in Hawaii's land, air, and water resources.         (2) Greater public awareness and appreciation of Hawaii's environmental resources.         (1) Foster educational activities that promote a better understanding of Hawaii's limited environmental resources.         (2) Promote the proper management of Hawaii's land and water resources.         (3) Promote effective measures to achieve desired quality in Hawaii's surface, ground, and coastal waters.	d, air, ar	nd water	water quality ✓
quality.         Objectives:       Planning for the State's physical environment with regard to land shall be directed towards achievement of the following objectives:         (1) Maintenance and pursuit of improved quality in Hawaii's land, air, and water resources.         (2) Greater public awareness and appreciation of Hawaii's environmental resources.         (1) Foster educational activities that promote a better understanding of Hawaii's limited environmental resources.         (2) Promote the proper management of Hawaii's land and water resources.         (3) Promote effective measures to achieve desired quality in Hawaii's surface, ground, and coastal waters.         (4) Encourage actions to maintain or improve aural and air quality levels to enhance the health and well-being of Hawaii's people.	d, air, ar	air, and mater	water quality
<ul> <li>quality.</li> <li><u>Objectives</u>: Planning for the State's physical environment with regard to lanshall be directed towards achievement of the following objectives:</li> <li>(1) Maintenance and pursuit of improved quality in Hawaii's land, air, and water resources.</li> <li>(2) Greater public awareness and appreciation of Hawaii's environmental resources.</li> <li>(2) Greater educational activities that promote a better understanding of Hawaii's limited environmental resources.</li> <li>(2) Promote the proper management of Hawaii's land and water resources.</li> <li>(3) Promote effective measures to achieve desired quality in Hawaii's surface, ground, and coastal waters.</li> <li>(4) Encourage actions to maintain or improve aural and air quality levels to enhance the health and well-being of Hawaii's people.</li> <li>(5) Reduce the threat to life and property from erosion, flooding, tsunamis, hurricanes, earthquakes, volcanic eruptions, and other natural or maninduced hazards and disasters.</li> </ul>	d, air, ar	air, and mater	water quality ✓

HAWAI'I STATE PLAN, Chapter 226, HRS Part I. Overall Themes, Goals, Objectives and Policies (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A	
(7) Encourage urban developments in close proximity to existing services and facilities.			$\checkmark$	
(8) Foster recognition of the importance and value of the land, air, and water resources to Hawaii's people, their cultures and visitors.	✓			
Analysis: The proposed comfort station improvements will involve treatment and disposal of wastewater offsite at a permitted wastewater treatment facility. The proposed project will provide sanitation facilities to promote a clean and safe environment and to prevent pollution of the environment which may occur when restrooms are not available to Park users. As such, the proposed project will not adversely impact State environmental and water quality standards at Mākena State Park. The proposed project will also involve drainage improvements which will safely retain and discharge stormwater runoff to protect ground water quality and the nearshore marine environment. Informational signage will be provided to educate Park users regarding practices for safe and environmentally friendly use of the Park and shoreline areas.				
Chapter 226-14 Objective and policies for facility systems – – in general.				
<b><u>Objective</u></b> : Planning for the State's facility systems in general shall be directed towards achievement of the objective of water, transportation, waste disposal, and energy and telecommunication systems that support statewide social, economic, and physical objectives.			~	
Policies:				
<ol> <li>Accommodate the needs of Hawaii's people through coordination of facility systems and capital improvement priorities in consonance with state and county plans.</li> </ol>	✓			
(2) Encourage flexibility in the design and development of facility systems to promote prudent use of resources and accommodate changing public demands and priorities.	~			
(3) Ensure that required facility systems can be supported within resource capacities and at reasonable cost to the user.	✓			
(4) Pursue alternative methods of financing programs and projects and cost- saving techniques in the planning, construction, and maintenance of facility systems.			~	
<i>Analysis:</i> The proposed project meets the objective of planning for disposal facility systems that support public State Park facilities. The proposal be supported within resource capacities and at reasonable cost to the	⁺ the St osed im user.	ate's w provem	aste ents	
Chapter 226-15 Objectives and policies for facility systems – – solid and lie	quid was	ste.		
<b><u>Objectives</u></b> : Planning for the State's facility systems with regard to solid and directed towards the achievement of the following objectives:	liquid w	astes sl	nall be	
(1) Maintenance of basic public health and sanitation standards relating to treatment and disposal of solid and liquid wastes.	✓			
(2) Provision of adequate sewerage facilities for physical and economic activities that alleviate problems in housing, employment, mobility, and other areas.	<b>√</b>			
Policies:				
(1) Encourage the adequate development of sewerage facilities that complement planned growth.	$\checkmark$			

HAWAI'I STATE PLAN, Chapter 226, HRS Part I. Overall Themes, Goals, Objectives and Policies (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
(2) Promote re-use and recycling to reduce solid and liquid wastes and employ a conservation ethic.			>
(3) Promote research to develop more efficient and economical treatment and disposal of solid and liquid wastes.			$\checkmark$
Analysis: The proposed action supports long-term Park manageme promotes public health by providing improved sanitation for Park users.	ent obje	ectives	and
Chapter 226-16 Objective and policies for facility systems – – water.			
<b>Objective:</b> Planning for the State's facility systems with regard to water shall be directed towards achievement of the objective of the provision of water to adequately accommodate domestic, agricultural, commercial, industrial, recreational, and other needs within resource capacities.	<b>√</b>		
Policies:			
(1) Coordinate development of land use activities with existing and potential water supply.	✓		
(2) Support research and development of alternative methods to meet future water requirements well in advance of anticipated needs.			✓
(3) Reclaim and encourage the productive use of runoff water and wastewater discharges.			✓
(4) Assist in improving the quality, efficiency, service, and storage capabilities of water systems for domestic and agricultural use.			✓
(5) Support water supply services to areas experiencing critical water problems.			$\checkmark$
(6) Promote water conservation programs and practices in government, private industry, and the general public to help ensure adequate water to meet long-term needs.	~		
Analysis: The proposed project will implement water service, improve and provide two (2) new comfort stations and shower facilities (or foot rinse State Park for the convenience and comfort of Park visitors.	parking stations	availab s) at Māł	ility, kena
<b>Objectives:</b> Planning for the State's facility systems with regard to transport	ation sh	all be di	irected
towards the achievement of the following objectives:			lected
(1) An integrated multi-modal transportation system that services statewide needs and promotes the efficient, economical, safe, and convenient movement of people and goods.			✓
(2) A statewide transportation system that is consistent with and will accommodate planned growth objectives throughout the State.			✓
Policies:			
(1) Design, program, and develop a multi-modal system in conformance with desired growth and physical development as stated in this chapter;			✓
<ul> <li>(2) Coordinate state, county, federal, and private transportation activities and programs toward the achievement of statewide objectives;</li> </ul>			✓
<ul> <li>(3) Encourage a reasonable distribution of financial responsibilities for transportation among participating governmental and private parties;</li> </ul>			$\checkmark$

HAWAI'I STATE PLAN, Chapter 226, HRS Part I. Overall Themes, Goals, Objectives and Policies (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
(4) Provide for improved accessibility to shipping, docking, and storage facilities;			~
(5) Promote a reasonable level and variety of mass transportation services that adequately meet statewide and community needs;			✓
<ul> <li>(6) Encourage transportation systems that serve to accommodate present and future development needs of communities;</li> </ul>			~
(7) Encourage a variety of carriers to offer increased opportunities and advantages to interisland movement of people and goods;			<b>~</b>
<ul> <li>(8) Increase the capacities of airport and harbor systems and support facilities to effectively accommodate transshipment and storage needs;</li> </ul>			✓
<ul> <li>(9) Encourage the development of transportation systems and programs which would assist statewide economic growth and diversification;</li> </ul>			✓
(10) Encourage the design and development of transportation systems sensitive to the needs of affected communities and the quality of Hawaii's natural environment;			✓
(11) Encourage safe and convenient use of low-cost, energy-efficient, non- polluting means of transportation;			✓
(12) Coordinate intergovernmental land use and transportation planning activities to ensure the timely delivery of supporting transportation infrastructure in order to accommodate planned growth objectives; and			✓
(13) Encourage diversification of transportation modes and infrastructure to promote alternate fuels and energy efficiency.			✓
Analysis: Not Applicable			
Chapter 226-18 Objectives and policies for facility systems – – energy.			
<b><u>Objectives</u>:</b> Planning for the State's facility systems with regard to energy shall achievement of the following objectives, giving due consideration to all:	be direc	ted towa	ard the
(1) Dependable, efficient, and economical statewide energy systems capable of supporting the needs of the people;	✓		
(2) Increased energy security and self-sufficiency through the reduction and ultimate elimination of Hawaii's dependence on imported fuels for electrical generation and ground transportation.	✓		
(3) Greater diversification of energy generation in the face of threats to Hawaii's energy supplies and systems;	✓		
(4) Reduction, avoidance, or sequestration of greenhouse gas emissions from energy supply and use; and	✓		
(5) Utility models that make the social and financial interests of Hawaii's utility customers a priority.			✓
(b) To achieve the energy objectives, it shall be the policy of this State to ensure the short- and long-term provision of adequate, reasonably prices, and dependable energy services to accommodate demand.			✓
Policies:			
(1) Support research and development as well as promote the use of renewable energy sources:	✓		

HAWAI'I STATE PLAN, Chapter 226, HRS Part I. Overall Themes, Goals, Objectives and Policies (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
<ul> <li>(2) Ensure that the combination of energy supplies and energy-saving systems is sufficient to support the demands of growth;</li> </ul>	✓		
(3) Base decisions of least-cost supply-side and demand-side energy resource options on a comparison of their total costs and benefits when a least-cost is determined by a reasonably comprehensive, quantitative, and qualitative accounting of their long-term, direct and indirect economic, environmental, social, cultural, and public health costs and benefits;			✓
(4) Promote all cost-effective conservation of power and fuel supplies through measures, including:	✓		
(A) Development of cost-effective demand-side management programs;			$\checkmark$
(B) Education;			$\checkmark$
(C) Adoption of energy-efficient practices and technologies; and			$\checkmark$
(D) Increasing energy efficiency and decreasing energy use in public infrastructure	✓		
(5) Ensure, to the extent that new supply-side resources are needed, that the development or expansion of energy systems uses the least-cost energy supply option and maximizes efficient technologies; and			✓
(6) Support research, development, demonstration, and use of energy efficiency, load management, and other demand-side management programs, practices, and technologies;			~
(7) Promote alternate fuels and transportation energy efficiency;			~
<ul> <li>(8) Support actions that reduce, avoid, or sequester greenhouse gases in utility, transportation, and industrial sector applications;</li> </ul>	✓		
<ul> <li>(9) Support actions that reduce, avoid, or sequester Hawaii's greenhouse gas emissions through agriculture and forestry initiatives;</li> </ul>			✓
(10) Provide priority handling and processing for all state and county permits required for renewable energy projects;			✓
(11) Ensure that liquefied natural gas is used only as a cost-effective transitional, limited-term replacement of petroleum for electricity generation and does not impede the development and use of other cost-effective renewable energy sources; and			~
(12) Promote the development of indigenous geothermal energy resources that are located on public trust land as an affordable and reliable source of firm power for Hawaii.			✓
<i>Analysis:</i> The proposed project will utilize solar energy features in order efficiency and reduce greenhouse gas emissions.	r to pror	note en	ergy
Chapter 226-18.5 Objectives and policies for facility systems – – telecommu	unicatio	ns.	
Objectives:			
(a) Planning for the State's telecommunications facility systems shall be directed towards the achievement of dependable, efficient, and economical statewide telecommunications systems capable of supporting the needs of the people.			~

HAWAI'I STATE PLAN, Chapter 226, HRS Part I. Overall Themes, Goals, Objectives and Policies (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	\$	N/S	N/A
(b) To achieve the telecommunications objective, it shall be the policy of this State to ensure the provision of adequate, reasonably priced, and dependable telecommunications services to accommodate demand.			✓
Policies:			
(1) Facilitate research and development of telecommunications systems and resources;			✓
<ul> <li>(2) Encourage public and private sector efforts to develop means for adequate, ongoing telecommunications planning;</li> </ul>			✓
(3) Promote efficient management and use of existing telecommunications systems and services; and			✓
(4) Facilitate the development of education and training of telecommunications personnel.			✓
Analysis: Not Applicable			
Chapter 226-19 Objectives and policies for socio-cultural advancement – – hou	sing	J.	
<b><u>Objectives</u>:</b> Planning for the State's socio-cultural advancement with regard to housing shall be directed toward the achievement of the following objectives:			✓
(1) Greater opportunities for Hawaii's people to secure reasonably priced, safe, sanitary, and livable homes, located in suitable environments that satisfactorily accommodate the needs and desires of families and individuals, through collaboration and cooperation between government and nonprofit and for-profit developers to ensure that more affordable housing is made available to very low-, low- and moderate-income segments of Hawaii's population.			•
(2) The orderly development of residential areas sensitive to community needs and other land uses.			✓
(3) The development and provision of affordable rental housing by the State to meet the housing needs of Hawaii's people.			$\checkmark$
Policies:			
(1) Effectively accommodate the housing needs of Hawaii's people.			$\checkmark$
(2) Stimulate and promote feasible approaches that increase housing choices for low-income, moderate-income, and gap-group households.			✓
(3) Increase homeownership and rental opportunities and choices in terms of quality, location, cost, densities, style, and size of housing.			✓
(4) Promote appropriate improvement, rehabilitation, and maintenance of existing housing units and residential areas.			<
(5) Promote design and location of housing developments taking into account the physical setting, accessibility to public facilities and services, and other concerns of existing communities and surrounding areas.			<b>~</b>
(6) Facilitate the use of available vacant, developable, and underutilized urban lands for housing.			✓
(7) Foster a variety of lifestyles traditional to Hawaii through the design and maintenance of neighborhoods that reflect the culture and values of the community.			~

HAWAI'I STATE PLAN, Chapter 226, HRS Part I. Overall Themes, Goals, Objectives and Policies (Kev: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	s	N/S	N/A
(8) Promote research and development of methods to reduce the cost of housing construction in Hawaii.	0	N/O	$\checkmark$
Analysis: Not Applicable			
Chapter 226-20 Objectives and policies for socio-cultural advancement – –	health.		
<b><u>Objectives</u></b> : Planning for the State's socio-cultural advancement with regard to towards achievement of the following objectives:	health sl	nall be di	rected
(1) Fulfillment of basic individual health needs of the general public.			$\checkmark$
(2) Maintenance of sanitary and environmentally healthful conditions in Hawaii's communities.	~		
(3) Elimination of health disparities by identifying and addressing social determinants of health.			$\checkmark$
Policies:	1		
(1) Provide adequate and accessible services and facilities for prevention and treatment of physical and mental health problems, including substance abuse.			✓
(2) Encourage improved cooperation among public and private sectors in the provision of health care to accommodate the total health needs of individuals throughout the State.			✓
(3) Encourage public and private efforts to develop and promote statewide and local strategies to reduce health care and related insurance costs.			✓
(4) Foster an awareness of the need for personal health maintenance and preventive health care through education and other measures.			~
(5) Provide programs, services, and activities that ensure environmentally healthful and sanitary conditions.	✓		
(6) Improve the State's capabilities in preventing contamination by pesticides and other potentially hazardous substances through increased coordination, education, monitoring, and enforcement.			~
(7) Prioritize programs, services, interventions, and activities that address identified social determinants of health to improve native Hawaiian health and well-being consistent with the United States Congress' declaration of policy as codified in title 42 United States Code section 11702, and to reduce health disparities of disproportionately affected demographics, including native Hawaiians, other Pacific Islanders, and Filipinos. The prioritization of affected demographic groups other than native Hawaiians may be reviewed every ten years and revised based on the best available epidemiological and public health data.			•
<i>Analysis:</i> The proposed project will improve sanitary conditions at Mā Park users.	kena St	ate Park	for
Chapter 226-21 Objectives and policies for Socio-cultural advancement – –	educati	on.	
<b><u>Objective</u></b> : Planning for the State's socio-cultural advancement with regard to education shall be directed towards achievement of the objective of the provision of a variety of educational opportunities to enable individuals to fulfill their needs, responsibilities, and aspirations.			✓

HAWAI'I STATE PLAN, Chapter 226, HRS Part I. Overall Themes, Goals, Objectives and Policies (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
Policies:			
(1) Support educational programs and activities that enhance personal development, physical fitness, recreation, and cultural pursuits of all groups.			$\checkmark$
(2) Ensure the provision of adequate and accessible educational services and facilities that are designed to meet individual and community needs.			$\checkmark$
(3) Provide appropriate educational opportunities for groups with special needs.			$\checkmark$
(4) Promote educational programs which enhance understanding of Hawaii's cultural heritage.			$\checkmark$
(5) Provide higher educational opportunities that enable Hawaii's people to adapt to changing employment demands.			~
(6) Assist individuals, especially those experiencing critical employment problems or barriers, or undergoing employment transitions, by providing appropriate employment training programs and other related educational opportunities.			✓
(7) Promote programs and activities that facilitate the acquisition of basic skills, such as reading, writing, computing, listening, speaking, and reasoning.			~
(8) Emphasize quality educational programs in Hawaii's institutions to promote academic excellence.			~
(9) Support research programs and activities that enhance the education programs of the State.			✓
Analysis: Not Applicable			
Chapter 226-22 Objective and policies for socio-cultural advancement – – s	ocial se	rvices.	
<b>Objective:</b> Planning for the State's socio-cultural advancement with regard to social services shall be directed towards the achievement of the objective of improved public and private social services and activities that enable individuals, families, and groups to become more self-reliant and confident to improve their well-being.			~
Policies:			
(1) Assist individuals, especially those in need of attaining a minimally adequate standard of living and those confronted by social and economic hardship conditions, through social services and activities within the State's fiscal capacities.			✓
(2) Promote coordination and integrative approaches among public and private agencies and programs to jointly address social problems that will enable individuals, families, and groups to deal effectively with social problems and to enhance their participation in society.			✓
(3) Facilitate the adjustment of new residents, especially recently arrived immigrants, into Hawaii's communities.			$\checkmark$
(4) Promote alternatives to institutional care in the provision of long-term care for elder and disabled populations.			✓
(5) Support public and private efforts to prevent domestic abuse and child			$\checkmark$
molestation, and assist victims of abuse and neglect.			

HAWAI'I STATE PLAN, Chapter 226, HRS Part I. Overall Themes, Goals, Objectives and Policies (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
Analysis: Not Applicable			
Chapter 226-23 Objective and policies for socio-cultural advancement – – le	isure.		
<b>Objective:</b> Planning for the State's socio-cultural advancement with regard to leisure shall be directed towards the achievement of the objective of the adequate provision of resources to accommodate diverse cultural, artistic, and recreational needs for present and future generations.	✓		
Policies:			
(1) Foster and preserve Hawaii's multi-cultural heritage through supportive cultural, artistic, recreational, and humanities-oriented programs and activities.			✓
(2) Provide a wide range of activities and facilities to fulfill the cultural, artistic, and recreational needs of all diverse and special groups effectively and efficiently.			✓
(3) Enhance the enjoyment of recreational experiences through safety and security measures, educational opportunities, and improved facility design and maintenance.	~		
(4) 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.	✓		
(5) Ensure opportunities for everyone to use and enjoy Hawaii's recreational resources.	✓		
(6) Assure the availability of sufficient resources to provide for future cultural, artistic, and recreational needs.			~
(7) Provide adequate and accessible physical fitness programs to promote the physical and mental well-being of Hawaii's people.			~
(8) Increase opportunities for appreciation and participation in the creative arts, including the literary, theatrical, visual, musical, folk, and traditional art forms.			~
(9) Encourage the development of creative expression in the artistic disciplines to enable all segments of Hawaii's population to participate in the creative arts.			✓
(10) Assure adequate access to significant natural and cultural resources in public ownership.	✓		
<i>Analysis:</i> Mākena State Park offers natural, scenic, and historic recreational opportunities to the public. The proposed action will preserve providing improved facility design and parking availability for users of the F project provides adequate facility support at Mākena State Park for v convenience.	value, these v Park. Th isitor c	as well values w ne propo omfort	as /hile osed and
Chapter 226-24 Objective and policies for socio-cultural advancement – – personal well-being.	individ	ual right	ts and
<b><u>Objective</u></b> : Planning for the State's socio-cultural advancement with regard to individual rights and personal well-being shall be directed towards achievement of the objective of increased opportunities and protection of individual rights to enable individuals to fulfill their socio-economic needs and aspirations.			✓

HAWAI'I STATE PLAN, Chapter 226, HRS Part I. Overall Themes, Goals, Objectives and Policies (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
Policies:			
(1) Provide effective services and activities that protect individuals from criminal acts and unfair practices and that alleviate the consequences of criminal acts in order to foster a safe and secure environment.			>
(2) Uphold and protect the national and state constitutional rights of every individual.			✓
(3) Assure access to, and availability of, legal assistance, consumer protection, and other public services which strive to attain social justice.			✓
(4) Ensure equal opportunities for individual participation in society.			$\checkmark$
Analysis: Not Applicable			
Chapter 226-25 Objective and policies for socio-cultural advancement – – cult	ture.		
<b>Objective:</b> Planning for the State's socio-cultural advancement with regard to culture shall be directed toward the achievement of the objective of enhancement of cultural identities, traditions, values, customs, and arts of Hawaii's people.	<b>√</b>		
Policies:			
(1) Foster increased knowledge and understanding of Hawaii's ethnic and cultural heritages and the history of Hawaii.	✓		
(2) Support activities and conditions that promote cultural values, customs, and arts that enrich the lifestyles of Hawaii's people and which are sensitive and responsive to family and community needs.			✓
(3) Encourage increased awareness of the effects of proposed public and private actions on the integrity and quality of cultural and community lifestyles in Hawaii.			✓
(4) Encourage the essence of the aloha spirit in people's daily activities to promote harmonious relationships among Hawaii's people and visitors.			~
Analysis: Archaeological and cultural studies have been undertaken planning to ensure that the proposed improvements can be implemented any significant impacts on archaeological or cultural resources.	as par without	t of pro presen	oject ting
Chapter 226-26 Objectives and policies for socio-cultural advancement – –	public s	afety.	
<b><u>Objective</u></b> : Planning for the State's socio-cultural advancement with regard directed towards the achievement of the following objectives:	to public	safety s	shall be
(1) Assurance of public safety and adequate protection of life and property for all people.			$\checkmark$
(2) Optimum organizational readiness and capability in all phases of emergency management to maintain the strength, resources, and social and economic well-being of the community in the event of civil disruptions, wars, natural disasters, and other major disturbances.			✓
(3) Promotion of a sense of community responsibility for the welfare and safety of Hawaii's people.			$\checkmark$
Policies (Public Safety):			
(1) Ensure that public safety programs are effective and responsive to community needs.			$\checkmark$

HAWAI'I STATE PLAN, Chapter 226, HRS Part I. Overall Themes, Goals, Objectives and Policies (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
(2) Encourage increased community awareness and participation in public safety programs.			✓
Policies (Public Safety-Criminal Justice):		1	
(1) Support criminal justice programs aimed at preventing and curtailing criminal activities.			✓
(2) Develop a coordinated, systematic approach to criminal justice administration among all criminal justice agencies.			~
(3) Provide a range of correctional resources which may include facilities and alternatives to traditional incarceration in order to address the varied security needs of the community and successfully reintegrate offenders into the community.			✓
Policies (Public Safety – Emergency Management):		I	
<ul> <li>(1) Ensure that responsible organizations are in a proper state of readiness to respond to major war-related, natural, or technological disasters and civil disturbances at all times</li> </ul>			~
(2) Enhance the coordination between emergency management programs throughout the State.			✓
Analysis: Not Applicable			
Chapter 226-27 Objectives and policies for socio-cultural advancement – –	governi	nent.	
<b>Objectives:</b> Planning the State's socio-cultural advancement with regard to directed towards the achievement of the following objectives:	o goverr	iment sł	nall be
(1) Efficient, effective, and responsive government services at all levels in the State.	✓		
(2) Fiscal integrity, responsibility, and efficiency in the state government and county governments.	✓		
Policies:			
(1) Provide for necessary public goods and services not assumed by the private sector.			$\checkmark$
(2) Pursue an openness and responsiveness in government that permits the flow of public information, interaction, and response.	✓		
(3) Minimize the size of government to that necessary to be effective.			<b>~</b>
(4) Stimulate the responsibility in citizens to productively participate in government for a better Hawaii.			✓
(5) Assure that government attitudes, actions, and services are sensitive to community needs and concerns.	✓		
(6) Provide for a balanced fiscal budget.			✓
(7) Improve the fiscal budgeting and management system of the State.			✓
(8) Promote the consolidation of state and county governmental functions to increase the effective and efficient delivery of government programs and services and to eliminate duplicative services wherever feasible.			✓

HAWAI'I STATE PLAN, Chapter 226, HRS Part I. Overall Themes, Goals,			
Objectives and Policies			
(Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A

*Analysis:* The proposed project improves State Park facilities for public enjoyment and convenience. The Environmental Assessment (EA) and Special Management Area (SMA) permitting process for the proposed project will provide opportunities for public input during project review and public hearings.

HAWAI'I STATE PLAN, CHAPTER 226, HRS – PART III. PRIORITY GUIDELINES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
<b>Chapter 226-101: Purpose.</b> The purpose of this part is to establish overall privareas of statewide concern.	ority guid	elines to	address
<b>Chapter 226-102: Overall direction.</b> The State shall strive to improve the control and future population through the pursuit of desirable courses of action in concern which merit priority attention: economic development, populat management, affordable housing, crime and criminal justice, quality education climate change adaptation.	uality of seven m ion grow n, principl	ife for Ha ajor area th and es of sus	awaii's pro s of state land reso tainability
Chapter 226-103: Economic priority guidelines.			
<ul> <li>(a) Priority guidelines to stimulate economic growth and encourage development to provide needed jobs for Hawaii's people and achieve economy:</li> </ul>	business e a stable	expansi e and div	ion and ersified
(1) Seek a variety of means to increase the availability of investment capital for new and expanding enterprises.			<ul> <li>✓</li> </ul>
(A) Encourage investments which:			$\checkmark$
(i) Reflect long term commitments to the State;	✓		
(ii) Rely on economic linkages within the local economy;			✓
(iii) Diversify the economy;			✓
(iv) Reinvest in the local economy;			✓
(v) Are sensitive to community needs and priorities; and	$\checkmark$		
(vi) Demonstrate a commitment to provide management opportunities to Hawaii residents; and			✓
(B) Encourage investments in innovative activities that have a nexus to the State, such as:			✓
(i) Present or former residents acting as entrepreneurs or principals;			<ul> <li>✓</li> </ul>
(ii) Academic support from an institution of higher education in Hawaii;			✓
(iii) Investment interest from Hawaii residents;			✓
(iv) Resources unique to Hawaii that are required for innovative activity; and			✓

HAWAI'I STATE PLAN, CHAPTER 226, HRS – PART III. PRIORITY GUIDELINES			
(Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
<ul><li>(v) Complementary or supportive industries or government programs or projects.</li></ul>			✓
(2) Encourage the expansion of technological research to assist industry development and support the development and commercialization of technological advancements.			<b>~</b>
(3) Improve the quality, accessibility, and range of services provided by government to business, including data and reference services and assistance in complying with governmental regulations.			<b>√</b>
(4) Seek to ensure that state business tax and labor laws and administrative policies are equitable, rational, and predictable.			✓
(5) Streamline the processes for building and development permit and review, and telecommunication infrastructure installation approval and eliminate or consolidate other burdensome or duplicative governmental requirements imposed on business, where scientific evidence indicates that public health, safety and welfare would not be adversely affected.			<b>✓</b>
(6) Encourage the formation of cooperatives and other favorable marketing or distribution arrangements at the regional or local level to assist Hawaii's small-scale producers, manufacturers, and distributors.			<b>~</b>
(7) Continue to seek legislation to protect Hawaii from transportation interruptions between Hawaii and the continental United States.			✓
(8) Provide public incentives and encourage private initiative to develop and attract industries which promise long-term growth potentials and which have the following characteristics:			<b>√</b>
(A) An industry that can take advantage of Hawaii's unique location and available physical and human resources.			✓
(B) A clean industry that would have minimal adverse effects on Hawaii's environment.			✓
(C) An industry that is willing to hire and train Hawaii's people to meet the industry's labor needs at all levels of employment.			✓
(D) An industry that would provide reasonable income and steady employment.			✓
(9) Support and encourage, through educational and technical assistance programs and other means, expanded opportunities for employee ownership and participation in Hawaii business.			<ul> <li>Image: A state of the state of</li></ul>
(10) Enhance the quality of Hawaii's labor force and develop and maintain career opportunities for Hawaii's people through the following actions:			<b>√</b>
(A) Expand vocational training in diversified agriculture, aquaculture, information industry, and other areas where growth is desired and feasible.			
(B) Encourage more effective career counseling and guidance in high schools and post-secondary institutions to inform students of present and future career opportunities.			<ul> <li>✓</li> </ul>

HAWAI'I STATE PLAN, CHAPTER 226, HRS – PART III. PRIORITY GUIDELINES		N/0	N1/ A
(Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
(C) Allocate educational resources to career areas where high employment is expected and where growth of new industries is desired.			<ul> <li>✓</li> </ul>
(D) Promote career opportunities in all industries for Hawaii's people by encouraging firms doing business in the State to hire residents.			<b>√</b>
(E) Promote greater public and private sector cooperation in determining industrial training needs and in developing relevant curricula and on- the-job training opportunities.			~
(F) Provide retraining programs and other support services to assist entry of displaced workers into alternative employment.			✓
(b) Priority guidelines to promote the economic health and quality of the	ne visitor	industry	:
(1) Promote visitor satisfaction by fostering an environment which enhances the Aloha Spirit and minimizes inconveniences to Hawaii's residents and visitors.	<b>√</b>		
(2) Encourage the development and maintenance of well-designed, adequately serviced hotels and resort destination areas which are sensitive to neighboring communities and activities and which provide for adequate shoreline setbacks and beach access.			<b>√</b>
(3) Support appropriate capital improvements to enhance the quality of existing resort destination areas and provide incentives to encourage investment in upgrading, repair, and maintenance of visitor facilities.	•		
(4) Encourage visitor industry practices and activities which respect, preserve, and enhance Hawaii's significant natural, scenic, historic, and cultural resources.	~		
(5) Develop and maintain career opportunities in the visitor industry for Hawaii's people, with emphasis on managerial positions.			✓
(6) Support and coordinate tourism promotion abroad to enhance Hawaii's share of existing and potential visitor markets.			✓
(7) Maintain and encourage a more favorable resort investment climate consistent with the objectives of this chapter.			✓
(8) Support law enforcement activities that provide a safer environment for both visitors and residents alike.			✓
(9) Coordinate visitor industry activities and promotions to business visitors through the state network of advanced data communication techniques.			<b>√</b>
(c) Priority guidelines to promote the continued viability of the sugar a	nd pinea	pple indu	stries:
<ol> <li>Provide adequate agricultural lands to support the economic viability of the sugar and pineapple industries.</li> </ol>			✓
(2) Continue efforts to maintain federal support to provide stable sugar prices high enough to allow profitable operations in Hawaii.			✓

HAWAI'I STATE PLAN, CHAPTER 2 GUIDELINES (Key: S = Supportive, N/S = Not Suppo	26, HRS – PART III. PRIORITY ortive, N/A = Not Applicable)	S	N/S	N/A
(3) Support research and developm quality and production of sugar a	ent, as appropriate, to improve the and pineapple crops.			✓
(d) Priority guidelines to promote th aquaculture:	e growth and development of div	versified	agricultu	ire and
(1) Identify, conserve, and protect an importance and initiate affirmative promote economically productive of such lands.	gricultural and aquacultural lands of /e and comprehensive programs to e agricultural and aquacultural uses			<b>√</b>
<ul> <li>(2) Assist in providing adequate, rea activities.</li> </ul>	sonably priced water for agricultural			✓
(3) Encourage public and private in and to improve transmission, support of diversified agriculture	vestment to increase water supply storage, and irrigation facilities in and aquaculture.			✓
<ul> <li>(4) Assist in the formation and ope associations and cooperatives to costs.</li> </ul>	ration of production and marketing o reduce production and marketing			✓
(5) Encourage and assist with the airborne freight and cargo syste Hawaii's agricultural community.	development of a waterborne and m capable of meeting the needs of			✓
<ul> <li>(6) Seek favorable freight rates for interisland and overseas transport</li> </ul>	Hawaii's agricultural products from ortation operators.			✓
<ul> <li>(7) Encourage the development a aquacultural activities which o potential and employment opport</li> </ul>	nd expansion of agricultural and offer long-term economic growth tunities.			✓
<ul> <li>(8) Continue the development of ag to assist small independent fan and loans.</li> </ul>	ricultural parks and other programs mers in securing agricultural lands			1
<ul><li>(9) Require agricultural uses in ag monitor the uses in these subdiv</li></ul>	ricultural subdivisions and closely isions.			✓
(10) Support the continuation of lan agriculture.	nd currently in use for diversified			✓
(11) Encourage residents and visito purchasing locally grown food a	rs to support Hawaii's farmers by nd food products.			✓
(e) Priority guidelines for water use a	nd development:			
<ol> <li>Maintain and improve water consumption rate.</li> </ol>	nservation programs to reduce the			✓
<ul> <li>(2) Encourage the improvement of the use of nonpotable water purposes.</li> </ul>	irrigation technology and promote for agricultural and landscaping			<b>√</b>
(3) Increase the support for researc feasible alternative water source	h and development of economically s.			✓
<ul><li>(4) Explore alternative funding sound future water development improvements.</li></ul>	urces and approaches to support programs and water system			

HAWAI'I STATE PLAN, CHAPTER 226, HRS – PART III. PRIORITY GUIDELINES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A	
(f) Priority guidelines for energy use and development:				
(1) Encourage the development, demonstration, and commercialization of renewable energy sources.			✓	
(2) Initiate, maintain, and improve energy conservation programs aimed at reducing energy waste and increasing public awareness of the need to conserve energy.	~			
(3) Provide incentives to encourage the use of energy conserving technology in residential, industrial, and other buildings.	✓			
(4) Encourage the development and use of energy conserving and cost- efficient transportation systems.			~	
(g) Priority guidelines to promote the development of the information in	ndustry:			
(1) Establish an information network, with an emphasis on broadband and wireless infrastructure and capability that will serve as the foundation of and catalyst for overall economic growth and diversification in Hawaii.			<b>~</b>	
(2) Encourage the development of services such as financial data processing, a products and services exchange, foreign language translations, telemarketing, teleconferencing, a twenty-four-hour international stock exchange, international banking, and a Pacific Rim management center.			<b>~</b>	
(3) Encourage the development of small businesses in the information field such as software development; the development of new information systems, peripherals, and applications; data conversion and data entry services; and home or cottage services such as computer programming, secretarial, and accounting services.			<b>√</b>	
(4) Encourage the development or expansion of educational and training opportunities for residents in the information and telecommunications fields.			<b>√</b>	
(5) Encourage research activities, including legal research in the information and telecommunications fields.			✓	
(6) Support promotional activities to market Hawaii's information industry services.			✓	
(7) Encourage the location or co-location of telecommunication or wireless information relay facilities in the community, including public areas, where scientific evidence indicates that the public health, safety, and welfare would not be adversely affected.			✓	
<i>Analysis:</i> The proposed project improves Park facilities at Mākena State Park for Park users and represents a long term commitment to enhance tourist facilities and resources in South Maui. The proposed project will incorporate solar energy features to promote energy efficiency and reduce greenhouse gas emissions.				
Chapter 226-104: Population growth and land resources priority guidelines.				
(a) Priority guidelines to effect desired statewide growth and distribution:				
(1) Encourage planning and resource management to insure that population growth rates throughout the State are consistent with			✓	

HAWAI'I STATE PLAN, CHAPTER 226, HRS – PART III. PRIORITY GUIDELINES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
available and planned resource capacities and reflect the needs and desires of Hawaii's people.			
(2) Manage a growth rate for Hawaii's economy that will parallel future employment needs for Hawaii's people.			✓
(3) Ensure that adequate support services and facilities are provided to accommodate the desired distribution of future growth throughout the State.			<b>√</b>
(4) Encourage major state and federal investments and services to promote economic development and private investment to the neighbor islands, as appropriate.			<b>√</b>
(5) Explore the possibility of making available urban land, low-interest loans, and housing subsidies to encourage the provision of housing to support selective economic and population growth on the neighbor islands.			<b>√</b>
(6) Seek federal funds and other funding sources outside the State for research, program development, and training to provide future employment opportunities on the neighbor islands.			<b>√</b>
(7) Support the development of high technology parks on the neighbor islands.			✓
(b) Priority guidelines for regional growth distribution and land resource utilization:			
(1) Encourage urban growth primarily to existing urban areas where adequate public facilities are already available or can be provided with reasonable public expenditures, and away from areas where other important benefits are present, such as protection of important agricultural land or preservation of lifestyles.			✓
(2) Make available marginal or nonessential agricultural lands for appropriate urban uses while maintaining agricultural lands of importance in the agricultural district.			1
(3) Restrict development when drafting of water would result in exceeding the sustainable yield or in significantly diminishing the recharge capacity of any groundwater area.			<b>√</b>
(4) Encourage restriction of new urban development in areas where water is insufficient from any source for both agricultural and domestic use.			<b>√</b>
(5) In order to preserve green belts, give priority to state capital- improvement funds which encourage location of urban development within existing urban areas except where compelling public interest dictates development of a noncontiguous new urban core.			<b>√</b>
(6) Seek participation from the private sector for the cost of building infrastructure and utilities, and maintaining open spaces.			✓
(7) Pursue rehabilitation of appropriate urban areas.			$\checkmark$
(8) Support the redevelopment of Kakaako into a viable residential, industrial, and commercial community.			✓

HAWAI'I STATE PLAN, CHAPTER 226, HRS – PART III. PRIORITY GUIDELINES $(K_{AV}, S = Supportive N/S = Not Supportive N/A = Not Applicable)$	Q	N/S	N/A	
<ul> <li>(9) Direct future urban development away from critical environmental areas or impose mitigating measures so that negative impacts on the environment would be minimized.</li> </ul>	5			
(10) Identify critical environmental areas in Hawaii to include but not be limited to the following: watershed and recharge areas; wildlife habitats (on land and in the ocean); areas with endangered species of plants and wildlife; natural streams and water bodies; scenic and recreational shoreline resources; open space and natural areas; historic and cultural sites; areas particularly sensitive to reduction in water and air quality; and scenic resources.			✓	
(11) Identify all areas where priority should be given to preserving rural character and lifestyle.			✓	
(12) Utilize Hawaii's limited land resources wisely, providing adequate land to accommodate projected population and economic growth needs while ensuring the protection of the environment and the availability of the shoreline, conservation lands, and other limited resources for future generations.			✓	
(13) Protect and enhance Hawaii's shoreline, open spaces, and scenic resources.	✓			
<i>Analysis:</i> The proposed project enhances the cleanliness and scenic beauty of Mākena State Park by providing appropriate sanitary facilities and improved amenities.				
Obserten 000 405. Onimes and eniminal institution				
Chapter 226-105: Crime and criminal justice.				
Chapter 226-105: Crime and criminal justice. Priority guidelines in the area of crime and criminal justice: (1) Support law enforcement activities and other criminal justice efforts				
Chapter 226-105: Crime and criminal justice.         Priority guidelines in the area of crime and criminal justice:         (1) Support law enforcement activities and other criminal justice efforts that are directed to provide a safer environment.			<ul> <li>✓</li> </ul>	
Chapter 226-105: Crime and criminal justice.         Priority guidelines in the area of crime and criminal justice:         (1) Support law enforcement activities and other criminal justice efforts that are directed to provide a safer environment.         (2) Target state and local resources on efforts to reduce the incidence of violent crime and on programs relating to the apprehension and prosecution of repeat offenders.			<ul> <li>✓</li> <li>✓</li> </ul>	
Chapter 226-105: Crime and criminal justice.         Priority guidelines in the area of crime and criminal justice:         (1) Support law enforcement activities and other criminal justice efforts that are directed to provide a safer environment.         (2) Target state and local resources on efforts to reduce the incidence of violent crime and on programs relating to the apprehension and prosecution of repeat offenders.         (3) Support community and neighborhood program initiatives that enable residents to assist law enforcement agencies in preventing criminal activities.			✓ ✓ ✓	
<ul> <li>Chapter 226-105: Crime and criminal justice.</li> <li>Priority guidelines in the area of crime and criminal justice: <ul> <li>(1) Support law enforcement activities and other criminal justice efforts that are directed to provide a safer environment.</li> </ul> </li> <li>(2) Target state and local resources on efforts to reduce the incidence of violent crime and on programs relating to the apprehension and prosecution of repeat offenders.</li> <li>(3) Support community and neighborhood program initiatives that enable residents to assist law enforcement agencies in preventing criminal activities.</li> <li>(4) Reduce overcrowding or substandard conditions in correctional facilities through a comprehensive approach among all criminal justice agencies which may include sentencing law revisions and use of alternative sanctions other than incarceration for persons who pose no danger to their community.</li> </ul>			<ul> <li>✓</li> <li>✓</li> <li>✓</li> <li>✓</li> <li>✓</li> </ul>	
<ul> <li>Chapter 226-105: Crime and criminal justice.</li> <li>Priority guidelines in the area of crime and criminal justice: <ul> <li>(1) Support law enforcement activities and other criminal justice efforts that are directed to provide a safer environment.</li> <li>(2) Target state and local resources on efforts to reduce the incidence of violent crime and on programs relating to the apprehension and prosecution of repeat offenders.</li> <li>(3) Support community and neighborhood program initiatives that enable residents to assist law enforcement agencies in preventing criminal activities.</li> <li>(4) Reduce overcrowding or substandard conditions in correctional facilities through a comprehensive approach among all criminal justice agencies which may include sentencing law revisions and use of alternative sanctions other than incarceration for persons who pose no danger to their community.</li> <li>(5) Provide a range of appropriate sanctions for juvenile offenders, including community-based programs and other alternative sanctions.</li> </ul> </li> </ul>			<ul> <li>✓</li> <li>✓</li> <li>✓</li> <li>✓</li> <li>✓</li> </ul>	
<ul> <li>Chapter 225-105: Crime and Criminal Justice.</li> <li>Priority guidelines in the area of crime and criminal justice: <ul> <li>(1) Support law enforcement activities and other criminal justice efforts that are directed to provide a safer environment.</li> </ul> </li> <li>(2) Target state and local resources on efforts to reduce the incidence of violent crime and on programs relating to the apprehension and prosecution of repeat offenders.</li> <li>(3) Support community and neighborhood program initiatives that enable residents to assist law enforcement agencies in preventing criminal activities.</li> <li>(4) Reduce overcrowding or substandard conditions in correctional facilities through a comprehensive approach among all criminal justice agencies which may include sentencing law revisions and use of alternative sanctions other than incarceration for persons who pose no danger to their community.</li> <li>(5) Provide a range of appropriate sanctions for juvenile offenders, including community-based programs and other alternative sanctions.</li> <li>(6) Increase public and private efforts to assist witnesses and victims of crimes and to minimize the costs of victimization.</li> </ul>			<ul> <li>✓</li> </ul>	

HAWAI'I STATE PLAN, CHAPTER 226, HRS – PART III. PRIO GUIDELINES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	RITY	N/S	N/A
Chapter 226-106: Affordable housing.			
Priority guidelines for the provision of affordable housing:			
(1) Seek to use marginal or nonessential agricultural land and pulland to meet housing needs of low- and moderate-income and group households.	ublic gap-		<b>√</b>
(2) Encourage the use of alternative construction and developm methods as a means of reducing production costs.	nent		$\checkmark$
(3) Improve information and analysis relative to land availability suitability for housing.	and		$\checkmark$
(4) Create incentives for development which would increase he ownership and rental opportunities for Hawaii's low- and moder income households, gap-group households, and residents special needs.	ome rate- with		<b>√</b>
(5) Encourage continued support for government or private hou programs that provide low interest mortgages to Hawaii's people the purchase of initial owner-occupied housing.	sing e for		<b>~</b>
(6) Encourage public and private sector cooperation in the developm of rental housing alternatives.	nent		✓
(7) Encourage improved coordination between various agencies levels of government to deal with housing policies and regulatio	and ns.		✓
(8) Give higher priority to the provision of quality housing the affordable for Hawaii's residents and less priority to development housing intended primarily for individuals outside of Hawaii.	at is nt of		<b>√</b>
Analysis: Not Applicable			
Chapter 226-107: Quality education.			
Priority guidelines to promote quality education:			-
<ol> <li>Pursue effective programs which reflect the varied district, sch and student needs to strengthen basic skills achievement;</li> </ol>	nool,		✓
<ul> <li>(2) Continue emphasis on general education "core" requirement provide common background to students and essential suppo other university programs;</li> </ul>	s to rt to		<b>√</b>
<ul> <li>(3) Initiate efforts to improve the quality of education by improving capabilities of the education work force;</li> </ul>	the		$\checkmark$
(4) Promote increased opportunities for greater autonomy and flexil of educational institutions in their decision making responsibilities	bility es;		$\checkmark$
(5) Increase and improve the use of information technology in educa by the availability of telecommunications equipment for:	ation		✓
(A) The electronic exchange of information;			$\checkmark$
(B) Statewide electronic mail; and			$\checkmark$
(C) Access to the Internet.			$\checkmark$

HAWAI'I STATE PLAN, CHAPTER 226, HRS – PART III. PRIORITY GUIDELINES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A		
<ul> <li>(6) Encourage programs that increase the public's awareness and understanding of the impact of information technologies on our lives;</li> </ul>			✓		
<ul> <li>(7) Pursue the establishment of Hawaii's public and private universities and colleges as research and training centers of the Pacific;</li> </ul>			✓		
(8) Develop resources and programs for early childhood education;			✓		
<ul> <li>(9) Explore alternatives for funding and delivery of educational services to improve the overall quality of education; and</li> </ul>			✓		
(10) Strengthen and expand educational programs and services for students with special needs.			✓		
Analysis: Not Applicable					
CHAPTER 226-108: Sustainability					
Priority guidelines and principles to promote sustainability shall includ	e:	1	T		
(1) Encouraging balanced economic, social, community, and environmental priorities;	✓				
<ul><li>(2) Encouraging planning that respects and promotes living within the natural resources and limits of the State;</li></ul>	<ul> <li>✓</li> </ul>				
(3) Promoting a diversified and dynamic economy;			✓		
(4) Encouraging respect for the host culture;			✓		
(5) Promoting decisions based on meeting the needs of the present without compromising the needs of future generations;	✓				
(6) Considering the principles of the ahupuaa system; and			$\checkmark$		
(7) Emphasizing that everyone, including individuals, families, communities, businesses, and government, has the responsibility for achieving a sustainable Hawaii.			<b>√</b>		
<i>Analysis:</i> The proposed project responds to the need to provide adequate user-related improvements at Mākena State Park and does not compromise the needs of future generations. The proposed project will be developed within available water resources and services.					
CHAPTER 226-109: Climate change adaptation					
Priority guidelines and principles to promote climate change adaptation	n shall in	clude:	1		
<ol> <li>Ensure that Hawaii's people are educated, informed, and aware of the impacts climate change may have on their communities;</li> </ol>			✓		
(2) Encourage community stewardship groups and local stakeholders to participate in planning and implementation of climate change policies;			✓		
<ul> <li>(3) Invest in continued monitoring and research of Hawaii's climate and the impacts of climate change on the State;</li> </ul>			✓		
(4) Consider native Hawaiian traditional knowledge and practices in planning for the impacts of climate change;			~		
HAWAI'I STATE PLAN, CHAPTER 226, HRS – PART III. PRIORITY GUIDELINES	7				
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(Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A		
(5) Encourage the preservation and restoration of natural landscape features, such as coral reefs, beaches and dunes, forests, streams, floodplains, and wetlands, that have the inherent capacity to avoid, minimize, or mitigate the impacts of climate change;	<b>√</b>				
(6) Explore adaptation strategies that moderate harm or exploit beneficial opportunities in response to actual or expected climate change impacts to the natural and built environments;			~		
(7) Promote sector resilience in areas such as water, roads, airports, and public health, by encouraging the identification of climate change threats, assessment of potential consequences, and evaluation of adaptation options;	✓				
(8) Foster cross-jurisdictional collaboration between county, state, and federal agencies and partnerships between government and private entities and other nongovernmental entities, including nonprofit entities;			<b>√</b>		
(9) Use management and implementation approaches that encourage the continual collection, evaluation, and integration of new information and strategies into new and existing practices, policies, and plans; and	<b>√</b>				
(10) Encourage planning and management of the natural and built environments that effectively integrate climate change policy.	~				
Analysis: A sea level rise analysis has been carried out for the proposed project in utilizing available sea level rise data. The proposed project is located inland (outside) of the 3.2 foot sea level rise projection area for Mākena. The proposed project preserves and is not anticipated to impact the nearby wetland, beach, and marine environments. Signage will be provided to educate Park users to use the Park in an environmentally responsible way.					

## C. STATE FUNCTIONAL PLANS

A key element of the Statewide Planning System is the Functional Plans which set forth the policies, statewide guidelines, and priorities within a specific field of activity. There are 13 Functional Plans which have been developed by the State agency primarily responsible for a given functional area. Together with the County General Plans, the State Functional Plans establish more specific strategies for implementation. In particular, State Functional Plans provide for the following:

- Identify major Statewide priority concerns
- Define current strategies for each functional area
- Identify major relationships among functional areas
- Provide direction and strategies for departmental policies, programs, and priorities
- Provide a guide for the allocation of resources
- Coordinate State and County roles and responsibilities in the implementation of the Hawaii State Plan

Thirteen (13) Functional Plans have been prepared by State agencies. **Table 5** provides an assessment of the relationship between the proposed action and each of the 13 Functional Plans.

Stat	e Functional Plan	State Coordinating Agency	Purpose	Analysis
1	Agriculture Functional Plan (1991)	Department of Agriculture	Continued viability of agriculture throughout the State	Not Applicable
2	Conservation Lands State Functional Plan (1991)	Department of Land and Natural Resources	Addresses issues of population and economic growth and its strain on current natural resources; broadening public use of natural resources while protecting lands and shorelines from overuse; additionally, promotes the aquaculture industry	The proposed project does not involve lands in the "Conservation" district. Within Mākena State Park, the area of the Pu'u Ōla'i cinder cone is recognized as part of the Conservation District. The remainder of the Park, including the north and south parking sites, is outside the Conservation District. The project area does not involve wetland or shoreline areas. The proposed project is not in conflict with the objectives, policies, and implementing actions of the Conservation Lands State Functional Plan, and supports its Policy IID(3), "Develop recreational and archaeological resources on the shoreline and mauka areas", by providing improved access and convenience to recreational users of the Park. The proposed project is also not located within the shoreline setback area.
3	Education State Functional Plan (1989)	Department of Education	Improvements to Hawaii's educational curriculum, quality of educational staff, and access to adequate facilities	Not Applicable
4	Employment State Functional Plan (1990)	Department of Labor and Industrial Relations	Improve the qualifications, productivity, and effectiveness of the State's workforce through better education and training of workers as well as efficient planning of economic development, employment opportunities, and training activities	The proposed project will provide short term employment opportunities during construction of improvements.
5	Energy State Functional Plan (1991)	Department of Business, Economic Development and Tourism	Lessen the reliance on petroleum and other fossil fuels in favor of alternative sources of energy so as to keep up with the State's increasing energy demands while	The proposed project will incorporate energy conserving features such as PV panels for lighting.

Table 5.	Relations	nip Between	the Mākena	State Park	Improvements	Project and the	State Functional Plans
	State (	• • • • • • • • • • • • • • • • • • •					

Stat	e Functional Plan	State Coordinating Agency	Purpose	Analysis
			also becoming a more sustainable island state; achieving dependable, efficient, and economical statewide energy systems	
6	Health State Functional Plan (1989)	Department of Health	Improve health care system by providing for those who don't have access to private health care providers; increasing preventative health measures; addressing 'quality of care' elements in private and public sectors to cut increasing costs	Not Applicable
7	Higher Education Functional Plan (1984)	University of Hawaii	Prepare Hawaii's citizens for the demands of an increasingly complex world through providing technical and intellectual tools	Not Applicable
8	Historic Preservation State Functional Plan (1991)	Department of Land and Natural Resources	Preservation of historic properties, records, artifacts and oral histories; provide public with information/education on the ethnic and cultural heritages and history of Hawai'i	An AIS and CIA have been carried out to ensure the proposed project does not adversely impact historic and cultural resources.
9	Affordable Housing State Functional Plan	Hawaii Housing Finance and Development Corporation	Based largely on joint public/private efforts to finance, build, and maintain an adequate supply of affordable housing. It will be a working tool to guide the State, the counties, as well as the private sector in meeting the overall goal that every Hawai'i resident will have the opportunity to live in a safe, decent and affordable home.	Not Applicable
10	Human Services State Functional Plan (1989)	Department of Human Services	Refining support systems for families and individuals by improving elderly care, increasing preventative measures to combat child/spousal	Not Applicable

State	Functional Plan	State Coordinating Agency	Purpose	Analysis
			abuse and neglect; providing means for 'self-sufficiency'	
11	Recreation State Functional Plan (1991)	Department of Land and Natural Resources	Manage the use of recreational resources via addressing issues: (1) ocean and shoreline recreation, (2) mauka, urban, and other recreation opportunities, (3) public access to shoreline and upland recreation areas, (4) resource conservation and management, (5) management of recreation programs/facilities/areas, and (6) wetlands protection and management	The Recreation State Functional Plan identifies saturation of beach park capacity as a top priority issue, and includes policies to expand State-owned beach park facilities in less developed areas such as Mākena on Maui. Mākena State Park offers over half a mile of wide sandy beach for recreation by beachgoers, who access the Park primarily by the north and south parking sites. The proposed improvements will provide improved organization of existing parking, sanitation, and convenience for beachgoers, providing an incentive to utilize Oneloa Beach and potentially reducing oversaturation at other beaches in South Maui. The proposed project is not in conflict with the objectives, policies, and implementing actions of the Recreation State Functional Plan. Specifically, the proposed project supports the following policies and objectives: <i>Policy I-C(3): Mitigate the impact of increased use of popular ocean recreation areas by visitors.</i> Analysis: Provision of comfort facilities with appropriate collection and treatment of waste will mitigate the unsanitary conditions of waste and litter throughout the Park which can occur when comfort facilities are not available. Additionally, the visual and scenic impact of appropriately designed comfort stations will be an improvement over the existing portable toilets in use at the Park. <i>Objective V-A: Properly maintain existing parks and recreation areas.</i>

Stat	e Functional Plan	State Coordinating Agency	Purpose	Analysis
				Analysis: Proper maintenance of Mākena State Park necessitates provision of appropriate user comfort and parking facilities.
12	Tourism State Functional Plan (1991)	Department of Business, Economic Development and Tourism	Balance tourism/economic growth with environmental and community concerns; development that is cognizant of the limited land and water resources of the islands; maintaining friendly relations between tourists and community members; development of a productive workforce and enhancement of career and employment opportunities in the visitor industry	The proposed project supports improvements to a tourist destination by providing convenience, comfort and enhancing the visitor experience.
13	Transportation State Functional Plan (1991)	Department of Transportation	Development of a safer, more efficient transportation system that also is consistent with planned physical and economic growth of the state; construction of facility and infrastructure improvements; develop a transportation system balanced with new alternatives; pursue land use initiatives which help reduce travel demand	Not Applicable

## D. MAUI COUNTY GENERAL PLAN

The Countywide Policy Plan was adopted in March 2010 and is a comprehensive policy document for the islands of Maui County to the year 2030. The plan replaces the *General Plan of the County of Maui 1990 Update* and provides the policy framework for the development of the forthcoming Maui Island Plan as well as for updating the nine (9) detailed Community Plans.

The Countywide Policy Plan provides broad goals, objectives, policies and implementing actions that portray the desired direction of the County's future. Goals are intended to describe a desirable condition of the County by the year 2030 and are intentionally general. Objectives tend to be more specific and may be regarded as milestones to achieve the larger goals. Policies are not intended as regulations, but instead provide a general guideline for County decision makers, departments, and collaborating organizations toward the attainment of goals and objectives. Implementing actions are specific tasks, procedures, programs, or techniques that carry out policy.

Discussion of the proposed project's conformance to the relevant goals, objectives, policies, and implementing actions of the Countywide Policy Plan is provided below:

COUNTYWIDE POLICY PLAN (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
A. PROTECT THE NATURAL ENVIRONMENT			
<b>Goal:</b> 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.	✓		
Policies:			
(a) Perpetuate native Hawaiian biodiversity by preventing the introduction of invasive species, containing or eliminating existing noxious pests, and protecting critical habitat areas.			~
(b) Preserve and reestablish indigenous and endemic species' habitats and their connectivity.	✓		
(c) Restore and protect forests, wetlands, watersheds, and stream flows, and guard against wildfires, flooding, and erosion.			✓
(d) Protect baseline stream flows for perennial streams, and support policies that ensure adequate stream flow to support Native Hawaiian aquatic species, traditional kalo cultivation, and self-sustaining ahupua'a.			~
(e) Protect undeveloped beaches, dunes, and coastal ecosystems, and restore natural shoreline processes.			✓
(f) Protect the natural state and integrity of unique terrain, valued natural environments, and geological features.			$\checkmark$
(g) Preserve and provide ongoing care for important scenic vistas, view planes, landscapes, and open-space resources.			✓

COUNTYWIDE POLICY PLAN (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
Policies:			
(a) Preserve and protect natural resources with significant scenic, economic, cultural, environmental, or recreational value.	$\checkmark$		
(b) Improve communication, coordination, and collaboration among government agencies, nonprofit organizations, communities, individuals, and land owners that work for the protection of the natural environment.			✓
(c) Evaluate development to assess potential short-term and long-term impacts on land, air, aquatic, and marine environments.	✓		
(d) Improve efforts to mitigate and plan for the impact of natural disasters, human influenced emergencies, and global warming.	✓		
(e) Regulate access to sensitive ecological sites and landscapes.			$\checkmark$
(f) Reduce air, noise, light, land, and water pollution, and reduce Maui County's contribution to global climate change.	✓		
(g) Plan and prepare for and educate visitors and residents about the possible effects of global warming.			✓
(h) Provide public access to beaches and shorelines for recreational and cultural purposes where appropriate.	✓		
(i) Educate the construction and landscape industries and property owners about the use of best management practices to prevent erosion and nonpoint source pollution.	~		
(j) Support the acquisition of resources with scenic, environmental, and recreational value, and encumber their use.			✓
(k) Improve enforcement activities relating to the natural environment.			$\checkmark$
(I) For each shoreline community, identify and prioritize beach-conservation objectives, and develop action plans for their implementation.			✓
Implementing Actions:	•		
(a) Document, record, and monitor existing conditions, populations, and locations of flora and fauna communities.	$\checkmark$		
(b) Implement Federal and State policies that require a reduction of greenhouse- gas emissions.	✓		
(c) Establish a baseline inventory of available natural resources and their respective carrying capacities.			✓
Analysis: Drainage improvements and a BMP Plan will be implem construction to minimize adverse impacts to downstream properties and environment. A biological resource analysis has been carried out to ide conditions, potential impacts, and mitigation measures. A sea level rise ana been carried out to ensure the proposed project will not be adversely impacte sea level rise.	nented the no entify Ilysis d by p	duri earsho existi has al project	ng pre ng so ced
Objective:			
(4) Educate residents and visitors about responsible stewardship practices and the interconnectedness of the natural environment and people.			<ul> <li>✓</li> </ul>
Policies:			
(a) Expand education about native flora, fauna, and ecosystems.			✓

COUNTYWIDE POLICY PLAN (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	s	N/S	N/A
(b) Align priorities to recognize that the health of the natural environment and the health of people are inextricably linked			✓
<ul> <li>(c) Promote programs and incentives that decrease greenhouse-gas emissions and improve environmental stewardship.</li> </ul>			✓
Analysis: Not Applicable.			
B. PRESERVE LOCAL CULTURES AND TRADITIONS			
<b>Goal:</b> Maui County will foster a spirit of pono and protect, perpetuate, and reinvigorate its residents" multi-cultural values and traditions to ensure that current and future generations will enjoy the benefits of their rich island heritage.	✓		
Objective:	1		
(1) Perpetuate the Hawalian culture as a vital force in the lives of residents.			$\checkmark$
Policies:			
(a) Protect and preserve access to mountain, ocean, and island resources for traditional Hawaiian cultural practices.	✓		
(b) Prohibit inappropriate development of cultural lands and sites that are important for traditional Hawaiian cultural practices, and establish mandates for the special protection of these lands in perpetuity.	✓		
(c) Promote the use of ahupua'a and moku management practices.			$\checkmark$
(d) Encourage the use of traditional Hawaiian architecture and craftsmanship.			$\checkmark$
(e) Promote the use of the Hawaiian language.			✓
(f) Recognize and preserve the unique natural and cultural characteristics of each ahupua'a or district.	$\checkmark$		
(g) Encourage schools to promote broader incorporation of Hawaiian and other local cultures' history and values lessons into curriculum.			✓
(h) Ensure the protection of Native Hawaiian rights.	✓		
(i) Promote, encourage, and require the correct use of traditional place names, particularly in government documents, signage, and the tourism industry.			✓
Implementing Actions:			
<ul> <li>(a) Establish alternative land use and overlay zoning designations that recognize and preserve the unique natural and cultural characteristics of each ahupua'a or district.</li> </ul>			~
(b) Develop requirements for all County applicants to perpetuate and use proper traditional place names in all applications submitted.			$\checkmark$
Analysis: An AIS and CIA have been carried out to ensure the proposed	oroject	t will r	not
adversely impact historic and cultural resources.			
(2) Emphasize respect for our island lifestyle and our unique local cultures family			
and natural environment.	•		
Policies:	1	1	r
(a) Acknowledge the Hawaiian culture as the host culture, and foster respect and humility among residents and visitors toward the Hawaiian people and their practices.	<b>√</b>		
(b) Perpetuate a respect for diversity, and recognize the historic blending of cultures and ethnicities.	$\checkmark$		

COUNTYWIDE POLICY PLAN (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
(c) Encourage the perpetuation of each culture's unique cuisine, attire, dance, music, and folklore, and other unique island traditions and recreational activities.			$\checkmark$
(d) Recognize the interconnectedness between the natural environment and the cultural heritage of the islands.			✓
(e) Protect and prioritize funding for recreational activities that support local cultural practices, such as surfing, fishing, and outrigger-canoe paddling.			✓
Analysis: As noted, a CIA has been carried out on the proposed project in the interconnectedness between the natural environment and the cultural lislands. The proposed project is not expected to significantly adversely impa or environmental resources.	recog neritag ct any	nition je of t cultu	of he ral
Objective:	1		
(3) Preserve for present and future generations the opportunity to know and experience the arts, culture, and history of Maui County.			$\checkmark$
Policies:	1		
(a) Foster teaching opportunities for cultural practitioners to share their knowledge and skills.			✓
(b) Support the development of cultural centers.			$\checkmark$
(c) Broaden opportunities for public art and the display of local artwork.			$\checkmark$
(d) Foster the Aloha Spirit by celebrating the Hawaiian host culture and other Maui County cultures through support of cultural-education programs, festivals, celebrations, and ceremonies.			~
(e) Support the perpetuation of Hawaiian arts and culture.			$\checkmark$
(f) Support programs and activities that record the oral and pictorial history of residents.			>
(g) Support the development of repositories for culture, history, genealogy, oral history, film, and interactive learning.			$\checkmark$
Implementing Actions:			
(a) Establish incentives for the display of public art.			$\checkmark$
(b) Establish centers and programs of excellence for the perpetuation of Hawaiian arts and culture.			~
Analysis: Not Applicable			
<u>Objective</u> :			
(4) Preserve and restore significant historic architecture, structures, cultural sites, cultural districts, and cultural landscapes.	✓		
Policies:	1		
(a) Support the development of island-wide historic, archaeological, and cultural resources inventories.	✓		
(b) Promote the rehabilitation and adaptive reuse of historic sites, buildings, and structures to perpetuate a traditional sense of place.			~
(c) Identify a sustainable rate of use and set forth specific policies to protect cultural resources.			✓
(d) Protect and preserve lands that are culturally or historically significant.	$\checkmark$		
(e) Support programs that protect, record, restore, maintain, provide education about, and interpret cultural districts, landscapes, sites, and artifacts in both natural and museum settings.	<ul> <li>✓</li> </ul>		

COUNTYWIDE POLICY PLAN (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
(f) Perpetuate the authentic character and historic integrity of rural communities and small towns.			✓
(g) Seek solutions that honor the traditions and practices of the host culture while recognizing the needs of the community.			$\checkmark$
(h) Support the development of an Archaeological District Ordinance.			$\checkmark$
(i) Protect summits, slopes, and ridgelines from inappropriate development.			$\checkmark$
(j) Support the registering of important historic sites on the State and Federal historic registers.	$\checkmark$		
(k) Provide opportunities for public involvement with restoration and enhancement of all types of cultural resources.	✓		
(I) Foster partnerships to identify and preserve or revitalize historic and cultural sites.	$\checkmark$		
Implementing Actions:	<u> </u>		
(a) Identify, develop, map, and maintain an inventory of locally significant natural. cultural, and historical resources for protection.	$\checkmark$		
(b) Prepare, continually update, and implement a cultural-management plan for cultural sites, districts, and landscapes, where appropriate.			~
(c) Enact an Archaeological District Ordinance.			$\checkmark$
(d) Nominate important historic sites to the State and Federal historic registers.			$\checkmark$
Analysis: An AIS and CIA have been carried out to ensure that improvements do not significantly impact any historic or cultural resources.	the p	ropos	ed
C. IMPROVE EDUCATION			
<b><u>Goal</u></b> : Residents will have access to lifelong formal and informal educational options enabling them to realize their ambitions.			<ul> <li>Image: A start of the start of</li></ul>
Objective:			
(1) Encourage the State to attract and retain school administrators and educators of the highest quality.			$\checkmark$
Policies:	· · · · ·		
(a) Encourage the State to provide teachers with nationally competitive pay and benefit packages.			✓
(b) Encourage the State to ensure teachers will have the teaching tools and support staff needed to provide students with an excellent education.			✓
(c) Explore Maui County district- and school-based decision making in public education.			✓
Analysis: Not Applicable			
Objective:			
(2) Provide nurturing learning environments that build skills for the 21st century.			$\checkmark$
Policies:	<b></b>		-
(a) Expand professional-development opportunities in disciplines that support the economic-development goals of Maui County.			✓
(b) Plan for demographic, social, and technological changes in a timely manner.			$\checkmark$
(c) Encourage collaborative partnerships to improve conditions of learning environments.			$\checkmark$

COUNTYWIDE POLICY PLAN (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)		S	N/S	N/A
(d) Promote development of neighborhood schools and educational centers.				$\checkmark$
(e) Integrate schools, community parks, and playgrounds, and expand ea community's use of these facilities.	ich			$\checkmark$
(f) Support coordination between land use and school-facility planning agencies	5.			$\checkmark$
(g) Encourage the upgrade and ongoing maintenance of public-school facilities.				$\checkmark$
(h) Encourage the State Department of Education to seek reliable, innovative, a alternative methods to support a level of per-pupil funding that places Haw among the top tier of states nationally for its financial support of public school	nd aiʻi Is.			✓
<ul> <li>(i) Encourage the State to promote healthier, more productive learning environments, including by providing healthy meals, more physical activity natural lighting, and passive cooling.</li> </ul>	ing ity,			~
<ul> <li>(j) Encourage the State to support the development of benchmarks to measure t success of Hawai'i's public-education system and clarify lines of accountability</li> </ul>	the ty.			$\checkmark$
(k) Design school and park facilities in proximity to residential areas.				$\checkmark$
(I) Support technology- and natural-environment-based learning.				$\checkmark$
(m) Encourage the State to support lower student-teacher ratios in public schools	S.			$\checkmark$
(n) Encourage alternative learning and educational opportunities.				$\checkmark$
Implementing Actions:				
(a) Develop safe walking and bicycling programs for school children.				$\checkmark$
Objective:				
(3) Provide all residents with educational opportunities that can help them bet understand themselves and their surroundings and allow them to realize th ambitions.	ter eir			✓
Policies:				
(a) Encourage the State to improve Maui Community College as a comprehens community college that will serve each community.	ive			$\checkmark$
(b) Broaden the use of technology and telecommunications to improve education opportunities throughout the County.	nal			$\checkmark$
(c) Attract graduate-level research programs and institutions.				$\checkmark$
(d) Promote the teaching of traditional practices, including aquaculture; subsister agriculture; Pacific Island, Asian, and other forms of alternative health practice and indigenous Hawaiian architecture.	ice es;			✓
(e) Integrate cultural and environmental values in education, including se sufficiency and sustainability.	əlf-			$\checkmark$
(f) Foster a partnership and ongoing dialogue between business organization formal educational institutions, and vocational training centers to tailor learn and mentoring programs to County needs.	ns, ing			✓
(g) Ensure teaching of the arts to all ages.				$\checkmark$
(h) Expand and develop vocational learning opportunities by establishing transchools.	de			✓
(i) Encourage the State to integrate financial and economic literacy in elemental secondary, and higher-education levels.	iry,			✓

COUNTYWIDE POLICY PLAN (Kov: $S = Supportive N/S = Not Supportive N/A = Not Applicable)$	e	N/S	NI/A
Implementing Actions:	3	N/3	N/A
<ul> <li>(a) Encourage the State to establish a four-year university, and support the development of other higher-education institutions to enable residents to obtain bachelor degrees and postgraduate degrees in Maui County.</li> </ul>			✓
Analysis: Not Applicable			
Objective:	r		
(4) Maximize community-based educational opportunities.			$\checkmark$
Policies:	<del></del>		
(a) Encourage the State and others to expand pre-school, after-school, and homebased (parent-child) learning.			✓
(b) Support public-private partnerships to develop youth-internship, -apprenticeship, and -mentoring programs.			$\checkmark$
(c) Support the development of a wide range of informal educational and cultural programs for all residents.			$\checkmark$
(d) Improve partnerships that utilize the skills and talents at Hawai'i's colleges and universities to benefit the County.			$\checkmark$
(e) Support career-development and job-recruitment programs and centers.			$\checkmark$
(f) Attract learning institutions and specialty schools to diversify and enhance educational opportunities.			$\checkmark$
(g) Expand education of important life skills for the general public.			$\checkmark$
(h) Support community facilities such as museums, libraries, nature centers, and open spaces that provide interactive-learning opportunities for all ages.			$\checkmark$
Analysis: Not Applicable			
D. STRENGTHEN SOCIAL AND HEALTHCARE SERVICES			
<b><u>Goal</u></b> : Health and social services in Maui County will fully and comprehensively serve all segments of the population.			$\checkmark$
Objective:			-
(1) In cooperation with the Federal and State governments and nonprofit agencies, broaden access to social and healthcare services and expand options to improve the overall wellness of the people of Maui County.			~
Policies:			
(a) Work with other levels of government and the nonprofit sector to expand services to address hunger, homelessness, and poverty.			$\checkmark$
(b) Support the improvement of opportunities for disadvantaged youth, encourage the tradition of hanai relatives, and support expanded opportunities for foster care.			✓
(c) Support expanded long-term-care options, both in institutions and at home, for patients requiring ongoing assistance and medical attention.			>
(d) Encourage the expansion and improvement of local hospitals, facilitate the establishment of new healthcare facilities, and facilitate prompt and high-quality emergency- and urgent-care services for all.			✓
(e) Support broadened access to affordable health insurance and health care, and recognize the unique economic challenges posed to families when healthcare services are provided off-island.			✓
(f) Encourage equal access to social and healthcare services through both technological and traditional means.			$\checkmark$

COUNTYWIDE POLICY PLAN			
(Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
Analysis: Not Applicable			
(2) Encourage the Federal and State governments and the private sector to improve			$\checkmark$
the quality and delivery of social and healthcare services.			
Policies:	1		
<ul> <li>(a) Strengthen partnerships with government, nonprofit, and private organizations to provide funding and to improve counseling and other assistance to address substance abuse, domestic violence, and other pressing social challenges.</li> </ul>			✓
(b) Encourage the State to improve the quality of medical personnel, facilities, services, and equipment.			✓
(c) Encourage investment to improve the recruitment of medical professionals and the quality of medical facilities and equipment throughout Maui County.			✓
(d) Promote the development of continuum-of-care facilities that provide assisted living, hospice, home-care, and skilled-nursing options allowing the individual to be cared for in a manner congruent with his or her needs and desires.			✓
(e) Support improved social, healthcare, and governmental services for special needs populations.			$\checkmark$
(f) Plan for the needs of an aging population and the resulting impacts on social services, housing, and healthcare delivery.			$\checkmark$
(g) Improve coordination among the police, the courts, and the public in the administration of social and healthcare services.			$\checkmark$
(h) Support programs that address needs of veterans.			$\checkmark$
(i) Support programs that address the needs of immigrants.			$\checkmark$
Implementing Actions:	1		
(a) Invest in programs designed to improve the general weitare and quality of life of Native Hawaiians.			✓
(b) Assist and facilitate the State Department of Public Safety and others in efforts to strengthen programs and facilities that will improve the mental and social health of incarcerated people and assist in prison inmates' successful transition back into Maui County communities.			~
(c) Develop and maintain a comprehensive index that will measure the health and wellness needs of families.			✓
(d) Provide heliports countywide for emergency health and safety purposes.			$\checkmark$
Analysis: Not Applicable	•		
Objective:	_		
(3) Strengthen public-awareness programs related to healthy lifestyles and social and medical services.			$\checkmark$
Policies:			
(a) Expand public awareness about personal safety and crime prevention.			$\checkmark$
(b) Encourage residents to pursue education and training for careers in the healthcare, social services, and community-development fields.			~
(c) Expand public awareness and promote programs to achieve healthy eating habits and drug-free lifestyles.			$\checkmark$
Analysis: Not Applicable			

COUNTYWIDE POLICY PLAN (Key: $S = Supportive N/S = Not Supportive N/A = Not Applicable)$	s	N/S	N/A
E. EXPAND HOUSING OPPORTUNITIES FOR RESIDENTS	0	N/0	
<b><u>Goal</u></b> : Quality, island-appropriate housing will be available to all residents.			$\checkmark$
Objective:			
(1) Reduce the affordable housing deficit for residents.			$\checkmark$
Policies:			
(a) Ensure that an adequate and permanent supply of affordable housing, both new and existing units, is made available for purchase or rental to our resident and/or workforce population, with special emphasis on providing housing for low- to moderate-income families, and ensure that all affordable housing remains affordable in perpetuity.			✓
(b) Seek innovative ways to lower housing costs without compromising the quality of our island lifestyle.			✓
(c) Seek innovative methods to secure land for the development of low- and moderate- income housing.			✓
(d) Provide the homeless population with emergency and transitional shelter and other supportive programs.			✓
(e) Provide for a range of senior-citizen and special needs housing choices on each island that affordably facilitates a continuum of care and services.			$\checkmark$
(f) Support the Department of Hawaiian Home Lands' development of homestead lands.			$\checkmark$
(g) Manage property-tax burdens to protect affordable resident homeownership.			✓
(h) Explore taxation mechanisms to increase and maintain access to affordable housing.			✓
(i) Improve awareness regarding available affordable homeowner's insurance.			$\checkmark$
(j) Redevelop commercial areas with a mixture of affordable residential and business uses, where appropriate.			$\checkmark$
(k) Ensure residents are given priority to obtain affordable housing units developed in their communities, consistent with all applicable regulations.			>
(I) Establish pricing for affordable housing that is more reflective of Maui County's workforce than the United States Housing and Urban Development's median- income estimates for Maui County.			>
(m) Develop neighborhoods with a mixture of accessible and integrated community facilities and services.			$\checkmark$
(n) Provide alternative regulatory frameworks to facilitate the use of Kuleana lands by the descendants of Native Hawaiians who received those lands pursuant to the Kuleana Act of 1850.			>
(o) Work with lending institutions to expand housing options and safeguard the financial security of homeowners.			$\checkmark$
(p) Promote the use of the community land trust model and other land-lease and land- financing options.			$\checkmark$
(q) Support the opportunity to age in place by providing accessible and appropriately designed residential units.			✓
Analysis: Not Applicable	I		

COUNTYWIDE POLICY PLAN	6		
(Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	5	N/5	N/A
<ul> <li>(2) Increase the mix of housing types in towns and neighborhoods to promote sustainable land use planning, expand consumer choice, and protect the County's rural and small town character.</li> </ul>			✓
Policies:			
(a) Seek innovative ways to develop 'ohana cottages and accessory-dwelling units as affordable housing.			$\checkmark$
(b) Design neighborhoods to foster interaction among neighbors.			$\checkmark$
(c) Encourage a mix of social, economic, and age groups within neighborhoods.			$\checkmark$
(d) Promote infill housing in urban areas at scales that capitalize on existing infrastructure, lower development costs, and are consistent with existing or desired patterns of development.			~
(e) Encourage the building industry to use environmentally sustainable materials, technologies, and site planning.			$\checkmark$
(f) Develop workforce housing in proximity to job centers and transit facilities.			$\checkmark$
(g) Provide incentives to developers and owners who incorporate green building practices and energy-efficient technologies into their housing developments.			$\checkmark$
Implementing Actions:			
(a) Revise laws to support neighborhood designs that incorporate a mix of housing types that are appropriate for island living.			$\checkmark$
Analysis: Not Applicable			
Objective:			
(3) Increase and maintain the affordable housing inventory.			$\checkmark$
Policies:			
(a) Recognize housing as a basic human need, and work to fulfill that need.			$\checkmark$
(b) Prioritize available infrastructure capacity for affordable housing.			$\checkmark$
(c) Improve communication, collaboration, and coordination among housing providers and social-service organizations.			$\checkmark$
(d) Study future projected housing needs, monitor economic cycles, and prepare for future conditions on each island.			$\checkmark$
(e) Develop public-private and nonprofit partnerships that facilitate the construction of quality affordable housing.			$\checkmark$
(f) Streamline the review process for high-quality, affordable housing developments that implement the goals, objectives, and policies of the General Plan.			✓
(g) Minimize the intrusion of housing on prime, productive, and potentially productive agricultural lands and regionally valuable agricultural lands.			$\checkmark$
(h) Encourage long-term residential use of existing and future housing to meet residential needs.			✓
Implementing Actions:			
(a) Develop policies to even out the peaks and valleys in Maui County's construction-demand cycles.			$\checkmark$
Analysis: Not Applicable			

COUNTYWIDE POLICY PLAN (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
Objective:			
(4) Expand access to education related to housing options, homeownership, financing, and residential construction.			✓
Policies:		r	r
(a) Broaden access to information about County, State, and Federal programs that provide financial assistance to renters and home buyers.			✓
(b) Expand access to information about opportunities for homeownership and self- help housing.			~
(c) Educate residents about making housing choices that support their individual needs, the needs of their communities, and the health of the islands' natural systems.			✓
(d) Improve home buyers' education on all aspects of homeownership.			$\checkmark$
Analysis: Not Applicable			
F. STRENGTHEN THE LOCAL ECONOMY	1	T	T
<b><u>Goal</u>:</b> Maui County's economy will be diverse, sustainable, and supportive of community values.			$\checkmark$
<u>Objective</u> :	1	1	
(1) Promote an economic climate that will encourage diversification of the County's economic base and a sustainable rate of economic growth.			✓
Policies:			
(a) Support economic decisions that create long-term benefits.			✓
(b) Promote lifelong education, career development, and technical training for existing and emerging industries.			~
(c) Invest in infrastructure, facilities, and programs that foster economic diversification.			✓
(d) Support and promote locally produced products and locally owned operations and businesses that benefit local communities and meet local demand.			~
(e) Support programs that assist industries to retain and attract more local labor and facilitate the creation of jobs that offer a living wage.			✓
(f) Encourage work environments that are safe, rewarding, and fulfilling to employees.			✓
(g) Support home-based businesses that are appropriate for and in character with the community.			✓
(h) Encourage businesses that promote the health and well-being of the residents, produce value-added products, and support community values.			✓
(i) Foster an understanding of the role of all industries in our economy.			$\checkmark$
(j) Support efforts to improve conditions that foster economic vitality in our historic small towns.			$\checkmark$
(k) Support and encourage traditional host-culture businesses and indigenous agricultural practices.			✓
(I) Support public and private entities that assist entrepreneurs in establishing locally operated businesses.			$\checkmark$
Implementing Actions:			
(a) Develop regulations and programs that support opportunities for local merchants, farmers, and small businesses to sell their goods and services directly to the public.			✓

COUNTYWIDE POLICY PLAN (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
<ul> <li>(b) Monitor the carrying capacity of the islands' social, ecological, and infrastructure systems with respect to the economy.</li> </ul>			$\checkmark$
Analysis: Not Applicable	<u> </u>		
Objective:			
(2) Diversify and expand sustainable forms of agriculture and aquaculture.			$\checkmark$
Policies:			
(a) Support programs that position Maui County's agricultural products as premium export products.			$\checkmark$
(b) Prioritize the use of agricultural land to feed the local population, and promote the use of agricultural lands for sustainable and diversified agricultural activities.			$\checkmark$
(c) Capitalize on Hawai'i's economic opportunities in the ecologically sensitive aquaculture industries.			$\checkmark$
(d) Assist farmers to help make Maui County more self-sufficient in food production.			$\checkmark$
(e) Support ordinances, programs, and policies that keep agricultural land and water available and affordable to farmers			$\checkmark$
(f) Support a tax structure that is conducive to the growth of the agricultural economy.			$\checkmark$
(g) Enhance County efforts to monitor and regulate important agricultural issues.			$\checkmark$
(h) Support education, research, and facilities that strengthen the agricultural industry.			$\checkmark$
(i) Maintain the genetic integrity of existing food crops.			$\checkmark$
(j) Encourage healthy and organic farm practices that contribute to land health and regeneration.			✓
(k) Support cooperatives and other types of nontraditional communal farming and efforts.			$\checkmark$
(I) Encourage methods of monitoring and controlling genetically modified crops to prevent adverse effects.			$\checkmark$
(m) Work with the State to ease the permitting process for the revitalization of traditional fish ponds.			$\checkmark$
Implementing Actions:			
(a) Redirect efforts in the Office of Economic Development to further facilitate the development of the agricultural section and to monitor agricultural legislation and issues.			~
(b) Publicly identify, with signage and other means, the field locations of all genetically modified crops.			✓
(c) Create agricultural parks in areas distant from genetically modified crops.			$\checkmark$
Analysis: Not Applicable			
Objective:			
(3) Support a visitor industry that respects the resident culture and the environment.			$\checkmark$
Policies:			
(a) Promote traditional Hawaiian practices in visitor-related facilities and activities			$\checkmark$
(b) Encourage and educate the visitor industry to be sensitive to island lifestyles and cultural values.			$\checkmark$

COUNTYWIDE POLICY PLAN (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	s	N/S	N/A
(c) Encourage a spirit of welcome for residents at visitor facilities, such as by offering kama'aina incentives and discount programs.			$\checkmark$
(d) Support the renovation and enhancement of existing visitor facilities.	$\checkmark$		
(e) Support policies, programs, and a tax structure that redirect the benefits of the visitor industry back into the local community.			✓
(f) Encourage resident ownership of visitor-related businesses and facilities.			$\checkmark$
(g) Develop partnerships to provide educational and training facilities to residents employed in the visitor industry.			✓
(h) Foster an understanding of local cultures, customs, and etiquette, and emphasize the importance of the Aloha Spirit as a common good for all.			$\checkmark$
(i) Support the diversification, development, evolution, and integration of the visitor industry in a way that is compatible with the traditional, social, economic, spiritual, and environmental values of island residents			✓
(j) Improve collaboration between the visitor industry and the other sectors of Maui County's economy.			~
(k) Perpetuate an authentic image of the Hawaiian culture and history and an appropriate recognition of the host culture.	$\checkmark$		
(I) Support the programs and initiatives outlined in the Maui County Tourism Strategic Plan 2006-2015.			✓
(m) Promote water conservation, beach conservation, and open-space conservation in areas providing services for visitors.	✓		
(n) Recognize the important contributions that the visitor industry makes to the County's economy, and support a healthy and vibrant visitor industry.	✓		
Analysis: The proposed project will enhance visitor comfort and convenie State Park. The proposed project will promote beach conservation through in of drainage improvements and construction BMPs at the project sites. Improve Park facilities supports a healthy and vibrant visitor industry.	nce at nplem ement	Māke entati of Sta	na on ate
Objective:			
(4) Expand economic sectors that increase living-wage job choices and are compatible with community values.			✓
Policies:			
<ul> <li>(a) Support emerging industries, including the following: <ul> <li>Health and wellness industry;</li> <li>Sports and recreation industry;</li> <li>Film and entertainment industry;</li> <li>Arts and culture industry;</li> <li>Renewable-energy industry;</li> </ul> </li> <li>Renewable-energy industry;</li> <li>Renewable-energy industry;</li> </ul>			~
Analysis: Not Applicable	1	1	
G. 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:	✓		

COUNTYWIDE POLICY PLAN (Key: $S = Supportive N/S = Not Supportive N/A = Not Applicable)$	s	N/S	N/A
<ol> <li>Expand access to recreational opportunities and community facilities to meet the present and future needs of residents of all ages and physical abilities.</li> </ol>	✓		
Policies:	<u> </u>		
(a) Protect, enhance, and expand access to public shoreline and mountain resources.	✓		
(b) Expand and enhance the network of parks, multi-use paths, and bikeways.	$\checkmark$		
(c) Assist communities in developing recreational facilities that promote physical fitness.	✓		
(d) Expand venue options for recreation and performances that enrich the lifestyles of Maui County's people.			✓
(e) Expand affordable recreational and after-school programs for youth.			$\checkmark$
(f) Encourage and invest in recreational, social, and leisure activities that bring people together and build community pride.	✓		
(g) Promote the development and enhancement of community centers, civic spaces, and gathering places throughout our communities.	✓		
(h) Expand affordable access to recreational opportunities that support the local lifestyle.	✓		
Implementing Actions:			
<ul> <li>(a) Identify and reserve lands for cemeteries, and preserve existing cemeteries on all islands, appropriately accommodating varying cultural and, faith-based traditions.</li> </ul>			✓
<i>Analysis:</i> The proposed project improves recreational opportunities services and facilities that enhance visitor comfort and experience. I improvements will allow for better management of parking at the existing parkine as the existing parkine a	with The p parking	supp ropos g lots	ort ed at
Objective:			
(2) Improve the quality and adequacy of community facilities.	$\checkmark$		
Policies:			
(a) Provide an adequate supply of dedicated shelters and facilities for disaster relief.			$\checkmark$
(b) Provide and maintain community facilities that are appropriately designed to reflect the traditions and customs of local cultures.	✓		
(c) Ensure that parks and public facilities are safe and adequately equipped for the needs of all ages and physical abilities to the extent reasonable.	✓		
(d) Maintain, enhance, expand, and provide new active and passive recreational facilities in ways that preserve the natural beauty of their locations.	✓		
(e) Redesign or retrofit public facilities to adapt to major shifts in environmental or urban conditions to the extent reasonable.			✓
Analysis: The proposed project will provide comfort station and related im Mākena State Park. All proposed improvements will meet current standards for according to the Americans with Disabilities Act (ADA).	prove or acce	ments essibil	at ity

COUNTYWIDE POLICY PLAN (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
Objective:	•		
(3) Enhance the funding, management, and planning of public facilities and park lands.	$\checkmark$		
Policies:			
(a) Identify and encourage the establishment of regulated and environmentally sound campgrounds.			$\checkmark$
(b) Manage park use and control access to natural resources in order to rest sensitive places and utilize the resources in a sustainable manner.	$\checkmark$		
(c) Provide public-recreational facilities that are clean and well-maintained.	$\checkmark$		
(d) Develop partnerships to ensure proper stewardship of the islands' trails, public lands, and access systems.			✓
(e) Ensure that there is an adequate supply of public restrooms in convenient locations.	✓		
Implementing Actions:			
(a) Encourage the State to allow for overnight fishing along the shoreline in accordance with management plans and regulations.			<b>&gt;</b>
(b) Develop and regularly update functional plans, including those relating to public facilities, parks, and campgrounds.			$\checkmark$
(c) Develop and adopt local level-of service standards for public facilities and parks.			$\checkmark$
(d) Identify, acquire, and develop lands for parks, civic spaces, and public uses.			$\checkmark$
Analysis: The proposed project provides comfort station, showers ( stations), parking, and drainage improvements at appropriate locations at Māke Maintentance of restrooms by State Park's staff ensure facilities will be of maintained.	or to ena Sta clean a	ot rin ate Pa and w	se rk. vell
H. DIVERSIFY TRANSPORTATION OPTIONS			
<b><u>Goal</u>:</b> Maui County will have an efficient, economical, and environmentally sensitive means of moving people and goods.			$\checkmark$
Objective:			
(1) Provide an effective, affordable, and convenient ground-transportation system that is environmentally sustainable.			✓
Policies:			
(a) Execute planning strategies to reduce traffic congestion.			$\checkmark$
(b) Plan for the efficient relocation of roadways for the public benefit.			$\checkmark$
(c) Support the use of alternative roadway designs, such as traffic-calming techniques and modern roundabouts.			$\checkmark$
(d) Increase route and mode options in the ground-transportation network.			$\checkmark$
(e) Ensure that roadway systems are safe, efficient, and maintained in good condition.			✓
(f) Preserve roadway corridors that have historic, scenic, or unique physical attributes that enhance the character and scenic resources of communities.			✓
(g) Design new roads and roadway improvements to retain and enhance the existing character and scenic resources of the communities through which they pass.			$\checkmark$

COUNTYWIDE POLICY PLAN (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
(h) Promote a variety of affordable and convenient transportation services that meet countywide and community needs and expand ridership of transit systems.			~
(i) Collaborate with transit agencies, government agencies, employers, and operators to provide planning strategies that reduce peak-hour traffic.			✓
(j) Develop and expand an attractive, island-appropriate, and efficient public transportation system.			✓
(k) Provide and encourage the development of specialized transportation options for the young, the elderly, and persons with disabilities.			✓
(I) Evaluate all alternatives to preserve quality of life before widening roads.			$\checkmark$
(m) Encourage businesses in the promotion of alternative transportation options for resident and visitor use.			~
(n) Support the development of carbon-emission standards and an incentive program aimed at achieving County carbon-emission goals.			✓
Implementing Actions:			
(a) Create incentives and implement strategies to reduce visitor dependence on rental cars.			✓
(b) Establish efficient public-transit routes between employment centers and primary workforce residential areas.			~
(c) Create attractive, island-appropriate, conveniently located park-and-ride and ride- share facilities.			>
Analysis: Not Applicable			
Objective:			
(2) Reduce the reliance on the automobile and fossil fuels by encouraging walking, bicycling, and other energy-efficient and safe alternative modes of transportation.			~
Policies:			
(a) Make walking and bicycling transportation safe and easy between and within communities.			✓
(b) Require development to be designed with the pedestrian in mind.			$\checkmark$
(c) Design new and retrofit existing rights-of-way with adequate sidewalks, bicycle lanes, or separated multi-use transit corridors.			$\checkmark$
(d) Support the development of a countywide network of bikeways, equestrian trails, and pedestrian paths.			$\checkmark$
(e) Support the reestablishment of traditional trails between communities, to the ocean, and through the mountains for public use.			✓
(f) Encourage educational programs to increase safety for pedestrians and bicyclists.			$\checkmark$
Implementing Actions:			
(a) Design, build, and modify existing bikeways to improve safety and separation from automobiles.			✓
(b) Increase enforcement to reduce abuse of bicycle and pedestrian lanes by motorized vehicles.			✓
(c) Identify non-motorized transportation options as a priority for new sources of funding.			✓
Analysis: Not Applicable			

COUNTYWIDE POLICY PLAN (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
Objective:			
(3) Improve opportunities for affordable, efficient, safe, and reliable air transportation.			✓
Policies:			
(a) Discourage private helicopter and fixed-wing landing sites to mitigate environmental and social impacts.			✓
(b) Encourage the use of quieter aircraft and noise-abatement procedures for arrivals and departures.			>
(c) Encourage the modernization and maintenance of air-transportation facilities for general-aviation activities.			✓
(d) Encourage a viable and competitive atmosphere for air carriers to expand service and ensure sufficient intra-County flights and affordable fares for consumers.			✓
(e) Continue to support secondary airports, and encourage the State to provide them with adequate funding.			$\checkmark$
(f) During Community Plan updates, explore the use of the smaller airports.			$\checkmark$
(g) Encourage the State to provide efficient, adequate, and affordable parking and transit connections within and around airports.			$\checkmark$
Analysis: Not Applicable			
Objective:			
(4) Improve opportunities for affordable, efficient, safe, and reliable ocean transportation.			$\checkmark$
Policies:			
(a) Support programs and regulations that reduce the disposal of maritime waste and prevent spills into the ocean.			~
(b) Encourage the upgrading of harbors to resist damage from natural hazards and disasters.			~
(c) Encourage the State to study the use of existing harbors and set priorities for future use.			$\checkmark$
(d) Explore all options to protect the traditional recreational uses of harbors, and mitigate harbor-upgrade impacts to recreational uses where feasible.			$\checkmark$
(e) Encourage the upgrading of harbors and the separation of cargo and bulk materials from passenger and recreational uses.			$\checkmark$
(f) Encourage the State to provide for improved capacity at shipping, docking, and storage facilities.			$\checkmark$
(g) Encourage the State to provide adequate parking facilities and transit connections within and around harbor areas.			$\checkmark$
(h) Encourage the redevelopment and revitalization of harbors while preserving historic and cultural assets in harbor districts.			✓
(i) Encourage the State to provide adequate facilities for small-boat operations, including small-boat launch ramps, according to community needs.			✓
(j) Support the maintenance and cleanliness of harbor facilities.			$\checkmark$
(k) Support the redevelopment of harbors as pedestrian-oriented gathering places.			$\checkmark$

COUNTYWIDE POLICY PLAN (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	s	N/S	N/A
Analysis: Not Applicable			
Objective:			
(5) Improve and expand the planning and management of transportation systems.			$\checkmark$
Policies:			
(a) Encourage progressive community design and development that will reduce transportation trips.			✓
(b) Require new developments to contribute their pro rata share of local and regional infrastructure costs.			$\checkmark$
(c) Establish appropriate user fees for private enterprises that utilize public transportation facilities for recreational purposes.			$\checkmark$
(d) Support the revision of roadway-design criteria and standards so that roads are compatible with surrounding neighborhoods and the character of rural areas.			✓
(e) Plan for multi-modal transportation and utility corridors on each island.			$\checkmark$
(f) Support designing all transportation facilities, including airport, harbor, and mass- transit stations, to reflect Hawaiian architecture.			✓
(g) Utilize transportation-demand management as an integral part of transportation planning.			✓
(h) Accommodate the planting of street trees and other appropriate landscaping in all public rights-of-way.			✓
Analysis: Not Applicable			
I. IMPROVE PHYSICAL INFRASTRUCTURE			
<b>Goal:</b> Maui County's physical infrastructure will be maintained in optimum condition and will provide for and effectively serve the needs of the County through clean and sustainable technologies.			~
Objective:			
(1) Improve water systems to assure access to sustainable, clean, reliable, and affordable sources of water.			$\checkmark$
Policies:			
(a) Ensure that adequate supplies of water are available prior to approval of subdivision or construction documents.			✓
(b) Develop and fund improved water-delivery systems.			$\checkmark$
(c) Ensure a reliable and affordable supply of water for productive agricultural uses.			$\checkmark$
(d) Promote the reclamation of gray water, and enable the use of reclaimed, gray, and brackish water for activities that do not require potable water.			✓
(e) Retain and expand public control and ownership of water resources and delivery systems.			✓
(f) Improve the management of water systems so that surface-water and groundwater resources are not degraded by overuse or pollution.			$\checkmark$
(g) Explore and promote alternative water-source-development methods.			$\checkmark$
(h) Seek reliable long-term sources of water to serve developments that achieve consistency with the appropriate Community Plans.			✓
Implementing Actions:			
(a) Develop a process to review all applications for desalination.			$\checkmark$

COUNTYWIDE POLICY PLAN	6	N/C	
Analysis: Not Applicable	3	N/3	N/A
Objective:			
<ul> <li>(2) Improve waste-disposal practices and systems to be efficient, safe, and as environmentally sound as possible.</li> </ul>	$\checkmark$		
Policies:	1		
(a) Provide sustainable waste-disposal systems and comprehensive, convenient recycling programs to reduce the flow of waste into landfills.	$\checkmark$		
(b) Support innovative and alternative practices in recycling solid waste and wastewater and disposing of hazardous waste.			✓
(c) Encourage vendors and owners of automobile, appliance, and white goods to participate in the safe disposal and recycling of such goods, and ensure greater accountability for large waste producers.			~
(d) Develop strategies to promote public awareness to reduce pollution and litter, and encourage residents to reduce, reuse, recycle, and compost waste materials.	~		
(e) Pursue improvements and upgrades to existing wastewater and solid-waste systems consistent with current and future plans and the County's Capital Improvement Program.	~		
Implementing Actions:		•	
(a) Establish recycling, trash-separation, and materials recovery programs and facilities to reduce the flow of waste into landfills.	✓		
(b) Study the feasibility of developing environmentally safe waste-to-energy facilities.			$\checkmark$
(c) Utilize taxes and fees as means to encourage conservation and recycling.	$\checkmark$		
(d) Implement and regularly update the Integrated Solid Waste Management Plan.			$\checkmark$
(e) Phase out the use of injection wells.			$\checkmark$
Analysis: The proposed project involves provision of new comfort station facilities at Mākena State Park. Recycle bins will be located at the two (2) c sites to reduce solid waste flow into Maui's Central Landfill. Additionally, prov filling stations will reduce the use of plastic water bottles at the Park. Si provided to encourage Park users to reduce waste, avoid littering, and rec appropriately.	ns and omfor vision ignage ycle n	d relat t stati of bot e will nateria	ed on tle be als
(3) Significantly increase the use of renewable and green technologies to promote			
energy efficiency and energy self-sufficiency.	✓		
Policies:		1	
(a) Promote the use of locally renewable energy sources, and reward energy efficiency.	✓		
(b) Consider tax incentives and credits for the development of sustainable- and renewable-energy sources.			✓
(c) Expand education about energy conservation and self-sufficiency.			$\checkmark$
(d) Encourage small-scale energy generation that utilizes wind, sun, water, biowaste, and other renewable sources of energy.	✓		
(e) Expand renewable-energy production.	$\checkmark$		
(f) Develop public-private partnerships to ensure the use of renewable energy and			$\checkmark$

COUNTYWIDE POLICY PLAN (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
increase energy efficiency.			
(g) Require the incorporation of locally appropriate energy-saving and green building design concepts in all new developments by providing energy efficient urban design guidelines and amendments to the Building Code.	✓		
(h) Encourage the use of sustainable energy to power vehicles.			$\checkmark$
(i) Promote the retrofitting of existing buildings and new development to incorporate energy-saving design concepts and devices.	$\checkmark$		
(j) Encourage green footprint practices.	$\checkmark$		
(k) Reduce Maui County's dependence on fossil fuels and energy imports.	$\checkmark$		
<ol> <li>Support green building practices such as the construction of buildings that aim to minimize carbon dioxide production, produce renewable energy, and recycle water.</li> </ol>	✓		
(m) Promote and support environmentally friendly practices in all energy sectors.	$\checkmark$		
Implementing Actions:			_
(a) Adopt an energy-efficiency policy for Maui County government as a model for other jurisdictions.			✓
(b) Adopt a Green Building Code, and support green building practices.			$\checkmark$
<i>Analysis:</i> The proposed project will incorporate solar energy facilities into to promote energy efficiency and conservation.	) the b	uildin	ıgs
Objective:			
(4) Direct growth in a way that makes efficient use of existing infrastructure and to areas where there is available infrastructure capacity.	✓		
Policies:			
(a) Capitalize on existing infrastructure capacity as a priority over infrastructure expansion.			✓
(b) Planning for new towns should only be considered if a region's growth is too large to be directed into infill and adjacent growth areas.			✓
(c) Utilize appropriate infrastructure technologies in the appropriate locations.	$\checkmark$		
(d) Promote land use patterns that can be provided with infrastructure and public facilities in a cost-effective manner.	✓		
(e) Support catchment systems and on-site wastewater treatment in rural areas and aggregated water and wastewater systems in urban areas if they are appropriately located.	<b>~</b>		
Implementing Actions:			
(a) Develop a streamlining system for urban infill projects.			$\checkmark$
(b) Identify appropriate areas for urban expansion of existing towns where infrastructure and public facilities can be provided in a cost-effective manner.			✓
Analysis: The proposed infrastructure improvements will enhance the experience at Mākena State Park in a cost-effective manner.	ne Pa	irk us	ser
Objective:			
(5) Improve the planning and management of infrastructure systems.			$\checkmark$
Policies:		1	
(a) Provide a reliable and sufficient level of funding to enhance and maintain			✓

COUNTYWIDE POLICY PLAN (Key: $S = Supportive N/S = Not Supportive N/A = Not Applicable)$	s	N/S	N/A
infrastructure systems.			
(b) Require new developments to contribute their pro rata share of local and regional infrastructure costs.			✓
(c) Improve coordination among infrastructure providers and planning agencies to minimize construction impacts.			$\checkmark$
(d) Maintain inventories of infrastructure capacity, and project future infrastructure needs.			✓
(e) Require social-justice and -equity issues to be considered during the infrastructure-planning process.			~
(f) Discourage the development of critical infrastructure systems within hazard zones and the tsunami-inundation zone to the extent practical.			$\checkmark$
(g) Ensure that infrastructure is built concurrent with or prior to development.			$\checkmark$
(h) Ensure that basic infrastructure needs can be met during a disaster.			$\checkmark$
<ul> <li>Locate public facilities and emergency services in appropriate locations that support the health, safety, and welfare of each community and that minimize delivery inefficiencies.</li> </ul>			~
(j) Promote the undergrounding of utility and other distribution lines for health safety, and aesthetic reasons.			$\checkmark$
Implementing Actions:			
(a) Develop and regularly update functional plans for infrastructure systems.			$\checkmark$
(b) Develop, adopt, and regularly update local or community-sensitive level-of service standards for infrastructure systems.			$\checkmark$
Analysis: Not Applicable			
J. PROMOTE SUSTAINABLE LAND USE AND GROWTH MANAGEMENT			
<b><u>Goal</u></b> : Community character, lifestyles, economies, and natural assets will be preserved by managing growth and using land in a sustainable manner.			✓
<u>Objective</u> :			
(1) Improve land use management and implement a directed-growth strategy.			$\checkmark$
Policies:	1		· .
(a) Establish, map, and enforce urban- and rural-growth limits.			$\checkmark$
(b) Direct urban and rural growth to designated areas.			✓
(c) Limit the number of visitor-accommodation units and facilities in Community Plan Areas.			$\checkmark$
(d) Maintain a sustainable balance between the resident, part-time resident, and visitor populations.			$\checkmark$
(e) Encourage redevelopment and infill in existing communities on lands intended for urban use to protect productive farm land and open-space resources.			✓
(f) Discourage new entitlements for residential, resort, or commercial development along the shoreline.			✓
(g) Restrict development in areas that are prone to natural hazards, disasters, or sea-level rise.			$\checkmark$
(h) Direct new development in and around communities with existing infrastructure and service capacity, and protect natural, scenic, shoreline, and cultural resources.			✓

COUNTYWIDE POLICY PLAN (Key: $S = Supportive_N/S = Not Supportive_N/A = Not Applicable)$	s	N/S	N/A
<ul> <li>(i) Establish and maintain permanent open space between communities to protect</li> </ul>			$\checkmark$
(i) Support the dedication of land for public uses			
			•
(k) Preserve the public's rights of access to and continuous lateral access along all shorelines.			$\checkmark$
(I) Enable existing and future communities to be self-sufficient through sustainable land use planning and management practices.			$\checkmark$
(m) Protect summits, slopes, and ridgelines from inappropriate development.			$\checkmark$
Implementing Actions:			
(a) Regularly update urban- and rural-growth boundaries and their maps.			$\checkmark$
(b) Establish transfer and purchase of development rights programs.			$\checkmark$
(c) Develop and adopt a green infrastructure plan.			$\checkmark$
(d) Develop studies to help determine a sustainable social, environmental, and economic carrying capacity for each island.			✓
(e) Identify and define resort-destination areas.			~
Analysis: Not Applicable			
Objective:			
(2) Improve planning for and management of agricultural lands and rural areas.			$\checkmark$
Policies:			
(a) Protect prime, productive, and potentially productive agricultural lands to maintain the islands' agricultural and rural identities and economies.			$\checkmark$
(b) Provide opportunities and incentives for self-sufficient and subsistence homesteads and farms.			~
(c) Discourage developing or subdividing agriculturally designated lands when non- agricultural activities would be primary uses.			✓
(d) Conduct agricultural-development planning to facilitate robust and sustainable agricultural activities.			$\checkmark$
Implementing Actions:			
(a) Inventory and protect prime, productive, and potentially productive agricultural lands from competing non-agricultural land uses.			✓
Analysis: Not Applicable			
Objective:			
(3) Design all developments to be in harmony with the environment and to protect each community's sense of place.	✓		
Policies:			
(a) Support and provide incentives for green building practices.			$\checkmark$
(b) Encourage the incorporation of green building practices and technologies into all government facilities to the extent practicable.	✓		
(c) Protect and enhance the unique architectural and landscape characteristics of each Community Plan Area, small town, and neighborhood.	$\checkmark$		
(d) Ensure that adequate recreational areas, open spaces, and public-gathering places are provided and maintained in all urban centers and neighborhoods.	$\checkmark$		

COUNTYWIDE POLICY PLAN (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
(e) Ensure business districts are distinctive, attractive, and pedestrian-friendly destinations.			$\checkmark$
(f) Use trees and other forms of landscaping along rights-of-way and within parking lots to provide shade, beauty, urban-heat reduction, and separation of pedestrians from automobile traffic in accordance with community desires.			~
(g) Where appropriate, integrate public-transit, equestrian, pedestrian, and bicycle facilities, and public rights-of-way as design elements in new and existing communities.			✓
(h) Ensure better connectivity and linkages between land uses.			~
(i) Adequately buffer and mitigate noise and air pollution in mixed-use areas to maintain residential quality of life.			$\checkmark$
(j) Protect rural communities and traditional small towns by regulating the footprint, locations, site planning, and design of structures.			✓
(k) Support small-town revitalization and preservation.			$\checkmark$
(I) Facilitate safe pedestrian access, and create linkages between destinations and within parking areas.	✓		
Implementing Actions:	-		
(a) Establish design guidelines and standards to enhance urban and rural environments.			$\checkmark$
(b) Provide funding for civic-center and civic-space developments.			$\checkmark$
(c) Establish and enhance urban forests in neighborhoods and business districts.			$\checkmark$
Analysis: The proposed project will enhance the Mākena State Park fac users. Landscaping and walkways will be incorporated to improve pedestriar	ilities conn	for Pa ectivit	ark ty.
Objective:			
(4) Improve and increase efficiency in land use planning and management.	$\checkmark$		
Policies:	-		
(a) Assess the cumulative impact of developments on natural ecosystems, natural resources, wildlife habitat, and surrounding uses.	✓		
(b) Ensure that new development projects requiring discretionary permits demonstrate a community need, show consistency with the General Plan, and provide an analysis of impacts.	✓		
(c) Encourage public and private partnerships to preserve lands of importance, develop housing, and meet the needs of residents.			$\checkmark$
(d) Promote creative subdivision designs that implement best practices in land development, sustainable management of natural and physical resources, increased pedestrian and bicycle functionality and safety, and the principles of livable communities.			$\checkmark$
(e) Coordinate with Federal, State, and County officials in order to ensure that land use decisions are consistent with County plans and the vision local populations have for their communities.	✓		
(f) Enable greater public participation in the review of subdivisions.			$\checkmark$
(g) Improve land use decision making through the use of land- and geographic information systems.			$\checkmark$
Implementing Actions:	-	-	-

COUNTYWIDE POLICY PLAN (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A	
(a) Institute a time limit and sunsetting stipulations on development entitlements and their implementation.			✓	
<i>Analysis:</i> The proposed project is consistent with County plans as set out i This EA has been prepared to ensure adverse impacts to environmental avoided or mitigated.	n this resou	chapt rces a	er. are	
K. STRIVE FOR GOOD GOVERNANCE				
Objective:				
(1) Strengthen governmental planning, coordination, consensus building, and decision making.	✓			
Policies:				
(a) Plan and prepare for the effects of social, demographic, economic, and environmental shifts.			✓	
(b) Plan for and address the possible implications of Hawaiian sovereignty.			$\checkmark$	
(c) Encourage collaboration among government agencies to reduce duplication of efforts and promote information availability and exchange.			✓	
(d) Expand opportunities for the County to be involved in and affect State and Federal decision making.	✓			
(e) Plan and prepare for large-scale emergencies and contingencies.			$\checkmark$	
(f) Improve public awareness about preparing for natural hazards, disasters, and evacuation plans.			✓	
(g) Improve coordination among Federal, State, and County agencies.	$\checkmark$			
Implementing Actions:				
(a) Develop policies, regulations, and programs to protect and enhance the unique character and needs of the County's various communities.			✓	
(b) Evaluate and if necessary, recommend modifications to the County Charter that could result in a possible change to the form of governance for Maui County.			✓	
(c) Study and evaluate the feasibility and implications of voting in Maui County Council elections.			<	
(d) Study and evaluate the feasibility of authorizing town governments in Maui County.			✓	
Analysis: This EA has been prepared to ensure compliance with State environmental laws. The EA public review process also enables Federal, State, and County agencies as well as the public to comment on the proposed action. The SMA and Shoreline Setback Assessment (SSA) applications will require County review and approval of the proposed project.				
(2) Promote civic engagement.				
	-			
<ul> <li>(a) Foster consensus building through in-depth, innovative, and accessible public participatory processes</li> </ul>	✓			
<ul> <li>(b) Promote and ensure public participation and equal access to government among all citizens</li> </ul>	✓			
<ul> <li>(c) Encourage a broad cross-section of residents to volunteer on boards and commissions.</li> </ul>			✓	

COUNTYWIDE POLICY PLAN (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
(d) Encourage the State to improve its community-involvement processes.	$\checkmark$		
(e) Support community-based decision making.			$\checkmark$
(f) Expand advisory functions at the community level.			$\checkmark$
(g) Expand opportunities for all members of the public to participate in public meetings and forums.	✓		
(h) Facilitate the community's ability to obtain relevant documentation.	$\checkmark$		
(i) Increase voter registration and turnout.			$\checkmark$
Implementing Actions:		•	
(a) Implement two-way communication using audio-visual technology that allows residents to participate in the County's planning processes.			$\checkmark$
(b) Ensure and expand the use of online notification of County business and public meetings, and ensure the posting of all County board and commission meeting minutes.			✓
(c) Explore funding mechanisms to improve participation by volunteers on boards and commissions.			$\checkmark$
(d) Develop a project-review process that mandates early and ongoing consultation in and with communities affected by planning and land use activities.	✓		
Analysis: The State has consulted with stakeholders, including the Oneloa the proposed improvements at Mākena State Park. The EA, SMA, and SSA and approval processes provides opportunities for public review and commer	a Coal projec nt.	ition, t revi	on ew
<u>Objective</u> :	T	Γ	
(3) Improve the efficiency, reliability, and transparency of County government's internal processes and decision making.	$\checkmark$		
Policies:	1	r	
(a) Use advanced technology to improve efficiency.			$\checkmark$
(b) Simplify and clarify the permitting process to provide uniformity, reliability, efficiency, and transparency.			✓
(c) Improve communication with Lana'i and Moloka'i through the expanded use of information technologies, expanded staffing, and the creation and expansion of government-service centers.			~
(d) Ensure that laws, policies, and regulations are internally consistent and effectuate the intent of the General Plan.			✓
Implementing Actions:	T		
(a) Update the County Code to be consistent with the General Plan.			$\checkmark$
(b) Identify and update County regulations and procedures to increase the productivity and efficiency of County government.			$\checkmark$
(c) Develop local level-of-service standards for infrastructure, public facilities, and services.			$\checkmark$
(d) Implement plans through programs, regulations, and capital improvements in a timely manner.			$\checkmark$
(e) Expand government online services.			$\checkmark$

COUNTYWIDE POLICY PLAN (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	s	N/S	N/A
Analysis: The proposed project will undergo a public hearing and County of the SMA Use Permit application process. Opportunities for public review have also been provided during the EA review process.	reviev and c	v as p omme	art ent
Objective:			
(4) Adequately fund in order to effectively administer, implement, and enforce the General Plan.			✓
Policies:			
(a) Adequately fund, staff, and support the timely update and implementation of planning policy, programs, functional plans, and enforcement activities.			✓
(b) Ensure that the County's General Plan process provides for efficient planning at the County, island, town, and neighborhood level.			✓
(c) Encourage ongoing professional development, education, and training of County employees.			✓
(d) Encourage competitive compensation packages for County employees to attract and retain County personnel.			✓
(e) Enable the County government to be more responsive in implementing our General Plan and Community Plans.			✓
(f) Review discretionary permits for compliance with the Countywide Policy Plan.			$\checkmark$
(g) Strengthen the enforcement of County, State, and Federal land use laws.			$\checkmark$
Implementing Actions:			
(a) Establish penalties to ensure compliance with County, State, and Federal land use laws.			✓
Analysis: Not Applicable			
Objective:	1		
(5) Strive for County government to be a role model for implementing cultural and environmental policies and practices.			✓
Policies:	1		
(a) Educate residents on the benefits of sustainable practices.			$\checkmark$
(b) Encourage the retention and hiring of qualified professionals who can improve cultural and environmental practices.			✓
(c) Incorporate environmentally sound and culturally appropriate practices in government operations and services.			✓
(d) Encourage all vendors with County contracts to incorporate environmentally sound and culturally appropriate practices.			✓
Analysis: Not Applicable			
L. MITIGATE CLIMATE CHANGE AND WORK TOWARD RESILIENCE	T	I	
<b>Goal</b> : Minimize the causes and negative effects of climate change.			$\checkmark$
Objective:			
(1) Lower carbon emissions levels to mitigate climate change impacts and limit the rate of global warming.			✓
Policies:			
(a) Increase reforestation efforts by encouraging residents and visitors to plant non-invasive gardens and trees.			$\checkmark$

CO (Ke	UNTYWIDE POLICY PLAN v: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	s	N/S	N/A
(b)	Improve communication, coordination, and collaboration among those that work to mitigate climate change impacts.			✓
(c)	Promote the teaching and use of regenerative agriculture.			✓
(d)	Invest in infrastructure that is not dependent on fossil fuels and utilizes renewable energy.			✓
(e)	Improve efforts to mitigate and plan for the impact of natural disasters and global warming.			✓
(f)	Encourage the building industry to use environmentally sustainable materials, technology, and site planning.			✓
(g)	Reduce air, noise, light, land, and water pollution, and reduce Maui County's contribution to global climate change.			✓
(h)	Plan and prepare for and educate visitors and residents about the possible effects of global warming.			✓
(i)	Promote programs and incentives that decrease greenhouse-gas emissions and improve environmental stewardship.			✓
(j)	Support the development of carbon-emission standards and an incentive program aimed at achieving County carbon-emission goals.			✓
Imp	lementing Actions:			
(a)	Implement Federal and State policies that require a reduction of greenhouse- gas emissions.			~
(b)	Establish a Countywide Climate Action Plan			✓
(c)	Develop programs that assist residents and businesses with obtaining access to renewable energy sources.			~
(d)	Revise laws to support neighborhood designs that incorporate the use of renewable energy sources that are appropriate for island living.			~
(e)	Incorporate planting of native and indigenous trees as a major component of Urban Design to both cool neighborhoods and reduce carbon dioxide.			~
(f)	Coordinate with State, County, and private landowners in the development of forestry and prioritizing of native and indigenous trees to reduce carbon dioxide.			~
(g)	Strongly support efforts to restore and improve Maui County's watersheds for the purpose of improving the water supply, controlling carbon dioxide levels, decreasing soil runoff, and reducing coastal flooding.			✓
Ohi	arysis. Not Applicable			
(2)	Reduce the impacts of sea-level rise by acknowledging climate change, adapting, mitigating, and planning accordingly.	✓		
Pol	icies:	1		1
(a)	Evaluate development to assess potential short-term and long-term sea-level rise impacts on nearshore environments.	$\checkmark$		
(b)	Improve efforts to mitigate and plan for the impact of sea-level rise.			$\checkmark$
(c)	Protect undeveloped beaches, dunes, and ecosystems, and restore natural shoreline processes.	✓		
(d)	Develop an inventory of private wastewater systems (septic systems, cesspools) that may be affected by sea-level rise.			✓

COUNTYWIDE POLICY PLAN (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
(e) Strengthen coastal-zone management, re-naturalization of shorelines, where possible, and filtration or treatment of urban and agricultural runoff.			$\checkmark$
(f) Educate the construction and landscape industries and property owners about the use of best management practices to prevent erosion and nonpoint source pollution.			✓
(g) Discourage beach hardening processes such as building sea walls and revetments that block movement of the shoreline and can accelerate erosion.			✓
(h) Discourage new entitlements for residential, resort, or commercial development along the shoreline.			~
(i) Restrict development in areas that are prone to sea-level rise.			✓
(j) Move or rebuild public facilities away from nearshore environments to account for sea-level rise to the extent reasonable.			$\checkmark$
(k) Move or rebuild roads that are in sea-level rise inundation zones to the extent reasonable.			✓
<ol> <li>Ensure that public or affordable housing projects include siting and design standards that promote equity and resilience for vulnerable populations.</li> </ol>			$\checkmark$
(m) Identify, research, and evaluate innovative and sustainable financing to support mitigation and adaptation to sea level rise.			$\checkmark$
Implementing Actions:	1	-	
(a) Develop programs to help transition shoreline property owners out of their nearshore locations and develop a long-term plan to stay out of the way of natural beach migration.			~
(b) Identify buildings, roads, and other infrastructure that are in sea-level rise inundation zones and assist in adaptive efforts, including nature-based solutions, elevation, or moving them away from such zones.			✓
(c) Identify disaster redevelopment alternatives that support resilience-focused adaptation to sea level rise in the event of a catastrophic coastal event.			$\checkmark$
Analysis:A sea level rise analysis has been carried out for the propo utilizing available sea level rise data. The proposed project is located inland ( 3.2 foot sea level rise projection area for Mākena. The proposed project preser anticipated to impact the nearby wetland, beach, and marine environments.	sed p outsid rves ai	roject le) of t nd is r	in :he not
(3) Significantly increase the use of renewable and green technologies to promote			
energy efficiency and energy self-sufficiency.	V		
Policies:			
(a) Promote the use of locally renewable energy sources, and reward energy efficiency.	✓		
(b) Consider tax incentives and credits for the development of sustainable- and renewable-energy sources.			✓
(c) Expand education about energy conservation and self-sufficiency.			$\checkmark$
(d) Encourage small-scale energy generation that utilizes wind, sun, water, biowaste, and other renewable sources of energy.	✓		
(e) Expand renewable-energy production.		✓	
(f) Develop public-private partnerships to ensure the use of renewable energy and increase energy efficiency.			✓
(g) Require the incorporation of locally appropriate energy-saving and green building design concepts in all new developments by providing energy-efficient urban design guidelines and amendments to the Building Code.			✓
(h) Encourage the use of sustainable energy to power vehicles.			$\checkmark$

COUNTYWIDE POLICY PLAN (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
(i) Promote the retrofitting of existing buildings and new development to incorporate energy-saving design concepts and devices.			✓
(j) Encourage green footprint practices.			✓
(k) Reduce Maui County's dependence on fossil fuels and energy imports.			✓
<ul> <li>(I) Support green building practices such as the construction of buildings that aim to minimize carbon dioxide production, produce renewable energy, and recycle water.</li> </ul>	<b>√</b>		
(m) Promote and support environmentally friendly practices in all energy sectors.			~
Implementing Actions:	•		
(a) Adopt an energy-efficiency policy for Maui County government as a model for other jurisdictions.			✓
(b) Adopt a Green Building Code and support green building practices.			✓
Analysis: The proposed project will involve use of solar energy equipme energy efficiency and conservation.	ent to	prom	ote

## E. MAUI ISLAND PLAN

The Maui Island Plan (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 wastewater 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 assessing supply, demand and quality parameters
- 3. A nearshore ecosystem element assessing 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. The implementation program component of the MIP was adopted as Ordinance No. 4126 on May 29, 2014.
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 and rural growth boundaries. The respective boundaries identify areas appropriate for future growth and their corresponding intent with respect to development character.

The proposed project is located outside directed growth boundaries in the Mākena-La Perouse-Kanaio Protected Area. The Mākena-La Perouse-Kanaio Protected Area is a Preservation Area intended to set aside and protect shoreline lands with high natural and cultural value. The proposed design philosophy for this area as described in the MIP is to "create recreational access while not detracting from the inherent value of its natural condition and historic resources". Preservation Areas may include accessory structures such as restrooms and other structures consistent with the purpose and intent of the preservation area. The proposed project is consistent with the directed growth strategy in that it is not a population generator and is a permitted use within the land use designations of subject property.

In addition, the proposed project has been reviewed with respect to pertinent goals, objectives, policies and implementing actions of the MIP. The analysis is presented in the table below.

MAULI (Key: S	SLAND PLAN Goals, Objectives and Policies s = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
CHAPT	ER 1 – POPULATION			
Goal:				
1.1	Maui's people, values, and lifestyles thrive through strong, healthy, and vibrant island communities.	✓		
<u>Objecti</u>	ve:			
1.1.1	Greater retention and return of island residents by providing viable work, education, and lifestyle options.			✓
Policies	<u>S.</u>			
1.1.1.a	Expand programs that enable the community to meet the education, employment, housing, and social goals of youth and young adults.			$\checkmark$
1.1.1.b	Expand housing, transportation, employment, and social opportunities to ensure residents are able to comfortably age within their communities.			✓
1.1.1.c	Measure and track resident satisfaction through surveys and community indicators.			✓
1.1.1.d	Support funding for transportation, housing, health care, recreation, and social service programs that help those with special needs (including the elderly and disabled).	✓		
Analys recreat compli	<i>is:</i> The proposed project enhances opportunities for the public ional resources of Mākena State Park. The proposed project will be ance with ADA guidelines.	to e des	njoy t igned	he in
<u>CHAPT</u>	ER 2 – HERITAGE RESOURCES			
CULTU	RAL, HISTORICAL, AND ARCHAEOLOGICAL RESOURCES ISSUES			
<u>Goal:</u>		Γ.	[	r –
2.1 Ou per	r community respects and protects archaeological and cultural resources while petuating diverse cultural identities and traditions.	✓		
<u>Objecti</u>	ve:	1		
2.1.1	An island culture and lifestyle that is healthy and vibrant as measured by the ability of residents to live on Maui, access and enjoy the natural environment, and practice Hawaiian customs and traditions in accordance with Article XII, Section 7, Hawai'i State Constitution, and Section 7-1, Hawai'i Revised Statutes (HRS).	•		
Policies	<u>8:</u>			
2.1.1.a	Perpetuate the spirit of aloha and celebrate the host Hawaiian culture and other ethnic cultures.	✓		
2.1.1.b	Perpetuate a respect for diversity and recognize the broad blending of cultures and ethnicities as vital to the quality of life on Maui.	✓		
2.1.1.c	Ensure traditional public access routes, including native Hawaiian trails, are maintained for public use.	$\checkmark$		
2.1.1.d	Support the education of visitors and new residents about the customs and etiquette of the Hawaiian culture, as well as other cultures.			✓
<i>Analys</i> does n	<i>is:</i> An AIS and CIA have been carried out on the proposed project to ens ot adversely impact historic and cultural resources or cultural practices.	ure t	he acti	on

MAULI (Key: S	SLAND PLAN Goals, Objectives and Policies 6 = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
Objecti	ve:		•	
2.2	A more effective and efficient planning and review process that incorporates the best available cultural resources inventory, protection techniques, and preservation strategies.	✓		
Policies	<u>8:</u>			
2.1.2.a	Ensure that the island has a comprehensive and up-to-date inventory of historic and archaeological resources, and their cultural significance.			✓
2.1.2.b	Require the update of existing planning and regulatory mechanisms to protect the natural, cultural, scenic, and historic resources within designated Heritage Areas (see Cultural Resources Overlay/Scenic Corridor Protection Technical Reference Map).			✓
2.1.2.c	Ensure that cultural, historic, and archaeological resources are protected for the benefit of present and future generations.	✓		
<u>Objecti</u>	<u>ve:</u>			
2.3	Enhance the island's historic, archaeological, and cultural resources.	$\checkmark$		
Policies	<u>8:</u>			
2.1.3.a	Identify and pursue a listing of the properties and sites on the State and National Register of Historic Places.			✓
2.1.3.b	Support the use of easements, dedications, and other mechanisms to acquire, maintain, and protect lands with cultural, archaeological, and historic significance.			✓
2.1.3.c	Support regulations to require developers, when appropriate, to prepare an Archaeological Inventory Survey, Cultural Impact Assessment, and Ethnographic Inventories that are reviewed and commented upon by the Office of Hawaiian Affairs, Native Hawaiian advisory bodies, the State Historic Preservation Division (SHPD), and the Office of Environmental Quality Control, and systematically comply with the steps listed in SHPD's administrative rules, including consultation and monitoring during construction phases of projects.	✓		
2.1.3.d	Promote the rehabilitation and adaptive reuse of historic sites, buildings, and structures.			✓
2.1.3.e	Encourage property owners to register historic and archaeological sites on the State and National Register.			✓
2.1.3.f	Support opportunities for public involvement with the intent to facilitate the protection and restoration of historic and archeological sites, including consultation with stakeholders.	✓		
2.1.3.g	Encourage the resolution of land title questions relating to Land Commission Awards and Royal patents.			✓
2.1.3.h	Ensure compliance with historic preservation laws, and discourage demolition of properties that are determined to be eligible for listing on the National or State Register of Historic Places.	✓		
Analys Land a the One action. applica	Analysis: An AIS and CIA have been carried out on the proposed project. The Department of Land and Natural Resources (DLNR) has initiated community stakeholder consultation, including the Oneloa Coalition, throughout the planning of the project to engage the public on the proposed action. Public comment opportunities are provided through the EA and the SMA Use Permit application review process.			

MAUI I (Key: S	SLAND PLAN Goals, Objectives and Policies S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
SHORE	LINE, REEFS, AND NEARSHORE WATERS			
<u>Goal:</u>				
2.2	An intact, ecologically functional system of reef, shoreline, and nearshore waters that are protected in perpetuity.	<ul> <li>Image: A start of the start of</li></ul>		
<u>Objecti</u>	ve:	-		
2.2.1	A more comprehensive and community-based ICZM program.			$\checkmark$
Policie	<u>s:</u>			
2.2.1.a	Encourage a management system that protects and temporarily rests the reef ecosystems from overuse.			✓
2.2.1.b	Support the establishment of additional MMAs and reef replenishment areas.			$\checkmark$
2.2.1.c	Work with appropriate agencies and community members to protect any special managed conservation areas from overuse and ensure that surrounding land uses do not contribute to the degradation of the natural resources, such as 'Ahihi-Kina'u Natural Area Reserve, Honolua-Mokulē'ia Bay Marine Life Conservation District, and Mākena State Park.	<ul> <li>✓</li> </ul>		
2.2.1.d	Incorporate the following into the MIP, where consistent with the MIP:			$\checkmark$
	(1) Beach Management Plan for Maui;			✓
	(2) Coastal Nonpoint Pollution Control Program Management Plan;			$\checkmark$
	(3) Implementation Plan for Polluted Runoff Control; and			✓
	(4) Ocean Resource Management Plan.			✓
2.2.1.e	Support greater coordination among governmental agencies involved with the protection of the island's marine resources.	✓		
<u>Objecti</u>	<u>ve:</u>			
2.2.2	Improved reef health, coastal water quality, and marine life.	$\checkmark$		
Policie:	<u>s:</u>			
2.2.2.a	Create additional mechanisms where needed to contain and control runoff and pollution.	✓		
2.2.2.b	Allow extraction of high quality, Class A, low silt sands only when they will be used to protect or restore Maui's shorelines and beaches.			✓
2.2.2.c	Carefully manage beach nourishment activities to protect the coastal and marine ecosystem.			✓
2.2.2.d	Require, where appropriate, a buffer between landscaped areas and the shoreline, gulches, and streams to reduce the runoff of fertilizers, pesticides, herbicides, and other pollutants into coastal waters.	✓		
2.2.2.e	Strictly regulate shoreline armoring in accordance with adopted Shoreline Rules, with an intent to protect the coastal and marine ecosystem.			$\checkmark$
2.2.2.f	Support greater protection of Keālia Pond National Wildlife Refuge through the following:			$\checkmark$

MAUI I (Key: S	SLAND PLAN Goals, Objectives and Policies s = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
	(1) Enhancement of marine ecosystems;			$\checkmark$
	(2) Beach and sand dune restoration; and			✓
	(3) Expansion of habitat for Maui's threatened or endangered sea turtles, birds, and other species.			✓
2.2.2.g	Support the development of regulations to prevent the excessive depletion of fish stocks due to non-sustainable practices and gear such as SCUBA spear-fishing and lay nets, within the context of nearshore ecosystems.			~
2.2.2.h	Encourage the State to conduct a regular census of fish populations and monitor coral health.			✓
2.2.2.i	Encourage the State to significantly increase the number of park rangers, enforcement officers, and marine biologists to protect coastal resources.			✓
2.2.2.j	Encourage the State to prohibit the collection and exportation of fish, coral, algae, and other marine species for the ornamental and aquarium trade.			✓
<u>Objecti</u>	<u>ve:</u>			
2.2.3 \	Nater quality that meets or exceeds State Clean Water Act standards.	$\checkmark$		
Policies	<u>S:</u>			
2.2.3.a	Reduce the amount of impervious surface and devise site plan standards that aim to minimize storm runoff and NPS pollution.			✓
2.2.3.b	Support the revision of existing regulations to require an Erosion and Sedimentation Control Plan (ESCP) for development activities that may pose a threat to water quality.			~
2.2.3.c	Require an on-site monitoring program, where applicable, when grading may pose a threat to water quality or when recommended in the ESCP.			✓
2.2.3.d	Avoid development actions that impair Maui's reef systems and remove identified stressors.	✓		
2.2.3.e	Phase out cesspools and restrict the use of septic systems in ecologically sensitive coastal areas by converting to environmentally-friendly alternative sewage treatment systems, and connecting to central sewerage systems when and where feasible.	<b>~</b>		
2.2.3.f	Prohibit the development of new wastewater injection wells, except when unavoidable for public health and safety purposes.			✓
2.2.3.g	Ensure that the County upholds its affirmative duty under the Clean Water Act by monitoring and reducing point and NPS pollution to help safeguard coastal waters.			✓
<u>Objecti</u>	ve:			
2.2.4	Acquire additional shoreline lands and shoreline access rights.			✓
Policies	<u>s:</u>			
2.2.4.a	Promote the use of conservation easements, land trusts, transfer and purchase of development rights, and mitigation banking.			✓
2.2.4.b	Require the dedication of public beach and rocky shoreline access ways to and along the shoreline where it serves a practical public interest as a condition of development or subdivision approval; future subdivisions and developments shall be consistent with and effectuate, to the extent practicable, the <i>Shoreline</i>			✓

MAUI I (Key: S	SLAND PLAN Goals, Objectives and Policies s = Supportive, N/S = Not Supportive, N/A = Not Applicable)	s	N/S	N/A
	Access Inventory Update - Final Report (March 2005), and its updates.			
2.2.4.c	Incorporate the <i>Shoreline Access Inventory Update - Final Report</i> (March 2005), and its regular updates, into this plan.			✓
2.2.4.d	Identify access points while further acquiring key shoreline parcels and easement rights to enhance and protect beach access and shoreline recreation.			✓
Analys shoreli regardi the wa pumpe facility	<i>is:</i> The proposed improvements have been designed with special at ne environment. No leach field will be developed for the project, due ing groundwater infliltration of treated effluent into the nearshore environn stewater from the comfort stations will flow into containment tanks and d into a waste disposal truck and treated offsite at a permitted wastewa	tentic to o nent. I be ater t	on to t concer Instea regula reatme	he ns nd, rly ent
WATER	SHEDS, STREAMS, AND WETLANDS ISSUES			
<u>Goal:</u>				
2.3	Healthy watersheds, streams, and riparian environments.	$\checkmark$		
<u>Objecti</u>	<u>ve:</u>		T	r
2.3.1	Greater protection and enhancement of watersheds, streams, and riparian environments.	✓		
Policies	<u>S:</u>			
2.3.1.a	All present and future watershed management plans shall incorporate concepts of ahupua'a management based on the interconnectedness of upland and coastal ecosystems/species.			✓
2.3.1.b	Continue to support and be an active member of watershed partnerships.			$\checkmark$
2.3.1.c	Support the establishment of regional water trusts, composed of public and private members, to manage water resources.			✓
2.3.1.d	Support regulations to require developments to utilize ahupua'a management practices.			✓
2.3.1.e	Work with private and non-profit entities to educate the public about the connection between upland activities within the watershed and the impacts on nearshore ecosystems and coral reefs.	✓		
2.3.1.f	Provide adequate funding and staff to develop and implement watershed protection plans and policies, including acquisition and management of watershed resources and land.			✓
2.3.1.g	Encourage the State to mandate instream assessment to provide adequate water for native species.			✓
2.3.1.h	Maui will protect all watersheds and streams in a manner that guarantees a healthy, sustainable riparian environment.	✓		
<u>Objecti</u>	ve:			
2.3.2	Decreased NPS and point source pollution.	✓		
2.3.2.a	Enforce water pollution related standards and codes.			✓
2.3.2.b	Support the use of LID Techniques such as those described in the State of Hawai'i LID Practitioner's Guide (June 2006), as amended.			✓

MAULI (Key: S	SLAND PLAN Goals, Objectives and Policies 5 = Supportive, N/S = Not Supportive, N/A = Not Applicable)	s	N/S	N/A
2.3.2.c	Encourage farmers and ranchers to use agricultural BMPs to address NPS pollution.			✓
<u>Objecti</u>	ve:			
2.3.3	Preserve existing wetlands and improve and restore degraded wetlands.	$\checkmark$		
Policies	<u>S:</u>			
2.3.3.a	Prohibit the destruction and degradation of existing upland, mid-elevation, and coastal wetlands.	✓		
2.3.3.b	Support and fund wetland protection and improvement, and restoration of degraded wetlands.			$\checkmark$
2.3.3.c	Where applicable, require developers to provide a wetland protection buffer and/or other protective measures around and between development and wetland resources.			$\checkmark$
<u>Objecti</u>	ve:			
2.3.4	Greater preservation of native flora and fauna biodiversity to protect native species.			✓
Policies	<u>S:</u>	•		
2.3.4.a	Work with appropriate agencies to eliminate feral ungulate populations and invasive species.			✓
2.3.4.b	Encourage the State to provide adequate funding to preserve biodiversity, protect native species, and contain or eliminate invasive species.			✓
2.3.4.c	Support the work of conservation groups and organizations that protect, reestablish, manage, and nurture sensitive ecological areas and threatened indigenous ecosystems.	~		
<u>Objecti</u>	ve:			
2.3.5	Limited development in critical watershed areas.			$\checkmark$
Policies	<u>3:</u>			
2.3.5.a	Discourage development and subdivision of land within critical watersheds and in areas susceptible to high erosion and sediment loss.			$\checkmark$
2.3.5.b	Designate critical watershed areas as conservation lands.			$\checkmark$
2.3.5.c	Strongly encourage new subdivisions and developments that are proximate to environmentally sensitive watershed resources to prepare and implement CSD plans.			✓
<u>Objecti</u>	ve:			
2.3.6	Enhance the vitality and functioning of streams, while balancing the multiple needs of the community.			✓
Policies	<u>2</u>			
2.3.6.a	Protect and enhance natural streambeds and discourage stream alteration.			$\checkmark$
2.3.6.b	Work with appropriate agencies to establish minimum stream flow levels and ensure adequate stream flow to sustain riparian ecosystems, traditional kalo cultivation, and self-sustaining ahupua'a.			✓

MAUI ISLAND PLAN Goals, Objectives and Policies (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
2.3.6.c Respect and participate in the resolution of native Hawaiian residual land and water rights issues (kuleana lands, ceded lands, and historic agricultural and gathering rights).			✓
2.3.6.d Ensure that stream flows implement laws and policies found in the State Constitution and Water Code.			✓
2.3.6.e Work with appropriate agencies and stakeholders to establish minimum stream flow levels, promote actions to support riparian habitat and the use of available lo'i, and maintain adequate flows for the production of healthy kalo crops.			✓
Analysis: The DLNR has engaged community stakeholders (including the Oneloa Coalition) during the planning process of the proposed project, in recognition of cultural, environmental, and recreational stakeholder interests in the area. The proposed comfort stations have been designed to hold the effluent in containment tanks for pumping into trucks for offsite disposal. The improvements are anticipated to reduce contamination from litter and waste to the nearby land, wetland, and marine environments and cultural sites. In addition, drainage improvements will retain and reduce sedimentation in stormwater runoff. As such, the proposed project will not adversely impact the nearshore marine and wetland environment.			
WILDLIFE AND NATURAL AREAS			
<u>Goal:</u>		1	
2.4 Maui's natural areas and indigenous flora and fauna will be protected.	$\checkmark$		
Objective:		1	1
2.4.1 A comprehensive management strategy that includes further identification, protection, and restoration of indigenous wildlife habitats.			$\checkmark$
Policies:		•	
2.4.1.a Identify and inventory the following:			
(1) Natural, recreational, and open space resources;	$\checkmark$		
(2) Flora and fauna with medium, high, and very high concentrations of threatened or endangered species; and	✓		
(3) Location and extent of invasive species.	$\checkmark$		
2.4.1.b Require flora and fauna assessment and protection plans for development in areas with concentrations of indigenous flora and fauna; development shall comply with the assessment and protection plan and shall use the avoidance, minimization, and mitigation approach respectively, with an emphasis on avoidance.	<b>√</b>		
2.4.1.c Support the implementation of Hawai`i's Comprehensive Wildlife Conservation Strategy (October 2005).			✓
Objective:	-		
2.4.2 A decrease in invasive species through programs and partnerships that eradicate undesirable species and protect native habitat.			~
Policies:		•	•
2.4.2.a Prevent the introduction of invasive species at all of Maui's airports and harbors.			$\checkmark$
2.4.2.b Encourage the State to increase funding in support of invasive species			$\checkmark$

MAULI (Key: S	SLAND PLAN Goals, Objectives and Policies S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
	interception, control, and eradication.			
2.4.2.c	Encourage the State to develop programs that allow students to participate in invasive species eradication projects.			✓
<u>Object</u>	ive:			
2.4.3	Greater protection of sensitive lands, indigenous habitat, and native flora and fauna.	✓		
Policies	<u>8:</u>			
2.4.3.a	Secure an interconnected network of sensitive lands, greenways, watercourses, and habitats.			✓
2.4.3.b	Protect Maui's sensitive lands (see Sensitive Lands on Protected Areas Diagrams).	✓		
2.4.3.c	Promote innovative environmental-planning methods and site-planning standards that preserve and re-establish indigenous flora and fauna habitat, to preserve and restore connected habitat corridors and open space.	✓		
2.4.3.d	Utilize protection tools such as conservation easements, land trusts, land banks, Purchase of Developments Rights (PDRs), Transfer of Development Rights (TDRs), and other stewardship tools to acquire natural areas			✓
2.4.3.e	Encourage discussions with communities to designate heritage areas that protect recreational and cultural lifestyles and resources.			✓
2.4.3.f	Support the expansion of Haleakalā National Park, and the creation of new national parks, where appropriate and supported by local communities.			✓
2.4.3.g	Encourage reforestation efforts that increase native species' habitat.			$\checkmark$
2.4.3.h	Utilize the Natural Area Partnership Program (NAPP) and other programs to protect natural lands.			✓
2.4.3.i	Support increased dedicated funding for the acquisition, protection, restoration, or preservation of important natural areas or open space through the following: grants from the Land and Water Conservation Fund; dedicated funding from real property taxes or other appropriate revenues; bond issues; real estate transfer tax; revenues from the Transient Accommodations Tax; development mitigation fees; and other appropriate funding sources.			<b>√</b>
Analys mitigat endang	<i>is:</i> A biological survey has been carried out for the proposed project. ive measures have been taken into consideration to ensure no advers gered wildlife species and their habitats will result from project implementat	Ap se im tion.	propria pacts	ate to
SCENIC	C RESOURCES			
<u>Goal:</u>				
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.	✓		
<u>Objecti</u>	<u>ve:</u>			
2.5.1	A greater level of protection for scenic resources.	$\checkmark$		
Policies	<u>S:</u>	I	1	1
2.5.1.a	Protect views to include, but not be limited to, Haleakalā, 'Īao Valley, the Mauna Kahalawai (West Maui Mountains), Pu'u Ō'la'i, Kaho'olawe, Molokini, Moloka'i,	✓		

MAULI (Key: S	SLAND PLAN Goals, Objectives and Policies s = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
	and Lāna'i, Mauna Kea, Mauna Loa, sea stacks, the Pacific Ocean, and significant water features, ridgelines, and landforms.			
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.	✓		
2.5.1.c	Protect "night sky" resources by encouraging the implementation of ambient light ordinances and encouraging conversion of all sources that create excessive light pollution, affecting our ability to view the stars.	✓		
2.5.1.d	Protect ridgelines from development where practicable to facilitate the protection of public views.			✓
2.5.1.e	Protect scenic resources along Maui's scenic roadway corridors.	✓		
<u>Objecti</u>	<u>ve:</u>		-	-
2.5.2.	Reduce impacts of development projects and public-utility improvements on scenic resources.	✓		
Policies:	<u>.</u>			
2.5.2.a	Enforce the policies and guidelines of the SMA regarding the protection of views.	✓		
2.5.2.b	Require any new subdivision of land, development, or redevelopment adjacent to a "high" or "exceptional" scenic corridor to submit an impact assessment of the project's scenic impacts; this assessment shall use the avoidance, minimization, and mitigation steps respectively, with an emphasis on avoidance.			~
2.5.2.c	Require appropriate building setbacks and limits on wall heights to protect views along scenic corridors.	✓		
2.5.2.d	Encourage the State of Hawai`i Board of Land and Natural Resources to deny any development within the State Conservation District that interferes with a scenic landscape or disrupts important open space resources.			✓
2.5.2.e	Require Urban Design and Review Board (UDRB) review and approval of utility poles, facilities, and other visible infrastructure improvements along scenic corridors.			✓
2.5.2.f	Ensure little or no effect on scenic resources from utility improvements, primarily power poles.			~
2.5.2.g	Protect scenic vistas from intrusion by power poles.			$\checkmark$
<u>Objecti</u>	<u>ve:</u>		-	-
2.5.3	Greater protection of and access to scenic vistas, access points, and scenic lookout points.	✓		
Policy:		-		
2.5.3.a	Protect, enhance, and acquire access to Maui's scenic vistas and resources.	$\checkmark$		

MAUI ISLAND PLAN Goals, Objectives and Policies (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
Analysis: The proposed project involves the development of two (2) single story, low-rise, comfort station buildings and related improvements that will be located at two (2) existing parking areas at Mākena State Park. The proposed buildings will be setback from the shoreline approximately 500 feet and 250 feet, respectively, and will not adversely impact makai views along the shoreline. The parking area improvements will enhance access to the Park. The project involves only low-level lighting and all lighting associated with the project will be shielded and down directed to protect the Hawai'i night sky.			
CHAPTER 3 – NATURAL HAZARDS			
3.1 Maui will be disaster resilient.			$\checkmark$
<u>Objective:</u>		n	
3.1.1 Increased inter-agency coordination.			$\checkmark$
Policy:			
3.1.1.a Reinforce the island's preparedness capacity by:			$\checkmark$
(1) Applying the latest data-gathering techniques/technology;			$\checkmark$
(2) Pursuing funding opportunities;			$\checkmark$
(3) Improving monitoring and advance warning systems;			$\checkmark$
(4) Fostering public awareness; and			$\checkmark$
(5) Working with external agencies to coordinate disaster mitigation and response.			✓
Objective:	•		
3.1.2 Greater protection of life and property.			$\checkmark$
Policies:			
3.1.2.a Identify critical infrastructure, lifelines, roads, and populations that are vulnerable to coastal hazards, and encourage strategic retreat and relocation to safer areas.			✓
3.1.2.b Consider the location of dams, reservoirs, holding ponds, and other water- containing entities that are upstream of inhabited areas to anticipate, avoid, and mitigate inundation risks, and discourage new development in areas where possible inundation hazards may exist.			~
3.1.2.c Strengthen current development standards to minimize destruction of land and property.			✓
3.1.2.d Encourage the use of construction techniques that reduce the potential for damage from natural hazards.			✓
3.1.2.e Increase the County's resilience to drought.			$\checkmark$
3.1.2.f Increase food and energy security through local production and storage.			$\checkmark$
Objective:			
3.1.3 A more coordinated emergency response system that includes clearly defined			$\checkmark$

MAULI (Key: S	SLAND PLAN Goals, Objectives and Policies 6 = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
	and mapped evacuation routes.			
Policy:				
3.1.3.a	Identify and expand shelter facilities and evacuation routes away from areas susceptible to natural hazards.			✓
<u>Objecti</u>	<u>ve:</u>			
3.1.4	A more educated and involved public that is aware of and prepared for natural hazards.			✓
Policies	<u>s:</u>			
3.1.4.a	Promote public education and involvement related to natural hazards awareness and preparedness.			✓
3.1.4.b	Coordinate a multi-agency effort to establish and promote a comprehensive public education program that will focus on practical approaches to preparedness, damage prevention, and hazard mitigation.			✓
Analys	is: Not Applicable			
<u>CHAPT</u>	ER 4 – ECONOMIC DEVELOPMENT			
ECONC	OMIC DIVERSIFICATION			
<u>Goal:</u>			T	1
4.1	Maui will have a balanced economy composed of a variety of industries that offer employment opportunities and well-paying jobs and a business environment that is sensitive to resident needs and the island's unique natural and cultural resources.			✓
<u>Objecti</u>	<u>ve:</u>			
4.1.1	A more diversified economy.			$\checkmark$
Policies	<u>S:</u>		1	1
4.1.1.a	Encourage an economy that is driven by innovation, research and development, and human resource development, including but not limited to, increasing technology- and knowledge-based sectors to be a major component in Maui County's economic base.			~
4.1.1.b	Support the creation of new jobs and industries that provide a living wage.			$\checkmark$
4.1.1.c	Facilitate and expedite permits and approvals.			✓
4.1.1.d	Develop linkages and partnerships among international research and development activities and Maui businesses.			✓
<u>Objecti</u>	<u>ve:</u>			
4.1.2 I	ncrease activities that support principles of sustainability.	✓		
Policies	<u>S:</u>		T	1
4.1.2.a	Support industries that are sustainable, and culturally and environmentally sensitive.	✓		
4.1.2.b	Encourage and support local businesses.			$\checkmark$
4.1.2.c	Substitute imports with locally-produced services and products where practicable.			✓

MAUI IS (Key: S	SLAND PLAN Goals, Objectives and Policies = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
4.1.2.d	Support the development of economic development clusters in targeted industry sectors.			✓
4.1.2.e	Encourage all businesses to save energy, water, and other resources.	$\checkmark$		
Objectiv	<u>/e:</u>			
4.1.3	Improve the island's business climate.			$\checkmark$
Policies	<u>:</u>		-	
4.1.3.a	Upgrade, maintain the quality of, and improve access to telecommunications infrastructure.			✓
4.1.3.b	Ensure an adequate supply of affordable workforce housing.			$\checkmark$
4.1.3.c	Develop neighborhoods and communities that are attractive to the workforce of a diversified economy.			✓
4.1.3.d	Encourage, nurture, and reward entrepreneurship and innovation.			$\checkmark$
4.1.3.e	Encourage employers to establish incentive programs. Support flexibility in workforce policies compatible with business and quality of life goals.			~
4.1.3.f	Assist community development organizations with revitalization and development of neighborhoods and communities that are attractive to the workforce of a diversified economy.			✓
Analys. efficien	<i>is:</i> The proposed project will involve use of solar energy equipment to pricy and conservation.	omo	te ener	gу
TOURIS	SM			
<u>Goal:</u>				
4.2	A healthy visitor industry that provides economic well-being with stable and diverse employment opportunities.	✓		
Objective	<u>.</u>		L	
4.2.1	Increase the economic contribution of the visitor industry to the island's environmental well-being for the island's residents' quality of life.	✓		
Policies	<u>::</u>		1	
4.2.1.a	Engage the visitor industry in the growth of emerging sectors where practicable.			$\checkmark$
4.2.1.b	Support the implementation of the Maui County TSP, when consistent with the MIP.	✓		
4.2.1.c	Focus economic growth in the visitor industry through enhanced visitor experiences and an emphasis on attracting higher-spending.	✓		
4.2.1.d	Provide a rich visitor experience, while protecting the island's natural beauty, culture, lifestyles, and aloha spirit.	✓		

MAUI ISLAND PLAN Goals, Objectives and Policies (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
4.2.1.e Diversify the tourism industry by supporting appropriate niche activities such as ecotourism, cultural tourism, voluntourism, ag-tourism, health and wellness tourism, educational tourism, medical tourism, and other viable tourism-related businesses in appropriate locations.			✓
4.2.1.f Recognize the important economic contributions that the visitor industry makes and support a healthy and vibrant visitor industry.	<b>√</b>		
4.2.1.g Support the increased availability of kama'āina discount programs.			✓
Objective:			
4.2.2 Comprehensively manage future visitor-unit expansion.			$\checkmark$
Policies:			<u> </u>
4.2.2.a Mitigate the impact of tourism on the host culture, natural environment, and resident lifestyles.	$\checkmark$		
4.2.2.b Allow, where permitted by the community plan, the development of business hotels and small, sensitively-designed inns.			✓
4.2.2.c Manage impacts from transient vacation rentals, hotels, bed and breakfast units, timeshares, and resort condominiums on residential communities, public infrastructure, and community facilities.			✓
4.2.2.d Discourage supplanting of existing island housing to visitor accommodations that may have a negative impact on long-term rental housing, price of housing, and price of land.			✓
4.2.2.e Allow the designation of retreat/mini-conference centers in appropriate locations through the community plan process.			✓
4.2.2.f Community plans should consider establishing standards such as limits on building size, room count, and the number of inns, if any, that will be allowed in small towns.			✓
Objective:			
4.2.3 Maximize residents' benefits from the visitor industry.			$\checkmark$
Policies:		1	<del>.</del>
4.2.3.a Promote a desirable island population by striving to not exceed an island-wide visitor population of roughly 33 percent of the resident population.			✓
4.2.3.b Use the required General Plan Annual Status Report to monitor trends related to residents and visitors.			✓
Analysis: The proposed project will provide added comfort and convenien State Park visitors. The proposed project also mitigates the impact of v environment by providing safe and sanitary disposal facilities in convenient locat	ce foi isitors ions.	r Māke s on t	na he
AGRICULTURE			
<u>Goal:</u>			
4.3 Maui will have a diversified agricultural industry contributing to greater economic, food, and energy security and prosperity.			✓
Objective:			
4.3.1 Strive for at least 85 percent of locally-consumed fruits and vegetables and 30 percent of all other locally-consumed foods to be grown in-State.			✓

MAUI ISLAND PLAN Goals, Objectives and Policies (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
Policies:			
4.3.1.a Strive to substitute food/agricultural product imports with a reliable supply of locally produced food and agricultural products.			✓
4.3.1.b Facilitate and support the direct marketing/sale of the island's agricultural products to local consumers, through farmers markets and similar venues.			✓
4.3.1.c Encourage growing a diverse variety of crops and livestock to ensure the stewardship of our land while safeguarding consumer safety.			✓
4.3.1.d Work with the State to regulate and monitor genetically-modified-organism (GMO) crops to ensure the safety of all crops and label all GMO products.			✓
Objective:			
4.3.2 Maintain or increase agriculture's share of the total island economy.			✓
Policies:		•	
4.3.2.a Encourage the export of the island's agricultural products to offshore markets.			$\checkmark$
4.3.2.b Support infrastructure investments at harbors, such as ferry service, airports, and other facilities for the rapid and cost-effective export of island-grown products.			✓
4.3.2.c Encourage the continued viability of sugar cane production, or other agricultural crops, in central Maui and all of Maui Island.			✓
4.3.2.d Work with the State to reduce excise taxes for commercial agricultural products produced within the State.			✓
4.3.2.e Coordinate with appropriate State and Federal Departments and agencies, private shipping companies, and farmers associations to assist in the rapid and cost-effective export of Maui's agricultural products to off-island markets.			~
Objective:	4		
4.3.3 Expand diversified agriculture production at an average annual rate of 4 percent.			$\checkmark$
Policies:			
4.3.3.a Promote the development of locally-grown and ecologically-sound biofuels, aquaculture, and forest products.			✓
4.3.3.b Support the development of farming associations/cooperatives.			✓
4.3.3.c Work with educational institutions and appropriate agencies to provide education and training for farm owners and entrepreneurs.			✓
Analysis: Not Applicable			
EMERGING SECTORS			
<u>Goal:</u>			
4.4 A diverse array of emerging economic sectors.			✓
Objective:			T
4.4.1 Support increased investment and expanded activity in emerging industries.			$\checkmark$
Policies:	_		

MAULI (Key: S	SLAND PLAN Goals, Objectives and Policies 5 = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
4.4.1.a	Support the development of and access to state-of-the-art voice, video, and data telecommunications systems and high-speed Internet.			✓
4.4.1.b	Attract and assist industries to compete in high technology activities such as those related to renewable energy, green technologies, diversified agriculture, ocean sciences, health sciences, space technologies, and other knowledge- based industries.			~
4.4.1.c	Support new industries that are environmentally and culturally sensitive such as health and wellness, sports and outdoor activities, cultural activities, the arts, film-making, entertainment, and digital media.			✓
4.4.1.d	Support a sustainable, culturally sensitive, astronomy industry.			$\checkmark$
4.4.1.e	Support the continued development of the Maui Research and Technology Park in Kihei, as a center for research and development, education, and diversified economic development, as provided by the Maui County Code.			✓
4.4.1.f	Work with appropriate organizations to support the development of high technology clusters around renewable energy, diversified agriculture, ocean sciences, health sciences, and other knowledge-based industries.			✓
<u>Objecti</u>	<u>ve:</u>	1		
4.4.2	Increase the development of renewable energy technologies that are supported by the local community.			✓
Policies	<u>S:</u>	1		
4.4.2.a	Support the expansion of the renewable energy sector and the use of solar, wind, wave, and biofuel technologies.	✓		
4.4.2.b	Provide incentives to encourage renewable energy development, the use of green energy technologies, and energy conservation.			✓
4.4.2.c	Ensure an adequate supply of land and facilitate permitting to meet the needs for renewable energy technologies such as solar, wind, wave, biofuel, and other technologies, provided that environmental, view plane, and cultural impacts are addressed.			~
4.4.2.d	Support the Maui County Energy Alliance Plan where consistent with the MIP.			$\checkmark$
Analys efficier	<i>is:</i> The proposed project will utilize solar energy equipment to proncy and conservation.	omote	e ener	gy
SMALL	BUSINESS DEVELOPMENT			
<u>Goal:</u>				
4.5	Small businesses will play a key role in Maui's economy.			$\checkmark$
<u>Objecti</u>	<u>ve:</u>		-	-
4.5.1	Increase the number of and revenue generated by small businesses and decrease the percentage of small business failures.			✓
Policies	<u>S:</u>		-	-
4.5.1.a	Provide incentives and support for small businesses and entrepreneurs that incorporate sustainable technologies and practices into their operations, utilize local materials, or produce and sell locally-made goods or services.			✓
4.5.1.b	Assist traditional "mom and pop" business establishments.			$\checkmark$

MAULI (Key: S	SLAND PLAN Goals, Objectives and Policies s = Supportive, N/S = Not Supportive, N/A = Not Applicable)	s	N/S	N/A
4.5.1.c	Reduce barriers to small business development.			$\checkmark$
4.5.1.d	Require, where feasible, the government procurement of goods and services from locally-owned, small businesses.			✓
4.5.1.e	Support community markets and venues that sell locally-made produce, goods, and services.			✓
Analys	is: Not Applicable			
<u>HEALT</u>	H CARE SECTOR			
<u>Goal:</u>		1		<u> </u>
4.6	Maui will have a health care industry and options that broaden career opportunities that are reliable, efficient, and provide social well-being.			$\checkmark$
<u>Objecti</u>	ve:		1	1
4.6.1	Expand the economic benefits of the health care sector.			$\checkmark$
Policies	<u>S:</u>		•	
4.6.1.a	Encourage expanded services at MMMC and at other medical facilities.			$\checkmark$
4.6.1.b	Support expansion of federally qualified health centers with the direct involvement of the residents of the communities served.			✓
4.6.1.c	Support the use of multimedia as a means to provide healthcare information.			$\checkmark$
4.6.1.d	Encourage digitalization of all diagnostic equipment at all facilities on Maui to enable sharing of data and more efficient use of limited provider workforce, consistent with data protection and patient privacy.			✓
4.6.1.e	Support the expansion of telemedicine.			$\checkmark$
4.6.1.f	Encourage expansion and improved access to emergency care in all communities.			✓
<u>Objecti</u>	ve:			
4.6.2	Be more efficient in the delivery of health care services and in minimizing health care costs.			✓
Policies	<u>8:</u>			
4.6.2.a	Support expansion of health care providers and facilities to improve access to quality care throughout the island.			✓
4.6.2.b	Encourage the expansion of veteran health care services.			✓
4.6.2.c	Allow home-based out-patient medical care that does not interfere with surrounding neighborhoods.			✓
<u>Objecti</u>	<u>ve:</u>			
4.6.3.	Expand Maui's alternative health care services, including spiritual practices.			$\checkmark$
Policies	<u></u>			
4.6.3.a	Support efforts to promote alternative medicine.			✓
4.6.3.b	Allow small-scale home-alternative medicine businesses such as massage, chiropractic care, traditional Hawaiian healing, and acupuncture that do not interfere with surrounding neighborhoods.			✓

MAUI I (Key: S	SLAND PLAN Goals, Objectives and Policies S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
Analys	is: Not Applicable			
EDUCA	TION AND WORKFORCE DEVELOPMENT			
Goal:				
4.7	Maui will have effective education and workforce development programs and initiatives that are aligned with economic development goals.			$\checkmark$
<u>Objecti</u>	ve:			
4.7.1	Improve preschool and K-12 education to allow our youth to develop the skills needed to successfully navigate the 21st century.			✓
<u>Objecti</u>	ve:			
4.7.1.a	Encourage the State to implement programs such as:			✓
	(1) Universally available preschool for children between the ages of one and five;			✓
	(2) Mandatory kindergarten;			$\checkmark$
	(3) Mandatory K-5th grade classroom size limits of 1 teacher to 20 students;			$\checkmark$
	(4) Mandatory nutrition programs; and			$\checkmark$
	(5) Mandatory Native Hawaiian programs at all grade levels.			$\checkmark$
4.7.1.b	Encourage the DOE to extend the school day by at least an hour.			$\checkmark$
4.7.1.c	Encourage the State to increase funding for public education so that Hawai'i is among the top 10 states nationally as measured by investment per pupil.			~
4.7.1.d	Encourage the State to ensure teacher certifications relate to effective delivery and improved student performances, and develop an industry experience/equivalency certification to assure our DOE students have access to career technical education and training.			<b>√</b>
4.7.1.e	Encourage the UHMC to provide dormitory space for high school students.			✓
4.7.1.f	Encourage the development and implementation of curriculum on native Hawaiian history, culture, and practices, in consultation with native Hawaiian groups and associations.			<b>√</b>
Objecti	ve:	1		
4.7.2	Encourage an increase in the number of certificate recipients and associate, bachelors, and graduate degrees conferred.			✓
Policie	<u>S:</u>	1	I	<u>.                                    </u>
4.7.2.a	Encourage the State to increase the number of articulation agreements between the UHMC and four-year universities, particularly the University of Hawai'i at Manoa.			<b>√</b>
4.7.2.b	Encourage the State to expand accredited 2-year, 4-year, and graduate programs through the UHMC.			~

MAULI (Key: S	SLAND PLAN Goals, Objectives and Policies S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
4.7.2.c	Encourage the education and training of our residents to meet the needs of a diversified economy.			✓
4.7.2.d	Support education and training programs such as student internships, vocational training, and career development opportunities to ensure a highly skilled workforce			✓
4.7.2.e	Work with educational institutions to improve and expand access to education and training through multiple modes, including distance learning.			~
Objective:				
4.7.3	Strive to ensure that more of Maui's jobs are developed in STEM-related sectors by 2030.			✓
Policies	<u>8:</u>			-
4.7.3.a	Support the development of STEM-related certificates and degrees at the two- and four year levels.			✓
4.7.3.b	Support the education initiatives of the Maui Agricultural Development Plan.			$\checkmark$
4.7.3.c	Expand and seek funding for internships, mentoring, job shadowing, etc. to foster interest in health and green workforce careers.			✓
4.7.3.d	Work with MEDB, UHMC, and other similar organizations to expand internship/education programs to support STEM careers.			✓
4.7.3.e	Continue to partner with the MEDB and other similar organizations to recruit, assist, and retain emerging industries, research and development activities, and educational/workforce opportunities.			✓
Analys	is: Not Applicable			
<u>CHAPT</u>	<u>ER 5 – HOUSING</u>			
<u>Goal:</u>		1		
5.1	Maui will have safe, decent, appropriate, and affordable housing for all residents developed in a way that contributes to strong neighborhoods and a thriving island community.			~
<u>Objecti</u>	<u>ve:</u>			-
5.1.1	More livable communities that provide for a mix of housing types, land uses, income levels, and age.			✓
Policies	<u>8:</u>			
5.1.1.a	Promote livable communities (compact/walkable/bikeable, access to transit) that provide for a mix of housing types and land uses, including parks, open space, and recreational areas.			✓
5.1.1.b	Promote planning approaches that provide a mix of multifamily and single-family housing units to expand housing choices.			✓
5.1.1.c	Discourage gated communities.			$\checkmark$
5.1.1.d	Provide incentives for the rehabilitation or adaptive reuse of historic structures to facilitate more housing choices.			✓
5.1.1.e	Use planning and regulatory approaches to provide higher housing densities.			$\checkmark$

MAUI I (Key: S	SLAND PLAN Goals, Objectives and Policies s = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
Objecti	ve:			
5.1.2	Better monitoring, evaluation, and refinement of affordable housing policy in conjunction with the economic cycle.			✓
Policies	<u>S:</u>			
5.1.2.a	Improve data on resident and nonresident housing.			$\checkmark$
5.1.2.b	Utilize the following approaches to promote resident housing and to minimize offshore market impacts:			✓
	(1) Ensure that the future housing stock is composed of a mix of housing types (multifamily, small lots, ohana units, co-housing, cottage houses, etc.);			✓
	(2) Encourage new housing in proximity to jobs and services, in places that are conducive/affordable to island residents; and			✓
	(3) Explore taxation alternatives and building fee structures.			$\checkmark$
Objecti	ve:			
5.1.3	Provide affordable housing, rental or in fee, to the broad spectrum of our island community.			<b>√</b>
Policies	<u>S:</u>	1		
5.1.3.a	Consider regulations that can help keep affordable housing available at affordable rents.			✓
5.1.3.b	Seek to have ownership of affordable for-sale and rental housing vested in a non-profit community land trust, or other qualified housing provider, committed to keeping such housing affordable in perpetuity.			~
5.1.3.c	Facilitate the use of public lands in urban areas that are suitable for affordable housing.			✓
5.1.3.d	Develop or support partnerships and initiatives that provide housing-related education/outreach.			✓
5.1.3.e	Support the continuing efforts of the County and its community partners to:			$\checkmark$
	<ul> <li>(1) Disseminate information on different housing/financial assistance programs (loans, grants, etc.) including information on housing rehabilitation/restoration/adaptive reuse;</li> </ul>			✓
	(2) Provide housing-related counseling including budget, credit, and financial planning assistance; and			✓
	(3) Create and maintain a comprehensive/master list of available affordable housing to help residents secure a unit that satisfies their need.			✓
<u>Objecti</u>	ve:			
5.1.4	Provide infrastructure in a more timely manner to support the development of affordable housing.			✓
Policie	<u>s:</u>			
5.1.4.a	Prioritize the development of infrastructure that supports the development of affordable housing.			✓

MAULIS (Key: S	SLAND PLAN Goals, Objectives and Policies = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
5.1.4.b	Utilize appropriate financing approaches and assistance tools to encourage the development of infrastructure and public facilities.			$\checkmark$
5.1.4.c	Tailor infrastructure requirements to correspond with appropriate level-of- service standards to help control housing costs and to maintain safety.			$\checkmark$
<u>Objectiv</u>	<u>/e:</u>			
5.1.5	A wider range of affordable housing options and programs for those with special needs.			✓
Policies	<u></u>			
5.1.5.a	Ensure that residents with special needs have access to appropriate housing.			$\checkmark$
5.1.5.b	Encourage housing to be built or rehabilitated to allow the elderly and those with special needs to live in their homes.			$\checkmark$
5.1.5.c	Ensure and facilitate programs to assist those with special needs from becoming homeless.			✓
5.1.5.d	Promote programs that stimulate the production of sustainable homeless shelters and alternative housing technologies.			✓
5.1.5.e	Support programs that offer home modification counseling on low-interest retrofit loans and grants to those with special needs.			✓
Objectiv	/e:	1		
5.1.6	Reduce the cost to developers of providing housing that is affordable to families with household incomes 160 percent and below of annual median income.			✓
Policies	<u>:</u>			
5.1.6.a	Support fast-track processing procedures for the following housing-related entitlements: affordable housing projects/units; indigenous Hawaiian housing/units; and special-needs housing units (seniors, disabled, homeless, etc.).			>
5.1.6.b	Require the construction of affordable for-sale and rental housing units as part of the construction of new housing developments.			✓
5.1.6.c	Offer extra incentives in boom periods and withdraw incentives during slack periods.			✓
<u>Objectiv</u>	<u>/e:</u>			
5.1.7	Increased preservation and promotion of indigenous Hawaiian housing and architecture.			✓
Policie	<u>s:</u>			
5.1.7.a	Preserve, promote, and give priority to Hawaiian housing/architecture forms to preserve Hawaiian culture.			$\checkmark$
5.1.7.b	Provide for indigenous architecture as an allowable structure for native Hawaiian uses to include hula and lā au lapa au.			$\checkmark$
Analys	is: Not Applicable			
CHAPT	ER 6 – INFRASTRUCTURE AND PUBLIC FACILITES			
SOLID \	NASTE			
<u>Goal:</u>				

MAULI (Key: S	SLAND PLAN Goals, Objectives and Policies 5 = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
6.1	Maui will have implemented the ISWMP thereby diverting waste from its landfills, extending their capacities.	✓		
Objective:				
6.1.1	Meet our future solid waste needs with a more comprehensive planning and management strategy.			✓
Policies	<u>8:</u>			
6.1.1.a	Update and publicize the ISWMP every ten years.			$\checkmark$
6.1.1.b	Strengthen inter-agency coordination including Planning and Environmental Management departments.			✓
6.1.1.c	Divert waste from the landfills and educate the public about the recommendations of the ISWMP.	✓		
6.1.1.d	Minimize future active, unlined landfill cells to the extent feasible.			$\checkmark$
Objecti	ve:			
6.1.2	Divert at least 60 percent of solid waste from the island's landfills.	$\checkmark$		
Policies	<u>8:</u>			
6.1.2.a	Require residents and commercial enterprises that generate waste to pay a fair proportion of disposal costs.			✓
6.1.2.b	Encourage environmentally safe waste-to-energy solutions.			✓
6.1.2.c	Facilitate the reduction of solid waste generated by packaging, food service products, construction waste, etc.			✓
6.1.2.d	Educate residents and visitors about the impacts of and methods to reduce, reuse, and recycle.	✓		
6.1.2.e	Discourage the disposal of landfill leachate by diversion to wastewater treatment plants, where practicable.			✓
Analys water b users t	<i>is:</i> There will be recycling bins located at the new comfort stations. Addition to the provided to reduce plastic waste. Signage will be recycling of waste materials.	itiona eduo	l potat cate Pa	ole Irk
WASTE	WATER			
<u>Goal:</u>				
6.2	Maui will have wastewater systems that comply with or exceed State and Federal regulations; meet levels-of-service needs; provide adequate capacity to accommodate projected demand; ensure efficient, effective, and environmentally sensitive operation; and maximize wastewater reuse where feasible.			•
<u>Objecti</u>	<u>ve:</u>	T	r	1
6.2.1	A wastewater planning program capable of efficiently providing timely and adequate capacity to service projected demand where economically feasible and practicable.			✓
Policies	<u>8:</u>	ı	I	L
6.2.1.a	Encourage the use of renewable energy in support of wastewater treatment facilities.			✓

MAUI ISLAND PLAN Goals, Objectiv (Key: S = Supportive, N/S = Not Sup	res and Policies portive, N/A = Not Applicable)	S	N/S	N/A
6.2.1.b Focus the expansion of waste consistent with the MIP Direct	water systems to accommodate planned growth ed Growth Strategy.			✓
6.2.1.c Establish new wastewater trea	tment plant(s) outside the tsunami zone.			$\checkmark$
Objective:				
6.2.2 Adequate levels of wastewate	r service with minimal environmental impacts.	✓		
Policies:				
6.2.2.a Meet or exceed all State and F or reuse.	ederal standards regulating wastewater disposal	✓		
6.2.2.b Encourage tertiary treatment through deep injection wells. F in coordination with water reus	for all municipal wastewater that is disposed Phase out all municipal and private injection wells se programs, where feasible, by 2020.			$\checkmark$
6.2.2.c Improve and upgrade the Co and reuse facilities consistent CIP.	unty's existing wastewater collection, treatment, with current and future plans and the County's			$\checkmark$
6.2.2.d Maintain an ongoing sewer ins systems to identify potential p	pection program for public and private multi-user oblems and forecast each system's residual life.			$\checkmark$
6.2.2.e Require all new developments development impact and in accuplan.	to fund system improvements in proportion to the cordance with the County's wastewater functional			$\checkmark$
6.2.2.f Require appropriate funding m maintain or replace aging wate	echanisms, such as a sinking fund, to adequately er-system components.			$\checkmark$
6.2.2.g Strongly encourage the phase	out of cesspools.			$\checkmark$
<u>Objective:</u>				
6.2.3 Increase the reuse of wastewate	er.			$\checkmark$
Policies:				
6.2.3.a Strengthen coordination betwee the WWRD to promote reuse/	een the Department of Water Supply (DWS) and recycling of wastewater.			$\checkmark$
6.2.3.b Expand the reuse of wastewa other wastewater systems.	ater from the Central Maui, Kīhei, Lahaina, and			$\checkmark$
Analysis: The wastewater storage environmental setting of the prop- stations will be collected and held transported to the a permitted waste	ge system has been designed in the context of osed comfort station sites. Wastewater from in a contained storage tank and regularly pur ewater treatment facility for safe treatment and	the the nped disp	sensiti comfo out a osal.	ve ort nd
WATER				
<u>Goal:</u>				
6.3 Maui will have an environment system.	ally sustainable, reliable, safe, and efficient water			✓
Objective:				
6.3.1 More comprehensive approa protect, recharge, and man groundwater, streams, and aq	ch to water resources planning to effectively nage water resources including watersheds, uifers.			✓

MAULI (Key: S	SLAND PLAN Goals, Objectives and Policies S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
Policies	<u>s:</u>		•	
6.3.1.a	Ensure that DWS actions reflect its public trust responsibilities toward water.			$\checkmark$
6.3.1.b	Ensure the WUDP implements the State Water Code and MIP's goals, objectives, and policies.			✓
6.3.1.c	Regularly update the WUDP, to maintain compliance with the General Plan.			✓
6.3.1.d	Ensure that the County's CIP for water-source development is consistent with the WUDP and the MIP.			✓
6.3.1.e	Where desirable, retain and expand public ownership and management of watersheds and fresh-water systems.			✓
6.3.1.f	Encourage and improve data exchange and coordination among Federal, State, County, and private land use planning and water resource management agencies.			✓
<u>Objecti</u>	<u>ve:</u>			
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	<u>s:</u>			
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.			✓
6.3.2.b	Encourage increased education about and use of private catchment systems where practicable for nonpotable uses.			✓
6.3.2.c	Maximize the efficient use of reclaimed wastewater to serve nonpotable needs.			✓
6.3.2.d	Work with appropriate State and County agencies to achieve a balance in resolving the needs of water users in keeping with the water allocation priorities of the MIP.			✓
6.3.2.e	Ensure water conservation through education, incentives, and regulations.			$\checkmark$
6.3.2.f	Acquire and develop additional sources of potable water.			$\checkmark$
<u>Objecti</u>	ve:			
6.3	Improve water quality and the monitoring of public and private water systems.			$\checkmark$
Policy:				
6.3.3.a	Protect and maintain water delivery systems.			✓
Analys	is: Not Applicable			
TRANS	PORTATION			
Goal:				
6.4	An interconnected, efficient, and well-maintained, multimodal transportation system.			✓
<u>Objecti</u>	<u>ve:</u>			
6.4.1	Provide for a more integrated island-wide transportation and land use planning program that reduces congestion and promotes more efficient (transit-friendly)			<ul> <li>✓</li> </ul>

MAUI I (Key: S	SLAND PLAN Goals, Objectives and Policies S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
	land use patterns.			
Policie:	<u>s:</u>			
6.4.1.a	Plan for an integrated multi-modal transportation system comprised of public transit, bicycle, pedestrian, automobile, and other transportation modes.			✓
6.4.1.b	Refocus transportation investment from the construction of additional roadways only for the automobile to the expansion of a multimodal transportation system.			✓
6.4.1.c	Encourage the use of "complete streets" design methods.			✓
6.4.1.d	Encourage employers to implement TDM strategies.			✓
<u>Objecti</u>	ve:			
6.4.2	Safe, interconnected transit, roadway, bicycle, equestrian, and pedestrian network.			✓
Policie:	<u>8:</u>			
6.4.2.a	Ensure transit-, roadway-, and pedestrian-facilities design and level-of-service standards respect the unique character of our communities.			✓
6.4.2.b	Prioritize transportation improvements list to cost-effectively meet existing and future needs consistent with the MIP.			✓
6.4.2.c	Require new development, where appropriate, to integrate sidewalks, pathways, bikeways, and transit infrastructure into new commercial and residential projects while enhancing community character.			✓
6.4.2.d	Identify and improve hazardous and substandard sections of roadways, drainage infrastructure, and bridges, provided that the historical integrity of the roads and bridges are protected.			✓
6.4.2.e	Consider identification, acquisition where appropriate, and utilization of abandoned right of-ways for bikeways, pedestrian pathways, and open-space networks.			✓
6.4.2.f	Support the implementation of the <i>Central Maui Pedestrian &amp; Bicycle Master Plan</i> (March 2012), when consistent with the MIP.			✓
<u>Objecti</u>	ve:			
6.4.3	An island-wide, multimodal transportation system that respects and enhances the natural environment, scenic views, and each community's character.			✓
Policie:	<u>S:</u>			
6.4.3.a	Ensure that the roadway and transit alignments respect the natural environment and scenic views.			✓
6.4.3.b	Ensure that roadways and transit systems in rural areas and small towns enhance community character.			✓
6.4.3.c	Design all transit systems to respect visual corridors and Maui's character.			$\checkmark$
Analys	is: Not Applicable		<u> </u>	<u>I</u>
TRANS	<u>IT</u>			
<u>Goal:</u>				
6.5	An island-wide transit system that addresses the needs of residents and visitors and contributes to healthy and livable communities.			✓

MAULI (Key: S	SLAND PLAN Goals, Objectives and Policies s = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
<u>Object</u>	ive:			
6.5.1	An integrated transit system that better serves all mobility needs of Maui's residents and visitors.			✓
Policies	<u>8:</u>			-
6.5.1.a	Maximize access to public transit in town centers, commercial districts, and employment centers.			✓
6.5.1.b	Expand regional and inter-regional transit services, where appropriate, in heavily traveled corridors and within communities			✓
6.5.1.c	Increase the frequency of current service, add additional bus routes as demand requires, and transition to nonpolluting transit vehicles, as funding permits.			✓
6.5.1.d	Provide adequate transit infrastructure (e.g., bus pullouts, waiting benches and shelters, signs) along existing and future transit right-of-ways.			✓
6.5.1.e	Require new development where appropriate, to provide right-of-ways (ROWs) to accommodate transit circulation and support facilities.			✓
6.5.1.f	Identify, protect, and preserve, or acquire corridors for future inter-community transit use, including but not limited to, rail and also multimodal use corridors.			✓
6.5.1.g	Establish transit corridors by planning for and securing right-of-way when appropriate for alternative modes of transportation (such as rail and water ferry service).			✓
6.5.1.h	Pursue improvements and upgrades to the existing transit system consistent with updated MDOT planning studies/transit plans (within the framework of comprehensive island-wide multimodal transportation plans).			✓
6.5.1.i	Increase inter-agency coordination between the Department of Planning, State Department of Transportation, County Department of Public Works, and other applicable agencies.			✓
<u>Objecti</u>	ve:			
6.5.2	Plan for a more diversified and stable funding base to support transportation goals.			✓
Policies	<u>8:</u>			
6.5.2.a	Support alternative methods and sources of funding transportation improvements (including impact fees, higher taxes, fare adjustments, dedicated sources of funding, and assessments).			✓
6.5.2.b	Collaborate with public-private entities or nonprofit organizations to reduce public transit operational expenses.			✓
6.5.2.c	Coordinate with appropriate Federal, State, and County agencies to fund transportation projects in areas where growth is anticipated.			✓
Analys	is: Not Applicable			
PARKS	· · · · · · · · · · · · · · · · · · ·			
<u>Goal:</u>			1	1
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.	✓		
Obiecti	ve:			

MAULI (Key: S	SLAND PLAN Goals, Objectives and Policies s = Supportive, N/S = Not Supportive, N/A = Not Applicable)	s	N/S	N/A
6.6.1	More effective, long-range planning of parks and recreation programs able to meet community needs.	✓		
Policies	<u>S:</u>			
6.6.1.a	Support, consistent with the MIP, the implementation of open-space and recreational plans, such as the <i>Pali to Puamana Parkway</i> Master Plan and the <i>Upcountry Greenways Master Plan</i> .			✓
6.6.1.b	Utilize the ahupua'a approach by integrating mauka-to-makai natural landscapes into an island-wide parks and recreation functional plan.			✓
6.6.1.c	Provide a balanced mix of passive and active parks, including neighborhood, community, and regional parks, in each community plan area.			✓
6.6.1.d	Support the expansion of Haleakala National Park, where supported by affected communities.			✓
6.6.1.e	Support lo'i and dryland taro restoration in County, State, and Federal parks.			$\checkmark$
6.6.1.f	Encourage private landowners to dedicate land to Federal, State, or County governments, or nonprofit land trusts, for parks and open-space protection consistent with the MIP.			✓
6.6.1.g	Strengthen inter-agency coordination including State and County departments, such as resolving joint use of facilities and properties.			✓
6.6.1.h	Work with the State to prepare and implement a master management plan for 'Āhihi-Kīna'u and La Perouse-Keone'ō'io Bay to Kanaloa Point region.			✓
<u>Objecti</u>	ve:			
6.6.2	Achieve parks and recreation opportunities to meet the diverse needs of our community.	✓		
Policies	<u>s:</u>			
6.6.2.a	Establish appropriate level-of-service standards at the neighborhood, community, and regional levels.	✓		
6.6.2.b	Identify and acquire parks and recreational facilities that address existing park inadequacies and complement and enhance neighborhoods, communities, and natural land features.	✓		
6.6.2.c	Design park facilities to preserve and enhance natural site characteristics, maximize views, protect environmental and cultural sites, and minimize water demands.	✓		
6.6.2.d	Acquire lands along the shoreline, between coastal roadways and the ocean.			$\checkmark$
6.6.2.e	Encourage the development of regional parks, district parks, and greenways in a manner that helps to contain sprawl, provide separation between distinct communities, or offer open space within urban communities.			~
6.6.2.f	Require large master-planned communities that incorporate a mixture of park facilities pursuant to parks standards and functional plans.			✓
6.6.2.g	Support appropriate areas for cultural parks (e.g., Kepaniwai) in each community plan area.			✓
6.6.2.h	Incorporate community input to determine the appropriate location, design, and long-term stewardship of parks and recreation facilities.			✓

MAULI (Key: S	SLAND PLAN Goals, Objectives and Policies 5 = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
6.6.2.i	Manage commercial activities at public parks to minimize impacts to residents.			$\checkmark$
6.6.2.j	Support public-private partnerships to implement the acquisition and development of parks when consistent with the General Plan.			✓
6.6.2.k	Support a coordinated program to improve, operate, and maintain joint-use facilities and grounds.			✓
<u>Objecti</u>	ve:			
6.6.3	An expanded network of greenways, trails, pathways, and bikeways.			$\checkmark$
Policies	<u>s:</u>			
6.6.3.a	Link existing and future park sites, natural areas, the shoreline, and residential areas with a network of bikeways, pedestrian paths, trails, and greenways.			✓
6.6.3.b	Support the implementation of plans and programs that facilitate pedestrian mobility and access to active and passive recreation areas and sites.			✓
6.6.3.c	Collaborate with the State and private land owners to ensure perpetual access and proper stewardship of traditional trails and access systems.			✓
6.6.3.d	Facilitate the development of well-managed noncommercial campgrounds throughout the island.			✓
6.6.3.e	Consider requiring commercial bike rental businesses to provide funding that supports a mauka-to-makai Haleakalā bikeway improvement program.			✓
6.6.3.f	Ensure ADA compliance and seek opportunities to make all parks and recreational facilities accessible to people with disabilities.	✓		
<i>Analys</i> of park at Māk	<i>is:</i> The current portable toilets are not adequate due to the level of use an visitors. The proposed project establishes the appropriate level of service are not state Park. The proposed project will be ADA compliant.	id ex for Pa	pectati ark use	on ers
PUBLIC	FACILITIES			
<u>Goal:</u>		1	n	n
6.7	Maui will have adequate public facilities that meet the diverse needs of residents.	✓		
<u>Objecti</u>	ve:	1		
6.7.1	More effective planning for public facilities to meet community needs.	$\checkmark$		
Policies	<u>S:</u>	1	1	1
6.7.1.a	Ensure the development and update of island-wide public facilities functional plans that incorporate prioritized facilities, programs, and a financial component.			✓
6.7.1.b	Establish appropriate level-of-service standards for public facilities provided by the County.			✓
6.7.1.c	Pursue improvements and upgrades of County public facilities consistent with the public facilities functional plan.			✓
6.7.1.d	Recognize Wailuku Town as Maui's Civic Center and support the revitalization of the Civic Center District by consolidating government office spaces, enhancing landscape beautification, and providing adequate public parking.			✓
6.7.1.e	Support, with community input, the relocation of the Maui Community Correctional Center from Wailuku to an appropriate location in Pu'unēnē.			✓

MAULIS (Key: S	SLAND PLAN Goals, Objectives and Policies = Supportive, N/S = Not Supportive, N/A = Not Applicable)	s	N/S	N/A
6.7.1.f	Adequately plan and fund public safety facilities (fire, police, ambulance, civil defense) to meet community needs.			✓
6.7.1.g	Increase joint facilities utilization and program coordination between State and County agencies such as baseyards, communication centers, recreational facilities, etc., where feasible.			✓
6.7.1.h	Focus future expenditures for additional government office space, parking, and related facilities in Wailuku's Civic Center District.			✓
6.7.1.i	Encourage continuous and safe walkways for children within one mile of each school.			✓
6.7.1.j	Encourage public-private partnerships to identify and resolve public facility plan shortcomings when consistent with the General Plan.			✓
6.7.1.k	Incorporate community/area residents' input to determine the appropriate location and design of public facilities.	✓		
Analysi Stakeho the con	is: The proposed project improves the level of service at the Māken older consultations have been carried out to receive input on the design a nfort stations.	a Sta nd Io	ate Par cation	rk. of
<u>SCHOO</u>	LS AND LIBRARIES			
<u>Goal:</u>		r	1	
6.8	Maui will have school and library facilities that meet residents' needs and goals.			$\checkmark$
<u>Objectiv</u>	<u>/e:</u>		-	
6.8.1	Assist in providing appropriate school and library facilities in a timely manner and in strategic locations.			$\checkmark$
Policies	<u></u>	1	-	-
6.8.1.a	Work in partnership with all educational institutions to meet current and future needs including appropriate location, timing, and design of future facilities.			✓
6.8.1.b	Allow for the expansion and intensification of uses at the UHMC including satellite campuses operating in remote areas.			✓
6.8.1.c	Encourage the DOE to build and maintain smaller, community-oriented schools.			$\checkmark$
6.8.1.d	Encourage better cooperation by the State and County for use of State and County facilities.			✓
6.8.1.e	Encourage the State to upgrade, modernize, and expand school facilities, including those in remote communities.			✓
6.8.1.f	Work with the State to develop a master plan for the expansion of UHMC in accordance with the MIP.			✓
6.8.1.g	Support partnerships (public/private/nonprofit) to build and staff new schools and improve existing facilities.			$\checkmark$
6.8.1.h	Work with the BOE HSPLS to provide centralized library services (including telecommunications) to all areas of Maui.			✓
6.8.1.i	Work with the State to expedite planning and construction of Kīhei High School, including the integration of the high school with the Maui Research and Technology Park.			✓
6.8.1.j	Work with the State to identify intermediate school sites in Central Maui and other areas where needed.			✓

MAULE (Key: S	SLAND PLAN Goals, Objectives and Policies 6 = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
<u>Objecti</u>	ve:			
6.8.2	Provide a more expansive network of safe and convenient pedestrian-friendly streets, trails, pathways, and bikeways between neighborhoods and schools where appropriate.			✓
Policies	<u>s:</u>	•		
6.8.2.a	Encourage the State to build new school facilities in appropriate locations that minimize time and distance for students to travel to and from school.			✓
6.8.2.b	Encourage the State to implement the Safe Routes to School initiative with funding commitments to help the County plan and fund projects that ensure safe access routes to school.			✓
Analys	is: Not Applicable			
HEALT	H CARE			
<u>Goal:</u>				
6.9	All of Maui residents will have the best possible health care to include healthy living, disease prevention, as well as acute and long-term care.			✓
<u>Objecti</u>	ve:	•		
6.9.1	Greater autonomy to the Maui region in their efforts to improve medical care on the island.			✓
Policies	<u>s:</u>	•		
6.9.1.a	Encourage the State to give greater autonomy to the Maui region in their efforts to improve medical care on the island.			✓
6.9.1.b	Support innovative financial solutions, such as capital partnerships, joint ventures, and consolidations for MMMC and other health institutions.			✓
6.9.1.c	Support MMMC as a major core medical center that provides a greater range of services.			✓
6.9.1.d	Support the immediate development of a critical access hospital in West Maui.			$\checkmark$
6.9.1.e	Support the expansion of regional critical-access facilities, where allowed by Federal regulations.			✓
6.9.1.f	Improve medical service to remote and outlying regions.			$\checkmark$
6.9.1.g	Support transportation services for dialysis patients and community dialysis programs.			✓
6.9.1.h	Work with the State to determine the feasibility of appropriate medical facilities in South Maui and Hāna, including the possible reestablishment of a small community hospital in Hāna, the establishment of a hospital in South Maui, and assist the State in securing funding to meet Maui's health care needs.			✓
<u>Objecti</u>	ve:			
6.9.2	An expansion of long-term care facilities and long-term care alternatives to meet the needs of our aging population.			$\checkmark$
Policies	<u> </u>			
6.9.2.a	Support efforts to increase Maui's long-term care bed capacity to cover current and future needs, close to large population centers.			$\checkmark$

MAULI (Key: S	SLAND PLAN Goals, Objectives and Policies S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
6.9.2.b	Recognize that facilities for low-income elders who need long-term care are a needed form of affordable and subsidized housing.			✓
6.9.2.c	Evaluate the needs of the long-term disabled and provide planning support for their care, if there is a need for long-term care facilities.			✓
6.9.2.d	Consider long-term care facilities as a major potential employment base and encourage the recruitment and training of potential employees.			✓
<u>Objecti</u>	<u>ve:</u>			
6.9.3	More support to home-care and community-based programs so they become alternatives to traditional nursing homes.			✓
Policies	<u>S:</u>			
6.9.3.a	Support the establishment of a program to assist the elderly and people with disabilities to remain in their homes or in a home-like setting.			✓
6.9.3.b	Support the establishment of senior and adult-day-care centers and senior housing.			✓
6.9.3.c	Continue to support existing senior centers (e.g. Kaunoa), and establish new senior centers that will provide day-care sites and programs for the disabled and elderly.			✓
6.9.3.d	Support funding alternatives for community-based services that assist home-care efforts.			✓
6.9.3.e	Encourage the State to adopt the recommendations contained within the Legislative Reference Bureau's report entitled "Gimme a Break: Respite Care Services in Other States," (December 2007) where appropriate, feasible, and consistent with the MIP.			✓
<u>Objecti</u>	ve:			
6.9.4	Improved preventative medicine and primary health care.			$\checkmark$
Policies	<u>s:</u>			<del>.</del>
6.9.4.a	Develop and utilize health-status benchmarks to measure prevention and primary health care service delivery.			✓
6.9.4.b	Support programs that provide family planning assistance.			$\checkmark$
Analys	is: Not Applicable		1	L
ENERG	<u>iY</u>			
<u>Goal:</u>				
6.10	Maui will meet its energy needs through local sources of clean, renewable energy, and through conservation.	✓		
<u>Objecti</u>	ve:	-		
6.10.1	Reduce fossil fuel consumption. Using the 2005 electricity consumption as a baseline, reduce by 15 percent in 2015; 20 percent by 2020; and 30 percent by 2030.	✓		
Policie	<u>s:</u>			•
6.10.1.	a Support energy efficient systems, processes, and methods in public and private operations, buildings, and facilities.	✓		

MAUI ISLAND PLAN Goals, Objectives and Policies (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
6.10.1.b Support the Maui Solar Rooftop initiative.			$\checkmark$
6.10.1.c Support Hawai`i Energy and other Public Utility Commission (PUC) appro energy efficiency programs.	ved 🗸		
Objective:			
6.10.2 Increase the minimum percentage of electricity obtained from clean, renewal energy sources. By 2015, more than 15 percent of Maui's electricity will produced from locally-produced, clean, renewable energy sources, 25 percesty 2020, and 40 percent by 2030.	ible be ent		
Policies:			
6.10.2.a Evaluate available renewable energy resource sites and applica technologies.	ible		✓
6.10.2.b Encourage the installation of renewable energy systems, wh appropriate.	ere 🗸		
6.10.2.c Support the establishment of new renewable energy facilities at appropr locations provided that environmental, view plane, and cultural impacts addressed.	ate are		✓
6.10.2.d Encourage all new County facilities completed after January 1, 2015 produce at least 15 percent of their projected electricity needs with on renewable energy.	, to site		✓
Objective:	i		
6.10.3 Increased use of clean, renewable energy.	✓		
Policies:			
6.10.3.a Support efforts in the PUC to upgrade Maui's power grid to integrant renewable energy from multiple sources and wheeling of electricity.	ate 🗸		
6.10.3.b Encourage the PUC to work with the County to implement and experiment community supported renewable energy projects.	dite		✓
6.10.3.c Encourage efforts to produce more renewable energy using distribut generation.	ited		✓
6.10.3.d Encourage import substitution by MECO and the broader community become more self-sufficient in energy production.	/ to		✓
6.10.3.e Educate the public on the economic and environmental benefits from increased use of renewable energy.	the		✓
6.10.3.f Encourage support from the Federal government, State, and the privilation sector for Maui's renewable energy objectives.	rate 🗸		
6.10.3.g Encourage incentives to support the development and use of renewa energy.	ıble		$\checkmark$
Objective:			
6.10.4 More efficient distribution of power throughout the island while preserving island beauty.	and		✓
Analysis: The proposed project will incorporate a solar energy comporequire connection to the existing electrical grid.	nent and	l will r	ot
HARBORS AND AIRPORT			

MAUI ISI (Key: S =	_AND PLAN Goals, Objectives and Policies = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
Goal:				
6.11 N fa	Aaui will have harbors and airports that will efficiently, dependably, and safely acilitate the movement of passengers and cargo.			✓
<u>Objective</u>	<u>).</u>			
6.11.1 L a	Jpgraded harbor facilities to handle larger volumes of freight and passengers and additional small boat harbors.			$\checkmark$
Policies:				
6.11.1.a	Support the expansion and upgrade of Kahului Harbor through the following, provided that any expansion is respectful of cultural practices and existing recreational uses and supports improved water quality:			✓
	(1) Accommodate increasing volumes of cargo;			$\checkmark$
	(2) Provide deeper pier depths and greater fuel-receiving and storing capacities; and			✓
	(3) Ensure safe and efficient work areas, including separating passenger operations from fuel and cargo operations.			✓
6.11.1.b	Work with public and private entities to provide adequate pier slips, utilities, repair facilities, and waste-disposal capabilities.			✓
6.11.1.c	Encourage the State to safely separate passenger (cruise and ferry) operations from hazardous bulk fuels and heavy cargo transporting operations, while not decreasing harbor's capacity to safely support various recreational uses.			✓
6.11.1.d	Encourage the State to develop cargo inspecting sites and facilities for efficient cargo and container processing and transportation and to prevent alien species entry.			✓
6.11.1.e	Support a State and County task force to study the feasibility of a second commercial harbor on Maui.			✓
<b>Objective</b>	<u>):</u>			
6.11.2 E h re	stablish more economically thriving and environmentally sensitive small boat arbors accommodating resident and business activity, including fishing, ecreation, and tour boats.			✓
Policy:		<del>,                                    </del>		1
6.11.2.a	Provide for needed shore-side facilities and capabilities to support small boat harbor users (e.g. repair facilities, parking, cold storage, and mass-transit connections).			✓
<b>Objective</b>	<u>):</u>			
6.11.3 L p	Jpgraded airport facilities and navigation aids to serve the needs of assengers, freight movements, and general aviation.			✓
Policies:				
6.11.3.a	Protect the island's airports from encroaching urbanization that may negatively impact the airport operations.			✓
6.11.3.b	Support State efforts to improve Kahului Airport operations to better serve passenger and cargo needs.			$\checkmark$
6.11.3.c	Support State efforts to identify sites and plan to relocate and accommodate			✓

MAUI ISL (Key: S =	AND PLAN Goals, Objectives and Policies Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
	small and rotary wing aircraft.			
6.11.3.d	Encourage the State to improve airport safety including lighting, fuel transmission, fuel safety, etc.			✓
6.11.3.e	Consider expansion of rental car facilities in West and South Maui.			$\checkmark$
6.11.3.f	Consider expansion of mass transit (bus, fixed-rail, shuttle, and taxis, bicycle, and pedestrian facilities) to and from Kahului Airport and not limited to passenger movements (allowing for luggage and cargo).			✓
6.11.3.g	Encourage the State to maintain airport capacity and to encourage more responsive air services to Hāna and Kapalua.			✓
Analysis	: Not Applicable			
<b>CHAPTER</b>	R 7 – LAND USE			
	TURAL LANDS			
<u>Goal:</u>				
7.1 N la	aui will have a prosperous agricultural industry and will protect agricultural ands.			✓
Objective	<u>x</u>			
7.1.1 S	ignificantly reduce the loss of productive agricultural lands.			$\checkmark$
Policies:				
7.1.1.a A w	llow, where appropriate, the clustering of development on agricultural lands /hen approved as a CSD plan or similar approval mechanism.			✓
7.1.1.b R s	Require, where appropriate, the review and approval of CSD plans prior to the ubdivision of agricultural land.			✓
7.1.1.c D re a	Discourage developing or subdividing productive agricultural lands for esidential uses in which the residence would be the primary use and any gricultural activities would be secondary uses.			✓
7.1.1.d C a	Consider requirements for public notification and review of the subdivision of gricultural land into four or more lots.			✓
7.1.1.e F ir	ocus urban growth, to the extent practicable, away from productive and nportant agricultural lands.			✓
7.1.1.f S la u a	strongly discourage the conversion of productive and important agricultural ands (such as sugar, pineapple, and other produce lands) to rural or urban use, nless justified during the General Plan update, or when other overriding factors re present.			✓
7.1.1.g F S	urther develop the requirements for agricultural assessments found under section 19.510, MCC.			✓
7.1.1.h P fr p	Provide incentives for landowners to preserve and protect agricultural lands rom development through the use of TDR/PDR, tax credits, easement rograms, or similar means.			✓
7.1.1.i P	Promote the use of U.S.D.A. Farm and Ranch Lands Protection Program grants of fund the acquisition of conservation easements on eligible agricultural lands.			✓
7.1.1.j R a s	Require all major developments adjacent to agricultural lands to provide an ppropriate and site-specific agricultural protection buffer as part of a required ite plan.			✓

MAUI ISLAND PLAN Goals, Objectives and Policies (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
7.1.1.k Support and promote the viability of Maui's agricultural businesses through property tax incentives and other programs and subsidies.			✓
7.1.1.I Encourage future community plan efforts to identify lands within the County Agricultural zoning district that are primarily being used for large-lot residential or rural use and consider such lands for reclassification to an appropriate County Rural zone.			~
Objective:			
7.1.2 Reduction of the island's dependence on off-island agricultural products and expansion of export capacity.			✓
Policies:			
7.1.2.a Coordinate with the agricultural community, associations/community groups, agricultural landowners, and the State to designate IALs.			✓
7.1.2.b Support an incentive package for productive Agricultural Lands which aims to ensure agricultural viability for small- and commercial-scale agricultural producers.			✓
7.1.2.c Actively look to acquire land and provide infrastructure to expand the agricultural park and establish new agricultural parks.			✓
7.1.2.d Support the designation of a research and development area within agricultural parks to help farmers stay attuned to new technology and research.			✓
7.1.2.e Support local cooperative extension services to facilitate timely technology transfer opportunities.			✓
7.1.2.f Support plans and programs to develop additional sources of water for irrigation purposes.			✓
7.1.2.g Consider appropriate subdivision requirements (gravel roads, above-ground utilities, etc.) in those subdivisions creating Agricultural Parks where lots are limited to agricultural production with no dwellings.			✓
7.1.2.h Support the recommendations, policies, and actions contained within the Maui Agricultural Development Plan, July 2009, when consistent with the MIP.			✓
7.1.2.i Allow water and tax discounts for legitimate farming operations on rural and agricultural land.			✓
7.1.2.j Give priority in delivery and use of agricultural water and agricultural land within County agricultural parks to cultivation of food crops for local consumption.			✓
7.1.2.k Support programs that control pests and diseases that affect agriculture.			$\checkmark$
7.1.2.I Support the development of training and apprenticeship programs to encourage an adequate supply of agricultural workers.			✓
Objective:		•	
7.1.3 Support and facilitate connectivity between communities.			$\checkmark$
Policies:			
7.1.3.a Evaluate the impact of gated communities on interconnectivity.			$\checkmark$
7.1.3.b Discourage land use and urban design that impedes interconnectivity between adjacent communities.			✓
Analysis: Not Applicable			

MAULI (Key: S	SLAND PLAN Goals, Objectives and Policies S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	s	N/S	N/A
RURAL	AREAS			
Goal:				
7.2	Maui will have a rural landscape and lifestyle where natural systems, cultural resources and farm lands are protected and development enhances and compliments the viability and character of rural communities.			<ul> <li>✓</li> </ul>
<u>Objecti</u>	ve:			
7.2.1	Reduce the proliferation and impact of residential development outside of urban, small town, and rural growth boundaries.			✓
Policies	<u>8:</u>			
7.2.1.a	Focus development to areas inside urban, small town, and rural growth boundaries to preserve natural, cultural, and agricultural resources.			✓
7.2.1.b	Encourage cluster development with a mandatory buffer requirement/clear edge at the interface of country towns, agricultural uses, and surrounding rural landscapes.			✓
7.2.1.c	Encourage or require, where appropriate, CSDs and the use of green spaces/natural separations to protect the character of rural landscapes.			✓
7.2.1.d	Encourage basic goods/services in business country towns.			✓
7.2.1.e	Allow for mixed uses, including residential uses, within Business Country Town Districts.			✓
7.2.1.f	Encourage the use of alternative stormwater management techniques that minimize land disturbance and preserve natural drainage features.			✓
7.2.1.g	Encourage green belts, open space buffers, and riparian zones to minimize conflicts between agriculture and residential uses.			✓
7.2.1.h	Evaluate the impact of gated communities on inter-connectivity.			$\checkmark$
Objecti	ve:			
7.2.2	More appropriate service/infrastructure standards to enhance and protect the island's rural character and natural systems.			$\checkmark$
Policies	<u>8:</u>			
7.2.2.a	Minimize impermeable surfaces within rural areas.			✓
7.2.2.b	Protect and support the character, economic viability, and historic integrity of Maui's small towns.			✓
7.2.2.c	Use infrastructure, public service, and design standards that are appropriate to rural areas.			✓
7.2.2.d	Discourage land use and urban design that impede interconnectivity between adjacent communities.			✓
Analys	is: Not Applicable			
URBAN	AREAS			
Goal:				
7.3	Maui will have livable human-scale urban communities, an efficient and sustainable land use pattern, and sufficient housing and services for Maui residents.			✓
MAUI ISLAND PLAN Goals, Objectives and Policies (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)			N/S	N/A
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Objecti	ve:			
7.3.1	Facilitate and support a more compact, efficient, human-scale urban development pattern.			✓
Policies	<u>.</u>			
7. 3.1.a	Ensure higher-density compact urban communities, infill, and redevelopment of underutilized urban lots within Urban Growth Boundaries.			✓
7.3.1.b Maintain a distinct separation between communities, such as but not limited to, Wailuku and Waikapū; Wailuku and Waihe'e; Pukalani and Makawao; Pukalani and Kula; Makawao and Hāli'imaile; Lahaina and Kā'anapali; Kīhei and Mā'alaea; and Mā'alaea and Waikapū, to protect the character and identity of Maui's communities.				✓
7.3.1.c Strengthen evaluation requirements for new urban expansion, new towns, and major urban infill projects within urban growth areas. Tailor submittal requirements to reflect the impact or scale of different projects.				✓
<ul> <li>7.3.1.d Ensure future amendments to urban growth boundaries achieve the following:</li> <li>(1) provide a beneficial extension of the existing community; (2) are in areas where it is cost-effective to provide and operate infrastructure/public service facilities; and (3) do not promote automobile-oriented land use patterns.</li> </ul>				✓
7.3.1.e Evaluate the impact of gated communities on inter-connectivity.				✓
7.3.1.f Encourage the development and implementation of neighborhood design standards that are environmentally friendly, such as LEED for Neighborhood Development (LEED – ND) standards.				✓
7.3.1.g	7.3.1.g Discourage future pyramid zoning within the industrial zoning districts, while allowing accessory commercial uses and grandfathering existing uses.			✓
7.3.1.h Promote agriculture by encouraging community gardening, community- supported agricultural programs, and farmers markets within and adjacent to urban areas.				✓
7.3.1.i	7.3.1.i Discourage land use and urban design that impedes inter-connectivity between adjacent communities.			✓
<u>Objecti</u>	<u>ve:</u>			
7. 3.2	Facilitate more self-sufficient and sustainable communities.			$\checkmark$
Policies	<u>3:</u>			
7.3.2.a	When developing new communities, provide sufficient lands for commercial, appropriate industrial, educational, spiritual, and non-profit uses to serve the daily needs of community residents.			✓
7.3.2.b	.b Site community facilities such as schools, parks, libraries, and community centers within walking and biking distance of residences.			✓
7.3.2.c	Facilitate self-sufficient communities and shorten commutes by:			$\checkmark$
	(1) Directing residential development to job-rich areas;			$\checkmark$
	(2) Allowing for appropriate commercial development and community services to shorten commutes; and			✓
	(3) Allowing home occupations or home-based businesses that are compatible			$\checkmark$

MAUI ISLAND PLAN Goals, Objectives and Policies (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)				N/A
	with surrounding neighborhoods and lifestyles.			
7.3.2.d	Ensure, where appropriate, that affordable employee housing and multi-modal transportation opportunities are located near major employment centers.			✓
7.3.2.e	Discourage the establishment of bedroom communities where long commutes are required to employment centers.			✓
7.3.2.f	7.3.2.f Facilitate the development of housing by focusing projects in locations where land and infrastructure costs facilitate the development of affordably-priced housing.			✓
7.3.2.g	Provide incentives to facilitate the development of multifamily housing.			$\checkmark$
7.3.2.h	Encourage the placement of rental housing projects in the same areas as for- sale housing to facilitate mixed-income communities.			✓
7.3.2.i	Develop communities that provide sufficient parks, schools, libraries, and other essential public facilities and services to serve resident needs.			✓
7.3.2.j	Promote agriculture by encouraging community gardening, edible landscaping, community-supported agricultural programs, and farmers markets within and adjacent to urban areas.			✓
<u>Objectiv</u>	<u>/e:</u>			-
7.3.3	Strengthen the island's sense of place.			✓
Policies	<u>:</u>	•		
7.3.3.a	Protect and enhance the unique architectural and landscape characteristics of each community.			✓
7.3.3.b	Encourage Hawaiian architecture and tropical building designs.			$\checkmark$
7.3.3.c	Support the continued revitalization of historic country towns, Wailuku Town, and Kahului's commercial core and harbor-front without displacing traditional, cultural, recreational and customary uses.			✓
7.3.3.d	Strongly encourage the preservation of buildings, structures, and sites of historic significance.			✓
7.3.3.e	Require community input through Design Workshops for major new urban expansion, new towns, and major urban infill projects.			✓
7.3.3.f	Require design enhancement, landscaping, and integration of park and rides, bicycle parking areas, and mass-transit infrastructure to mitigate the effect of parking lots and structured parking on the urban landscape.			✓
7.3.3.g	Ensure that safe and attractive public spaces (e.g., plazas, parks, town/village squares) are provided throughout the island's urban areas.			✓
<u>Objectiv</u>	<u>/e:</u>			
7.3.4	Strengthen planning and management for the visitor industry to protect resident quality of life and enhance the visitor experience.			✓
Policies	<u> </u>			
7.3.4.a	Discourage the conversion of hotel units to timeshares and fractional ownership.			$\checkmark$
7.3.4.b	Monitor and manage the amount of, and impacts from, timeshares and fractional ownership.			✓

MAUI ISLAND PLAN Goals, Objectives and Policies (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)			N/S	N/A
7.3.4.c	Manage short-term rentals and bed-and-breakfast homes through a permitting and regulatory process in accordance with adopted ordinances and community plan policies.			~
7.3.4.d	Limit large-scale resort development to the four existing resort destination areas of Wailea, Mākena, Kapalua and Kā'anapali. "Large Scale Resort" is defined as complexes that include multiple accommodation facilities, activity businesses, retail complexes, and other amenities.			~
<u>Objecti</u>	<u>ve:</u>	•		
7.3.5	Ensure that Maui's planning and development review process becomes more transparent, efficient, and innovative.			>
Policie	<u>s:</u>			
7.3.5.a	Encourage greater community involvement in land use planning and decision making.			✓
7.3.5.b	Establish a predictable and timely development review process that facilitates the approval of projects that meet planning and regulatory requirements.			✓
7.3.5.c	Increase inter-agency coordination between the Department of Planning and all State and County agencies responsible for infrastructure and public facilities provision, particularly as it relates to the mitigation of long-term cumulative impacts resulting from development projects.			~
7.3.5.d Provide greater certainty and transparency in the development review process.				
7.3.5.e	Expand and maintain land use and geographic information system databases for improved decisions, and make data and products available to the public.			>
Analys	is: Not Applicable.			
<u>CHAPT</u>	ER 8 – DIRECTED GROWTH PLAN			
URBAN	I AND SMALL TOWN GROWTH AREA			
<u>Goal:</u>		1		
8.1	Maui will have well-serviced, complete, and vibrant urban communities and traditional small towns through sound planning and clearly defined development expectations.			~
Policie	<u>s:</u>			
8.1.a	The County, with public input, will be responsible for designating new growth areas where infrastructure and public facilities will be provided, consistent with the policies of the MIP and in accordance with State and County infrastructure plans.			~
8.1.b	Amendments to a UGB or STB shall be reviewed as a MIP amendment. A UGB or STB shall only be expanded if the island-wide inventory (maintained by the Department of Planning) of existing land uses (residential, commercial, ndustrial) indicates that additional urban density land is necessary to provide for the needs of the projected population growth within ten years of that inventory; or, during the decennial update of the MIP.			•
8.1.c	Community plans shall provide for urban density land use designations only within UGBs and Small Towns. The County may only support and approve State Urban Land Use Designations for areas within UGBs, STBs, and Rural Villages.			✓
8.1.d	The unique character and function of existing small towns shall be protected to			$\checkmark$

MAUI ISLAND PLAN Goals, Objectives and Policies (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)			N/S	N/A
retain and preserve their sense of place.				
8.1.e	New development shall be consistent with the UGBs, STBs, and all other applicable policies of the MIP. New urban-density development shall not be allowed outside of a UGB or STB.			✓
8.1.f	The County, as a condition of development approval, shall require developers of privately owned infrastructure systems to provide financial insurance (bonding, etc.) for the operation and maintenance of these systems.			✓
8.1.g	The County shall implement a zoning program to comprehensively redistrict and rezone lands within UGBs according to updated community plan policies and map designations.			✓
8.1.h	The County will seek to focus capital improvements (schools, libraries, roads, and other infrastructure and public facilities) within the UGBs and STBs in accordance with the MIP.			✓
8.1.i	The County will promote (through incentives, financial participation, expedited project review, infrastructure/public facilities support, etc.) appropriate urban infill, redevelopment and the efficient use of buildable land within UGBs to avoid the need to expand the UGBs.			~
8.1.j	The MIP's UGBs and STBs shall not be construed or implemented to prohibit the construction of a single-family dwelling on any existing parcel where otherwise permitted by law.			✓
Analys	sis: Not Applicable			
RURAL	<u>- GROWTH AREA</u>			
<u>Goal:</u>				
8.2	Maui will maintain opportunities for agriculture and rural communities through sound planning and clearly defined development expectations.			✓
Policie	<u>s:</u>			
8.2.a	Amendments to a RGB shall be reviewed as an MIP amendment. A RGB shall only be expanded if an island-wide inventory of existing land uses (residential, commercial, industrial) indicates that additional lands are necessary to provide for the needs of the projected population growth within ten years of that inventory; or, during the decennial update of the MIP.			✓
8.2.b	New development shall be consistent with RGB and all other applicable policies and requirements of the MIP. Public, quasi-public, civic, and limited commercial or industrial uses may be allowed in the RGB when the proposed uses demonstrate a public need and are consistent with the Community Plan and zoning.			✓
8.2.c	Environmental protection and compatibility will be a top priority in rural growth areas.			✓
8.2.d	All development within rural growth areas should avoid encroachment upon prime agricultural land.			$\checkmark$
8.2.e	Rural growth areas include Rural Residential Areas and Rural Villages. Rural residential areas may be designated when they are located in association with or on the border of urban growth areas or Small Towns; and/or when they provide for complete, self-sufficient rural communities with a range of uses to be developed at densities that do not require urban infrastructure.			~

MAUI (Key:	ISLAND PLAN Goals, Objectives and Policies S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
8.2.f	Community plans shall provide for rural density land use designations only within RGBs; provided that limited community plan urban designations may be allowed within Rural Villages. New rural growth areas shall not be located where urban expansion may ultimately become necessary or desirable. New rural-density development shall not be allowed outside of a RGB.			✓ ✓
8.2.g	New rural growth areas intended to be complete, self-sufficient rural communities must be located a significant distance from existing urban areas, distinctly separated by agricultural or open lands.			✓
8.2.h	Urban-scale infrastructure and public facilities shall not be provided in rural areas except as described in the defined Level-of-Service (LOS) standards. There should be no expectations of urban services in rural areas.			✓
8.2.i	Urban development standards shall not be required within RGBs except in fulfillment of Federal law.			✓
8.2.j	The unique character and function of existing small towns and rural communities shall be protected to retain and preserve their sense of place.			✓
8.2.k	Preserve rural landscapes in which natural systems, cultural resources, and agricultural lands are protected and development compliments rural character and contributes to the viability of communities and small towns.			✓
8.2.I	The MIP's RGBs shall not be construed or implemented to prohibit the construction of a single family dwelling on any existing parcel where otherwise permitted by law.			✓
8.2.m	The County shall implement a zoning program to comprehensively redistrict and rezone lands within RGBs, and to implement community plan policies and map designations.			~
8.2.n	At the time of zoning from agricultural to rural, Council will consider prohibiting restrictions on agricultural activity.			✓
Analy	/sis: Not Applicable			
PRO	TECTED AREA POLICY	1	1	1
8.3.a	The Protected Areas in Diagrams E-1, NW-1, N-1, NE-1, S-1, SE-1, and WC-1 should be concurrently reviewed with Table 8-2 and with any proposed land uses that may result in an adverse impact on a Protected Area. The County Council and the Administration should be notified if a Protected Area may be compromised by a development proposal.	<ul> <li>✓</li> </ul>		
Analysis: Mākena State Park is located in the Mākena-La Perouse-Kanaio Protected Area, an area identified for Preservation in the Protected Areas Diagram S-1. Preservation Areas may include accessory structures such as restrooms and other structures consistent with the purpose and intent of the Preservation Area. The attributes of the Mākena State Park Preservation designation will not be compromised by the proposed project.				

# F. <u>KIHEI-MAKENA COMMUNITY PLAN</u>

The project sites are located within the Kihei-Makena Community Plan region, one (1) of nine (9) community plan regions established in the County of Maui. Each region's growth and development is guided by a Community Plan. The County's Community Plan reflects current and anticipated conditions in the Kīhei-Mākena region and advances planning

goals, objectives, policies, and implementation considerations to guide decision-making in the region. The primary purpose of the Community Plan is to outline a detailed agenda for carrying out these policies and objectives. The Kihei-Makena Community Plan was adopted by the County of Maui and became effective in 1998. The Community Plan land use map designates the subject property as "Park (PK)". The proposed project is in compliance with the "Park" designated use.

The proposed project is consistent with the following goals, objectives, and policies of the Kihei-Makena Community Plan as outlined below.

# LAND USE

### <u>Goal:</u>

A well-planned community with land use and development patterns designed to achieve the efficient and timely provision of infrastructural and community needs while preserving and enhancing the unique character of Mā'alaea, Kīhei, Wailea, and Mākena, as well as the region's natural environment, marine resources, and traditional shoreline uses.

### **Objectives and Policies:**

\* \* \*

f. Establish a distribution of land uses which provides housing, jobs, shopping, open space, and recreation areas in close proximity to each other in order to enhance Kihei's neighborhoods and to minimize dependence on authomobilies.

#### Land Use Objectives and Policies

1. Preserve coastal vistas, open space and recreational opportunities for residents by prohibiting further shoreline development except in places designated on the 1997 community plan land use map, and prohibit future community plan amendments along the shoreline that would increase the intensity of land use, with the exception of land use that is public or quasi-public in nature.

#### **ENVIRONMENT**

#### <u>Goal</u>:

Preservation, protection, and enhancement of Kihei-Mākena's unique and fragile environmental resources.

#### **Objectives and Policies:**

a. Maintain and enhance the long-term availability of shoreline resources for public enjoyment through adequate access, space,

and facility provisions, and through on-going resource management programs.

\* \* \*

c. Require that new shoreline development respect shoreline resources and maintain public access:

\* \* \*

3. Planning for new shoreline development, as well as redevelopment, shall consider the cyclic nature of beach processes. Setbacks shall be used to provide a sufficient buffer between the ocean and structures to allow for periodic and long-term accretion and erosion of the shoreline.

A Coastal Erosion Rate Analysis shall be developed. The planning commissions are encouraged to incorporate data from the analysis into planning decisions for shoreline areas, especially with respect to shoreline building setbacks. In the interim period prior to the completion of the analysis, the planning commissions are further encouraged to utilize minimum setbacks for multi-family and hotel uses of 150 feet from sandy shorelines, and 75 feet from rocky shorelines, or 25% of the average lot depth, whichever is greater.

- 4. Storm water run-off from proposed developments shall not adversely affect the marine environment and nearshore and offshore water quality.
- 5. Planning, design, and layout for new development shall be integrated with public shoreline use and sound principles of resource management. Permit recreational activities in the shoreline zone which respond to shoreline characteristics and principles of sound resource management. Activities which damage or deplete shoreline resources, or are incompatible with ecological systems, shall not be permitted.

\* \* \*

- e. Protect the quality of nearshore waters by ensuring that land-based discharges meet water quality standards. Continued monitoring of existing and future waste disposal systems is necessary to ensure their efficient operation. Programs should be implemented to reduce the reliance on injection wells for wastewater disposal.
- f. Protect all wetland resources, such as those at Kealia Pond and near Road "C". These open space and wildlife habitat resources are important for flood control and their natural beauty.

#### CULTURAL RESOURCES

#### <u>Goal:</u>

*Identification, preservation, enhancement, and appropriate use of cultural resources, cultural practice, and historic sites that:* 

- a. provides a sense of history and defines a sense of place for the Kihei-Mākena region; and
- b. preserves and protects native Hawaiian rights customarily and traditionally exercised for subsistence, cultural, and religious purposes in accordance with Article XII, Section 7, of the Hawaii State Constitution, and the Hawaii Supreme Court's PASH opinion, 79 Haw. 425 (1995).

#### **Objectives and Policies:**

a. Identify, preserve, protect and restore significant historical and cultural sites.

\* \* \*

c. Encourage and protect traditional mauka and makai accesses, cultural practices and rural lifestyles.

#### ECONOMIC ACTIVITY

#### <u>Goal:</u>

A diversified and stable economic base which serves resident and visitor needs while providing long-term resident employment.

#### **Objective and Policy:**

1. Establish a sustainable rate of economic development consistent with concurrent provision of needed transportation, utilities, and public facilities improvements.

#### PHYSICAL AND SOCIAL INFRASTRUCTURE

#### <u>Goal:</u>

Provision of facility systems, public services and capital improvement projects in an efficient, reliable, cost effective, and environmentally sensitive manner which accommodates the needs of the Kihei-Mākena community, and fully support present and planned land uses, especially in the case of project district implementation.

Allow no development for which infrastructure may not be available concurrent with the development's impacts.

#### LIQUID AND SOLID WASTE

#### **Objectives and Policies:**

\* \* \*

b. Provide efficient, safe and environmentally sound systems for the reuse, recycling, and disposal of liquid and solid wastes.

\* \* \*

d. Encourage public awareness of the need to reduce, reuse, recycle and compost waste materials, and make composting facilities available to the public.

#### DRAINAGE

#### **Objectives and Policies:**

a. Design drainage systems that protect coastal water quality by incorporating best management practices to remove pollutants from runoff. Construct and maintain, as needed, sediment retention basins and other best management practices to remove sediments and other pollutants from runoff.

\* \* \*

d. Minimize the increase in discharge of storm water runoff to coastal waters by preserving flood storage capacity in low-lying areas, and encouraging infiltration of runoff.

#### RECREATION

#### **Objectives and Policies:**

a. Provide high-quality recreational facilities to meet the present and future needs of residents of all ages and physical ability.

\* \* \*

e. Improve recreation facilities and services through the integration of public parking, vehicular drop-offs and turnarounds, and sanitation facilities with facility planning and design.

\* \* \*

f. Improve public access to shoreline and nearshore resources through the following measures:

\* \* \*

(3) Require setbacks to include recreational space on lands behind the legally defined public shoreline zone wherever possible. This allows for adequate recreational activities and proper management of the shoreline.

\* \* \*

h. Provide for adequate parking at all park facilities. Many existing parks lack sufficient parking and require substantial increases in parking spaces.

#### DISCUSSION AND RESPONSE

The proposed project supports the aforementioned goals, objectives, and policies of the Kihei-Makena Community Plan by providing high quality recreational amenities at Mākena State Park to meet the present and future needs of Park users. The proposed project also involves improved parking facilities. Recycling bins will be provided at the proposed comfort stations to reduce disposal at Central Maui Landfill. The proposed project will be developed with appropriate setbacks to allow adequate recreational shoreline activities and proper shoreline management. The proposed project involves drainage system improvements that are designed to protect the nearshore water quality and reduce sediments in stormwater runoff. The proposed project will incorporate sustainable design features to promote energy efficiency and conservation. The project also respects and preserves a buffer around the area of the Pu'u Ōla'i cinder cone, a site of cultural significance according to the Cultural Impact Assessment.

# G. <u>COUNTY ZONING</u>

The proposed project sites are zoned "PK, Park", "OZ, Open Zone", and "R-3, Residential" districts pursuant to the Maui County zoning code. Parks are a permitted use in Park and Residential districts. The portion of the project in the "OZ, Open Zone" consists of a grassed drainage sump adjacent to the North Site comfort station. See **Figure 16**. While no description of allowed uses is given in Maui County Code for the Open Zone designation, consultation with the Planning Department has determined that the proposed improvements are permitted with respect to the existing zoning designations underlying the project site.

# H. HAWAI'I COASTAL ZONE MANAGEMENT PROGRAM

The Hawai'i Coastal Zone Management Program (HCZMP), as formalized in Chapter 205A, HRS, establishes objectives and policies for the preservation, protection, and restoration of natural resources of Hawai'i's coastal zone. The subject property is within the County of Maui's Special Management Area. As such, the applicability of coastal zone management considerations has been reviewed and assessed.



#### 1. <u>Recreational Resources</u>

#### **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 restoration of coastal resources that have recreational and ecosystem value including, but not limited to coral reefs, surfing sites, fishponds, sand beaches, and coastal dunes when these resources will be unavoidably damaged by development; or requiring monetary compensation to the State for recreation when restoration 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 uses 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 nonpoint sources of pollution to protect,
  - 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, and county authorities; and crediting such dedication against the requirements of section 46-6.

**Response:** The proposed project will enhance the Park user experience and amenities at Mākena State Park. BMPs will be carried out during construction to protect shoreline resources from adverse development impacts. Adequate shoreline setback distances will be established to protect the shoreline from upland development impacts. As such, the proposed action is not expected to impact coastal recreational opportunities or affect existing public access to the shoreline.

## 2. <u>Historic/Cultural Resources</u>

#### **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 archaeological 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.

**<u>Response</u>**: The proposed project is not anticipated to have an adverse effect on historical or cultural resources. An AIS was conducted to assess the presence of historical and archaeological resources within the State Park. It is noted that no archaeological sites have been identified within the proposed project areas. An Archaeological Monitoring Plan (AMP) has been prepared for all future groundaltering activities and submitted for review and approval to SHPD prior to the commencement of construction activities.

#### 3. <u>Scenic and Open Space Resources</u>

#### **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 that are not coastal dependent to locate in inland areas.

**Response:** As indicated previously, appropriate setbacks and construction BMPs will be established to protect the shoreline and coastal area from development impacts. In the long term, the proposed project will not adversely impact coastal scenic and open space resources or scenic views of Pu'u Ōla'i.

# 4. <u>Coastal Ecosystem</u>

#### Objective:

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

#### Policies:

- a. Exercise an overall conservation ethic, and practice stewardship in the protection, use, and development of marine and coastal resources;
- b. Improve the technical basis for natural resource management;
- c. Preserve valuable coastal ecosystems of significant biological or economic importance, including reefs, beaches, and dunes;
- d. 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
- e. Promote water quantity and quality planning and management practices that reflect the tolerance of fresh water and marine ecosystems and maintain and enhance water quality through the development and implementation of point and nonpoint source water pollution control measures.

**Response:** The proposed improvements have been designed to avoid impacting the nearshore marine environment. Wastewater from the comfort stations will be collected and held in storage tanks and pumped into trucks and transported to a permitted wastewater reclamation facility for treatment and disposal. The proposed action involves drainage system improvements that will

reduce stormwater runoff impacts on the nearshore environment. As such, the proposed project is not anticipated to have adverse impacts on coastal/shoreline resources, including reefs and marine resources. Also, the proposed project does not include any stream diversions or channelization.

Appropriate BMPs will be utilized to ensure that construction runoff is appropriately captured, minimizing any impact on coastal waters.

# 5. <u>Economic Use</u>

### **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 and coastal related development are located, designed, and constructed to minimize exposure to coastal hazards and adverse social, visual, and environmental impacts in the coastal zone management area; and
- c. Direct the location and expansion of coastal development to areas designated and used for that development and permit reasonable long-term growth at those areas, and permit coastal development outside of designated areas when:
  - *i.* Use of designated locations is not feasible;
  - *ii.* Adverse environmental effects and risks from coastal hazards are minimized; and
  - *iii.* The development is important to the State's economy.

**<u>Response</u>**: The proposed project will stimulate the economy through the generation of construction jobs. The proposed project does not contravene the objective and policies for economic use.

#### 6. <u>Coastal Hazards</u>

#### Objective:

Reduce hazard to life and property from coastal hazards.

### Policies:

- a. Develop and communicate adequate information about the risk of coastal hazards;
- b. Control development, including planning and zoning control, in areas subject to coastal hazards;
- c. <u>Ensure that developments comply with requirements of the National</u> <u>Flood Insurance Program; and</u>
- d. <u>Prevent coastal flooding from inland projects.</u>

**<u>Response</u>**: Drainage improvements will be designed in accordance with the Drainage Standards of the County of Maui to ensure that the project will not adversely affect downstream properties.

### 7. <u>Managing Development</u>

### 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 or 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.

**<u>Response:</u>** Opportunities for agency and public review of the proposed action are provided pursuant to Chapter 343, HRS and the SMA Use Permit review process. The State DLNR has, and will continue to engage Park stakeholders through the development review process.

# 8. <u>Public Participation</u>

#### Objective:

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

### Policies:

- a. Promote public involvement in coastal zone management processes;
- 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 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 has, and will continue to address public awareness, education, and participation objectives. Meetings with Park stakeholders have also been held to solicit comments regarding the proposed project. Opportunities for agency and further public review of the proposed action have been provided through the notification review and comment processes pursuant to Chapter 343, HRS and the SMA Use Permit application process. Following completion of the EA process, a public hearing will be scheduled before the Maui Planning Commission for review of the SMA Use Permit application.

# 9. <u>Beach Protection</u>

### Objective:

- A. Protect beaches and coastal dunes for:
  - *(i) Public use and recreation;*
  - (ii) The benefit of coastal ecosystem; and
  - (iii) Use as natural buffers against coastal hazards; and
- B. Coordinate and fund beach management and protection.

#### Policies:

- a. Locate new structures inland from the shoreline setback to conserve open space, minimize interference with natural shoreline processes, and minimize loss of improvements due to erosion;
- b. Prohibit construction of private shoreline hardening structures, including seawalls and reventments, at sites having sand beaches and at sites where shoreline hardening structures interfere with existing recreational and waterline activities;
- c. Minimize the construction of public shoreline hardening structures, including seawalls and revetments at sites having sand beaches and at sites where shoreline hardening structures interfere with

existing recreational and waterline activities;

- d. Minimize grading of and damage to coastal dunes;
- e. Prohibit private property owners from creating a public nuisance by inducing or cultivating the private property owner's vegetation in a beach transit corridor; and
- f. Prohibit private property owners from creating a public nuisance by allowing the private property owner's unmaintained vegetation to interfere or encroach upon a beach transit corridor.

**<u>Response:</u>** Appropriate setbacks from the shoreline have been established to ensure the proposed project will not impact shoreline processes.

#### 10. <u>Marine Resources</u>

#### **Objective:**

*Promote the protection, use, and development of marine and coastal resources to assure their sustainability.* 

#### Policies:

- a. Ensure that the use and development of marine and coastal resources are ecologically and environmentally sound and economically beneficial;
- b. Coordinate the management of marine and coastal resources and activities to improve effectiveness and efficiency;
- c. 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;
- d. Promote research, study, and understanding of ocean and coastal processes, impacts of climate change and sea level rise, marine life, and other ocean resources to acquire and inventory information necessary to understand how coastal development activities relate to and impact ocean and coastal resources; and
- e. Encourage research and development of new, innovative technologies for exploring, using, or protecting marine and coastal resources

**<u>Response:</u>** As previously stated, appropriate shoreline setback distances, drainage improvements and construction BMPs will be established for the proposed project. As such, the proposed project is not anticipated to have an impact on marine or coastal resources.

In addition to the foregoing objectives and policies, SMA permit review criteria pursuant to §205A.30.5(1) Prohibitions provides that:

No special management area use permit or special management area minor permit shall be granted for structures that allow artificial light from floodlights, uplights, or spotlights used for decorative or aesthetic purposes when the light:

- (1) Directly illuminates the shoreline and ocean waters; or
- (2) Is directed to travel across property boundaries toward the shoreline and ocean waters.

Further, artificial lighting provided by a government agency or its authorized users for government operations, security, public safety, or navigational needs shall make reasonable efforts to properly position or shield lights to minimize adverse impacts.

**Response:** All construction operations will be carried out during daylight hours. Upon completion, outdoor lights will be shielded and will not directly illuminate any shoreline or ocean waters. All outdoor lighting will comply with the County's Outdoor Lighting ordinance.

# I. <u>MAUI PLANNING COMMISSION SPECIAL MANAGEMENT AREA</u> <u>RULES AND REGULATIONS</u>

As noted above, the project sites are located within the County of Maui's Special Management Area. The Rules and Regulations of the Maui Planning Commission, Chapter 202 were established in order to implement HRS, Chapter 205A-26 relating to Coastal Zone Management and Special Management Areas. In addition to establishing procedures for processing of SMA applications and procurement of related permits, the rules assist the Commission in giving consideration to State policy regarding coastal zones.

This section addresses the project's relationship to applicable coastal zone management considerations as set forth in the Maui Planning Commission Rules and Regulations, Chapter 202, "Special Management Area Permit Procedures," which are provided for considering the significance of potential environmental and ecological effects of a proposed action. The criteria have been reviewed and analyzed with respect to the proposed project.

### 1. <u>Involves an irrevocable commitment to loss or destruction of any natural or</u> <u>cultural resources.</u>

The proposed project does not involve an irrevocable commitment to loss or destruction of any natural or cultural resources. As noted, an AIS was carried for

the project as well as a CIA. An Archaeological Monitoring Plan has been prepared and submitted to SHPD for review and approval prior to any ground altering activities. In accordance with Section 6E-43.6, HRS and Chapter 13-300, Hawai'i Administrative Rules (HAR); if any significant cultural deposits or human skeletal remains are encountered, work will stop in the immediate vicinity and SHPD will be contacted to establish the appropriate protocols and level of mitigation. BMPs will be implemented to prevent impacts to wildlife and the natural environment.

# 2. <u>Significantly curtails the range of beneficial uses of the environment.</u>

Implementation of the proposed project will enhance overall experience for Park users at Mākena State Park. It will not curtail the range of beneficial uses of the environment or activities at the Park.

Applicable dust control, noise control, and drainage control measures will be implemented during construction activities to minimize impacts to the surrounding environment.

# 3. <u>Conflicts with the County's or the State's long-term environmental policies</u> or goals.

The proposed project does not conflict with the County's or State's long-term environmental policies or goals. This EA has been prepared pursuant to the environmental laws of the State found in Chapter 343, HRS. Refer to Sections A through E in Chapter III (this chapter) of this document for a detailed assessment of the project's consistency with County and State policies and goals.

# 4. <u>Substantially affects the economic or social welfare and activities of the</u> <u>community, County, or State.</u>

On a short-term basis, the project will support construction-related employment and benefit the local economy during construction. On a long-term basis, the project will not adversely affect the economic or social welfare activities of the community, County, or State.

# 5. <u>Involves substantial secondary impacts, such as population changes and</u> increased effects on public facilities, streets, drainage, sewage, and water systems, and pedestrian walkways.

The proposed project is not anticipated to result in adverse, secondary impacts to population or public facilities or services. Proposed drainage improvements will accommodate the increase in runoff resulting from the proposed project. Water services will be provided by the County. The proposed project is not a population generator and will not affect population change nor affect future land use development patterns. As such, no substantial cumulative nor secondary impacts are anticipated on public facilities or services.

# 6. <u>In itself has no significant adverse effects but cumulatively has</u> <u>considerable effect upon the environment or involves a commitment for</u> <u>larger actions.</u>

The proposed project is a stand alone action and does not represent a commitment for larger actions. As such, it is not anticipated to have a cumulative adverse impact on the environment, nor involve a commitment to larger actions.

# 7. <u>Substantially affects a rare, threatened, or endangered species of animal or plant, or its habitat.</u>

A biological survey was conducted to ensure that any sensitive biological resources within the project sites would be identified and provided adequate protection. Refer to **Appendix** "**D**". In addition, consultation was undertaken with USFWS to identify potential impacts and recommended mitigative measures for threatened and endangered species. Refer to **Appendix** "**C**". The biological survey report and the USFWS provided recommendations regarding the Hawaiian goose, Hawaiian waterbirds, Hawaiian seabirds, sea turtles, the Hawaiian hoary bat, and the Blackburn's sphinx moth. With implementation of these recommendations, the proposed project is not anticipated to present significant adverse impacts on rare, threatened, or endangered species of animal or plant, or their habitats.

# 8. <u>Is contrary to the State plan, County's general plan, appropriate community</u> plans, zoning and subdivision ordinances.

The proposed action is in accordance with the Hawai'i State Plan, Countywide Policy Plan, and the Maui Island Plan urban growth strategy and the Kihei-Makena Community Plan. Refer to Sections A through E in Chapter III (this chapter) of this document for a more detailed assessment.

# 9. Detrimentally affects air or water quality or ambient noise levels.

Short-term air and water quality and noise impacts from the proposed project will be mitigated through the implementation of BMPs. Long-term impacts to air and water quality are not anticipated as a result of the proposed project.

# 10. <u>Affects an environmentally sensitive area, such as flood plains, shoreline,</u> <u>tsunami zone, erosion-prone area, geologically hazardous land, estuary,</u> <u>fresh waters, or coastal waters.</u>

The proposed project is located inland of the 150-foot shoreline setback area for the property and outside of special flood hazard zones. While the project area is located within the tsunami evacuation zone, the proposed project will not affect routes out of the tsunami evacuation zone. As such, no adverse impacts related to tsunami or flood hazards or impacts to environmentally sensitive areas are anticipated with implementation of the proposed project.

# 11. <u>Substantially alters natural land forms and existing public views to and along the shoreline.</u>

The project area is located within the existing developed parking areas of the Park. The proposed project will not adversely alter natural land forms such as Pu'u Ōla'i or Oneloa Wetland. Appropriate shoreline setback distances have been established for the comfort station improvements to protect shoreline processes and maintain public view corridors along the shoreline.

### 12. <u>Is contrary to the objectives and policies of chapter 205A, HRS.</u>

A review of the objectives and policies of Chapter 205A, HRS, is provided in its entirety in Section H of Chapter III of this document, which addresses the project's relationship to the Coastal Zone Management considerations. Based on the foregoing analysis, the project will appropriately and adequately mitigate impacts to SMA-relevant areas of interest. Accordingly, there are no significant adverse impacts expected with implementation of the project.

# J. HRS 205A-26 SPECIAL MANAGEMENT AREA GUIDELINES

The proposed project is consistent with the State's guidelines for issuance of a SMA Use Permit by the Maui Planning Commission, as set forth in HRS, Chapter 205A-26:

- (1) All development in the special management area shall be subject to reasonable terms and conditions set by the authority in order to ensure:
  - (A) Adequate access, by dedication or other means, to publicly owned or used beaches, recreation areas, and natural reserves is provided to the extent consistent with sound conservation principles;
  - (B) Adequate and properly located public recreation areas and wildlife preserves are reserved;

- (C) Provisions are made for solid and liquid waste treatment, disposition, and management which will minimize adverse effects upon special management area resources; and
- (D) Alterations to existing land forms and vegetation, except crops, and construction of structures shall cause minimum adverse effect to water resources, beaches, coastal dunes, and scenic and recreational amenities and minimize impacts from floods, wind damage, storm surge, landslides, erosion, sea level rise, siltration, or failure in the event of earthquake.
- (2) No development shall be approved unless the authority has first found:
  - (A) That the development will not have any substantial adverse environmental or ecological effect, except as such adverse effect is minimized to the extent practicable and clearly outweighed by public health, safety, or compelling public interests. Such adverse effects shall include, but not be limited to, the potential cumulative impact of individual developments, each one of which taken in itself might not have a substantial adverse effect, and the elimination of planning options;
  - (B) That the development is consistent with the objectives, policies, and special management area guidelines of this chapter and any guidelines enacted by the legislature; and
  - (C) That the development is consistent with the county general plan, community plan, and zoning; provided that a finding of consistency shall not preclude concurrent processing where a general plan, community plan, or zoning amendment may also be required.
- (3) The authority shall seek to minimize, where reasonable:
  - (A) Dredging, filling or otherwise altering any bay, estuary, salt marsh, river mouth, slough or lagoon;
  - (B) Any development which would reduce the size of any beach or other area usable for public recreation;
  - (C) Any development which would reduce or impose restrictions upon public access to tidal and submerged lands, beaches, portions of rivers and streams within the special

management areas and the mean high tide line where there is no beach;

- (D) Any development which would substantially interfere with or detract from the line of sight toward the sea from the state highway nearest the coast; and
- (E) Any development which would adversely affect water quality, existing areas of open water free of visible structures, existing and potential fisheries and fishing grounds, wildlife habitats, or potential or existing agricultural uses of land.

# K. <u>SHORELINE SETBACK RULES</u>

The project sites are located several hundred feet inland within a shoreline-abutting parcel and, as such, the proposed action is not located within the County's maximum 150 foot shoreline setback area. Accordingly, a Shoreline Setback Assessment/Determination application for the proposed project has been submitted to the Department of Planning to confirm the imposed improvements are located inland (outside) of the shoreline setback area.

# SUMMARY OF ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED AND IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

IV

# IV. SUMMARY OF ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED AND IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

The proposed project may result in unavoidable construction-related impacts which include noisegenerated impacts associated with construction of the proposed improvements. Construction of the proposed project will be carried out in compliance with State Departement of Health Community Noise Control standards. Furthermore, Best Management Practices (BMPs), such as equipment mufflers and regular maintenance, will be employed to mitigate noise-related impacts. In addition, there may be temporary air quality impacts associated with dust generated from site work and exhaust emissions discharged by construction equipment. These impacts will be mitigated by BMPs for minimizing dust and providing erosion control.

Project implementation will require commitments of land, labor, material, and fuel resources. The land underlying the proposed project has been previously designated as a State Park. Labor, material, and fuel resources expended during construction are deemed justified when considered in relation to the existing land use designations for the property and the benefits to the Park and its users generated through implementation of the project.

In summary, the proposed action is not anticipated to create any significant, long-term adverse environmental effects.

# **ALTERNATIVES ANALYSIS**



# V. ALTERNATIVES ANALYSIS

A number of design alternatives were considered for provision of sanitary facilities for Mākena State Park (Park) users and treatment of wastewater. A series of meetings were held with the Oneloa Coalition, to provide information on project alternatives and solicit input. The Oneloa Coalition is a community-based volunteer committee with a stated mission to *"ensure the preservation of historical and cultural sites and the restoration and management of the natural ecology of Oneloa (Makena) State Park, while enhancing the stewardship of traditional and recreational uses for future generations."* Comments received from Oneloa Coalition members and community members regarding potential environmental impacts associated with wastewater collection and treatment were considered in identifying the preferred alternative. Refer to **Appendix "I"**. In addition, alternative site locations for the comfort station within the North Site were considered.

# A. <u>NO ACTION ALTERNATIVE</u>

There are currently no permanent restrooms or water supply infrastructure at the Park for drinking water or showers. While portable toilets are provided for Park users, they do not provide an adequate sanitation level. The lack of permanent sanitary facilities detracts from the Park users' experience. Some Park users may avoid the existing portable toilets. This results in a higher level of waste in other locations in the Park and in the ocean, potentially impacting the nearby environment and creating unsanitary conditions. The portable toilets also create an ongoing operational cost which is difficult for DSP to budget indefinitely.

In addition, the existing parking facilities are insufficient to accommodate the number of Park users, creating congestion as vehicles park outside of defined stalls within the parking lot or along the driveway or roadway. The proposed project would provide marked stalls to replace the improvised and disorganized parking of vehicles along the existing parking area driveway, and the number of vehicles in the lot will be limited to the capacity of the marked stalls to prevent overcrowding.

The no action alternative would involve a continuation of the current situation without sanitary restroom facilities and without addressing parking congestion in and around the Park. The no action alternative was not considered by State of Hawai'i, Department of Land and Natural Resources, Division of State Parks (DSP) to be a viable option for maintaining the Park's facilities in an appropriately clean, attractive, and safe condition.

# B. <u>DEFERRED ACTION ALTERNATIVE</u>

Similar to the no action alternative, the deferred action alternative would allow the current situation with inadequate sanitary facilities and parking to continue into the future. The deferred action alternative was not considered a viable option by DSP.

# C. OFFSITE WASTEWATER TREATMENT PLANT CONNECTION

The project sites are in a rural location and do not have access to a sewerline connection at this time. With this alternative, wastewater generated from the proposed comfort station toilets and sinks would be conveyed offsite via a new sewerline to the Mākena Resort's Wastewater Reclamation Facility (WWRF), located approximately two (2) miles away from the project area. The cost to construct this sewerline is substantial and is beyond the budget available for the project. In addition, the WWRF is located uphill from the project area and it would require significant energy and expense to pump the wastewater. As such, this alternative is not considered viable at this time. However, this alternative would eliminate the need for onsite wastewater storage, gray water disposal, and service to pump and truck wastewater away from the site. As such, in the future, if there is County or private wastewater infrastructure expanded to the Mākena State Park area that could be utilized by Park facilities, the WWRF option could be implemented at that time.

# D. ONSITE WASTEWATER TREATMENT OPTIONS

A number of alternatives for onsite treatment of wastewater were considered. These included treatment with septic tanks, onsite individual aerobic treatment units, fixed activated sludge treatment, and membrane bioreactor treatment. These treatment options vary in terms of cost, maintenance and energy requirements, and effluent quality, but all methods ultimately would involve disposal of effluent to new leach fields located within Mākena State Park. Due to feedback received from the Oneloa Coalition and Kihei Community Association regarding the potential impact to burials and concerns regarding impacts to marine life, stakeholders expressed the preference for alternatives which do not involve disposal of wastewater effluent onsite. As such, these alternatives were not pursued further. While composting toilets were suggested by some stakeholders, they were not considered as a viable alternative by DSP, as the anticipated waste load for the Mākena State Park comfort stations is too great to allow for proper decomposition to occur as designed in a composting toilet system.

# E. <u>SHOWER ALTERNATIVES</u>

A community survey conducted by the Oneloa Coalition in 2013 found that permanent restrooms and outdoor showers were the basic amenities that were wanted and needed at Mākena State Park. As such, the Preferred Alternative for the project includes two (2)

new outdoor showers located adjacent to the two (2) new comfort stations. The showers will drain via drainageway swales to new surface drainage basins.

However, comments have been received from some stakeholders requesting that showers not be included in the project scope due to concerns regarding disposal of shower effluent via the proposed surface drainage basins. As such, DSP has considered a "no shower" option as well as replacement of showers with foot rinse stations.

Removal of showers from the project scope was not considered ideal as this alternative would not meet the community's stated preference for outdoor showers at the Park. Furthermore, addition of showers reduces the volume of sand tracked into comfort station facilities. The no shower option would create maintenance issues associated with high volumes of sand accumulating in the comfort station facilities.

Foot rinse stations have been considered as an alternative to outdoor showers. Foot rinse fixtures would be located no more than 24 inches above the ground, discouraging their use as full-body showers. As such, it is anticipated that soaps and shampoos would not be used at foot rinse stations by most park visitors. Installation of foot rinse stations would mitigate tracking of sand inside comfort stations. DSP understands that the community's preference is for outdoor showers. As such, use of foot rinse stations is not considered to be DSP's preferred alternative at this time, but could be reconsidered based on stakeholder preferences.

# F. <u>PREFERRED ALTERNATIVE</u>

The Preferred Alternative represents the proposed action described in Chapter I of this report. This alternative involves construction of two (2) comfort stations utilizing flush toilets with containment tanks for wastewater containment and two (2) outdoor shower stations utilizing potable water with drainage to an evaporative retention area. This alternative also involves improvements to existing unpaved parking areas at the North Site and South Site with paving, striping, curbs, walkways, and related improvements. Implementation of this alternative will provide convenience to Park users and enhances sanitary conditions and cleanliness of the Park. These improvements will be designed to complement the rustic nature of the Park environment and allow removal of the portable toilets currently in use.

With implementation of this alternative, wastewater will be collected from the comfort stations and contained in a 13,000 gallon containment tank at the North Site and a 7,000 gallon containment tank at the South Site. Wastewater will not be treated onsite and no wastewater effluent will be released within the Park. The containment tanks will be pumped out regularly and wastewater will be transferred offsite for treatment at existing wastewater treatment facilities. As such, the Preferred Alternative accommodates the preference expressed by stakeholders for containment and removal of wastewater from

the site. This alternative's construction cost is lower than other alternatives, but has a higher operating cost due to the necessity of frequent pumping of the containment tanks. See **Table 6**. However, DSP considers the high operating cost to be justified in the context of providing comfort station facilities with zero release of effluent onsite.

Alternative	Approximate Construction Cost	Approximate Annual Operating Cost		
Containment Tank (Preferred Alternative)	\$58,700.00	\$124,800.00		
Septic Tank and Leach Field	\$101,600.00	\$2,400.00		
Fixed Activated Sludge Treatment	\$476,300.00	\$39,597.00		
Membrane Bio Reactor	\$250,000.00	\$8,278.00		
Offsite Wastewater Treatment	Greater than \$929,925.00	Not Available		
Source: State of Hawai'i, Department of Land and Natural Resources.				

Table 6. Cost Estimates for Wastewater Treatment Alternat	ives
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Among the wastewater treatment alternatives, there are only two (2) that would not involve release of wastewater effluent within the Park: the Preferred Alternative and the WWRF alternative. As the cost of conveying wastewater to the nearest WWRF is prohibitive, the Preferred Alternative of wastewater collection in holding tanks with periodic pumping was selected.

# G. NORTH SITE COMFORT STATION LOCATION

Initial plans located the North Site comfort station to the west of the existing parking lot. This location was close to the base of Pu'u Ōla'i and also located in the State Conservation district. Due to concerns over impacts to cultural, natural, or archaeological resources associated with Pu'u Ōla'i, the proposed comfort station was relocated to the south side of the existing parking lot away from the Conservation district lands.

# SIGNIFICANCE CRITERIA ASSESSMENT

# VI. SIGNIFICANCE CRITERIA ASSESSMENT

The proposed action involves implementation of comfort station, parking, and other related improvements at Mākena State Park. The "Significance Criteria" defined in Section 7 of the Chapter 11-200.1 of the Hawai'i Administrative Rules were reviewed and analyzed to determine whether the proposed project will have significant impacts on the environment. The following criteria and analyses are provided:

#### 1. Irrevocably commit a natural or cultural resource.

The proposed action represents a continuation of the Mākena State Park (Park) use in accordance with its existing function and capacity, and does not involve any actions which would permanently commit the resources of the State Park. As discussed previously, a Cultural Impact Assessment and Archaeological Inventory Survey have been completed for the project and an Archaeological Monitoring Plan has been prepared and submitted to SHPD for review/acceptance and will be implemented prior to any ground altering activities.

### 2. <u>Curtails the range of beneficial uses of the environment.</u>

The proposed action is anticipated to enhance the Park user's experience at Mākena State Park and will not curtail the range of beneficial uses of the environment or activities at the Park. Construction Best Management Practices (BMPs) will be implemented in order to minimize impacts to the surrounding environment.

# 3. <u>Conflict with the state's environmental policies or long-term environmental goals</u> established by law.

The proposed project does not conflict with the County's or State's long-term environmental policies or goals. This Environmental Assessment (EA) has been prepared pursuant to the environmental laws of the State found in Chapter 343, Hawai'i Revised Statutes.

# 4. <u>Have a substantial adverse effect on the economic welfare, social welfare, and</u> <u>cultural practices of the community and State.</u>

On a short-term basis, the project will support a limited level of construction-related employment to benefit the local economy. Long term, the proposed improvements will support the long-term management objectives of Mākena State Park by providing adequate park facilities at this popular South Maui beach park destination. The project will not adversely affect the economic or social welfare activities or cultural practices of the community, County, or State.

### 5. <u>Have a substantially adverse effect on public health.</u>

The proposed project will promote clean and sanitary conditions within Mākena State Park by providing adequate toilet and shower facilities (or foot rinse stations), as well as additional parking areas. As such, the proposed action is expected to provide a benefit and will not adversely affect public health.

# 6. <u>Involve substantial secondary impacts, such as population changes or effects on</u> <u>public facilities.</u>

The proposed project is not anticipated to result in adverse secondary impacts to the population or to public facilities or services. Proposed drainage improvements will retain the increase in runoff resulting from the proposed project. Water services will be provided by the County. The project is not a population generator and will not affect population change, nor affect future land use development patterns. As such, no substantial secondary impacts are anticipated on public facilities or services.

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

Construction activities will create temporary short-term nuisances related to noise and dust. Construction BMPs will be implemented by the contractor to ensure that fugitive dust and noise during project construction is limited. As previously discussed, significant adverse impacts to natural resources and the natural environment are not anticipated with implementation of the project.

# 8. <u>Be individually limited but cumulatively have substantial adverse effect upon the</u> <u>environment or involves a commitment for larger actions.</u>

The proposed project is not part of a larger action and represents the continuation of use of a public State Park. No adverse cumulative impacts are foreseen in connection with project implementation.

### 9. <u>Have a substantially adverse effect on a rare, threatened, or endangered species,</u> <u>or its habitat.</u>

As discussed in Chapter II, a biological survey of the project area was carried out to identify rare, threatened, or endangered species which may be present in the project area. In addition, consultation was undertaken with USFWS to identify potential impacts and recommended mitigative measures for threatened and endangered species. The biological survey report and the USFWS provided recommendations regarding the Hawaiian goose, Hawaiian waterbirds, Hawaiian seabirds, sea turtles, the Hawaiian hoary bat and the Blackburn's sphinx moth. All measures as recommended by the USFWS and the biological survey report will be implemented to ensure that these species will not be adversely impacted by the proposed action. With implementation of these

recommendations, the proposed project is not anticipated to present significant adverse impacts on rare, threatened, or endangered species of animal or plant, or their habitats.

# 10. <u>Have a substantial adverse effect on air or water quality or ambient noise levels.</u>

Short-term impacts to noise levels, air, and water quality during construction will be mitigated through use of construction BMPs. No long-term adverse effects to noise levels or air or water quality are anticipated.

# 11. <u>Have a substantial adverse effect on or be likely to suffer damage by being located</u> in an environmentally sensitive area such as a flood plain, tsunami zone, sea level rise exposure area, beach, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters.

The proposed project is located inland of the 150-foot shoreline setback area for the property and outside of special flood hazard zones. While the project area is located within the tsunami evacuation zone, the proposed project does not include habitable structures susceptible to tsunami damage, nor does it affect routes out of the tsunami evacuation zone. The project does not involve work within wetlands. As such, no adverse impacts related to tsunami or flood hazards or impacts to environmentally sensitive areas are anticipated with implementation of the proposed project.

# 12. <u>Have a substantial adverse effect on scenic vistas and viewplanes, during day or</u> <u>night, identified in county or state plans or studies.</u>

The proposed project will occur within the existing developed parking areas within the park. The proposed project does not directly impact Pu'u Ōla'i and does not adversely alter any other significant land forms. As noted previously, the proposed improvements have been sited inland of the 150-foot shoreline setback area for the property to protect shoreline processes and maintain public view corridors.

# 13. <u>Requires substantial energy consumption or emit substantial greenhouse gases.</u>

The proposed action is limited to addition of two (2) public comfort stations, as well as shower (or foot rinse stations) and parking improvements for users of the Mākena State Park. No substantial energy-consuming improvements are proposed. While pump vehicles will be utilized to pump out the wastewater from the containment tanks, the amount of energy and greenhouse gas emissions associated with the fuel used for these vehicle trips is not considered to be significant.ef

Based on the foregoing analysis, the proposed project has been determined to qualify for a Finding of No Significant Impact (FONSI).

# LIST OF PERMITS AND APPROVALS
# VII. LIST OF PERMITS AND APPROVALS

The following permits and approvals are anticipated to be required for project implementation:

### **Federal**

- 1. National Environmental Policy Act (NEPA) Compliance
- 2. Section 7, Endangered Species Act Compliance
- 3. Section 106, National Historic Preservation Act Compliance

### State of Hawai'i

- 1. Chapter 343, Hawai'i Revised Statutes Compliance
- 2. Department of Health Community Noise Permit, as applicable
- 3. National Pollutant Discharge Elimination System (NPDES) Permit, as applicable
- 4. Hawaii Disability and Communication Access Board Plan Review and Approval
- 5. Chapter 6E-8, Hawai'i Revised Statutes Historic Preservation Compliance

### County of Maui

- 1. Special Management Area (SMA) Use Permit
- 2. Shoreline Setback Assessment/Determination, as applicable
- 3. Grading Permit
- 4. Work on County Highway Permit
- 5. Department of Water Supply Approval

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

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

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

### FEDERAL AGENCIES

- Lt. Furyisa Miller

   U.S. Coast Guard
   Fourteenth Coast Guard District
   300 Ala Moana Boulevard, Room 9-204
   Honolulu, Hawai'i 96850-4982
- Kay Zukeran
   NOAA Inouye Regional Center
   NMFS/PIRO1845 Wasp Blvd., Building 176
   Honolulu, Hawai'i 96818
- Kahana Stone, Soil Conservationist
   U.S. Department of Agriculture Natural Resources Conservation Service
   77 Hookele Street, Suite 202 Kahului, Hawai'i 96732
- Linda Speerstra, Chief Regulatory Branch
   U.S. Department of the Army
   U.S. Army Engineer District, Honolulu
   Regulatory Branch, Building 230
   Fort Shafter, Hawai'i 96858-5440
- Michelle Bogardus, Island Team Leader U.S. Fish and Wildlife Service 300 Ala Moana Blvd., Rm. 3-122 Honolulu, Hawai'i 96850
- Department of Commerce National Marine Fisheries Service Pacific Islands Regional Office 1845 Wasp Blvd., Building 176 Honolulu, Hawai'i 96818

### STATE AGENCIES

- Major General Arthur "Joe" Logan, Adjutant General State of Hawai'i Hawai'i State Civil Defense 3949 Diamond Head Road Honolulu, Hawai'i 96816
- Keith Kawaoka, Acting Director State of Hawai'i
   Office of Environmental Quality Control
   235 S. Beretania Street, Suite 702 Honolulu, Hawai'i 96813
- Curt T. Otaguro, Comptroller State of Hawai'i
   Department of Accounting and General Services
   1151 Punchbowl Street, #426 Honolulu, Hawai'i 96813
- Mike McCartney, Director State of Hawai'i
   Department of Business, Economic Development & Tourism
   P.O. Box 2359
   Honolulu, Hawai'i 96804
- William Aila, Jr., Chair State of Hawai'i Department of Hawaiian Home Lands P.O. Box 1879 Honolulu, Hawai'i 96805
- Bruce Anderson, PhD, Director State of Hawai'i
   Department of Health 1250 Punchbowl St., Room 325 Honolulu, Hawai'i 96813

- Alec Wong, P.E., Chief State of Hawai'i Department of Health, Clean Water Branch Hale Ola, Room 225 2827 Waimano Home Road Pearl City, Hawai'i 96782
- Patti Kitkowski State of Hawai'i
  Department of Health Maui Sanitation Branch 54 South High Street, Room 300 Wailuku, Hawai'i 96793
- Suzanne Case, Chairperson State of Hawai'i
   Department of Land and Natural Resources
   P. O. Box 621
   Honolulu, Hawai'i 96809
- Samuel J. Lemmo, Administrator State of Hawai'i
   Department of Land and Natural Resources
   Office of Conservation and Coastal Lands
   1151 Punchbowl Street, Room 131 Honolulu, Hawai'i 96813
- Dr. Alan Downer, Administrator State of Hawai'i Department of Land and Natural Resources State Historic Preservation Division 601 Kamokila Blvd., Room 555 Kapolei, Hawai'i 96707
- Jade Butay, Director State of Hawai'i
   Department of Transportation 869 Punchbowl Street Honolulu, Hawai'i 96813
- Dr. Sylvia Hussey, Chief Executive Officer State of Hawai'i
   Office of Hawaiian Affairs 560 N. Nimitz Highway, Suite 200 Honolulu, Hawai'i 96817

- 20. Mary Alice Evans, Director State of Hawai'i **Office of Planning** P.O. Box 2359 Honolulu, Hawai'i 96804
- Dan Orodenker, Executive Officer State of Hawai'i
   State Land Use Commission P.O. Box 2359 Honolulu, Hawai'i 96804

### COUNTY AGENCIES

- 22. Eric Nakagawa, Acting Director County of Maui Department of Environmental Management 2050 Main Street, Suite 2B Wailuku, Hawai'i 96793
- 23. David Thyne, Chief County of Maui
   Department of Fire and Public Safety 200 Dairy Road Kahului, Hawai'i 96732
- Karla Peters, Director County of Maui
   Department of Parks and Recreation 700 Hali'a Nakoa Street, Unit 2F Wailuku, Hawai'i 96793
- Michele Chouteau McLean, Director County of Maui
   Department of Planning 2200 Main Street, Suite 315 Wailuku, Hawai'i 96793
- Tivoli Faaumu, Chief County of Maui
   Police Department
   55 Mahalani Street
   Wailuku, Hawai'i 96793
- Rowena Dagdag-Andaya, Acting Director County of Maui
   Department of Public Works 200 South High Street, 4th Floor Wailuku, Hawai'i 96793

 Jeff Pearson, Director County of Maui
 Department of Water Supply 200 South High Street, 5th Floor Wailuku, Hawai'i 96793

### ORGANIZATIONS

- 29. Hawaiian Telcom 60 South Church Street Wailuku, Hawai'i 96793
- 30. Ekolu Lindsey
   Maui Cultural Lands, Inc.
   P. O. Box #122
   Lāhainā, Hawai'i 96767
- Michael Grider, Manager, Engineering Maui Electric Company, Ltd.
   P.O. Box 398
   Kahului, Hawai'i 96733
- 32. Spectrum158 Ma'a StreetKahului, Hawai'i 96732
- Albert Perez
   Oneloa Coalition
   c/o Maui Tomorrow Foundation
   55 North Church Street, Suite A-4
   Wailuku, Hawai'i 96793
- 34. Mike Moran, President
   Kihei Community Association
   P.O. Box 662
   Kihei, Hawai'i 96753



Natural Resources Conservation Service

Pacific Islands Area Kahului Field Office

77 Hookele St., # 202 Kahului, HI 96732

Voice 808-871-5500 ext. 3 Fax 855-878-2454 December 30, 2019

Ms. Gwendolyn Rivera Munekiyo Hiraga 305 High St., Suite 104 Wailuku, HI 96793

Subject: Chapter 343, HRS Early Consultation Request for Proposed Makena State Park Comfort Stations Project; TMK: 2-2-1-006: 030 (por.)

Dear Ms. Rivera:

The following comments pertains to the above subject:

### Drainage

- How will stormwater be managed?
- Post Construction Operations and Maintenance
  - Identify responsible parties (e.g. State, County, individual or company) that will maintain all permanent BMPs.
  - Specify maintenance programs on all permanent BMPs, especially after rain events, fires, and loss of vegetation.
  - Explain procedures for repairs to be performed on deficiencies including timetable for implementation

#### Erosion

- Dust Control
  - Include on plan detailed application methods, location, and when will be applied
  - Clearly articulate responsible parties and metric to define periods that require specific measures
  - o Must be applied on all sites during grubbing work
  - Storm Water
    - Methods to manage storm water erosion need to be clearly articulated (i.e. vegetation, barriers, and/or materials).
    - Practices such as "diversions other", require safe and adequate outlets or containment

Vegetation

- Vegetation selected should be adapted to the area and able to survive if irrigation is removed.
- Drought periods need to be considered including susceptibility to ignition and spread of brush

Sincerely,

Kal In, Acting DL

Kahana Stone USDA-NRCS Soil Conservationist

Mark Alexander Rov VICE PRESIDENT

Karlynn K. Fukuda PRESIDENT

Tessa Munekiyo Ng VICE PRESIDENT

Michael T. Munekiyo SENIOR ADVISOR

July 20, 2021

Kahana Stone, Soil Conservationist U.S. Department of Agriculture Natural Resources Conservation Service 77 Hookele Street, Suite 202 Kahului, Hawai'i 96732

#### Chapter 343, Hawai'i Revised Statutes Early Consultation Request SUBJECT: for Proposed Mākena State Park Improvements at TMK No.: (2)2-1-006:030(por.), Mākena, Maui, Hawai'i

Dear Mr. Stone:

MUNEKIYO HIRAGA

Thank you for your letter dated December 30, 2019 providing early consultation comments for the proposed Mākena State Park Comfort Stations project at Mākena, Maui, Hawai'i. On behalf of the State of Hawai'i, Department of Land and Natural Resources (DLNR), Division of State Parks (DSP), we offer the following information in response to the comments noted in your letter:

### Drainage

Information on stormwater management, operation and maintenance, and permanent Best Management Practices (BMP) will be presented as part of the Preliminary Engineering report that will be included in the Draft Environmental Assessment (EA).

### Erosion

The construction plans for the project will specify detailed BMP measures to mitigate impacts from soil erosion resulting from wind and water, such as use of dust fences and watering for dust control.

Kahana Stone, Soil Conservationist July 20, 2021 Page 2

### Vegetation

Vegetation at the site will be drought-tolerant in keeping with the existing natural landscape. No irrigation of landscape elements is proposed. Appropriate fire buffers will be included in the site plan, as applicable to the project, to prevent spread of brush fires.

We appreciate your input and will include a copy of your comment letter and this response letter in the Draft EA for the project. Should you have any questions or require further information, please feel free to contact me at (808) 244-2015.

Very truly yours,

Groundolyn Rivera

Gwendolyn Leialoha Cheney Rivera Senior Associate

GLCR:la

cc: John Datiles, P.E., Department of Land and Natural Resources, Engineering Division

Kirk Tanaka, R.T. Tanaka Engineers, Inc.

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-----Original Message-----From: Speerstra, Linda CIV USARMY CEPOH (US) <<u>Linda.Speerstra@usace.army.mil</u>> Sent: Monday, December 30, 2019 6:42 PM To: General eMail <<u>planning@munekiyohiraga.com</u>> Cc: Speerstra, Linda CIV USARMY CEPOH (US) <<u>Linda.Speerstra@usace.army.mil</u>> Subject: Makena State Park Comfort Stations - Maui POH-2019-00140

Aloha Gwendolyn thank you for reaching out to the Corps. I'm providing scoping information in regards to the early consultation request provided to our office on December 23rd.

The Corps' regulatory authorities are based on two laws: Section 10 of the Rivers and Harbors Act (RHA) of 1899 (33 USC 403), which prohibits the obstruction or alteration of navigable waters of the U.S. without a permit from the Corps; and Section 404 of the Clean Water Act (CWA), which prohibits the discharge of dredged or fill material into waters of the U.S., including wetlands, without a Corps' permit.

Based on information provided it appears all work would be conducted in uplands on an existing filled area. If all work is being conducted in uplands no further action is required. My contact information is below if you have any further questions. Linda

Linda Speerstra Chief, Regulatory Branch U.S. Army Corps of Engineers Honolulu District 808-835-4300



Karlynn K. Fukuda PRESIDENT

Mark Alexander Roy VICE PRESIDENT

Tessa Munekiyo Ng VICE PRESIDENT

Michael T. Munekiyo SENIOR ADVISOR

July 20, 2021

Linda Speerstra, Chief U.S. Department of the Army U.S. Army Engineer District, Honolulu Regulatory Branch, Building 230 Fort Shafter, Hawai'i 96858

### SUBJECT: Chapter 343, Hawai'i Revised Statutes Early Consultation Request for Proposed Mākena State Park Improvements at TMK No.: (2)2-1-006:030(por.), Mākena, Maui, Hawai'i

Dear Ms. Speerstra:

Thank you for your email message dated December 30, 2019 providing scoping information for the proposed Mākena State Park Comfort Stations project at Mākena, Maui, Hawai'i. On behalf of the State of Hawai'i, Department of Land and Natural Resources (DLNR), Division of State Parks (DSP), we offer the following information in response to the comments noted in your letter:

- We note that the U.S. Army Corps of Engineers has regulatory authority pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403) and Section 404 of the Clean Water Act.
- We acknowledge that the proposed project is located in the vicinity of the existing parking areas of Mākena State Park, which are upland areas, and will not involve any waters of the U.S.

Linda Speerstra, Chief July 20, 2021 Page 2

We appreciate your input and will include a copy of your email message and this response letter in the Draft Environmental Assessment for the project. Should you have any questions or require further information, please feel free to contact me at (808) 244-2015.

Very truly yours,

Groundolyn Rivera

Gwendolyn Leialoha Cheney Rivera Senior Associate

GLCR:Ih

cc: John Datiles, P.E., Department of Land and Natural Resources, Engineering Division

Kirk Tanaka, R.T. Tanaka Engineers, Inc.

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## United States Department of the Interior

FISH AND WILDLIFE SERVICE Pacific Islands Fish and Wildlife Office 300 Ala Moana Boulevard, Room 3-122 Honolulu, Hawaiʻi 96850



In Reply Refer To: FWS/RI 01EPIF00-2020-TA-0111

January 9, 2020

Ms. Gwendolyn Rivera, Senior Associate Munekiyo Hiraga 305 High Street, Suite 104 Wailuku, Hawai'i 96793

# Subject: Response to your Request for Technical Assistance Regarding Early Consultation for the Proposed Mākena State Park Comfort Stations Project, Maui

Dear Ms. Rivera,

Thank you for your recent correspondence requesting technical assistance on species biology, habitat, or life requisite requirements. The Pacific Islands Fish and Wildlife Office (PIFWO) of the U.S. Fish and Wildlife Service (Service) appreciates your efforts to avoid or minimize effects to protected species associated with your proposed actions. We provide the following information for your consideration under the authorities of the Endangered Species Act (ESA) of 1973 (16 U.S.C. 1531 *et seq.*), as amended.

Due to significant workload constraints, PIFWO is currently unable to specifically address your information request. The table below lists the protected species most likely to be encountered by projects implemented within the Hawaiian Islands. Based on your project location and description, we have noted the species most likely to occur within the vicinity of the project area, in the 'Occurs In or Near Project Area' column. Please note this list is not comprehensive and should only be used for general guidance. Please refer to the PIFWO website, located at <a href="https://www.fws.gov/pacificislands/promo.cfm?id=177175840">https://www.fws.gov/pacificislands/promo.cfm?id=177175840</a> for recommended conservation measures intended to avoid or minimize adverse effects to these federally protected species and best management practices to minimize and avoid sedimentation and erosion impacts to water quality.

If you are representing a federal action agency, please use the official species list on our web-site for your section 7 consultation. You can find out if your project occurs in or near designated critical habitat here: <u>https://ecos.fws.gov/ipac/</u>.

Under section 7 of the ESA, it is the Federal agency's (or their non-Federal designee) responsibility to make the determination of whether or not the proposed project "may affect" federally listed species or designated critical habitat. A "may affect, not likely to adversely affect" determination is appropriate when effects to federally listed species are expected to be discountable (*i.e.*, unlikely to occur), insignificant (minimal in size), or completely beneficial.

<b>INTERIOR REGION 9</b>	
COLUMBIA-PACIFIC NORTHWEST	
	-

INTERIOR REGION 12 Pacific Islands

Idaho, Montana\*, Oregon\*, Washington

This conclusion requires written concurrence from the Service. If a "may affect, likely to adversely affect" determination is made, then the Federal agency must initiate formal consultation with the Service. Projects that are determined to have "no effect" on federally listed species and/or critical habitat do not require additional coordination or consultation.

Implementing the avoidance, minimization, or conservation measures for the species that may occur in your project area will normally enable you to make a "may affect, not likely to adversely affect" determination for your project. If it is determined that the proposed project may affect federally listed species, we recommend you contact our office early in the planning process so that we may assist you with the ESA compliance. If the proposed project is funded, authorized, or permitted by a Federal agency, then that agency should consult with us pursuant to section 7(a)(2) of the ESA. If no Federal agency is involved with the proposed project, the applicant should apply for an incidental take permit under section 10(a)(1)(B) of the ESA. A section 10 permit application must include a habitat conservation plan that identifies the effects of the action on listed species and their habitats, and defines measures to minimize and mitigate those adverse effects.

We appreciate your efforts to conserve endangered species. We regret that we cannot provide you with more specific protected species information for your project site. If you have questions that are not answered by the information on our website, you can contact PIFWO at (808) 792-9400 and ask to speak to the lead biologist for the island where your project is located.

Sincerely,

MICHELLE BOGARDUS

Digitally signed by MICHELLE BOGARDUS Date: 2020.01.09 14:25:32 -10'00'

Michelle Bogardus Island Team Manager Maui Nui and Hawai'i Island Pacific Islands Fish and Wildlife Office The table below lists the protected species most likely to be encountered by projects implemented within the Hawaiian Islands. For your guidance, we've marked species that may occur in the vicinity of your project, this list is not comprehensive and should only be used for general guidance.

<u>Scientific Name</u>	<u>Common Name /</u> <u>Hawaiian Name</u>	<u>Federal</u> <u>Status</u>	<u>May Occur</u> <u>In Project</u> <u>Area</u>	
Mammals				
Lasiurus cinereus semotus	Hawaiian hoary bat/ 'ōpe'ape'a	Е	$\boxtimes$	
Reptiles				
Chelonia mydas	Green sea turtle/honu - Central North Pacific DPS	Т	$\square$	
Erectmochelys imbricata	Hawksbill sea turtle/ Honu 'ea	Е	$\square$	
Birds				
Anas wyvilliana	Hawaiian duck/ koloa	Е		
Branta sandvicensis	Hawaiian goose/ nēnē	Е		
Fulica alai	Hawaiian coot/ 'alae kea	Е		
Gallinula galeata sandvicensis	Hawaiian gallinule/ 'alae 'ula	Е		
Himantopus mexicanus knudseni	Hawaiian stilt/ Ae'o	Е		
Oceanodroma castro	Band-rumped storm-petrel/ 'akē'akē	Е		
Pterodroma sandwichensis	Hawaiian petrel/ 'ua'u	Е	$\square$	
Puffinus auricularis newelli	Newell's shearwater/ 'a'o	Т		
Ardenna pacificus	Wedge-tailed Shearwater/ 'ua'u kani	MBTA		
Gygis alba	White Tern/ manu-o-kū	MBTA		
Buteo solitarius	Hawaiian hawk/ 'io	Е		
Insects				
Manduca blackburni	Blackburn's sphinx moth	Е	$\square$	
Megalagrion pacificum	Pacific Hawaiian Damselfly	Е		
M. xanthomelas	Orangeblack Hawaiian Damselfly	Е		
M. nigrohamatum nigrolineatum	Blackline Hawaiian Damselfly	Е		

Plants				
Scientific Name	<u>Common Name</u> <u>or</u> <u>Hawaiian Name</u>	<u>Federal</u> <u>Status</u>	<u>Locations</u>	<u>May</u> Occur In <u>Project</u> Area
Abutilon menziesii	Koʻoloaʻula	Е	O, L, M, H	
Achyranthes splendens var. rotundata	'Ewa hinahina	Е	0	
Bonamia menziesii	No common name	Е	K, O, L, M, H	
Canavalia pubescens	'Āwikiwiki	Е	Ni, K, L, M	$\boxtimes$
Colubrina oppositifolia	Kauila	Е	O, M, H	
Cyperus trachysanthos	Pu'uka'a	Е	К, О	
Gouania hillebrandii	No common name	Е	Mo, M	
Hibiscus brackenridgei	Ma'o hau hele	Е	O, Mo, L, M, H	
Ischaemum byrone	Hilo ischaemum	Е	K, O, Mo, M, H	
Isodendrion pyrifolium	Wahine noho kula	Е	О, Н	
Marsilea villosa	ʻIhiʻihi	Е	Ni, O, Mo	
Mezoneuron kavaiense	Uhiuhi	Е	O, H	
Nothocestrum breviflorum	'Aiea	Е	Н	
Panicum fauriei var.	Carter's	Е	Molokini Islet (O),	
carteri	panicgrass		Мо	
Panicum niihauense	Lau'ehu	E	K	
Peucedanum sandwicense	Makou	E	K, O, Mo, M	
Pleomele (Chrysodracon) hawaiiensis	Halapepe	E	Н	
Portulaca sclerocarpa	ʻIhi	Е	L, H	
Portulaca villosa	ʻIhi	Е	Le, Ka, Ni, O, Mo, M, L, H, Nihoa	
Pritchardia affinis (maideniana)	Loulu	Е	Н	
Pseudognaphalium sandwicensium var. molokaiense	'Ena'ena	Е	Mo, M	
Scaevola coriacea	Dwarf naupaka	Е	Mo, M	
Schenkia (Centaurium) sebaeoides	ʻĀwiwi	Е	K, O, Mo, L, M	
Sesbania tomentosa	ʻŌhai	Е	Ni, Ka, K, O, Mo, M, L, H, Necker, Nihoa	
Tetramolopium rockii	No common name	Т	Мо	
Vigna o-wahuensis	No common name	Е	Mo, M, L, H, Ka	

Location key: O=Oʻahu, K=Kauaʻi, M=Maui, H=Hawaiʻi Island, L=Lānaʻi, Mo=Molokaʻi, Ka=Kahoʻolawe, Ni=Niʻihau, Le=Lehua.

Karlynn K. Fukuda

Mark Alexander Roy

Tessa Munekiyo Ng vice President

Michael T. Munekiyo SENIOR ADVISOR

July 20, 2021



Michelle Bogardus, Island Team Manager U. S. Fish and Wildlife Service Department of the Interior 300 Ala Moana Blvd., Rm. 3-122 Honolulu, Hawai'i 96850

> SUBJECT: Chapter 343, Hawai'i Revised Statutes Early Consultation Request for Proposed Mākena State Park Improvements at TMK No.: (2)2-1-006:030(por.), Mākena, Maui, Hawai'i (FWS/RI 01EPIF00-2020-TA-0111)

Dear Ms. Bogardus:

Thank you for your letter dated January 9, 2020 providing early consultation comments for the proposed Mākena State Park Comfort Stations project at Mākena, Maui, Hawai'i. On behalf of the State of Hawai'i, Department of Land and Natural Resources (DLNR), Division of State Parks (DSP), we offer the following information in response to the comments noted in your letter:

DSP acknowledges that the Pacific Islands Fish and Wildlife Office (PIFWO) is not able to address a project-specific request at this time, but has provided a list of protected species likely to be encountered in the project area.

A flora and fauna survey for the project area was conducted in October, 2019. Of the species identified in your letter as most likely to be encountered by projects implemented in the Hawaiian Islands, one species, *Lasiurus cinereus semotus* (Hawaiian hoary bat), was inventoried during the survey. Due to the presence of Hawaiian hoary bats in the area, PIFWO guidelines for protection of these bats will be followed during project implementation. Woody plants taller than 15 feet in height will not be removed or trimmed during the bat's breeding season of June 1 through September 15, and no barbed wire will be used.

In addition, the October 2019 flora and fauna survey identified tree tobacco plants, a potential host plant for *Manduca blackburni* (Blackburn's sphinx moth) around the project site. None of these moths or their larvae were detected at the time of the survey, but it is noted that a subsequent survey during the rainy season may identify

Michelle Bogardus, Island Team Leader July 20, 2021 Page 2

this species. As such, a survey of the area will be undertaken within 4 to 6 weeks prior to initiation of construction. Should Blackburn's sphinx moth be identified, PIFWO guidance will be solicited to ensure that these moths are not harmed.

With the above mitigative measures, the project is not anticipated to have a significant adverse effect on endangered species.

As the proposed project is being undertaken by DSP, a State agency, and does not involve any Federal agency, the action is not anticipated to be subject to consultation pursuant to Section 7 of the Endangered Species Act.

We appreciate your input and will include a copy of your comment letter and this response letter in the Draft Environmental Assessment for the project. Should you have any questions or require further information, please feel free to contact me at (808) 244-2015.

Very truly yours,

Groundolyn Rivera

Gwendolyn Leialoha Cheney Rivera Senior Associate

GLCR:la

cc: John Datiles, P.E., Department of Land and Natural Resources, Engineering Division

Kirk Tanaka, R.T. Tanaka Engineers, Inc.

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DAVID Y. IGE GOVERNOR OF HAWAII



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

January 3, 2020

Ms. Gwendolyn Rivera Senior Associate Munekiyo Hiraga 305 High Street, Suite 104 Wailuku, Hawaii 96793

Dear Ms. Rivera:

Subject: Chapter 343, Hawaii Revised Statutes Early Consultation Request for Proposed Makena State Park Comfort Stations Project, Makena, Maui Hawaii TMK: (2) 2-1-006:030 (por.)

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

- We are unable to make comments pertaining to Hawaii Administrative Rules, Chapter 11-62, Wastewater Systems, as the wastewater disposal method was not satisfactorily addressed for review. If you have any questions, please call Roland Tejano, Environmental Engineer, at 808 984-8232.
- National Pollutant Discharge Elimination System (NPDES) permit coverage may be required for this project. The Clean Water Branch should be contacted at 808 586-4309.
- 3. The noise created during the construction phase of the project may exceed the maximum allowable levels as set forth in Hawaii Administrative Rules, Chapter 11-46, "Community Noise Control." A noise permit may be required and should be obtained before the commencement of work. Please call the Indoor & Radiological Health Branch at 808 586-4700.

It is strongly recommended that you review the department's website at <a href="https://health.hawaii.gov/epo/files/2018/05/DOHEHA.LandUseContactList.20180502.pdf">https://health.hawaii.gov/epo/files/2018/05/DOHEHA.LandUseContactList.20180502.pdf</a> and contact the appropriate program that concerns your project.

### JAN 0 6 2020

BRUCE S. ANDERSON, Ph.D. DIRECTOR OF HEALTH

LORRIN W. PANG, M.D., M.P.H. DISTRICT HEALTH OFFICER Ms. Gwendolyn Rivera January 3, 2020 Page 2

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

Sincerely,

Patti Kitkowski District Environmental Health Program Chief

c Sina Pruder, Acting EMD Administrator

Karlynn K. Fukuda PRESIDENT

Mark Alexander Roy VICE PRESIDENT

Tessa Munekiyo Ng VICE PRESIDENT

Michael T. Munekiyo SENIOR ADVISOR

July 20, 2021

Patti Kitkowski, District Environmental Health Program Chief State of Hawai'i Department of Health Maui Sanitation Branch 54 South High Street, Room 300 Wailuku, Hawai'i 96793

### SUBJECT: Chapter 343, Hawai'i Revised Statutes Early Consultation Request for Proposed Mākena State Park Improvements at TMK No.: (2)2-1-006:030(por.), Mākena, Maui, Hawai'i

Dear Ms. Kitkowski:

MUNEKIYO HIRAGA

Thank you for your letter dated January 3, 2020 providing early consultation comments for the proposed Mākena State Park Comfort Stations project at Mākena, Maui, Hawai'i. On behalf of the State of Hawai'i, Department of Land and Natural Resources (DLNR), Division of State Parks (DSP), we offer the following information in response to the comments noted in your letter:

- Information regarding the wastewater disposal method will be provided for review in the Draft Environmental Assessment (EA). The proposed comfort stations will utilize County water with flushing toilets. Wastewater generated by the comfort stations will be stored in below-ground holding tanks and regularly pumped out for removal and treatment at an existing permitted offsite wastewater treatment facility.
- A National Pollutant Discharge Elimination System Permit will be obtained as applicable per consultation with the Clean Water Branch.
- A noise permit will be obtained as may be applicable to the project.

Patti Kitkowski, District Environmental Health Program Chief July 20, 2021 Page 2

We appreciate your input and will include a copy of your comment letter and this response letter in the Draft EA for the project. Should you have any questions or require further information, please feel free to contact me at 244-2015.

Very truly yours,

Geoundolyn Rivera

Gwendolyn Leialoha Cheney Rivera Senior Associate

GLCR:la

cc: John Datiles, P.E., Department of Land and Natural Resources, Engineering Division

Kirk Tanaka, R.T. Tanaka Engineers, Inc. K:DATAIRTTanaka:Makena Comfort Station:Applications:EC:Response Letters:DOH.Maui response.docx

### JAN 0 6 2020

DAVID Y. IGE GOVERNOR OF HAWAII





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

OFFICE OF CONSERVATION AND COASTAL LANDS POST OFFICE BOX 621 HONOLULU, HAWAII 96809

REF: OCCL: TF

Gwendolyn Rivera, Senior Associate Munekiyo Hiraga 305 High Street, Suite 104 Wailuku, HI 96793 SUZANNE D. CASE CHAIRFERSON BOARD OF LAND AND NATURAL RESOURCES COMMISSION ON WATER RESOURCE MANAGEMENT

> ROBERT K. MASUDA FIRST DEPUTY

M. KALEO MANUEL DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES BOATING AND OCEAN BECREATION BUREAU OF CONVEYANCES COMMERSION ON WATER RESOURCE BANAGEMENT CONSERVATION AND COASTAL LANDS CONSERVATION AND RESOURCE SENSOR FORESTRY AND WILLIFE HISTORIC PRESERVATION KAROOLAWE ELAND RESERVE COMMISSION LAND STATE PARKS

COR: MA-20-100 JAN - 3 2020

### SUBJECT:

Chapter 343, Hawaii Revised Statutes Early Consultation Request for Proposed Makena State Park Comfort Stations Project. Makena, Maui, Hawaii TMK: (2) 2-1-006:030

Dear Ms. Rivera:

The Office of Conservation and Coastal Lands (OCCL) is in receipt of your correspondence and attachments regarding the subject matter. According to the information you provided, the Division of State Parks (DSP) of the Department of Land and Natural Resources (DLNR) is proposing to develop two (2) new comfort stations, outdoor showers, and parking lot improvements at Makena State Park. The proposed work is contained within two (2) existing paved parking areas that are on the parcel with TMK: (2) 2-1-006:030 which is owned by the State of Hawaii – DSP.

The OCCL regulates land uses within the Conservation District through the issuance of permits and Site Plan Approvals. Staff notes that Makena State Park was created under Governor Executive Order (EO) 4184. Based on the information you have provided, the proposed project does not appear to be in the Conservation District and therefore does not appear to require our approval. Should any of the proposed work be located in the Conservation District, then the OCCL will require more information, details, and consultation with our office to determine the appropriate level of permitting.

Should you have any questions, please feel free to contact Trevor Fitzpatrick of the Office of Conservation and Coastal Lands at 587-0373.

COR: MA-20-100

REF: OCCL: TF Gwendolyn Rivera, Senior Associate Munekiyo Hiraga

Sincerely,

Michta

Samuel J. Lemmo, Administrator Office of Conservation and Coastal Lands

CC: Maui District Land Division Office Division of State Parks County of Maui, Planning Department MUNEKIYO HIRAGA

Karlynn K. Fukuda PRESIDENT

Mark Alexander Roy VICE PRESIDENT

Tessa Munekiyo Ng VICE PRESIDENT

Michael T. Munekiyo SENIOR ADVISOR

July 20, 2021

Samuel J. Lemmo, Administrator State of Hawai'i Department of Land and Natural Resources Office of Conservation and Coastal Lands Kalanimoku Building 1151 Punchbowl Street, Room 131 Honolulu, Hawai'i 96813

### SUBJECT: Chapter 343, Hawai'i Revised Statutes Early Consultation Request for Proposed Mākena State Park Improvements at TMK No.: (2)2-1-006:030(por.), Mākena, Maui, Hawai'i (REF: OCCL: TF; COR: MA-20-100)

Dear Mr. Lemmo:

Thank you for your letter dated January 3, 2020 providing early consultation comments for the proposed Mākena State Park Comfort Stations project at Mākena, Maui, Hawai'i. On behalf of the State of Hawai'i, Department of Land and Natural Resources (DLNR), Division of State Parks (DSP), we offer the following information in response to the comments noted in your letter.

DSP acknowledges Office of Conservation and Coastal Lands (OCCL) comment that the proposed project does not appear to involve the Conservation District as such, does not require OCCL approval. DSP understands that if any work is located in the Conservation District, coordination with OCCL will be required to determine applicable permitting requirements. Samuel J. Lemmo, Administrator July 20, 2021 Page 2

We appreciate your input and will include a copy of your comment letter and this response letter in the Draft Environmental Assessment for the project. Should you have any questions or require further information, please feel free to contact me at (808) 244-2015.

Very truly yours,

Groundolyn Rivera

Gwendolyn Leialoha Cheney Rivera Senior Associate

GLCR:la

cc: John Datiles, P.E., Department of Land and Natural Resources, Engineering Division

Kirk Tanaka, R.T. Tanaka Engineers, Inc. K:\DATA\RTTanaka\Makena Comfort Station\Applications\EC\Response Letters\OCCL response.docx

### JAN 0 6 2020

DAVID Y. IGE GOVERNOR JADE T. BUTAY DIRECTOR

Deputy Directors LYNN A.S. ARAKI-REGAN DEREK J. CHOW ROSS M. HIGASHI EDWIN H. SNIFFEN

IN REPLY REFER TO: DIR 1299 STP 8.2825



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

January 02, 2020

Ms. Gwendolyn Rivera Senior Associate Munekiyo Hiraga 305 High Street, Suite 104 Wailuku, Hawaii 96793

Dear Ms. Rivera:

Subject: Chapter 343, Hawaii Revised Statutes Early Consultation Makena State Park Comfort Stations Project Makena, Maui, Hawaii TMK: (2) 2-1-006:030 (por.)

The Hawaii Department of Transportation (HDOT) understands that the Department of Land and Natural Resources, Division of State Parks is proposing to develop two new comfort stations, outdoor showers, and parking lot improvements at Makena State Park.

HDOT has determined that due to the project description and location, it appears that the proposed project would not have any significant impacts to State highway facilities. HDOT has no comments to provide.

If there are any questions, please contact Mr. Blayne Nikaido of the HDOT Statewide Transportation Planning Office at (808) 831-7979 or via email at blayne.h.nikaido@hawaii.gov.

Sincerely

JADE T. BUTAY Director of Transportation

Karlynn K. Fukuda PRESIDENT

Mark Alexander Roy VICE PRESIDENT

Tessa Munekiyo Ng VICE PRESIDENT

Michael T. Munekiyo SENIOR ADVISOR

July 20, 2021

Jade Butay, Director State of Hawai'i Department of Transportation 869 Punchbowl Street Honolulu, Hawai'i 96813

MUNEKIYO HIRAGA

### SUBJECT: Chapter 343, Hawai'i Revised Statutes Early Consultation Request for Proposed Mākena State Park Improvements at TMK No.: (2)2-1-006:030(por.), Mākena, Maui, Hawai'i (DIR 1299, STP 8.2825)

Dear Mr. Butay:

Thank you for your letter dated January 2, 2020 providing early consultation comments for the proposed Mākena State Park Comfort Stations project at Mākena, Maui, Hawai'i. On behalf of the State of Hawai'i, Department of Land and Natural Resources (DLNR), Division of State Parks (DSP), we acknowledge your determination that due to the project description and location, it appears that the proposed project would not have any significant impacts to state highway facilities.

We appreciate your input and will include a copy of your comment letter and this response letter in the Draft Environmental Assessment for the project. Should you have any questions or require further information, please feel free to contact me at (808) 244-2015.

Very truly yours,

Groundolyn Rivera

Gwendolyn Leialoha Cheney Rivera Senior Associate

GLCR:la

cc: John Datiles, P.E., Department of Land and Natural Resources, Engineering Division

Kirk Tanaka, R.T. Tanaka Engineers, Inc. K\DATA\RTTanaka\Makena Comfort Station\Applications\EC\Response Letters\SDOT response.docx

JAN 1 3 2020

DAVID Y. IGE GOVERNOR

MARY ALICE EVANS DIRECTOR OFFICE OF PLANNING



## OFFICE OF PLANNING STATE OF HAWAII

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/

DTS202001031137LI

January 10, 2020

Ms. Gwendolyn Rivera Munekiyo Hiraga 305 High Street, Suite 104 Wailuku, Hawaii 96793

Dear Ms. Rivera:

Subject:

Chapter 343, Hawaii Revised Statutes, Early Consultation Request for Proposed Makena State Park Comfort Stations, Makena, Maui, Hawaii; TMK: (2) 2-1-006: 030 (portion)

The Office of Planning (OP) is in receipt of your Chapter 343, Hawaii Revised Statutes (HRS), early consultation request, received December 20, 2019, for the proposed Makena State Park Comfort Station Project.

According to the request, Division of State Parks, the State of Hawaii, Department of Land and Natural Resources (DLNR), proposes to develop two comfort stations, outdoor showers, associated water and wastewater infrastructure improvements, and parking lot improvements at Makena State Park. The proposed improvements will be contained within two existing parking areas, which occupy a total area of approximately 1.75 acres.

The proposed improvements are located within the portion of the parcel designated "Rural" by the State Land Use Commission, "Park" by the Kihei-Makena Community Plan, and "PK, Park" by County Zoning. The project site is located within the special management area (SMA) as designated by the County of Maui.

The use of State funds and land are triggers for the preparation of an Environment Assessment (EA) pursuant to HRS Chapter 343 and Hawaii Administrative Rules (HAR) 11-200.1.

The Office of Planning (OP) has reviewed the consultation request and has the following comments to offer:

 The Hawaii State Planning Act, HRS Chapter 226, serves as a guide for long-term development for the State. It provides 1) goals, objectives, and policies; 2) the allocation of resources through planning coordination and implementation efforts; and 3) priority guidelines for the State. OP suggests that the EA include a discussion Ms. Gwendolyn Rivera January 10, 2020 Page 2

on the provisions of HRS Chapter 226, as they pertain to the park improvements project.

- 2. The Hawaii Coastal Zone Management (CZM) Law, HRS Chapter 205A, requires all state and county agencies to enforce the CZM objectives and policies. The EA should include an assessment as to how the proposed development conforms to CZM objectives and supporting policies set forth in HRS § 205A-2, as amended.
- 3. To identify and assess any potential impacts of sea level rise on the subject property area, OP suggests the subject EA refer to the findings of the Hawaii Sea Level Rise Vulnerability and Adaptation Report 2017, accepted by the Hawaii Climate Change Mitigation and Adaptation Commission. The Report, and Hawaii Sea Level Rise Viewer at https://www.pacioos.hawaii.edu/shoreline/slr-hawaii/ particularly identifies a 3.2-foot sea level rise exposure area across the main Hawaiian Islands, including Maui, which may occur in the mid to latter half of the 21st century. The EA should provide a map of 3.2-foot sea level rise exposure area in relation to the property site.
- 4. Given that the subject EA will serve as the supporting document for the SMA use permit application and shoreline setback assessment, the EA should specifically discuss compliance with the requirements of SMA use and shoreline setbacks by consulting with the County of Maui Planning Department.
- 5. The EA should assess potential impacts of the proposed project on the existing drainage system and water quality, and discuss site-specific mitigation measures to prevent any runoff, sediment, soil and debris resulting from the proposed construction, including excavation, grading and staging, from adversely impacting the coastal ecosystem and the State waters as specified in HAR Chapter 11-54.

OP has developed guidance documents to assist in the development of stormwater runoff control strategies. These guidance documents offer useful techniques to keep land-based pollutants and sediment in place, while considering the management practices best suited for the topography of the area and the types of contaminants potentially affecting nearby water resources. OP recommends the subject EA refer to the following stormwater evaluative tools when developing mitigation approaches for polluted runoff control:

• <u>Stormwater Impact Assessments</u> can be used to identify and analyze information on hydrology, sensitivity of coastal and riparian resources, and management measures to control runoff, as well as consider secondary and cumulative impacts to the area. Ms. Gwendolyn Rivera January 10, 2020 Page 3

http://files.hawaii.gov/dbedt/op/czm/initiative/stomwater\_imapct/final\_stormwater\_impact\_assessments\_guidance.pdf

 Low Impact Development (LID), A Practitioners Guide covers a range of structural best management practices for stormwater control management, onsite infiltration techniques, and water reuse methods that minimize negative environmental impacts. http://files.hawaii.gov/dbedt/op/czm/initiative/lid/lid\_guide\_2006.pdf

If you have any questions regarding this comment letter, please contact Shichao Li of our office at (808) 587-2841.

Mahalo, MoryAlinEins

Mary Alice Evans Director

MUNEKIYO HIRAGA

Karlynn K. Fukuda PRESIDENT

Mark Alexander Roy VICE PRESIDENT

Tessa Munekiyo Ng VICE PRESIDENT

Michael T. Munekiyo SENIOR ADVISOR

July 20, 2021

Mary Alice Evans, Director State of Hawai'i Office of Planning P.O. Box 2359 Honolulu, Hawai'i 96804

### SUBJECT: Chapter 343, Hawai'i Revised Statutes Early Consultation Request for Proposed Mākena State Park Improvements at TMK No.: (2)2-1-006:030(por.), Mākena, Maui, Hawai'i (Ref. DTS 02001031137LI)

Dear Ms. Evans:

Thank you for your letter dated January 10, 2020 providing early consultation comments for the proposed Mākena State Park Comfort Stations project at Mākena, Maui, Hawai'i. On behalf of the State of Hawai'i, Department of Land and Natural Resources (DLNR), Division of State Parks (DSP), we offer the following information in response to the comments noted in your letter:

- 1. The Draft Environmental Assessment (EA) will include an analysis of the applicable provisions of the Hawai'i Revised Statutes (HRS), Chapter 226 as they pertain to the subject project.
- 2. The Draft EA will include an assessment of the proposed action pursuant to the Hawai'i Coastal Zone Management Program.
- 3. The Draft EA will include an analysis of the subject property and project area with respect to the Hawai'i Sea Level Rise Vulnerability and Adaptation Report (2017). The project area lies outside the 3.2-foot sea level rise exposure area (SLR-XA). A map showing the 3.2-foot SLR-XA will be provided in the Draft EA.
- 4. The project is within the Special Management Area (SMA) of the County of Maui. The Draft EA will include a discussion of compliance with the SMA and Shoreline Setback Rules of the Maui Planning Commission.
- 5. The Draft EA will provide a discussion of potential impacts of the project on nearshore marine resources and surface water. The project civil engineer has

Mary Alice Evans, Director July 20, 2021 Page 2

> reviewed the suggested guidance documents and identified applicable mitigation measures in the Preliminary Engineering and Drainage Report, a copy of which is included in the Draft EA.

We appreciate your input and will include a copy of your comment letter and this response letter in the Draft EA for the project. Should you have any questions or require further information, please feel free to contact me at (808) 244-2015.

Very truly yours,

Geoudolyn Rivera

Gwendolyn Leialoha Cheney Rivera Senior Associate

GLCR:Ih

- cc: John Datiles, P.E., Department of Land and Natural Resources, Engineering Division
  - Kirk Tanaka, R.T. Tanaka Engineers, Inc.
  - K:\DATA\RTTanaka\Makena Comfort Station\ApplIcations\EC\Response Letters\OP response.doc

## JAN 1.3 2020

MICHAEL P. VICTORINO Mayor

> DAVID C. THYNE Fire Chief

BRADFORD K. VENTURA Deputy Fire Chief





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

> 313 MANEA PL. WAILUKU, HI 96793

> > January 7, 2020

Munekiyo Hiraga Attn: Gwendolyn Rivera, Senior Associate 305 High St. Suite 104 Wailuku, HI 96793

### SUBJECT: Proposed Makena State Park Comfort Stations, Makena, HI TMK: (2) 2-1-006:030 (por.)

Dear Gwendolyn,

Thank you for allowing our office to provide comment on the subject proposed project. As per your request, comments are provided below:

- At this time, there are no comments in regards to the proposed comfort stations.
- Our office does reserve the right to comment on the proposed project during the building
  permit review process when detailed plans for this project are routed to our office for
  review. 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 (808) 876-4693 or by email at paul.haake@mauicounty.gov.

Sincerely,

Paul Houke

Paul Haake Captain - Fire Prevention Bureau

Karlynn K. Fukuda PRESIDENT

Mark Alexander Roy VICE PRESIDENT

Tessa Munekiyo Ng VICE PRESIDENT

Michael T. Munekiyo SENIOR ADVISOR

July 20, 2021

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

### SUBJECT: Chapter 343, Hawai'i Revised Statutes Early Consultation Request for Proposed Mākena State Park Improvements at TMK No.: (2)2-1-006:030(por.), Mākena, Maui, Hawai'i

Dear Captain Haake:

MUNEKIYO HIRAGA

Thank you for your letter dated January 7, 2020 providing early consultation comments for the proposed Mākena State Park Comfort Stations project at Mākena, Maui, Hawai'i. On behalf of the State of Hawai'i, Department of Land and Natural Resources (DLNR), Division of State Parks (DSP), we offer the following information in response to the comments noted in your letter.

- We acknowledge that the Department of Fire and Public Safety (Department) has no comments at this time regarding the proposed action.
- We understand that the Department may provide comments during the building permit application review process.

Paul Haake, Captain July 20, 2021 Page 2

We appreciate your review and will include a copy of your comment letter and this response letter in the Draft Environmental Assessment for the project. Should you have any questions or require further information, please feel free to contact me at 244-2015.

Very truly yours,

Geoundolyn Rivera

Gwendolyn Leialoha Cheney Rivera Senior Associate

GLCR:Ih

cc: John Datiles, P.E., Department of Land and Natural Resources, Engineering Division

Kirk Tanaka, R.T. Tanaka Engineers, Inc. K\DATA\RTTanaka\Makena Comfort Station\Applications\EC\Response Letters\DFPS response.doc MICHAEL P. VICTORINO Mayor MICHELE CHOUTEAU MCLEAN, AICP Director JORDAN E. HART

Deputy Director





DEPARTMENT OF PLANNING COUNTY OF MAUI ONE MAIN PLAZA

2200 MAIN STREET, SUITE 315 WAILUKU, MAUI, HAWAII 96793

September 14, 2021

Ms. Martha Yent, Hawai'i LWCF Coordinator Department of Land and Natural Resources Division of State Parks P.O. Box 621 Honolulu, Hawai'i 96809

Dear Ms. Yent:

### SUBJECT: COMMENTS FROM THE MAUI COUNTY CULTURAL RESOURCES COMMISSION ON PROPOSED COMFORT STATION AND PARKING LOT IMPROVEMENTS AT MĀKENA STATE PARK IN THE AHUPUA'A OF MO'OIKI AND MO'OLOA AND THE MOKU OF HONUA'ULA, TMK (2) 2-2-006:027 AND 030

At its September 2, 2021 meeting, the Maui County Cultural Resources Commission (Commission) reviewed the following documents prepared in support of the proposed improvements at Mākena State Park:

- The Section 106, National Historic Preservation Act and Chapter 6E-8, Hawai'i Revised Statutes Consultation Invitation;
- The Draft Archaeological Inventory Survey (AIS) report; and
- The Final Cultural Impact Assessment (CIA) report titled Traditional Cultural Practices Study for Mākena State Park and Analysis of Potential Cultural Impacts for Two Proposed Mākena State Park and Related Improvements.

With respect to these documents, the Commission voted to transmit the following comments:

- 1. In-depth research and the engineering plans are appreciated, however the AIS report, in its current state, is insufficient based on its testing methodology. 1m x 1m test units do not seem sufficient for the wastewater system.
- 2. Further, the staging areas are not defined in any of the documents. Staging areas are considered part of the Area of Potential Effect (APE) and need to be clearly defined in all documents. The APE is not solely tied to the proposed parking lot improvements, wastewater system, and showers. The APE also includes wherever the gravel, asphalt, and pipe will go. This should be determined early on and represented in the documentation, rather than on the fly by the archaeologist.
Martha Yent September 14, 2021 Page 2

- 3. Currently, there are porta potties at the park, which have very small footprints compared to the proposed comfort stations. It does not seem like a huge expense to maintain this current setup.
- 4. This project has a number of triggers for studies and consultation. The federal grant monies trigger Section 106, National Historic Preservation Act and the state funds trigger Chapter 6E-8, Hawai'i Revised Statutes. Because the park is a jewel of South Maui, the proposed improvements require very robust consultation. Eleven people were contacted for the CIA and only five people participated, which is not unusual. Of the individuals interviewed for the CIA, three had concerns about the proposed improvements. There were concerns that the additional amenities (the showers, the comfort stations, and the increased parking) would draw more people to the park. Related to this concern is the worry that more people in the park will increase pressure on resources. Another concern focused on the environmental effects associated with increasing asphalt surfaces in the park. Hopefully the Department of Land and Natural Resources (DLNR) seriously considers these concerns moving forward with any plans.
- 5. The term "improvement" that is being used for this project is questionable. That is a biased term because it implies that things are going to be better. Whether this project will actually improve anything is yet to be determined. This project is really more of an expansion because it is expanding amenities.
- There are two groups involved in this project with opposing purposes. There is the project 6. proponent (the DLNR) who has funds to spend with the purpose of development. On this side, the goal is to expand the facilities and parking for additional users (increasing capacity for user populations). The secondary purpose of this group is to expend the funds. The other group consists primarily of the cultural respondents with the purpose of preservation and protection. The preservation and protection side is driven by Article 12, Section 7 of the State Constitution, which protects customary and traditional rights exercised for subsistence. cultural, and religious purposes. The purpose of this land for the lawai'a, the gatherers, and the practitioners needs to be kept in mind. How will increased visitation at the park affect not only the land but, the gathering capabilities for this group? What kinds of changes to ocean resources will all these people and increased human interaction bring to this area, which was once heavily used by lawai'a? In addition to customary and traditional rights, there are cultural resources, which the State is also obligated to project. Iwi kūpuna have been exposed in the dune area, which is a major clue that there are more than just those three or four individuals there. What is being done to address that issue?
- 7. Often times, agencies seek mana'o from descendents and cultural respondents and then do not sufficiently address their concerns. What is being done to address concerns about the iwi kūpuna? Concerns were raised about this beach being really dangerous. What is being done about the wetlands, which are important cultural sites? What about the signage asking people to not use soaps and shampoos? That is not a guarantee and cannot be listed as a mitigative measure, but it is anyway. A number of serious concerns have not been addressed because there is an objective and an outcome that needs to be met. DLNR needs to do additional consultation with those who are most integral to that community (the lineal descendants, the practitioners, and the users) they are the critical stakeholders. The Commission received verbal testimony on this project from four individuals, plus written testimony from Justin Kekiwi. Because Justin represents both the agency side and the Hawaiian lineal descendent

Martha Yent September 14, 2021 Page 3

> side, he is knowledgeable and his concerns are very valid. He believes this project warrants an Environmental Impact Statement (EIS), that spending the allocated funds should not be primary concern, that more needs to be done to understand how this project will affect the park, and that once this resource is gone, it's gone forever.

- 8. DLNR should be held to the same rigorous standards that private developers are held to.
- 9. This is a really difficult project to review. There is a potential for this project to add value, but there is also potential for it to decrease value.
- 10. What is Mākena State Park? No one knows. The land knows who or what it is, but we as a people are confused. Is it a wilderness park? Is it a historic park? Is it a recreational area? Is it a cultural landscape? Or is it a natural area reserve like the NAR down the road? It is likely all of these things, and they are competing uses. However, the effort to install comfort stations and showers indicates that it is being looked at as a recreational park first and foremost. This is unfortunate because the locals are getting pushed out of the park. It is getting difficult to access the park. DLNR wants to increase parking, but that does not solve this problem because we have such a high number of visitors arriving on Maui each day, creating a high demand to use the park.
- 11. The first 1970 Civic Plan identified Mākena as a place of quiet historic interest and natural beauty. It was a place for people to get away from the urban areas.
- 12. The Environmental Assessment (EA) is a very narrow way of looking at impacts. A place as significant as Mākena State Park requires a broader review than is provided in an EA. An EIS needs to be done, along with a master plan and an 'āina-based carrying capacity study. The current draft master plan is inadequate. Improvements should not be made to the park until these studies are completed. There are so many competing uses, so these foundational documents are needed to prudently plan for the park.
- 13. Access for locals is really important. How can access be provided without reserving spots for locals in the parking lots?
- 14. If the comfort stations are built, underground tanks are not preferable. The lines should hook up to the treatment plant instead.
- 15. The showers are not supported because people will use shampoos and other detergents. These detergents will eventually leach into the wetlands. Signs prohibiting shampoos and detergents will not prevent this. The showers will also use a lot of water, and are not a necessity. People can live without them.
- 16. The Commission does not concur with the "no adverse effect" per 36 CFR 800.5 and "no historic properties affected" per Chapter 6E, Hawai'i Revised Statutes determinations. The proposed improvements pose a significant impact by increasing the number of people that will be using the park. It will put a lot of pressure on the park and this concern was identified in the CIA. This concern was also shared by testifiers. We keep hearing these concerns from the public, and we cannot ignore them. We have to pay attention to them.
- 17. The project may be more palatable if it maintains the existing footprint. Perhaps the project can be scaled back, and can actually improve what is already there rather expanding and adding amenities. Additional parking spaces are not needed, just maintain the current footprint and fix the existing parking lots. People will continue to park on the side of the road anyway. The project should be scaled back because it caters to luxuries more than it considers the people who really want to preserve the resources there.

Martha Yent September 14, 2021 Page 4

18. These comments are not intended to be adversarial. The role of the Commission is to advocate for culture. The goal is to work together to do the best we can for this special place.

Should you have any questions or require additional clarification, please contact Annalise Kehler, Cultural Resources Planner, at (808) 270-7506 or email annalise.kehler@mauicounty.gov.

Sincerely, ' MMMMM

MICHELE CHOUTEAU MCLEAN, AICP **Planning Director** 

xc: Martha Yent, DLNR - Division of State Parks, martha.e.yent@hawaii.gov Andrew McCallister, DLNR - State Historic Preservation Division, andrew.mccallister@hawaii.gov Janet Six, Department of Management, janet.six@mauicounty.gov Erin Derrington, Department of Planning - Curent Division, erin.derrington@mauicounty.gov

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DAVID Y. IGE GOVERNOR OF HAWAII





SUZANNE D. CASE CHAIRPERSON BOARD OF LAND AND NATURAL RESOURCES COMMISSION ON WATER RESOURCE MANAGEMENT

ROBERT K. MASUDA

M. KALEO MANUEL DEPUTY DIRECTOR - WATE

AQUATIC RESOURCES BOATING AND OCEAN RECREATION BURLOI OF CONVEY ANCES COMISSION ON WATER RESOURCE MANAGEMENT CONSERVATION AND CONSTAL LANDS CONSERVATION AND CONSTAL LANDS FOR THE AND AND AND AND AND AND FOR THE AND AND AND AND AND AND FOR THE AND WILD LIFE 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

October 15, 2021

Ms. Michele Chouteau McLean, Director Department of Planning County of Maui 2200 Main Street, Suite 315 Wailuku, HI 96793

Dear Ms. McLean:

 SUBJECT: Response to Comments from the Maui County Cultural Resources Commission NHPA, Section 106 and HRS, Chapter 6E-8 Consultation
 Proposed Comfort Stations and Parking Lot Improvements at Mākena State Park Ahupua'a of Mo'oiki and Mo'oloa, Moku of Honua'ula, Maui TMK: (2) 2-2-006:027 and 030

The Department of Land and Natural Resources (DLNR), Division of State Parks requested a review of our proposed project at Mākena State Park by the Maui County Cultural Resources Commission (CRC) as part of the consultation process required under the National Historic Preservation Act (NHPA), Section 106 and Hawai'i Revised Statutes (HRS), Chapter 6E-8. We would like to thank the Commissioners for reviewing the project and providing their comments during their meetings held on August 5 and September 2, 2021. We would also like to acknowledge the assistance provided by Cultural Resources Planner Annalise Kehler with placing this item on the agenda and coordinating the presentation to the CRC.

The discussion with the Commissioners during the meetings provided an opportunity to share information but we would like to respond to the comments in the letter of September 14, 2021 to provide some clarification and further explanation. While many of the comments are relevant to the issues of historic preservation and cultural resources, some of the other comments may be more appropriate when considering the Draft Environmental Assessment that will be available for public review in the near future. Our responses have been grouped by topic and we have retained the numbering of the comments for reference.

We would like to point out that our initial request for consultation occurred in February 2021 but our placement on the agenda was delayed for 6 months while we completed the Cultural Impact Assessment (CIA). We felt this was important so that the Commissioners were fully informed about the cultural values and traditions of the project area and not just the archaeological findings. The CIA has also influenced our assessment of the effects of the project and the mitigation measures proposed to address these impacts.

#### Draft Archaeological Inventory Survey (AIS)

# 1. The AIS is insufficient based on its testing methodology; 1m by 1m test units do not seem sufficient for the wastewater system.

The only substantial wastewater system element for each of the 2 comfort stations is the containment tank. The 1m x 1m units excavated at each of the two tank locations was taken to a depth of either 1 meter or to bedrock. Both units produced negative findings and a lack of cultural remains. Testing would have been expanded if there had been cultural remains found. Previous land use and negative results during other archaeological testing and monitoring in the park were also considered in determining the amount of archaeological testing appropriate for this project. Archaeological monitoring is being recommended to address the concern for potential iwi kūpuna outside of the areas tested.

# 2. Staging areas have not been defined and should be considered part of the Area of Potential Effect (APE) and need to be clearly defined. The APE should include wherever the gravel, asphalt, and pipe with go.

It was explained that the staging areas would be identified by the archaeologist and contractors during the pre-construction meeting and would be restricted to the previously disturbed and/or developed park areas within the APE/project area. In response to this comment, the State Parks archaeologist and engineer have identified locations along the park entry road and within the APE as staging areas. These staging areas will be indicated in the Draft AIS.

# 16. The Commission does not concur with the "no adverse effect" per 36 CFR 800.5 and "no historic properties affected" per Chapter 6E determination. The proposed improvements pose a significant impact by increasing the number of people using the park.

The initial determination shared during the Section 106 and Chapter 6E-8 consultation in February 2021 was based on the lack of historic properties within the APE/project area. The completion of the Cultural Impact Assessment (CIA) in July 2021 and the identification of Pu'u Ōla'i as a Traditional Cultural Property (TCP) eligible for listing on the National Register of Historic Places created the need to reassess the earlier determination. Although the APE/project area is not within the TCP and will not physically impact the pu<sup>c</sup>u, we recognize the potential visual impact on the setting and cultural landscape. While there may be an effect, we do not believe that the effect will be adverse because of the mitigation measures being proposed such as keeping the height of the comfort station to 16 feet with a low pitch roof, applying paint colors that blend with the environment, and using landscaping to buffer the modern structure. The determination also acknowledges that the undertaking is occurring within a previous developed area consisting of a parking lot, ADA picnic table, and portable toilets. Per §6E-8, our determination has been changed to "effect with mitigation commitments". Archaeological monitoring is being recommended as a mitigation measure to protect archaeological sites in the vicinity of the APE/project area and to address the low potential for iwi kupuna to be found during the project. There is no evidence that the project will substantially increase visitation as the improvements are not expanding the footprint of the current parking at the northern parking lot.

Response to County of Maui Cultural Resources Commission Mākena State Park, Honua'ula, Maui October 15, 2021

#### Project Need and Purpose

# 3. The currently available porta potties have a small footprint compared to the proposed comfort station. It does not seem like a huge expense to maintain this current setup.

The proposed comfort stations will provide sanitation at a level commensurate with the high level of public use at Mākena State Park. During periods of high visitation such as the summer months and weekends, the porta potties are not adequate and people may seek the bushes as an alternative. In addition, portable toilets are a recurring operational cost that becomes a budgetary challenge as State agencies face funding limitations.

The CIA has raised concerns about the portable toilets being situated adjacent to the pu'u and the TCP. For this reason, State Parks prefers to have this facility at the northern parking lot located away from the pu'u.

# 5. The term "improvement" that is being used for this project is questionable. That is a biased term because it implies that things are going to be better and this is yet to be determined. This project is really more of an expansion because it is expanding amenities.

Improvements is a term used to justify the expenditure of public funds and in this case, the proposed sanitation facilities are intended to ensure public health and safety to the same degree that the County of Maui and other agencies try to address sanitation needs in public areas. Toilet facilities are critical in a heavily used park where people may stay for several hours. Therefore, we believe these comfort stations will be an improvement and will be appreciated by park users. A community survey conducted by the Oneloa Coalition in 2013 found that permanent restrooms and outdoor showers were the basic amenities that were wanted and needed at Mākena State Park.

# 14. If the comfort stations are built, underground tanks are not preferable. The lines should hook up to the treatment plant instead.

There is no existing sewer line connection to any wastewater treatment plan (WWTP) in the vicinity of the park. Connection to the WWTP at Mākena Resort would require the acquisition of sewer easements and the construction of a sewer line to this WWTP, which is located at a distance of 1.8 miles and uphill from the park. The funds required to complete this connection have been estimated to exceed one million dollars and may not be available for many years. We also note that DLNR, Division of State Parks has not secured a commitment to connect to the WWTP at Mākena Resort, though we understand that a potential commitment may have been discussed among other parties. The comfort stations are being designed for a future connection when funding becomes available. Once the connection to a sewer line to the WWTP becomes a reality, the containment tanks will remain a back-up in the event that problems occur at the treatment plan.

#### 15. The showers are not supported because people will use shampoos and other detergents. These detergents will eventually leach into the wetlands. Signs will not prevent this. Showers also use a lot of water and are not a necessity.

As noted in our response to Comment 5, a community survey indicated that the addition of outdoor showers was a high priority among park users. In addition, use of showers reduces the tracking of sand into comfort stations, which could otherwise create maintenance issues.

In response to the environmental concerns, State Parks is considering foot rising stations as an alternative to the outdoor showers. The same footprint for the concrete slab and drainage sump will be retained in the event an acceptable disposal system can be found in the future to address the leaching concerns. We are interested in the County's efforts to mitigate impacts from surface water impacts from shower and look forward to seeing if these options are effective and economically feasible in the expenditure of public funds.

State Parks believes the foot rising station is a positive alternative that will use less water and because it will only be about 24 inches above the ground surface, use of soap and shampoo will be discouraged. However, the foot rising station will allow people to rinse off the sand before entering the comfort stations which will assist with maintenance. State Parks will be exploring the option of a water garden to utilize the run-off from the rising stations.

# 17. Perhaps the project can be scaled back and improve what is already there rather than expanding and adding amenities. Additional parking spaces are not needed, just maintain the current footprint and fix the existing parking lot. The project caters to luxuries more than it considers the people who really want to preserve the resources there.

As explained at the meetings, the parking spaces will organize the existing parking at the northern parking lot. The current shortage of defined parking stalls creates a congested situation in this parking lot with the potential for obstructed access to both park users and emergency vehicles. The proposed parking stalls are limited to the existing footprint of the parking lots and shoulders of the entry roads and will not increase the existing parking capacity in this section of the park. By organizing the parking, the need for emergency vehicle access will also be addressed. In addition, the pavement will assist with erosion and drainage along the entry roads.

State Parks has considered alternatives to asphalt pavement such as compacted gravel and pavers. However, these materials do not accommodate striping and the delineation of stalls to organize the parking. With the level of visitation and vehicle traffic at the park, these methods will require maintenance and higher operational costs.

The other consideration is trying to avoid under-sizing facilities which requires the development of new and/or expanded structures in the future. This has happened at several park facilities including the comfort stations at Wai'ānapanapa State Park and Pua'a Ka'a State Wayside. The increase in the stalls at the southern parking lot has been determined by the availability of space adjacent to the previously developed parking area and the cars parking on Mākena-Keone'ō'io Road.

Response to County of Maui Cultural Resources Commission Mākena State Park, Honua'ula, Maui October 15, 2021

#### Consultation

4. This project has a number of triggers for studies and consultation. Of the individuals interviewed for the CIA, 3 had concerns about the proposed improvements. More amenities bring more people which will increase pressure on the resources. Also cited environmental effects associated with increasing asphalt surfaces.

While the CIA did identify these concerns, it was determined that the project would not directly affect Pu'u Ōla'i, the culturally significant geological feature, nor the archaeological sites and cultural practices associated with the pu'u. To mitigate potential effects to the viewshed from the pu'u toward Keone'ō'io, as well as the overall setting and feel, the comfort station at the northern entrance has been designed with low pitched roofing and native plantings are recommended to shield the comfort stations as much as possible from the top of the pu'u in an effort to blend in with the surrounding landscape.

6. There are customary and traditional rights and cultural resources that the State is obligated to protect (Article 12, Section 7 of the State Constitution). How will increased visitation affect the land the capabilities of the lawai'a, the gatherers, and the practitioners? There are iwi kūpuna in the dune area. What is being done to address these issues?

The CIA identifies the possibility for increased pressures from the intensification of visitor use of the park on marine resources, plant resources, and the practices associated with them. As noted in the CIA, "while it may be difficult to measure direct association between increased use due to the presence of the proposed comfort stations vs. increase in tourism and population growth on Maui in general, working toward developing a system of monitoring, or checks and balances, through community and visitor industry advocacy was recommended as a means to fulfill long-term management goals that would fulfill the mission statement of the Department of Land and Natural Resources to "(e)nhance, protect, conserve and manage Hawaii's unique and limited natural, cultural and historic resources held in public trust for current and future generations of the people of Hawaii nei, and its visitors, in partnership with others from the public and private sectors." (https://dlnr.hawaii.gov/)

Additionally, with the identification of Pu'u Ōla'i as part of the mo'o known as Puuoinaina and recognition of the physical manifestation of Inaina from Molokini to Pu'u Ōla'i as a traditional cultural property (TCP) associated with the traditional beliefs of Native Hawaiians about the nature of the world, management systems grounded in Hawaiian values, the lessons to be found in the kaona of her name in relation to those who are a part of her mo'olelo, and traditional systems of 'āina conservation may begin to guide the overall management of the areas within the TCP. Although not acknowledged by the Commissioners during the meetings, we hope the Commission can appreciate the significance of recognizing the TCP and the proposed boundary as it could potentially be the first TCP recognized and listed on the State and National Registers of Historic Places for Maui Island. 7. Agencies seek mana'o from descendants and cultural respondents and then do not sufficiently address their concerns. What about iwi kūpuna? What about the beach being really dangerous? What about wetlands and cultural sites? DLNR needs to do additional consultation with those who are most integral to the community (lineal descendants, practitioners, and users) – they are critical stakeholders.

The consultation process was conducted on several levels as detailed in both the Draft AIS and CIA. Over 30 individuals were consulted through the Section 106 and Chapter 6E-8 process while another 11 individuals were contacted for the CIA. Since 2018, meetings have been held with the Oneloa Coalition, a diverse group of lineal descendants, practitioners, and community members, where the project was discussed. It was through this consultation process that concerns were recognized that resulted in the selection of the comfort station locations and changes were made to the wastewater system. It was also through community consultation that the restoration of Paniaka Fishpond has been proposed and State Parks has responded with the drafting of a restoration plan. While it is believed that the potential for iwi kupuna in the APE/project area is low based on archaeological testing and monitoring, State Parks recognizes the potential for iwi kupuna during ground disturbing activities and therefore, will be preparing an Archaeological Monitoring Plan. We are now re-assessing the outdoor showers in the project because of the concerns we have been hearing from the community and Commissioners. Finally, interpretive materials are in preparation to better inform park visitors about ocean safety of the Mākena beach and the high incidences of spinal injuries. Therefore, we believe a concerted effort has been made to consult and address concerns and comments.

#### Other Comments

#### 8. DLNR should be held to the same rigorous standards that private developers are held to.

DLNR, State Parks is complying with all the regulatory requirements, including HRS Chapter 6E-8 (historic preservation), HRS Chapter 343 (environmental review), and Special Management Area (SMA) permitting pursuant to HRS Chapter 205A. It is noted that the Environmental Assessment (EA) process pursuant to Chapter 343, HRS and Chapter 200.1, Hawaii Administrative Rules (HAR) lays out separate procedural tracks for actions proposed by a government agency versus actions initiated by a private applicant. However, all EA determinations by the agency serving as the approving agency must be based on analysis of the significance criteria defined under HAR Section 11-200.1-13. When completed, the Final EA for this project would be reviewed for acceptance by the Board of Land and Natural Resources (BLNR) via a regularly scheduled public meeting.

# 9. This is a really difficult project to review. There is a potential for this project to add value, but there is also potential for it to decrease value.

We appreciate the challenge to balance the need for facilities for public health and safety with a desire to keep parks low development and avoid introducing modern structures into areas with natural and cultural values. We have scaled the comfort stations and parking lots to meet the current level of use and it is not the intent of State Parks to increase visitation but to meet current needs. By not providing basic sanitation facilities, we are creating a greater threat to the resources with people using the bushes and impacting the sand dune. Response to County of Maui Cultural Resources Commission Mākena State Park, Honua'ula, Maui October 15, 2021

# 10 and 13. What is Mākena State Park? Concerned that it is being looked at as a recreational park first. Locals are getting pushed out of the park and getting difficult to access the park. Increased parking does not solve the problem. How can access for locals be provided without reserving spots for locals in the parking lot?

While some have indicated that Mākena should be a wilderness park, the site does not meet the criteria of a large natural space without human habitation that provides solitude in a natural setting with a sense of unconfined space. Since the 1970s, the areas around the park have experienced residential and resort development so while Mākena State Park offers the opportunity to escape the urban setting and participate in passive recreation, it is not far from modern intrusions on the natural setting. State Parks has made an effort to keep the park low development, set facilities back from the shoreline, and maintain the vegetation.

State Parks has no evidence that locals are unable to use Mākena State Park. Residents are not charged parking fees to use the parking lots and many residents prefer the southern portion of the park. In the event that State Parks learns that residents are having difficulty using the park in the future, a reservation system can be considered.

# 11. The first 1970 Civic Plan identified Mākena as a place of quiet historic interest and natural beauty. It is a place for people to get away from the urban areas.

State Parks agrees that preservation of the natural beauty and the cultural resources is a major goal of Mākena State Park. The park facilities have been setback from the shoreline so that they do not directly impact the beaches, Pu'u Ōla'i, or the wetlands. Once people leave the parking lot and are on the beach, they are able to enjoy the beauty of Oneloa Beach, the ocean and offshore islands, and Pu'u Ōla'i without a lot of modern intrusion. The paving of the Mākena-Keone'ō'io Road in the 1970s is what really opened up the area to the residential development that is occurring around the park.

#### 12. The EA is a narrow way of looking at impacts. A place as significant as Mākena State Park requires a broader review than is provided in an EA. An EIS needs to be done, along with a master plan and an 'āina based carrying capacity study. Improvements should not be made to the park until these studies are complete.

As noted in our response to Comment No. 8, a Draft Environmental Assessment (EA) is being prepared pursuant to the requirements and processes set forth by both Chapter 343, HRS and Chapter 200.1, HAR in order to evaluate the project, determine whether the effect of the proposed action may constitute a significant impact, and to identify measures to mitigate or reduce any adverse impacts. The need for an EIS is based upon the presence of significant direct, indirect and cumulative impacts of the proposed action on the environment, according to the significance criteria of HAR Section. Upon completion of the EA preparation process, DLNR/BLNR will review the Final EA to determine whether or not a potential for significant impacts exists with the proposed project. If a decision is made to accept the Final EA, a Finding of No Significant Impact (FONSI) would be issued by DLNR/BLNR and the Final EA/FONSI would be published in The Environmental Notice publication by the State's Environmental Review Program (ERP – formerly known as the Office of Environmental Quality Control). Should DLNR/BLNR, however, determine that the proposed action is anticipated to result in

significant impacts pursuant to the significance criteria set forth in HAR Section 11-200.1-13, an EIS process will be initiated. Depending on the nature of significant impacts anticipated, additional technical studies may be undertaken as part of the EIS preparation process.

State Parks has discussed the need for a Master Plan for Mākena State Park with the Oneloa Coalition. State Parks does not believe that a Master Plan is needed at this time as no major development is proposed beyond basic facilities such as restrooms and parking lots. A management plan is felt to be more appropriate as it could address issues such as resource management, level of visitation, and concerns of cultural practitioners. Carrying capacity studies can be challenging because people have different perceptions about crowding and personal space. Sometimes it is not the number of users but management, including how people are behaving and how an area is being used. Another approach is referred to as limits of acceptable changes which can measure observable impacts to resources and action is taken when the limit of acceptable change is encountered.

# **18.** The role of the Commission is to advocate for culture. The goal is to work together and do the best we can for this special place.

DLNR, Division of State Parks agrees with this comment and this is why we are supportive of designating Pu'u Ōla'i as a Traditional Cultural Property (TCP) and nominating it to the National Register of Historic Places. An effort has been made to select a location for the northern comfort station that provides a physical and visual buffer for the pu'u and which respects the significance of this cultural feature. The design elements, such as height, color, and landscaping, are also being considered to minimize the impacts on the cultural landscape and environmental setting.

We appreciate the comments received from the community and the Commission and thank you for this opportunity to share our responses to these comments. If you have any questions, please feel free to contact Martha Yent, Parks Interpretive Program and LWCF Coordinator, at Martha.E.Yent@hawaii.gov or 808-587-0287.

Sincerely,

· CAGANA

CURT COTTRELL State Parks Administrator

JAN 1 3 2020

MICHAEL P. VICTORINO Mayor

> KARLA H. PETERS Director

JOHN L. BUCK III Deputy Director



DEPARTMENT OF PARKS AND RECREATION

700 Hali'a Nakoa Street, Unit 2, Wailuku, Hawaii 96793 Main Line (808) 270-7230 / Facsimile (808) 270-7942

January 9, 2020

Gwendolyn Rivera, Senior Associate Munekiyo Hiraga 305 High Street, Suite 104 Wailuku, Hawaii 96793

Dear Ms. Rivera,

SUBJECT: Chapter 343, Hawai'i Revised Statutes, Early Consultation Request for Proposed Makena State Park Comfort Stations Project at TMK No.: (2)2-1-006:030(por.), Makena, Maui, Hawai'i

Thank you for the opportunity to review and comment on the subject project. The Department of Parks and Recreation has no comments at this time.

Should you have any questions, please feel free to contact me or Robert Halvorson, Chief of Planning and Development, at robert.halvorson@co.maui.hi.us or (808) 270-7387.

Sincerely,

KARLA H. PETERS Director of Parks & Recreation

c: Robert Halvorson, Chief of Planning & Development

KHP:RH:sm

WUNEKIYO HIRAGA

Karlynn K. Fukuda PRESIDENT

Mark Alexander Roy VICE PRESIDENT

Tessa Munekiyo Ng VICE PRESIDENT

Michael T. Munekiyo SENIOR ADVISOR

July 20, 2021

Karla Peters, Director County of Maui Department of Parks and Recreation 700 Hali'a Nakoa Street, Unit 2 Wailuku, Hawai'i 96793

#### SUBJECT: Chapter 343, Hawai'i Revised Statutes Early Consultation Request for Proposed Mākena State Park Improvements at TMK No.: (2)2-1-006:030(por.), Mākena, Maui, Hawai'i

Dear Ms. Peters:

Thank you for your message dated January 9, 2020 in response to our request for early consultation comments for the proposed Mākena State Park Comfort Stations project at Mākena, Maui, Hawai'i. On behalf of the State of Hawai'i, Department of Land and Natural Resources (DLNR), Division of State Parks (DSP), we acknowledge that the Department of Parks and Recreation has no comments at this time.

We appreciate your review and will include a copy of your letter and this response letter in the Draft Environmental Assessment for the project. Should you have any questions or require further information, please feel free to contact me at 244-2015.

Very truly yours,

Geoudolyn Rivera

Gwendolyn Leialoha Cheney Rivera Senior Associate

GLCR:lh

cc: John Datiles, P.E., Department of Land and Natural Resources, Engineering Division

Kirk Tanaka, R.T. Tanaka Engineers, Inc. K\DATA\RTTanaka\Makena Comfort Station\ApplicationsEC\Response Letters\DPR response.doc

Minu305 High Street, Suite 104Wailuku, Hawaii96793Tel: 808.244.2015Fax: 808.244.8729Onice735 Bishop Street, Suite 321Honolulu, Hawaii96813Tel: 808.983.1233Weak munching on the second street complete street complete street complete street complete street complete street stree



## POLICE DEPARTMENT

COUNTY OF MAUL

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

January 8, 2020



MICHAEL P. VICTORINO MAYOR

OUR REFERENCE

CHIEF OF POLICE

DEAN M. RICKARD DEPUTY CHIEF OF POLICE

Ms. Gwendolyn Rivera Senior Associate Munekiyo Hiraga 305 High Street, Suite 104 Wailuku, Hawaii 96793

#### Re: Chapter 343, Hawaii Revised Statues Early Consultation Request for Proposed Makena State Park Comfort Stations Project at TMK: (2) 2-1-006:030 (por.), Makena, Maui, Hawaii

Dear Ms. Rivera:

This is in response to your letter dated December 17, 2019 requesting comments on the proposed development of two (2) new comfort stations, outdoor showers, and parking lot improvements at Makena State Park.

In review of the submitted documents, we would like to suggest a sidewalk area or marked walking path be erected from the newly marked parking stalls to the beach area that could be wide enough to allow for wheelchair access and pedestrian traffic. This will allow for visitors who need wheelchair access to the park, but are unable to find a designated handicap parking, the ability to safely make their way to the beach without traveling within the roadway. This would also provide the same safe walking path for the other pedestrians also.

We would also like to suggest turning off the water after park hours and if possible, eliminate any or as many electrical outlets at the comfort stations. This will help in hindering homeless individuals from camping in the park area since the parking lot will be secured and traffic to the area is limited.

Thank you for giving us the opportunity to comment on this project.

Sincerely,

Acting Assistant Chief Randy Esperanza for: TIVOLI S. FAAUMU Chief of Police



Karlynn K. Fukuda PRESIDENT

Mark Alexander Roy VICE PRESIDENT

Tessa Munekiyo Ng VICE PRESIDENT

Michael T. Munekiyo SENIOR ADVISOR

July 20, 2021

Dean Rickard, Acting Chief County of Maui Police Department 55 Mahalani Street Wailuku, Hawai'i 96793

#### SUBJECT: Chapter 343, Hawai'i Revised Statutes Early Consultation Request for Proposed Mākena State Park Improvements at TMK No.: (2)2-1-006:030(por.), Mākena, Maui, Hawai'i

Dear Chief Rickard:

Thank you for your Department's letter dated January 8, 2020 providing early consultation comments for the proposed Mākena State Park Comfort Stations project at Mākena, Maui, Hawai'i. On behalf of the State of Hawai'i, Department of Land and Natural Resources (DLNR), Division of State Parks (DSP), we offer the following information in response to the comments noted in your letter.

- 1. An ADA-accessible walkway will be provided to the new parking stalls to provide improved park access for all users.
- 2. The comfort stations will be locked and outdoor water fixtures will be disabled after hours. No electrical outlets will be provided for park users.

Dean Rickard, Acting Chief July 20, 2021 Page 2

We appreciate your review and will include a copy of your comment letter and this response letter in the Draft Environmental Assessment for the project. Should you have any questions or require further information, please feel free to contact me at 244-2015.

Very truly yours,

Geoudolyn Rivera

Gwendolyn Leialoha Cheney Rivera Senior Associate

GLCR:Ih

cc: John Datiles, P.E., Department of Land and Natural Resources, Engineering Division

Kirk Tanaka, R.T. Tanaka Engineers, Inc. K'IDATA'RTTanaka\Makena Comfort Station\Applications\EC\Response Letters\MPD response.doc

JAN 2 1 2020

MICHAEL P. VICTORINO Mayor

ROWENA M. DAGDAG-ANDAYA Director

JORDAN MOLINA

Deputy Director

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

RODRIGO "CHICO" RABARA, P.E. Engineering Division

> JOHN R. SMITH, P.E. Highways Division

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





COUNTY OF MAUI DEPARTMENT OF PUBLIC WORKS 200 SOUTH HIGH STREET, ROOM 434 WAILUKU, MAUI, HAWAII 96793

January 15, 2020

Ms. Gwendolyn Rivera, Senior Associate MUNEKIYO HIRAGA 305 High Street, Suite 104 Wailuku, Hawai'i 96793

Dear Ms. Rivera:

#### SUBJECT: CHAPTER 343, HAWAI'I REVISED STATUTES EARLY CONSULTATION REQUEST FOR PROPOSED MAKENA STATE PARK COMFORT STATIONS PROJECT; TMK: (2) 2-1-006:030 (POR.), MAKENA, MAUI, HAWAI'I

We reviewed the subject early consultation request and have no comments at this time.

If you have any questions regarding this memorandum, please call Jordan Molina at 270-7845.

Sincerely,

ordan Molina

FOP ROWENA M. DAGDAG-ANDAYA Director of Public Works

RMDA:JM:da xc: Engineering Division S:\DSA\Engr\CZM\Draft Comments\21006030\_makena\_st\_prk\_comfort\_stns\_ec.rtf

Karlynn K. Fukuda PRESIDENT

Mark Alexander Roy VICE PRESIDENT

Tessa Munekiyo Ng. VICE PRESIDENT

Michael T. Munekiyo SENIOR ADVISOR

July 20, 2021

Rowena Dagdag-Andaya, Director County of Maui Department of Public Works 200 South High Street, Room 434 Wailuku, Hawai'i 96793

MUNEKIYO HIRAGA

#### SUBJECT: Chapter 343, Hawai'i Revised Statutes Early Consultation Request for Proposed Mākena State Park Improvements at TMK No.: (2)2-1-006:030(por.), Mākena, Maui, Hawai'i

Dear Ms. Dagdag-Andaya:

Thank you for your message dated January 15, 2020 responding to our request for early consultation comments for the proposed Mākena State Park Comfort Stations project at Mākena, Maui, Hawai'i. On behalf of the State of Hawai'i, Department of Land and Natural Resources (DLNR), Division of State Parks (DSP), we acknowledge that the Department of Public Works has no comments on the proposed action at this time.

We appreciate your review and will include a copy of your letter and this response letter in the Draft Environmental Assessment for the project. Should you have any questions or require further information, please feel free to contact me at 244-2015.

Very truly yours,

Groundolyn Rivera

Gwendolyn Leialoha Cheney Rivera Senior Associate

GLCR:lh

cc: John Datiles, P.E., Department of Land and Natural Resources, Engineering Division

KIRK Tanaka, R.T. Tanaka Engineers, Inc. KIDATAIRTTanakaiMakena Comfort Station/Applications/EC/Response Letters/DPW response.doc

www.munekiyofsquguicom

January 26, 2020

Gwendolyn Rivera Munekiyo Hiraga 305 High Street, Suite 104 Wailuku, Hawaii 96793

Aloha Gwen,

Mahalo for allowing me the opportunity to comment on the proposed construction at the Makena State Park involving the addition of rest rooms, showers and additional parking.

I have personally been involved with trying to make improvements to the Park for over 30 years. As the Assistant General Manager and Marketing Director for the Maui Prince Hotel, I represented Seibu Hawaii's interest in improving the State Park. I worked closely with Phil Ota, the DLNR representative at the time, in trying to provide improvements at the Park, however to no avail. Since then, I have become a member of the Oneloa Coalition representing the community of Makena, primarily due to my role within the community as President of the Makena Homeowners Association.

The Oneloa Coalition was the result of a condition imposed upon Everett Dowling by the County of Maui as a result of Dowling's request for zoning and further development of the Makena Resort. The composition of the Coalition consisted of a very diverse, by design, group of individuals representing various associations on the Island. Also included were State of Hawaii DLNR representatives. Activist groups, community groups and miscellaneous "land/sea and animal shepherd" type groups were thrown into this mixing bowl, all with the mission to create a recommendation for a master plan for the Makena State Park.

Over the years, members representing community groups have dwindled, leaving the present majority of members who represent groups known for their anti-development philosophy. Maui Tomorrow, The Sierra Club, the Surfrider Foundation and other individual Hawaiian activists currently form the majority of the meeting.

While there is a common desire by most members of the Coalition, myself included, to keep this as an undisturbed, natural park, the need to protect health and safety are concerns that should remain paramount. Foremost is the need for rest room facilities, as supported in an exit interview study conducted by PBR for their draft plan, Second on that list was the desire for showers.

Most members of the Coalition do not want showers in the Park. Some members stating that it is an excess use of water from our limited Island supply. Others say that showers will create an influx of homeless to use the facilities, especially the showers. Yet others are concerned of the runoff from the showers, and the possible impact on the wetlands and the fragile ecology of the Park.

By a unanimous vote at one of our meetings last year, The Makena Homeowners Association has asked that showers be installed at the Park. As there presently are no shower facilities in the Park, the restrooms and showers within our neighborhood at our three park areas (Maluaka North, Maluaka South and The Landing) are inundated with beach-users from the Makena State Park. Much of this involves young groups that congregate, complete with loud music, at our three parks that are intended to service beach users within our immediate vicinity.

To refute the objections by the "no-shower" naysayers I offer the following:

There would be no additional water being used as people are already using the showers at the 3 locations within the neighborhood. Water would now be used within the Park instead.

The State should be able to provide a system that would not leach into the wetlands. Given an assurance that a safe system for the containment of shower runoff is available, we should then approve the showers.

Finally, there remains the issue of the proposed additional parking. The Coalition was never advised of the additional parking, or the paving that would be required. The Coalition needs an opportunity to discuss the pros and cons of this subject. Quite possibly a "carrying capacity" for the Park needs to be established in order to determine if the additional parking is really warranted. And if so, how many additional spaces are needed.

Mahalo Nui Gwen. I am always available for further discussion should such be needed.

Aloha

Sam Garcia, President Makena Homeowners Association 193 Makena Rd Kihei, HI 96753

808-276-9129 Koakai1@hotmail.com MUNEKIYO HIRAGA

Karlynn K. Fukuda PRESIDENT

Mark Alexander Roy VICE PRESIDENT

Tessa Munekiyo Ng VICE PRESIDENT

Michael T. Munekiyo SENIOR ADVISOR

July 20, 2021

#### Via email: koakai1@hotmail.com

Mr. Sam Garcia Makena Homeowners Association 193 Makena Road Kihei, Hawai'i 96753

#### SUBJECT: Chapter 343, Hawai'i Revised Statutes Early Consultation Request for Proposed Mākena State Park Improvements at TMK No.: (2)2-1-006:030(por.), Mākena, Maui, Hawai'i

Dear Mr. Garcia:

Thank you for your letter dated January 26, 2020 providing early consultation comments for the proposed Mākena State Park Comfort Stations project at Mākena, Maui, Hawai'i. On behalf of the State of Hawai'i, Department of Land and Natural Resources (DLNR), Division of State Parks (DSP), we offer the following information in response to the comments noted in your letter:

- 1. Thank you for providing your perspective regarding your experience as a member of Oneloa Coalition as well as the Makena Homeowners Association.
- 2. DSP acknowledges your comment that the Makena Homeowners Association has asked that showers be installed at Makena State Park. DSP proposes to install two (2) outdoor showers located adjacent to the two (2) new comfort stations at the two existing parking lots. Your comment that installation of showers at Makena State Park would not represent a net increase in water use is also noted.
- 3. The duty of the DLNR, DSP, pursuant to Hawai'i Revised Statutes Title 12, Section 186.4, is to "preserve the parks and parkways in the state park system in their natural condition so far as may be consistent with their use and safety, and improve them in such manner as to retain to a maximum extent their natural scenic, historic, and wildlife values for the use and enjoyment of the public," As such, DSP will ensure that any

Mr. Sam Garcia July 20, 2021 Page 2

> improvements implemented at Makena State Park, including showers, will be designed to preserve the park's natural resources and avoid adverse impacts to the environment.

4. We note that an Early Consultation Request, with information regarding the proposed parking facilities, was sent to the Oneloa Coalition on December 17, 2019. DPS welcomes any comments from the Oneloa Coalition and other community stakeholders regarding the proposed project. While the proposed plan provides additional improved parking areas, these areas utilize the gravel shoulders of the existing access driveways which are already used for parking by park visitors. The proposed parking improvements are intended to provide enhanced access to service the existing visitor volumes at the park and to reduce vehicle and pedestrian conflict with better organization and traffic control.

We appreciate your input and will include a copy of your comment letter and this response letter in the Draft Environmental Assessment for the project. Should you have any questions or require further information, please feel free to contact me at 244-2015.

Very truly yours,

Groundolyn Rivera

Gwendolyn Leialoha Cheney Rivera Senior Associate

GLCR:la

cc: John Datiles, P.E., Department of Land and Natural Resources, Engineering Division

Kirk Tanaka, R.T. Tanaka Engineers, Inc. K:\DATA\RTTanaka\Makena Comfort Station\Applications\EC\Response Letters\MHA response.docx

JAN 0 9 2020



Kihei Community Association "e mālama pono"...dedicated to protecting, sustaining and enhancing our 'āina, kai and 'ohana

January 8, 2020

Munekiyo Hiraga Attention: Gwendolyn Rivera 305 High St Suite 104 Wailuku, HI 96793

Re: Makena State Park Comfort Station Project

Aloha Ms. Rivera:

We appreciate this opportunity to offer our input as part of the early consultation process for this project at Makena State Park. In general we are in support of adding the two comfort stations as well as the outdoor showers, but have strong reservations about expanding the parking lots.

We have followed the numerous proposals for several years and while we appreciate and support the rural character concept, we believe the need for environmental friendly toilets here is paramount. It is certainly preferable to having large numbers of residents and visitors relieving themselves in this pristine land on a daily basis. The challenge has been the "environmental friendly" aspect, as there are no existing sewage lines. We are aware that eventually the sewage at these facilities may be transported to the treatment plant in Makena, but believe it is not in the best interest to not have a fixed facility here until that time. Moving ahead with construction including vaults or holding tanks to contain the waste for removal achieved in the plan can later be modified when there are sewer lines in place to transport it to the treatment plant.

Likewise we support installation of outdoor showers for park users who wish to rise off seawater and sand after being at the beach. Again there needs to be every effort to insure any impact to the natural environment is mitigated. While shower users can be encouraged to do no more than rise off, some will have sunscreen residue. Moreover there very likely will be some using soaps & shampoos. How will the runoff be collected? Will this also go into holding tanks to be collected? If not, it will ultimately end up in the ocean. If plans are for rain gardens, will these be strictly be maintained?

We do not support expansion of the parking lots. Our position is expanding the availability of vehicle parking further burdens the carrying capacity of the park and further burdens the limited surrounding infrastructure. Build more parking spaces and they will be filled and demand made for even more. Further, paving over more of the land is damaging to the environment.

We are aware that a paid parking system for non-Hawaii residents is set to begin. Evaluating the effect this has on the number of park users is yet another reason to not proceed with expanding parking lots. Have shuttle wagons been considered to transport park users to and from the park from more urban areas?

We hope this is truly an early consultation process that considers community input, as at times we have observed they are simply "check offs" on a list before proceeding with decided plans.

Mahalo, Mike Moren, President, Kihei Community Association



Karlynn K. Fukuda PRESIDENT

Mark Alexander Roy VICE PRESIDENT

Tessa Munekiyo Ng VICE PRESIDENT

Michael T. Munekiyo SENIOR ADVISOR

July 20, 2021

258

Mike Moran, President Kihei Community Association P.O. Box 662 Kihei, Hawai'i 96753

> SUBJECT: Chapter 343, Hawai'i Revised Statutes Early Consultation Request for Proposed Mākena State Park Improvements at TMK No.: (2)2-<u>1-006:030(por.)</u>, Mākena, Maui, Hawai'i

Dear Mr. Moran:

Thank you for your letter dated January 8, 2020 providing early consultation comments for the proposed Mākena State Park Comfort Stations project at Mākena, Maui, Hawai'i. On behalf of the State of Hawai'i, Department of Land and Natural Resources (DLNR), Division of State Parks (DSP), we offer the following information in response to the comments noted in your letter:

#### Comment 1:

We appreciate this opportunity to offer input as part of the early consultation process for this project at Makena State Park. In general we are in support of adding the two comfort stations as well as the outdoor showers, but have strong reservations about expanding the parking lots.

**<u>Response</u>**: DSP notes the Kihei Community Association's (KCA) support for the addition of two (2) comfort stations and outdoor showers and reservations regarding expansion of the parking lots.

#### Comment 2:

We have followed the numerous proposals for several years and while we appreciate and support the rural character concept, we believe the need for environmental friendly toilets here is, paramount. It is certainly preferable to having large numbers of residents and visitors relieving themselves in this pristine land on a daily basis. The challenge has been

Maul: 305 High Street, Suite 104 · Wailuku, Hawaii 96793 · Tel: 808.244.2015 · Fax: 808.244.8729 Cather: 735 Bishop Street, Suite 321 · Honolulu, Hawaii 96813 · Tel: 808.983.1233 www.monekiyoblinaga.com the "environmental friendly" aspect, as there are no existing sewage lines.

We are aware that eventually the sewage at these facilities may be transported to the treatment plant in Makena, but believe it is not in the best interest to not have a fixed facility here until that time. Moving ahead with construction including vaults or holding tanks to contain the waste for removal achieved in the plan can later be modified when there are sewer lines in place to transport it to the treatment plant.

**Response:** In evaluation of alternatives for disposal of wastewater from the proposed comfort stations, DSP has considered and incorporated the feedback received from KCA and other community stakeholders. As such, DSP proposes to install holding tanks for collection of wastewater, which will be regularly pumped out for removal and treatment offsite at an existing permitted wastewater treatment facility.

#### Comment 3:

Likewise we support installation of outdoor showers for park users who wish to rise off seawater and sand after being at the beach. Again there needs to be every effort to insure any impact to the natural environment is mitigated. While shower users can be encouraged to do no more than rise off, some will have sunscreen residue. Moreover there very likely will be some using soaps & shampoos. How will the runoff be collected? Will this also go into holding tanks to be collected? If not, it will ultimately end up in the ocean. If plans are for rain gardens, will these be strictly be maintained?

**Response:** DSP proposes a shower drainage system utilizing an evaporative retention area for disposal of shower water. In arriving at a final design, DSP is making every effort to ensure that any potential impacts to the environment are mitigated. Signage will be installed to discourage use of soap and shampoo in the showers. An example of this type of signage used within the State Parks system is provided. See **Attachment "A"**. All proposed facilities will be maintained by DSP staff.

#### Comment 4:

We do not support expansion of the parking lots. Our position is expanding the availability of vehicle parking further burdens the carrying Mike Moran, President July 20, 2021 Page 3

> capacity of the park and further burdens the limited surrounding infrastructure. Build more parking spaces and they will be filled and demand made for even more. Further, paving over more of the land is damaging to the environment.

**Response:** DSP notes that KCA is not in favor of expanding the parking lots. The proposed parking lot improvements are not intended as an expansion, as the areas to be improved are currently already in use for parking. See **Attachment "B"**. Though additional paved, marked stalls will be created, DPS's primary motivation is to provide enhanced access to service the existing visitor volumes at the park and to reduce vehicle and pedestrian conflict with better organization and traffic control. Drainage facility design will ensure that any additional runoff generated by the improvements will be retained.

#### Comment 5:

We are aware that a paid parking system for non-Hawaii residents is set to begin. Evaluating the effect this has on the number of park users is yet another reason to not proceed with expanding parking lots. Have shuttle wagons been considered to transport park users to and from the park from more urban areas?

**Response:** As of January 6, 2020, parking fees apply to non-residents and commercial vehicles at Makena State Park. This policy, unrelated to the currently proposed project, was enacted to provide funding for better park management and maintenance, and to aid in enforcement of park operating hours. Impacts to park visitorship as a result of this policy are not assumed or intended.

#### Comment 6:

We hope this is truly an early consultation process that considers community input, as at times we have observed they are simply "check offs" on a list before proceeding with decided plans.

**<u>Response</u>**: We appreciate your input and will include a copy of your comment letter and this response letter in the Draft Environmental Assessment for the project.

Mike Moran, President July 20, 2021 Page 4

Should you have any questions or require further information, please feel free to contact me at 244-2015.

Very truly yours,

Groundolyn Rivera

Gwendolyn Leialoha Cheney Rivera Senior Associate

GLCR:la

Attachment

cc: John Datiles, P.E., Department of Land and Natural Resources, Engineering Division (w/attachment)

Kirk Tanaka, R.T. Tanaka Engineers, Inc. (w/attachment) K:DATAIRTTanakaWakena Comfort Station/Applications/EC/Response Letters/KCA response.docx

# SHOWER RULES

The water from this shower enters the ground and can make its way to the ocean.



**PLEASE KŌKUA** Do not use soaps and shampoos that can damage corals and marine life.



STATE OF HAWAI'I Department of Land and Natural Resources / Division of State Parks

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Unpaved Parking Areas. North Parking Site



Unpaved Parking Areas. North Parking Site

# PARTIES CONSULTED DURING THE 30-DAY COMMENT PERIOD FOR THE DRAFT ENVIRONMENTAL ASSESSMENT; LETTERS RECEIVED AND RESPONSES TO SUBSTANTIVE COMMENTS

IX

### IX. PARTIES CONSULTED DURING THE 30-DAY COMMENT PERIOD FOR THE DRAFT ENVIRONMENTAL ASSESSMENT; LETTERS RECEIVED; AND RESPONSES TO SUBSTANTIVE COMMENTS

The Draft EA was published in the Office of Planning and Sustainable Development's *The Environmental Notice* on December 23, 2021. The following agencies and organizations received a copy of the Draft EA for review and comment during the 30-day comment period. Comment letters received and responses to substantive comments are included in this Chapter.

#### FEDERAL AGENCIES

- Lt. Furyisa Miller
   U.S. Coast Guard
   Fourteenth Coast Guard District
   300 Ala Moana Boulevard, Room 9-204
   Honolulu, Hawai'i 96850-4982
- Kay Zukeran
   NOAA Inouye Regional Center
   NMFS/PIRO
   1845 Wasp Blvd., Building 176
   Honolulu, Hawai'i 96818
- Kahana Stone, Soil Conservationist U.S. Department of Agriculture Natural Resources Conservation Service 77 Hookele Street, Suite 202 Kahului, Hawai'i 96732
- Linda Speerstra, Chief Regulatory Branch
   U.S. Department of the Army U.S. Army Engineer District, Honolulu Regulatory Branch, Building 230 Fort Shafter, Hawai'i 96858-5440
- Michelle Bogardus, Island Team Leader U.S. Fish and Wildlife Service 300 Ala Moana Blvd., Rm. 3-122 Honolulu, Hawai'i 96850
- Department of Commerce National Marine Fisheries Service Pacific Islands Regional Office 1845 Wasp Blvd., Building 176 Honolulu, Hawai'i 96818

#### STATE AGENCIES

- Major General Arthur "Joe" Logan, Adjutant General State of Hawai'i Hawai'i State Civil Defense 3949 Diamond Head Road Honolulu, Hawai'i 96816
- Keith Kawaoka, Acting Director State of Hawai'i
   Office of Environmental Quality Control
   235 S. Beretania Street, Suite 702 Honolulu, Hawai'i 96813
- Curt T. Otaguro, Comptroller State of Hawai'i Department of Accounting and General Services 1151 Punchbowl Street, #426 Honolulu, Hawai'i 96813
- Mike McCartney, Director State of Hawai'i
   Department of Business, Economic Development & Tourism
   P.O. Box 2359
   Honolulu, Hawai'i 96804
- William Aila, Jr., Chair State of Hawai'i
   Department of Hawaiian Home Lands P.O. Box 1879 Honolulu, Hawai'i 96805

- Bruce Anderson, PhD, Director State of Hawai'i
   Department of Health 1250 Punchbowl St., Room 325 Honolulu, Hawai'i 96813
- 13. Alec Wong, P.E., Chief State of Hawai'i Department of Health, Clean Water Branch Hale Ola, Room 225 2827 Waimano Home Road Pearl City, Hawai'i 96782
- Patti Kitkowski State of Hawai'i
  Department of Health Maui Sanitation Branch 54 South High Street, Room 300 Wailuku, Hawai'i 96793
- Suzanne Case, Chairperson State of Hawai'i
   Department of Land and Natural Resources
   P. O. Box 621
   Honolulu, Hawai'i 96809
- Samuel J. Lemmo, Administrator State of Hawai'i Department of Land and Natural Resources Office of Conservation and Coastal Lands 1151 Punchbowl Street, Room 131 Honolulu, Hawai'i 96813
- Dr. Alan Downer, Administrator State of Hawai'i Department of Land and Natural Resources State Historic Preservation Division 601 Kamokila Blvd., Room 555 Kapolei, Hawai'i 96707
- Jade Butay, Director State of Hawai'i
   Department of Transportation 869 Punchbowl Street Honolulu, Hawai'i 96813

- Dr. Sylvia Hussey, Chief Executive Officer State of Hawai'i
   Office of Hawaiian Affairs 560 N. Nimitz Highway, Suite 200 Honolulu, Hawai'i 96817
- 20. Mary Alice Evans, Director State of Hawai'i **Office of Planning** P.O. Box 2359 Honolulu, Hawai'i 96804
- Dan Orodenker, Executive Officer State of Hawai'i
   State Land Use Commission P.O. Box 2359 Honolulu, Hawai'i 96804

#### COUNTY AGENCIES

- 22. Eric Nakagawa, Acting Director County of Maui Department of Environmental Management 2050 Main Street, Suite 2B Wailuku, Hawai'i 96793
- 23. David Thyne, Chief County of Maui Department of Fire and Public Safety 200 Dairy Road Kahului, Hawai'i 96732
- Karla Peters, Director County of Maui
   Department of Parks and Recreation 700 Hali'a Nakoa Street, Unit 2F Wailuku, Hawai'i 96793
- Michele Chouteau McLean, Director County of Maui
   Department of Planning 2200 Main Street, Suite 315 Wailuku, Hawai'i 96793
- 26. Tivoli Faaumu, Chief County of Maui
  Police Department
  55 Mahalani Street
  Wailuku, Hawai'i 96793

- Rowena Dagdag-Andaya, Acting Director County of Maui
   Department of Public Works 200 South High Street, 4th Floor Wailuku, Hawai'i 96793
- Jeff Pearson, Director County of Maui
   Department of Water Supply 200 South High Street, 5th Floor Wailuku, Hawai'i 96793

#### **ORGANIZATIONS**

- 29. **Hawaiian Telcom** 60 South Church Street Wailuku, Hawai'i 96793
- 30. Ekolu Lindsey
   Maui Cultural Lands, Inc.
   P. O. Box #122
   Lāhainā, Hawai'i 96767
- Michael Grider, Manager, Engineering Maui Electric Company, Ltd.
   P.O. Box 398
   Kahului, Hawai'i 96733
- 32. **Spectrum** 158 Ma'a Street Kahului, Hawai'i 96732
- Albert Perez
   Oneloa Coalition
   c/o Maui Tomorrow Foundation
   55 North Church Street, Suite A-4
   Wailuku, Hawai'i 96793
- 34. Mike Moran, President
   Kihei Community Association
   P.O. Box 662
   Kihei, Hawai'i 96753

DAVID Y. IGE GOVERNOR OF HAWAII



ELIZABETH A. CHAR, M.D. DIRECTOR OF HEALTH

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

In reply, please refer to: EMD/CWB

02016PMHK.22

February 17, 2022

Via-email only (<u>Russell.p.kumabe@hawaii.gov</u>)

Mr. Russell Kumabe, AICP Department of Land and Natural Resources (DLNR) Division of State Parks P.O. Box 621 Honolulu, Hawaii 96809

Dear Mr. Kumabe:

#### SUBJECT: Comments on the Draft Environmental Assessment for Proposed Makena State Park Improvements Project Island of Maui, Hawaii TMK: (2) 2-1-006:030

The Department of Health (DOH), Clean Water Branch (CWB), acknowledges receipt of your request on February 11, 2022, for comments on the subject project. The DOH-CWB has reviewed the subject project 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 11-53, 11-54, and 11-55.

The DOH-CWB understands that the proposed project includes the addition of two (2) new outdoor showers which will drain via drainageway swales to new surface drainage basins. The purposes of the outdoor showers are to rinse off seawater and reduce tracking of sand into the comfort stations. The DOH-CWB does not regulate the discharges as the beach showers are not intended to be used for bathing with soaps or to be used as laundry or sink facilities. The new surface drainage basins should be designed and maintained to hold gray water from the showers for evaporation and should not result in soil or shoreline erosion. The operation of the showers with the discharge of effluent into the surface basins will not require an NPDES permit.

A Water Quality Certification (WQC) is not required if the project is not required to obtain a federal license or permit. Please note that all activities must comply with the Water Quality Standards. The DOH-CWB recommends the use of Best Management Practices (BMPs) to prevent or mitigate pollutant discharges to State surface waters.

Mr. Russell Kumabe February 17, 2022 Page 2

#### **DOH-CWB Standard Comments**

The following information is for agencies and/or project owners who are seeking comments regarding environmental compliance for their projects with the Hawaii Administrative Rules Chapters 11-53, 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: https://health.hawaii.gov/cwb/files/2018/05/Memo-CWB-Standard-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 point source water pollutant discharges into State surface waters (HAR Chapter 11-55). Point source means any discernible, confined, and discrete conveyance from which pollutants are or may be discharged.

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: <a href="https://eha-cloud.doh.hawaii.gov/epermit/">https://eha-cloud.doh.hawaii.gov/epermit/</a>. 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.

Mr. Russell Kumabe February 17, 2022 Page 3

Some of the activities requiring NPDES permit coverage include, but are not limited to:

- a. Discharges of Storm Water.
  - i. For Construction Activities Disturbing One (1) or More Acres of Total Land Area.

By HAR Chapter 11-55, an NPDES permit is required before the start of the construction activities that result in the disturbance of one (1) or more acres of total land area, including clearing, grading, and excavation. The total land area includes a contiguous area where multiple separate and distinct construction activities may be taking place at different times on different schedules under a larger common plan of development or sale.

- ii. For Industrial Activities for facilities with primary Standard Industrial Classification (SIC) Codes regulated in the Code of Federal Regulations (CFR) at 40 CFR 122.26(b)(14)(i) through (ix) and (xi). If a facility has more than one SIC code, the activity that generates the greatest revenue is the primary SIC code. If revenue information is unavailable, use the SIC code for the activity with the most employees. If employee information is also unavailable, use the SIC code for the activity with the greatest production.
- iii. From a small Municipal Separate Storm Sewer System (along with certain non-storm water discharges).
- b. Discharges to State surface waters from construction activity, hydrotesting, or dewatering.
- c. Discharges to State surface waters from cooling water applications.
- d. Discharges to State surface waters from the application of pesticides (including insecticides, herbicides, fungicides, rodenticides, and various other substances to control pest) to State waters.
- e. Well-Drilling Activities.

Any discharge to State surface waters of treated process wastewater effluent associated with well drilling activities is regulated by HAR Chapter 11-55. Discharges of treated process wastewater effluent (including well drilling slurries, lubricating fluids wastewater, and well purge wastewater) to State surface waters requires NPDES permit coverage.
Mr. Russell Kumabe February 17, 2022 Page 4

NPDES permit coverage is not required for well pump testing. For well pump testing, the discharger shall take all measures necessary to prevent the discharge of pollutants from entering State waters. Such measures shall include, if necessary, containment of initial discharge until the discharge is essentially free of pollutants. If the discharge is entering a stream or river bed, best management practices (BMPs) shall be implemented to prevent the discharge from disturbing the clarity of the receiving water. If the discharge is entering a storm drain, the discharger must obtain written permission from the owner of the storm drain prior to discharge. Furthermore, BMPs shall be implemented to prevent the discharge from collecting sediments and other pollutants prior to entering the storm drain.

- 3. A Section 401 Water Quality Certification (WQC) is required if your project/activity:
  - a. Requires a federal permit, license, certificate, approval, registration, or statutory exemption; and
  - b. May result in a discharge into State waters. The term "discharge" is defined in Clean Water Act, Subsections 502(16), 501(12), and 502(6).

Examples of "discharge" include, but are not limited to, allowing the following pollutants to enter State waters from the surface or in-water: solid waste, rock/sand/dirt, heat, sewage, construction debris, any underwater work, chemicals, fugitive dust/spray/paint, agricultural wastes, biological materials, industrial wastes, concrete/sealant/epoxy, and washing/cleaning effluent.

Determine if your project/activity requires a federal permit, license, certificate, approval, registration, or statutory exemption by contacting the appropriate federal agencies (e.g., Department of the Army (DA), U.S. Army Corps of Engineers (COE), Pacific Ocean Division Honolulu District Office (POH) Tel: (808) 835-4303; U.S. Environmental Protection Agency, Region 9 Tel: (415) 947-8021; Federal Energy Regulatory Commission Tel: (866) 208-3372; U.S. Coast Guard Office of Bridge Programs Tel: (202) 372-1511). 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: (808) 835-4303) regarding their permitting requirements.

To request a Section 401 WQC, you must complete and submit the Section 401 WQC application. This application is available on the e-Permitting Portal website located at: <u>https://eha-cloud.doh.hawaii.gov/epermit/</u>.

Please see HAR Chapter 11-54 for the State's Water Quality Standards and HAR 11-53 for more information on the Section 401 WQC. HAR 11-53 and 11-54 are available on the CWB website at: <u>http://health.hawaii.gov/cwb/</u>.

Mr. Russell Kumabe February 17, 2022 Page 5

- 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 and up to two (2) years in jail.
- 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.

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Mr. Russell Kumabe February 17, 2022 Page 6

If you have any questions, please visit our website at: <u>http://health.hawaii.gov/cwb/</u>, or contact the Engineering Section, CWB, at (808) 586-4309.

Sincerely,

Len Wong

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

MHK:ms

c: Ms. Erin Derrington, COM-DOP [via e-mail <u>erin.derrington@mauicounty.gov</u> only] Ms. Gwendolyn Leialoha Cheney Rivera, Munekiyo Hiraga [via e-mail <u>planning@munekiyohiraga.com</u> only]



Karlynn K. Fukuda PRESIDENT Mark Alexander Roy AICP, LEED AP VICE PRESIDENT Tessa Munekiyo Ng AICP VICE PRESIDENT

Michael T. Munekiyo AICP SENIOR ADVISOR

December 1, 2022

Alec Wong, P.E., Chief State of Hawai'i Department of Health Clean Water Branch P.O. Box 3378 Honolulu, Hawai'i 96720

### SUBJECT: Draft Environmental Assessment for Proposed Mākena State Park Comfort Stations Project at TMK No. (2)2-1-006:030(por.), Mākena, Maui, Hawai'i (ref EMD/CWB 02016PMHK.22)

Dear Mr. Wong:

Thank you for your comment letter dated February 17, 2022, regarding the Draft Environmental Assessment (EA) for the subject project. We appreciate you taking the time to provide comments for this project proposed by the State of Hawai'i, Department of Land and Natural Resources, Division of State Parks (DSP). On behalf of the DSP, we offer the following responses to your project-specific comments in the same order provided in your letter:

## Comment No. 1:

The DOH-CWB understands that the proposed project includes the addition of two (2) new outdoor showers which will drain via drainageway swales to new surface drainage basins. The purposes of the outdoor showers are to rinse off seawater and reduce tracking of sand into the comfort stations. The DOH-CWB does not regulate the discharges as the beach showers are not intended to be used for bathing with soaps or to be used as laundry or sink facilities. The new surface drainage basins should be designed and maintained to hold gray water from the showers for evaporation and should not result in soil or shoreline erosion. The operation of the showers with the discharge of effluent into the surface basins will not require an NPDES permit.

**<u>Response:</u>** DSP notes DOH-CWB's confirmation that operation of the showers with discharge of effluent into the surface basins is not regulated by DOH-CWB and will not require an NPDES permit. The proposed surface basins will be designed and maintained

Alec Wong, P.E., Chief December 1, 2022 Page 2

to receive shower effluent as well as site surface runoff, and should not result in soil or shoreline erosion.

## Comment No. 2:

A Water Quality Certification (WQC) is not required if the project is not required to obtain a federal license or permit. Please note that all activities must comply with the Water Quality Standards. The DOH-CWB recommends the use of Best Management Practices (BMPs) to prevent or mitigate pollutant discharges to State surface waters.

**Response:** DSP notes DOH-CWB's confirmation that a Water Quality Certification is not required if the project is not required to obtain a federal license or permit. The project will comply with all applicable Water Quality Standards. A Best Management Practices (BMP) plan has been prepared and is included in the Preliminary Engineering Report, as provided in the Draft EA.

In addition, DSP notes the DOH-CWB Standard Comments provided in your letter, and offer the following responses to these Standard Comments in the order in which they appear in your letter:

## Standard Comment No. 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).

**Response:** The project will comply with HAR Section 11-54-1.1, 3, and 4-8.

## Standard Comment No. 2:

You may be required to obtain National Pollutant Discharge Elimination System (NPDES) permit coverage for point source water pollutant discharges into State surface waters (HAR Chapter 11-55). Point source means any discernible, confined, and discrete conveyance from which pollutants are or may be discharged. 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-You will be asked to do a one-time cloud.doh.hawaii.gov/epermit/. 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. Some of the activities requiring NPDES permit coverage include, but are not limited to:

a. Discharges of Storm Water.

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- For Construction Activities Disturbing One (1) or More Acres of Total Land Area. By HAR Chapter 11-55, an NPDES permit is required before the start of the construction activities that result in the disturbance of one (1) or more acres of total land area, including clearing, grading, and excavation. The total land area includes a contiguous area where multiple separate and distinct construction activities may be taking place at different times on different schedules under a larger common plan of development or sale.
- ii. For Industrial Activities for facilities with primary Standard Industrial Classification (SIC) Codes regulated in the Code of Federal Regulations (CFR) at 40 CFR 122.26(b)(14)(i) through (ix) and (xi). If a facility has more than one SIC code, the activity that generates the greatest revenue is the primary SIC code. If revenue information is unavailable, use the SIC code for the activity with the most employees. If employee information is also unavailable, use the SIC code for the activity with the greatest production.
- *iii.* From a small Municipal Separate Storm Sewer System (along with certain non-storm water discharges).
- b. Discharges to State surface waters from construction activity, hydrotesting, or dewatering.
- c. Discharges to State surface waters from cooling water applications.

Alec Wong, P.E., Chief December 1, 2022 Page 4

- d. Discharges to State surface waters from the application of pesticides (including insecticides, herbicides, fungicides, rodenticides, and various other substances to control pest) to State waters.
- e. Well-Drilling Activities.

Any discharge to State surface waters of treated process wastewater effluent associated with well drilling activities is regulated by HAR Chapter 11-55. Discharges of treated process wastewater effluent (including well drilling slurries, lubricating fluids wastewater, and well purge wastewater) to State surface waters requires NPDES permit coverage.

NPDES permit coverage is not required for well pump testing. For well pump testing, the discharger shall take all measures necessary to prevent the discharge of pollutants from entering State waters. Such measures shall include, if necessary, containment of initial discharge until the discharge is essentially free of pollutants. If the discharge is entering a stream or river bed, best management practices (BMPs) shall be implemented to prevent the discharge from disturbing the clarity of the receiving water. If the discharge is entering a storm drain, the discharger must obtain written permission from the owner of the storm drain prior to discharge. Furthermore, BMPs shall be implemented to prevent the discharge from collecting sediments and other pollutants prior to entering the storm drain.

**<u>Response</u>**: An NPDES permit for Construction Activities Disturbing One (1) or More Acres of Total Land Area will be obtained for construction of the project, as applicable. As previously noted, no NPDES permit will be required for operation of the proposed facilities.

## Standard Comment No. 3:

A Section 401 Water Quality Certification (WQC) is required if your project/activity:

- a. Requires a federal permit, license, certificate, approval, registration or statutory exemption; and
- b. May result in a discharge into State waters. The term "discharge" is defined in Clean Water Act, Subsections 502(16), 501(12), and 502(6).

Examples of "discharge" include, but are not limited to, allowing the following pollutants to enter State waters from the surface or inwater; solid waste, rock/sand/dirt, heat, sewage, construction debris, any underwater work, chemicals, fugitive dust/spray/paint, agricultural wastes, biological materials, industrial wastes, concrete/sealant/epoxy, and washing/cleaning effluent. Determine if your project/activity requires a federal permit, license, certificate, approval, registration, or statutory exemption by contacting the appropriate federal agencies (e.g., Department of the Army (DA), U.S. Army Corps of Engineers (COE), Pacific Ocean Division Honolulu District Office (POH) Tel: (808) 835-4303; U.S. Environmental Protection Agency, Region 9 Tel: (415) 947-8021; Federal Energy Regulatory Commission Tel: (866) 208-3372; U.S. Coast Guard Office of Bridge Programs Tel: (202) 372-1511). 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: (808) 835-4303) regarding their permitting requirements.

To request a Section 401 WQC, you must complete and submit the Section 401 WQC application. This application is available on the e-Permitting Portal website located at: <u>https://eha-cloud.doh.hawaii.gov/epermit/</u>.

Please see HAR Chapter 11-54 for the State 's Water Quality Standards and HAR 11-53 for more information on the Section 401 WQC. HAR 11-53 and 11-54 are available on the CWB website at: <u>http://health.hawaii.gov/cwb/</u>.

**<u>Response</u>**: The proposed project is not anticipated to require a federal permit, license, certificate, approval, registration, or statutory exemption. As such, the project is not anticipated to require a Section 401 WQC.

## Standard Comment No. 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 and up to two (2) years in jail.

**<u>Response</u>**: The project and subsequent operation of the proposed facilities will be in compliance with applicable requirements pertaining to the State's Water Quality Standards.

Alec Wong, P.E., Chief December 1, 2022 Page 6

## Standard Comment No. 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:

- Treat storm water as a resource to be protected by integrating it into a. 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 reuse 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.

Alec Wong, P.E., Chief December 1, 2022 Page 7

**<u>Response</u>**: Thank you for this guidance. DSP will consider implementation of the foregoing measures to reduce, reuse, and recycle water to protect, restore, and sustain water quality and beneficial uses of State waters as may be applicable to the project.

We appreciate your input and will include a copy of your comment letter and this response in the Final EA. Should you have any questions or require further information regarding the proposed project, please contact me at (808) 244-2015, extension 220.

Very truly yours,

Geoudolyn Rivera

Gwendolyn Leialoha Cheney Rivera Senior Associate

GLCR:lh

cc: Valerie Suzuki, Department of Land and Natural Resources, Engineering Division Kirk Tanaka, P.E., R.T. Tanaka Engineers, Inc K:DATA/RTTanaka/Makena Comfort Station/Applications/Draft EA/Response Letters/DOH-CWB.docx DAVID Y. IGE GOVERNOR OF HAWAI

22/186



STATE OF HAWAII DEPARTMENT OF HEALTH Maui District Health Office 54 South High St. Rm. #301 Wailuku, HI 96793

January 14, 2022

Ms. Michele Chouteau McLean, AICP Director Department of Planning County of Maui 2200 Main Street, Suite 315 Wailuku, HI 96793

DEPT. OF PLANNING COUNTY OF MAUI

RECEIVED

Attn: Erin Derrington

Dear Ms. Chouteau McLean:

Subject:	MAKENA STATE PARK IMPROVEMENTS
Applicant:	State of Hawaii Department of Land and Natural Resources, Division of State Parks
Permit No.:	SM1 2021/0002 / SSA 2021/0037
TMK:	(2) 2-1-006: 030
Location:	Makena Road, Makena, Hawaii 96753
Description:	Construct improvements in the vicinity of two existing visitor parking areas at Makena State Park at the North Site. Proposed
	improvements include construction of two new comfort stations at the
	North and South sites, to include flushing toilets, sinks and potable water bottle filling station with roof-mounted photovoltaic arrays, wastewater containment sites and outdoor showers. Paving, striping, signage, guardrail, and related improvements to the existing unpaved parking areas at the North and South sites will create a total of 138
	new marked parking stalls.

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

Hawaii Administrative Rules, Chapter 11-62, Wastewater Systems, Section 11-62-06(a) General Requirements states that all buildings used or occupied as a dwelling, all public buildings, and all buildings and places of assembly generating wastewater or with toilets, sink, drains, or other plumbing fixtures capable of conveying wastewater, shall be connected to a wastewater system which meets the requirements of this rule. If you have any questions regarding the above comments, please contact Roland Tejano, Environmental Engineer, at 808 984-8232.

ELIZABETH A. CHAR, M.D. DIRECTOR OF HEALTH

Lorrin W. Pang, M.D., M.P.H. District Health Officer Ms. Michele Chouteau McLean January 14, 2022 Page 2

It is strongly recommended that you review the department's website at <u>https://health.hawaii.gov/epo/landuse/</u> and contact the appropriate program that concerns your project.

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

Sincerely,

1. 1

Hikitleowsai

Patti Kitkowski District Environmental Health Program Chief

c Joanna L. Seto, EMD Chief {Via Email}



Karlynn K. Fukuda PRESIDENT

Mark Alexander Roy AICP, LEED AP VICE PRESIDENT Tessa Munekiyo Ng AICP VICE PRESIDENT

Michael T. Munekiyo AICP SENIOR ADVISOR

December 1, 2022

Patti Kitkowski, District Environmental Health Program Chief State of Hawai'i Department of Health Maui District Health Office 54 South High Street, Room 301 Wailuku, Hawai'i 96793

> SUBJECT: Draft Environmental Assessment, Special Management Area Use Permit Application, and Shoreline Setback Assessment Application for Proposed Mākena State Park Comfort Stations Project at TMK No. (2)2-1-006:030(por.), Mākena, Maui, Hawai'i

Dear Ms. Kitkowski:

Thank you for your comment letter dated January 14, 2022, regarding the Draft Environmental Assessment (EA), Special Management Area Use Permit Application, and Shoreline Setback Assessment Application for the subject project. We appreciate you taking the time to provide comments for this project proposed by the State of Hawai'i, Department of Land and Natural Resources, Division of State Parks (DSP). On behalf of the DSP, we offer the following responses to your comments in the same order as they appear in your letter:

## Comment No. 1:

Hawaii Administrative Rules, Chapter 11-62, Wastewater Systems, Section 11-62-06(a) General Requirements states that all buildings used or occupied as a dwelling, all public buildings, and all buildings and places of assembly generating wastewater or with toilets, sink, drains, or other plumbing fixtures capable of conveying wastewater, shall be connected to a wastewater system which meets the requirements of this rule.

**<u>Response</u>**: Until such time that infrastructure is available for a direct sewerline connection, the proposed comfort station toilets and drains will be connected with applicable safeguards to a containment tank. Wastewater from the containment tanks will be transferred by truck to an approved wastewater treatment facility. The proposed

Maui: 305 High Street, Suite 104 • Wailuku, Hawaii 96793 • Tel: 808.244.2015 • Fax: 808.244.8729 Oahu: 735 Bishop Street, Suite 412 • Honolulu, Hawaii 96813 • Tel: 808.983.1233 www.muneklyohiraga.com

Patti Kitkowski, District Environmental Health Program Chief December 1, 2022 Page 2

comfort station facilities will be built and operated in compliance with Hawaii Administrative Rules, Chapter 11-62.

## Comment No. 2:

It is strongly recommended that you review the department's website at https://health.hawaii.gov/epo/landuse/ and contact the appropriate program that concerns your project

**<u>Response</u>**: Thank you for providing these resources. The project team has reviewed the information available at the Department's website and will coordinate with the Department as applicable to the project.

We appreciate your input and will include a copy of your comment letter and this response in the Final EA. Should you have any questions or require further information regarding the proposed project, please contact me at (808) 244-2015, extension 220.

Very truly yours,

Groundolyn Rivera

Gwendolyn Leialoha Cheney Rivera Senior Associate

GLCR:lh

cc: Valerie Suzuki, Department of Land and Natural Resources, Engineering Division Kirk Tanaka, P.E., R.T. Tanaka Engineers, Inc. K:DATA/RTTanaka/Makena Comfort Station/Applications/Draft EA/Response Letters/DOH-Maui.docx From: Balanay, Rana K <<u>rana.balanay@doh.hawaii.gov</u>>
Sent: Wednesday, January 26, 2022 10:52 AM
To: Cottrell, Curt A <<u>curt.a.cottrell@hawaii.gov</u>>; General eMail <<u>planning@munekiyohiraga.com</u>>
Subject: Makena State Park Improvements--Draft EA (AFNSI)

Aloha

Thank you for the opportunity to provide comments on the subject project. I apologize for sending this past the deadline.

Please see our standard comments at:

https://health.hawaii.gov/cab/files/2019/08/Standard-Comments-Clean-Air-Branch-2019.pdf

Please let me know if you have any Questions

Lisa M.M. Wallace EHS QA Officer Clean Air Branch Environmental Health Office Hilo, Hawaii 96720

### Standard Comments for Land Use Reviews Clean Air Branch Hawaii State Department of Health

If your proposed project:

### Requires an Air Pollution Control Permit

You must obtain an air pollution control permit from the Clean Air Branch and comply with all applicable conditions and requirements. If you do not know if you need an air pollution control permit, please contact the Permitting Section of the Clean Air Branch.

### Includes construction or demolition activities that involve asbestos

You must contact the Asbestos Abatement Office in the Indoor and Radiological Health Branch.

### Has the potential to generate fugitive dust

You must control the generation of all airborne, visible fugitive dust. Note that construction activities that occur near to existing residences, business, public areas and major thoroughfares exacerbate potential dust concerns. It is recommended that a dust control management plan be developed which identifies and mitigates all activities that may generate airborne, visible fugitive dust. The plan, which does *not* require Department of Health approval, should help you recognize and minimize potential airborne, visible fugitive dust problems.

Construction activities must comply with the provisions of Hawaii Administrative Rules, §11-60.1-33 on Fugitive Dust. In addition, for cases involving mixed land use, we strongly recommend that buffer zones be established, wherever possible, in order to alleviate potential nuisance complaints.

You should provide reasonable measures to control airborne, visible fugitive dust from the road areas and during the various phases of construction. These measures include, but are not limited to, the following:

- a) Planning the different phases of construction, focusing on minimizing the amount of airborne, visible fugitive dust-generating materials and activities, centralizing on-site vehicular traffic routes, and locating potential dust-generating equipment in areas of the least impact;
- b) Providing an adequate water source at the site prior to start-up of construction activities;
- c) Landscaping and providing rapid covering of bare areas, including slopes, starting from the initial grading phase;
- d) Minimizing airborne, visible fugitive dust from shoulders and access roads;
- e) Providing reasonable dust control measures during weekends, after hours, and prior to daily start-up of construction activities; and
- f) Controlling airborne, visible fugitive dust from debris being hauled away from the project site.

If you have questions about fugitive dust, please contact the Enforcement Section of the Clean Air Branch

Clean Air Branch	Indoor Radiological Health Branch
(808) 586-4200	(808) 586-4700
<u>cab@doh.hawaii.gov</u>	

April 1, 2019



Karlynn K. Fukuda PRESIDENT Mark Alexander Roy AICP, LEED AP VICE PRESIDENT Tessa Munekiyo Ng AICP VICE PRESIDENT

Michael T. Munekiyo AICP SENIOR ADVISOR

December 1, 2022

Via Email: rana.balanay@doh.hawaii.gov

Lisa M.M. Wallace, EHS QA Officer State of Hawai'i Department of Health Clean Air Branch, Environmental Health Office Hilo, Hawai'i 96720

> SUBJECT: Draft Environmental Assessment for Proposed Mākena State Park Comfort Stations Project at TMK No. (2)2-1-006:030(por.), Mākena, Maui, Hawai'i

Dear Ms. Wallace:

Thank you for your email of January 26, 2022, regarding the Draft Environmental Assessment (EA) for the subject project. We appreciate you taking the time to provide us with the Clean Air Branch standard comments. The project team has reviewed the standard comments. The project will comply with all applicable requirements pertaining to fugitive dust and air pollution. We note that the project does not include construction or demolition activities that involve asbestos.

We appreciate your input and will include a copy of your comment letter and this response in the Final EA. Should you have any questions or require further information regarding the proposed project, please contact me at (808) 244-2015, extension 220.

Very truly yours,

Groundolyn Rivera

Gwendolyn Leialoha Cheney Rivera Senior Associate

GLCR:lh

cc: Valerie Suzuki, Department of Land and Natural Resources, Engineering Division Kirk Tanaka, P.E., R.T. Tanaka Engineers, Inc.

K:\DATA\RTTanaka\Makena Comfort Station\Applications\Draft EA\Response Letters\DOH-CAB.docx

Maui: 305 High Street, Suite 104 • Wailuku, Hawaii 96793 • Tel: 808.244.2015 • Fax: 808.244.8729 Oahu: 735 Bishop Street, Suite 412 • Honolulu, Hawaii 96813 • Tel: 808.983.1233 www.muneklyohiraga.com



# STATE OF HAWAII OFFICE OF PLANNING & SUSTAINABLE DEVELOPMENT

235 South Beretania Street, 6th Floor, Honolulu, Hawaii 96813 Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804 DAVID Y. IGE GOVERNOR

MARY ALICE EVANS DIRECTOR

 Telephone:
 (808) 587-2846

 Fax:
 (808) 587-2824

 Web:
 http://planning.hawaii.gov/

DTS202112200955NA

January 20, 2022

Program Environmental

Coastal Zone Management

Review Program

Land Use Commission

Land Use Division

Special Plans Branch

State Transit-Oriented Development

Statewide Geographic Information System

Statewide Sustainability Program Mr. Clayton Yoshida Planning Program Administrator Department of Planning County of Maui One Main Plaza Building 2200 Main Street, Suite 315 Wailuku, Hawaii 96793

Attn: Ms. Erin Derrington

Dear Mr. Yoshida:

 Subject: Chapter 343, Hawaii Revised Statutes, Draft Environmental Assessment, and Applications for Special Management Area Use Permit (SM1 2021/0002) and Shoreline Setback Assessment (SSA 2021/0037) for Proposed Makena State Park Improvements Project, Makena, Maui; Tax Map Key: (2) 2-1-006: 030 (por.)

The Office of Planning and Sustainable Development (OPSD) is in receipt of your review request, dated December 20, 2021, on the Draft Environmental Assessment (Draft EA), and the applications for Special Management Area (SMA) Use Permit (SM1 2021/0002) and Shoreline Setback Assessment (SSA 2021/0037) for the proposed Makena State Park Improvements Project at Makena Road, Makena, Maui.

According to the subject SMA use permit application, The State of Hawaii, Department of Land and Natural Resources (DLNR), Division of State Parks proposes improvements in the vicinity of two existing parking areas at Makena State Park. The proposed improvements include the following:

- Two new comfort stations located at the North Site and South Site, to include flushing toilets, sinks, and a potable water bottle filling station. Comfort stations will include a roof-mounted photovoltaic array.
- Two below-ground wastewater containment tanks located adjacent to the two comfort stations. Wastewater will be pumped out and conveyed offsite by truck for treatment and disposal.

 $\circ$   $\,$   $\,$  Two outdoor showers located adjacent to the two comfort stations. The showers will drain to an onsite drainage basin.

Mr. Clayton Yoshida January 20, 2022 Page 2

- Installation of two new water service laterals and associated improvements to the North Site and South Site.
- Paving, striping, signage, guardrail, and related improvements to the existing unpaved parking areas along the access driveways to the North Site and South Site to create a total of 138 new marked parking stalls.

The State land use designation for the project site is Rural, and the county zoning designation is Park and Open Space, and R-3 (Residential). The project site will be inland of the maximum 150-foot shoreline setback area, and located within county designated SMA under the Hawaii Coastal Zone Management (CZM) Law, Hawaii Revised Statutes (HRS) Chapter 205A.

The use of State funds and land are triggers for the preparation of an EA pursuant to HRS Chapter 343. The Draft EA illustrates that the project area is not within the Sea Level Rise Exposure Area associated with a 3.2-foot sea level rise.

Construction is anticipated to be completed in 12 months. The total project cost is estimated at \$2,090,495.

The OPSD has reviewed the subject applications and the Draft EA, and has the following comments to offer:

- 1. The OPSD suggests that the Final EA provide an assessment to discusses the justification for the two comfort stations and additional 138 parking stalls and the potential environmental impacts of beach park users as a result of the proposed project on the marine and coastal resources at the subject area.
- 2. The proposed project will involve ground and soil disturbing activities. The OPSD recommends that an Erosion and Sediment Control Plan be prepared to ensure that site-specific best management practices with erosion and sediment control measures, including silt fences, berms and other erosion control devices, will be implemented to confine the proposed excavation and construction activities, and prevent potential soil, construction debris and polluted runoff from adversely impacting the coastal ecosystem, and State waters as specified in Hawaii Administrative Rules Chapter 11-54.
- 3. A total of 138 new parking stalls will be added to the two existing paved parking areas, which currently provide 97 parking stalls. The OPSD recommends that petroleum and sediment filters at onsite drain inlets be installed and maintained to prevent potential petroleum pollutants associated with onsite vehicle parking from entering adjacent wetlands, ocean waters and the storm drainage system.

Mr. Clayton Yoshida January 20, 2022 Page 3

4. If available, the Final EA should include the shoreline setback determination from the County of Maui Planning Department to ensure that the proposed project sites are outside of the shoreline area as defined in HRS § 205A-41.

If you have any questions regarding this comment letter, please contact Shichao Li of our office at (808) 587-2841, or by email at shichao.li@hawaii.gov.

Sincerely,

· Mary Alice Evans

Mary Alice Evans Director

c: Mr. Russell Kumabe, Department of Land and Natural Resources



Karlynn K. Fukuda PRESIDENT Mark Alexander Roy AICP, LEED AP VICE PRESIDENT

Tessa Munekiyo Ng AICP VICE PRESIDENT

Michael T. Munekiyo AICP SENIOR ADVISOR

December 1, 2022

Mary Alice Evans, Director State of Hawai'i Office of Planning & Sustainable Development P.O. Box 2359 Honolulu, Hawai'i 96804

> SUBJECT: Draft Environmental Assessment, Special Management Area Use Permit Application, and Shoreline Setback Assessment Application for Proposed Mākena State Park Comfort Stations Project at TMK No. (2)2-1-006:030(por.), Mākena, Maui, Hawai'i (REF: DTS202112200955NA)

Dear Ms. Evans:

Thank you for your comment letter dated January 20, 2022, regarding the Draft Environmental Assessment (EA), Special Management Area Use Permit application, and Shoreline Setback Assessment application for the subject project. We appreciate you taking the time to provide comments for this project, proposed by the State of Hawai'i, Department of Land and Natural Resources, Division of State Parks (DSP). On behalf of the DSP, we offer the following responses to your comments in the same order as they appear in your letter:

## Comment No. 1:

The OPSD suggests that the Final EA provide an assessment to discusses the justification for the two comfort stations and additional 138 parking stalls and the potential environmental impacts of beach park users as a result of the proposed project on the marine and coastal resources at the subject area.

**<u>Response</u>**: A community survey conducted by the Oneloa Coalition in 2013 found that permanent restrooms and outdoor showers were the basic amenities that were wanted and needed at Mākena State Park. As such, DSP is proposing the addition of two comfort stations in response to community preferences. As part of the proposed action, parking improvements are proposed for the primary purpose of organizing parking in areas where visitors are already parking in order to address the current haphazard and disorganized

Mary Alice Evans, Director December 1, 2022 Page 2

parking situation. Based on the analysis presented in the Draft EA, the project is not anticipated to present a potential for significant environmental impacts to marine and coastal resources according to the significance criteria of HAR Section 11-200.1-13. Upon completion of the EA preparation process, the DLNR/Board of Land and Natural Resources (BLNR) will review the Final EA to determine whether or not a potential for significant impacts exists with the proposed project.

## Comment No. 2:

The proposed project will involve ground and soil disturbing activities. The OPSD recommends that an Erosion and Sediment Control Plan be prepared to ensure that site-specific best management practices with erosion and sediment control measures, including silt fences, berms and other erosion control devices, will be implemented to confine the proposed excavation and construction activities, and prevent potential soil, construction debris and polluted runoff from adversely impacting the coastal ecosystem, and State waters as specified in Hawaii Administrative Rules Chapter 11-54.

**<u>Response</u>**: An Erosion and Sediment Control Plan and a Best Management Practices Plan have been prepared, and are included in the Preliminary Engineering Report as provided in the Draft EA.

## Comment No. 3:

A total of 138 new parking stalls will be added to the two existing paved parking areas, which currently provide 97 parking stalls. The OPSD recommends that petroleum and sediment filters at onsite drain inlets be installed and maintained to prevent potential petroleum pollutants associated with onsite vehicle parking from entering adjacent wetlands, ocean waters and the storm drainage system.

**<u>Response</u>**: The project includes drainage systems designed to retain shower and parking lot runoff and prevent migration of harmful pollutants into the environment. The project will be implemented in compliance with all regulations related to water quality, and with best management practices as recommended by reviewing agencies. DSP does not anticipate that the proposed improvements will result in any significant adverse effects to the environment.

Mary Alice Evans, Director December 1, 2022 Page 3

## Comment No. 4:

If available, the Final EA should include the shoreline setback determination from the County of Maui Planning Department to ensure that the proposed project sites are outside of the shoreline area as defined in HRS § 205A-41.

**Response:** The project has been designed with appropriate setbacks from the shoreline to ensure that the proposed project will not impact shoreline processes. The proposed buildings at the North Site and South Site are estimated to be set back from the shoreline by approximately 500 feet and 250 feet, respectively. A Shoreline Setback Assessment application has been submitted to the County of Maui, Department of Planning (DP) to request confirmation that the proposed improvements are inland of the maximum 150-foot Shoreline Setback area. As applicable, said determinations are typically issued by the Department of Planning during the SMA permitting phase (i.e. following completion of an EA process).

We appreciate your input and will include a copy of your comment letter and this response in the Final EA. Should you have any questions or require further information regarding the proposed project, please contact me at (808) 244-2015, extension 220.

Very truly yours,

Groundolyn Rivera

Gwendolyn Leialoha Cheney Rivera Senior Associate

GLCR:lh

cc: Valerie Suzuki, Department of Land and Natural Resources, Engineering Division Kirk Tanaka, P.E., R.T. Tanaka Engineers, Inc. K:DATA/RTTanaka/Makena Comfort Station/Applications/Draft EA/Response Letters/OPSD.res.docx

292





January 14, 2022

<u>Via email</u>:

State of Hawai'i, Department of Land and Natural Resources (DLNR) Division of State Parks 1151 Punchbowl Street, Room 310 Honolulu, HI 96813

Attention: Mr. Curt Cottrell (curt.a.cottrell@hawaii.gov)

Re: Mākena State Park Improvements—Draft EA (AFNSI) TMK: (2) 2-1-006:030 Makawao District, Island of Maui

Dear Mr. Cottrell:

Thank you for the opportunity to comment on the draft environmental assessment (EA) for the proposed Mākena State Park Improvements project (published December 23, 2021), specifically with respect to issues and concerns regarding light pollution.

The University of Hawai'i Institute for Astronomy (IfA) conducts research in astronomy using telescopes located on Haleakalā and Maunakea and operated by IfA and our partner institutions. Both Haleakalā and Maunakea are among the best sites in the world for astronomical facilities because of their elevation, clear skies, favorable atmospheric conditions, and low levels of light pollution. Hawai'i-based observatories have played major roles in the advancement of astronomy and astrophysics for over 50 years and are well positioned to remain at the forefront of astronomical research for decades to come.

Because of the outstanding quality and productivity of these facilities, IfA is acutely concerned about negative impacts on astronomy from increased light pollution. Our work to combat light pollution has also brought us into contact with parties concerned about light pollution for other reasons, including impacts on wildlife (particularly seabirds) and on human health. While IfA's comments focus on the impacts of light pollution on astronomy, appropriate mitigation measures also help to reduce non-astronomy impacts.

With that background, we offer the following comments:

Any new or additional artificial light at night has an adverse effect on astronomical observations by increasing the night sky brightness. All observations performed by the Pan-STARRS observatories, the ATLAS telescope, and the Faulkes telescope on Haleakalā are sky-background State of Hawai'i, DLNR Mr. Curt Cottrell Page 2

limited. This means that there is a natural sky brightness coming from airflow and zodiacal light. Artificial light increases the sky brightness, thereby decreasing the sensitivity of the telescopes.

Some of the observations performed by the Air Force telescopes atop Haleakalā are also skybackground limited, so those observations, performed for national defense purposes, will also be adversely affected.

If A appreciates the Draft EA's discussion of the project in the context of the Maui County General Plan, particularly the very limited use of lighting and the express recognition of the importance of protecting the Hawai'i night sky. Consistent with that discussion, we reiterate the important steps to reduce the impact on the observatories:

- 1. The minimum possible amount of outdoor lighting should be used. We appreciate the Draft EA's language in this area.
- 2. Any outdoor lighting must follow the Maui County lighting ordinance: all lighting must be fully shielded, i.e., all lighting fixtures must emit zero light above the horizontal plane. This requirement is also appropriately addressed in the Draft EA.
- 3. Limit any white light used to a Correlated Color Temperature of 2700 K or below, to minimize the amount of blue light emitted. The blue component of white light is especially damaging to astronomy, so blue-deficient lighting should be exclusively selected. The best choices are filtered LED lights, or amber LED lights. In general, the use of blue-wavelength light should be limited as much as possible.

Finally, we note that there is a strong need for further dialog with the University regarding light pollution in Maui County, and a strong need for revision of the present lighting ordinance to properly address the impacts of changes in lighting technology including LED lighting.

Thank you for your consideration of these comments and attention to IfA's concerns. If you have questions or need further detail regarding these comments, please do not hesitate to contact the undersigned or Richard Wainscoat (rjw@hawaii.edu).

Very truly yours,

Harg Almour Doug Simons

Director

cc: Ms. Gwendolyn Leialoha Cheney Rivera, Munekiyo Hiraga (planning@munekiyohiraga.com)



Karlynn K. Fukuda PRESIDENT Mark Alexander Roy AICP, LEED AP VICE PRESIDENT Tessa Munekiyo Ng AICP VICE PRESIDENT

Michael T. Munekiyo AICP SENIOR ADVISOR

December 1, 2022

Doug Simons, Director University of Hawai'i Institute for Astronomy 2680 Woodlawn Drive Honolulu, Hawai'i 96822

> SUBJECT: Draft Environmental Assessment for Proposed Mākena State Park Comfort Stations Project at TMK No. (2)2-1-006:030(por.), Mākena, <u>Maui, Hawai</u>'i

Dear Dr. Simons:

Thank you for your comment letter dated January 14, 2022, regarding the Draft Environmental Assessment (EA) for the subject project. We appreciate you taking the time to provide comments for this project proposed by the State of Hawai'i, Department of Land and Natural Resources, Division of State Parks (DSP). On behalf of the DSP, we offer the following responses to your comments in the same order as they appear in your letter:

## Comment No. 1:

Any new or additional artificial light at night has an adverse effect on astronomical observations by increasing the night sky brightness. All observations performed by the Pan-STARRS observatories, the ATLAS telescope, and the Faulkes telescope on Haleakalā are sky-background limited. This means that there is a natural sky brightness coming from airflow and zodiacal light. Artificial light increases the sky brightness, thereby decreasing the sensitivity of the telescopes.

Some of the observations performed by the Air Force telescopes atop Haleakalā are also skybackground limited, so those observations, performed for national defense purposes, will also be adversely affected.

If A appreciates the Draft EA's discussion of the project in the context of the Maui County General Plan, particularly the very limited use of lighting and the express recognition of the importance of protecting the Hawai'i night sky. Consistent with that discussion, we reiterate the important steps to

Maui: 305 High Street, Suite 104 • Wailuku, Hawaii 96793 • Tel: 808.244.2015 • Fax: 808.244.8729 Oahu: 735 Bishop Street, Suite 412 • Honolulu, Hawaii 96813 • Tel: 808.983.1233 www.muneklyohiraga.com

Doug Simons, Director December 1, 2022 Page 2

reduce the impact on the observatories:

1. The minimum possible amount of outdoor lighting should be used. We appreciate the Draft EA's language in this area.

**<u>Response</u>**: We acknowledge IfA's comment regarding the impacts of artificial light on astronomical observations and national defense operations being conducted on Haleakalā. Mākena State Park is closed between the hours of 7:00 p.m. and 7:00 a.m. nightly. As such, the proposed improvements will involve only minimal low-level lighting.

## Comment No. 2:

2. Any outdoor lighting must follow the Maui County lighting ordinance: all lighting must be fully shielded, i.e., all lighting fixtures must emit zero light above the horizontal plane. This requirement is also appropriately addressed in the Draft EA.

**<u>Response</u>**: As stated in the Draft EA, the project will comply with all state and local regulations regarding lighting. Any outdoor lighting associated with the project will be shielded and directed downward to protect the Hawai'i night sky.

## Comment No. 3:

3. Limit any white light used to a Correlated Color Temperature of 2700 K or below, to minimize the amount of blue light emitted. The blue component of white light is especially damaging to astronomy, so blue-deficient lighting should be exclusively selected. The best choices are filtered LED lights, or amber LED lights. In general, the use of blue-wavelength light should be limited as much as possible.

**<u>Response</u>**: Thank you for providing this information. DSP will consider the use of filtered or amber LED lighting, as may be applicable to the project.

## Comment No. 4:

Finally, we note that there is a strong need for further dialog with the University regarding light pollution in Maui County, and a strong need for revision of the present lighting ordinance to properly address the impacts of changes in lighting technology including LED lighting.

**<u>Response:</u>** DSP notes this comment. While revision of Maui County Code with respect to current lighting technology for outdoor lighting is not within the scope of this project, we

Doug Simons, Director December 1, 2022 Page 3

appreciate your guidance for minimizing light pollution impacts as it pertains to the proposed action.

We appreciate your input and will include a copy of your comment letter and this response in the Final EA. Should you have any questions or require further information regarding the proposed project, please contact me at (808) 244-2015, extension 220.

Very truly yours,

Groundolyn Rivera

Gwendolyn Leialoha Cheney Rivera Senior Associate

GLCR:lh

cc: Valerie Suzuki, Department of Land and Natural Resources, Engineering Division Kirk Tanaka, P.E., R.T. Tanaka Engineers, Inc. K:DATA\RTTanaka\Makena Comfort Station\Applications\Draft EA\Response Letters\UH\_IA.docx MICHAEL P. VICTORINO Mayor

MICHELE CHOUTEAU MCLEAN, AICP Director

> JORDAN E. HART Deputy Director





DEPARTMENT OF PLANNING COUNTY OF MAUI ONE MAIN PLAZA 2200 MAIN STREET, SUITE 315 WAILUKU, MAUI, HAWAII 96793

## TRANSMITTAL

ST.	ATE AGENCIES	
X	Dept. of Health, Director	
X	Dept. of Health, Clean Water Branch	
X	Dept. of Health, Maui Sanitation Branch	
x	Dept. of Land and Natural Resources	
X	DLNR-OCCL	
x	DLNR-DOFAW	
x	DLNR-SHPD – submitted via HICRIS on October 17, 2021	
X	DOT, Statewide Planning Office	
X	Department of Defense	
X	Dept. of Accounting and General Services	
x	Dept. of Business, Economic Development, & Tourism	
X	Dept. of Hawaiian Home Lands	
X	Office of Hawaiian Affairs	
x	Office of Planning and Sustainable Development	
X	State Land Use Commission	

### December 20, 2021

CC	COUNTY AGENCIES		
X	Dept. of Environmental Management		
X	Dept. Public Works		
X	Dept. of Water Supply		
X	Dept. of Fire & Public Safety		
X	Dept. of Parks & Recreation		
X	Police Department		

FEDERAL AGENCIES		
X	NOAA Inouye Regional Center	
X	U.S. Coast Guard	
X	USDA Natural Resources Conservation	
X	U.S. Dept. of the Army, Regulatory Branch	
X	U.S. Fish and Wildlife Service	
X	U.S. Department of Commerce-NMFS	

PROJECT NAME:	MAKENA STATE PARK IMPROVEMENTS
APPLICANT:	State of Hawaii Department of Land and Natural Resources, Division of State Parks
PROJECT ADDRESS:	Makena Road, Makena, Hawaii 96753
PROJECT DESCRIPTION:	Construct improvements in the vicinity of two existing visitor parking areas at Makena State Park at the "North Site", located near the southern edge of the Pu'u Ola'i cinder cone, and the "South Site" approximately 0.2 miles south of the North Site. Proposed improvements include construction of two new comfort stations at the North and South sites, to include flushing toilets, sinks, and potable water bottle filling station with roof-mounted photovoltaic arrays, wastewater containment sites, and outdoor showers. Paving, striping, signage, guardrail, and related improvements to the existing unpaved parking areas at the North and South sites will create a total of 138 new marked parking stalls.
TMK:	(2) 2-1-006:030
APPLICATION NO.:	SM1 2021/0002 / SSA 2021/0037

Agency Transmittal – DLNR-Division of State Parks Makena Park Improvements SM1 2021/0002 / SSA 2021/0037 December 20, 2021 Page 2

### TRANSMITTED TO YOU ARE THE FOLLOWING:

TIN

 X
 Webpage address to download the application and plans

 Address:
 https://www.mauicounty.gov/DocumentCenter/View/130919/Makena-State-Park-Improvements-SMI

#### THESE ARE TRANSMITTED AS CHECKED BELOW:

X For your Comment and Recommendation for SM1/SSA Review.

Transmitted for your review and comment is a link to the project applications on the Department web page. We would appreciate your comments on these Special Management Area (SMA) and Shoreline Setback Assessment (SSA) applications.

Please note that this transmission includes a letter from Department of Land and Natural Resources-Division of State Parks requesting concurrent review of the Draft Environmental Assessment (DEA) prepared pursuant to Chapter 343, Hawaii Revised Statutes, that has been prepared for the project, which is included in the project applications and which is being published in the Environmental Review Program's, The Environmental Notice, on December 23, 2021.

Please submit your consolidated comments on the DEA and, if applicable, the SMA and SSA, by January 24, 2022 via email or hardcopy. If no response is received by this date, we may assume your agency has "no comment."

Thank you for your cooperation. If additional clarification is required, please contact Senior Staff Planner Erin Derrington at erin.derrington@co.maui.hi.us or at (808) 270-5537.

Sincerely,

ERIN DERRINGTON Staff Planner We have no objections. ()× We have no comments. ()Comments are attached. Signed: Print: AINE Contact: 18/2 Date: 12

Copy to: Clayton I. Yoshida, Planning Program Administrator (PDF) Erin Derrington, Senior Shoreline Staff Planner (PDF) Annalise Kehler, Cultural Resources Planner (PDF) Janet Six, Department of Management (PDF) Curt Cottrell, Department of Land & Natural Resources-Division of State Parks, Applicant (PDF) Andrew McCallister, Department of Land of Natural Resources-SHPD (PDF) Gwendolyn Rivera, Munekiyo Hiraga (PDF) Project File

EMD:lp

K: WP\_DOCS\Planning\SM1\2021\0002\_MakenaStateParkImprvmts|FOR\_TRANSMITTAL\AgencyTransmittal\_docx\_\_\_\_



Karlynn K. Fukuda PRESIDENT Mark Alexander Roy AICP, LEED AP VICE PRESIDENT Tessa Munekiyo Ng AICP VICE PRESIDENT

Michael T. Munekiyo AICP SENIOR ADVISOR

December 1, 2022

Elaine Baker, P.E. County of Maui Department of Environmental Management 2200 Main Street, Suite 225 Wailuku, Hawai'i 96793

> SUBJECT: Draft Environmental Assessment, Special Management Area Use Permit Application and Shoreline Setback Assessment Application for Proposed Mākena State Park Comfort Stations Project at TMK No. (2)2-1-006:030 (por.), Mākena, Maui, Hawai'i

Dear Ms. Baker:

Thank you for your statement dated December 21, 2021 confirming that the Department of Environmental Management, Solid Waste Division has no comments at this time regarding the Draft Environmental Assessment (EA), Special Management Area Use Permit Application, and Shoreline Setback Assessment Application for the subject project.

We appreciate your input and will include a copy of your statement and this response in the Final EA. Should you have any questions or require further information regarding the proposed project, please contact me at (808) 244-2015, extension 220.

Very truly yours,

Groundolyn Rivera

Gwendolyn Leialoha Cheney Rivera Senior Associate

GLCR:lh

cc: Valerie Suzuki, Department of Land and Natural Resources, Engineering Division Kirk Tanaka, P.E., R.T. Tanaka Engineers, Inc. K:DATA\RTTanaka\Makena Comfort Station\Applications\Draft EA\Response Letters\DEM-SWD.docx

Maui: 305 High Street, Suite 104 • Wailuku, Hawaii 96793 • Tel: 808.244.2015 • Fax: 808.244.8729 Oahu: 735 Bishop Street, Suite 412 • Honolulu, Hawaii 96813 • Tel: 808.983.1233 www.muneklyohiraga.com MICHAEL P. VICTORINO Mayor MICHELE CHOUTEAU MCLEAN, AICP Director JORDAN E. HART Deputy Director





DEPARTMENT OF PLANNING COUNTY OF MAUI ONE MAIN PLAZA 2200 MAIN STREET, SUITE 315 WAILUKU, MAUI, HAWAII 96793

February 3, 2022

Mr. Curt Cottrell State of Hawaii Department of Land and Natural Resources Division of State Parks 1151 Punchbowl Street, Room 310 Honolulu, Hawaii 96813

Ms. Gwendolyn Rivera Munekiyo Hiraga 305 High Street, Suite 104 Wailuku, Hawaii 96793

Transmitted digitally to: curt.a.cottrell@hawaii.gov and planning@munekivohiraga.com

Dear Mr. Cottrell and Ms. Rivera:

### SUBJECT: COMMENTS ON DRAFT ENVIRONMENTAL ASSESSMENT (DEA), MAKENA STATE PARK IMPROVEMENTS TO VISITOR PARKING AREAS AND ADDITION OF COMFORT STATIONS, MAKENA ROAD, MAKENA, ISLAND OF MAUI, HAWAII; TMK: (2) 2-1-006:030 (POR.) (SM1 2021/0002) (SSA 2021/0037)

The Maui County Department of Planning (Department) is providing additional comments on the above referenced Draft Environmental Assessment (DEA) for Makena State Park improvements. Proposed improvements include installing two new comfort stations with underground wastewater containment tanks, showers, and improved parking creating 138 new marked parking stalls at two sites. We appreciate the ongoing correspondence and opportunity to build from the initial comments submitted in the preparation of this DEA. As comments are being collected and considered, the Department continues to encourage consideration of community planning priorities as well as design and stormwater management best practices.

The Department has reviewed the DEA which was submitted to the Department in August, 2021. Initial review by the Department encouraged further discussion and consideration of alternatives to demonstrate consideration of best management practices including opportunities for stormwater management, incorporation of low impact design features within the parking lots, and more robust discussion of the alternatives considered for wastewater management at the proposed sites, and a revised application package was submitted in November, 2021. The Department appreciates the early coordination and collaborative approach reflected by this proposal, as well as the goals of this to improve access and address water quality and site management concerns at this popular destination that attracts residents and tourist alike.

Mr. Curt Cottrell and Ms. Gwendolyn Rivera February 3, 2022 Page 2

Because Makena State Park is a cherished natural area that embodies multiple community use values and needs, it is not surprising that initial public comments being received about this project reflect a range of opinions about the project approach and outcomes. While there is no requirement for development projects to achieve consensus, robust community engagement to obtain feedback and assess options is encouraged. As such, it is suggested that the Department of Land and Natural Resources-Division of State Parks (DLNR-DSP) continue to work with community stakeholders and partner agencies at the Local, State, and Federal levels to identify and address a range of site-specific environmental concerns. As the public comment period ends and DLNR-DSP reviews and responds to comments received, it is suggested that you consider the development of communications materials to support stakeholder charrettes in addition to public meetings to discuss issues raised; including cultural resource and environmental sensitivity, and coordination with complementary access projects such as the bike lane expansion.

As detailed further in the narrative that follows, the Department offers the following comments to support finalization of the DEA for compliance with environmental impact review requirements of Hawaii Revised Statutes (HRS) Chapter 343 and Hawaii Administrative Rules (HAR) § 11-200 et seq. and ensure clear analysis that supports the selection of preferred alternatives:

- 1. Consider providing additional supporting data and design details to demonstrate determinations that there will be no significant environmental impacts from this undertaking, particularly as it pertains to water quality and environmental resources, including cultural sites at Makena State Park;
- 2. Detail how comments about planned area-wide improvements including the pending bike lane expansion, have been considered and addressed; and
- 3. Consider continuing to support community engagement through planning and design charettes or other venues to build understanding of alternatives and ensure the project is maximizing alignment with community values and planning goals.

The Department has received numerous questions and comments regarding the data and alternatives analysis presented that warrant additional discussion and that are summarized further here. To address these issues, please provide detailed responses to address the following questions regarding clarification of project design features and incorporation of low impact development features into the proposed parking area enhancements, and describe the process(es) that will be implemented to address community concerns regarding both environmental and cultural resources and long-term planning alignment.

### **Design Features and Incorporation of Low Impact Development**

The Department has received the following questions, comments, and requests for clarification regarding design features of the comfort stations and the parking areas.

### **Comfort stations**

- Please clarify if there will be 'vault toilets' or 'flush toilets' as both terms are used.
- Please clarify that the containment tanks do not discharge to a leach field and that the tanks are only intended as 'holding tanks' that will be pumped approximately every 2 days (5,000 GPD) and every 3 days (2,500 GPD).

Mr. Curt Cottrell and Ms. Gwendolyn Rivera February 3, 2022 Page 3

> - Please explain the following statement; "Gray water from showers will be retained for evaporation in a contained area" Will this area be a lined retention pond? How will you prevent grey water discharge to the wetlands and ocean? Because this is a very sensitive natural area, please consider an onsite grey water treatment system (such as a nutrient bioreactor) or similar to treat this water before discharge to the environment and discuss the feasibility of this alternative further.

### **Parking lot improvements**

There are substantial stormwater related drainage issues associated with the current paved and unimproved parking lot areas. These lots create a significant area of impervious surface with little to no consideration for drainage, and per the Preliminary Engineering Report an increase in runoff of 1.8 cubic feet per second (cfs) on the North Site and an increase of .9 cfs on the South Side is anticipated. The site would benefit greatly from the incorporation of Low Impact Design (LID) features to treat stormwater runoff in the proposed improvements.

Please consider a LID assessment (which can be conducted at no cost by UH Sea Grant Dune Restoration Coordinator, Wes Crile, at wcrile@hawaii.edu) to assess opportunities to incorporate LID principles into the plans. There are likely numerous opportunities to treat runoff from the parking lot and comfort station roofs which could include:

- Bioretention (vegetated bioswales and/or rain gardens)
- Pervious pavement options (such as pervious concrete)
- Rainwater harvesting from rooftop; etc.

Incorporating these elements would allow for treatment of polluted runoff that currently flows off the parking lot and road, erodes the unimproved gravel areas, and flows into the ocean and adjacent wetlands.

### **Project design and landscaping**

Please address questions raised about project design, impact avoidance and mitigation, and proposed landscaping features that are referenced to support impact mitigation further.

- Given the proximity of the wetland to the North Site and comments about flooding concerns, could rain gardens or other green infrastructure components be incorporated into the project design to reduce visual and environmental impacts and restore native vegetation and habitat?
- In addition to monitoring, has discussion of updating signage about the cultural and environmental resources at Makena been considered to further mitigate potential impacts of this project?
- What native plants and landscaping features will be included in the project design? In discussion of visual impacts of the comfort stations, the DEA notes that "landscaping may be incorporated to shield the comfort stations" and that preference would be given to native plantings "to the extent practicable". To reflect County planning alignment the DEA also states that landscaping and walkways will be incorporated into the project design. Please describe how

Mr. Curt Cottrell and Ms. Gwendolyn Rivera February 3, 2022 Page 4

> landscaping and walkways will be incorporated into the site design including description of what trees and shrubs will be planted and how their survival will be monitored and maintained if irrigation is not being proposed.

### Processes to address impacts to resources and long-term planning alignment

The Department has received verbal comments expressing concern about the cultural sensitivity of the site as well as questions regarding project alignment with community development plans and environmental protection mandates. It is understood that consultation with Department of Land and Natural Resources-State Historic Preservation Division (DLNR-SHPD), as well as coordination with stakeholders including the Oneloa Coalition is ongoing, and that permits issued through this application and supporting development applications will provide additional opportunities for public engagement and achieve regulatory compliance. Please provide additional narrative detailing how identified concerns are being addressed and outline the process, in addition to the forthcoming public meeting required through the SMA application, to ensure your alternatives analysis and preferred alternative selection reflects culturally and environmentally sensitive outcomes that align with long-term planning goals listed in Section III of your DEA.

It is further suggested that DLNR-DSP highlight timelines and next steps for permitting and upcoming public engagement on a webpage dedicated to this project. Such ongoing communications and coordination efforts could be further supported by scheduling additional community project briefings and listening sessions as well as posting key dates on community events calendars. This additional outreach continues to demonstrate and facilitate DLNR-DSP's commitment to ensuring public participation, building understanding about the project, and providing opportunities to provide meaningful feedback as this proposal moves forward through numerous and, at times complicated, permitting and authorization processes.

Should you need clarification on the above comments, please contact Coastal Resources Planners Erin Derrington at erin.derrington@co.maui.hi.us or (808) 270-5537.

Sincerely,

muchm

MICHELE MCLEAN, AICP Planning Director

XC:

Jordan Hart, Deputy Director (PDF) Clayton I. Yoshida, Planning Program Administrator (PDF) Jeffrey P. Dack, Current Planning Supervisor (PDF) Erin Derrington, Staff Planner, (PDF) Annalise Kehler, Cultural Resources Planner (PDF) Janet Six, County Archeologist (PDF) Wesley Crile, U.H. Sea Grant Extension Program (PDF) **Project File** MCM:CIY:JPD:EMD:lp K:\WP\_DOCS\Planning\SM1\2021\0002\_MakenaStateParkImprvmts\SM120210002\_DEAComment\_12022.docx



Karlynn K. Fukuda PRESIDENT Mark Alexander Roy AICP, LEED AP VICE PRESIDENT Tessa Munekiyo Ng AICP VICE PRESIDENT

Michael T. Munekiyo AICP SENIOR ADVISOR

December 1, 2022

Michele McLean, AICP, Director County of Maui Department of Planning **Attention: Erin Derrington, Coastal Resources Planner** 2200 Main Street, Suite 315 Wailuku, Hawai'i 96793

> SUBJECT: Draft Environmental Assessment for Proposed Mākena State Park Comfort Stations Project at TMK No. (2)2-1-006:030(por.), Mākena, <u>Maui, Hawai'i</u>

Dear Ms. McLean:

Thank you for your comment letter dated February 3, 2022, regarding the Draft Environmental Assessment (EA) for the subject project. We appreciate you taking the time to provide comments for this project proposed by the State of Hawai'i, Department of Land and Natural Resources, Division of State Parks (DSP). On behalf of the DSP, we offer the following responses to your comments in the same order as they appear in your letter:

## Comment No. 1:

Because Mākena State Park is a cherished natural area that embodies multiple community use values and needs, it is not surprising that initial public comments being received about this project reflect a range of opinions about the project approach and outcomes. While there is no requirement for development projects to achieve consensus, robust community engagement to obtain feedback and assess options is encouraged. As such, it is suggested that the Department of Land and Natural Resources Division of State Parks (DLNR-DSP) continue to work with community stakeholders and partner agencies at the Local, State. and Federal levels to identify and address a range of site-specific environmental concerns. As the public comment period ends and DLNR-DSP reviews and responds to comments received, it is suggested that you consider the development of communications materials to support stakeholder charrettes in addition to public meetings to discuss issues raised; including cultural resource and environmental sensitivity, and coordination with complementary access projects such as the bike lane expansion.

Maui: 305 High Street, Suite 104 • Wailuku, Hawaii 96793 • Tel: 808.244.2015 • Fax: 808.244.8729 Oahu: 735 Bishop Street, Suite 412 • Honolulu, Hawaii 96813 • Tel: 808.983.1233 www.muneklyohiraga.com
**Response:** Through all stages of the project, DSP has sought feedback from the community. The comfort stations and parking improvements have been proposed in direct response to the community's preferences for the Park. A community survey conducted by the Oneloa Coalition in 2013 found that permanent restrooms and outdoor showers were the basic amenities that were wanted and needed at the Park. The project was further refined as a result of community feedback to eliminate designs involving use of onsite wastewater treatment with leach fields, in favor of collection of wastewater in containment tanks for removal and offsite treatment at a wastewater treatment facility. There are no plans for further development that would change the general character and use of the Park. DSP will continue to partner with the Oneloa Coalition as a stakeholder group with representatives from a cross-section of community organizations.

# Comment No. 2:

Consider providing additional supporting data and design details to demonstrate determinations that there will be no significant environmental impacts from this undertaking, particularly as it pertains to water quality and environmental resources, including cultural sites at Mākena State Park.

**Response:** The wastewater collection and shower water collection systems have been designed to prevent discharge of harmful pollutants to the environment. The project will be implemented in compliance with applicable regulations related to water quality, and with best management practices and mitigation measures recommended by reviewing agencies, including the Department of Health, Clean Water Branch, and DLNR Division of Aquatic Resources, Division of Forestry and Wildlife, and the State Historic Preservation Division. DSP is not aware of any evidence that the proposed improvements will result in a significant adverse effect to water quality and environmental resources.

## Comment No. 3:

Detail how comments about planned area-wide improvements including the pending bike lane expansion, have been considered.

**Response:** DSP is not able to implement roadway improvements along Mākena Road, which is a County-owned roadway located outside the Park. However, DSP would be open to coordinating with County on such a project.

## Comment No. 4:

Consider continuing to support community engagement through planning and design charettes or other venues to build understanding of alternatives and ensure the project is maximizing alignment with community values and planning goals.

**Response:** As noted in our response to your Comment No. 1, DSP has solicited community feedback throughout all stages of project planning and has defined the project in order to align with the community's preferences for the Park. DSP will continue to partner with the Oneloa Coalition as a stakeholder group with representatives from a cross-section of community organizations.

## Comment No. 5:

Please clarify if there will be 'vault toilets' or 'flush toilets' as both terms are use.

**Response:** The project will utilize flushing toilets, not vault toilets.

## Comment No. 6:

Please clarify that the containment tanks do not discharge to a leach field and that the tanks are only intended as 'holding tanks' that will be pumped approximately every 2 days (5,000 GPD) and every 3 days (2,500 GPD).

**Response:** The containment tanks do not discharge to a leach field. Wastewater will be removed from the Park for offsite treatment at a wastewater treatment facility. Frequency of pumping will depend on quantity of wastewater generated. The comfort stations are designed for a maximum wastewater flow of 2,500 gpd for the South Site and 5,000 gpd for the North Site, however, actual wastewater flow quantities will be less than this maximum rate.

## Comment No. 7:

Please explain the following statement; "Gray water from showers will be retained for evaporation in a contained area" Will this area be a lined retention pond? How will you prevent grey water discharge to the wetlands and ocean? Because this is a very sensitive natural area, please consider an onsite grey water treatment system (such as a nutrient bioreactor) or

> similar to treat this water before discharge to the environment and discuss the feasibility of this alternative further.

**Response:** The proposed drainage basins are unlined, grassed sumps. While some subsurface infiltration will occur in the immediate area of the basin, the drainage systems have been designed to prevent migration of harmful pollutants to the environment. The project will be implemented in compliance with applicable regulations related to water quality, and with best management practices as recommended by reviewing agencies. Gray water treatment systems for shower effluent are not proposed as part of the current project scope.

## Comment No. 8:

There are substantial stormwater related drainage issues associated with the current paved and unimproved parking lot areas. These lots create a significant area of impervious surface with little to no consideration for drainage, and per the Preliminary Engineering Report an increase in runoff of 1.8 cubic feet per second (cfs) on the North Site and an increase of .9 cfs on the South Side is anticipated. The site would benefit greatly from the incorporation of Low Impact Design (LID) features to treat stormwater runoff in the proposed improvements. Please consider a LID assessment (which can be conducted at no cost by UH Sea Grant Dune Restoration Coordinator, Wes Crile, at wcrile@hawaii.edu) to assess opportunities to incorporate LID principles into the plans. There are likely numerous opportunities to treat runoff from the parking lot and comfort station roofs which could include: Bioretention (vegetated bioswales and/or rain gardens), Pervious pavement options (such as pervious concrete), Rainwater harvesting from rooftop; etc. Incorporating these elements would allow for treatment of polluted runoff that currently flows off the parking lot and road, erodes the unimproved gravel areas, and flows into the ocean and adjacent wetland.

**Response:** While not part of the current project scope, DSP may consider incorporation of Low Impact Design (LID) features at a later time, as may be applicable to the Park's dry and sandy environment. DSP must consider the cost, labor, water and energy requirements involved to install and maintain any potential LID features. Vegetated bioswales and rain gardens require irrigation and maintenance. Pervious pavements can become blocked with sand and require regular maintenance to maintain their function. LID features such as rain barrels and associated piping may also be vulnerable to vandalism.

## Comment No. 9:

Given the proximity of the wetland to the North Site and comments about flooding concerns, could rain gardens or other green infrastructure components be incorporated into the project design to reduce visual and environmental impacts and restore native vegetation and habitat?

**Response:** Please see our response to your Comment No. 8. Rain gardens and other green infrastructure components are not proposed as part of the current project scope.

## Comment No. 10:

In addition to monitoring, has discussion of updating signage about the cultural and environmental resources at Mākena been considered to further mitigate potential impacts of this project?

**Response:** Thank you for this suggestion. DSP has developed and installed interpretive signs at the two (2) paved parking lots and trailheads to Oneloa Beach. These signs provide information on the historical background and natural resources of the park area, and highlight the cultural significance of Pu'u Ola'i. Other signs emphasize ocean safety and park rules.

# Comment No. 11:

What native plants and landscaping features will be included in the project design? In discussion of visual impacts of the comfort stations, the DEA notes that "landscaping may be incorporated to shield the comfort stations" and that preference would be given to native plantings "to the extent practicable". To reflect County planning alignment the DEA also states that landscaping and walkways will be incorporated into the project design. Please describe how landscaping and walkways will be incorporated into the project design the site design including description of what trees and shrubs will be planted and how their survival will be monitored and maintained if irrigation is not being proposed.

**Response:** The Park area is characterized as a kiawe forest, and the removal of kiawe trees will be minimized to avoid a major change in the park landscape. DSP does not intend to introduce new plant species to the park. Any landscaping planting, if implemented, will be in keeping with the existing xeric (dry) natural flora that is able to grow in the Park. No irrigation is proposed.

## Comment No. 12:

The Department has received verbal comments expressing concern about the cultural sensitivity of the site as well as questions regarding project alignment with community development plans and environmental protection mandates. It is understood that consultation with Department of Land and Natural Resources-State Historic Preservation Division (DLNR-SHPD), as well as coordination with stakeholders including the Oneloa Coalition is ongoing, and that permits issued through this application and supporting development applications will provide additional opportunities for public engagement and achieve regulatory compliance. Please provide additional narrative detailing how identified concerns are being addressed and outline the process, in addition to the forthcoming public meeting required through the SMA application, to ensure your alternatives analysis and preferred alternative selection reflects culturally and environmentally sensitive outcomes that align with long-term planning goals listed in Section III of your DEA.

**Response:** The comfort station location at the northern site was selected to provide a buffer from Pu'u Ola'i. State Parks recognizes the cultural significance of the pu'u and visual impacts are being addressed through building design, size and paint colors. The existing kiawe trees can reduce the visual impacts and as mentioned above, the removal of kiawe trees will be limited to that needed for construction of the building and infrastructure. Archaeological monitoring is recommended in response to the cultural sensitivity and concerns shared in the consultation process and the Cultural Impact Assessment. Upon completion of the environmental review process, DSP looks forward to working alongside the Department of Planning to complete processing of the SMA Use Permit application and preparing for the public hearing that will be scheduled before the Maui Planning Commission.

## Comment No. 13:

It is further suggested that DLNR-DSP highlight timelines and next steps for permitting and upcoming public engagement on a webpage dedicated to this project. Such ongoing communications and coordination efforts could be further supported by scheduling additional community project briefings and listening sessions as well as posting key dates on community events calendars. This additional outreach continues to demonstrate and facilitate DLNR-DSP's commitment to ensuring public participation, building understanding about the project, and providing opportunities to provide

> meaningful feedback as this proposal moves forward through numerous and, at times complicated, permitting and authorization processes.

**Response:** Please see our responses to your Comment No. 1 and Comment No. 4. Public comments have been invited and received as part of the Hawai'i Revised Statutes (HRS), Chapter 343 Environmental Review process. The public will also have the opportunity to provide testimony on the project as part of the SMA Use Permit review process pursuant to HRS, Chapter 205A and pursuant to requirements of the National Historic Preservation Act, Section 106 process, as may be applicable to the project.

## Comment No. 14:

In review of the submitted documents, we have no objection to the upcoming construction, but have concerns on who will have access to the water at the comfort stations after the park is closed. With the normal homeless population parking and using the beach in the Mākena area after hours, this could draw vandalism to the utilities for those wanting access to the water.

**Response:** To minimize misuse, all water fixtures will be shut off and the comfort stations will be locked when the Park is closed. DSP's Enforcement Division will address any issues that may arise related to the homeless population. In addition, unlike many State and County parks, Mākena State Park has an onsite resident caretaker to monitor the Park and address any violations to Park rules that may occur outside of normal Park operating hours.

We appreciate your input and will include a copy of your comment letter and this response in the Final EA. Should you have any questions or require further information regarding the proposed project, please contact me at (808) 244-2015, extension 220.

Very truly yours,

Groundolyn Rivera

Gwendolyn Leialoha Cheney Rivera Senior Associate

GLCR:Ih

cc: Valerie Suzuki, Department of Land and Natural Resources, Engineering Division Kirk Tanaka, P.E., R.T. Tanaka Engineers, Inc. K:DATA/RTTanaka/Makena Comfort Station/Applications/Draft EA/Response Letters/Planning.docx



MICHAEL P. VICTORINO MAYOR

OUR REFERENCE

YOUR REFERENCE

# POLICE DEPARTMENT

COUNTY OF MAUI

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

January 31, 2022



JOHN PELLETIER CHIEF OF POLICE

CHARLES L. HANK III DEPUTY CHIEF OF POLICE

Mr. Russell Kumabe, AICP DLNR, Division of State Parks P.O. Box 621 Honolulu, Hawaii 96809

## Re: Chapter 343, Hawaii Revised Statutes Draft Environmental Assessment for Proposed Makena State Park Improvements Project at TMK No. (2) 2-1-006:030, Maui, Hawaii

Dear Mr. Kumabe:

This is in response to your letter dated December 10, 2021 requesting comments on the Draft Environmental Assessment (EA) for the proposed Makena State Park Improvements Project.

In review of the submitted documents, we have no objection to the upcoming construction, but have concerns on who will have access to the water at the comfort stations after the park is closed. With the normal homeless population parking and using the beach in the Makena area after hours, this could draw vandalism to the utilities for those wanting access to the water.

Thank you for giving us the opportunity to comment on this project.

Sincerely, Assistant Chief Clyde Holekai JOHN PELLETIER for:

Chief of Police

c: Erin Derrington, Dept. of Planning Gwendolyn Leialoha Cheney Rivera, Munekiyo Hiraga



Karlynn K. Fukuda PRESIDENT Mark Alexander Roy AICP, LEED AP VICE PRESIDENT Tessa Munekiyo Ng AICP VICE PRESIDENT

Michael T. Munekiyo AICP SENIOR ADVISOR

December 1, 2022

John Pelletier, Chief of Police County of Maui Maui Police Department 55 Mahalani Street Wailuku, Hawai'i 96793

> SUBJECT: Draft Environmental Assessment for Proposed Mākena State Park Comfort Stations Project at TMK No. (2)2-1-006:030(por.), Mākena, <u>Maui, Hawai'i</u>

Dear Chief Pelletier:

Thank you for your comment letter dated January 31, 2022, regarding the Draft Environmental Assessment (EA) for the subject project. We appreciate you taking the time to provide us with comments on this project, proposed by the State of Hawai'i, Department of Land and Natural Resources, Division of State Parks (DSP).

In response to your comment, DSP confirms that all water fixtures will be shut off and the comfort stations will be locked to reduce the potential for misuse while the Park is closed nightly between the hours of 7:00 p.m. and 7:00 a.m.

We appreciate your input and will include a copy of your comment letter and this response in the Final EA. Should you have any questions or require further information regarding the proposed project, please contact me at (808) 244-2015, extension 220.

Very truly yours,

Geoundolyn Rivera

Gwendolyn Leialoha Cheney Rivera Senior Associate

GLCR:lh

cc: Valerie Suzuki, Department of Land and Natural Resources, Engineering Division Kirk Tanaka, P.E., R.T. Tanaka Engineers, Inc. K:DATA\RTTanaka\Makena Comfort Station\Applications\Draft EA\Response Letters\Police.docx

Maui: 305 High Street, Suite 104 • Wailuku, Hawaii 96793 • Tel: 808.244.2015 • Fax: 808.244.8729 Oahu: 735 Bishop Street, Suite 412 • Honolulu, Hawaii 96813 • Tel: 808.983.1233 www.muneklyohiraga.com



January 26, 2022

DLNR, Division of State Parks Attn: Russell Kumabe, AICP P.O. Box 621 Honolulu, Hawaii 96809 via email: Russell.p.kumabe@hawaii.gov

Subject: Makena State Park Improvements Project – Draft Environmental Assessment Chapter 343, Hawaii Revised Statutes Makena Road Makena, Maui, Hawaii Tax Map Key: (2) 2-1-006:030

Dear Mr. Kumabe,

Thank you for allowing us to comment on the subject project.

In reviewing our records and the information received, Hawaiian Electric Company has no objection to the project.

Should you have any questions or concerns, please feel free to contact me at <u>ray.okazaki@hawaiianelectric.com</u> (as we continue to work remotely) or leave a message at 808-871-2340 (office).

Sincerely,

Ray Okazaki

Ray Okazaki Engineer II, Engineering Hawaiian Electric Company – Maui County

c: Erin Derrington, Staff Planner–County of Maui–Department of Planning (erin.derrington@mauicounty.gov) Gwendolyn Leialoha Cheney Rivera, Senior Associate – Munekiyo Hiraga (planning@munekiyohiraga.com)



Karlynn K. Fukuda PRESIDENT Mark Alexander Roy AICP, LEED AP VICE PRESIDENT Tessa Munekiyo Ng AICP VICE PRESIDENT

Michael T. Munekiyo AICP SENIOR ADVISOR

December 1, 2022

Via Email: ray.okazaki@hawaiianelectric.com

Ray Okazaki, Engineer II Hawaiian Electric Company P.O. Box 398 Kahului, Hawai'i 96733-6898

> SUBJECT: Draft Environmental Assessment for Proposed Mākena State Park Comfort Stations Project at TMK No. (2)2-1-006:030(por.), Mākena, Maui, Hawai'i

Dear Mr. Okazaki:

Thank you for your letter dated January 26, 2022, regarding the Draft Environmental Assessment (EA) for the subject project. We note that the Hawaiian Electric Company has no objection to the subject project.

We appreciate your input and will include a copy of your letter and this response in the Final EA. Should you have any questions or require further information regarding the proposed project, please contact me at (808) 244-2015, extension 220.

Very truly yours,

Groundolyn Rivera

Gwendolyn Leialoha Cheney Rivera Senior Associate

Cc: Valerie Suzuki, Department of Land and Natural Resources, Engineering Division Kirk Tanaka, P.E., R.T. Tanaka Engineers, Inc K:DATA\RTTanaka\Makena Comfort Station\Applications\Draft EA\Response Letters\HECO.docx

Maui: 305 High Street, Suite 104 • Wailuku, Hawaii 96793 • Tel: 808.244.2015 • Fax: 808.244.8729 Oahu: 735 Bishop Street, Suite 412 • Honolulu, Hawaii 96813 • Tel: 808.983.1233 www.muneklyohiraga.com

- From: Albert Perez, Executive Director Maui Tomorrow Foundation
- To: Curt Cottrell, Administrator Division of State Parks Department of Land and Natural Resources curt.a.cottrell@hawaii.gov

Gwendolyn Rivera Munekiyo Hiraga <u>planning@munekiyohiraga.com</u>

Date: January 24, 2022

Re: Draft Environmental Assessment for Mākena State Park Improvements; TMK No.: (2)2-1-006:030

Dear Mr. Cottrell,

We have reviewed the subject Draft Environmental Assessment (DEA), and have the following comments:

During multiple meetings of the Oneloa Coalition, Division of State Parks staff repeatedly reminded us of the urgency of spending the money allocated for the proposed park improvements before funding lapsed. They stated that they intended to prepare an Environmental Assessment and issue a Finding of No Significant Impact. The subject DEA follows through on this predetermined outcome. I personally informed DSP staff that an environmental assessment was inappropriate for this project because of multiple significant environmental and cultural impacts. Therefore, statements in the EA such as this one,

"The DLNR has engaged community stakeholders (including the Oneloa Coalition) during the planning process of the proposed project, in recognition of cultural, environmental, and recreational stakeholder interests in the area"

are <u>disingenuous</u> in that they imply consent on the part of the Oneloa Coalition with regard to the proposed development. In fact, many members of the Oneloa Coalition were opposed to one or more aspects of the project, due to its significant cultural and environmental impacts, and the Oneloa Coalition did not reach consensus regarding the proposed improvements. In addition, I was very surprised to see a letter from DLNR to the National Park Service claiming that the Oneloa Coalition meetings with State Parks constituted a Section 106 consultation. This was never mentioned at the meetings.

From the first mention of this project, Maui Tomorrow has urged State Parks to do the following, which need to be evaluated under the Alternatives Analysis section of the EA.

- Prepare an updated Master Plan for Mākena State Park, to include an environmental carrying capacity study that will assess the capacity of offshore waters to retain their Class AA status, the needs of endangered species, and crowding of the human environment. This carrying capacity study should be conducted prior to any changes in parking capacity, and prior to the construction of comfort stations and/or showers, which would likely attract additional park visitors. Mākena State Park on Maui deserves the same level of attention in this regard that was given Ha'ena State Park on Kaua'i.
- Connect all wastewater generating facilities, including comfort stations and showers, to the Makena Resort WWTP prior to any construction.
- Maui Island Plan Policy 4.2.2.a is to "Mitigate the impact of tourism on the host culture, natural environment, and resident lifestyles." Maui Island Plan Policy 4.2.3. is to "Promote a desirable island population by striving to not exceed an island-wide visitor population of roughly 33 percent of the resident population. In keeping with these policies, the EA should evaluate the alternative of reserving 75 percent of the parking for Hawaii residents."

The impacts of the proposed project are significant as defined in HAR 11-200-13. Accordingly, an environmental assessment is insufficient, and an Environmental Impact Statement is required.

Per HAR 11-200.1-2,

"'Significant effect' or 'significant impact' means the sum of effects on the quality of the environment, including actions that irrevocably commit a natural resource, curtail the range of beneficial uses of the environment, are contrary to the State's environmental policies or long-term environmental goals and guidelines as established by law, adversely affect the economic welfare, social welfare, or cultural practices of the community and State, or are otherwise set forth in section 11-200.1-13."

HAR 11-200.1-13(b) sets forth the significance criteria for determining whether a proposed action is significant. Since the proposed project will trigger several of these criteria, the project will have significant impact on the environment, and an environmental assessment is not appropriate. An Environmental Impact Statement is required. Better yet, the project should be abandoned.

1. According to HRS 11-200.1-13, an action shall be determined to have a significant effect on the environment if it may:

#### (1) Irrevocably commit a natural, cultural, or historic resource;

- a. The use of of water resources for comfort stations and showers at Mākena State Park may diminish the opportunity for traditional and customary water uses in Central Maui. The impacts of traditional and customary water uses in Central Maui need to be analyzed.
- b. The Cultural Impact Assessment (CIA) states that concerns were expressed regarding "the proximity of the comfort station to the pu'u and potential degradation of its setting and feeling as well as the viewshed from the pu'u." However, the CIA then recommends "refraining from any further construction beyond the current proposal." This is faulty reasoning. <u>Allowing</u> the proposed construction will not address the concerns about the proposed construction. The proximity to the pu'u, potential degradation of its setting and feeling, and the viewshed will all be impacted by the proposed improvements. These are significant impacts that cannot be mitigated; an Environmental Impact Statement is therefore required.
- c. The hawksbill turtle is an endangered species that is known to nest along the beach fronting the park. The EA needs to discuss the impact on endangered species resulting from additional park users that would be attracted by the presence of showers that are not currently available.
- d. The EA also needs to discuss the impacts from addition of new pavement that will build up oil, antifreeze, microplastics from tires, and other contaminants that will be washed into drainage facilities, especially during the "first flush" after a long dry period. This is particularly important given the increased frequency of "rain bombs" like recent storms that caused flooding within the park. Regular users of Mākena State Park know that during big rains, the south side of the north parking lot gets eroded, and the sediment- and chemical-laden runoff goes into the wetland. Addition of pavement will increase the impervious area that collects oil & antifreeze until the next flood brings it down to the wetland, where it will eventually make its way into groundwater and the ocean.

In addition, asphalt contains oil contaminants that are released and leach out over time. Many parks are actually paying to have asphalt removed and replaced because of the impacts on water quality and endangered species.

All of these impacts need to be discussed in the EA.

e. Page 24 of the EA contains the incorrect claim that "Drainage improvements for the proposed project are designed to ensure that the increase in runoff due to the development is retained onsite so as to ensure there are no impacts on downstream properties or nearshore ocean water quality." The proposed showers have drainage sumps with a permeable bottom consisting of 6 inches of crushed rock. The Cultural Impact Assessment for the project states on page 86 that,

"Concerns with regard to the use of non-biodegradable detergents at the showers, and the potential for these detergents to enter the ecosystem regardless of the catchment system were also raised. To this end, and though potentially not entirely foolproof, the Park has committed to actively discouraging the use of shampoo and soap at the showers through signage banning the use of detergent located in the shower and comfort station areas."

It is extremely unlikely that signage is going to stop people from using soap or shampoo at the showers. Even if only footwashing stations are installed, people will be able to bring buckets and use the water to bathe in and/or to wash dishes. Unless State Parks is going to have enforcement personnel monitoring the use of the showers/footwashing stations 24 hours a day, there will be some level of noncompliance with the signage, which will result in the introduction of nutrients underground that can eventually make their way to the wetland and the Class AA waters offshore. Since State Parks is chronically short-staffed, impacts from soaps, shampoos and food wastes need to be disclosed and discussed. The waters off Mākena State Park are some of the cleanest and clearest on Maui, and the EA needs to take protection of these pristine waters seriously by disclosing and discussing potential impacts.

On page 231 of the EA, State Parks responds to the Maui County Cultural Resources Commission's concern about shampoos and detergents in shower water leaching into the wetlands, by saying, "We are interested in the County's efforts to mitigate impacts from surface water impacts from shower and look forward to seeing if these options are effective and economically feasible in the expenditure of public funds. It is commendable that State Parks is interested in the County's efforts to mitigate impacts from surface water impacts from showers, but this "interest" does not constitute adequate mitigation . The fact that State Parks admits that signage will not work, but will not commit to providing adequate mitigation, means that there will be a significant environmental impact.

The EA also needs to discuss the impact, over the long term, of water and nutrients being introduced into the subsurface environment through the crushed rock bottom of the drainage sumps. In particular, the presence of additional water underground has the potential to change the surrounding plant community. This should be disclosed and discussed.

Over time, water from the showers may percolate through the drainage sumps, taking chemicals and nutrients with it. Eventually these contaminants may reach the Oneloa wetland and/or the Class AA ocean waters fronting the beach. The EA should disclose and discuss potential impacts of these chemicals and nutrients on water quality and on endangered species that are found on land and in the marine environment, including the endangered hawksbill turtle and other protected marine species.

The shower water should be captured and processed at a wastewater treatment plant from the beginning – not "later." Maui Tomorrow reached a settlement with Mākena Resort in which the resort agreed to accept wastewater from Mākena State Park. This opportunity should be taken advantage of, instead of sending the shower water and nutrients down into the ground where they will eventually reach the pristine ocean. DLNR enforcement is already severely understaffed. Go to other beach parks and you will see people washing their dirty dishes and laundry in the showers. These nutrients and chemicals will negatively impact the nearby wetlands and the ocean as well. The impacts from these types of activities occurring at Mākena State Park needs to be discussed in the EA.

f. On Page 8 of the EA, the following statement is made (highlighting added):

g.

# b. Potential Impacts and Mitigation Measures

The proposed action involves the development of comfort stations, outdoor showers, and parking improvements at existing parking areas within the Park. The proposed project represents a continuation of the existing Park use and there are no anticipated adverse land use impacts associated with its implementation.

This statement is false. The existing park use does not include comfort stations or outdoor showers. Currently people who want to go to a beach park that has comfort stations and showers do not go to Mākena State Park. If comfort stations and/or showers are built, people who have previously avoided this park will start to use it. The EA needs to assess all of the impacts associated with increased park use that will be generated by the proposed "improvements."

2. According to HRS 11-200.1-13, an action shall be determined to have a significant effect on the environment if it may:

(4) Have a substantial adverse effect on the economic welfare, social welfare, or cultural practices of the community and State;

a. Overtourism and cumulative impacts of the proposed parking expansion need to be examined. Maui's recent experience with the boom/bust nature of the visitor industry have our elected officials looking for ways to <u>reduce</u> the number of tourists. The fact that people are currently parking illegally on unpaved areas does not mean that the capacity of the parking lots has officially been already expanded. Creation of the additional spaces will <u>accommodate</u> the current illegal parking and make permanent the excessive demand. This is the opposite of what is required by the Maui Island Plan, which contains the following policies:

Policy 4.2.2.a is to "Mitigate the impact of tourism on the host culture, natural environment, and resident lifestyles."

Policy 4.2.3. is to "Promote a desirable island population by striving to not exceed an island-wide visitor population of roughly 33 percent of the resident population

The EA needs to discuss the adverse effect on the economic welfare, social welfare, or cultural practices of the community and State of not complying with the Maui Island Plan.

- b. As recommended by the Maui County Cultural Resources Commission, a master plan, to include a carrying capacity study, should be done prior to facilitating any additional parking. Rather than simply accommodating the excessive demand tht is evidenced by people parking in undesignated areas, the Division of State Parks needs to examine an alternative approach of making it physically impossible to do so, with fencing high curbs, berms, or other traffic control devices.
- c. Mākena State Park has an extremely high spinal injury rate. The EA needs to discuss the impacts of increased use by people who currently avoid using the park because it lacks showers, including families with children, and particularly visitor who are unfamiliar with the dangerous shorebreak that is common at this beach park.

## **Mitigation Inadequate:**

The monitoring of excavation activity for "inadvertent" disturbance of burials does not prevent the significant impact of the disturbance itself; this impact cannot be mitigated. Therefore, an environmental assessment is not appropriate, and an Environmental Impact Statement that discloses these unavoidable potential impacts must be prepared.

Given the presence of known burials within Mākena State Park, there is clear potential for irrevocably committing cultural resources by disturbing additional burials that may be located in the project area.. Hawaiian cultural practitioners, including members of Ho'oponopono o Mākena, who are dedicated to the cultural practice of protecting iwi kupuna, are very active in the Mākena area. The disturbance of Hawaiian burials is extremely traumatic and significant, and causes great anguish, as it does in any culture. The bones of ancestors function as a source of collective mana for Kānaka Maoli. When iwi kūpuna are planted back into the 'āina, they become the 'āina that nourishes their descendants in perpetuity. Unfortunately, the monitoring of excavation activity for "inadvertent" disturbance of burials does not prevent the significant impact of the disturbance itself; this impact cannot be mitigated. Therefore, an environmental assessment is not appropriate, and an Environmental Impact Statement that discloses these unavoidable impacts must be prepared.

## Alternatives Analysis Inadequate

The discussion of alternatives considered in the Draft EA is clearly inadequate. The alternatives analysis needs to consider the benefits and the impacts of an adequate range of alternatives.

The first alternative mentioned in the DEA is the No Action Alternative. The DEA states that " the existing parking facilities are insufficient to accommodate the number of Park users," and concludes that No Action is therefore not a viable option. This conclusion fails to consider the possibility that the park is already accommodating more visitors than can adequately be handled by various limiting factors, including endangered species and water quality. The benefits of the No Action Alternative need to be adequately considered.

The congestion that is mentioned due to "inadequate parking" could be handled by increasing parking fees for non-residents, in conjunction with the creation of No Parking zones on the roadway outside the park. This is an alternative that needs to be considered.

The second alternative considered, the Deferred Action Alternative, is not a true alternative, but would be the exact same project pursued at a later time. With respect to environmental impacts, the timing of the project is irrelevant once it is built, now or at some future time.

The third alternative considered, the OFFSITE WASTEWATER TREATMENT PLANT CONNECTION, is only a partial alternative to holding tanks, and does not address the proposed paved parking

expansion or the impacts thereof. The fact that the cost to construct a sewerline connecting the comfort stations and showers is substantial and beyond the budget available for the project is not relevant to a discussion of the environmental impacts of this alternative; lack of a budget at this time is not an excuse for failure to address the positive environmental impacts of preventing infiltration of shower water to the surrounding ground, the wetland, and eventually the ocean.

The DEA discusses the cost of maintenance as a deciding factor in choosing the Preferred Alternative. However, a true comparison of the total cost of the alternatives of the project must include the proposed upfront \$2,069,495 cost of the proposed improvements. Given the relatively low cost of porta potties rental and servicing, even if the number of porta potties were doubled, it could be decades before the existing wastewater disposal solution would even approach the upfront capital cost of the proposed improvements. This alternative should be analyzed in the EA.

# **Conclusion:**

In view of the deficient information, and the fact that the impacts of the project are significant, as defined by HAR 11-200.1-13, an Environmental Impact Statement is required instead of an Environmental Assessment.

Mahalo for the opportunity to comment.



Karlynn K. Fukuda PRESIDENT

Mark Alexander Roy AICP, LEED AP VICE PRESIDENT

Tessa Munekiyo Ng AICP VICE PRESIDENT

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December 1, 2022

Via Email: director.mauitomorrow@gmail.com

Albert Perez, Executive Director Maui Tomorrow Foundation

Dear Mr. Perez:

Thank you for your comment letter dated January 24, 2022, regarding the Draft Environmental Assessment (EA) for the subject project. We appreciate you taking the time to provide comments for this project proposed by the State of Hawai'i, Department of Land and Natural Resources, Division of State Parks (DSP). On behalf of the DSP, we offer the following responses to your comments in the same order as they appear in your letter:

# Comment No. 1:

During multiple meetings of the Oneloa Coalition, Division of State Parks staff repeatedly reminded us of the urgency of spending the money allocated for the proposed park improvements before funding lapsed. They stated that they intended to prepare an Environmental Assessment and issue a Finding of No Significant Impact. The subject DEA follows through on this predetermined outcome. I personally informed DSP staff that an environmental assessment was inappropriate for this project because of multiple significant environmental and cultural impacts. Therefore, statements in the EA such as this one, "The DLNR has engaged community stakeholders (including the Oneloa Coalition) during the planning process of the proposed project, in recognition of cultural, environmental, and recreational stakeholder interests in the area" are disingenuous in that they imply consent on the part of the Oneloa Coalition with regard to the proposed development. In fact, many members of the Oneloa Coalition were opposed to one or more aspects of the project, due to its significant cultural and environmental impacts, and the Oneloa Coalition did not reach consensus regarding the proposed improvements.

SUBJECT: Draft Environmental Assessment for Proposed Mākena State Park Comfort Stations Project at TMK No. (2)2-1-006:030(por.), Mākena, <u>Maui, Hawai'i</u>

Maui: 305 High Street, Suite 104 • Wailuku, Hawaii 96793 • Tel: 808.244.2015 • Fax: 808.244.8729 Oahu: 735 Bishop Street, Suite 412 • Honolulu, Hawaii 96813 • Tel: 808.983.1233 www.muneklyohiraga.com

Response: Between March 2018 and February 2020, DSP met 14 times with the Oneloa Coalition to share proposed plans for the comfort station and solicit input from the members. While no consensus was offered from the Oneloa Coalition regarding the proposed improvements, State Parks considered comments and concerns from the Oneloa Coalition members and other community stakeholders about wastewater leaching, resulting in DSP's decision to shift the proposed design from a septic system with leach field to containment tanks. A Draft Environmental Assessment (EA) was prepared pursuant to the requirements and processes set forth by both Chapter 343, HRS and Chapter 200.1, HAR in order to evaluate the project, determine whether the effect of the proposed action may constitute a significant impact, and to identify measures to mitigate or reduce any adverse impacts. Based on the analysis presented in the Draft EA, the project is not anticipated to present a potential for significant environmental or cultural impacts according to the significance criteria of HAR Section 11-200.1-13. Upon completion of the EA preparation process, the DLNR/Board of Land and Natural Resources (BLNR) will review the Final EA to determine whether or not a potential for significant impacts exists with the proposed project.

## Comment No. 2:

In addition, I was very surprised to see a letter from DLNR to the National Park Service claiming that the Oneloa Coalition meetings with State Parks constituted a Section 106 consultation. This was never mentioned at the meetings.

**Response:** Formal Section 106 Consultation with the Oneloa Coalition was conducted via a letter and an information packet emailed to the members on February 17, 2021. Due to the COVID-19 pandemic, this consultation was conducted by email rather than a formal meeting. Comments were requested within 30 days, however, the comment period was extended to April 5, 2022 to allow more time for members to respond.

# Comment No. 3:

From the first mention of this project, Maui Tomorrow has urged State Parks to do the following, which need to be evaluated under the Alternatives Analysis section of the EA. Prepare an updated Master Plan for Mākena State Park, to include an environmental carrying capacity study that will assess the capacity of offshore waters to retain their Class AA status, the needs of endangered species, and crowding of the human environment.

This carrying capacity study should be conducted prior to any changes in parking capacity, and prior to the construction of comfort stations and/or showers, which would likely attract additional park visitors. Mākena State Park on Maui deserves the same level of attention in this regard that was given Ha'ena State Park on Kaua'i.

**Response:** Preparation of a Master Plan for Mākena State Park is beyond the scope of the currently proposed action, as no major development is proposed beyond basic facilities such as restrooms and parking lots. The DSP has discussed the need for a Master Plan for Mākena State Park and is open to preparing such a plan in the future. When a Master Plan is prepared, a carrying capacity study will be recommended as part of that scope of work. There are management tools that can be utilized in the interim, such as adjustment of Park hours to accommodate maintenance activities and resource stabilization, and public education and outreach regarding resource management. These efforts will require coordination with community stakeholder groups as well as County and State agencies, in which DSP would welcome any voluntary efforts by the Maui Tomorrow Foundation.

## Comment No. 4:

Connect all wastewater generating facilities, including comfort stations and showers, to the Makena Resort WWT prior to any construction.

**Response:** Infrastructure to connect to the Mākena Resort WWTP, approximately 1.8 miles from the Park, is not available at this time. We also note that DSP has not secured a commitment from Mākena Resort to allow such a connection. Waiting until such a connection is available is not a viable solution, as doing so would allow the current situation with inadequate sanitary facilities for Park users to continue into the future. The lack of permanent sanitary facilities detracts from the Park users' experience. Some Park users may avoid the existing portable toilets, resulting in a higher level of waste in other locations in the Park and in the ocean, potentially impacting the nearby environment and creating unsanitary conditions. DSP seeks to avoid these impacts and to provide comfort station facilities which are desired by the community. Wastewater from the comfort stations will be collected in containment tanks and removed from the Park for offsite treatment, while water from the showers will drain to a surface basin for evaporation. However, the proposed facilities are being designed to allow for connection to a wastewater treatment facility should such a connection become available in the future.

## Comment No. 5:

Maui Island Plan Policy 4.2.2.a is to "Mitigate the impact of tourism on the host culture, natural environment, and resident lifestyles." Maui Island Plan Policy 4.2.3. is to "Promote a desirable island population by striving to not exceed an island-wide visitor population of roughly 33 percent of the resident population. In keeping with these policies, the EA should evaluate the alternative of reserving 75 percent of the parking for Hawaii residents.

**Response:** DSP is not aware of any evidence that local residents are not able to access and use Mākena State Park. While visitors are charged a parking fee, Hawai'i residents are permitted to enter the Park and utilize the Park's parking lots free of charge, although many prefer to park roadside near the southern portion of the park. In the event that DSP learns that residents are having difficulty using the park in the future, a reservation system can be considered.

## Comment No. 6:

The impacts of the proposed project are significant as defined in HAR 11-200-13. Accordingly, an environmental assessment is insufficient, and an Environmental Impact Statement is required. Per HAR 11-200.1-2, "Significant effect' or 'significant impact' means the sum of effects on the quality of the environment, including actions that irrevocably commit a natural resource, curtail the range of beneficial uses of the environment, are contrary to the State's environmental policies or long-term environmental goals and guidelines as established by law, adversely affect the economic welfare, social welfare, or cultural practices of the community and State, or are otherwise set forth in section 11-200.1-13." HAR 11-200.1-13(b) sets forth the significance criteria for determining whether a proposed action is significant. Since the proposed project will trigger several of these criteria, the project will have significant impact on the environment, and an environmental assessment is not appropriate. An Environmental Impact Statement is required. Better yet, the project should be abandoned.

**Response:** The need for an EIS is based upon the presence of significant direct, indirect and cumulative impacts of the proposed action on the environment, according to the significance criteria of HAR Section 11-200.1-13. A Draft Environmental Assessment (EA) was prepared pursuant to the requirements and processes set forth by both Chapter 343, HRS and Chapter 200.1, HAR in order to evaluate the project, determine whether the effect of the proposed action may constitute a significant impact, and to

> identify measures to mitigate or reduce any adverse impacts. Based on the analysis presented in the Draft EA, the project is not anticipated to present a potential for significant impacts according to the significance criteria of HAR Section 11-200.1-13. Upon completion of the EA preparation process, DLNR/BLNR will review the Final EA to determine whether or not a potential for significant impacts exists with the proposed project. If a decision is made to accept the Final EA, a Finding of No Significant Impact (FONSI) would be issued by DLNR/BLNR and the Final EA/FONSI would be published in The Environmental Notice by the State's Environmental Review Program. Should DLNR/BLNR, however, determine that the proposed action is anticipated to result in significant impacts pursuant to the significance criteria set forth in HAR Section 11-200.1-13, an EIS process will be initiated. Depending on the nature of significant impacts anticipated, additional technical studies may be undertaken as part of the EIS preparation process.

# Comment No. 7:

According to HRS 11-200.1-13, an action shall be determined to have a significant effect on the environment if it may:

(1) Irrevocably commit a natural, cultural, or historic resource; The use of of water resources for comfort stations and showers at Mākena State Park may diminish the opportunity for traditional and customary water uses in Central Maui. The impacts of traditional and customary water uses in Central Maui need to be analyzed.

**Response:** We understand that Mākena is served by the County of Maui, Department of Water Supply primarily by groundwater sources, and as such, would not divert significantly from surface water sources. As part of the Chapter 343, HRS environmental review process, consultation is being conducted with the DLNR Commission on Water Resources Management (CWRM), whose responsibilities include regulating the use of water resources in water management areas, and coordinating activities necessary to insure the protection of traditional and customary water rights. CWRM may evaluate competing public and private water uses as needed on a case-by-case basis, but any balancing must begin with a presumption in favor of public use, access and enjoyment. The State is obligated to protect, control, and regulate the use of Hawai'i's water resources for the benefit of its people as a public trust. In contrast to many other water uses which benefit only private or commercial users, water use at the park will serve everyone who visits the park. Article XI, Section 7 of the Hawai'i State Constitution states

that "the State has an obligation to protect, control and regulate the use of Hawai'i's water resources for the benefit of its people." Providing water to a public park which is utilized by the people, is a benefit in accordance with the State Constitution and public trust purposes.

## Comment No. 8:

The Cultural Impact Assessment (CIA) states that concerns were expressed regarding "the proximity of the comfort station to the pu'u and potential degradation of its setting and feeling as well as the viewshed from the pu'u." However, the CIA then recommends "refraining from any further construction beyond the current proposal." This is faulty reasoning. Allowing the proposed construction will not address the concerns about the proposed construction. The proximity to the pu'u, potential degradation of its setting and feeling, and the viewshed will all be impacted by the proposed improvements. These are significant impacts that cannot be mitigated; an Environmental Impact Statement is therefore required.

**Response:** While the CIA did identify these as concerns, it was determined that the project would not directly affect Pu'u Ōla'i, the culturally significant geological feature, nor the archaeological sites and cultural practices associated with the pu'u. To mitigate potential effects to the viewshed from the pu'u toward Keone'ō'io, as well as the overall setting and feel, the comfort station at the northern entrance has been designed with low pitched roofing, paint colors will be selected to match with the environmental setting, and native plantings may be used to shield the comfort stations as much as possible from the top of the pu'u in an effort to blend in with the surrounding landscape.

## Comment No. 9:

The hawksbill turtle is an endangered species that is known to nest along the beach fronting the park. The EA needs to discuss the impact on endangered species resulting from additional park users that would be attracted by the presence of showers that are not currently available.

**Response:** As previously noted, DSP is not aware of a connection between the proposed action and the anticipated number of visitors to the Park. The proposed project seeks to address the current absence of restroom facilities, and as such is anticipated to have a beneficial impact to the Park environment by reducing the level of foot traffic, human waste, and rubbish throughout the dunes and other natural areas of the Park which may include

wildlife habitats. As part of the Chapter 343, HRS environmental review process, consultation is being conducted with the Department of Land and Natural Resources Division of Aquatic Resources (DAR) and the U.S. Fish and Wildlife Service (USFWS). The USFWS provided recommended measures to avoid adverse effects to Hawaiian sea turtles, such as the hawksbill sea turtle and the green sea turtle. These USFWS recommended measures are included in the Final EA. The project will implement all USFWS recommendations to mitigate project related impacts to hawksbill sea turtles. With implementation of these measures, no significant adverse impacts to sea turtles are anticipated.

## Comment No. 10:

The EA also needs to discuss the impacts from addition of new pavement that will build up oil, antifreeze, microplastics from tires, and other contaminants that will be washed into drainage facilities, especially during the "first flush" after a long dry period. This is particularly important given the increased frequency of "rain bombs" like recent storms that caused flooding within the park. Regular users of Mākena State Park know that during big rains, the south side of the north parking lot gets eroded, and the sediment- and chemical laden runoff goes into the wetland. Addition of pavement will increase the impervious area that collects oil & antifreeze until the next flood brings it down to the wetland, where it will eventually make its way into groundwater and the ocean. In addition, asphalt contains oil contaminants that are released and leach out over time. Many parks are actually paying to have asphalt removed and replaced because of the impacts on water quality and endangered species.

**Response:** In accordance with County drainage requirements, the increase in runoff due to the proposed improvements will be mitigated by the proposed drainage basins which, with proper maintenance, will serve to control the release of any pollutants. During very large rain events or storms, sedimentation, vegetation, and other items are flushed into the ocean across the island via natural waterways, drainage basins, streams, and rivers. The park improvements are minute in comparison and should have very little to no impact due to the distance from the project areas to the ocean at the park.

## Comment No. 11:

Page 24 of the EA contains the incorrect claim that "Drainage improvements for the proposed project are designed to ensure that the increase in runoff

> due to the development is retained onsite so as to ensure there are no impacts on downstream properties or nearshore ocean water quality." The proposed showers have drainage sumps with a permeable bottom consisting of 6 inches of crushed rock. The Cultural Impact Assessment for the project states on page 86 that, "Concerns with regard to the use of nonbiodegradable detergents at the showers, and the potential for these detergents to enter the ecosystem regardless of the catchment system were also raised. To this end, and though potentially not entirely foolproof, the Park has committed to actively discouraging the use of shampoo and soap at the showers through signage banning the use of detergent located in the shower and comfort station areas." It is extremely unlikely that signage is going to stop people from using soap or shampoo at the showers. Even if only footwashing stations are installed, people will be able to bring buckets and use the water to bathe in and/or to wash dishes. Unless State Parks is going to have enforcement personnel monitoring the use of the showers/footwashing stations 24 hours a day, there will be some level of noncompliance with the signage, which will result in the introduction of nutrients underground that can eventually make their way to the wetland and the Class AA waters offshore. Since State Parks is chronically shortstaffed, impacts from soaps, shampoos and food wastes need to be disclosed and discussed.

**Response:** The implementation of educational signage will alert Park users to the potential impacts of soaps and shampoos to the nearby environment and will discourage the majority of Park users from using these items. Most park users comply with posted rules and guidelines. To minimize misuse, the showers will be shut off when the Park is closed, and will not be available for use 24 hours a day. Mākena State Park, unlike many State and County parks, has an onsite resident caretaker to monitor activities in the Park and address any misuse of Park Facilities that may occur.

## Comment No. 12:

On page 231 of the EA, State Parks responds to the Maui County Cultural Resources Commission's concern about shampoos and detergents in shower water leaching into the wetlands, by saying, "We are interested in the County's efforts to mitigate impacts from surface water impacts from shower and look forward to seeing if these options are effective and economically feasible in the expenditure of public funds. It is commendable that State Parks is interested in the County's efforts to mitigate impacts from surface water impacts from showers, but this "interest" does not constitute adequate mitigation. The fact that State Parks admits that signage will not

work, but will not commit to providing adequate mitigation, means that there will be a significant environmental impact.

**Response:** As noted in our response to Comment No. 11, DSP considers signage to be both a helpful and effective Park user management tool. As part of the Chapter 343, HRS environmental review process, consultation has been conducted with the Department of Health, Clean Water Branch (CWB). The project will be implemented in compliance with applicable CWB requirements pertaining to water quality.

## Comment No. 13:

The EA also needs to discuss the impact, over the long term, of water and nutrients being introduced into the subsurface environment through the crushed rock bottom of the drainage sumps. In particular, the presence of additional water underground has the potential to change the surrounding plant community. This should be disclosed and discussed. Over time, water from the showers may percolate through the drainage sumps, taking chemicals and nutrients with it. Eventually these contaminants may reach the Oneloa wetland and/or the Class AA ocean waters fronting the beach. The EA should disclose and discuss potential impacts of these chemicals and nutrients on water quality and on endangered species that are found on land and in the marine environment, including the endangered hawksbill turtle and other protected marine species.

**Response:** The wastewater collection and shower water collection systems have been designed to prevent discharge of harmful pollutants to the environment. The project will be implemented in compliance with applicable regulations related to water quality, and with best management practices as recommended by reviewing agencies. DSP does not anticipate that the proposed improvements will result in any significant adverse effects to the environment.

## Comment No. 14:

The shower water should be captured and processed at a wastewater treatment plant from the beginning – not "later." Maui Tomorrow reached a settlement with Mākena Resort in which the resort agreed to accept wastewater from Mākena State Park. This opportunity should be taken advantage of, instead of sending the shower water and nutrients down into the ground where they will eventually reach the pristine ocean. DLNR enforcement is already severely understaffed. Go to other beach parks and

you will see people washing their dirty dishes and laundry in the showers. These nutrients and chemicals will negatively impact the nearby wetlands and the ocean as well. The impacts from these types of activities occurring at Mākena State Park needs to be discussed in the EA.

**Response:** Please see our responses to your Comment No. 4 and Comment No. 11.

## Comment No. 15:

On Page 8 of the EA, the following statement is made: "The proposed project represents a continuation of the existing Park use and there are no anticipated adverse land use impacts associated with its implementation." This statement is false. The existing park use does not include comfort stations or outdoor showers. Currently people who want to go to a beach park that has comfort stations and showers do not go to Mākena State Park. If comfort stations and/or showers are built, people who have previously avoided this park will start to use it. The EA needs to assess all of the impacts associated with increased park use that will be generated by the proposed "improvements".

**Response:** The project area is currently used as a beach park. There are temporary portable toilets which are currently in use. The proposed action will not significantly change the use of the project area as a beach park, but it will provide improved facilities to enhance the current use of the park and sanitary conditions for its users. As previously noted, DSP does not believe there to be a connection between the proposed action and a potential increase in the number of visitors at the park.

#### Comment No. 16:

According to HRS 11-200.1-13, an action shall be determined to have a significant effect on the environment if it may:

(4) Have a substantial adverse effect on the economic welfare, social welfare, or cultural practices of the community and State;

Overtourism and cumulative impacts of the proposed parking expansion need to be examined. Maui's recent experience with the boom/bust nature of the visitor industry have our elected officials looking for ways to reduce the number of tourists. The fact that people are currently parking illegally on unpaved areas does not mean that the capacity of the parking lots has officially been already expanded. Creation of the additional spaces will accommodate the current illegal parking and make permanent the excessive demand. This is the opposite of what is required by the Maui Island Plan, which contains the following policies:

Policy 4.2.2.a is to "Mitigate the impact of tourism on the host culture, natural environment, and resident lifestyles."

Policy 4.2.3. is to "Promote a desirable island population by striving to not exceed an island-wide visitor population of roughly 33 percent of the resident population.

The EA needs to discuss the adverse effect on the economic welfare, social welfare, or cultural practices of the community and State of not complying with the Maui Island Plan.

**Response:** The project is being proposed to address the existing conditions at the Park and to mitigate the impacts associated with insufficient sanitary and parking facilities. As noted in our response to Comment No. 3, DSP is not aware of a connection between the proposed action and the anticipated number of visitors to the Park, nor to the island-wide visitor population of Maui.

# Comment No. 17:

As recommended by the Maui County Cultural Resources Commission, a master plan, to include a carrying capacity study, should be done prior to facilitating any additional parking. Rather than simply accommodating the excessive demand that is evidenced by people parking in undesignated areas, the Division of State Parks needs to examine an alternative approach of making it physically impossible to do so, with fencing high curbs, berms, or other traffic control devices.

**<u>Response:</u>** Please see our response to your Comment No. 3 regarding a carrying capacity study.

## Comment No. 18:

Mākena State Park has an extremely high spinal injury rate. The EA needs to discuss the impacts of increased use by people who currently avoid using the park because it lacks showers, including families with children, and particularly visitor who are unfamiliar with the dangerous shorebreak that is common at this beach park.

**Response:** The presence of lifeguards at Oneloa Beach provides the most effective method of providing public safety in dangerous ocean conditions. Interpretive signs have been installed at the parking lots to inform the public of the dangerous shorebreak. DSP does not anticipate that the proposed action is correlated to the rate of visitor injuries at the Park.

## Comment No. 19:

The monitoring of excavation activity for "inadvertent" disturbance of burials does not prevent the significant impact of the disturbance itself; this impact cannot be mitigated. Therefore, an environmental assessment is not appropriate, and an Environmental Impact Statement that discloses these unavoidable potential impacts must be prepared. Given the presence of known burials within Mākena State Park, there is clear potential for irrevocably committing cultural resources by disturbing additional burials that may be located in the project area. Hawaiian cultural practitioners, including members of Ho'oponopono o Mākena, who are dedicated to the cultural practice of protecting iwi kupuna, are very active in the Mākena area. The disturbance of Hawaiian burials is extremely traumatic and significant, and causes great anguish, as it does in any culture. The bones of ancestors function as a source of collective mana for Kānaka Maoli. When iwi kūpuna are planted back into the 'āina, they become the 'āina that nourishes their descendants in perpetuity. Unfortunately, the monitoring of excavation activity for "inadvertent" disturbance of burials does not prevent the significant impact of the disturbance itself; this impact cannot be mitigated. Therefore, an environmental assessment is not appropriate, and an Environmental Impact Statement that discloses these unavoidable impacts must be prepared.

**Response:** Archaeological monitoring is being recommended as a mitigation measure to protect archaeological sites in the vicinity of the project area and to address the low potential for iwi kūpuna to be found during construction of the project. Previous burials have been discovered eroding from either the sand dune of Oneloa Beach or the cinder of Pu'u Ola'i. However, archaeological testing and monitoring have not indicated the potential presence of burials outside these two areas. Likewise, consultation conducted for the CIA has not suggested a potential for iwi kūpuna in the project area that would warrant a finding of a "significant impact". We further note that DSP supports the identification of Pu'u Ōla'i as part of the traditional cultural property (TCP) of Pu'uoinaina, in an effort to ensure that the traditional beliefs of native Hawaiians will be perpetuated in the land management systems established for the TCP.

## Comment No. 20:

The discussion of alternatives considered in the Draft EA is clearly inadequate. The alternatives analysis needs to consider the benefits and the impacts of an adequate range of alternatives. The first alternative mentioned in the DEA is the No Action Alternative. The DEA states that "the existing parking facilities are insufficient to accommodate the number of Park users," and concludes that No Action is therefore not a viable option. This conclusion fails to consider the possibility that the park is already accommodating more visitors than can adequately be handled by various limiting factors, including endangered species and water quality. The benefits of the No Action Alternative need to be adequately considered. The congestion that is mentioned due to "inadequate parking" could be handled by increasing parking fees for non-residents, in conjunction with the creation of No Parking zones on the roadway outside the park. This is an alternative that needs to be considered.

**Response:** The proposed parking improvements are intended to accommodate the existing use of the Park and are not anticipated nor intended to increase the number of visitors to the Park. It has not been determined by DSP that the current level of visitors to the Park is too high. Should DSP determine in the future, via completion of a carrying capacity study or otherwise, that the number of visitors to the Park is resulting in negative impacts to the environment, DSP will enact management measures to reduce these impacts. These management measures may include decreasing Park hours or revising the fees charged for entry or parking; however, these measures are not related to the currently proposed action. DSP does not consider keeping the parking lots in an inadequately maintained condition to be a reasonable means to manage Park visitor levels. We also note that DSP is not able to manage roadway and parking conditions on Mākena Road, which is a County-owned roadway located outside the Park.

## Comment No. 21:

The second alternative considered, the Deferred Action Alternative, is not a true alternative, but would be the exact same project pursued at a later time. With respect to environmental impacts, the timing of the project is irrelevant once it is built, now or at some future time.

**Response:** Adverse impacts associated with the No Action Alternative include lack of hygienic and convenient restroom facilities for Park users, involving an

> increase in bathroom waste and off-trail foot traffic throughout the Park, as well as a haphazard and disorganized parking situation. Implementation of the proposed action will eliminate these impacts now, not later, whereas the Deferred Action Alternative would allow these adverse impacts to continue to affect the Park users and environment for some period of time. As such, DSP does not consider the Deferred Action Alternative to be viable.

## Comment No. 22:

The third alternative considered, the offsite wastewater treatment plant connection, is only a partial alternative to holding tanks, and does not address the proposed paved parking expansion or the impacts thereof. The fact that the cost to construct a sewerline connecting the comfort stations and showers is substantial and beyond the budget available for the project is not relevant to a discussion of the environmental impacts of this alternative; lack of a budget at this time is not an excuse for failure to address the positive environmental impacts of preventing infiltration of shower water to the surrounding ground, the wetland, and eventually the ocean.

Response: As noted in our response to your Comment No. 13, the proposed wastewater collection and shower water collection systems have been designed to prevent discharge of harmful pollutants to the environment. DSP is not aware of any evidence that the proposed improvements will result in a significant adverse effect to the environment. As such, these improvements were considered among other viable alternatives. In selecting the preferred alternative, DSP considered other factors, such as community preference. For this reason, based on feedback received from the Oneloa Coalition and Kīhei Community Association, the alternatives involving onsite wastewater treatment were not selected. As a government agency with the fiduciary responsibility to ensure the optimal use of public funds in order to ensure public health and safety, DSP must also consider the cost associated with each project alternative. Due to cost, the offsite wastewater treatment plant connection does not represent an optimal use of public funds at this time. The proposed wastewater collection and shower water collection systems are a means to appropriately address the health and safety needs of Park users until such time that a connection to an offsite wastewater treatment plant becomes viable.

## Comment No. 23:

The DEA discusses the cost of maintenance as a deciding factor in choosing the Preferred Alternative. However, a true comparison of the total cost of the alternatives of the project must include the proposed upfront \$2,069,495 cost of the proposed improvements. Given the relatively low cost of porta potties rental and servicing, even if the number of porta potties were doubled, it could be decades before the existing wastewater disposal solution would even approach the upfront capital cost of the proposed improvements. This alternative should be analyzed in the EA.

**Response:** A community survey conducted by the Oneloa Coalition in 2013 found that permanent restrooms and outdoor showers were the basic amenities that were wanted and needed at Mākena State Park. This project has been proposed in response to the community's preferences, and further modified through stakeholder consultation to eliminate the leach field component in favor of collection of wastewater in containment tanks for removal and treatment offsite at a permitted wastewater treatment facility. In regards to your comment above, a No Action alternative was included and discussed in the Draft EA.

We appreciate your input and will include a copy of your comment letter and this response in the Final EA. Should you have any questions or require further information regarding the proposed project, please contact me at (808) 244-2015, extension 220.

Very truly yours,

Groundolyn Rivera

Gwendolyn Leialoha Cheney Rivera Senior Associate

GLCR:lh

cc: Valerie Suzuki, Department of Land and Natural Resources, Engineering Division Kirk Tanaka, P.E., R.T. Tanaka Engineers, Inc. K:DATA/RTTanaka/Makena Comfort Station/Applications/Draft EA/Response Letters/Maui Tomorrow.res.docx



"e mālama pono"...dedicated to protecting, sustaining and enhancing our 'āina, kai and 'ohana

January 17, 2022

Russell Kumabe, AICP State of Hawaii Department of Land and Natural Resources Division of State Parks P O Box 621 Honolulu, Hawaii 96809 Email: <u>Russell.p.kumabe@hawaii.gov</u>

Subject: Draft Environmental Assessment for the Proposed Makena State Parks Improvements Project TMKs: (2) 2-1-006:030 (por.) Mākena, Maui, Hawai'i

Dear Mr. Kumabe:

Mahalo for the opportunity to comment on the Draft Environmental Assessment for the Makena State Parks Improvements Project. We support the proposed improvements the state will be developing such as the comfort stations and the parking upgrades that will be beneficial to both residents and visitors. However, we recommend the project add a bike lane along Mākena Alanui as well as bike racks installed within the park near the roadway.

We expect a developer will be adding a bike lane located North of Mākena State Park on Makena Alanui fronting a residential project. This would then allow for an almost continuous 3 miles of bike lane from Kaukahi Street in Wailea to Makena State Park. Also, creating safe bike access all the way to the Makena State Park could help lessen the parking demand in the beach parking lots. We hope the State will add these modifications.

We are aware that the State cannot control if Maui County will agree to add a bike lane, but our hope is having it in the DEA will be an inducement to follow the current Kihei Makena Community Plan which calls for a walkable bikeable community in this district.

Aloha,

Mike Moran, President Kihei Community Association

cc: <u>erin.derrington@mauicounty.gov</u> planning@munekiyohiraga.com



Karlynn K. Fukuda PRESIDENT Mark Alexander Roy AICP, LEED AP VICE PRESIDENT Tessa Munekiyo Ng AICP VICE PRESIDENT

Michael T. Munekiyo AICP SENIOR ADVISOR

December 1, 2022

# Via Email: kca@GoKihei.org

Mike Moran, President Kihei Community Association P.O. Box 662 Kihei, Hawai'i 96753

> SUBJECT: Draft Environmental Assessment for Proposed Mākena State Park Comfort Stations Project at TMK No. (2)2-1-006:030(por.), Mākena, <u>Maui, Hawai'i</u>

Dear Mr. Moran:

Thank you for your comment letter dated January 17, 2022, regarding the Draft Environmental Assessment (EA) for the subject project. We appreciate you taking the time to provide comments for this project, proposed by the State of Hawai'i, Department of Land and Natural Resources, Division of State Parks (DSP). On behalf of the DSP, we offer the following response to your comment:

## Comment No. 1:

We support the proposed improvements the state will be developing such as the comfort stations and the parking upgrades that will be beneficial to both residents and visitors. However, we recommend the project add a bike lane along Mākena Alanui as well as bike racks installed within the park near the roadway.

We expect a developer will be adding a bike lane located North of Mākena State Park on Makena Alanui fronting a residential project. This would then allow for an almost continuous 3 miles of bike lane from Kaukahi Street in Wailea to Makena State Park. Also, creating safe bike access all the way to the Makena State Park could help lessen the parking demand in the beach parking lots. We hope the State will add these modifications.

We are aware that the State cannot control if Maui County will agree to add a bike lane, but our hope is having it in the DEA will be an inducement to follow the current Kihei Makena Community Plan which calls for a walkable bikeable community in this district.

Maui: 305 High Street, Suite 104 • Wailuku, Hawaii 96793 • Tel: 808.244.2015 • Fax: 808.244.8729 Oahu: 735 Bishop Street, Suite 412 • Honolulu, Hawaii 96813 • Tel: 808.983.1233 www.muneklyohiraga.com

Mike Moran, President December 1, 2022 Page 2

**Response:** Thank you for this comment and for your support. We note that Mākena Road in the vicinity of the Park is under the jurisdiction of the County of Maui (County). DSP is not in a position to implement roadway improvements along Mākena Road. However, as an adjacent landowner, DSP would be open to supporting such a project should a proposal be presented by the County at some point in the future.

We appreciate your input and will include a copy of your comment letter and this response in the Final EA. Should you have any questions or require further information regarding the proposed project, please contact me at (808) 244-2015, extension 220.

Very truly yours,

Groundolyn Rivera

Gwendolyn Leialoha Cheney Rivera Senior Associate

GLCR:Ih

cc: Valerie Suzuki, Department of Land and Natural Resources, Engineering Division Kirk Tanaka, P.E., R.T. Tanaka Engineers, Inc. K:\DATA\RTTanaka\Makena Comfort Station\Applications\Draft EA\Response Letters\KCA.docx+
# H2R, LLC

January 3, 2022

Mr. Curt Cottrell State of Hawai<sup>'</sup>i Department of Land and Natural Resources Division of State Parks Honolulu, Hawai<sup>'</sup>i 96813

Dear Mr. Cottrell:

Subject: Draft Environmental Assessment for the Proposed Mākena State Parks Improvements Project TMKs: (2) 2-1-006:030 (por.) Mākena, Maui, Hawai i

Thank you for the opportunity to comment on the Draft Environmental Assessment for the Mākena State Parks Improvements Project. We support the proposed improvements the State will be developing such as the comfort stations and the parking upgrades that will be beneficial to both residents and visitors. However, we recommend the project add a bike lane along Mākena Alanui. Subject to the approval of its SMA our H-2 Residential project located North of Mākena State Park will be adding a bike lane on Mākena Alanui along the project frontage. This would then allow for an almost continuous 3 miles of bike lane from Kaukahi Street in Wailea to Mākena State Park. Also, creating safe bike access all the way to the Makena State Park could help lessen the parking demand in the beach parking lots.

We thank you again for the opportunity to comment and hope the State will add a bike lane to this project to extend bike connectivity in the Mākena area. Should you have any questions, please feel free to contact me by phone at (808) 244-1500 or by email at <u>everett@dowlingco.com</u>.

Sincerely, H2R, LLC By Dowling Company, Inc. Its Manager

Everett R. Dowling President

cc: Saman Dias, Chair, Maui Bicycling League Maui Planning Commission Members



https://earth.google.com/web/@20.65373551,-156.44480361,1.63069787a,4948.99300946d,59.99999982y,274.16680436h,0t,0r



Karlynn K. Fukuda PRESIDENT

Mark Alexander Roy AICP, LEED AP VICE PRESIDENT Tessa Munekiyo Ng AICP

VICE PRESIDENT

Michael T. Munekiyo AICP SENIOR ADVISOR

December 1, 2022

#### Via Email: everett@dowlingco.com

Everett R. Dowling H2R, LLC c/o Dowling Co. Inc.

#### SUBJECT: Draft Environmental Assessment for Proposed Mākena State Park Comfort Stations Project at TMK No. (2)2-1-006:030(por.), Mākena, Maui, Hawai'i

Dear Mr. Dowling:

Thank for your comment letter dated January 3, 2022, regarding the Draft Environmental Assessment (EA) for the subject project. We appreciate your comments in support of this project proposed by the State of Hawai'i, Department of Land and Natural Resources, Division of State Parks (DSP). On behalf of the DSP, we offer the following response to your comments:

#### Comment No. 1:

We support the proposed improvements the State will be developing such as the comfort stations and the parking upgrades that will be beneficial to both residents and visitors. However, we recommend the project add a bike lane along Mākena Alanui. Subject to the approval of its SMA our H-2 Residential project located North of Mākena State Park will be adding a bike lane on Mākena Alanui along the project frontage. This would then allow for an almost continuous 3 miles of bike lane from Kaukahi Street in Wailea to Mākena State Park. Also, creating safe bike access all the way to the Makena State Park could help lessen the parking demand in the beach parking lots.

**<u>Response</u>**: Thank you for this comment. We note that Mākena Road in the vicinity of the Park is under the jurisdiction of the County of Maui (County). While DSP is not in a position to implement roadway improvements along Mākena Road, as an adjacent landowner, DSP would be open to supporting such a project should a proposal be presented by the County at some point in the future.

Maui: 305 High Street, Suite 104 • Wailuku, Hawaii 96793 • Tel: 808.244.2015 • Fax: 808.244.8729 Oahu: 735 Bishop Street, Suite 412 • Honolulu, Hawaii 96813 • Tel: 808.983.1233 www.muneklyohiraga.com Everett R. Dowling December 1, 2022 Page 2

We appreciate your input and will include a copy of your comment letter and this response in the Final EA. Should you have any questions or require further information regarding the proposed project, please contact me at (808) 244-2015, extension 220.

Very truly yours,

Geoundolyn Rivera

Gwendolyn Leialoha Cheney Rivera Senior Associate

GLCR:ab

cc: Valerie Suzuki, Department of Land and Natural Resources, Engineering Division

Kirk Tanaka, P.E., R.T. Tanaka Engineers, Inc. K:\DATA\RTTanaka\Makena Comfort Station\Applications\Draft EA\Response Letters\H2R.docx From: Teresa Berger <<u>bergerta@hotmail.com</u>> Sent: Tuesday, December 28, 2021 11:56 AM To: General eMail <<u>planning@munekiyohiraga.com</u>> Subject: Makena Beach plans

Hello, 🛈 Happy Holidays! **!!!\$** 

I am a long time resident here on Maui, and read about the new additional parking, sanitation facilities, etc. for Big Beach, Makena. That sounds very nice, and a very positive addition to the beautiful State Park, ocean and beach area. I was there yesterday looking for parking, to take a swim, and of course, with so many visitors, and people, there were many cars lined down the road.

As I drove in, I noticed the signage for parking fees, and daily p.p. fees, for out of state visitors. I was wondering if, ...is this still in effect, ... and how is the \$ collected, is it done by technology, cellphone, texting, credit card, etc.?.. Do any visitors notice, or bother to stop to read the instructions, (especially if cars may be behind them), and I was wondering if the new proposed improvements will have included in to have a better means, method for this fee collection. Just curious...

Thank you very much for your time, and also service, and efforts on the behalf of beautiful Makena, and any and all other areas of Maui.

With Aloha, Teresa Berger



Karlynn K. Fukuda PRESIDENT Mark Alexander Roy AICP, LEED AP VICE PRESIDENT Tessa Munekiyo Ng AICP VICE PRESIDENT

Michael T. Munekiyo AICP SENIOR ADVISOR

December 1, 2022

#### Via Email: <u>bergerta@hotmail.com</u>

Teresa Berger, Maui Resident

SUBJECT: Draft Environmental Assessment for Proposed Mākena State Park Comfort Stations Project at TMK No. (2)2-1-006:030(por.), Mākena, Maui, Hawai'i

Dear Ms. Berger:

Thank for your comment letter dated December 28, 2021, regarding the Draft Environmental Assessment (EA) for the subject project. We appreciate your comment in support of this project proposed by the State of Hawai'i, Department of Land and Natural Resources, Division of State Parks (DSP). On behalf of the DSP, we offer the following response to the comment in your letter:

#### Comment No. 1:

As I drove in, I noticed the signage for parking fees, and daily p.p. fees, for out of state visitiors. I was wondering if, ..is this still in effect, ... and how is the \$ collected, is it done by technology, cellphone, texting, credit card, etc.?.. Do any visitors notice, or bother to stop to read the instructions, (especially if cars may be behind them), and I was wondering if the new proposed improvements will have included in to have a better means, method for this fee collection.

**<u>Response</u>**: Non-residents of Hawai'i must pay a parking fee of \$10.00 per vehicle as well as an entrance fee of \$5.00 per person. No parking or entrance fees are required for Hawai'i residents with a valid Hawai'i ID or Driver's License. Park visitors can pay for parking and entrance fees upon arrival at the parking kiosks with a credit card, or online via a mobile app. Information regarding these payment options is given on the signage posted in both parking lots. The majority of Park visitors comply with the parking fee and entrance fee requirements. No changes in parking fees or procedures are anticipated at this time in connection with the proposed improvements.

Maui: 305 High Street, Suite 104 • Wailuku, Hawaii 96793 • Tel: 808.244.2015 • Fax: 808.244.8729 Oahu: 735 Bishop Street, Suite 412 • Honolulu, Hawaii 96813 • Tel: 808.983.1233 www.muneklyohiraga.com Teresa Berger December 1, 2022 Page 2

We appreciate your input and will include a copy of your comment letter and this response in the Final EA. Should you have any questions or require further information regarding the proposed project, please contact me at (808) 244-2015, extension 220.

Very truly yours,

Groundolyn Rivera

Gwendolyn Leialoha Cheney Rivera Senior Associate

GLCR:ab

cc: Valerie Suzuki, Department of Land and Natural Resources, Engineering Division

Kirk Tanaka, P.E., R.T. Tanaka Engineers, Inc. K:\DATA\RTTanaka\Makena Comfort Station\Applications\Draft EA\Response Letters\Berger.docx From: Mark Hyde <<u>markghyde@gmail.com</u>>
Sent: Monday, December 27, 2021 4:47 PM
To: General eMail <<u>planning@munekiyohiraga.com</u>>; <u>curt.a.cottrell@hawaii.gov</u>
Subject: Comments on Makena State Park Project Draft EA

Mark G. Hyde 4320 E. Waiola Loop Kihei, Hawaii, 96753 (808) 344-3358 markghyde@gmail.com

December 28, 2021

State of Hawaii, Department of Land and Natural Resources Attn: Curt Cottrell Division of State Parks 1151 Punchbowl Street Room 310 Honolulu, HI 96813

Munekiyuo Hiraga 305 High Street Suite 104 Wailuku, HI 96795

Sent by email to: Curt.a.cottrell@hawaii.gov planning@munekiyohiraga.com

Re: Proposed Makena State Park Improvement Project

Dear Mr. Cottrell and Mr. Hiraga,

Below are my questions and comments about the Proposed Project

Questions:

#### I. Shower Drainage Basins

(a) Describe the drainage basins associated with the showers; for example, what will they be made of? Development plans for the Project provide detail for the restrooms and parking lot but little if any information about the drainage basins.

(b) How will the drainage basins **function and perform**, including under different conditions and volumes?

(c) What **quantity of water** are the basins expected to receive from the showers? What is their processing capacity taking into account different seasons and conditions (climatic and visitor volume)?

(d) How are the basins expected to **behave during extreme weather events?** Consider and discuss Maui's recent rainstorm/deluge.

(e) What **kind of chemicals and waste are expected** to drain into the basins? Will elements in the wastewater accumulate in the basins over time? Will it leach into the soil? Into the wetlands? Into nearby ocean water?

Answers to these questions are critical to assessment of the environmental impact of the proposed showers, particularly when the Draft EA **admits that shower water can enter the ocean.** See the sign proposed to be posted at each shower (page 252):

#### "The water from the shower will enter the ground and can make its way to the ocean."

#### II. Cost Estimates

Cost estimates for the project (page 7 and Table V) speak only to construction costs, making no mention of ongoing costs associated with regular transport of comfort station wastewater to the Makena Wastewater Treatment Plant plus ongoing maintenance costs for the comfort stations and wastewater basins. Currently there are no such costs (with the exception of existing low maintenance portable toilets). What are these costs projected to be - so they can be considered in relationship to the Project as a whole, particularly when the Project is "nice to have" and not necessary.

(a) What is the expected annual cost of wastewater hauling and disposal and new facility maintenance and repair?

(b) How long will wastewater hauling and disposal likely last?

The report hints at a connecting line to the Makena Plant being remote in time. What is this estimated period of time and how will costs change over time due to inflation and other factors?

(b) Will these costs be offset by additional parking or entry fees?

(c) If so, what is current parking fee income? Are these fees expected to increase once additional parking is added?

(d) Will paid parking result in even more cars parking along Makena Road as many visitors do today presumably in order to avoid paying current parking fees? If so, will this impact traffic and public safety in the immediate area? Explain.

(e) Can Makena Road parking be metered to provide additional revenue to support park operations? What other mitigations are possible?

#### III. Increase In Visitors

Will the addition the proposed improvements increase visitor volume to the area? If so, to what extent and what effect will this have on local area traffic (see item II. d. above), public safety and park enjoyment?

#### Comment:

PART III

POLICY RECOMMENDATIONS, IMPLEMENTING ACTIONS AND STANDARDS FOR THE KIHEI-MAKENA REGION

1. PROVISION OF NEEDED PUBLIC FACILITIES AND INFRASTRUCTURE.

Upon adoption of this plan, it shall be required that adequate facilities and infrastructure will be built concurrent with future development.

Note the wording of the plan: "it shall be required." It is not suggestive. It is demanding. And it is law.

The proposed addition of showers to Makena State Park without appropriate infrastructure for removal of shower wastewater from the park violates the community plan.

Makena State Park is the last stretch of pristine beach in south Maui. When other beaches along Maui's the south coast are overwhelmed by storm water runoff, mud and debris, Oneola Beach remains an oasis. Keep it that way.

Unless or until shower wastewater can be removed from the park through dedicated infrastructure, this element of the proposed project should be eliminated.

Sincerely,

landy

Mark G. Hyde

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Mark G, Hyde 4320 E. Waiola Loop Kihel, Hawaii 96753 (808) 874-3839 hydem001@hawaii.rr.com

January 3, 2022

State of Hawaii Department of Land and Natural Resources Attn: Curt Cottrell Division of State Parks 1151 Punchbowl Street Room 310 Honolulu, Hawaii 96813

Munekiyuo Hiraga 305 High Street Suite 104 Wailuku, Hawaii 96795

Sent by email to: Curt,A.Cottrell@hawaii.gov planning@munekiyohiraga.com

Re: Proposed State Park Improvement Project Supplementary Comments

Dear Mr, Cottrell and Mr. Hiraga:

Below are supplementary comments to those earlier submitted by letter dated December 28, 2021:

South Maui has developed rapidly over the past several decades. Often this development has commenced in the absence of necessary infrastructure to support it, to the detriment of the community and the environment. This reality is captured in the 1998 Kihei Makena Community Plan as follows:

The Role of the Community Plan in the Planning Process

For Maui County, the General Plan and the community plans are strategic planning documents which **guide government action and decision-making.** Both the General Plan and the community plans are part of a planning hierarchy which includes, as primary components, the Hawaii State Plan and State Functional Plans (See Exhibit "A").

Mutually supporting goals, objectives, policies and implementing actions contained in the Hawaii State Plan, State Functional Plans, Maui County General Plan and the Kihei-Makena Community Plan **provide for optimum planning effectiveness and benefits** for the residents of the Kihei-Makena Community Plan region.



Karlynn K. Fukuda PRESIDENT

Mark Alexander Roy AICP, LEED AP VICE PRESIDENT Tessa Munekiyo Ng AICP

VICE PRESIDENT

Michael T. Munekiyo AICP SENIOR ADVISOR

December 1, 2022

## Via Email:markghyde@gmail.com

Mark G. Hyde 4320 E. Waiola Loop Kihei, Hawai'i. 96753

> SUBJECT: Draft Environmental Assessment for Proposed Mākena State Park Comfort Stations Project at TMK No. (2)2-1-006:030(por.), Mākena, Maui, Hawai'i

Dear Mr. Hyde:

Thank for your comment letters dated December 28, 2021 and January 3, 2022, regarding the Draft Environmental Assessment (EA) for the subject project. We appreciate you taking the time to provide comments for this project proposed by the State of Hawai'i, Department of Land and Natural Resources, Division of State Parks (DSP). On behalf of the DSP, we offer the following responses to your comments in the same order as they appear in your letter:

#### Comment No. 1:

Describe the drainage basins associated with the showers; for example, what will they be made of? Development plans for the Project provide detail for the restrooms and parking lot but little if any information about the drainage basins.

**Response:** The proposed drainage basins at the North Site and the South Site are grassed surface basins, and function as multi-use basins designed to contain runoff from shower as well as from the parking lot. A drainage swale will run from the shower to basin. Each basin is two (2) feet deep by 15 square feet in area, with six (6) inches of crushed rock at the bottom.

Maui: 305 High Street, Suite 104 • Wailuku, Hawaii 96793 • Tel: 808.244.2015 • Fax: 808.244.8729 Oahu: 735 Bishop Street, Suite 412 • Honolulu, Hawaii 96813 • Tel: 808.983.1233 www.muneklyohiraga.com

## Comment No. 2:

How will the drainage basins function and perform, including under different conditions and volumes?

**Response:** The basin retention is designed to meet County drainage requirements and to retain shower runoff, as well as parking lot runoff during typical conditions. The basins function primarily via evaporation of effluent, with some percolation. Basin sediment will be removed by DSP staff.

#### Comment No. 3:

What quantity of water are the basins expected to receive from the showers? What is their processing capacity taking into account different seasons and conditions (climatic and visitor volume)?

**Response:** Shower effluent volumes are estimated to be approximately 2,500 gallons per day for the north site and 1,250 gallons per day for the south site. As noted in our response to your Comment No. 2, the drainage basins are designed to retain shower runoff and parking lot runoff during typical conditions.

#### Comment No. 4:

How are the basins expected to behave during extreme weather events? Consider and discuss Maui's recent rainstorm/deluge.

**Response:** The basins are designed to retain shower and parking lot runoff during typical conditions. During heavy rain events, the basin may overflow. Please note that during very large rain events or storms, sedimentation, vegetation, and all kinds of other items are flushed into the ocean across the island via natural waterways, drainage basins, streams, and rivers. The park improvements are minute in comparison and should have very little to no impact due to the distance from the project areas to the ocean at the park.

#### Comment No. 5:

What kind of chemicals and waste are expected to drain into the basins? Will elements in the wastewater accumulate in the basins over time? Will it leach into the soil? Into the wetlands? Into nearby ocean water?

**Response:** The drainage basins have been designed to prevent migration of harmful pollutants into the environment from the showers and the parking lot areas. The project will be implemented in compliance with all regulations related to water quality, and with best management practices as recommended by reviewing agencies. DSP does not anticipate that the proposed improvements will result in any significant adverse effects to the environment.

#### Comment No. 6:

What is the expected annual cost of wastewater hauling and disposal and new facility maintenance and repair?

**<u>Response:</u>** The cost for ongoing service and maintenance for the proposed facilities is anticipated to be comparable to the cost of maintaining the existing portable toilets, while providing an improved level of service and sanitation to the Park users.

#### Comment No. 7:

How long will wastewater hauling and disposal likely last?

The report hints at a connecting line to the Makena Plant being remote in time. What is this estimated period of time and how will costs change over time due to inflation and other factors?

**Response:** Infrastructure to connect to the Mākena Resort WWTP, approximately 1.8 miles from the Park, is not available at this time. We also note that DSP has not secured a commitment from Mākena Resort to connect to allow such a connection. DSP does not have an anticipated date on which a connection to an offsite wastewater treatment facility will be available, however, the immediate need of Park users for comfort station facilities must be addressed. The proposed facilities are designed to accommodate a future connection to a wastewater treatment facility should such a connection become available.

#### Comment No. 8:

Will these costs be offset by additional parking or entry fees?

**<u>Response:</u>** DSP does not anticipate increasing parking fees at the Park in connection with the proposed improvements.

#### Comment No. 9:

If so, what is current parking fee income? Are these fees expected to increase once additional parking is added?

**Response:** Please see our response to your Comment No. 8.

#### Comment No. 10:

Will paid parking result in even more cars parking along Makena Road as many visitors do today presumably in order to avoid paying current parking fees? If so, will this impact traffic and public safety in the immediate area? Explain.

**Response:** As noted in our response to your Comment No. 8, there is no change in parking fees proposed at this time. The project is intended to improve parking conditions for Park users within the two (2) existing paved parking areas provided within the park by DSP. These improvements are intended to provide adequate facilities to address current conditions at the Park, and are not intended nor anticipated by DSP to result in an overall increase in the number of visitors utilizing the third entrance. We note that parking within the Park is available to Hawai'i residents free of charge, however, some residents may prefer to park along Mākena Road. DSP is not able to manage roadway or parking conditions outside the Park on the County-owned roadway right-of-way. Parking or traffic violations should be reported to the Maui Police Department.

#### Comment No. 11:

Can Makena Road parking be metered to provide additional revenue to support park operations? What other mitigations are possible?

**<u>Response:</u>** DSP is not able to charge for parking outside the Park or manage roadway or parking conditions on the County-owned roadway right-of-way. Parking or traffic violations should be reported to the Maui Police Department.

#### Comment No. 12:

Will the addition the proposed improvements increase visitor volume to the area? If so, to what extent and what effect will this have on local area traffic (see item II. d. above), public safety and park enjoyment?

**Response:** DSP proposes to provide parking improvements and comfort stations, in accordance with community feedback and preferences. These improvements are intended to provide adequate facilities to address current conditions at the Park, and are not intended nor anticipated by DSP to result in an overall increase in the number of visitors to the Park. The proposed project will promote clean and sanitary conditions, and will provide improved and better-organized parking areas. As such, the proposed action is expected to provide a benefit and not adversely affect public health, safety, or enjoyment of the Park.

#### Comment No. 13:

South Maui has developed rapidly over the past several decades. Often this development has commenced in the absence of necessary infrastructure to support it, to the detriment of the community and the environment. This reality is captured in the 1998 Kihei Makena Community Plan as follows:

#### The Role of the Community Plan in the Planning Process

For Maui County, the General Plan and the community plans are strategic planning documents which guide government action and decision-making. Both the General Plan and the community plans are part of a planning hierarchy which includes, as primary components, the Hawaii State Plan and State Functional Plans (See Exhibit "A").

Mutually supporting goals, objectives, policies and implementing actions contained in the Hawaii State Plan, State Functional Plans, Maui County General Plan and the Kihei-Makena Community Plan provide for optimum planning effectiveness and benefits for the residents of the Kihei-Makena Community Plan region.

PART III POLICY RECOMMENDATIONS, IMPLEMENTING ACTIONS AND STANDARDS FOR THE KIHEI-MAKENA REGION

1. PROVISION OF NEEDED PUBLIC FACILITIES AND INFRASTRUCTURE

Upon adoption of this plan, it shall be required that adequate facilities and infrastructure will be built concurrent with future development.

Note the wording of the plan: "it shall be required." It is not suggestive. It is demanding. And it is law.

The proposed addition of showers to Makena State Park without appropriate infrastructure for removal of shower wastewater from the park violates the community plan.

Makena State Park is the last stretch of pristine beach in south Maui. When other beaches along Maui's the south coast are overwhelmed by storm water runoff, mud and debris, Oneola Beach remains an oasis. Keep it that way.

Unless or until shower wastewater can be removed from the park through dedicated infrastructure, this element of the proposed project should be eliminated.

**Response:** The proposed wastewater collection and shower water collection systems are considered to be an appropriate and adequate means to address the health and safety needs of Park users until such time that a connection to an offsite wastewater treatment plant may become viable. The current lack of permanent sanitary facilities creates negative impacts to the Park environment, and to users' enjoyment of the Park. DSP seeks to avoid these negative impacts and to provide comfort station facilities, which are desired by the community.

The proposed action addresses current conditions in the Park, providing needed restrooms and adequate parking facilities to an existing State Park. In contrast to residential and commercial growth that may be occurring elsewhere in the region, this project does not represent a significant expansion or a population-generating development.

The proposed wastewater collection and shower water collection systems have been designed to prevent discharge of harmful pollutants to the environment. The project will be implemented in compliance with all regulations related to water quality, and with best management practices as recommended by reviewing agencies.

We appreciate your input and will include a copy of your comment letter and this response in the Final EA. Should you have any questions or require further information regarding the proposed project, please contact me at (808) 244-2015, extension 220.

Very truly yours,

Groundolyn Rivera

Gwendolyn Leialoha Cheney Rivera Senior Associate

GLCR:ab

cc: Valerie Suzuki, Department of Land and Natural Resources, Engineering Division

Kirk Tanaka, P.E., R.T. Tanaka Engineers, Inc. K:IDATA\RTTanaka\Makena Comfort Station\Applications\Draft EA\Response Letters\Hyde.docx From: Marielis Jepson <marielisjepson@gmail.com>
Sent: Sunday, December 26, 2021 2:33 PM
To: General eMail <planning@munekiyohiraga.com>
Subject: Makena State Beach Draft Improvement Concerns

Aloha, I am a longtime resident and have enjoyed visiting Makena State Beach when it first opens, several days a week, for the past 15+ years. Over the years, I have noticed many homeless people and low budget campers who remain in the park illegally after it has closed, and often stay for many days or weeks. I have witnessed illegal campfires (which pose a serious threat to the surrounding forest during the dry season), intentionally broken beer bottles and pushed over portable toilets. DLNR is responsible for enforcement but they are historically under budgeted and understaffed, so there is currently no consistent effective enforcement. Illegal overnight campers can manage to scrounge food and water left behind by visitors which sustains them for a while. But inevitably, it is likely that the lack of access to water makes it too difficult to remain.

I am concerned that with the proposed improvements and added access to water, this will likely be a very attractive incentive for people to stealth camp in the bushes, at Little Beach and on the slopes of Puu Ola'i. There is currently a homeless man who has been there for several weeks and sleeps under the Lifeguard stand at night. There are also several houseless people living in vehicles who park overnight on the mauka side of Makena Road directly across from the park and have done so, on and off, for years.

There is a well-established homeless Camp across from 7299 Makena Road. Several of these folks moved over a year ago when they were pressured to leave the area in front of Po'olenelena Beach Park. Currently the closest public access to water is at Maluaka beach, but it's difficult to access since it requires parking vehicles and walking down the path to the showers and bathrooms.

If access to water is made easily available at Makena State Beach Park, it is likely to be a magnet and draw a much larger population of homeless people and illegal overnight campers to the area. It is also very likely that there will be an increase of homeless vehicles parking overnight all along Makena Road. This might also increase the incidents of vandalism and violations while the park is closed.

The beauty of Makena State Beach is that it is one of the very few remaining wilderness areas to visit on the South Shore of Maui that is not overly landscaped or impacted by near shore development. There is a resident population of Nene in the nearby wetlands and a green and hawksbill turtle nesting beach. With the proposed added developments, there will be heavier use and misuse of this very special area. Enhanced protection and security of this priceless resource must be given priority, funded and built into the plan from the beginning. Once homeless get established in the park it will be very difficult to manage. And it will significantly diminish the sense of safety and aesthetics for residents and visitors and impact the resident wildlife. Please give this concern priority because it will be very difficult to correct if there is not an effective and funded plan to protect this resource as part of the plan. Mahalo for your consideration.

Marielis Jepson



Karlynn K. Fukuda PRESIDENT Mark Alexander Roy AICP, LEED AP VICE PRESIDENT Tessa Munekiyo Ng AICP VICE PRESIDENT

Michael T. Munekiyo AICP SENIOR ADVISOR

December 1, 2022

Via Email: marielis.jepson@gmail.com

Marielis Jepson, Maui Resident

SUBJECT: Draft Environmental Assessment for Proposed Mākena State Park Comfort Stations Project at TMK No. (2)2-1-006:030(por.), Mākena, <u>Maui, Hawai'i</u>

Dear Ms. Jepson:

Thank for your comment letter dated December 26, 2021, regarding the Draft Environmental Assessment (EA) for the subject project. We appreciate you taking the time to provide comments for this project proposed by the State of Hawai'i, Department of Land and Natural Resources, Division of State Parks (DSP). On behalf of the DSP, we offer the following responses to your comments in the same order as they appear in your letter:

#### Comment No. 1:

I am concerned that with the proposed improvements and added access to water, this will likely be a very attractive incentive for people to stealth camp in the bushes, at Little Beach and on the slopes of Puu Ola'i.

There is a well-established homeless Camp across from 7299 Makena Road. Several of these folks moved over a year ago when they were pressured to leave the area in front of Po'olenelena Beach Park. Currently the closest public access to water is at Maluaka beach, but it's difficult to access since it requires parking vehicles and walking down the path to the showers and bathrooms.

If access to water is made easily available at Makena State Beach Park, it is likely to be a magnet and draw a much larger population of homeless people and illegal overnight campers to the area. It is also very likely that there will be an increase in homeless vehicles parking overnight all along Makena Road. This might also increase the incidents of vandalism and violations while the park is closed.

Maui: 305 High Street, Suite 104 • Wailuku, Hawaii 96793 • Tel: 808.244.2015 • Fax: 808.244.8729 Oahu: 735 Bishop Street, Suite 412 • Honolulu, Hawaii 96813 • Tel: 808.983.1233 www.muneklyohiraga.com Marielis Jepson, Maui Resident December 1, 2022 Page 2

**Response:** To minimize potential misuse, all water fixtures will be shut off and the comfort stations will be locked when the Park is closed. DSP's Enforcement Division will address any issues that may arise related to the homeless population. In addition, unlike many State and County parks, Makena State Park has an onsite resident caretaker to monitor the Park and address any violations to Park rules that may occur outside of normal Park operating hours. We encourage any Park user who witnesses illegal activity to contact the Maui Police Department.

#### Comment No. 2:

There is a resident population of Nene in the nearby wetlands and a green and hawksbill turtle nesting beach. With the proposed added developments, there will be heavier use and misuse of this very special area. Enhanced protection and security of this priceless resource must be given priority, funded and built into the plan from the beginning.

**<u>Response</u>**: As part of the Chapter 343, HRS environmental review process, consultation is being conducted with the Department of Land and Natural Resources Division of Aquatic Resources (DAR) and Division of Forestry and Wildlife (DOFAW), as well as the U.S. Fish and Wildlife Service (USFWS). DOFAW has advised that they have no record of a resident population of Nēnē in the wetland areas near the project, however, there is the potential for Nēnē to enter the project area. The USFWS provided recommended measures to avoid adverse effects of wildlife species including the hawksbill sea turtle and the Hawaiian goose (Nene). These USFWS recommended measures to avoid adverse effects to these species. DSP notes that the proposed project seeks to address the current absence of restroom facilities, and as such is anticipated to have a beneficial impact to the Park environment by reducing the level of foot traffic, human waste, and rubbish throughout the dunes and other natural areas of the Park which may include wildlife habitats.

Marielis Jepson, Maui Resident December 1, 2022 Page 3

We appreciate your input and will include a copy of your comment letter and this response in the Final EA. Should you have any questions or require further information regarding the proposed project, please contact me at (808) 244-2015, extension 220.

Very truly yours,

Groundolyn Rivera

Gwendolyn Leialoha Cheney Rivera Senior Associate

GLCR:lh

cc: Valerie Suzuki, Department of Land and Natural Resources, Engineering Division

Kirk Tanaka, P.E., R.T. Tanaka Engineers, Inc. K:DATA\RTTanaka\Makena Comfort Station\Applications\Draft EA\Response Letters\Jepson.res.docx From: Michael Lauterman <<u>michael.lauterman@gmail.com</u>>
Sent: Friday, December 24, 2021 8:04 AM
To: <u>curt.a.cottrell@hawaii.gov</u>; General eMail <<u>planning@munekiyohiraga.com</u>>
Subject: Makena State Park - Comments are due by January 24, 2022. DLNR at <u>planning@munekiyohiraga.com</u>

I am a resident of Makena and a board member of the Makena Homeowners Association.

First of all I think the plan is an excellent one and a much needed upgrade to protect and enhance Makena State Park for the public's benefit.

One point that I couldn't find in the comprehensive review was the potential impact on the informal 3rd entrance to the park. I live directly in front of the 3rd entrance and would like to point out that whatever happens at the 1st and 2nd entrance has a direct effect on the 3rd entrance. If this review is going to be comprehensive to the whole Makena State Park it would be remiss not to review all the entrances to the park.

Sam Garcia the chair of the Makena Homeowners Association is planning on having a board meeting in January and this will be a topic. The concern to be discussed is the safety of the residents and day users south of Big Beach. On any given Saturday or Sunday the street parking around 3rd entrance is so chaotic that there is barely room for a single vehicle to pass in any direction, It becomes a serious grid lock and would be viewed as very problematic for any emergency services attempting to access past the 3rd entrance.

We would appreciate it if this could be added to the review or at least to have it highlighted to the public safety departments as a point of concern for residents within the area.

Thanks and Happy Holidays.

--

**Michael Lauterman** 

**Personal Email** 



Karlynn K. Fukuda PRESIDENT Mark Alexander Roy AICP, LEED AP VICE PRESIDENT

Tessa Munekiyo Ng AICP VICE PRESIDENT

Michael T. Munekiyo AICP SENIOR ADVISOR

December 1, 2022

#### Via Email: michael.lauterman@gmail.com

Michael Lauterman

SUBJECT: Draft Environmental Assessment for Proposed Mākena State Park Comfort Stations Project at TMK No. (2)2-1-006:030(por.), Mākena, <u>Maui, Hawai'i</u>

Dear Mr. Lauterman:

Thank you for your comment letter dated December 24, 2021, regarding the Draft Environmental Assessment (EA) for the subject project. We appreciate your comments in support of this project proposed by the State of Hawai'i, Department of Land and Natural Resources, Division of State Parks (DSP). On behalf of the DSP, we offer the following responses to your comments in the same order as they appear in your letter:

#### Comment No. 1:

One point that I couldn't find in the comprehensive review was the potential impact on the informal 3rd entrance to the park. I live directly in front of the 3rd entrance and would like to point out that whatever happens at the 1st and 2nd entrance has a direct effect on the 3rd entrance. If this review is going to be comprehensive to the whole Makena State Park it would be remiss not to review all the entrances to the park. Sam Garcia the chair of the Makena Homeowners Association is planning on having a board meeting in January and this will be a topic. The concern to be discussed is the safety of the residents and day users south of Big Beach. On any given Saturday or Sunday the street parking around 3rd entrance is so chaotic that there is barely room for a single vehicle to pass in any direction, It becomes a serious grid lock and would be viewed as very problematic for any emergency services attempting to access past the 3rd entrance. We would appreciate it if this could be added to the review or at least to have it highlighted to the public safety departments as a point of concern for residents within the area.

Maui: 305 High Street, Suite 104 • Wailuku, Hawaii 96793 • Tel: 808.244.2015 • Fax: 808.244.8729 Oahu: 735 Bishop Street, Suite 412 • Honolulu, Hawaii 96813 • Tel: 808.983.1233 www.muneklyohiraga.com

Michael Lauterman December 1, 2022 Page 2

**Response:** We acknowledge your comment regarding on-street parking. The project is intended to improve parking conditions for Park users within the two existing paved parking areas provided within the park by DSP. These improvements are intended to provide adequate facilities to address current conditions at the Park, and are not intended nor anticipated by DSP to result in an overall increase in the number of visitors utilizing the third entrance. We note that parking within the Park is available to Hawai'i residents free of charge, however, some residents and other users prefer to park along Mākena Road. DSP is not able to manage roadway or parking conditions outside the Park on the County-owned roadway right-of-way. Parking or traffic violations should be reported to the Maui Police Department.

We appreciate your input and will include a copy of your comment letter and this response in the Final EA. Should you have any questions or require further information regarding the proposed project, please contact me at (808) 244-2015, extension 220.

Very truly yours,

Groundolyn Rivera

Gwendolyn Leialoha Cheney Rivera Senior Associate

GLCR:Ih

cc: Valerie Suzuki, Department of Land and Natural Resources, Engineering Division Kirk Tanaka, P.E., R.T. Tanaka Engineers, Inc. K:DATA/RTTanaka/Makena Comfort Station/Applications/Draft EA/Response Letters/Lauterman.docx From: Amita S <<u>amitaschmidt@gmail.com</u>>
Sent: Tuesday, December 28, 2021 5:12 PM
To: General eMail <<u>planning@munekiyohiraga.com</u>>
Subject: Makena State Park bathroom proposal 12/23/2021 MA-DEA Park Improvements

Please consider that Makena State Beach bathrooms will become a magnet for the homeless population. This is a very dry area and there will be fires and camps that will be set up in this remote area once there is water, showers, and bathrooms. It doesn't matter that there is a gate by the road, people sneak in and are dropped off in that park at all hours anyway as it is. Please consider the ramifications of this change carefully and how you will handle the influx of homeless, car campers, and such. Mahalo for your careful consideration of the cause and effect. If there is an influx of homeless then the benefits to the tourists will be outweighed, especially if fires occur in this area because of squatters. Amita Schmidt

Kihei, HI



Karlynn K. Fukuda PRESIDENT Mark Alexander Roy AICP, LEED AP VICE PRESIDENT Tessa Munekiyo Ng AICP VICE PRESIDENT

Michael T. Munekiyo AICP SENIOR ADVISOR

December 1, 2022

#### Via Email: amitaschmidt@gmail.com

Amita Schmidt, Maui Resident

Dear Ms. Schmidt:

Thank for your comment letter dated December 28, 2021, regarding the Draft Environmental Assessment (EA) for the subject project. We appreciate you taking the time to provide comments for this project proposed by the State of Hawai'i, Department of Land and Natural Resources, Division of State Parks (DSP). On behalf of the DSP, we offer the following responses to your comments in the same order as they appear in your letter:

#### Comment No. 1:

Please consider that Makena State Beach bathrooms will become a magnet for the homeless population. This is a very dry area and there will be fires and camps that will be set up in this remote area once there is water, showers, and bathrooms. It doesn't matter that there is a gate by the road, people sneak in and are dropped off in that park at all hours anyway as it is. Please consider the ramifications of this change carefully and how you will handle the influx of homeless, car campers, and such. Mahalo for your careful consideration of the cause and effect. If there is an influx of homeless then the benefits to the tourists will be outweighed, especially if fires occur in this area because of squatters.

**<u>Response</u>**: To minimize potential for misuse, all water fixtures will be shut off and the comfort stations will be locked when the Park is closed. DSP's Enforcement Division will address any issues that may arise related to the homeless population. In addition, unlike many State and County parks, Mākena State Park has an onsite resident caretaker to monitor the Park and address any violations to Park rules that may occur outside of

SUBJECT: Draft Environmental Assessment for Proposed Mākena State Park Comfort Stations Project at TMK No. (2)2-1-006:030(por.), Mākena, <u>Maui, Hawai'i</u>

Maui: 305 High Street, Suite 104 • Wailuku, Hawaii 96793 • Tel: 808.244.2015 • Fax: 808.244.8729 Oahu: 735 Bishop Street, Suite 412 • Honolulu, Hawaii 96813 • Tel: 808.983.1233 www.muneklyohiraga.com

Amita Schmidt December 1, 2022 Page 2

normal Park operating hours. We encourage any Park user who witnesses illegal activity to contact the Maui Police Department or the Maui Fire Department.

We appreciate your input and will include a copy of your comment letter and this response in the Final EA. Should you have any questions or require further information regarding the proposed project, please contact me at (808) 244-2015, extension 220.

Very truly yours,

Groundolyn Rivera

Gwendolyn Leialoha Cheney Rivera Senior Associate

GLCR:ab

cc: Valerie Suzuki, Department of Land and Natural Resources, Engineering Division

Kirk Tanaka, P.E., R.T. Tanaka Engineers, Inc. K:\DATA\RTTanaka\Makena Comfort Station\Applications\Draft EA\Response Letters\Schmidt.docx From: John Seliga <jjseliga@gmail.com>
Sent: Monday, January 24, 2022 2:12 PM
To: General eMail <<u>planning@munekiyohiraga.com</u>>
Subject: Comfort stations @ Makena State Park

#### To Whom It May Concern,

It is disappointing to hear you feel a need to establish "comfort stations" at our beautiful Makena State Park. It's "Natural State" is the BEAUTY of the park. The WETLANDS attract the Birds and wildlife we have there. LET'S NOT STRESS MOTHER NATURE at this CRITICAL TIME of GLOBAL WARMING! My husband and I walk, meditate, swim and enjoy the birds at this beach every morning. We have many concerns with this project due to what we see at other beaches: #1- WETLANDS

Have to be PROTECTED!! We are not confident that this can be done.

#### #2- BATHROOMS / SHOWERS

How can we afford to use any more of our water resources. There are already water shortages with ALL the NEW CONSTRUCTION that never seems to cease. The WATER USAGE, the TOXIC WASTE in holding tanks is another real concern with our wetlands and the OCEAN because of the depth of tanks & pumping and possible runoff. It also means heavy toxic equipment digging the tank & cutting trees. Once again, THIS DOES NOT SUPPORT CLIMATE CHANGE and DESTROYS HABITATS.

#### #3- PARKING LOT with STRIPING

Effects of black Top or Concrete have been already proven to be harmful to the environment and the climate. The materials leach into the ground and atmosphere. This has been proven at other parks.Some of them have now used their funds to remove what was used previously.

My husband and I hope you give all of this information careful consideration. Please protect our beautiful Makena State Park! It's perfect the way it is...

Respectfully, Deborah & John Seliga



Karlynn K. Fukuda PRESIDENT Mark Alexander Roy AICP, LEED AP VICE PRESIDENT Tessa Munekiyo Ng AICP VICE PRESIDENT

Michael T. Munekiyo AICP SENIOR ADVISOR

December 1, 2022

#### Via Email: jjseliga@gmail.com

John and Deborah Seliga Maui Residents

> SUBJECT: Draft Environmental Assessment for Proposed Mākena State Park Comfort Stations Project at TMK No. (2)2-1-006:030(por.), Mākena, <u>Maui, Hawai'l</u>

Dear Mr. and Mrs. Seliga:

Thank you for your email of January 24, 2022, regarding the Draft Environmental Assessment (EA) for the subject project. We appreciate you taking the time to provide comments for this project proposed by the State of Hawai'i, Department of Land and Natural Resources, Division of State Parks (DSP). On behalf of the DSP, we offer the following responses to your comments in the same order as they appear in your letter:

#### Comment No. 1:

It is disappointing to hear you feel a need to establish "comfort stations" at our beautiful Makena State Park. It's "Natural State" is the BEAUTY of the park. The WETLANDS attract the Birds and wildlife we have there. LET'S NOT STRESS MOTHER NATURE at this CRITICAL TIME of GLOBAL WARMING!

**Response:** We note your personal objection regarding this project. A community survey conducted by the Oneloa Coalition in 2013 found that permanent restrooms and outdoor showers were the basic amenities that were wanted and needed at Mākena State Park. As such, DSP is proposing the addition of two comfort stations in response to community preferences. Based on the analysis presented in the Draft EA, the project is not anticipated to present a potential for significant environmental impacts according to the significance criteria of Hawai'i Administrative Rules (HAR) Section 11-200.1-13. Upon completion of the EA preparation process, the Department of Land and Natural Resources (DLNR)/Board of Land and Natural Resources (BLNR) will review the Final EA to determine whether or not a potential for significant impacts exists with the proposed project.

Maui: 305 High Street, Suite 104 • Wailuku, Hawaii 96793 • Tel: 808.244.2015 • Fax: 808.244.8729 Oahu: 735 Bishop Street, Suite 412 • Honolulu, Hawaii 96813 • Tel: 808.983.1233 www.muneklyohiraga.com Deborah Seliga December 1, 2022 Page 2

# Comment No. 2:

My husband and I walk, meditate, swim and enjoy the birds at this beach every morning. We have many concerns with this project due to what we see at other beaches: #1- WETLANDS Have to be PROTECTED!! We are not confident that this can be done.

**Response:** We note your comment and agree that wetland areas require protection. The proposed improvements will not be occurring within any wetland areas at the park. Based on the analysis presented in the Draft EA, DSP does not anticipate that the proposed project will cause any significant adverse effect to the surrounding environment. As noted in our response to your Comment No. 1, a Final EA is being prepared to assess the potential for project-related impacts to the environment, and will be reviewed and approved the DLNR/BLNR prior to project implementation. The project will be implemented in compliance with applicable regulations related to water quality, and with best management practices as recommended by reviewing agencies.

## Comment No. 3:

#2- BATHROOMS / SHOWERS

How can we afford to use any more of our water resources. There are already water shortages with ALL the NEW CONSTRUCTION that never seems to cease.

The WATER USAGE, the TOXIC WASTE in holding tanks is another real concern with our wetlands and the OCEAN because of the depth of tanks & pumping and possible runoff. It also means heavy toxic equipment digging the tank & cutting trees. Once again, THIS DOES NOT SUPPORT CLIMATE CHANGE and DESTROYS HABITATS.

**Response:** As noted in our responses to your Comment No. 1 and Comment No. 2, DSP does not anticipate that the proposed action will result in any significant adverse effects to the environment. As part of the Chapter 343, HRS environmental review process, consultation is being conducted with the DLNR Commission on Water Resources Management (CWRM) regarding potential impacts to water resources, whose responsibilities include regulating the use of water resources in water management areas. In contrast to many other water uses which benefit only private or commercial users, water use at the park will serve everyone who visits the park. Article XI, Section 7 of the Hawai'i State Constitution states that "the State has an obligation to protect, control and regulate the use of Hawai'i's water resources for the benefit of its people." Providing water to a public park which is utilized by the people is a benefit in accordance with the State Constitution and public trust purposes.

Deborah Seliga December 1, 2022 Page 3

### Comment No. 4:

#3- PARKING LOT with STRIPING

Effects of black Top or Concrete have been already proven to be harmful to the environment and the climate. The materials leach into the ground and atmosphere. This has been proven at other parks. Some of them have now used their funds to remove what was used previously.

**<u>Response</u>**: The project includes drainage systems designed to retain shower and parking lot runoff and prevent migration of harmful pollutants into the environment. The project will be implemented in compliance with all regulations related to water quality, and with best management practices as recommended by reviewing agencies. DSP does not anticipate that the proposed improvements will result in any significant adverse effects to the environment.

We appreciate your input and will include a copy of your comment letter and this response in the Final EA. Should you have any questions or require further information regarding the proposed project, please contact me at (808) 244-2015, extension 220.

Very truly yours,

Groundolyn Rivera

Gwendolyn Leialoha Cheney Rivera Senior Associate

GLCR:lh

cc: Valerie Suzuki, Department of Land and Natural Resources, Engineering Division Kirk Tanaka, P.E., R.T. Tanaka Engineers, Inc. K:\DATA\RTTanaka\Makena Comfort Station\Applications\Draft EA\Response Letters\Seliga.docx



# X. REFERENCES

Ashdown, Inez MacPhee, <u>Ala Loa o Maui: The Broad Highway of Maui, Wailuku: Private Press</u>, 1970.

Beckwith, Martha W., 1970, Hawaiian Mythology, University of Hawaii Press, Honolulu, HI.

Cordy, R., and J.S. Athens, <u>Archaeological Survey and Excavation, Seibu Sites 1916 and 2101,</u> <u>Makena, Honuaula, Maui (TMK: 2-1-05:108)</u>. International Archaeological Research Institute Incorporated, Honolulu, Hawaii, 1988.

County of Maui, Department of Planning, Kihei-Makena Community Plan, 1998.

County of Maui, Department of Planning, Maui Island Plan, as amended December 2012.

County of Maui, Department of Planning, <u>Socio-Economic Forecast, The Economic Projections</u> for the Maui County General Plan 2030, September 2014.

County of Maui, Emergency Management Agency, <u>Tsunami Evacuation Map</u>, 2015.

County of Maui, Office of Economic Development, Maui County Data Book, 2020.

County of Maui, <u>The 2030 Countywide Policy Plan</u>, 2010.

Federal Emergency Management Agency, <u>Flood Insurance Rate Map Community/Panel No.</u> <u>1500030686F</u>, September 19, 2012.

Gale Cengage Learning, <u>Complete Demographic Comparison Report</u>, Accessed December 2020.

Handy, E. S. Craighill, Elizabeth Green Handy and Mary Kawena Pukui, 1991 <u>Native Planters in</u> <u>Old Hawaii : Their Life, Lore, and Environment</u>. Rev. ed. Bernice P Bishop Museum Bulletin 233. Bishop Museum Press, Honolulu, HI.

Hawaii Department of Health, Clean Air Branch, <u>Hawaii Greenhouse Gas Emissions Report for</u> <u>2015, Final Report</u>, January 2019.

Hawaii Public Utilities Commission, <u>Report to the 2019 Legislature on Hawaii's Renewable</u> <u>Portfolio Standards</u>, December 2018.

IPCC, <u>EXIT Contribution of Working Group I to the Fourth Assessment Report of the</u> Intergovernmental Panel on Climate Change, 2007.

Kelilpio, L.D., 1900, Hawaiian Fish Stories and Superstitions. In Hawaiian Almanac and Annual.

Matsuoka, Jon K., Davianna Pomaika'i McGregor, Luciano Minerbi, Pualani Kanahele, Marion Kelly and Noenoe Barney-Campbell, 1996 <u>Native Hawaiian Ethnographic Study for the Hawai'i Geothermal Project Proposed for Puna and Southeast Maui.</u> Prepared for U.S. Department of Energy, Oak Ridge Operations Office, Oak Ridge, Tennessee.

Munekiyo Hiraga, <u>Draft Environmental Assessment Proposed Mākena Resort M-5/M-6/S-7/B-2</u> <u>Project, Maui, Hawai'i</u>, November 2015.

Pukui, M. K. and Elbert, S. H., <u>Hawaiian Dictionary</u>, Honolulu: University of Hawai'i Press, 1986.

Pukui, Mary Kawena et. al., <u>Place Names of Hawai'i</u>, Honolulu: University of Hawai'i Press, 2nd ed., 1974.

State of Hawai'i, Department of Education (DOE), <u>Official Public and Charter School Enrollment</u>, 2020-2022.

State of Hawai'i, Hawai'i Revised Statutes, <u>http://www.capitol.Hawaii.gov/hrscurrent/</u>.

State of Hawai'i, Department of Labor and Industrial Relations (DLIR), <u>http://www.hiwi.org</u>, May 2021.

State of Hawai'i, Land Use Commission, State Land Use Districts, 2010.

State of Hawai'i, Office of Planning, <u>Hawai'i State Plan Revised</u>, 1986.

Sterling, Elspeth P., 1998 Sites of Maui, Bishop Museum Press, Honolulu, HI.

Tau'a, Keli'l and Kimokeo Kapahulehua, 2007, <u>Mākena.</u> Prepared for Mr. Don Fujimoto, Wailuku, HI. Hana Pono, LLC., Kihei, HI.

U.S. Census Bureau, <u>2010 Census Summary File 1</u>, 2010.

U.S. Census Bureau, <u>Annual Estimate of Resident Population</u>, 2017.

U.S. Department of Agriculture, Soil Conservation Service, <u>Soil Survey of Islands of Kauai, Oahu,</u> <u>Maui, Molokai, and Lanai, State of Hawaii</u>, in cooperation with the University of Hawaii, Agricultural Experiment Station, August 1972.

U.S. Environmental Protection Agency, <u>AVERT, U.S. national weighted average CO2 marginal</u> <u>emission rate, year 2017 data</u>, Accessed August 21, 2019.

U.S. Environmental Protection Agency, GHG Reporting Program Data, 2017, https://ghgdata.epa.gov/ghgp/main.do, Accessed August 27, 2019.

U.S. Environmental Protection Agency, GHG Reporting Program Data, 2017, https://ghgdata.epa.gov/ghgp/main.do, Accessed February 3, 2020.

United States Environmental Protection Agency, Sources of Greenhouse Gas Emissions, http://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions, Accessed February 3, 2020.

University of Hawai'i, School of Ocean and Earth Science Technology, Sea Level Rise Hawai'i, www.soest.hawaii.edu/coasts/sealevel, accessed June 2017.

University of Hawai'i, Department of Geography, <u>Atlas of Hawai'i,</u> Third Edition, 1998.

University of Hawai'i, Land Study Bureau, Detailed Land Classification, Island of Maui, May 1967.

USDA Natural Resources Conservation Service, Soil Survey Geographic Database, <u>Soil</u> <u>Classification Map</u>, 2006

# **APPENDIX**



# PRELIMINARY DEVELOPMENT PLANS


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

FOR

**DIVISION OF STATE PARKS** 

**JOB NO. F73C680B** 

# MAKENA STATE PARK IMPROVEMENTS, PHASE 2

# MAKENA, MAUI, HAWAII

TMK: (2) 2-1-006: 030

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PROJECT DESCRIP

THE WORK SHALL GENERALLY CONS ST OF IMPROVEMENTS TO MAKENA STATE PARK PARKING LOTS (NORTH AND SOUTH) WITH THE ADDITION OF A NEW COMFORT STATION WITH BEACH SHOWER AND ADDITIONAL PARKING STALLS WITH UNDERGROUND WASTEWATER CONTAINMENT SYSTEM, ALSO INCLUDED ARE ADDITIONAL ADA STALLS.

APPROVED:

DATE: Apr 22, 2020

DATE: Apr 23, 2020

CAG

ADMINISTRATOR DIVISION OF STATE PARKS DEPARTMENT OF LAND AND NATURAL RESOURCES

APPROVED:

CARTY S. CHANG, P.E. ERING DIVISION MENT OF LAND AND NATURAL RESOURCES

DRAWING NO. T-1

- DEPARTMENT OF WATER SUPPLY COUNTY OF MAU PLAN. NOTES FOR WATER SYSTEM: 1. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF WATER SUPPLY (DWS),
- IN WRITING, ONE (1) WEEK PRIOR TO COMMENCEMENT OF WORK. IF CONSTRUCTION OF WATER SYSTEM IMPROVEMENTS WILL AFFECT DWS CONSUMERS, CONTRACTOR SHALL NOTIFY CONSUMERS BY RADIO/NEWSPAPER TWO (2) DAYS BEFORE AND ON DAY OF CONNECTION. CONTRACTOR SHALL
- TWO (2) DAYS BEFORE AND ON DAY OF CONNECTION. CONTRACTOR SHALL ALSO NOTFY CONSUMERS HOUSE-TO-HOUSE ONE (1) DAY BEFORE ALSO NOTFY CONSUMERS HOUSE-TO-HOUSE ONE (1) DAY BEFORE ALL MATERIALS USED AND METHODS OF CONSTRUCTION OF WATER SYSTEM FACILITIES SHALL BE IN ACCORDANCE WITH THE LATEST REVISION OF DWS WATER SYSTEM STANDARDS. CONTRACTOR SHALL OBTAIN THE LATEST REVISIONS OF THE DWS STANDARDS BEFORE COMMENCING CONSTRUCTION. ALL WATER SYSTEM WORK SHALL BE PERFORMED BY CONTRACTORS POSSESSING VALUD STATE OF HAWAII CONTRACTOR'S LICENSES, REGARDLESS OF THE VALUE OF THE WORK. CONTRACTOR SHALL FOLLOW ALL LOCAL, STATE, FEDERAL LAWS, RULES AND REGULATIONS REGARDING THE HANDLING, REMOVAL AND DISPOSAL OF ASBESTOS PIPE. CONTRACTOR SHALL PROTECT EXISTING WATERLINE DURING COURSE OF CONSTRUCTION AND SUPPORT EXPOSED WATERLINE TO PREVENT ANY MOVEMENT.
- 5.
- 6.
- CONSTRUCTION AND SUPPORT EXPUSED WATERLINE TO FREVENT ANT MOVEMENT. THE EXACT DEPTH AND LOCATION OF EXISTING WATERLINES, SERVICE LATERALS AND OTHER UTUITIES 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 APPURTENANCES, WHETHER SHOWN OR NOT SHOWN ON THE CONSTRUCTION PLANS AT THE CONTRACTOR'S EXPENSE. PAVEMENT RESURFACING/RESTORATION: A. CONTRACTOR SHALL VERIFY LOCATION OF EXISTING DWS VALVES AND MANDLES, WHEN AFFECTED BY THE WORK, PRIOR TO START OF CONSTRUCTION. B. ALL WATER VALVE AND WATER MANHOLE CONCRETE COLLARS WITHIN THE
- В.
- CONSTRUCTION. ALL WATER VALVE AND WATER MANHOLE CONCRETE COLLARS WITHIN THE PROJECT LIMITS SHALL BE DEMOLISHED AND RECONSTRUCTED PER DWS STANDARD DETAIL V12 AND V23, RESPECTIVELY, AT THE CONTRACTOR'S EXPENSE. THE VALVE BOX RISER AND COVER OF ALL WATER VALVES WITHIN THE PROJECT LIMITS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. CONTRACTOR SHALL ADJUST BUS SLIDING VALVE BOX ASSEMBLY AND MANHOLE FRAME AND COVER TO FINISHED GRADE.
- C.
- D.
- MANHOLE FRAME AND COVER TO FINISHED GRADE. E. PRIOR TO PAVEMENT RESURFACING/RESTORATION WORK, THE CONTRACTOR SHALL SCHEDULE INSPECTION WITH DWS. ANY SLIDING VALVE BOX ASSEMBLY, MANHOLE COVER, OR CONCRETE COLLAR, WHETHER DISCOVERED DAMAGED OR NOT SPECIFIED ON THE PLANS TO BE ADJUSTED OR REPLACED, SHALL BE REPLACED AT THE CONTRACTOR'S EMPENSE.
- EXPENSE. CONTRACTOR SHALL ADJUST TO FINISHED GRADES, ALL UTILITIES (LE., WATER, SEWER, DRAIN, ETC.) AFFECTED BY THE WORK WHETHER SHOWN OR NOT SHOWN ON THE CONSTRUCTION PLANS AT THE CONTRACTOR'S EXPENSE. CONTRACTOR SHALL RESTORE ALL ROAD IMPROVEMENTS DISTURBED OR
- DAMAGED DURING CONSTRUCTION IN ACCORDANCE WITH THE 2005
- DAMAGED DURING CONSINCE AND AND BRIDGE TO THE 2003 NAMAI STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AS AMENDED, TO THE SATISFACTION OF THE DEPARTMENT OF PUBLIC WORKS AT THE CONTRACTOR'S EXPENSE. ROAD IMPROVEMENTS INCLUDE, BUT NOT LIMITED TO, PAVEMENT, PAVEMENT MARKERS, SHOULDER DRESSING, STRIPING, AND SPECE HUMPS. CONCRETE FOR REACTION BLOCKS AND ANCHOR BLOCKS SHALL BE DWS CLASS 5000
- 12 13. MAXIMUM DISTANCE BETWEEN VALVE NUT AND TOP OF MANHOLE COVER

- THE MAXIMUM DISTANCE BETWEEN VALVE NUT AND TOP OF MANHOLE COVER SHALL BE THREE (3) FEET.
   CONTRACTOR SHALL SUBMIT A MATERIALS LIST TO DWS FOR APPROVAL PRIOR TO CONSTRUCTION.
   CONNECTION TO DWS SYSTEM:
   CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING ALL NECESSARY FITTINGS AND OTHER MATERIALS AND EQUIPMENT REQUIRED FOR THE HOOK-UP. CONTRACTOR SHALL WERRY THE EXACT LOCATION, DEPTH, TYPE AND CONSTRUCTION.
   CONTENCTOR SHALL BE RESPONSIBLE FOR FURNISHING ALL NECESSARY FITTINGS AND OTHER MATERIALS AND EQUIPMENT REQUIRED FOR THE HOOK-UP. CONTRACTOR SHALL WERRY THE EXACT LOCATION, DEPTH, TYPE AND CONTENT OR WITH PCONTON LONG CONCENTRY.
   B. WHENEVER FRASBLE, WECHANICAL JOINT FITTINGS SHALL BE USED FOR BURIED APPLICATIONS AND FLANGED JOINT FITTINGS SHALL BE USED FOR EXPOSED APPLICATIONS AND FLANGED JOINT FITTINGS SHALL BE USED FOR EXPOSED APPLICATIONS AND FLANGED JOINT FITTINGS SHALL BE USED FOR EXPOSED APPLICATIONS AND FLANGED JOINT FITTINGS SHALL BE USED FOR EXPOSED APPLICATIONS AND FLANGED JOINT FITTINGS SHALL BE USED FOR EXPOSED APPLICATIONS.
   DWS FERSONNEL MAY BE REQUIRED TO BE PRESENT OR ASSIST WITH CONNECTIONS TO THE EXSTING WATER SYSTEM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS INCURRED BY DWS FOR SAID WORK.
   D. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FUNKISHING ALL MATERIAL EQUIPMENT AND LABOR FOR TRECH EXCAVATION, BACKFLLING, CLEANIG AND CHLORINATION, PAVING, AND OTHER WORK NECESSARY TO COMPLETE THE HOOK UP, AS DIRECTED BY AND TO THE SAITSFACTION OF DWS.
   MINIMUM COVER OVER WATER MAIN, 6° DIAMETER OR LARGER, SHALL BE 3'-0". MINIMUM COVER FOR A\* DIAMETER SHALL BE 2'-6". MINIMUM COVER FOR A\* DIAMETER SHALL BE 2'-6". MINIMUM COVER FOR A\* DIAMETER SHALL BE 2'-6". MINIMUM COVER FOR A\* SHALL AND CLEARANCES FROM EXISTING TREES, MAD APPIRTENANCES HAVE PROPER CLEARANCES FROM EXISTING TREES, MAD APPIRTENANCES HAVE PROPER CLEARANCES FROM EXISTING TREES, MAD APPIRTENANCES HAVE PROPER CLEARANCES FROM EXISTING

- WALLS, FENCES, ETC. IN ACCORDANCE WITH CURRENT DWS WATER SYSTEM STANDARDS. 3. CONTRACTOR SHALL VERIFY AND MAINTAIN 18" MINIMUM CLEARANCE WITH WATERLINE OR SERVICE LATERAL CROSSING OVER EXISTING SEWERLINE OR SERVICE LATERAL. INSTALL REINFORCED CONCRETE JACKET AROUND SEWERLINE. THE LENGTH OF JACKET REQUIRED SHALL BE AS SPECIFIED IN TABLE 100-5 OF THE LENGTH OF JACKET REQUIRED SHALL BE AS SPECIFIED IN TABLE 100-5 OF THE DWS STANDARDS. PROVIDE 6" MINIMUM CLEARANCE FROM OUTSIDE JACKET TO WATERLINE OR SERVICE LATERAL STANDARD CONCRETE JACKET DETAILS FOR SERVICE LATERAL. STANDARD CONCRETE JACKET DETAILS FOR SERVICE JACKET NE DEPARTMENT OF PUBLIC WORKS STANDARDS SHALL BE FOLLOWED ON THE DEPARTMENT OF CONTRACTOR SHALL HAVE LICENSED SURVEYOR STAKE OUT WATERLINE BASELINE STATIONING, RIGHT OF WAY LIMITS, PROPERTY LINES, AND EASEMENT LINES TO ENSURE PROPER LOCATION OF WATER STEM MARCOMENTS. BOLTS FOR EXPOSED FLANGED DUCTLE IRON PIPE JOINTS SHALL BE ETHER SILCON BRONZE BOLTS AND NUTS OR 316 STANDARDS STEM JACKOTS WITH THE HEAVY DUTY STANLESS STELL MUST (ONLY) FURNISHED, WITH TRIPAC 2000 18
- 19
- 20. BULIS FOR EAROSED FLAMED DUCILLE IRCM FIRE JOINT SHALL BUTS WITH THE HEAVY DUTY STANLESS STEEL NUTS (ONLY FURNISHED WITH TRIPAC 2000 BLUE COATING SYSTEM. ANTI-SEZE SHALL NOT BE USED. T-BOLTS FOR DUCTLE IRCN MECHANICAL JOINT (MJ) PIPE AND FITTING CONNECTIONS IN UNDERGROUND SITUATIONS SHALL BE CHE OF THE FOLLOWING SYSTEMS: A 316 STAINLESS STEEL T-BOLTS WITH THE HEAVY DUTY STAINLESS STEEL NUTS (ONLY) FURNISHED WITH TRIPAC 2000 BLUE COATING SYSTEMS. ANTI-SEIZE SHALL NOT BE USED. B. COR-TEN T-BOLTS AND NUTS WITH HIGH GRADE ZINC SACRIFICIAL ANODES, EQUIVALENT TO 'DURATRON' SACRIFICIAL 'SAC NUT' MODULES, INSTALLED ON THE NUTS FOR ALL STANDARD COR-TEN T-BOLTS. C. COR-TEN T-BOLTS AND NUTS BOTH FACTORY COATED WITH TRIPAC 2000 BLUE COATING STSTEM BY 'TRIPAC FASTENES'. ALL HOT FORGED STANLESS STEEL BOLTS ARE REQUIRED TO BE PASSIVATED PER ASTM ASBD, MANUFACTURER CERTIFICATERS'. ALL HOT FORGED STANLESS STEEL BOLTS ARE REQUIRED FOR PROOF WITH EACH SHIPMENT. CONTRACTOR SHALL FUNNISH AND INSTALL DUCTLE IRON NIPPLES FOR COMFULETE INSTALLATION OF THE WATERLINE, WHETHER SHOWN OR NOT SHOWN COMFULETE INSTALLATION OF THE WATERLINE, WHETHER SHOWN ON NOT SHOWN
- 21.
- ON THE CONSTRUCTION PLANS, AT THE CONTRACTOR'S EXPENSE. CONTRACTOR SHALL FURNISH TEMPORARY CLEANOUTS WHEN NECESSARY TO 22.
- 23
- 25.
- ON THE CONSTRUCTION PLANS, AT THE CONTRACTOR'S EXPENSE. CONTRACTOR SHALL FURNISH TEMPORARY CLEANOUTS WHEN RECESSARY TO TEST, FLUSH, AND CHLORINATE THE WATERLINE AT THE CONTRACTOR'S EXPENSE. CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL PORTIONS OF ABANDONED WATERLINES THAT ARE EXPOSED OF WITHIN 12-INCHES BELOW THE GROUND SURFACE AT THE CONTRACTOR'S EXPENSE. ALL BURIED METALS, INCLUDING COPER PIPES, SHALL BE WRAPPED WITH POLY-WRAP, FOR ALL BURIED INSTALLATIONS OF FUCTILE IRON PIPE AND FITTINGS, POLY-WRAP IS REQUIRED EXCEPT WITHIN CONCRETE JACKETS. LUBRICATE HYDRANT NOZZLE THREADS WITH NON-TOXIC GREASE. CONTRACTOR SHALL PAINT AND NUMBER FIRE HYDRANT(S). NUMBERING TO BE FURNISHED BY DWS. WATER MINS AND APPURTENANCES SHALL BE SUBJECT TO HYDROSTATIC TESTING IN ACCORDANCE WITH THE LATEST REVISION OF AWWA C600, UNDER THE "HYDROSTATIC TESTING" SECTION. TO A PRESSURE OF A LEAST 1.5 IMES THE WORKING PRESSURE LINLESS OTHERWAS STATED IN THE CONSTRUCTION DOCUMENTS OR LIMITED BY THE PRESSURE STATED IN THE CONSTRUCTION DOCUMENTS OR LIMITED BY THE PRESSURE STATED IN THE CONSTRUCTION DOCUMENTS OR LIMITED BY THE PRESSURE ATAINE OF ECUIPMENT, THE PRESSURE TEST AND LEAKAGE TEST SHALL BE PERFORMED AT 225 POUNDS PER SOLIARE INCH PRESSURE. DEVELOPER SHALL SUBMIT A COST LIST ALONG WITH AN AFFIDANT FOR THE WATER SYSTEM PRIOR TO ACCEPTANCE. 27.
- 28.
- WALER STSTEM PRIOR TU AUCEPTANCE. 29. CONTRACTOR SHALL SUBMIT ONE (1) SET OF RECORD DRAWINGS VIA A CONSULTANT PRIOR TO ACCEPTANCE OF THE WATER SYSTEM. AN ELECTRONIC IMAGE FILE IN PDF FORMAT AT FULL PAGE SIZE (24"X36") SHALL BE PROVIDED TO THE DWS FOR ALL PROJECTS.

## CONSTRUCTION NOTES WITHIN COUNTY RIGHT-OF-WAY

- CONTRACTOR SHALL OBTAIN A PERMIT TO PERFORM WORK ON COUNTY HIGHWAYS FROM THE DEVELOPMENT SERVICES ADMINISTRATION TWO WEEKS PRIOR TO THE COMMENCEMENT OF WORK. STANDARD DETAIL DRAWINGS AND STANDARD SPECIFICATIONS OF THE DEPARTMENT OF PUBLIC WORKS SHALL BE INCLUDED AS PART OF THE CONSTRUCTION PLANS. ALL CONSTRUCTION WORK SHALL STRICTLY CONFORM TO THE LATEST VERSION OF THE HWAIL STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE
- 5.
- ALL CONSTRUCTION WORK SHALL STRICTLY CONFORM TO THE LATEST VERSION OF THE HAWAII STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE PUBLIC WORKS CONSTRUCTION, AND THE SEPTEMBER 1984 "STANDARD DETAILS" FOR PUBLIC WORKS CONSTRUCTION OF THE DEPARTMENT OF PUBLIC WORKS, AS AMENDED. IF EXISTING UTILITIES, WHETHER OR NOT SHOWN ON PLANS, ARE DAMAGED DURING CONSTRUCTION, THE CONTRACTOR SHALL AT HIS OWN EXPENSE BE REQUIRED TO REPARE SUCH UTILITIES. CONTRACTOR SHALL PROVIDE, INSTALL AND MAINTAIN ALL NECESSARY SIGNS, LICHTS, FLARES, BARRICADES, AND OTHER PROTECTIVE DEVICES FOR THE PROTECTION, SAFETY AND CONVENIENCE OF THE PUBLIC, ACCORDING TO THE LATEST VERSION OF THE "MANULA ON UNIFORM TRAFFIC CONTROL DEVICE FOR STREETS AND HIGHWAYS". AND TO THE RULES AND REGULATIONS GOVERNING THE USE OF TRAFFIC CONTROL DEVICES AT WORK SHEETS AND/OR ADJACENT TO PUBLIC STREETS AND HIGHWAYS ADOPTED BY THE HIGHWAY SAFETY COORDINATOR AND THE U.S. FEDERAL HIGHWAY ADMINISTRATION "MANULA ON UNIFORM TRAFFIC CONTROL DEVICES FOR HIGHWAY CONSTRUCTION AND MAINTENANCE OPERATIONS". THE DIRECTOR 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 SHOULD ANY WORK BE FOUND CONTRARY TO THE APPROVED CONSTRUCTION SHOULD ANY WORK BE FOUND CONTRARY TO THE APPROVED CONSTRUCTION SHOULD ANY WORK BE FOUND CONTRARY TO THE APPROVED CONSTRUCTION NEAD ON DETRIMENTAL TO THE PUBLIC'S INTEREST. THE DIRECTOR PUBLIC SONG THE APPROVED CONSTRUCTION NEAD ON DETRIMENTAL SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE OPVELOPMENT SERVICE'S ADMINISTRATION FIVE (5) DAYS PRIOR TO COMMENCEMENT SERVICES ADMINISTRATION FIVE (5) DAYS PRIOR TO COMMENCEMENT SERVICES ADMINISTRATION FIVE (5) DAYS PRIOR TO

- THE CONTINUATION SHALL SUFFLUEL A PRE-CUNSTRUCTION MEETING WITH THE DEVELOPMENT SERVICES ADMINISTRATION FIVE (5) DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION. 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 POLIUTION CONTROL STANDARDS AND REGULATIONS OF THE STATE DEPARTMENT OF HEALTH AND COUNTY GRADING ORDINANCE
- REGULATIONS OF THE STATE DEPARTMENT OF HEALTH AND COUNTY GRADING ORDINANCE. 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 PAD BY THE CONTRACTOR. CONSTRUCTION DEBRIS AND WASTES SHALL BE DEPOSITED AT AN APPROPRIATE WORK SITE. THE CONTRACTOR SHALL BE DEPOSITED AT AN APPROPRIATE WORK SITE. THE CONTRACTOR SHALL INFORM THE DIRECTOR OF PUBLIC WORKS OF THE LOCATION OF THE DISPOSAL SITE MUST FULFILL THE REQUIREMENTS OF THE GRADING ORDINANCE.
- 10.
- ORDINANCE. 11. THE CONTRACTOR SHALL SUBMIT A TIFF AND FIVE (5) COPIES OF THE "AS-BUILT" DRAWINGS PRIOR TO THE FINAL APPROVAL OF THE
- AS-BUILD URANINGS FRICK TO THE FINAL APPROVAL OF THE IMPROVENTIS. 12. IF THE CLEARANCE BETWEEN A WASTEWATER LINE AND A NEW OR EXISTING WATERLINE IS EIGHTEEN INCHES (18<sup>9</sup>) OR LESS, THE WASTEWATER LINE SHALL BE CONCRETE-JACKETED IN ACCORDANCE WITH THE STANDARD DETAILS OF PUBLIC WORKS CONSTRUCTION DATED SEPTEMBER 1984, AS

- SHALL BE CONCRETE\_INCKETED IN 'ACCORDANCE' WITH THE STANDARD 'DETAILS OF PUBLIC WORKS CONSTRUCTION DATED SEPTEMBER 1984, AS AMENDED.
   SHOULD HISTORIC SITES SUCH AS WALLS, PLATFORMS, PAVEMENTS, OR MOUNDS, OR REMAINS SUCH AS WATFACTS BURMLS, CONCENTRATION OF SHELL OR CHARCOAL BE ENCOUNTERED DURING CONSTRUCTION ACTIVITES, WORK SHALL OR CHARCOAL BE ENCOUNTERED DURING CONSTRUCTION ACTIVITES, SHALL OR CHARCOAL BE ENCOUNTERED DURING CONTACT THE STATE HISTORIC PRESERVATION DIVISION (692–6015), WHICH WILL ASSESS THE SIGNIFICANCE OF THE FIND AND RECOMMEND AN APPROPRIATE MITIGATION MEASURE, IF NECESSARY.
   PURSUANT OF MAUL COUNTY CODE SECTION 344.015(C), THE COUNTY OF MAUL IS NOT RESPONSIBLE FOR ANY PARK, ROADWAY, ÉASEMENT (INCLUDING BUT NOT LIMITED TO DRAINAGE, SEWER, ACCESS, RECLAIMED WATER, OR ANGATION EASEMENT), OR ANY OTHER INTEREST IN REAL PROPERTY SHOWN ON THESE PLANS, UNLESS THE MAUL COUNTY COUNCIL HAS ACCEPTED ITS DEDICATION BY A RESOLUTION APPROVED BY A MAJORITY OF COUNCIL, SINCHARES, SEWER, MALL STEEL PLATE WARNING SIGN ARE REQUIRED FOR ALL STEEL PLATES IN THE RIGHT-OF-WAY.
   WHEEL PLATE WARNING SIGN ARE REQUIRED FOR ALL STEEL PLATES IN THE RIGHT-OF-WAY.
   WHEELCHAR RANNING SIGN ARE REQUIRED FOR ALL STEEL PLATES IN THE RIGHT-OF-WAY.
   WHEELCHAR RANNING SIGN ARE REQUIRED FOR ALL STEEL PLATES IN THE RIGHT-OF-WAY.
   WHEELCHAR RANNING SIGN ARE REQUIRED FOR ALL STEEL PLATES IN THE RIGHT-OF-WAY.
   WHEELCHAR RANNING SIGN ARE REQUIRED FOR ALL STEEL PLATES IN THE RIGHT-OF-WAY.
   WHEELCHAR RANNING SIGN ARE READ WARKINGS SHALL BE OF THERMOPLASTIC MATERIAL.
   COMPACTION REQUIREMENTS:
   A TESTING OF MATERIALS SHALL BE CONDUCTED BY AN APPROVED INDEPPRO

- - ENGINEERING UNISION, AS FOLLOWS: I. EMBANKMENT/SELECT BORROW AND SUBGRADE MATERIALS: ONE (1) COMPACTION TEST PER 600 SQUARE YARDS PER LIFT; II. AGGREGATE SUBBASE COURSE:
- II. AGGREGATE SUBBASE COURSE: ONE (1) COMPACTION TEST PER 400 SQUARE YARDS; ONE (1) GRADATION AND SAND EQUIVALENT YERT PER LIFT PER PROJECT; II. AGGREGATE BASE COURSE: ONE (1) GRADATION AND SAND EQUIVALENT TEST PER LIFT PER PROJECT; IV. ASPHALT CONCRETE PAVEMENT OR ASPHALT TREATED BASE COURSE: DURSE: (3) AC ODESE FOR THROUTD IN FORMER (3) AC
- COURSE: ONIGHER FARMENT OR AS FOR THICKNESS AN DENSITY TESTS PER THREE (3) A.C. CORES FOR THICKNESS AN DENSITY TESTS PER PROJECT: ONE (1) TEST FOR EACH 300 LINEAL FEET OF TRENCH PER LIFT OF MATERIAL: CONTRACTOR SHALL SUBMIT ALL TESTING REPORTS INCLUDING RESULTS TO THE COUNTY'S LINSPECTION AGENCY FOR REVIEW AND APPROVAL PRIOR TO COUNTY'S ALCEPTANCE OF WORK. 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.

- C.

## GRADING NOTES:

- 1. CONTRACTOR SHALL OBTAIN A GRADING PERMIT FROM THE DEVELOPMENT
- 2.
- 3.
- CONTRACTOR SHALL OBTAIN A GRADING PERMIT FROM THE DEVELOPMENT SERVICES ADMINISTRATION TWO (2) WEEKS PRIOR TO COMMENCEMENT OF ANY GRADING OR GRUBBING. CONTRACTOR SHALL BE REQUIRED TO SUBMIT A SATISFACTORY GRADING WORK METHOD TO MINIMIZE DUST POLLITION BEFORE A GRADING PERMIT IS ISSUED. ALL GRADING OPERATIONS SHALL CONFORM WITH APPLICABLE PROVISIONS OF THE WATER POLLUTION CONTROL AND WATER QUALITY STANDARDS" CONTINED IN THE STATE OF HAWIN PUBLIC HEALTH REQUILITIONS, STATE DEPT. OF HEALTH ON WATER POLLUTION CONTROL AND WATER QUALITY STANDARDS AND THE COUNTY GRADING CONTROL AND WATER QUALITY STANDARDS AND THE COUNTY GRADING CONTROL AND WATER QUALITY STANDARDS AND THE COUNTY GRADING CONTROL AND WATER QUALITY STANDARDS AND THE COUNTY GRADING CONTROL AND WATER QUALITY STANDARDS AND THE COUNTY GRADING CONTROL AND WATER QUALITY STANDARDS AND THE COUNTY GRADING CONTROL AND WATER QUALITY STANDARDS AND THE COUNTY GRADING CONTROL STANDARDS AND REGULATION OF THE STATE CONTRACTOR SHALL REPORT ALL THES, INCLUDING WEEKEND AND HOLDAYS. THE WORK SHALL BE IN CONFORMANCE WITH THE AIR POLLUTION CONTROL STANDARDS AND REGULATION OF THE STATE DEPARTMENT OF HEALTH AND GRADING ORDINANCE. THE CONTRACTOR SHALL REMOVE ALL SLITS AND DEBRIS RESULTING FROM THE DIRECTOR OF DEPW (COUNTY OF MAUJ) SHALL BE PAYABLE BY THE CONTRACTOR. THE COST INCURRED FOR ANY MECESSARY REMEDIAL ACTION BY THE DIRECTOR OF DEPW (COUNTY OF MAUJ) SHALL BE PAYABLE BY THE CONTRACTOR. DEBRIS AND WASTES SHALL INFORM THE DIRECTOR OF DPW OF THE LOCATION OF THE DISPOSAL SITE SHALL ALSO FULIFILL THE REQUIREMENTS OF THE GRADING ORDINANCE. APPROXIMATE :: = 2000 FORMANTE : 190 C. Y. PURPOSES 4.
- 5.
- 6. 7.
  - EXEMPTIE: 985 C.Y. EMBANKMENT = 190 C.Y. AREA = 160 ACRES FOR GRADING PERMIT PURPOSES ONLY

## GENERAL CONSTRUCTION NOTES:

- THE PROJECT IS LOCATED AT MAKENA STATE PARK AREA, MAKENA, MAU,
- THE WORK SHALL GENERALLY CONSIST OF IMPROVEMENTS TO MAKENA STATE PARK PARKING LOTS (NORTH AND SOUTH) WITH THE ADDITION OF A NEW COMFORT STATION WITH BEACH SHOWER AND ADDITIONAL PARKING STALLS WITH UNDERGROUND WASTEWATER CONTAINMENT SYSTEM. ALSO INCLUDED ARE ADDITIONAL ADA STALLS.
- 2. ALL APPLICABLE CONSTRUCTION WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST REVISION OF THE STATE OF HAWAII, DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2005, THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, SEPTEMBER 1986, AND STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION, SEPTEMBER 1984, AS AMENDED, OF THE DEPARTMENT OF PUBLIC WORKS, COUNTY OF MAUI.
- VERIFY AND CHECK ALL DIMENSIONS AND DETAILS SHOWN ON THE DRAWINGS PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCY SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER FOR DIRECTION.
- 4. NO CONTRACTOR SHALL PERFORM ANY CONSTRUCTION OPERATION SO AS TO CAUSE FALLING ROCKS, SOIL OR DEBRIS IN ANY FORM TO FALL SLIDE OR FLOW ONTO ADJOINING PROPERTIES, STREETS OR NATURAL WATERCOURSES. SHOULD SUCH VIOLATIONS OCCUR, THE COSTS INCURRED FOR ANY REMEDIAL ACTION SHALL BE PAYABLE BY THE CONTRACTOR.
- 5. THE UNDERGROUND PIPES, CABLES OR DUCTLINES KNOWN TO EXIST BY THE ENGINEER FROM HIS SEARCH OF RECORDS ARE INDICATED ON THE PLANS. THE CONTRACTOR SHALL VERITY THE LOCATONS AND DEPTHS OF THE FACILITIES AND EXERCISE PROPER CARE IN EXCAVATING IN THE AREA. ALL DAMAGED PORTIONS SHALL BE REPLACED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE AFFECTED UTILITY COMPANY AND SHALL BE THE CONTRACTORS RESPONSIBILITY. PERSONAL INJURY RESULTING FROM CONTACT WITH EXISTING UTILITIES SHALL BE THE CONTRACTORS RESPONSIBILITY. WHEREVER CONNECTIONS OF NEW UTILITIES TO EXISTING UTILITIES ARE SHOWN ON THE PLANS, THE CONTRACTOR SHALL EXPOSE THE EXISTING LINES AT THE PROPOSED CONNECTIONS TO VERIFY THEIR LOCATIONS AND DEPTHS PRIOR TO EXCAVATION FOR NEW LINES.
- 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONFORMANCE WITH THE APPLICABLE PROVISIONS OF CHAPTER 54, WATER QUALITY STANDARDS, AND CHAPTER 55, WATER POLLUTION CONTROL, OF TITLE 11, HAWAII ADMINISTRATIVE RULES OF THE STATE DEPARTMENT OF HEALTH.
- THE CONTRACTOR SHALL NOTIFY ALL AGENCIES TO VERIFY THE ACTUAL LOCATION OF ALL UTILITIES IN THE PROJECT AREA PRIOR TO EXCAVATION. THE CONTRACTOR SHALL COORDINATE ALL WORK.
- 8. THE CONTRACTOR SHALL RESTORE TO THEIR ORIGINAL OR BETTER CONDITION ALL IMPROVEMENTS AND VEGETATION DAMAGED AS A RESULT OF THE CONSTRUCTION, INCLUDING PAVENENTS, DEMANKMENTS, CURBS, SKONS, LANDSCAPING, STRUCTURES, UTILITIES, WALLS, FENCES, ETC. UNLESS PROVIDED FOR SPECIFICALLY IN THE PROPOSAL DEMOLITION AND RESTORATION OF EXISTING ITEMS SHALL BE INCIDENTAL.
- WHERE PEDESTRIAN WALKWAYS EXIST. THEY SHALL BE MAINTAINED IN PASSABLE CONDITION OR OTHER FACILITIES FOR PEDESTRIANS SHALL BE PROVIDED. TEMPORARY PASSAGEWAYS SHALL BE ACCESSIBLE PER 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN CHAPTER 2, SECTIONS 201.3 AND 206.1.
- EXISTING TOPOGRAPHIC SURVEY WAS COMPLETED ON MAY 29, 2015 BY WARREN S. UNEMORI ENGINEERING, INC. THIS TOPOGRAPHIC SURVEY WAS BASED ON THE BEST AVAILABLE INFORMATION AND THE CONTRACTOR MUST VERIFY IT IS ACCURATE PRIOR TO CONSTRUCTION.
- 11. NO BLASTING SHALL BE ALLOWED ON THIS PROJECT.
- 12. THE CONTRACTOR SHALL NOTIFY THE ONE CALL CENTER AT (866) 423-7287 AT LEAST 5 WORKING DAYS PRIOR TO THE START OF EXCAVATION OR TRENCHING.
- 13. FOR ALL PROJECTS WHICH WILL DISTURB ONE (1) ACRE OR MORE OF LAND, THE CONTRACTOR SHALL NOT START CONSTRUCTION UNTIL A NPDES PERMIT IS RECEIVED FROM THE DEPARTMENT OF HEALTH, STATE OF HAWAII, AND HAS SATISFIED ANY OTHER APPLICABLE REQUIREMENTS OF THE NPDES PERMIT PROGRAM. ALSO, FOR COUNTY PROJECTS, THE CONTRACTOR SHALL PROVIDE A WRITTEN COPY OF THE NP DES PERMIT TO THE APPROPRIATE COUNTY DEPARTMENT OR GOVERNMENTAL AGENCY PER THEIR REQUIREMENTS.
- WORK INCIDENTAL TO THE CONTRACT AND NECESSARY TO COMPLETE THE PROJECT, ALTHOUGH NOT SPECIFICALLY REFERRED TO ON THE CONTRACT DOCUMENTS, SHALL BE FURNISHED AND PERFORMED BY THE CONTRACTOR
- 15. THE CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY, AND THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORK HOURS.
- 16. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED PERMITS FROM APPROPRIATE GOVERNMENT AGENCIES.
- 17. THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR UTILITIES SUCH AS ELECTRICITY, WATER, ETC. REQUIRED FOR HIS OPERATIONS AND ALL COSTS SHALL BE BORNE BY THE CONTRACTOR.

19. THE JOB SITE MUST BE LEFT IN A SAFE, SECURE CONDITION AT THE END OF EACH CONSTRUCTION WORK DAY, CLEAN UP AND REMOVE FROM THE JOB SITE ALL RUBBISH AND MAINTAIN THE PREMISES IN A CLEAN ORDERLY CONDITION AT ALL TIMES.

18. GENERAL CONTRACTOR TO CONSTRUCT TEMPORARY BARRICADES DURING CONSTRUCTION, FOR THE PROTECTION OF LIFE, SAFETY AND PROPERTY.

20. UPON COMPLETION OF CONSTRUCTION THE ENTIRE JOB SITE SHALL BE CLEANED OF ALL RUBBISH AND DEBRIS.

21. THE PARK SHALL REMAIN OPEN DURING THE CONSTRUCTION PERIOD. THE CONTRACTOR SHALL INSTALL ADEQUATE TEMPORARY BARRICADES AND WARNING SIGNS TO PROTECT THE PUBLIC DURING THE CONSTRUCT/ON PERIOD. PROVIDE AND MAINTAIN A SAFE PEDESTRIAN ACCESS AND VEHICLE ACCESS TO THE PARK AND PARK FACILITIES THROUGHOUT THE

22. ALL EXISTING UTILITIES, WHETHER OR NOT SHOWN ON THE PLANS, SHALL BE PROTECTED AT ALL TIMES BY THE CONTRACTOR DURING CONSTRUCTION AND ANY DAMAGE TO THEM SHALL BE REPAIRED AND PAID FOR BY THE CONTRACTOR.

23. THE CONTRACTOR SHALL PROVIDE, INSTALL AND MAINTAIN ALL NECESSARY SIGNS, LIGHTS, FLARES, BARRICADES, MARKERS, CONES AND OTHER PROTECTURE FACILITIES AND SHALL TAKE NECESSARY PRECAUTIONS FOR THE PROTECTION, CONVENIENCE AND SAFETY OF THE PUBLIC.

24. ALL REQUIRED UTILITY ADJUSTMENTS SUCH AS MANHOLE AND/OR VALVE BOX FRAMES AND COVERS SHALL BE DONE BY THE CONTRACTOR.

26. PROVIDE THEFT-RESISTANT FASTENERS FOR ALL ACCESSORY MOUNTINGS. ALL FASTENERS SHALL BE STAINLESS STEEL WITH THEFT-RESISTANT TYPE HEADS OR NUTS.

27. CONTRACTOR SHALL ENSURE THAT TEMPORARY PEDESTRIAN ROUTES BE ACCESSIBLE AND SHALL COMPLY WITH ADAAG 201.3 AND ADAAG 206.1.

TRUCT/ON PERIOD

25. ALL STRIPING SHALL BE THERMOPLASTIC.

## NOTES FOR CHLORINATION OF WATER SYSTEM PIPELINES:

WATER MAINS AND APPURTENANCES SHALL BE DISINFECTED IN ACCORDANCE WITH AWWA C651, ALL PROCEDURES AND MATERIALS (LIQUID CHLORINE OR CALCIUM HYPOCHLORITE) USED FOR THE CHLORINATION OF THE PROJECT SHALL CONFORM TO AWWA REQUIREMENTS. PRIOR TO CHLORINATION, THE PROJECT PIPELINES SHALL BE THOROUGHLY

PRIOR TO CHLORINATION, THE PROJECT PIPELINES SHALL BE THOROUGHLY CLEANED. CLEANING OF LINES 8" AND LARGER SHALL BE BY PIGGING USING FOAM PIGS. SMALLER LINES CAN BE FLUSHED IN ACCORDANCE WITH AWWA REQUIREMENTS IF ADEQUATE WATER SUPPLY IS PROVIDED, OTHERWISE BY PIGGING. THE CONTRACTOR SHALL SUBMIT HIS PLAN FOR PIPELINE CLEANING, INCLUDING FITTING REQUIREMENTS FOR PIGGING, FOR APPROVAL PRIOR TO DEPOGEPTION.

PROCEEDING. 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. RESIDUAL SHALL NOT BE LESS THAN 10 PPM AFTER SUCH TIME.

RESIDUAL SHALL NOT BE LESS THAIN TO PM ATTER SUCH TIME. RESIDUAL SHALL NOT BE LESS THAIN TO PM ATTER SUCH TIME. 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. AT THE END OF THE 24-HOUR DISINFECTION PERIOD, REPRESENTATIVE SAMPLES SHALL BE TAKEN AND ANALYZED TO ASSURE A CHLORINE RESIDUAL FAST 10 PPM. MEASUREMENTS FOR CHLORINA RESIDUAL TESTS SHALL BE BY A TRAINED, QUALIFIED TESTER APPROVED BY THE DIRECTOR. SHOULD THE RESULTS INDICATE ADEQUATE CHLORINATED, THE PROJECT SHALL BE THOROUGHLY FLUSHED AND FILLED WITH POTABLE WATER FROM THE EXISTING POTABLE WATER SYSTEM AND AGAIN TESTED FOR CHLORINE RESIDUAL THE FLUSHING SHALL BE CONSIDERED ADEQUATE IF THE TEST FINICATE THAT THE WATER IN THE PROJECT HAS A COMPARABLE CHLORINE RESIDUAL AS THE WATER IN THE PROJECT HAS A COMPARABLE CHLORINE RESIDUAL AS THE WATER IN THE PROJECT HAS A COMPARABLE CHLORINE SOLUTION, TWO CONSECUTIVE SETS OF ACCEPTABLE SAMPLES SHALL BE TAKEN AT LEAST 24 HOURS APART FROM REPRESENTATIVE POINTS IN THE FROME TH AND CONSECUTIVE SETS OF ACCEPTABLE SAMPLES SHALL BE TAKEN AT LEAST 24 HOURS APART FROM REPRESENTATIVE POINTS IN THE PROJECT AND SUBJECTED TO MICROBIOLOGICAL TEST PERFORMED SHALL BE TAKEN AT LEAST 24 HOURS AFART FROM REPRESENTATIVE POINTS IN THE PROJECT AND SUBJECTED TO MICROBIOLOGICAL TESTS PERFORMED BY A CERTIFIED LABORATORY APPROVED BY THE DEPARTMENT OF HEALTH. AT LEAST ONE SET OF SAMPLES SHALL BE COLLECTED AND TESTED FROM EVERY 1,200 FEET OF THE NEW WATER MAIN, PLUS ONE SET FROM THE END OF THE LINE AND AT LEAST ONE SET FROM EACH BRANCH. POSITIVE RESULTS WILL NOT BE ACCEPTABLE AND THE ENTIRE CHLORINATION PROCESS WILL BE REPRATED.

WILL BE REPEATED. ANALYSIS FOR RESIDUAL CHLORINE SHALL BE MADE IN ACCORDANCE WITH ANALTSIS FOR RESIDUAL CHLORINE SHALL BE MADE IN ACCORDANCE WITH "STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER", AMERICAN PUBLIC HEALTH ASSOCIATION, CURRENT EDITION. MICROBIOLOGICAL TESTS SHALL BE MADE IN ACCORDANCE WITH "STANDARD

METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER", AMERICAN PUBLIC HEALTH ASSOCIATION, CURRENT EDITION. THE DEVELOPER/CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH ALL OF THE FOREGOING.

## PERMITTEE NOTES TO CONTROL DRAINAGE AND EROSION:

RMITIEE NOTES TO CONTINUE DRAINAGE AND ENDISION: CONTROL DUST BY MEANS OF WATER WAGONS OR BY INSTALLING TEMPORARY SPRINKLER SYSTEMS OR BOTH IF NECESSARY. GRADED AREAS SHALL BE THOROUGHLY WATERED AFTER CONSTRUCTION ACTIVITY HAS CEASED FOR THE DAY AND FOR THE WEEKEND AND HOUDAYS. ALL EXPOSED AREAS SHALL BE PAYED, GRASSED, OR PERMANENTLY LANDSCAPED AS SOON AS FINISHED GRADING IS COMPLETED. THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN AND PAY FOR THE WATER NECESSARY FOR DUST CONTROL AND INRIGATION PURPOSES. CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN AND PAY FOR THE WATER NECESSARY FOR DUST CONTROL AND INRIGATION PURPOSES. CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN AND PAY FOR THE CONSTRUCTION AS FINISHED AND ANY DIVERSION DITCHES OR SWALES AWAY FROM GRADED AREAS TO NATURAL DRAINAGEWAYS DURING CONSTRUCTION. CONTRUCTION. CONTRUCTOR SHALL SUBMIT A SATISFACTORY SOIL EROSION CONTROL PLAN TO MINIMIZE SOIL EROSION PRIOR TO AN ISSUANCE OF A GRADING PERMIT. SEE ALSO GRADING NOTES NO. 2.

## NOTES FOR TOPOGRAPHIC FEATURES:

. ELEVATION DATUM = MEAN SEA LEVEL. ALL VISIBLE UTILITY STRUCTURES HAVE BEEN LOCATED IN THE FIELD, HOWEVER, CONNECTION OF UNDERGROUND UTILITY LINES AS SHOWN ARE UNVERIFIED AND COMPILED FROM EXISTING DATA. UNDERGROUND UTILITIES SHOWN HEREON ARE FOR INFORMATION ONLY, HAVING BEEN OBTAINED FROM THE BEST AVAILABLE SOURCES, BUT FROM OTHERS NOT CONNECTED WITH THIS COMPANY. THEREFORE, NO GUARANTEE IS MADE ON THE ACCURACY OR COMPLETENESS OF SAID INFORMATION.

## ARCHAEOLOGICAL MONITOR DURING ON-SITE EXCAVATION;

SHOULD HISTORIC SITES SUCH AS WALLS, PLATFORMS, PAVEMENTS AND MOUNDS, OR REMAINS SUCH AS ARTIFACTS, BURIALS, CONCENTRATION OF CHARCOAL OR SHELLS ARE ENCOUNTERED DURING CONSTRUCTION ACTIVITIES, WORK SHALL CEASE 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 (243-5169, MAUI OR 692-8023, OAHU), WHICH WILL ASSESS THE SIGNIFICANCE OF THE FIND AND RECOMMEND AN APPROPRIATE MITIGATION MEASURE, IF NECESSARY.

## CONTRACTOR'S RESPONSIBILITY FOR EXISTING

## UTILITY, LINES, PIPES AND SERVICES

INFORMATION RECARDING THE SITE OF THE WORK GVEN ON THE DRAWINGS OR SPECIFICATIONS HAS BEEN OBTAINED BY THE ENGINEER AND IS BELIEVED TO BE REASONABLY CORRECT, HOWEVER, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL SUCH INFORMATION.
 ANY UTILITES THAT THE CONTRACTOR ENCOUNTERS DURING THE PROGRESS OF THE WORK, SUCH AS TELEPHONE DUCTS, ELECTRIC DUCTS, WHETHER SHOWN OR NOT ON THE CONTRACTOR FLAND, SHALL NOT BE DISTURBED OR DAMAGED UNLESS. OTHERWISE INSTRUCTED IN THE PLANS AND SPECIFICATIONS.
 IN THE EVENT THE UTILITES ARE DAWAGED OR DISTURBED BY THE CONTRACTOR, THE WORK THE UTILITIES ARE DAWAGED OR DISTURBED OR DAMAGED UTILITIES AND BE RESPONSIBLE FOR THE REPAIR THEREOF.

JOB NO. F73C680B

REVISION SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED					
T. TANTA	STATE OF DEPARTMENT OF LAND AN ENGINEERIN	HAWAII	RAL RESO	URCES					
LICENSED PROFESSIONAL ENGINEER No. 6646-C	MAKENA ST IMPROVEMEN	MAKENA STATE PARK IMPROVEMENTS, PHASE 2							
MALL, U.S. K	CONSTRUCTION NOTES								
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND			∂≮	Ы					
CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.	DESIGNED: R.T.	SUBMITTED:							
R. T. TANAKA ENGINEERS, INC.	DRAWN: N.D.	DATE: JA	NUARY 2020						
Kas J. P. III	CHECKED: K.T.	SCALE: AS	NOTED						
KIRK T. TANAKA Replaced Profession Ortificate No. 6646-C Ularese Eighter 04-30-2022	APPROVED: Carty Chang E-signed 2020-04-23 07 carty.s.chang@hawaii. CHIEF ENGINEEF State of Hawaii	38AM HST gov <u>×</u> lı	DR/	awing no. C-1					

SHEET NO. 2 OF 34 SHEETS



DESCRIPTION: BACKFLOW PREVENTER CONCRETE THRUST BEAM TYPE C WATER SERVICE LATERAL/MANHOLE BACKFLOW PREVENTER

V9 B16, B17, B18 L33, L34, M12 V9

PLATE NO.



SHEET NO. 3 OF 34 SHEETS











SHEET NO. 8 OF 34 SHEETS



JOB	NO.	F73C680E

SHEET NO. 9 OF 34 SHEETS



REVISION NO.	SYM.			DESCRIP	TION		SHT./OF	D	ATE	APPROVED
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	LCENSED PROFESSIONAL * EXCINEER No. 6646-C *					MAKENA ST MPROVEMEN	TATE P/ ITS, PH	ARK IASE	2	
	AWAII.	U.S.I				DET	AILS			
THIS WO OR UN	XRK WAS Der My S	PREPAREI	D BY ME ON AND					2	*	bL
CONSTR WILL BE	CUNDER I	nf this p Ny obser	PROJECT RVATION.	DESIGNED:	R.T		SUBMITTE	D:		
R. T. TAM	NAKA	ENGINE	ERS, INC.	DRAWN:	N.D		DATE: JA	NUARY	2020	
120	7	. 0	a. ( 1	CHECKED:	K.T		SCALE: AS	NOTE	D	
				APPROVED:		Carty Chang	20AM LICT		DR/	AWING NO.
Registered Pr Certifical License Expin	te No. 6646- te So. 6646- te: 04-30-	ngineer -C 2022	DATE	CHIEF ENGI	NEEF	carty.s.chang@hawaii.g State of Hawaii	jov x.lu	_	(	C-9
	JOB	NO. F	73C680B			Chief Engineer SHEET NO.	10 OF	34	SI	HEETS



WITH A STABILIZED CONSTRUCTION ENTRANCE.

### STOCKPILES

STOCKPILES IN PLASTIC WHEN NOT IN USE.

### SEDIMENT BARRIERS OR TRAPS

WITH PLASTIC.

### SLOPE PROTECTION

DEVICE

STARII IZED

SLABBED WITHIN 14 DAYS.



- 5.
- 6.
- 7.
- 10.
- TRAFFIC CONTROL PLANS. SIGNS SPACING (D), TAPER LENGTHS (T) AND SPACING OF CONES OR DELINEATORS SHALL BE AS SHOWN IN TABLE 1, UNLESS OTHERWISE NOTED ON THE TRAFFIC CONTROL PLANS. ALL TRAFFIC LANES SHALL BE A MINIMUM OF TO FEET WIDE. ALL CONSTRUCTION WARNING SIGNS SHALL BE PROMPTLY REMOVED OR COVERED WHENEVER THE MESSAGE IS NOT APPLICABLE OR NOT IN USE. THE BACKS OF ALL SIGNS USED FOR TRAFFIC CONTROL SHALL BE APPROPRIATELY COVERED TO RECLUDE THE DISPLAY OF INAPPLICABLE SIGN MESSAGES (i.e., when signs have messages on both faces.) Ш.
- INAPPLICABLE SIGN MESSAGES (i.e., when signs have messages on both faces.) AT THE END OF EACH DAY'S WORK OR AS SOON AS THE WORK IS COMPLETED, THE PERMITTEE SHALL REMOVE ALL TRAFFIC CONTROL DEVICE NO LONGER NEEDED TO PERMIT FREE AND SAFE PASSAGE OF PUBLIC TRAFFIC. REMOVAL SHALL BE IN THE REVERSE ORDER OF INSTALLATION. REPLACE PERMANERT PAVEMENT MARKINGS AND TRAFFIC SIGNS UPON COMPLETION OF WORK.
- 12.

	TABLE I	FOR TR	AFFIC CO	ONTROL	PLAN	1	
POSTED SPEED	SIGN SPACING TAPER LENGTH (T) L		LONGITUDINAL BUFFER	SPACING OF CONE OR DELINEATORS (FEET)			
(M.P.H.)	(FEET)	W = 12' OR LESS ①	W = GREATER THAN 12' (1)	(FEET)	TAPER	TANGENT	WORK
20	250	200	W x 17	35	20	20	10
25	250	200	W x 17	55	25	25	10
30	250	250	W x20	85	30	30	10
35	250	250	W x20	120	35	35	10
40	500	350	W x30	170	40	40	10
45	500	550	W x45	220	45	45	10
50	1000	600	W x50	280	50	50	10
55	1000	700	W x55	335	55	55	10
NOTE:							

() W = WDTH OF LANE, SHOULDER, OR OFFSET.

SHEET NO. 11 OF 34 SHEETS

•	ABBREVIATIONS			MATERIAL	INDICATIONS		SYMBOLS	
&       And       E.J.         L       Angle       E.L.         Q.       Centerline       BLA         Q.       Centerline       BLA         J.       Pependiculor       BMA         #       Pound or Number       E.F.         GD       Existing       EQ         A.C.       Air Conditioning       BXA         ACOUR       Aron Drain       EXIST         ADDA       Argengate       AL         ADDA       Adjustible       ADA         ADOR       Architectural       F.F.         ABR       Ashetos       F.C.         ABR       Ashetos       F.C.         ABR       Ashetos       F.C.         BLDQ       Buldring       F.C.         BLDA       Bultoninous       F.F.         BLA       Bootic       F.F.         BLC       Bultoninous       F.C.         BLC       <	A Expansion Joint LAB Expansion Joint LAW LEW, Einstein LAW, LAW, LAW, LAW, LAW, LAW, LAW, LAW,	Loborotory BC-PED S Lumitote B, D S Lowtory B, D, BD, S Locker BBCT, S Locker BBCT, S Hart S BH, S S BH, S BH, S S	Schedule Soop Dispenser Soon Dependening Boord Section Sheft Shoer Sheft Shoer Sheft Shoer Sheft Shoer Sheft Shoer Sonitary Nepkin Dispenser Sonitary Nepkin Receptoole Specification Source Stainers Steel Shorge Stroke Sikk Station Starles Steel Shorge Structural Starles Steel Shorge Structural Starles Steel Shorge Structural Starles Steel Shorge Structural Starles Steel Storge Structural Starles Steel Storge Structural Starles Steel Storge Structural Starles Steel Storge Structural Starles Steel Storge Structural Starles Storge Structural Starles Storge Structural Starles Storge Structural Starles Storge Structural Starles Storge Structural Storge Structural Storge Structural Storge Structural Storge Structural Storge St	MATERIAL	INDICATIONS EARTH ROCK FLL BAND / MORTAR / PLASTER CONCRETE CAST IN PLACE OR PRECAST ERCK CMU CONCRETE MASONRY UNIT ROCK WALL MARELE PLYWOOD ACOUSTICAL TLE OR BOARD NSULATION, BATT NSULATION, BATT NSULATION, RGD ASPHALT CONCRETE CMYPHIM BOARD OMIT INDUCATION ON THIN MATERIAL CLASS OMIT INDUCATION ON THIN MATERIAL CLASS OMIT INDUCATION ON THIN MATERIAL CASS SHOW PROFILE ONLY	DRAWING IN SEQUENCE DISCIPLINE DETAILS ON DRAWING $\rightarrow 4$ // DRAWING IN CATEGORY (A5) (A4-1) (A5)	SYMBOLS	PLINES: ENGINEERING: ISCAPING: ITECTURAL ENGINEER ITECTURAL ENGINEER ISPORTATION SYS ISON DESIGN: ISPORTATION SYS ISON DESIGN: / A4-1 DOOR OR OPEN / A4-1 DOOR OR OPEN KEY TO ELEVATION KEY TO ELEVATION
DBL     Double     HOI       DEFT.     Department     HGI       DET.     Defails     HGI       DBL     Dimiting Fountain     DGI       DBL     Dimeter     DGI       DBL     Dimeter     HGI       DBL     Dimeter     HGI       DBL     Down m     HGI       DR     Door     HGI       DR     Door     HGI       DR     Door     HGI       DR     Door     HGI       DR     Dorner     HGI	2REZ Horizontal t Hour GT. Height R.D. Inside Dismeter (Dim.) REF. REG. Inside Dismeter (Dim.) REF. REG. Inside Dismeter (Dim.) REF.	WOW, W W, H W W, H W W / O W Rodius WW Rodiforoin WCT, W Reference Register	Window Woter Heater Without Woterproof Worker Solitation Worker Headed Windod Wire Fobric		Wood, Frish Imrough Henger Wood, Frankia Interrupted Member Metal Studs	T.C. 9.0         TOP OF CURB           T.P. 2.0         TOP OF PAVEMEN           TOP OF PAVEMEN         TOP OF PAVEMEN	(1) (2) (1) (2) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1	SURVEYORS GRID, MODULAR GRID, EOLIPMENT TYPE OF EQUIPMENT X=X-RAY; EQUIPMENT GROU ROOM DENTRICA ROOM NO.
JT. E. East E.A. Each E.F.S. Exterior Finish System KJT. E.I.F.S. Exterior Insul. Fin. System K.C	r, Joint B. J., Kitchen B.C. Q. Knock-Out B.C.D.	South Solid Core Seat Cover Dispenser			BOUND BARNER EXISTING WOOD STUDS	76 EXISTING CONTOUR TO REALAN 72 EXISTING CONTOUR TO BE REMOVED W7 WALL TYPE	8 O 8	NDICATES NOTES

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	N. M.	YOSH	DEPARTMEN	NT OF LAND AND ENGINEERING	D NATU	RAL RESO ON	URCES
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	HAWAN	KS!	ABBREVIATIONS,	MATERIAL INDICA	TIONS		
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all wit	th work.	- Jervie proceeding		arty.s.chang@hawaii.go	v xli	<u> </u>	-2
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SHEET NO. 12 OF 34 SHEETS



SHEET NO. 13 OF 34 SHEETS



SHEET NO. 14 OF 34 SHEETS



SHEET NOTES:

- 1. SEE 1/A-5 FOR MOUNTING HEIGHTS AND LOCATIONS OF ACCESSIBLE FIXTURES AND ACCESSORIES.
- 2. ALL INTERIOR FINISH TO BE EPOXY PAINT
- OVER SMOOTH FINISH CMU. 3. ALL INTERIOR CMU JOINTS TO BE CONCAVE. 4. PAINT REQUIRED FOR EXTERIOR FIBER CEMENT SOFFIT PANELS, GATES AND
- GATE FRAMES. 5. AT STORAGE ROOM FRAME CEMENTITOUS
- BACKER BOARD. LEAVE OPENING FOR SCREEN BLOCK.
- 6. PAINT 8" HEIGHT BASE AT ALL MEN, WOMEN, TOILETS, AND STORAGE.

	REVISION NO.	SYM.		DESCR	IPTION		s	HT./OF	DA	TE	APPROVED	
	M. YOSHIN				RTM	STATE C ENT OF LAND A ENGINEER	ND I	AWAII NATU DIVISI	RAL F ON	RESO	URCES	
<		SED SIONAL TECT	1	MAKENA STATE PARK IMPROVEMENTS, PHASE 2								
	HAWAII, USI			INTERIOR	ELEV	ATIONS						
	DPIR	ATION DAT	E: 4/30/2022						ð*	6	<b>X</b>	
	This work w	as prepared	by me or under my	DESIGNED	: AY		SUE	BMITTE	D: APR	IL 20	20	
	supervision will be unde	and constru-	votion of this project votion. ("Observation	DRAWN:	ND		DAT	TE:	APR	IL 20	20	
	of construction as defined under Section 16-115-2 of Havail Administrative Rules, Professional Engineers, Architects, Surveyors, and Landscape Architects.) Note: Contractor shall check and verify	CHECKED	: AY		SCA	ALE:	AS	NOTE	)			
		APPROVE	D:	Carty Chang E-signed 2020-04-23	07:384	M HST		DR	WING NO.			
	all dimensions at job before proceeding with work.		CHIEF EN	GINEEF	carty.s.chang@hawa State of Hawaii	ii.gov	<u>x.lı</u>	-	A	4-3		
		JOB N	NO. F73C680B			SHEET NO.	15	OF	34	SHE	ETS	











	Acronym	Definition	SYMBOL LIST	
	ABV	ABOVE		
	BEL	BELOW	×	SHUT OFF VALVE
	BHP	BREAK HORSEPOWER	CD	CONDENSATE DRAIN
	CO	CLEANOUT		
	COTG	CLEANOUT TO GRADE		DOMESTIC COLD WATER
	CP	CIRCULATING PUMP		DOMESTIC HOT WATER
	CW	COLD WATER		DOMESTIC HOT WATER RECIRC
	DCW	DOMESTIC COLD WATER		
	DF	DRINKING FOUNTAIN	SAN	SANITARY WASTE
	DS	DOWNSPOUT	SD	STORM DRAIN
	EX	EXISTING		VENT
	EXIST	EXISTING		
	FCO	FLOOR CLEANOUT		
	FD	FLOOR DRAIN		
	FE	FIRE EXTINGUISHER		
	FLA	FULL LOAD AMPS		
	FS	FLOOR SINK		
	FV	FLUSH VALVE		
	GALV	HOT DIPPED GALVANIZED		
	GPM	GALLONS PER MINUTE		
	GRD	GROUND		
	HB	HOSE BIBB		
	HP	HORSEPOWER		
	LAV	LAVATORY		
	LRA	LOCKED ROTOR AMPS		
	MAX	MAXIMUM		
	MCA	MINIMUM CIRCUIT AMPACITY		
	MIN			
	MOP	MAXIMUM OVERCORRENT PROTECTION		
	00			
	DBV/			
	RD	ROOF DRAIN		
	RLA	RATED LOAD AMPS		
	RPM	REVOLUTIONS PER MINUTE		
	S/S	SERVICE SINK		
	SAN	SANITARY WASTE		
	SD	STORM DRAIN		
	SHW	SHOWER		
	SST	STAINLESS STEEL TYPE 304		
	TYP	TYPICAL		
	UR	URINAL		
	v	VENT		
	V/PH/HZ	VOLTS/PHASE/HERTZ		
	VTR	VENT THRU ROOF		
	w	WASTE		
	WC	WATER CLOSET		
	WCO	WALL CLEANOUT		
- 1	WHA	WATER HAMMER ARRESTOR		

## GENERAL NOTES: 1. CONFORM TO ALL REQUIREMENTS OF THE BUILDING, PLUMBING, ELECTRICAL CODES OF THE COUNTY OF MAUI, STATE OF HAWAII HEALTH REGULATION, FIRE MARSHAL'S REGULATIONS, MANUFACTURER'S RECOMMENDATIONS AND ALL OTHER APPLICABLE DESCRIPTION

- REGULATIONS. 2. THE CONTRACTOR SHALL VERIFY ALL FIELD CONDITIONS PRIOR TO BID AND

- REGULATIONS, MANUFACTURER'S RECOMMENDATIONS AND ALL OTHER APPLICABLE REGULATIONS.
  THE CONTRACTOR SHALL VERIFY ALL FIELD CONDITIONS PRIOR TO BID AND CONSTRUCTION.
  COORDINATE ALL WORK WITH OTHER TRADES TO AVOID INTERFERENCES AND DELAYS.
  CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PERMITS AND APPLICATIONS INCLUDING PAYMENT.
  PROVIDE ADDITIONAL MATERIALS AND LABOR FOR A COMPLETE AND OPERABLE SYSTEM AT NO ADDITIONAL COST TO THE STATE.
  ALL ITEMS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
  PROVIDE LECTRIC UNIONS OR SEPARATIONS AT ALL DISSIMILAR METALS.
  PROVIDE DELECTRIC UNIONS OR SEPARATIONS AT ALL DISSIMILAR METALS.
  RROVIDE ACCESS PANELS FOR ALL ITEMS UNDER THIS SECTION REQUIRING SERVICING, INSPECTION, MAINTENANCE, AND ADJUSTMENT.
  INSTALLATION SHALL BE FREE FROM DEFECTS FOR ONE YEAR FROM FINAL DATE OF ACCEPTANCE OF THE PROJECT AS A WHOLE.
  ALL STERLSHALL BE SIG STAINLESS FOR EXPOSED TO WEATHER STEEL.
  ALL STERLSHALL BE SIG STAINLESS FOR EXPOSED TO WEATHER STEEL.
  ALL STERLSHALL BE SIG STAINLESS FOR REPORDED ON WEATHER STEEL.
  ALL WALLROOF/FLOOR PENETRATIONS SHALL BE FLASHED, COUNTERFLASHED AND SEALED WATERTIGHT.
  TRENCHING, BACKFILL, CUSHION FILL IN ACCORDANCE WITH PLUMBING CODE. PROVIDE GRANULAR EART WITHOUT ROCKS OR DEPRISIS IN CUSHION OR BACKFILL SOIL FOR BEDDING AND BACKFILL SHALL BE TESTED FOR SOIL RESISTIVITY. IF SOIL RESISTIVITY IS LESS THAN 20,000 OHMS-CM, PROVIDE CATHODIC PROTECTION OF UNDERGROUND STEEL (INCLUDING GAS) AND COPPER LINES.
  ALL EXTERIOR FASTEMERS, BOLTS SCREWS SHALL BE STAINLESS STEEL TYPE 316.
  ALL SWITCHES SHALL BE IN ACCORDANCE WITH PLUMBING AND ENERGY CODES.
  PROVIDE 12'L LONG ANTER MARKES STEEL STEEL STEEL STEEL STEEL STEEL STEEL (INCLUDING GAS) AND COPPER LINES.
  PROVIDE TRANLESS STEELLIZERS. STEELL PLAYED STAIL BE MOLTORY ONDE SATILL PLUMBING FINTURES, PROVIDE WATER RARKES STEELS AT ALL APPLANCES/FIXTURES WI

# COUNTY OF MAUI CODE OF ORDINANCES CHAPTER 16.16B MAUI COUNTY CODE AS AMENDED 2015 IECC

TO THE BEST OF MY KNOWLEDGE, THIS PROJECT'S DESIGN SUBSTANTIALLY CONFORMS TO THE BUILDING ENERGY CONSERVATION CODE FOR: Mechanical Component Systems

May Dote: 4/17/2020 Signature: Name: Randolph H. Murayama Title: President License No.: 3404–M

REVISION NO.	SYM.		DESCR	PTION		SHT./OF	DATE	APPROVED		
H. Adjoy PH H. Adjoy PROFESSIONAL ENGINEER No. 3404-M HAIL, U.S.			DEPA	RTME	STATE OF INT OF LAND AN ENGINEERIN	HAWAII ID NATU IG DIVIS	RAL RESO	OURCES		
				MAKENA STATE PARK IMPROVEMENTS, PHASE 2						
			LEGEND, STAMPS, NOTES							
EXPIR	ATION DAT	E: 4/30/2022					0 <b>*</b>			
This work y	vas prepar	ed by me or under	DESIGNED	RHM		SUBMITTE	D: APRIL 2	020		
my supervis project will	be under	my observation.	DRAWN:	BTM		DATE:	APRIL 2	020		
defined und	ter Section	16-115-2 of Rules, Professional	CHECKED:	RHM		CONIE:	AS NOTE	D		
Engineers, Londscope	Engineers, Architects, Londscape Architects	Surveyors, and ) Note:	APPROVED	D:	Carty Chang E-signed 2020-04-23 07	38AM HST	DF	AWING NO.		
Contractor dimensions with work.	shall chec at job be	k ond verify oil fore proceeding		BINEER	carty.s.chang@hawaii. State of Hawaii	gov ×lı	_	M-1		
	JOB	NO. F73C680B			SHEET NO1	9_ OF	34_ SHE	ETS		



## FIXTURE CONNECTIONS

PIPE SIZE TO EACH FIXTURE										
FIXTURE	DCW (IN)	DHW (IN)	DIRECT SAN (IN)	VENT (IN)	COMMENT					
(DRINKING FOUNTAIN)	3/4		2	2	2 fountains, 1 bottle filler					
(HOSE BIBB)	3/4				Loose key removable handle					
(LAVATORY)	1/2	1/2	2	2						
TDOOR COLUMN SHW	3/4				4 Heads, 1 Foot Spray					
P SINK	3/4		3	2						
(URINAL)	1		2	2	Provide water hammer arrestor, wall cleanout					
-V (WATER CLOSET VALVE)	1		3	2	Provide water hammer arrestor					
	-	-								

REVISION NO.	SYM.		DESCR	IPTION		SHT./OF	DATE	APPROVED		
OLPH H. MURPH			STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES							
* RAN	PROFES ENGI	NEER	MAKENA STATE PARK IMPROVEMENTS, PHASE 2							
0	AL	5. 4/10/2022								
EXFIR		2. 4/30/2022	DESIGNED			SUBMITTE		2020		
This work w my supervis project will	sion and a be under	ed by me or under onstruction of this my observation.	DRAWN:	BTM		DATE:	APRIL	2020		
("Observatik defined und Hawaii Adm	on of cont ler Section	struction" as 16-115-2 of Rules, Professional	CHECKED	RHM		SCALE:	AS NO	TED		
Engineers, Landscape	Architects, Architects	Surveyors, and ) Note:	APPROVE	D:	Carty Chang E-signed 2020-04-23 07:	38AM HST	. — –	DRAWING NO.		
dimensions with work.	at job be	s and verify all fore proceeding	CHIEF ENG	GINEEF	carty.s.chang@hawaii.g State of Hawaii Chief Engineer	ov xli	_	M-2		
	JOB N	NO. F73C680B			SHEET NO2	0_ OF _	<u>_34_</u> S⊦	IEETS		



REVISION NO.	SYM.		DESCRI	PTION	l.	SHT./OF	D	ATE	APPROVED	
VON	H. MURAL	STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION								
*	NEER	MAKENA STATE PARK IMPROVEMENTS, PHASE 2								
P	1AL	. U	NORTH SITE PLUMBING DIAGRAMS							
EXPIR	ATION DAT	E: 4/30/2022					ð	f 1		
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defined und	on of cont der Section	16-115-2 of Rules, Professional	CHECKED:	RHM		SCALE:	AS	NOTE	D	
Engineers, Londscope	Architects Architects	Surveyors, and ) Note:	APPROVED	):	Carty Chang	20AM LICT		DR	AWING NO.	
Contractor dimensions with work.	shall chec at job be	k and verify all fore proceeding	CHIEF ENG	INEEI	carty.s.chang@hawaii.g State of Hawaii	sov xl	_	ľ	M-3	
	JOB I	NO. F73C680B			Chief Engineer SHEET NO2	21_ OF	34	SHE	ETS	



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Contractor dimensions with work.	shall chec at job be	ik and verify all fore proceeding	CHIEF ENGINEEF		carty.s.chang@hawaii.g State of Hawaii	zov <u>×lı</u>	-	ľ	<b>//-4</b>	
	JOB N	NO. F73C680B			SHEET NO2	2_ OF	34	SHE	ETS	





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			DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION						
* R	No. 3	NEER	MAKENA STATE PARK IMPROVEMENTS, PHASE 2						
P	AL	. U	DETAILS						
EXPIR	ATION DAT	E: 4/30/2022	Ø* ∞_						
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Engineers, Landscope	Architects, Architects	Surveyors, and ) Note:	APPROVE	D:	Carty Chang	20AM LIST		DR/	WING NO.
Contractor dimensions with work.	shall check and verify all at job before proceeding		CHIEF ENGINEEF		carty.s.chang@hawaii.g State of Hawaii	zov x.li	-	Ν	И-5
	JOB N	NO. F73C680B			SHEET NO2	3_ OF _	34_3	SHEE	TS



## **GENERAL NOTES**

ALL ELECTRICAL WORK TO BE DONE IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE COUNTY OF MAUI, THE 2014 EDITION OF THE NATIONAL ELECTRICAL CODE, AND LIFE SAFETY CODE, AND THE AMERICAN ELECTRICIANS HANDBOOK (BY CROFT), AND APPLICABLE INSTRUCTIONS OF MANUFACTURERS OF EQUIPMENT AND MATERIAL SUPPLIED FOR THIS PROJECT.

2. ALL MATERIALS TO BE NEW AND BE LISTED BY UNDERWRITERS LABORATORIES AS CONFORMING TO ITS STANDARDS WHERE SUCH STANDARDS EXIST.

INSTALLATION TO BE COMPLETE IN EVERY DETAIL AND READY FOR USE. ANY ITEM SUPPLIED BY THE CONTRACTOR DEVELOPING DEFECTS WITHIN ONE (1) YEAR OF FINAL ACCEPTANCE BY OWNER, TO BE REPLACED BY MATERIALS, APPARATUS OR PARTS INCLUDING INSTALLATION LABOR TO MAKE THE DEFECTIVE FORTION CONFORM TO THE TRUE INTENT AND MEANING OF THE DRAWINGS AND SPECIFICATIONS, AT NO ADDITIONAL COST TO THE OWNER. CONTRACTOR TO ALSO WARRANTY THEIR WORKMANSHIP FOR THE SAME ONE (1) YEAR PERIOD TO BE FREE OF DEFECTS.

4. THE CIRCUIT ROUTING AND LAYOUT ARE TYPICAL ONLY AND MAY BE VARIED IN A LOGICAL ORDER. PREPARE A RECORD DRAWING REFLECTING ANY DEVIATIONS TO TURN OVER TO THE ENGINEER AT THE COMPLETION OF THE WORK. ANY DEVICE MAY BE RELOCATED WITHIN 10 FEET BEFORE INSTALLATION AT THE DIRECTION OF THE ARCHITECT/ENGINEER WITHOUT ADDITIONAL COST TO THE OWNER.

5. ALL WORK TO BE PERFORMED IN A NEATLY EXECUTED AND WORKMANLIKE MANNER.

6. ANY DEVIATIONS FROM THE PLANS AND SPECIFICATIONS TO BE REFERRED TO THE ENGINEER PRIOR TO IMPLEMENTATION FOR APPROVAL.

CONDUCTORS SHALL BE TYPE THHN/THWN COPPER "UNLESS NOTED ON PLANS". MINIMUM POWER CONDUCTOR SIZE TO BE #12 AWG.

 VERIFY EQUIPMENT LOCATION, MOUNTING HEIGHT, AND ELECTRICAL REQUIREMENT/ CONNECTION WITH OWNER OR EQUIPMENT SUPPLIER PRIOR TO INSTALLATION. CONTRACTOR TO MAKE ADJUSTMENTS TO MEET REQUIREMENT OF ACTUAL EQUIPMENT INSTALLED. ALL CHANGES TO COMPLY WITH ALL APPLICABLE COUNTY CODES, NATIONAL ELECTRICAL CODE, AND LIFE SAFETY CODES. NOTE CHANGES ON "AS-BUILT" DRAWING

 WHERE POSSIBLE, ALL WIRING SHALL BE CONCEALED IN WALLS, CEILINGS, FLOORS, AND FURRED SPACES UNLESS OTHERWISE NOTED. ALL WIRING TO BE INSTALLED IN CONDUIT UNLESS NOTED OTHERWISE. ALL CONDUITS TO BE INSTALLED PARALLEL AND PERPENDICULAR TO WALLS AND CEILINGS. GROUP RELATED CONDUITS ON A RACK WITH 25% SPARE CAPACITY. SUPPORT CONDUITS PER NATIONAL ELECTRICAL CODE.

10. VERIFY AND CHECK ALL DIMENSIONS AT JOB PRIOR TO PROCEEDING WITH WORK. 11. TORQUE ELECTRICAL CONNECTIONS PER MANUFACTURER'S RECOMMENDED SPECIFICATIONS.

12. BALANCE ELECTRICAL LOAD AT PANEL.

13. REMOVE ANY UN-USED ELECTRICAL WIRING.

14. COORDINATE AND SCHEDULE POWER OUTAGES WITH OWNER.

15. PROVIDE EQUIPMENT GROUNDING AS REQUIRED BY CODE.

16. PENETRATIONS OF HORIZONTAL ASSEMBLIES (LISTED IN IBC 2006 SEC. 712.4) AND FIRE-RESISTANCE-RATED WALL ASSEMBLIES (LISTED IN IBC 2006 SEC. 712.3) SHALL BE PROTECTED BY METHODS DESCRIBED IN IBC 2006 SEC. 712.

	COUNTY OF MAUI MAUI COUNTY CODE, CHAPTER 16.16B ENERGY CODE COMMERCIAL PROVISIONS							
	COMPLIANCE METHOD CHECK APLLICABLE METHOD							
	C401.2(1) ANSI/ASHRAE/IESNA 90.1							
	C401.2(2) SECTIONS C402 THROUGH C406							
	C401.2(3) SECTIONS C402.5, C403.2, C404, C405.2, C405.3, C405.4, C405.6 & C407							
	C101.2 (ALTERNATIVE)							
TO TH CONF	TO THE BEST OF MY KNOWLEDGE, THIS PROJECT'S DESIGN SUBSTANTIALLY CONFORMS TO THE ENERGY CODE.							
SIGNA NAME	TURE:							

TITLE: LICENSE NO.: 9006-E

11Jul-	D
DON H. SUZUKI	
PRINCIPAL	
9006-F	

PCD-1	P <u>CD-</u> 1	PCD-1: REVISED	LIGHTING AND CONTROL		11/02/22					
REVISION NO.	SYM.		DESCRIPTION	SHT./OF	DATE	APPROVED				
	ON H. LICE PROFES ENGI	SU- NSED SSIONAL NEER	STATE OF DEPARTMENT OF LAND AN ENGINEERIN MAKENA ST	HAWAII	RAL RESC	OURCES				
*	NO. 9	1006-E	IMPROVEMENTS, PHASE 2							
11	XVA I		ELECTRICAL SITE PLAN, GENERAL NOTES, & COMPLIANCE STATEMENT							
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This wo	rk was prepare	d by me or under my	DESIGNED: DS	SUBMITTE	D: DEC. 20'	19				
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JOB NO. F73C680B

SHEET NO. 24 OF \_34\_ SHEETS



NOT TO SCALE

REVISION NO.	SYM.		DESCRIP	TION	1	SHT./OF	DATE	APPROVED	
	ON H.	SUZUA	STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION						
(*	NO, 9	NSED SSIONAL NEER	MAKENA STATE PARK IMPROVEMENTS, PHASE 2						
11	AVA		:	SING	GLE LINE DIAGRA & LUMINARE	M, PV D SCHEDI	ATA TABL ULE	E,	
C BXPI	ATION DAT	TE 4/30/2022					0×		
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			CHECKED:	DS	Carty Chang	SCALE	AS NOTE	D	
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	JOB	NO. F73C680B			SHEET NO25_	OF _34	4_SHEET	S	

NEW FIRERAPTOR FRS-ESW RAPID SHUTDOWN SWITCH





SHEET NO. 26 OF 34 SHEETS

COORDINATE ROOF PENETRATIONS WITH ROOFING CONTRACTOR. CONTRACTOR SHALL GUARANTEE INSTALLATION OF PV EQUIPMENT SHALL IN NO WAY AFFECT THE WARRANTY OF THE ROOF.



PV MODULE		- MID-CLAMP - UNIRAC SC RAIL OR AF - L-FOOT BRAC - S-5 CLIP MAT METAL ROOF STANDING SE METAL ROOF	/END-CLAM /LARMOUN /PROVED /KET CH PER TYPE. /AM /NG	MP IT EQUAL
MOL		METAL ROOFI	NG	
PCD-1 PCD-1 REVISED LIGHTIN	NG AND CONTROL		11/02/22	
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			ARK	
	IMPROVE	MENTS, PH	ASE 2	
NO. 9006-E				
	ELEVA	TION & DETAI	LS	
EXPERIMENTION DATE 1730/2024				
This work was prepared by me or under my supervision and construction of this project	DESIGNED: DS	SUBMITTE	DEC. 201	9
will be under my observation.	DRAWN: JE	DATE:	DEC. 201	9
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	CHIEF ENGINEER	DATE		. т
JOB NO. F73C680B	SHEET NO	27 OF 34	SHEETS	3

## GENERAL NOTES

## **GENERAL**

- A. CONSTRUCTION OF THIS PROJECT SHALL CONFORM TO THE INTERNATIONAL BUILDING CODE, 2012 EDITION, AND STANDARDS REFERENCED THEREIN.
- THE CONTRACTOR SHALL VERIFY ALL FIELD DIMENSIONS, EXISTING GROUND ELEVATIONS AND CONDITIONS AGAINST THE PROJECT DRAWINGS PRIOR TO
- STARTING WORK. ALL DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL EXCAVATION PROCEDURES INCLUDING SHORING, LAGGING, AND PROTECTION OF ADJACENT PROPERTIES, STRUCTURES, STREETS AND UTILITIES IN ACCORDANCE WITH ALL NATIONAL, STATE AND LOCAL ORDINANCES.
- DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR JOBSITE SAFETY. THE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR THE DESIGN AND PROVISION OF ALL TEMPORARY BRACING, SHORING, GUYS, ETC. IN ACCORDANCE WITH ALL NATIONAL, STATE AND LOCAL SAFETY ORDINANCE.
- SPECIFIC DETAILS AND SCHEDULES SHALL TAKE PRECEDENCE OVER TYPICAL DETAILS AND SCHEDULES. IN GENERAL, DETAILS AND NOTES IN DRAWINGS SHALL TAKE PRECEDENCE OVER THE SPECIFICATIONS.
- ALL OMISSIONS OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND/OR SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND RESOLVED BEFORE STARTING ANY WORK SO INVOLVED.

## DESIGN LOADS:

- A. LATERAL LOADS:
- EARTHQUAKE OCCUPANCY CATEGORY= II Ss = 1.004SI = 0.265SITE CLASS 'D SEISMIC DESIGN CATEGORY 'D'

  - | = 1.0
- SEISMIC FORCE RESISTING SYSTEM SPECIAL REINFORCED MASONRY SHEAR WALLS (R=5)
- WIND: EXPOSURE C 2.
- 130 MPH VELOCITY
- Kzt = 0.90
- UNIFORM LIVE LOADS
- ROOF 2

## CONCRETE

S

- ALL CONCRETE WORK SHALL CONFORM TO ACI 318. PLACEMENT OF CONCRETE SHALL BE IN CONFORMANCE WITH ACI 301.
- ALL CONCRETE SHALL BE NORMAL WEIGHT.
- AGGREGATES SHALL CONFORM TO ASTM C33
- CEMENT SHALL CONFORM TO ASTM C150, TYPE I OR II. BUD.
- WATER CEMENT RATIO SHALL NOT EXCEED 0.50.

8 DAT CUMPRESSIVE	STRENGTH, A	GGREGATE SIZE AND	J SLUMP SHALL	BF
	STRENGTH	MAXIMUM	SLUMP	
	PSI	AGGREGATE	+/- 1"	
LABS-ON-GRADE	4000	3/4"	4"	
OOTINGS	4000	3/4"	4"	

- THE CONTRACTOR SHALL NOTIFY THE ENGINEER 4 WORKING DAYS PRIOR TO ANY CONCRETE POUR SO A REVIEW OF THE REINFORCING STEEL LAYOUT AND CONCRETE POUR CAN BE MADE. NO POUR SHALL PROCEED WITHOUT PRIOR REVIEW.
- ALL WALKWAY SLABS-ON-GRADE SHALL BE POURED WITH CRACK CONTROL JOINTS
- SPACED AT 5'-O" MAXIMUM OR AS SHOWN IN ARCHITECTURAL DRAWINGS.
- CONCRETE SHALL BE CURED WITH CURING COMPOUND
- THE CONTRACTOR SHALL SUBMIT CONCRETE MIX DESIGNS FOR REVIEW AT LEAST
- THREE WEEKS PRIOR TO CONCRETE POURS. WHEN POURING CONCRETE FOOTINGS, CONSOLIDATE BY MECHANICALLY VIBRATING.
- CONCRETE BLOCK MASONRY:
- CONCRETE BLOCK SHALL BE HOLLOW LOAD BEARING UNITS CONFORMING TO ASTM C90. BLOCK TYPES SHALL BE SPLIT-FACE, & SMOOTH FACE. COORDINATE BLOCK
- TYPE WITH ARCHITECTURAL DRAWINGS.
- MASONRY MORTAR SHALL BE TYPE "S" 1800 PSI STRENGTH.
- MASONRY GROUT SHALL HAVE A MINIMUM 28 DAY STRENGTH OF 2500 PSI AND CONFORM TO ASTM C476.
- DESIGN IS BASED UPON AN ULTIMATE COMPRESSIVE STRENGTH OF THE
- MASONRY ASSEMBLY OF 1500 PSI.
- ALL WALLS SHALL BE CONSTRUCTED IN CONVENTIONAL RUNNING BOND, UNLESS NOTED OTHERWISE.
- ALL CELLS SHALL BE SOLID GROUTED, REINFORCING SHALL BE SECURED AGAINST DISPLACEMENT PRIOR TO GROUTING BY WIRE POSITIONERS AT INTERVALS NOT EXCEEDING 200 BAR DIAMETERS NOR 8'-0"
- REINFORCING STEEL IN MASONRY SHALL BE LAPPED 40 BAR DIAMETERS OR 2'-0" MINIMUM, UNLESS OTHERWISE NOTED.
- GROUT MASONRY IN 5'-0" LIFTS MAXIMUM. CLEANOUTS ARE REQUIRED FOR ALL GROUT POURS OVER 5'-0" IN HEIGHT.
- IF GROUT POUR IS STOPPED ONE HOUR OR LONGER, PROVIDE HORIZONTAL
- CONSTRUCTION JOINTS BY STOPPING THE GROUT 1-1/2" BELOW THE TOP OF THE BLOCK. THE THICKNESS OF THE GROUT BETWEEN THE INSIDE FACE OF BLOCK UNITS AND
- REINFORCING STEEL SHALL BE NOT LESS THAN 1/2". THE CLEAR SPACE BETWEEN PARALLEL BARS IN WALLS SHALL BE NOT LESS THAN THE BAR DIAMETER NOR 1"

- REINFORCING STEEL
- A. ALL REINFORCING BARS SHALL BE EPOXY COATED AND CONFORM TO ASTM A775, GRADE 60. WELDING OF REINFORCING BARS SHALL BE PROHIBITED.
  - MINIMUM CONCRETE COVER FOR REINFORCING BARS SHALL BE:
  - 1. CAST-IN-PLACE CONCRETE:
  - CONCRETE CAST AGAINST FARTH
    - FORMED CONCRETE EXPOSED TO EARTH OR WEATHER b.
- D. PROVIDE DOWELS IN FOOTINGS THE SAME SIZE AND SPACING AS WALL BARS, UNLESS OTHERWISE NOTED.
- E. ALL REINFORCING STEEL SHALL BE LAPPED OR SPLICED AT LOCATIONS AS INDICATED. WHERE LAP OR SPLICE LOCATIONS ARE NOT SPECIFICALLY INDICATED, LAPS OR SPLICES SHALL BE WELL STAGGERED.
- ALL REINFORCING STEEL SHALL BE LAPPED 50 BAR DIAMETERS OR 2'-0" MINIMUM UNLESS OTHERWISE NOTED IN PLANS.
- G. ANCHOR BOLTS, DOWELS AND OTHER EMBEDDED ITEMS SHALL BE SECURELY TIED IN PLACE BEFORE CONCRETE IS POURED.

- COLD FORMED STEEL RAFTERS, AND TRUSSES: A. ALL WORK SHALL COMPLY WITH THE "SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS" OF THE AISI, LATEST EDITION.
- ALL FRAMING DESIGNATIONS SHOWN ON THE DRAWINGS ARE AS DEFINED AND ADOPTED BY THE STEEL STUD MANUFACTURER'S ASSOCIATION (SSMA).
- C.
- THE STEEL SHALL CONFORM TO ASTM A1003: 1. GRADE 50, G90 GALVANIZED STEEL, FOR 54 MILS (16 GAUGE) AND HEAVIER. 2. GRADE 33, G90 GALVANIZED STEEL, FOR 43 MILS (18 GAUGE) AND LIGHTER.
- ALL FRAMING COMPONENTS SHALL BE GALVANIZED AND CONFORM TO ASTM A1003. ALL FRAMING COMPONENTS SHALL BE CUT SQUARELY ON OR AN ANGLE SQUARELY FIT AGAINST ABUTTING MEMBERS. STUDS SHALL BE PLUMBED, ALIGNED, AND TIGHTLY NESTED IN BOTH UPPER AND LOWER RUNNERS WITH SECURE ATTACHMENT TO THE
- FLANGES OF FACH RUNNER F. ALL PRE-FABRICATED METAL CONNECTORS INDICATED ON DRAWINGS SHALL BE
- GALVANIZED PER ASTM A653. FOLLOW FASTENING SCHEDULE AS SPECIFIED BY THE MANUFACTURER.
- G. FASTENING OF COMPONENTS SHALL BE WITH SELF-DRILLING SCREWS OR WELDING. WELDS SHALL BE OF SUFFICIENT SIZE TO ENSURE THE STRENGTH OF THE CONNECTION. MINIMUM WELD SHALL BE OF 1/8 INCH BY 1-INCH LONG. WIRE TYING SHALL NOT BE PERMITTED
- H. ALL SCREWS SHALL BE SELF-DRILLING/TAPPING FASTENERS CONFORMING TO ASTM C954. IN LENGTH RECOMMENDED BY SHEATHING MANUFACTURER FOR THICKNESS OF SHEATHING BOARD TO BE ATTACHED. ALL SCREWS SHALL BE CERAMIC COATED GALVANIZED HAVING A SALT-SPRAY RESISTANCE OF MORE THAN 800 HOURS OF SALT-FOG PER ASTM B117. SCREWS SHALL PENETRATE JOINED MEMBERS BY NOT LESS THAN THREE (3) EXPOSED THREADS.
- REPAIR DAMAGE TO GALVANIZED COATING USING ASTM A780 ZINC RICH PAINT FOR GALVANIZING DAMAGE BY HANDLING, TRANSPORTING, CUTTING, WELDING, OR BOLTING, 30# ROOFING PAPER OR EQUIVALENT BOND BREAKING MATERIAL OR SEALANT SHALL
- BE APPLIED BETWEEN ALL FRAMING & CONCRETE OR MASONRY WORK. K. ALL TRUSSES AND RAFTERS SHALL BE DESIGNED BY THE FABRICATOR IN ACCORDANCE
- WITH THE AMERICAN IRON AND STEEL INSTITUTE (AISI) "SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS", LATEST EDITION. DESIGN TO FIT DIMENSIONS NOTED ON THE PLANS FOR THE FOLLOWING MINIMUM HORIZONTAL PROJECTED LOADS (SELF WEIGHT OF TRUSS NOT INCLUDED):

- WIND LOADS SFF S-7
- L. ALL TRUSSES SHALL SATISFY STRESS AND DEFLECTION REQUIREMENTS. ALLOWABLE TOTAL LOAD DEFLECTION SHALL BE SPAN/240, BUT NEVER MORE THAN 1".
- ALLOWABLE LIVE LOAD DEFLECTION SHALL BE SPAN/360.
- WEB CONFIGURATION SHOWN ON ELEVATION ARE SCHEMATIC ONLY. TRUSS MANUFACTURER SHALL DETERMINE ACTUAL WEB AND CHORD SIZES, CONFIGURATION, AND SIZE OF TOP CHORD, NOTED ON ELEVATIONS. THE CONTRACTOR SHALL SUBMIT THE FOLLOWING FOR REVIEW PRIOR TO
- STARTING FABRICATION:
- TABRICATION AND ERECTION DRAWING SHOWING TRUSS LOCATIONS, BRACING, TEMPORARY AND PERMANENT MEMBER SIZES, DIMENSIONS, CONNECTOR PLATES, TEMPORART AND PERMANENT MEMOER SIZES, DIMENSIONS, CONNECTOR PLATE PLATE DIMENSIONS AND CAPACITIES STAMPED BY A LICENSED STRUCTURAL ENGINEER REGISTERED IN THE STATE OF HAWAII. DESIGN CALCULATION PREPARED AND STAMPED BY A LICENSED STRUCTURAL ENGINEER REGISTERED IN THE STATE OF HAWAII.
- N. CONTRACTOR SHALL GIVE NOTIFICATION TO THE ENGINEER PRIOR TO ENCLOSING THE TRUSSES TO PROVIDE AN OPPORTUNITY FOR REVIEW OF THE INSTALLATION.
- METAL ROOFING
- A. METAL ROOFING SHALL BE 20 GAUGE MINIMUM, STRUCTURAL QUALITY, CONFORMING TO ASTM A446, GRADE A. DECK SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A525, G90 AND PRE-FINISHED ON TWO SIDES.
- B. METAL ROOFING SHALL CONFORM TO THE "SDI SPECIFICATION AND COMMENTARY FOR STEEL ROOF DECK" AS ADOPTED BY THE STEEL DECK INSTITUTE.
- C. DECK PROFILE SHALL HAVE THE MINIMUM SECTION PROPERTIES:
- DEPTH, 1-1/2 IN
- MOMENT OF INERTIA, (I) 0.231 IN4
- SECTION MODULUS, (+S) 0.233 IN3 SECTION MODULUS, (-S) 0.244 IN3
- D. ATTACH DECKING PER MANUFACTURER'S RECOMMENDATIONS BUT NOT LESS THAN AS FOLLOWS:
  - PERPENDICULAR OVER SUPPORTS 5/8" DIAMETER PUDDLE WELDS
  - (5 WELDS MINIMUM PER SHEET)
  - PARALLEL OVER SUPPORTS 5/8" DIAMETER PUDDLE WELDS @ 12" OC
- AT SIDE SEAMS #10 TEK SCREWS @ 12" OC
   MINIMUM BEARING OF DECKING ON SUPPORTS SHALL BE 2".
- F. QUALIFIED LIGHT GAUGE WELDERS SHALL DO WELDING.

FOUNDATION NOTES:

D.

A.

C.

- THE FOUNDATION DESIGN IS BASED ON AN ASSUMED SOIL BEARING CAPACITY OF 1,500 PSF AND BOTTOM OF FOOTINGS SHALL BE AT LEAST 12 INCHES BELOW THE LOWEST Α. ADJACENT COMPACTED GRADE AND BEAR ON PROPERLY COMPACTED ON-SITE SOILS OR PROPERLY COMPACTED FILL.
- ALL LOOSE AND DISTURBED SOIL AT THE BOTTOM OF FOOTING EXCAVATIONS SHALL BE REMOVED TO FIRM SOIL OR THE DISTURBED SOIL SHALL BE COMPACTED PRIOR TO LAYING OF STEEL FOR PLACING OF CONCRETE. THE BOTTOM OF ALL FOOTINGS SHALL BE MECHANICALLY COMPACTED TO PRODUCE A FIRM/UNYIELDING SURFACE. BACKFILL AROUND THE PERIMETER OF ALL FOUNDATIONS SHALL BE MECHANICALLY COMPACTED TO PRODUCE A FIRM/UNYIELDING SURFACE.
- SITE PREPARATION AND GRADING: C.

MATERIAL IS FINE-GRAINED.

THE FOLLOWING WORK REQUIRES STRUCTURAL INSPECTION

COMPLETE LOAD PATH AND UPLIFT TIES.

PLACEMENT OF MASONRY GROUT.

PLACEMENT OF CAST-IN-PLACE CONCRETE.

SPECIAL INSPECTION REQUIREMENTS:

REINFORCING STEEL.

ACCESSIBLE FOR INSPECTIONS.

1. ALL VEGETATION, WEDS, BRUSH, ROOTS, STUMPS, RUBBISH, DEBRIS, AND OTHER DELETERIOUS MATERIALS SHALL BE REMOVED AND DISPOSED OFF-SITE. IN AREAS TO BE FILLED, AND AT FINISH SUBGRADE IN CUT OR EXCAVATED AREAS, THE EXPOSED SURFACE SHALL BE SCARIFIED TO A DEPTH OF 6 INCHES, MOISTURE CONDITIONED TO NEAR OPTIMUM MOISTURE AND THEN COMPACTED WITH A ROLLER WEIGHING NOT LESS THAN 10,000 POUNDS TO AT LEAST 90 PERCENT OF THE MAXIMUM DRY DENSITY. IF SOFT OR LOOSE SPOTS ARE ENCOUNTERED THAT CANNOT BE RE-COMPACTED, THE LOOSE/SOFT AREAS SHALL BE REMOVED TO FIRM MATERIAL AND THE RESULTING DEPRESSION SHALL BE FILLED WITH PROPERLY COMPACTED FILL. SLABS-ON-GRADE WITHIN BUILDING OUTLINE: 1. THE SUBGRADE SOIL SHALL BE MOISTURE CONDITIONED TO WITHIN 0 AND 3 PERCENT OF THE WET-SIDE OF OPTIMUM MOISTURE CONTENT AND COMPACTED TO A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY (AS DETERMINED BY THE ASTM D 1557 TEST PROCEDURE) IF THE MATERIAL IS COARSE GRAINED OR TO A MINIMUM OF 90% OF THE MAXIMUM DRY DENSITY (AS DETERMINED BY THE ASTM D 1557 TEST PROCEDURE) IF THE 2. PLACE A VAPOR BARRIER MATERIAL DIRECTLY BELOW THE SLAB. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT SPECIAL INSPECTION OF PORTIONS OF THE WORK, AS REQUIRED BY THE BUILDING CODE OF THE CITY AND COUNTY OF HONOLULU, IS MADE AT THE APPROPRIATE TIME. THE CONTRACTOR SHALL GIVE TIMELY NOTICE OF WHEN AND WHERE INSPECTIONS ARE TO BE MADE AND PROVIDE ACCESS FOR THE INSPECTOR. THE CONTRACTOR SHALL CORRECT DEFECTIVE WORK AT NO ADDITIONAL COST TO THE OWNER AND PAY FOR RE-INSPECTION. DRILLED AND EPOXIED THREADED RODS IN CONCRETE OR MASONRY. THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE OWNER, LICENSED ENGINEER OR ARCHITECT OF RECORD, AND OTHER OWNER-DESIGNATED PERSONS. REPORTS SHALL INDICATE THAT THE WORK INSPECTED WAS DONE IN CONFORMANCE TO APPROVED CONSTRUCTION DOCUMENTS. THE SPECIAL INSPECTOR SHALL SUBMIT A FINAL SIGNED REPORT TO THE OWNER AND LICENSED ENGINEER OR ARCHITECT OF RECORD, STATING WHETHER THE WORK REQUIRING SPECIAL INSPECTION WAS, TO THE BEST OF THE INSPECTORS KNOWLEDGE, IN CONFORMANCE TO THE APPROVED PLANS AND SPECIFICATIONS AND THE APPLICABLE WORKMANSHIP PROVISIONS OF THIS CODE. PRIOR TO THE FINAL INSPECTION REQUIRED UNDER THE BUILDING CODE SECTION 109.3.10 THE LICENSED ENGINEER OR ARCHITECT OF RECORD SHALL SUBMIT A WRITTEN STATEMENT VERIFYING RECEIPT OF THE FINAL INSPECTION REPORTS AND DOCUMENTING THAT THERE ARE NO UNRESOLVED CODE REQUIREMENTS THAT CREATE SIGNIFICANT PUBLIC SAFETY DEFICIENCIES. CONTRACTOR SHALL SUBMIT A STATEMENT CONTAINING AN ACKNOWLEDGEMENT OF AWARENESS OF THE SPECIAL INSPECTION REQUIREMENTS CONTAINED ON THE DRAWINGS AND THAT THE CONSTRUCTION REQUIRING SPECIAL INSPECTIONS WILL BE MADE EVISION NO. SYM DESCRIPTION SHT./OF DATE APPROV STATE OF HAWAII HAN W OKU DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION LICENSED ROFESSION MAKENA STATE PARK IMPROVEMENTS, PHASE 2 ENGINEER No. 7811-S Alin Malin GENERAL NOTES of be DESIGNED: AK SUBMITTED: APRIL 2020 DRAWN: CO DATE: APRIL 2020 supervision and construction of will be under my observation, of construction" as defined a 16-115-2 of Hawaii Adminis CHECKED: EWO SCALE. AS NOTED **Carty Chang** PPROVED: DRAWING NO E-signed 2020-04-23 07:38AM HST carty.s.chang@hawaii.gov S-1 CHIEF ENGINEER State of Hawaii SHEET NO. 28 OF 34 SHEETS JOB NO. F73C680B















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			1 <sup>*</sup> 6 <sup>*</sup> SCALE:	0 3/4" = 1	1' '–0"	2' 3'					
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	EXPIR	ATION DAT	E: 4/30/2022						ð	6 6	Z_
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	upervision II be unde	and constr my obser	vation of this project vation. ("Observation	DRAWN:	CO		DA	TE:	AP	RIL 20	20
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SHEET NO. 34 OF 34 SHEETS

## APPENDIX



## PRELIMINARY ENGINEERING REPORT

## PRELIMINARY

ENGINEERING, DRAINAGE AND SOIL EROSION CONTROL REPORT

FOR

## MAKENA STATE PARK COMFORT STATIONS

(NORTH AND SOUTH SITES)

## AT MAKENA, MAUI, HAWAII

TAX MAP KEY: (2) 2-1-06:30 (PORTIONS)

## PREPARED FOR:

STATE OF HAWAII DEPARTMENT OF LAND & NATURAL RESOURCES ENGINEERING DIVISION P O BOX 273 HONOLULU, HI 96809

## PREPARED BY:



ENGINEERS, INC. CIVIL ENGINEERING . LAND SURVEYING . CONSTRUCTION MANAGEMENT & INSPECTIONAL SERVICES

> 871 KOLU STREET, SUITE 201 WAILUKU, MAUI, HAWAII - 96793 JOB 17-044

> > FEBRUARY 2020

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IX.

Χ.

#### FIGURE 6 FLOOD HAZARD ASSESSMENT REPORT

-2-

#### INTRODUCTION:

1.

The State Parks Division of the Hawaii Department of Land and Natural Resources is proposing comfort station and additional parking lot improvements at two (2) sites at the existing Makena State Park Facilities.

The purpose of this study is to assess the siting, anticipated infrastructural requirements and drainage improvements for the development of said comfort stations on the North and South Sites of Makena State Park.

#### LOCATION: 11.

The project site is located in Makena, on the southwest side of the Island of Maui and is designated as Parcel 30 of Tax Map Key (2) 2-1-06. See Figures 1 and 2.

#### ACCESS:

III.

The project sites are accessed from Makena-Keoneolo Road which is under the jurisdiction of the County of Maui.

The proposed comfort station sites are adjacent to parking lots on both the north and south site that are connected to Makena-Keoneoio Road via 24 foot wide A.C. paved roadways.

#### IV. FLOODING HAZARD:

The sites are located within Zone "X" as shown on Map No. 1500030686F of the Flood Insurance Rate Map for the County of Maul dated September 19, 2012. Zone "X" is designated where the potential for flooding is minimal or where

-1-

the areas were determined to be outside the 0.2% annual chances of flood plain. Hence, the proposed project does not need flood development permits as required by Chapter 19.62 of the Maui County Code. (See Figure 6)

#### V. PROPOSED PROJECT:

The proposed comfort station building plans and outdoor shower are shown on Figures 3A, 3B and 3C.

The proposed comfort station building includes a men's and women's restroom with a storage room, which includes a total of seven (7) water closets, 1 urinal, 4 lavatory sinks and 2 drinking fountains and an outdoor shower and encompasses a floor area of 784, square feet.

The proposed comfort station siting on the north site is shown on Figure 4. Likewise, the proposed siting on the south site is shown on Figure 5.

#### VI. WATER/FIRE PROTECTION SYSTEM:

#### A. EXISTING:

There is an existing 12" diameter waterline that runs on the mauka side of Makena-Keoneoio Road that is able to provide domestic water and fire protection for the proposed comfort station.

#### B. ANTICIPATED WATER/FIRE PROTECTION REQUIREMENTS:

The domestic flow requirements for the proposed project was estimated using the Maui County Dept. of Water Supply's (DWS) Water Meter Sizing Worksheet (see Exhibit B). The expected water demand for the proposed comfort station is 61.34 gallons per minute (gpm). The domestic demand was based on the use of low-flow plumbing fixtures with flush valve toilets.

Thus, the required water meter size is 11/2-inch based on DWS Standards (100 gpm capacity).

Per Maul County's Dept. of Fire and Public Safety, based on the anticipated "U" occupancy rating of the proposed comfort stations, no additional fire protection infrastructure is required.

#### C. ANTICIPATED IMPROVEMENTS:

The proposed improvements include installation of a 1½" water meter with manhole at each site to accommodate the projected water demand of 62 gpm. Downstream of the proposed 1½" water meter, the DWS will require the installation of a reduced pressure backflow preventer.

Finally, a 2½" diameter copper waterline is proposed to convey the domestic water from the meter to the comfort station as shown in Figures 4 and 5.

#### VII. WASTEWATER SYSTEM:

A. EXISTING:

There is no existing sewer system at the project site and vicinity.

#### B. ANTICIPATED IMPROVEMENTS:

The Division of State Parks has decided to collect, contain and pump out and truck wastewater generated by Park visitors. It has estimated that

-3-

-2-

approximately 1,000 and 500 visitors per day enjoy the north and south sites, respectively.

The anticipated wastewater flows for the north and south sites are shown in Exhibit C.

The proposed onsite wastewater containment systems are laid out on Figures 4 and 5.

#### VIII. PRELIMINARY DRAINAGE AND SOIL EROSION CONTROL STUDY:

#### A. GENERAL:

The preliminary Drainage Study, in general, is based on the requirements, formulas, charts and tables of the <u>Rules of the Design of Storm Drainage</u> <u>Facilities</u> of the County of Maui [1] hereinafter referred to as <u>County Drainage</u> <u>Standards</u>.

#### B. FLOODING HAZARD:

The site is located within Zone X as plotted on Map Nos. 1500030678F and 1500030686F dated September 19, 2012 of the Flood Insurance Rate Map for the County of Maui as shown on Figure 4. Zone X is designated as areas of minimal flooding or areas determined to be outside the 0.2% annual chance flood plain. Hence the proposed grading work is not subject to Chapter 19.62, Flood Hazard Areas, of the Maui County Code.

#### C. EXISTING DRAINAGE CONDITIONS:

The current drainage flow pattern is generally characterized by surface flow in a westerly direction discharging in the direction of the ocean. There exists no formal drainage system on or near the north or south comfort station sites.

#### D. DRAINAGE PLAN:

It is anticipated that the minimal increase in storm runoff generated by the impervious surfaces of the comfort station, appurtenant walkways and additional parking areas will be contained in a surface drainage basin adjacent to the proposed structure. (See Exhibit "A" for Drainage Calculations)

#### E. GRADING CONCEPT:

Grading for the proposed development area will be performed in compliance with the applicable requirements of the Maui County Grading Ordinance No. 2884 or Chapter 20.08 of the Maui County Code. The project area will be graded for the proper reception of the proposed parking lots, comfort stations and other surface improvements.

#### F. STORM RUNOFF DISCHARGES

#### North Site:

Based on the attached Drainage Calculations (Exhibit "A"), the project area, encompassing about 0.5 acres could generate the 1-hour storm discharges as follows:

-4-

50-year runoff peak rate:

- Existing = 0.7 cfs
- Developed = 2.5 cfs
- Increase = 1.8 cfs
- 50-year runoff volume:
  - Existing = 828 cf
  - Developed = 1,426 cf
  - Increase = 598 cf

#### South Site:

Based on the attached Drainage Calculations (Exhibit "A"), the

project area, encompassing about 0.2 acres could generate the 1-hour

storm discharges as follows:

50-year runoff peak rate:

- Existing = 0.3 cfs
- Developed = 1.2 cfs
- Increase = 0.9 cfs
- 50-year runoff volume:
  - Existing = 274 cf
  - Developed = 423 cf
  - Increase = 149 cf

#### G. ANTICIPATED IMPROVEMENTS:

The Maui County Drainage Standards allows onsite retention of the additional runoff generated by the development when there is no existing drainage system or adequate outlet to connect the development's drainage system. Onsite drainage basins will be constructed to retain storm water and shower water. The storage capacity of the retention basins must be at least equal to the 50-year, 1-hour runoff volume increase in accordance with the Maui County Drainage Standards.

#### H. OPERATION AND MAINTENANCE PLAN:

The operation and maintenance of the onsite drainage system will be handled by the State Parks Division. The recommended operation and maintenance activities will include, but not limited to:

- Inspection of the drainage facilities annually and after major storms. Repair damages, if any.
- Periodic inspection of the drainage system. Remove debris and sediment build-up, as required.
- Cleaning of parking areas periodically to minimize the entry of debris and sediments into the drainage system.

#### I. STORM RUNOFF VOLUME INCREASE:

The volume of the storm water runoff increase at the North Site is anticipated to be 598 cubic feet.

The volume of the storm water runoff increase at the South Site is anticipated to be 149 cubic feet.

Therefore, the proposed drainage basins must contain a minimum volume of 598 cubic feet at the North Site and 198 cubic feet at the South Site.

-7-

#### J. BEST MANAGEMENT PRACTICES (BMPs):

The proposed plan for temporary control of soil erosion and dust during grading operations is shown on Sheet 2 of the attached construction plans. The BMPs will include the following:

- 1. Control dust by means of water trucks.
- Graded areas shall be thoroughly watered after construction activity has ceased for the day and for weekends and holidays.
- All exposed areas shall be grassed as soon as finished grading is completed.
- 4. Minimize time of grading operations.
- Installation of silt fence, gravel bag berms or other approved sediment trapping devices along the makai limits of the grading area and drainage basin.
- Temporary control measures shall be in place and functional prior to grading and shall remain operational throughout the grading operations period or until permanent controls, such as grassing, are in place.

Best Management Practices shall be in compliance with Section 20.08.035 of the Maul County Code (Ord. No. 2684) and "Construction Best Management Practices (BMPs) for the County of Maui" of the Department of Public Works & Waste Management, May 2001.

#### K. CONCLUSION:

The proposed development will increase the existing storm runoff due to addition of impervious surfaces such as building roofs, pavement and concrete walkways. Despite the increase in runoff, the proposed development is not anticipated to create any adverse drainage effects on downstream properties and roadways. The recommended drainage improvements call for the impoundment of all the 50-year, 1-hour storm runoff volume anticipated to be generated by the proposed development; thereby reducing the present storm runoff into the downstream properties. The proposed retention basins will also have the effect of reducing the potential for sediments contained in the runoff from entering neighboring properties and eventually the ocean.

With the construction of the proposed drainage improvements, no adverse drainage effects to adjacent and downstream properties are anticipated.

#### EXHIBIT "A"

#### DRAINAGE CALCULATIONS

REFERENCE:

L

"Rules for the Design of Storm Drainage Facilities in the County of Maui" [1], referred to as Maui County Drainage Standards.

#### 11. METHODOLOGY:

Rational Method: A.

> For drainage areas that have areas less than 100 acres, the peak discharge based on 1-hour storm will be determined by the Rational Method, Q = CIA, in which:

- Q = flow rate in cubic feet per second (cfs)
- C = runoff coefficient for the drainage basin
- I = rainfall intensity in inches per hour for a duration equal to the time of concentration
- A = drainage basin in acres (area of proposed improvements)
- = 0.5 Acs. (North Site)
- = 0.2 Acres (South Site)

The factors used in the application of the formula were taken from applicable tables and charts of the Maui Storm Drainage Standards.

Rainfall Value: 1.

50-year, 1-hour rainfall = 2.5" (Plate 7)

2.	Time of Concentration	n, Tc: As determined from Plate 1.
	North Site:	
	Existing Conditions:	
	Length of Flow	= 540 Ft.
	Average Slope	= 2.3%
	Ta	= 19 min. (Poor Grass)
	Finished Conditions:	
	Length of Flow	= 540 Ft.
	Average Slope	= 2.3%
	T <sub>c</sub>	= 9 min. (Paved)
3.	Rainfall Intensity, I: A	As determined from Plate 4
	50-Year Storm:	= 4.2 in./hr. (Existing)
		= 5.3 in./hr. (Finished)
4.	Runoff Coefficient, C:	The runoff coefficients for the project area are
	as follows:	
	Existing Condition:	C = 0.34 (Tables 1 and 2)
	Finished Condition:	C = 0.95 (Table 2)

#### South Site:

Existing Conditions:	
Length of Flow	= 300 Ft.
Average Slope	= 2.8%
Te	= 14 min. (Poor Grass)

A-2

Finished Conditions: Length of Flow = 300 Ft. Average Slope = 2.8% = 6 min. (Paved) T. Rainfall Intensity, I: As determined from Plate 4 5, 50-Year Storm: 1 = 4.7 in./hr. (Existing) 1 = 6.1 in./hr. (Finished) Runoff Coefficient, C: The runoff coefficients for the project area are 6. as follows: Existing Condition: C = 0.34 (Tables 1 and 2) Finished Condition: C = 0.95 (Table 2) STORM RUNOFF RATE CALCULATIONS: 111. 50-Year, 1-Hour Storm: Q = CIA A. North Site: Q (Existing Condition) = 0.34 x 4.2 x 0.5 = 0.7 cfs Q (Finished Condition) = 0.95 x 5.3 x 0.5 = 2.5 cfs = 2.5 - 0.7 Increase = 1.8 cfs South Site: Q (Existing Condition) = 0.34 x 4.7 x 0.2 = 0.3 cfs Q (Finished Condition) = 0.95 x 6.1 x 0.2 = 1.2 cfs Increase = 1.2 - 0.3 = 0.9 cfs

A-3

STORM WATER VOLUME CALCULATIONS:North Site: (From Hydrographs) $V_A = V_{\text{Finished}} - V_{\text{Existing}}$ = 1,426 - 828= 598 c.f.South Site: (From Hydrographs) $V_A = V_{\text{Finished}} - V_{\text{Existing}}$ = 423 - 274= 149 c.f.

IV.

### Hydrograph Plot

Hydraflow Hydrographs by	/ Intelisolve	Thursda	y, Jan 23 2020, 12:17 PN
Hyd. No. 1			
NORTH SITE (PP	RE-Condition)		
Hydrograph type	= Rational	Peak discharge	= 0.73 cfs
Storm frequency	= 50 yrs	Time interval	= 1 min
Drainage area	= 0.500 ac	Runoff coeff.	= 0.34
Intensity	= 4.271 in/hr	Tc by User	= 19.00 min
IDF Curve	= Makena Comfort Station.IDF	Asc/Rec limb fact	= 1/1

Hydrograph Volume = 828 cuft



#### . . Hydrograph Plot Hydraflow Hydrographs by Intelisoive Thursday, Jan 23 2020, 12:20 PM Hyd. No. 2 NORTH SITE (POST-Condition) Hydrograph type = Rational Storm frequency = 50 yrs Drainage area = 0.500 ac Peak discharge = 2.64 cfs Time interval = 1 min Runoff coeff. = 0.95 Intensity = 5,558 in/hr Tc by User = 9.00 min **IDF** Curve = Makena Comfort Station.IDF Asc/Rec limb fact = 1/1

Hydrograph Volume = 1,426 cuft



## Hydrograph Plot

Inte	Esolve	Thursda	y, Jan 23 2020, 12:21 PN
RE-	Condition)		
-	Rational	Peak discharge	= 0.33 cfs
=	50 yrs	Time interval	= 1 min
-	0.200 ac	Runoff coeff.	= 0.34
=	4.804 in/hr	Tc by User	= 14.00 min
-	Makena Comfort Station.IDF	Asc/Rec limb fact	= 1/1
	E-1	RE-Condition) = Rational = 50 yrs = 0.200 ac = 4.804 in/hr = Makena Comfort Station.IDF	RE-Condition) = Rational Peak discharge = 50 yrs Time interval = 0,200 ac Runoff coeff. = 4.804 in/hr Tc by User = Makena Comfort Station.IDF Asc/Rec limb fact

Hydrograph Volume = 274 cuft







# Hydrograph IDF Curves

IDF file: Makena Comfort Station.IDF



Hydra	aflow IE	F Report	t	
Return		Equation Co	efficients (FHA)	
(Yrs)	в	D	E	
1	0.0000	0.0000	0.0000	
2	0.0000	0.0000	0.0000	

0.0000

-

		0.0000	0.0000	
10	27.3279	9.9000	0.6180	
25	0.0000	0.0000	0.0000	
50	32.9258	9.5000	0.6097	
100	0.0000	0.0000	0.0000	

Intensity = B / (Tc + D)^E

0.0000

.....

3

Return Period (Yrs) 1 2 3		Intensity Values (in/hr)														
(Yrs)	5 min	10	15	20	25	30	35	40	45	50	55	60				
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0				
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0				
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0				
10	5.15	4.30	3.75	3.35	3.04	2.80	2.60	2.44	2.30	2.18	2.07	1.9				
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0				
50	6.45	5.38	4.68	4.18	3.80	3.50	3.25	3.05	2.88	2.73	2.60	2.4				
100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				

0.0000

0.000

(N/A)

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Page 1 of 1

### Department of Water Supply WATER METER SIZING WORKSHEET - NON-RESIDENTIAL

Project Name:	Makena Slate Park Impro	vernonte, Phase 2	2 - North Site	<b>Building Permit</b>	No.(If applicable):	_
Contact Name:	Randolph Murayama	Phone No.:	8085298186	Email Address: ma-bla	Ine@hawail.m.com	
Property Address:					TMK: (2) 2-1-06:30	
Account Number:			Meter Number:		Existing Meter Size:	

INSTRUCTIONS: This form must be completed, signed and stamped by a licensed engineer or architect. Complete the items below and submit one Water Meter Sizing Worksheet for each water meter on the property as applicable. Refer to page 2 for additional information and requirements. Should you have any questions, please contact the DWS Engineering Division at 808-270-7835.

#### SZERO WATER USE SCENARIO? YES INO

By selecting "YES", the applicant signing this worksheet certifies that no additional water demand is being added, removed or replaced with this application. If you propose zero water use you do not need to complete below items 2, 3, 4 and 5.

	Flat	ures	Π	Fix	tures l	n Exh	ting	T	Fixte	ures R	emov	ed if	T					П				1.1	I	Total
	Ad	ded	Ш	100	Struc	ture				Appli	cable	1.1	1	T	fotal F	bitum	P.G	IJ	Fixtu	re Uni	t Mult	tiplier	Н	Fixtur
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Type of Fixture	LF	LF	L	LF	NLF	LF	NLF		LF	NLF	LF	NLF	1	LF	NLF	LF	NLF	Ш	LF	NLF	LF	NLF	Ц	Value
Bathtub/Shower COMBO			F			-		+	-			-	=				1	X	1,6	2.0	3.2	4.0	Н	1.00
howerheads in stall only		. 8	+	1.1	1	1	1.0	-					=[		1	8.0		X	1,6	2.0	3.2	4.0	Ы	16.0
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avatory Sink		. 4	ŀ	1				-					-			1.0		×	0.6	1.0	1,2	2.0	Ы	1.8
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Water Closet (Tollet) - FV		7	<b>]</b> +					-	-		1.1.1		=[		1.0	7.8		]×[	3.4	6.0	5.6	10.0	-	28.2
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aundry Tray/Tub		1	+					-					-			1.0			1.6	2.0	3,2	4.0	-	3.0
Nashing Machine	1		+	1				-	104				-					X	2.0	2.0	4.0	4.0	-	1
Dishwasher			1.	1		-		4					=					K	2.0	2.0	4.0	4.0	-	
Drinking Fountain (single)		1	1.	-				-	-				4			3.0		X	1.0	1.0	2.0	2.0	1-1	6.2
ce Machine		-	1.				1	-					-	-			1	1.	1.0	1.0	1.0	1.0	1-1	-
Soda Machine	-	-	۱.	-		-			-	-	-		4	-				14	1.0	1.0	1.0	1.0	1-1	
Trap Primer		. 5	1.	-				1	-		-		4	1	-	20			1.0	1.0	1.0	1.0	Ы	8.0
Hose Blb	1	-	1.	-		-		1	-		-		ł	26				1	3.0	3.0	5.0	5.0	1-1	62
Other:	-	-	4	-	1			1	-		-	-	4	-			-	1,1		-	-		14	
		-	1.	-		-		1			-		<u>_</u> †	-	1	-	-	1.		1	-	1	1-1	
*Date Faisting Flatures Verifi	ed by A	policy	12	-	7	/	-	-	-	-	-	-	D	OME	STIC V	ATE	R DEN	IAI	ND FTX	TURE	UNIT'T	OTAL:	г	10.0
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additional water demand is Other Miscellaneous Wate	asses r Den	sed. sand:	if f	illed i tach	by ded	icates d just	d wate	r lle	ne, p	lease pration	arovic 1 suff	le the i cient t	ner ID I	quire	d flow the th	rate e wat	In GPI ter der	M: ma	nd, Tr	otal pri	oposed	] GPM:	1	0
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to obtain a total now	1,936	n Gri	W:	_	_	AU	ach ao	an	onai	sheet	sasn	ecessa	ıγ	to su	tuce	in A le	ISUITY	ne	prope	zseq in	igano	n wate	10	emana.
a state in a second of the														IR	RIGA	NON	WATE	RI	DEMA	ND TO	TALIN	GPM		0
S TOTAL WATER DEMAN	D in G	PM (	the	sum	of tot	al GP	M from	n al	bove	tem	s 2, 3	and 4)	÷	61.3	34									
erify the total water demand	t is with	hin yo	uri	existit	g mete	r's ca	pacity,	oth	erwit	se a mu	ter up	grade	m	oy be	requir	ed. Re	fer to	Not	te K on	Foge	Tar eg	digona	In	formatik
G CERTIFICATION: I certif	y that erty, 1	the a will in	bo	ve wa	iter de ne Dep	mana	i is the	TO	TAL ter S	AMO	UNT C	OF WA	TE	R DE	MANI y add	O ON	THE N	AET C	TER.	Sel Sel	LICEN	SED	è	Monal
Applicant's Signature:	0	e la	1	3-	-			_	_	Dates	2/18	2020	_	_	2	Sea	/stan	np	là	PR	OFES!	EER	)	2
Print Name, Randolph H.	Mura	yama		11															14	1			1	21
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									2	Page 1	of 2									Y	All,	JST	1	T ADVAC

### Department of Water Supply WATER METER SIZING WORKSHEET - NON-RESIDENTIAL

Project Name:	Makena State Park Impro	vements, Phase 2	2 - South Site	Building	Permit No.(If applicable):
Project Name: Contact Name: Property Address:	Randolph Murayama	Phone No.:	8065298186	Email Address: 0	ma-blaine@hawall.tr.com
Property Address:					TMK: (2) 2-1-06:30
Account Number:			Meter Numbers		Existing Meter Size:

INSTRUCTIONS: This form must be completed, signed and stamped by a licensed engineer or architect. Complete the items below and submit one Water Meter Sizing Worksheet for each water meter on the property as applicable. Refer to page 2 for additional information and requirements. Should you have any questions, please contact the DWS Engineering Division at 808-270-7835.

#### STERO WATER USE SCENARIO? YES INO

By selecting "YES", the applicant signing this worksheet certifies that no additional water demand is being added, removed or replaced with this application. If you propose zero water use you do not need to complete below Items 2, 3, 4 and 5.

	Fixt	ures	П	Fixt	ures l	n Exh	ting	П	Fint	ires R	emov	ed If	Π		ot al F			П	Elver	in the	KAuls	Inline	П	Total
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Tune of Electrice	LE	LE	Ľ	LE	NIF	LF	INLE	ш	LE	NLF	LF	NLF	П	LF 1	NLF	LF	NLF	ш	LF	NLF	LF	NLF	Ш	Value
Pathtub /Showar COMBO			Н	-	Tees		- teat	H	-	1444	-		H	-		-		IJ	16	2.0	3.2	4.0	H	FAIlure
Chowarheads in stall only	-		Ľ	-	-	-	-	Ð		-	-	-	1			8.0	-	13	1.6	2.0	3.2	4.0	1.1	18.0
Bathtub ONLY	-	-	Ľ	-	-	-	-	11	-	-	-	-	1	-	-	-	-	13	1.6	2.0	3.2	4.0	1.1	
Sink (1 fauret)		-				-	-	1.1		-	-	-			-	-	1	1.	1.6	2.0	3.2	4.0	14	
Sink, small (bar/hand)		-		-	-	-	-	1.1	-	-	-		1.1		-	-	-	x	0.6	1.0	1.2	2.0	1-1	
Sink (3-comp., 2-faucet)	-		1.	-		-	-	1.1										1.	3.2	4.0	6.4	8.0	1-1	
Lavatory Sink			1.	-	-	-	1	1.1	-		-	-		-		40		13	0.6	1.0	1.2	2.0	1-1	48
Urinal	-	1	1.	1		-	-	1.1	-		-		H			1.0		k	1.7	3.0	2,8	5.0	1-1	2.5
Water Closet (Tollet) - FT	1.00		1.	1			1	1.1	-	1			-1					1×	1.7	3,0	2.8	5.0	1-1	
Water Closet (Tollet) - FV		7	1.					1.1	-				Ы			74		14	3.4	6.0	5.6	10.0	1-[	182
Bidet	-		14	-		-		1-1		1			4					14	2.0	2.0	4.0	4.0	1-1	
Laundry Tray/Tub	1		1.			-		11	1				Ы	-	-	1.A		k	1.6	2.0	3,2	4.0	1-1	82
Washing Machine			1+					11	-		-	1	-			1		k	2.0	2.0	4.0	4.0	1-	1
Dishwasher			1.					1-1											2.0	2.0	4.0	4.0	]-[	
Drinking Fountain (single)	-	3	14	1.1.1				1-1	199		1		Ы			34		ы	1.0	1.0	2.0	2.0	]-[	0.0
ice Machine	-		1.					1-1	1	-			-1					14	1.0	1.0	1.0	1.0	1-1	-
Soda Machine			1+			15		1-1			-		ч	-	1111			Ы	1.0	1.0	1,0	1.0	1-(	
Trap Primer		2	1.	1.00		-		1-1				-	H			1.0		]×[	1.0	1.0	1.0	1.0	Н	23
Hose Blb	2		1.	1.1				1-1					4	10				Ы	3.0	0.E	5.0	5.0	]-[	6.0
Other			1.			-	1	1-1		1.54			-					ы				1.1	Ы	
			1.1					1.1				-	ы			-		14	100.00	1	-		1-1	
SWIMMING POOL/SPA Swimming Pool/Spa/Tanka dditional water demand is Other Miscellaneous Wate     IRRIGATION WATER DE	/TAN Pleas asses r Dem	K & O e Indi sed. nand: D?	Call If f At	IER M te how Illed b tach d	y your y ded letalle SW NO	ANE swin lcate d just IMM	OUS V nming d wate dficati ING P	post on lin	ne, p Infor	EMAN a/tani lease j mation A/TAN	ID? t is to provid suffi	YES be fill ie the clent i DTHER	ed je	I NO quired descri	I flow the the the the the the the the the the	sib or rate e wat	D D In GPI er der WATE	edi M: ma	cated nd. To DEMA	Une. I otal pro	f filled posed	by ho GPM	se 1	bib, no o O
uption A: State the measur	ed tio	wrat	en	or the	large	st set	arate	cire	crift o	Your	uriga	tion s	<u>y51</u>	tem in	GPN	a		4		-			-	-
Option B: Describe the larg	est se	parate	ec	freuit.	Provi	de th	e num	ber	011	prinkle	er tida	ds	-	0	10.1	a	nd rat	ea	now a	GPM	pern	Bad	5	
to obtain a total now	rate	n GPI	M:	_		Att	ach ac	10110	ional	sheet	3 85 1	ecess	ary	to su	Thcief	itiy Ju	stily	the	propo	seam	igatio	n wate	er a	emand.
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TOTAL WATER DEMAN	is with							-					TE	D DEP	MANE	00				1.	PHF	1. MI	In	Same
TOTAL WATER DEMAN	is with	the a	hn	VA WS	ter de	mani	4 ls th	в Т <b>с</b>	TAL	AMO	UNT6	11 1000		ALC: NO REAL			гне л	AE1	CEN. 11	Simo	into c	TRATA	50.0	
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TOTAL WATER DEMAN /erly the total water demand     CERTIFICATION: 1 certific water demand on the prop Applicant's Signature:	is with y that erty, I	the a will in	bo fo	ve wa	ter de e Dep	mani	d is the	Wa	iter S	AMO upply Date:	prior 2/18	to cre 2020	ati	ing an	y addi	tiona	Wate /Stan	MET er d	iema	A P	UCER OFES	ISION	and and	
<ul> <li>TOTAL WATER DEMAN Verify the lotal water demand</li> <li>CERTIFICATION: I certification</li> <li>CERTIFICATION: I certificater demand on the prop</li> <li>Applicant's Signature:</li> <li>Print Name: Bandolph H.</li> </ul>	y that erty, I Mura	the a will in P yama	bo fo	ve wa	ter de e Dep	mani	d is the	Wa	ater S	AMO upply Date:	prior 2/18	to cre 2020	ati	ing an	y addi	tiona	l wate	MET mpt	iema	PHANA A	LICER OFES ENGI	VSED ISION VEER	R AN	AMA
TOTAL WATER DEMAN Arity the Istal water demand CERTIFICATION: I certifi water demand on the prop- Applicant's Signature: Print Name: Bandolph H. Ji this form is to be signed b	y that erty, I Mura y an a	the a will in P yama	bo fo zeo	trepre	ter de e Dep	mani artma	d is the ent of witten	Wa	dence	of aut	prior 2/18	to cre 2020 to rep	ati	ing any	v addi	tiona Seal	/Stan	MET mpt mpt	rovide	THAN THE	LICES ENGLI No. 34	VSED ISION NEER	R A	APMA *

EXHIBIT B



Project: Makena State Park Improvements, Phase 2 TMK: (2) 2-1-06:30

Wastewater Flow Calculations

North Site:

Based on Store Customer Bathroom usage 5 Gal/Unit/Day each use

1000 Visitors / Day

1000 Visitors X 5 Gal/Unit/Day

5,000 Gallons Per Day

#### South Site:



500 Visitors / Day

500 Visitors X 5 Gal/Unit/Day

2,500 Gallons Per Day



Randolph H. Murayama Expiration Date: 4/30/2020

Randolph H. Murayama & Associates, Inc. 12/17/2019

EXHIBIT C







SHEET NO. \_\_\_\_ OF \_\_



- *						L			
	REVISION NO.	SYM.		DESCRIPTION		SHT./OF	D	ATE	APPROVED
	H M. YOSHING LICENSED PROFESSIONAL AMPHIEED TAMAILUS			STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION					
$\triangleleft$				MAKENA STATE PARK IMPROVEMENTS, PHASE 2					
				EXTERIOR ELEVATIONS AND SECTIONS					
	EXPRATION DATE: 4/30/2020 This work was prepared by me or order my supervision and construction of this project with be under my observation. ("Observation								
				DESIGNED: AY		SUBMITTED: DEC. 2019			)
				DRAWN: ND	1	DATE: DEC. 2019		)	
	af construct 18-115-2 of Brofession	enstruction oz defined under Section 15-2 of Horoz Administrative Rules, Association of Section 19		CHECKED: AY		SCALE: AS NOTED		)	
3	Surveyors, and Landscope Architects.) Note: Controctor shall check and weily			APPROVED:				DRA	WING NO.
	oil dimensi with work,	ons at jot	s before proceeding	CHIEF ENGINEER		DATE	_	ļ	4-2
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SHEET NO. \_\_\_\_ OF \_\_\_









# **APPENDIX**

C

# U.S. FISH AND WILDLIFE SERVICE CORRESPONDENCE

# **USFWS SPECIES LIST DATED JULY 8, 2022**



# United States Department of the Interior

FISH AND WILDLIFE SERVICE Pacific Islands Fish And Wildlife Office 300 Ala Moana Boulevard, Box 50088 Honolulu, HI 96850-5000 Phone: (808) 792-9400 Fax: (808) 792-9580



In Reply Refer To: Project Code: 2022-0061636 Project Name: Makena State Park July 08, 2022

# Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened and endangered species, as well as designated critical habitat that may occur within the boundary of your proposed project and that may be affected by project related actions. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*). Please contact the Service's Pacific Islands Fish and Wildlife Office (PIFWO) at 808-792-9400 if you have any questions regarding your IPaC species list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may adversely affect threatened and endangered species and/or designated critical habitat.

Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a Biological

Evaluation, similar to a Biological Assessment, be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment or Biological Evaluation are described at 50 CFR 402.12.

Due to the significant number of listed species found on each island within PIFWO's regulatory jurisdiction, and the difficulty in accurately mapping ranges for species that we have limited information about, your species list may include more species than if you obtained the list directly from a Service biologist. We recommend you use the species links in IPaC to view the life history, habitat descriptions, and recommended avoidance and minimization measures to assist with your initial determination of whether the species or its habitat may occur within your project area. If appropriate habitat is present for a listed species, we recommend surveys be conducted to determine whether the species is also present. If no surveys are conducted, we err on the side of the species, by regulation, and assume the habitat is occupied. Updated avoidance and minimization measures for plants and animals, best management practices for work in or near aquatic environments, and invasive species biosecurity protocols can be found on the PIFWO website at: <a href="https://www.fws.gov/office/pacific-islands-fish-and-wildlife/library">https://www.fws.gov/office/pacific-islands-fish-and-wildlife/library</a>.

If a Federal agency determines, based on the Biological Assessment or Biological Evaluation, that a listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at: <u>http://www.fws.gov/endangered/esa-library/index</u>.

Non-federal entities can also use the IPaC generated species list to develop Habitat Conservation Plans (HCP) in accordance with section 10(a)(1)(B) of the Act. We recommend HCP applicants coordinate with the Service early during the HCP development process. For additional information on HCPs, the Habitat Conservation Planning handbook can be found at <a href="https://www.fws.gov/sites/default/files/documents/habitat-conservation-planning-handbook-entire.pdf">https://www.fws.gov/sites/default/files/documents/habitat-conservation-planning-handbook-entire.pdf</a>.

Please be aware that wind energy projects should follow the Service's wind energy guidelines (http://www.fws.gov/windenergy) for minimizing impacts to migratory birds. Listed birds and the Hawaiian hoary bat may also be affected by wind energy development and we recommend development of a Habitat Conservation Plan for those species, as described above. Guidance for minimizing impacts to migratory birds for projects including communications towers can be found at:

- http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers
- http://www.towerkill.com
- http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation actions that benefit threatened and endangered species into their project planning to further the purposes of the Act in accordance with section 7(a)(1). Please include the Consultation Tracking Number associated with your IPaC species list in any

request for consultation or correspondence about your project that you submit to our office. Please feel free to contact us at PIFWO\_admin@fws.gov or 808-792-9400 if you need more current information or assistance regarding the potential impacts to federally listed species and federally designated critical habitat.

Attachment(s):

Official Species List

# **Official Species List**

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

### Pacific Islands Fish And Wildlife Office

300 Ala Moana Boulevard, Box 50088 Honolulu, HI 96850-5000 (808) 792-9400

# **Project Summary**

Project Code:	2022-0061636
Event Code:	None
Project Name:	Makena State Park
Project Type:	New Constr - Above Ground
Project Description:	Construction new comfort stations with parking lot improvements
	adjacent to the existing parking lots. Both locations are south of Pu'u Ola'i
	and encompass less than 2 acres in each of the 2 locations.

# Project Location:

Approximate location of the project can be viewed in Google Maps: <u>https://www.google.com/maps/@20.63333645,-156.44572997347333,14z</u>



Counties: Maui County, Hawaii

# **Endangered Species Act Species**

There is a total of 21 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

## Mammals

NAME STATUS
Hawaiian Hoary Bat Lasiurus cinereus semotus Endangered
No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/770
General project design guidelines:
https://ipac.ecosphere.fws.gov/project/RCPZRCXR2RE4ROBBXFHUNQ2AS4/
documents/generated/6477.pdf

# Birds

NAME	STATUS
Band-rumped Storm-petrel <i>Oceanodroma castro</i> Population: USA (HI)	Endangered
No critical habitat has been designated for this species.	
Species profile: <u>https://ecos.fws.gov/ecp/species/1226</u>	
General project design guidelines:	
https://ipac.ecosphere.fws.gov/project/RCPZRCXR2RE4ROBBXFHUNO2AS4/	
documents/generated/6939.pdf	
Hawaiian (=koloa) Duck Anas wyvilliana	Endangered
No critical habitat has been designated for this species.	
Species profile: <u>https://ecos.fws.gov/ecp/species/7712</u>	
General project design guidelines:	
https://ipac.ecosphere.fws.gov/project/RCPZRCXR2RE4ROBBXFHUNQ2AS4/	
documents/generated/6934.pdf	
Hawaiian Coot Fulica americana alai	Endangered
No critical habitat has been designated for this species.	0
Species profile: https://ecos.fws.gov/ecp/species/7233	
General project design guidelines:	
https://ipac.ecosphere.fws.gov/project/RCPZRCXR2RE4ROBBXFHUNO2AS4/	
documents/generated/6934.pdf	
Hawaijan Coose Branta (-Nesochen) sandyicensis	Threatened
No gritical babitat has been designated for this species	Tineateneu
Species profiles https://oco.frv.gov/oco/procise/1007	
Species profile: <u>https://ecos.tws.gov/ecp/species/162/</u>	
General project design guidelines:	
https://ipac.ecosphere.fws.gov/project/RCPZRCXR2RE4ROBBXFHUNQ2AS4/	
accuments/generated/6925.pdf	
Hawaiian Petrel Pterodroma sandwichensis	Endangered
No critical habitat has been designated for this species.	
Species profile: <u>https://ecos.fws.gov/ecp/species/6746</u>	
General project design guidelines:	
https://ipac.ecosphere.fws.gov/project/RCPZRCXR2RE4ROBBXFHUNQ2AS4/	
documents/generated/6939.pdf	
Hawaijan Stilt Himantopus mexicanus knudseni	Endangered
No critical babitat has been designated for this species	Lindungereu
Species profile: https://ecos.fws.gov/eco/species/2082	
General project design guidelines:	
https://ipac.acosphare.fws.gov/project/PCP7PCXP2PE4POBBXEHUNO2AS4/	
documents/generated/6934 ndf	
documents/generated/0504.put	
Newell's Townsend's Shearwater Puffinus auricularis newelli	Threatened
No critical habitat has been designated for this species.	
Species profile: <u>https://ecos.fws.gov/ecp/species/2048</u>	
General project design guidelines:	
https://ipac.ecosphere.tws.gov/project/RCPZRCXR2RE4ROBBXFHUNQ2AS4/	
documents/generated/6939.pdf	

# Reptiles

NAME	STATUS
Green Sea Turtle <i>Chelonia mydas</i>	Threatened
Population: Central North Pacific DPS	
No critical habitat has been designated for this species.	
Species profile: <u>https://ecos.fws.gov/ecp/species/6199</u>	
General project design guidelines:	
https://ipac.ecosphere.fws.gov/project/RCPZRCXR2RE4ROBBXFHUNQ2AS4/	
documents/generated/6929.pdf	

# Insects

NAME	STATUS
Blackburn's Sphinx Moth Manduca blackburni	Endangered
There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available.	-
Species profile: <u>https://ecos.fws.gov/ecp/species/4528</u>	
General project design guidelines:	
https://ipac.ecosphere.fws.gov/project/RCPZRCXR2RE4ROBBXFHUNQ2AS4/	
documents/generated/6926.pdf	

# **Flowering Plants**

NAME	STATUS
`awikiwiki <i>Canavalia pubescens</i> There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available. Species profile: <u>https://ecos.fws.gov/ecp/species/7908</u>	Endangered
`ena`ena <i>Pseudognaphalium sandwicensium var. molokaiense</i> No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/5993</u>	Endangered
Awiwi <i>Schenkia sebaeoides</i> There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available. Species profile: <u>https://ecos.fws.gov/ecp/species/7103</u>	Endangered
Carter's Panicgrass <i>Panicum fauriei var. carteri</i> There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available. Species profile: <u>https://ecos.fws.gov/ecp/species/5578</u>	Endangered
Dwarf Naupaka <i>Scaevola coriacea</i> No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/4669</u>	Endangered
Ihi <i>Portulaca villosa</i> No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/4886</u>	Endangered
Ko`oloa`ula <i>Abutilon menziesii</i> No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/3268</u>	Endangered
Ohai <i>Sesbania tomentosa</i> There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available. Species profile: <u>https://ecos.fws.gov/ecp/species/8453</u>	Endangered
Popolo Solanum nelsonii No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/2281</u>	Endangered
Round-leaved Chaff-flower Achyranthes splendens var. rotundata There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available. Species profile: <u>https://ecos.fws.gov/ecp/species/4709</u>	Endangered
Vigna o-wahuensis There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available. Species profile: <u>https://ecos.fws.gov/ecp/species/8445</u>	Endangered
Critical habitats	

# THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

# **IPaC User Contact Information**

Agency:Hawaii Division of State ParksName:Martha YentAddress:1151 Punchbowl Street, Room 310City:HonoluluState:HIZip:96813Emailmartha.e.yent@hawaii.govPhone:8085870287

# Lead Agency Contact Information

Lead Agency: Department of Interior

# DSP EFFECT DETERMINATION DATED AUGUST 8, 2022 (WITHOUT ATTACHMENTS)





SUZANNE D. CASE CHAIRPERSON BOARD OF LAND AND NATURAL RESOURCES COMMISSION ON WATER RESOURCE MANAGEMENT

> ROBERT K. MASUDA FIRST DEPUTY

M. KALEO MANUEL DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES BOATING AND OCEAN RECREATION BUREAU OF CONVEYANCES COMMISSION ON WATER RESOURCE MANAGEMENT CONSERVATION AND RESOURCES ENFORCEMENT EXCINEERING FORESTRY AND WILDLIFE HISTORIC PRESERVATION KAHOOLAWE ISLAND RESERVE COMMISSION LAND STATE PARKS

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

DIVISON OF STATE PARKS POST OFFICE BOX 621 HONOLULU, HAWAII 96809

## August 8, 2022 (Revised August 25, 2022)

U.S. Fish and Wildlife Service Pacific Islands Fish and Wildlife Office 300 Ala Moana Blvd. Room 3-122 Honolulu, Hawaii 96850 Sent by email: <u>pifwo\_admin@fws.gov</u>

## SUBJECT: Proposed Park Improvements at Mākena State Park Ahupua'a of Mo'oiki and Mo'oloa, Honua'ula District, Island of Maui TMK: (2) 2-1-006:030

The Department of Land and Natural Resources (DLNR), Division of State Parks is proposing to construct two new comfort stations and parking lot improvements in Mākena State Park, Maui. DLNR has requested a federal grant from the Land and Water Conservation Fund (LWCF) State and Local Assistance program to provide funding support for this project. The LWCF Program is administered by the National Park Service (NPS) and provides grants to States and local units of government for the acquisition and development of public outdoor recreation areas and facilities. The request to use these federal funds triggers the Section 7 consultation process under the Endangered Species Act (ESA) and DLNR has been delegated by the NPS to initiate the Section 7 process for Hawai'i's LWCF grants (Attachment A - NPS delegation letter dated July 29, 2022).

A species list was obtained through IPaC and suggests a total of 21 threatened, endangered, or candidate species that could maybe present in the area of potential effect (APE) within Mākena State Park. This list dated July 8, 2022 is included as Attachment B.

DLNR, State Parks conducted a flora and fauna survey of the APE which constitutes approximately 3 acres of the larger 165.7-acre park property. The survey was conducted in 2019 as part of the Environmental Assessment that is currently being finalized. This survey is attached at Attachment C. Only one endangered mammalian species, the Hawaiian hoary bat ('ōpe'ape'a), was identified during the survey. No endangered or threatened plant species were found in the APE and no special native plant habitats occur there either. Only one indigenous species, the 'ilima, was found in small numbers. Several tree tobacco plants that host the Endangered Blackburn's sphinx moth were found in the park. However, none these moths, their eggs or larvae were found on the plants. No protected seabirds were found during the survey but the endangered 'ua'u (Hawaiian petrel) and threatened 'a'o (Newell's Shearwater) are known to fly over the area at dawn and dusk to their burrows high in the mountains between the months of March and November.

U.S. Fish and Wildlife Service Section 7 Review for Mākena State Park, Maui August 8, 2022 Page 2

### Park Setting

The park is situated between the shoreline and Mākena-Keone'ō'io Road along the coastline of southwestern Maui (Figs. 1-2). To the north of the park are Kīhei and Wailea, which comprise the major resort center of southern Maui. To the south of Mākena is 'Āhihi-Kīna'u Natural Area Reserve and the expansive black lava flows from Haleakalā dating from the 1700s. The park is surrounded by a dispersed residential community.

The prominent feature of the park is Pu'u Ōla'i, a cinder cone at the shoreline that is centrally located in the park. It reaches an elevation of 360 feet above sea level and covers approximately 90 acres of the park property. The park consists of sandy beaches on the northern, western, and southern sides of Pu'u Ōla'i (Fig. 3). The northern beach is called Oneuli or Naupaka (Black Sand) Beach and is accessed by a dirt road from Mākena-Keone'ō'io Road. Oneloa (Big) Beach is a calcareous, white sand beach that runs for almost 0.5 mile on the southern side of Pu'u Ōla'i. Two paved entry roads and parking lots provide access to both ends of this beach. On the western (makai) side of the pu'u is Pu'u Ōla'i (Little) Beach that is reached by hiking over a protruding remnant of the pu'u at the northern end of Oneloa Beach.

There are three wetland (pond) features within the park that are situated behind the sand dunes backing Oneuli and Oneloa Beaches. Maluaka Wetland behind Oneuli Beach is approximately 3 acres in size. This wetland was restored as a habitat for Hawai'i's endangered waterbirds in 2004 with the removal of kiawe trees around the pond, installation of a predator fence, and the planting of native plants around the pond. Oneloa Wetland is the largest wetland encompassing 4 acres behind Oneloa Beach. This wetland serves as a sediment basin during heavy rains which prevents runoff into the ocean. It is dry during periods of no rainfall. Paniaka Wetland at the south end of Oneloa Beach is about one acre in size. It is heavily overgrown with kiawe but there are future plans to restore the pond similar to Maluaka.

Development of the park is currently limited to the two paved entry roads and parking lots, a park caretaker's residence, and a small baseyard for the lifeguards operating in the park (Fig. 4). The northern parking lot was constructed in 1993 and the southern lot was built in 1995. Previous land use includes ranching, farming, and raising pigs. Land alteration occurred in the 1940s when approximately 20 acres to the south of Pu'u Ōla'i were leveled for the construction of a Radio Station. Vegetation in the park is characterized as a kiawe forest with understory of sourgrass. Pickleweed and pluchea are common around Oneloa and Paniaka wetlands.

### **Project Description**

The proposed project will occur within the previously developed park area. The comfort stations will be built adjacent to existing parking lots and parking improvements will occur within the footprint of the existing entry roads and shoulders behind Oneloa Beach (Fig. 5).

U.S. Fish and Wildlife Service Section 7 Review for Mākena State Park, Maui August 8, 2022 Page 3

The comfort station buildings will measure 32 feet by 40 feet and 16 feet in height. The wastewater system will consist of underground containment tanks. An outdoor shower consisting of a 16-foot diameter concrete slab with a central shower pole will be constructed adjacent to each comfort station. Water run-off will be directed to a 25' by 25' sump with a concrete drainage culvert. A waterline will be installed from each comfort station to hook-up with the main waterline along Mākena-Keone'ō'io Road. There is lighting associated with the comfort station and the outdoor ceiling lights will be down shielding so light radiates downward. There are no fences, towers, or powerlines proposed in this project. Kiawe trees will be removed within the construction area (APE) for the comfort stations. No new landscaping is proposed.

The parking lot improvements will involve the reconfiguration of stalls within the existing footprint, paving of the gravel parking areas, and paving of the shoulders along the entry roads. The objective is to better organize the parking that is already occurring in these unpaved areas. The improvements to the northern entry road will create perpendicular paved, lined stalls with concrete headers in the existing graded dirt shoulders. A total of 97 new stalls along with 6 new ADA stalls will be created. The improvements to the southern parking lot will create 35 additional stalls along the entry road.

### Mammals

The Hawaiian Hoary Bat (*Lasiurus cinereus semotus*) is the only Endangered mammal identified in the APE. The 2019 faunal survey included the use of a bat detecting device (Batbox IIID) during an evening survey and detected bat activity around both parking lots.

DLNR proposes a determination of "may affect, not likely to adversely affect" for the impact of the undertaking on the Endangered Hawaiian hoary bat. To avoid and minimize impacts to the hoary bat, no woody plants greater than 15 feet tall will be removed during the bat birthing and pup rearing season (June 1 through September 15). There will be no fencing or barbed wire.

### Seabirds

Three endangered seabirds were present on the species list: Band-rumped Storm-petrel (*Oceanodroma castro*), Hawaiian Petrel (*Pterodroma sandwichensis*), and Newell's Townsend's Shearwater (*Puffinus auricularis newelli*). The faunal survey suggested that the Hawaiian petrel and Newell's Shearwater are likely to fly over the park but are not known to nest in the park. Traversing the park may occur during the breeding, nesting, and fledging seasons (March 1 to December 15). Outdoor lighting can cause disorientation, fallout, and injury or mortality.

DLNR proposes a determination of "may affect, not likely to adversely affect" for the impact of the undertaking on the Endangered Hawaiian Petrel and Threatened Newell's Shearwater. To avoid and minimize impacts to these seabirds, lighting associated with the comfort station and the outdoor ceiling lights will be down shielding so light radiates downward. Night lighting is for security and cleaning work by State staff when the park is closed so timers and motion sensors are not preferred but can be considered. No nighttime construction will occur during this project.

U.S. Fish and Wildlife Service Section 7 Review for Mākena State Park, Maui August 8, 2022 Page 4

### **Waterbirds**

The Endangered Hawaiian Stilt (*Himantopus mexicanus knudseni*) or ae'o has been seen at the 3 wetlands within the park. The Endangered Hawaiian Coot (*Fulica americana alai*) or 'alae ke'oke'o has been documented at Maluaka Wetland. The undertaking will not affect these wetlands but there is the potential for the Hawaiian Stilt to flyover the APE as it transits between wetland areas.

DLNR proposes a determination of "may affect, not likely to adversely affect" for the impact of the undertaking on the Endangered Hawaiian Stilt and "no effect" on the Endangered Hawaiian Coot. We do not believe any actions are necessary to avoid and minimize impacts to these waterbirds as work is occurring a safe distance from the wetlands.

### <u>Hawaiian Goose (Nene)</u>

The Threatened Hawaiian Goose (*Branta (Nesochen) sandvicensis*) was not identified within the park or APE during the 2019 faunal survey but there is the potential for the nene to enter or flyover the project area. DLNR proposes a determination of "may affect, not likely to adversely affect" for the impact of the undertaking on the nene. In the event nene should enter the project area, park staff, contractors, and park users will be informed to not approach, feed, or disturb the nene. If the birds should stay in the park for more than several days, signs will be installed with this information about the nene. Since the project could occur during the breeding season (September through April), a biologist from the Division of Forestry and Wildlife will be asked to check the site for nests if any nene are observed in the project area during this time. If a nest should be discovered, the U.S. Fish and Wildlife Service will be contacted for further guidance.

### Blackburn's Sphinx Moth

The Endangered Blackburn's Sphinx Moth (*Manduca blackburni*) has not been identified within the park or APE but the presence of the non-native tree tobacco plant suggests the potential for the moth to be present. The faunal survey was conducted in October which is the beginning of the wet season and the biologist made a concerted effort to look for the moth, eggs, and larvae during the survey.

DLNR proposes a determination of "may affect, not likely to adversely affect" for the impact of the undertaking on the sphinx moth due to the presence of the tree tobacco plant. However, the lack of the moth during the survey indicates a low probability. State Parks will request a biologist from the Division of Forestry and Wildlife conduct a survey of the two comfort station sites prior to construction to verify the absence of the moth in the APE.
U.S. Fish and Wildlife Service Section 7 Review for Mākena State Park, Maui August 8, 2022 Page 5

## Green Sea Turtle

The Threatened Green Sea Turtle (*Chelonia mydas*) has been reported on the beach of Mākena State Park by the Hawai'i Wildlife Fund (HWF) but it was not addressed in the 2019 park survey. During park planning, the HWF shared concerns about the potential for leaching of wastewater from the leach fields and soaps and shampoos from outdoor showers into the ocean waters. For these reasons, State Parks converted the wastewater systems to containment tanks with no leach fields. State Parks is considering converting the outdoor showers to foot washing stations to minimize the use of soap and shampoo.

DLNR proposes a determination of "no effect" because of the above design changes and construction is setback at least 750 feet from the shoreline. There will be no vehicles on the shoreline and no removal of dune vegetation. Any lighting from the comfort station will not be visible on the beach due to the kiawe forest in between the two sites. No nighttime work will occur during this project.

## **Summary**

Mākena State Park and the APE consist primarily of non-native flora and fauna. There are no federally listed Endangered or Threatened plant species in or around the APE and no special native plant habitats occur in the park.

DLNR believes the undertaking "may affect, not likely to adversely affect" the Endangered Hawaiian Hoary Bat, the Endangered Hawaiian Petrel, the Threatened Newell's Shearwater, the Endangered Hawaiian Stilt, the Threatened Hawaiian Goose, and the Endangered Blackburn's Sphinx Moth. DLNR will indicate the steps being taken to avoid and reduce the impacts on these species in the Environmental Assessment. More specifically, the mitigation measures include:

- Outdoor lights associated with the comfort station will be down shielding.
- No work will occur at night.
- No tree removal will occur between June 1 and September 15.
- No work will occur near the shoreline or wetland.
- No fencing is included in the project.
- A biologist from the Division of Forestry and Wildlife will check the site if any Threatened or Endangered birds or moths are discovered within the project area/APE during the term of the project/undertaking. Appropriate action will be taken in accordance with USFWS guidance.

DLNR believes the undertaking will have "no effect" on the Threatened Green Sea Turtle or Endangered Hawaiian Coot as the habitat for both species is a safe distance from the construction APE.

If you have any questions, please feel free to contact Martha Yent, State Parks LWCF Coordinator, at <u>Martha.E.Yent@hawaii.gov</u> or 808-587-0287. Thank you for your assistance.

Sincerely,

9

CURT COTTRELL State Parks Administrator

Attachment A: Delegation Letter from NPS Attachment B: FWS Species List Attachment C: Botanical and Faunal Survey (2019)

# USFWS EFFECT DETERMINATION CONCURRENCE DATED NOVEMBER 10, 2022



# United States Department of the Interior

FISH AND WILDLIFE SERVICE Pacific Islands Fish and Wildlife Office 300 Ala Moana Boulevard, Room 3-122 Honolulu, Hawai'i 96850



In Reply Refer To: 2022-0061636-S7-001

November 10, 2022

Marth E. Yent Land and Water Conservation Fund Coordinator State of Hawai'i Department of Land and Natural Resources Division of State Parks Post Office Box 621 Honolulu, Hawai'i 96809

Subject: Informal Consultation for Two Comfort Stations at Mākena State Park, Maui.

Dear Martha Yent:

The U.S. Fish and Wildlife Service (Service) received your request for informal consultation dated August 8, 2022, requesting our concurrence with your determination that construction of two comfort stations at Mākena State Park, may affect, but are not likely to adversely affect the following species:

- Hawaiian hoary bat (Lasiurus cinereus semotus),
- Hawaiian goose (Branta sandvicensis),
- Hawaiian waterbirds, including the Hawaiian stilt (*Himantopus mexicanus knudseni*), and the Hawaiian coot (*Fulica americana alai*),
- Hawaiian seabirds, including the Hawaiian petrel (*Pterodroma sandwichensis*), Newell's Townsend's shearwater (*Puffinus auricularis newelli*), and the Hawai'i distinct population segment (DPS) of the band-rumped storm-petrel (*Oceanodroma castro*),
- Blackburn's sphinx moth (Manduca blackburni), and
- Hawaiian sea turtles, including the Green see turtle (*Chelonia mydas*) and Hawksbill sea turtle (*Eretmochelys imbricata*).

On July 5, 2022, the U.S. District Court of the Northern District Court of California vacated the 2019 regulations implementing section 7 of the Endangered Species Act of 1973 (16 U.S.C. 1531 *et seq.*) as amended (ESA). On September 21, 2022, the Ninth Circuit Court of Appeals

# PACIFIC REGION 1

granted a request to stay the U.S. District Court of Northern California's July 5, 2022, order that vacated the 2019 ESA regulations. As a result, the 2019 regulations are again in effect, and the Service has relied upon the 2019 regulations in issuing our written concurrence on the action agency's "may affect, not likely to adversely affect" determination. However, because the outcome of the legal challenges to the 2019 ESA regulations is still unknown, we considered whether our substantive analyses and conclusions would have been different if the pre-2019 regulations were applied in this informal consultation. Our analysis included the prior definition of "effects of the action." We considered all the "direct and indirect effects" and the "interrelated and interdependent activities" when determining the "effects of the action." We then considered whether any "effects of the action" that overlap with applicable ranges of listed species would be wholly beneficial, insignificant, or discountable to the species. As a result, we determined the substantive analysis and conclusions would have been the same, irrespective of which regulations applied.

This letter has been prepared under the authority of, and in accordance with, provisions of the ESA.

# **Project Description**

The proposed project will occur within or adjacent to the previously developed park area; comfort stations will be built adjacent to existing parking lots and parking improvements will occur within the footprint of the existing entry roads and shoulders behind Oneloa Beach (Figures 1 and 2, below). The comfort station buildings will measure 32 by 40 feet (ft), and 16 ft in height. An outdoor shower consisting of a 16 ft diameter concrete slab with a central shower pole will be constructed adjacent to each comfort station. Water run-off will be directed to a 25 by 25 ft sump with a concrete drainage culvert. A waterline will be installed from each comfort station to hook up with the main waterline along Mākena-Keone'ō'io Road.



Figure 1. Arial view of project area and Mākena State Park.



Figure 2. Location of proposed comfort stations and existing roads and parking lots.

All lighting associated with the comfort station, both interior lights and outdoor ceiling lights, will be down facing and shielded so light radiates downward. Exterior lighting will only be installed on the northern, entry side of the comfort stations. No other exterior lighting will be installed. All lighting will be on a timer that shuts off at 8:00 pm every night. See Figure 3 below for modifications made to remove lighting for this project.



Figure 3. Revised lighting plan for Mākena State Park comfort stations.

There are no fences, towers, or powerlines proposed in the project areas. Kiawe trees (*Prosopis pallida*) will be removed within the construction area for the comfort stations. No new landscaping is proposed. Parking lot improvements will reconfigure stalls within the existing footprint and pave gravel parking areas and shoulders along the entry roads. Improvements at the northern entry road will create perpendicular paved, lined stalls with concrete headers in the existing graded dirt shoulders. A total of 97 new stalls along with 6 new ADA stalls will be created. The improvements to the southern parking lot will create 35 additional stalls along the entry road.

## **Effects to Listed Species**

## Hawaiian hoary bat

The Hawaiian hoary bat roosts in both exotic and native woody vegetation across all islands and will leave young unattended in trees and shrubs when they forage. Hawaiian hoary bats may be present and exposed to project-related effects. If trees or shrubs 15 ft or taller are cleared during the pupping season, there is a risk that young bats could inadvertently be harmed or killed since

they are too young to fly or may not move away. Additionally, Hawaiian hoary bats forage for insects from as low as 3 ft to higher than 500 ft above the ground and can become entangled in barbed wire used for fencing.

To avoid adverse effects to the endangered Hawaiian hoary bat the project will implement the following recommended avoidance and minimization measures:

- Avoid disturbing, removing, or trimming woody plants greater than 15-ft tall during the bat birthing and pup rearing season (June 1 through September 15).
- Avoid use of barbed wire on any fencing.

If Hawaiian hoary bats are present during construction, we expect human presence and disturbance will cause them to leave the site. Based on the proposed project design and implementation of these avoidance and minimization measures, Hawaiian hoary bats are extremely unlikely to be injured, killed, or measurably disrupted from their normal behaviors. Therefore, effects to the Hawaiian hoary bat are insignificant.

# Hawaiian goose

The Hawaiian goose is present on Hawai'i, Maui, Moloka'i, and Kaua'i Islands. They are observed in a variety of habitats, but prefer open areas, such as pastures, golf courses, wetlands, natural grasslands and shrublands, and lava flows. Threats to the species include introduced mammalian and avian predators, wind facilities, and vehicle strikes.

To avoid adverse effects to the threatened Hawaiian goose, the project will incorporate the following avoidance and minimization measures:

- Project personnel will not approach, feed, or disturb Hawaiian geese.
- If Hawaiian geese are observed loafing or foraging within the project area during the breeding season (September through April), have a biologist familiar with Hawaiian goose nesting behavior survey for nests in and around the project area prior to the resumption of any work. Repeat surveys after any subsequent delay of work of 3 or more days (during which the birds may attempt to nest).
- Cease all work immediately and contact the Service for further guidance if a nest is discovered within a radius of 150 feet of proposed project, or a previously undiscovered nest is found within the 150-ft radius after work begins.
  - In areas where Hawaiian geese are known to be present, post and implement reduced speed limits, and inform project personnel and contractors about the presence of endangered species on-site.

Service-recommended avoidance and minimization measures for the Hawaiian goose will be implemented. Hawaiian geese present and exposed to any project-related work may be temporarily disturbed but are unlikely to be measurably disrupted from their normal behaviors. We do not expect any nest failure, injury, or mortality of Hawaiian goose. Therefore, effects to the Hawaiian goose are insignificant.

# Hawaiian waterbirds

Hawaiian waterbirds are currently found in a variety of wetland habitats including freshwater marshes and ponds, coastal estuaries and ponds, artificial reservoirs, *Colocasia esculenta* (kalo

or taro) lo'i or patches, irrigation ditches, and sewage treatment ponds. Hawaiian stilts may also be found wherever ephemeral or persistent standing water may occur. The project area currently does not provide these types of suitable habitats. However, Hawaiian waterbirds may be attracted to areas of standing water that are inadvertently created during construction activities. The following measures will be implemented to avoid adverse effects to Hawaiian waterbirds:

- In areas where waterbirds are known to be present, the project will post and implement reduced speed limits, and inform project personnel and contractors about the presence of endangered species on site.
- If water resources are located within or adjacent to the project site, the project will incorporate applicable best management practices for work in aquatic environments into the project design (provided by the Service letter dated January 10, 2022).
- A biological monitor that is familiar with the species' biology will conduct Hawaiian waterbird nest surveys where appropriate habitat occurs within the vicinity of the proposed project site prior to project initiation. The monitor will repeat surveys again within 3 days of project initiation and after any subsequent delay of work of 3 or more days (during which the birds may attempt to nest). If a nest or active brood is found, the project will:
  - Contact the Service within 48 hours for further guidance.
  - Establish and maintain a 100-ft (30 m) buffer around all active nests and/or broods until the chicks have fledged where potentially disruptive activities or habitat alteration would be avoided within this buffer.
  - A biological monitor that is familiar with the species' biology will be present on the project site during all construction or earth-moving activities until the chicks fledge to ensure that Hawaiian waterbirds and nests are not adversely affected (i.e., mortality of young, or parents kept from the nest).

The project will implement Service-recommended measures as outlined above to avoid and minimize impacts to Hawaiian waterbirds. Hawaiian waterbird nests, chicks, and fledglings would not be injured or killed, and adults would not be kept from the nests. Hawaiian waterbirds are unlikely to be measurably disrupted from their normal behaviors. Therefore, effects to Hawaiian waterbirds are insignificant.

## Hawaiian seabirds

Hawaiian seabirds may traverse the project area at night during the breeding, nesting, and fledging seasons (March 1 to December 15). Outdoor lighting could result in seabird disorientation, fallout, and injury or mortality. Seabirds are attracted to lights and after circling the lights they may become exhausted and collide with nearby wires, buildings, or other structures or they may land on the ground. Downed seabirds are subject to increased mortality due to collision with automobiles, starvation, and predation by dogs, cats, and other predators. Young birds (fledglings) traversing the project area between September 15 and December 15, in their first flights from their mountain nests to the sea, are particularly vulnerable to light attraction.

The following measures will be implemented to avoid adverse effects to Hawaiian seabirds:

• Fully shield all outdoor lights so lighting can only be seen from below.

- Install automatic motion sensor switches and controls on all outdoor lights or turn off lights when human activity is not occurring in the lighted area.
- Avoid nighttime construction during the seabird fledging period, September 15 through December 15.

The project will implement Service-recommended avoidance and minimization measures to avoid adverse effects to Hawaiian seabirds. Additional effort went in to modifying project design to reduce lighting associated with the comfort stations to protect Hawaiian seabirds. Therefore, Hawaiian seabirds traversing the area at night are unlikely to be measurably disrupted from their normal behaviors and effects are insignificant.

# Blackburn's sphinx moth

The adult Blackburn's sphinx moth feeds on nectar from native plants, including *Ipomoea pes-caprae* (beach morning glory), *Plumbago zeylanica* ('ilie'e), *Capparis sandwichiana* (maiapilo), and others. Blackburn's sphinx moth larvae feed on nonnative *Nicotiana glauca* (tree tobacco), and native, federally listed, *Nothocestrum* spp. ('aiea). To pupate, the larvae burrow into the soil and can remain in a state of torpor for a year or more before emerging from the soil. Soil disturbance can result in death of the pupae.

The following measures will be implemented to avoid adverse effects to the Blackburn's sphinx moth:

- Monitor the project site for emerging tree tobacco, the principal host plant for the moth, and remove plants less than 3-ft tall to prevent use and presence by the moth.
- A biologist familiar with the species will survey areas of proposed activities for Blackburn's sphinx moth and its larval host plants prior to work initiation.
  - Surveys will be conducted during the wettest portion of the year (usually November through April or several weeks after a significant rain) and within 4 to 6 weeks prior to construction.
  - Surveys will include searches for adults, eggs, larvae, and signs of larval feeding (i.e., chewed stems, frass, or leaf damage).
  - If moths, eggs, larvae, or native 'aiea or tree tobacco over 3-ft tall, are found during the survey, the project will contact the Service for additional guidance to avoid impacts to this species.

If no Blackburn's sphinx moth, 'aiea, or tree tobacco are found during surveys, it is imperative that measures be taken to avoid attraction of Blackburn's sphinx moth to the project location and prohibit tree tobacco from entering the site. Tree tobacco can grow greater than 3 ft tall in approximately 6 weeks. If it grows over 3-ft tall, the plants may become a host plant for Blackburn's sphinx moth. Therefore, the following avoidance and minimization measures will be implemented:

- Any tree tobacco less than 3-ft tall will be removed.
- The construction site will be monitored every 4 to 6 weeks for new tree tobacco growth before, during, and after the proposed ground-disturbing activity.
  - Monitoring for tree tobacco can be completed by any staff, such as groundskeeper or regular maintenance crew, provided with picture placards of tree tobacco at different life stages.

The project will implement Service-recommended measures to avoid adverse effects to the Blackburn's sphinx moth. Because the recommended avoidance and minimization measures will be implemented, Blackburn's sphinx moth are unlikely to be injured, killed, or measurably disrupted from their normal behaviors. Therefore, effects to the Blackburn's sphinx moth are insignificant.

# Sea Turtles

Green sea turtles may nest on any sandy beach area in the Pacific Islands. Hawksbill sea turtles exhibit a wide tolerance for nesting substrate (ranging from sandy beach to crushed coral) with nests typically placed under vegetation. Both species exhibit strong nest site fidelity. Nesting occurs on beaches from May through September, peaking in June and July, with hatchlings emerging through November and December. Optimal sea turtle nesting habitat is a dark beach free of barriers that restrict sea turtle movement.

Nesting turtles may be deterred from approaching or laying successful nests on lighted or disturbed beaches. They may become disoriented by artificial lighting, leading to exhaustion and placement of a nest in an inappropriate location (such as at or below the high tide line). Hatchlings that emerge from nests may also be disoriented by artificial lighting. Inland areas visible from the beach should be sufficiently dark to allow for successful navigation by hatchlings to the ocean. Construction on or near beaches can result in sand and sediment compaction, destruction of sea turtle nests, beach erosion, contaminant, and nutrient runoff, and increase direct and ambient light pollution which may disorient hatchlings or deter nesting females.

To avoid and minimize adverse effects sea turtles from lighting the following measures will be implemented:

- Avoid nighttime work during the nesting and hatching season (May to December).
- No lighting will be installed in the parking lots.
- The exterior lighting associated with the comfort station will be installed solely on one side of the building, which is the entry and mauka (mountain) facing side. The lighting will be set within the entryway which will minimize the light emanating from the building. No lighting will face directly makai (ocean).
- The exterior lighting on the mauka, entry side of the comfort station will be under the roof, facing downward, and fully shielded.
- All lighting will be on timers. The lights, both interior and exterior, will be turned off at 8:00 pm every night. This will allow the caretaker one hour to clean the facility after park closing. Although the park opens at 5:00 am, it is not anticipated that the caretaker will clean the facility until there is sufficient natural light in the morning.
- The lighting in the evenings will consist of single exterior light and the interior lights will only be visible through the screen blocks in the upper walls (see Figure 3), appearing more like a lantern.

The project will implement Service-recommended measures to avoid adverse effects to the Hawaiian sea turtles. Because the recommended avoidance and minimization measures will be

implemented, Hawaiian sea turtles are unlikely to be injured, killed, or measurably disrupted from their normal behaviors. Therefore, effects to the Hawaiian sea turtles are insignificant.

## Listed plants

The project-specific species list generated in our Information Planning and Consultation (IPAC) tool included 11 listed plant species that have geographic ranges that overlap with the project area. However, a biological survey conducted in 2019 revealed no federally listed plant species were present within the project area. Additionally, we do not expect these listed plants would have become established in this area since the survey occurred in 2019. We do not expect federally listed plants would be present or exposed to project-related activities associated with construction of the proposed project. Therefore, effects to federally listed plants are discountable.

## Summary

Based on the information provided, implementation of Service-recommended avoidance and minimization measures, and our assessment of potential project impacts, we anticipate that adverse effects to Hawaiian hoary bat, Hawaiian goose, Hawaiian waterbirds, Hawaiian seabirds, Blackburn's sphinx moth, Hawaiian sea turtles, and federally listed plants are insignificant or discountable. We concur with your determination that this project may affect but is not likely to adversely affect these federally listed species. Reinitiation of consultation is required:

- If new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered;
- If the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the written concurrence; or,
- If a new species is listed or critical habitat designated that may be affected by the identified actions.

Thank you for participating with us in the protection of our endangered species. If you have any questions, please contact Carrie Harrington at carrie\_harrington@fws.gov or by telephone at 808-792-9436. When referring to this project, please include this reference number: 2022-0061636-S7.

Sincerely,



Lindsy Asman Island Team Manager Maui Nui and Hawai'i Island

# **APPENDIX**

# BIOLOGICAL SURVEY REPORT

#### BOTANICAL AND FAUNA SURVEY

FOR THE

#### MĀKENA STATE PARK IMPROVEMENTS

MAUI, HAWAII

by

ROBERT W. HOBDY Environmental Consultant Kokomo, Maui October 2019

Prepared for: Department of Land & Natural Resources Division of State Parks

#### BOTANICAL AND FAUNA SURVEY MĀKENA STATE PARK IMPROVEMENTS MAUI, HAWAII

#### INTRODUCTION

The Mākena State Park Improvements project is located at Oneloa Beach, South Maui TMK (2) 2-1-06:030 portion, (see Figures 1 & 2). The project will provide two new comfort stations and related improvements for the park. This biological survey was initiated by the State Parks Division in fulfillment of environmental requirements of the planning process.

#### SITE DESCRIPTION

Mākena State Park lies on gently sloping coastal lands below Mākena-Keone'o'io Road, extending from Pu'u Õla'i hill to the southern end of Oneloa Beach. Facilities include two paved beach access roads with parking lots and portable comfort stations as well as a caretakers cottage. The vegetation around these facilities consist mostly of dry land forests with an understory of shrubs and grasses. The soil is characterized as Makena Loam, Stony Complex, 3-15% slopes (MXC), which is a deep, well-drained soil developed from volcanic ash (Foote et al, 1972). Rainfall averages 20 inches per year with winter maximums (Armstrong, 1983).

#### SURVEY OBJECTIVES

This report summarizes the findings of a flora and fauna survey of the proposed Mākena State Parks Improvements Project which was conducted in October 2019.

The objectives of the survey were to:

- 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 (USFWS, 2019). 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 flora and fauna in this part of the island.

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#### BOTANICAL SURVEY REPORT

#### SURVEY METHODS

A walk-through botanical survey method was used covering the entire project area. Notes were made on species, distribution and abundance as well as on terrain and substrate. Focus was placed on identifying native plant species and especially any that are Endangered or Threatened species that may require special attention.

#### DESCRIPTION OF THE VEGETATION

The vegetation within the project area consisted of a variety of trees, shrubs and grasses. A total of 27 plant species were recorded during two site visits to the area. Taxonomy and nomenclature follow Wagner et al (1999). Two non-native species were abundant throughout the project area, the kiawe tree (*Prosopis pallida*) which makes up the entire forest canopy and sourgrass (*Digitaria insularis*). The prickly, non-native shrub lantana (*Lantana camara*), was common in the understory of the forest. The remaining twenty-four species were uncommon or rare in the area.

Just one common native plant species was recorded, the indigenous 'ilima (Sida fallax).

#### DISCUSSION AND RECOMMENDATIONS

The environment in this project area has been gradually altered over the last century and now consists primarily of non-native elements. Only one native indigenous species, the 'ilima, was found in small numbers here. 'Ilima is widespread throughout Hawaii and is of little environmental concern. No federally listed Endangered or Threatened plant species occur on or around this project area, and no special native plant habitats occur here either.

The proposed project is not expected to have any significant negative impact on the botanical resources in this part of Maui. No recommendations with regard to plants are deemed necessary.

#### PLANT SPECIES LIST

Following is a checklist of all those vascular plant species inventoried during the field studies. Plant families are arranged alphabetically within two groups: Monocots and Dicots. Taxonomy and nomenclature of the flowering plants (Monocots and Dicots) are in accordance with Wagner et al. (1999).

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).

Polynesian = plants brought to these islands by the Polynesians, during the course of their migrations.

non-native = all those plants brought to the islands intentionally or accidentally after western contact.

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.

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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	SCIENTIEIC NAME
MONOCOTS	COMMON NAME	SIAIOS	ABONDANCE	Solanum linnaganum Hepper & P. Jac
POACEAE (Grass Family)				Solanum seaforthianum Andr
Digitaria insularis (L.) Mez ex Ekman	sourcrass	non-native	abundant	VERBENACEAE (Verbena Eamily)
Megathyrsus maximus (Jaca) Simon & Jacobs	Guinea grass	non-native	rare	Lantana camara L
DICOTS	Guillea glass	non-native	laic	Lumana camara L.
AMARANTHACEAE (Amaranth Family)				
Alternanthera pungens Kunth	khaki weed	non-native	uncommon	
Dysphania carinata (R.Br.) Mosvakin & Clemants	keeled wormseed	non-native	rare	
ASTERACEAE (Sunflower Family)				
Pluchea carolinensis (Jacq.) G. Don	sourbush	non-native	rare	
Verbesing encelioides (Cav.) Benth. & Hook.	golden crown-beard	non-native	uncommon	
FABACEAE (Pea Family)	5			
Desmodium pernambucanus (L.) Thellung	slender mimosa	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	
Pithecellobium dulce (Roxb.) Bentham	'opiuma	non-native	rare	
Prosopis pallida (Humb. & Bonpl.) ex Willd.	kiawe	non-native	abundant	
Samanea saman (Jacq.) Merr.	monkeypod	non-native	rare	
Vachellia farnesiana (L.) Wight & Arnott	klu	non-native	rare	
LAMIACEAE (Mint Family)				
Leonotis nepetifolia (L.) R.Br.	lion's ear	non-native	rare	
MALVACEAE (Mallow Family)				
Abutilon grandifolium (Willd.) Sweet	hairy abutilon	non-native	uncommon	
Sida ciliaris L.	bracted fanpetals	non-native	rare	
Sida fallax Walp.	'ilima	indigenous	uncommon	
Sida spinosa L.	prickly sida	non-native	rare	
MORACEAE (Mulberry Family)				
Ficus microcarpa L.fil.	Chinese banyan	non-native	rare	
NYCTAGINACEAE (Four-o'clock Family)				
Boerhavia coccinea Mill.	scarlet spiderling	non-native	rare	
PORTULACACEAE (Purslane Family)				
Portulaca oleracea L.	pig weed	non-native	rare	
Portulaca pilosa L.	'ākulikuli	non-native	rare	
SOLANACEAE (Nightshade Family)				
Nicotiana glauca R.C. Graham	tree tobacco	non-native	uncommon	
	5			

# COMMON NAMESTATUSABUNDANCEapple of Sodomnon-nativerareBrazilian nightshadenon-nativerarelantananon-nativecommon

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#### FAUNA SURVEY REPORT

#### SURVEY METHODS

A walk-through fauna 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 feding. In addition, an evening visit was made 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

Two non-native mammals and one native mammal were detected during two site visits. Taxonomy and nomenclature follow Tomich (1986).

Axis deer (*Axis axis*) sign was seen throughout the project area in the form of trails, tracks and droppings within the forested portions. These deer are common in this part of Maui. Domestic cats (Felis catus) were seen around the parking areas during the evening survey.

The evening survey was focused on looking for the presence of the endemic and Endangered Hawaiian hoary bat 'ōpe'ape'a (*Lasiurus cinereus semotus*). A bat detecting devic (Batbox IIID) was used, set to the frequency of 27,000 Hertz, which is the frequency they are known to emit when they are echolocating for the nocturnal, flying insects they feed on. Bat activity was detected around both parking facilities with the use of this device.

Other non-native mammals likely to utilize this habitat but which were no seen include mice (Mus domesticus), rats (Rattus spp.), mongoose (Herpestes auropunctatus) and domestic dogs (Canis familiaris).

#### BIRDS

Eight species of birds were recorded during two site visits. Taxonomy and nomenclature follow American Onitholigists' Union (2019). One species was common, the zebra dove (*Geopelia striata*). Five others were uncommon: the northern cardinal (*Cardinalis cardinalis*) the spotted dove (*Streptopelia chinensis*), the house sparrow (*Passer domesticus*), the gray francolin (*Francolinus pondicerianus*) and the common myna (*Acridotheres tristis*). Two other species were of rare occurrence.

One indigenous, migratory species, the kolea or Pacific golden-plover (*Pluvialis fulva*) was seen. A few other non-native birds would be likely to occur in this habitat, but the project area is unsuitable for seabirds, water birds and native forest birds.

#### INSECTS

Insect diversity was very limited within this forest habitat. Just three species of non-native insects were seen. Taxonomy and nomenclature follow Nishida et al (1992). One species was common, the geometrid kiawe moth (*Anacamptodes fragillaria*), whose larvae feed on the abundant kiawe trees present here. The dung fly (*Musca sorbens*) was uncommon and the honeybee (*Apis mellifera*) was rare. No native insects were seen.

#### MOLLUSKS

One non-native mollusk, the giant African snail (Achatina fulica) was of uncommon occurrence.

#### DISCUSSION AND RECOMMENDATIONS

The habitat in the project area is dominated by non-native plant and animal species. Just one endemic mammal and one indigenous bird were found in this habitat. The endemic and endangered 'ōpe'ape'a or Hawaiian hoary bat was detected in small numbers during the evening survey. These bats are highly mobile and move about seasonally, reacting to climatic and food source conditions. The U.S. Fish and Wildlife Service has guidelines for protective measures regarding the removal of trees that should be taken during the summer months when these bats are breeding and raising their young.

During the survey nine tree tobacco plants (*Nicotiana glauca*) were found. Tree tobacco are potential host plant for the Endangered sphinx moth (*Manducca blackburni*) (USFWS, 2000). None of these moths, their eggs or their larvae were found on these plants, but they could show up during the wet season. The U.S. Fish and Wildlife Service may provide guidance for actions for the removal of these plants that will ensure that these Endangered moths are not harmed or destroyed if they are present.

The kõlea or Pacific golden plover (*Pluvialis fulva*) is an indigenous bird species. These birds breed and raise their young in the artic and migrate to tropical pacific islands to overwinter. Many thousands come to Hawaii each winter between March and September. The kõlea is common in a wide variety of habitats and is of no environmental concern.

While no endangered water birds were seen or would be expected to occur in the forested project area, there is a small temporary coastal depression pond that can attract endangered stilts and coots. This depression is about a hundred yards from the north parking lot, is screened from both this parking lot and the beach by dense forest and is off limits to the public.

While no protected seabirds were found on the property, the 'ua'u and 'a'o are known to overfly the area at dawn and dusk to their burrows high in the mountains between the months of March and November. In late fall young birds fledge from their burrows to take their first tentative flights out to sea. These inexperienced birds are easily confused and distracted by bright lights and often crash to the ground where they are particularly vulnerable to being run over by vehicles or killed by predators. Its is recommended that any significant outdoor lighting such as streetlights or flood lights that are incorporated into the project design be shielded to direct the light downward so that it is not visible from above.

With the above guidance, the project should be able to move forward without having any significant negative impact on the fauna resources in this part of Maui.

#### ANIMAL SPECIES LIST

Following is a checklist of the animal species inventoried during the field work. Animal species are arranged in descending abundance within four groups: Mammals, Birds, Insects 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).

non-native = all those animals brought to Hawaii intentionally or accidentally after western contact.

migratory = spending a portion of the year in Hawaii and a portion elsewhere. In Hawaii the migratory birds are usually in the overwintering/non-breeding phase of their life cycle.

4. Abundance of each species within the project area:

abundant = many flocks or individuals seen throughout the area all times of the 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			
CERVIDAE (Deer Family)			
Axis axis Erxleben	axis deer	non-native	common
FELIDAE (Cat Family)			
Felis catus L.	domestic cat	non-native	rare
VESPERTILLIONIDAE (Common Bat Family)			
Lasiurus cinereus semotus H. Allen	'ōpea'pe'a, Hawaiian hoary bat	endemic	uncommon
BIRDS			
ARDEIDAE (Heron Family)			
Bubulcus ibis L.	cattle egret	non-native	rare
CARDINALIDAE (Cardinal Family)			
Cardinalis cardinalis L.	northern cardinal	non-native	uncommon
CHARADRIIDAE (Plover Family)			
Pluvialis fulva Gmelin	Pacific golden-plover	indigenous	rare
COLUMBIDAE (Dove Family)			
Geopelia striata L.	zebra dove	non-native	common
Streptopelia chinensis Scopoli	spotted dove	non-native	uncommon
PASSERIDAE (Old World Sparrow Family)			
Passer domesticus L.	house sparrow	non-native	uncommon
PHASIANIDAE (Pheasant Family)			
Francolinus pondicerianus Gmelin	gray francolin	non-native	uncommon
STURNIDAE (Starling Family)			
Acridotheres tristis L.	common myna	non-native	uncommon





Figure 3. Project area showing typical habitat of dense kiawe forest.



Figure 4. Mākena State Park, north parking lot with typical surrounding kiawe forest.

#### Literature Cited

- American Ornithologists' Union 2019. Checklist of North American Birds. 7<sup>th</sup> edition. American Ornithologists' Union. Washington D.C.
- Armstrong, R. W. (ed.) 1983. Atlas of Hawaii. (2nd. ed.) University of Hawaii Press.
- Foote, D.E., E.L. Hill, S. Nakamura, and F. Stephens. 1972. Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii. U.S. Dept. of Agriculture, Soil Conservation Service. Washington, D.C.
- Nishida, G.M., G.A. Samuelson, J.S. Strazanac, K.S. Kami. 1992. Hawaii Terrestrial Arthropods of Hawaii. Hawaii Biological Survey, Honolulu.
- Tomich, P.Q. 1986. Mammals in Hawaii. Bishop Museum Press, Honolulu.
- U.S. Fish and Wildlife Service. 2019. Endangered and threatened wildlife and plants: Occurrences and listings for Hawaii. <u>www.fws.gov/endangered</u>
- U.S. Fish and Wildlife Service. 2000. Endangered and Threatened Wildlife and Plants: Determination of Endangered Status for Blackburn's sphinx moth from Hawaii. Federal Register 65(21): 4770-4779
- Wagner, W. L., D.R. Herbst, and S. H. Sohmer. 1999. Manual of the Flowering Plants of Hawai'i. University of Hawai'i Press and Bishop Museum Press. Honolulu. Revised edition.

# **APPENDIX**



DEPARTMENT OF ARMY EMAIL CORRESPONDENCE DATED DECEMBER 30, 2019 From: Speerstra, Linda CIV USARMY CEPOH (US) <<u>Linda.Speerstra@usace.army.mil</u>> Sent: Monday, December 30, 2019 6:42 PM To: General eMail <<u>planning@munekiyohiraga.com</u>> Cc: Speerstra, Linda CIV USARMY CEPOH (US) <<u>Linda.Speerstra@usace.army.mil</u>> Subject: Makena State Park Comfort Stations - Maui POH-2019-00140

Aloha Gwendolyn thank you for reaching out to the Corps. I'm providing scoping information in regards to the early consultation request provided to our office on December 23rd.

The Corps' regulatory authorities are based on two laws: Section 10 of the Rivers and Harbors Act (RHA) of 1899 (33 USC 403), which prohibits the obstruction or alteration of navigable waters of the U.S. without a permit from the Corps; and Section 404 of the Clean Water Act (CWA), which prohibits the discharge of dredged or fill material into waters of the U.S., including wetlands, without a Corps' permit.

Based on information provided it appears all work would be conducted in uplands on an existing filled area. If all work is being conducted in uplands no further action is required. My contact information is below if you have any further questions. Linda

Linda Speerstra Chief, Regulatory Branch U.S. Army Corps of Engineers Honolulu District 808-835-4300

# **APPENDIX**

F

# ARCHAEOLOGICAL INVENTORY SURVEY

# REVISED DRAFT #2 ARCHAEOLOGICAL INVENTORY SURVEY

Construction of New Comfort Stations and Parking Lot Improvements

Mākena State Park Ahupua'a of Mo'oiki, Mo'oloa, and Mohopilo Moku of Honua'ula, Island of Maui TMK: (2) 2-1-006: 030 por.



Pu'u Ōla'i and Oneloa Beach, Mākena State Park



STATE OF HAWAI'I Department of Land & Natural Resources Division of State Parks

# ARCHAEOLOGICAL INVENTORY SURVEY

Construction of New Comfort Stations and Parking Lot Improvements

Mākena State Park Ahupua'a of Mo'oloa, Mo'oiki, and Mohopilo Moku of Honua'ula, Island of Maui TMK: (2) 2-1-006: 030 por.

> Prepared by: Martha Yent, M.A. Archaeology Program Division of State Parks Department of Land & Natural Resources



REVISED DRAFT #2 September 2022

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#### **INTRODUCTION**

The Department of Land and Natural Resources (DLNR), Division of State Parks proposes to construct two new comfort stations with wastewater systems and related infrastructure, and to make improvements to the two existing paved parking lots and entry roads within Mākena State Park, ahupua'a of Mo'oloa, Mo'oiki, and Mohopilo, moku of Honua'ula, Island of Maui (DLNR, CIP Job No. F73C680B). Development of the 165.7-acre park is currently limited to these two parking lots and entry roads, a caretaker's residence, a small baseyard for the lifeguards, and a picnic table and portable toilets at each of the parking lots. The Mākena community has expressed a desire to minimize development of the park but a public survey in 2013 indicated a strong community desire for permanent restrooms. As visitation has increased, the concerns about public sanitation and parking congestion have created the need for this project.

Several alternative locations for the restrooms were proposed by the design consultant, Tanaka Engineering, Inc. Because of the proximity of the northern parking lot to Pu'u Õla'i, the culturally significant and visually prominent einder cone in the park, it was determined that a Cultural Impact Assessment (CIA) should be conducted early in the planning and design process. This would allow planners to address any cultural concerns in selecting a preferred location for the restroom at this northern project site. In the CIA, Tanya Lee-Greig of 'Āina Archaeology interviewed individuals with cultural and historical ties to the area, including members of the CIA are summarized in this AIS and the CIA document accompanies this AIS and the Environmental Assessment prepared by Munekiyo Hiraga (Draft Environmental Assessment dated November 2021).

State Parks archaeologists Phyllis Holly McEldowney, Ph.D., Martha Yent, M.A., and Tracy Tam Sing, M.A. conducted archaeological surveys and test excavations in the project area from April 30 to May 2, 2019. Additional testing was conducted by State Parks archaeologists Yent, McEldowney, and Kelly Cheesebourough, B.A. on July 8-10, 2020 to address the design changes. Yent initially conducted a surface survey of the general vicinity in 1993 while monitoring the construction of the northern entry road and parking lot (Yent 1993). An additional survey of the park occurred with monitoring for the southern parking lot and entry road in 1995 (Carpenter and Yent 1995). To verify the presence of the previously identified sites relative to the project area, a 100% pedestrian survey was conducted within the project area. In addition, plan-view mapping of the individual surface features located in the vicinity of the project area was conducted by Yent and Tam Sing in November 2012. State Parks Archaeologist Sean Newsome assisted with the GPS readings and mapping of the historic properties within the park boundaries. No historic properties have been found within the project area for this current project. The test excavations conducted in 2019 consisted of two units at the selected restroom location adjacent to the southern parking lot and one unit at the preferred restroom location adjacent to the northern parking lot. The additional testing in 2020 addressed the containment tank locations at each restroom site and the waterline routes. There was an absence of cultural deposits and materials in all these test units except for recent glass, metal, and plastic near the surface. Volcanic black cinder from the eruption of Pu'u Ōla'i around 150,000 years ago was prominent in the northern units with a much thinner deposit of cinder in the southern units which reflects the distance from the pu'u.

This archaeological inventory survey (AIS) for the Mākena comfort stations and parking lots has been prepared in compliance with HRS, Chapter 6E-8 and HAR §13-276 (*Rules Governing Standards for Archaeological Inventory Surveys and Reports)*. Because federal grant funds through the Land and Water Conservation Fund (LWCF) Program are being used for this

undertaking, the AIS provides a basis for inventorying the historic properties within the Area of Potential Effect (APE) and proposing a determination of effect under Section 106 of the National Historic Preservation Act (NHPA). The AIS may use terminology from both State and Federal historic preservation laws as defined by HAR §13-275-2 and 36 CFR §800.16.

The APE/project area consists of 3 acres in two discontinuous locations within the park. The northern location consists of 1.7 acre and encompasses a portion of the existing northern parking lot and adjacent areas where the comfort station, related infrastructure, and waterline are proposed. The southern location consists of 1.3 acres and encompasses a portion of the existing southern parking lot and areas where the related infrastructure, and waterline are proposed.

Consultation for the §6E-8 historic preservation review has been conducted through a Cultural Impact Assessment (CIA) study, community meetings with the Oneloa Coalition, and discussions with cultural descendants. A separate consultation process for Section 106 occurred through correspondence with Native Hawaiian Organizations (NHO), cultural descendants, community organizations, and individuals. While no archaeological remains were found in the APE/project area, the designation of Pu'u Ōla'i as a Traditional Cultural Property (TCP) through the CIA consultation has resulted in discussions with the State Historic Preservation Division (SHPD) about indirect and direct impacts of the undertaking/project on the TCP. Archaeological monitoring is recommended for identification purposes and to document the stratigraphic deposits exposed during the construction work, and to respond promptly in the event any iwi kūpuna are exposed during the construction and ground disturbing activities.

#### **Existing Park Conditions**

Mākena State Park was established in 1971 and consists of 165.7 acres between the shoreline and Mākena-Keone'ō'io Road in the ahupua'a of Mo'oiki, Mo'oloa, and Mohopilo in the district of Honua'ula on the southwestern coast of the island of Maui (Figs. 1 and 2). Pu'u Ōla'i, the prominent cinder cone along this shoreline, is centrally located in the park. It reaches an elevation of 360 feet above sea level and covers approximately 90 acres of the park property. There has been previous erosion and landslides on the makai side of the pu'u and mining of cinder along the southern slopes.

The park consists of several sandy beaches on the northern, western, and southern sides of Pu'u Õla'i (Fig. 3). The northern beach is called Oneuli or Naupaka (Black Sand) Beach and is accessed by a dirt road from Mākena-Keone'ō'io Road. Oneloa (Big) Beach runs for almost 0.5 mile on the southern side of Pu'u Õla'i. Two paved entry roads and parking lots constructed in the 1990s provide access to both ends of this beach. On the western (makai) side of Pu'u Õla'i is Pu'u Õla'i (Little) Beach that is reached by hiking over a protruding remnant of the pu'u at the northern end of Oneloa Beach. The visitation to the park was estimated at 525,000 in 2007 with park users participating in beach and ocean recreation.

A security (caretaker's) residence is located approximately 100 meters makai (west) of the Mākena-Keone'ō'io Road and between the entry roads to the two parking areas at Oneloa Beach (Fig. 3). This residence was constructed in 2000 and includes a house, garage, leach field, driveway, and chainlink fence. In 2010, the County of Maui built a small baseyard on the makai side of the security residence for their lifeguards who provide services in the park. This baseyard consists of two containers placed on the surface and connected by a roof.



Fig. 1. The APE/project area consists of two discontinuous locations behind Oneloa Beach within Mākena State Park, Maui (USGS, 7.5 minute series, Mākena Quad. 2017). Detailed APE/project boundaries are shown in Figures 2, 11, and 12.



Fig. 2. The two discontinuous locations of the APE/project area correspond to the northern and southern ends of Oneloa Beach and include portions of the existing parking lots as well as the proposed comfort station locations and waterline routes.



Fig. 3. Location of the park boundaries, facilities, parking lots, and the 3 wetland areas within the park. The APE/project area is associated with the northern and southern parking lots (Taken from PBR 2013).

DRAFT AIS for New Comfort Stations and Parking Lot Improvements, Makena State Park

There are three wetland (pond) features within the park that are situated behind the sand dunes along Oneuli and Oneloa Beaches:

- Maluaka Wetland. This wetland behind Oneuli Beach is approximately 3 acres in size. Most
  of the wetland is within the park but a portion extends into the neighboring private parcels.
  Restoration of this wetland in 2004 involved the removal of the kiawe trees around the pond,
  installation of a predator fence, and the planting of native plants around the pond. This pond
  has been referred to as a fishpond and was used as a watering hole for cattle in the 1850s. It is
  uncertain if this pond is spring-fed but always has water.
- Oneloa Wetland. This is the largest wetland and approximately 4 acres in size. It is long and narrow (200 by 880 feet) and located to the south of Pu'u Öla'i and the parking lot at the northern end of Oneloa Beach. This wetland serves as a sediment basin during heavy rains which prevents runoff into the ocean. The edges of this pond are marked by a dense growth of kiawe trees and a ground cover of pickleweed and 'akulikuli. This area is often dry with standing water occurring only after a heavy rainfall.
- Paniaka Wetland. Located at the southern end of the park, the pond area measures approximately one acre in size. The pond spans the area between the road and coastal sand dune but is believed to have extended across Mākena-Keone'ō'io Road in the past. It is likely that this pond is spring fed. The edges of the pond are marked by a dense growth of kiawe trees and date palms with an understory of pluchea, noni, pickleweed, and 'akulikuli. The site has been impacted by bulldozing on the southern side. This pond is recorded as a fishpond in documents from 1853.



Maluaka Wetland after restoration in 2004.

Paniaka Wetland in its current condition with kiawe.

#### Project Location

The park consists of multiple parcels and is identified as TMK: (2) 2-1-006: 026, 030, 080, 081, and 102 (Fig. 4). The APE/project area is within Parcel 30 and corresponds to the two paved parking lots, entry roads, and proposed comfort station locations situated mauka of Oneloa Beach (Photos 1-3). Three (3) alternative sites were initially considered for the comfort station at the northern project site: one at the western end of the parking lot, one on the north side, and one on the south side (Fig. 5). In conjunction with the cultural assessment study and the cultural significance of Pu'u Ōla'i, the site on the southern side of the parking lot has been selected as the preferred location. This site maintains the greatest distance from the pu'u and is 60 meters (200 feet) mauka (east) of Oneloa Wetland. The restroom site is approximately 10 meters (30 feet) south of the edge of the parking lot pavement and about 750 feet mauka of the shoreline of Oneloa Beach.



Photo 1. Portion of Mākena State Park behind Oneloa Beach and south of Pu'u Ōla'i. The proposed locations of the comfort stations are associated with the two parking lots and entry roads.

Two (2) alternative sites were proposed at the southern project site (Fig. 6). Both sites were located on the southern side of the parking lot at the southeast and southwest corners. After consultation with the community about the southern project area, a preferred location was selected that is centrally located along the south side of the paved parking lot and about 10 meters (30 feet) south of the parking lot pavement. The site is between the parking lot and the former asphalt driveway from the 1940s. This location is about 106m (350 feet) mauka of the dune and shoreline of Oneloa Beach. It is also about 150m (500 feet) south of Oneloa Wetland and 45m (150 feet) north of a natural, vertical ledge that runs mauka-makai from Mākena-Keone'ō'io Road to the shoreline.





(view makai/west).









on the CIA findings and the cultural significance of Pu'u Ola'i.



Fig. 6. Two alternative locations proposed at the southern parking lot. A central location was selected.

#### **Environmental Setting**

Mākena State Park is located on the western flank of Haleakalā volcano and the leeward side of East Maui. Pu'u Ōla'i is a 360-foot high cinder cone that represents a geologically recent vent of the Hāna series of eruptions from Haleakalā. Molokini Island, just offshore from Pu'u Ōla'i, is from this same series of eruptions. The pu'u is classified as cinder land, a mixture of cinder, pumice, and ash. Soils around the pu'u and in the park are classified as Mākena Loam, Stony Complex which is a deep, well-drained soil developed from volcanic ash (Foote et al. 1972). The loamy soil has been deposited atop 'a'ā and pāhoehoe flows from the Hāna volcanic series. Near Pu'u Ōla'i, the cinder is overlain by the loam. Archaeological testing and monitoring have indicated a consistent pattern of the orangish loam overlying a thick deposit of black cinder in the northern half of the park and in closer proximity to the pu'u. The cinder becomes thinner with distance from the pu'u and it is nearly absent at the vertical ledge to the south of the southern parking lot.

Oneloa and Pu'u Ōla'i beaches are calcareous sand. Oneloa is approximately 3,400 feet in length and 100 feet wide. Onculi is a black sand beach composed of basaltic and andesite sands. A coastal sand dune is found behind Oneloa Beach. The height of this coralline sand dune increases going south and at Paniaka Pond the dune is approximately 15 feet high. During winter surf and high winds, the dune migrates mauka and is gradually filling in the western edge of the pond.

The three wetlands located behind the coastal dune in the park reflect a pattern seen in the larger Mākena area and southeastern Maui. It has been noted that additional wetlands or marshy areas appear in the southern portion of the park during periods of heavy rain. Many of the wetlands are

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spring-fed and may have been used as fishponds. In 1996, there was a total of 37 ponds of various sizes remaining in the Honua'ula district (De Naie and Donham 2008:49).

Rainfall averages 20 inches a year. The vegetation in the park is characterized as a kiawe (*Prosopis pallida*) forest with an understory dominated by sourgrass (*Digitaria insularis*) (Hobdy 2019:3). Date palms have become established in the southern portion of the park and continue to expand to the south of Pu'u Õla'i. Shrubs include lantana, tree tobacco, and pluchea with weedy growth including lion's ear and wild basil. The only common native plant is the indigenous 'ilima (*Sida fallax*).

The only endemic mammal is the 'ōpe'ape'a (Hawaiian hoary bat) that was observed in the park during the evening (Hobdy 2019:8). Axis deer are found throughout the park along with mongoose, mice, and rats. Most of the birds are common urban species such as doves, cardinals, myna, sparrow, and francolin. Kōlea or Pacific golden plover is an indigenous migratory bird noted in the survey. The wetland areas attract the ae'o (Hawaiian stilt) and 'alae ke'oke'o (Coot), both of which are endangered waterbirds. Also found in these wetlands are the auku'u (Black-crowned Night Heron), 'akekeke (Ruddy Turnstone) and 'ulili (Wandering Tattler) (AECOS Consultants 2004).

Oneloa Beach has been noted as a nesting ground for the honua'ea (Hawksbill sea turtles) by the Hawaii Wildlife Fund. These turtles frequent rocky areas, coral reefs, and shallow coastal areas. Nesting occurs on undisturbed deep-sand beaches between the months of April and November when they lay their eggs under or in beach/dune vegetation (PBR 2013:28).

#### **Description of the Project/Undertaking**

It was originally envisioned that the restrooms would involve a wastewater system with septic tanks and leach fields. However, the community raised concerns about the leaching of wastewater into the ground and the potential impacts to human burials, ocean waters, and native wildlife. After a consideration of the alternative wastewater systems available, a design utilizing a containment tank was agreed upon (Fig. 7). The containment tanks are located below ground at a distance of about 40 feet (12m) from the comfort stations. The installation of the containment tanks will require an area that measures 41 feet (12m) by 8 feet (2.5m) at the northern site and 23 feet (7m) by 8 feet (2.5m) at the southern site. The difference in size reflects the level of use anticipated at the two sites. Excavation to a depth of approximately 10 feet (3m) will occur at both locations. A sewer line with trenching to a depth not to exceed 24" (60cm) will connect the comfort station and containment tanks with wastewater being pumped from the containment tanks and taken off-site so there will be no leaching into the soil. It was also learned that State Parks may have the ability to connect to a future sewer line that will run to a wastewater treatment plant on the property to the north of the park owned by Mäkena Resort. Connecting the new comfort stations to the treatment plant will require funding and design with a timeline of several years in the future.

The comfort station buildings will measure 32 feet by 41 feet (approximately 10m by 12m), including the concrete walkways around the building. Each comfort station will accommodate 4 women's toilets, 3 men's toilets, a urinal, interior sinks, and a central maintenance storage area (Fig. 8). This basic design will allow for transition from the containment tanks to a sewerline connection in the future. Concrete walkways will connect the comfort station buildings to the parking lots and ADA parking stalls. Excavation for the foundation of the restroom buildings should not exceed 3 feet (1m) to allow for the wall footings, base course, and concrete slab.



Fig. 7. Site plan showing location of two comfort stations with containment tanks, outdoor showers, drainage sumps, and waterlines connecting to the County waterline along the road. Locations of the archaeological sites in the vicinity but outside the APE/project area are indicated in red.

An outdoor shower was proposed as part of the scope for each comfort station (Fig. 9). The showers would be located about 5 feet (1.5m) from the restroom slab and connected by a concrete walkway. It consists of a circular concrete slab measuring approximately 16 feet (5m) in diameter. Excavation for the shower footing will be at least 24" (60cm) (Fig. 10). To accommodate water runoff from the outdoor showers, a concrete lined ditch measuring 4 feet (1.2m) wide and about 15 feet (5m) long will lead to a 2-foot (60cm) deep drainage sump measuring 35 feet by 35 feet (10.5m by 10.5m). Because of community concerns about the leaching of shower water, shampoo, and soap into the soil, the showers are being deferred in favor of foot rinsing stations. The same footprint will be constructed with stub-outs for future showers when the leaching issue can be adequately addressed. The 24-inch high foot rinsing station will use less water, discourage the use of soap and shampoo, and reduce the sand being taken into the comfort stations.

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Fig. 8. Plan-view of the comfort station and cross-section of the footing for the CMU walls.



Fig. 9. Detail of design for outdoor shower with drainage sump and concrete gutter.



rig. 10. closs-section of shower with footing, curoing, and gutter that may shift to a foot rinsing st

A waterline will be installed at each comfort station to connect with the existing County waterline along Mākena-Keone'ō'io Road. Excavation for the waterline will involve a depth of 2.5 feet (80cm). The length of the waterline at the northern site is estimated at 850 feet (260m) while the length at the southern site is about 320 feet (98m). The width of the limits of grading is 20 feet (6m) but actual trenching is expected to be about 24" (60cm) wide.

The parking lot improvements will involve the reconfiguration of stalls within the existing footprint, paving of the gravel parking areas, and paving of the shoulders along the entry roads. The improvements to the northern entry road will create perpendicular paved stalls with striping and concrete headers within the existing graded dirt shoulders (Fig. 11). A total of 87 stalls along with 6 new ADA stalls will be created along the entry road. The triangular area at the eastern end of the existing parking lot will be paved to create 10 stalls. The improvements to the southern parking lot will create 35 additional stalls along the entry road (Fig. 12). The southern lot lacks the dirt shoulders so additional grading will be needed. Existing guardrails will be removed and a strip 25 feet (7.5m) wide will be graded to allow for the 20-foot long parking stall and a 5-foot wide walkway with new guardrails. There are 20 stalls planned on the southern side of the entry road for a length of about 200 feet (60m) and 13 stalls are planned on the northern side for a length of about 20 feet (36.5m). The other 2 stalls are where the entry and exit lanes merge.

There will be up to 8" (20cm) of excavation below the existing ground surface to place 6" thick base course aggregate under the 2" of asphalt pavement. New guardrails will be installed along the outer side the parking stalls. This will involve excavation to a depth of 30" (80cm) to install the posts. In addition, a new 5-foot (1.5m) wide asphalt paved walkway will be constructed between the parking stalls and guardrails to provide an alternative to having park users walk on the busy park entry road.

Staging areas have been designated within the APE/project area at each of the two locations. The staging area will be where supplies and equipment are stored during the construction. Locations along the shoulders of the park road have been identified as these areas are previously disturbed and will not impact the public's use of the existing paved parking lots during the project. Paving and striping of the shoulders will be the last phase of work so these staging areas can be used effectively throughout the terms of the project. The staging area at the northern parking lot is located on the southern side of the road to prevent any potential impacts to Pu'u Õla'i. The guardrails will be removed at the southern parking lot to facilitate the staging area.

#### APE / Project Area

The two locations of the discontinuous APE/project area correspond to the limits of grading and incorporate the locations for the comfort stations, wastewater systems, outdoor showers, waterlines, and parking lot improvements at both the northern and southern ends of Oneloa Beach. Staging areas have been designated within the APE/project area. The northern location of the APE/project area is estimated to encompass 1.75 acre, including the comfort station, wastewater system, water line route, and the portion of the parking lot and entry road where the improvements will occur (Fig. 11). The limit of clearing and grading consists of a 10-foot wide swath along the outer edge of the roadway shoulder, around the comfort station, and to both sides of the water line. The project boundary begins 500 feet makai of Mākena-Keone'ō'io Road and extends another 600 feet into the parking lot. The southern location of the APE/project area is slightly smaller at 1.3 acre (Fig. 12). The project boundary begins about 200 feet makai of Mākena-Keone'ō'io Road and extends another 300 feet to the makai end of the parking lot.



Fig. 11. Northern location of the APE/project area corresponds to the limits of grading and encompasses the new comfort station, shower, drainage sump, containment tank, sewer line, waterline and staging area on the southern side of the existing parking lot. The design for additional parking stalls at the northern parking lot and along the entry road is also shown. This northern location is estimated to encompass 1.75 acre.



Fig. 12. Southern location of the APE/project area corresponds to the limits of grading and encompasses the new comfort station, shower, drainage sump, containment tank, sewer line, waterline, and staging area located on the southern side of the existing parking lot. The design for additional parking stalls at the southern parking lot and along the entry road is also shown. This southern location is estimated to encompass. J. a cre.

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#### HISTORICAL OVERVIEW

This historical overview summarizes the history in the park vicinity and within the context of the moku of Honua'ula. A more complete discussion is provided in the CIA (Lee-Greig 2021).

Although the park is named Mākena, it does not fall within the boundaries of the area referred to as Mākena in older historic documents. Traditionally, Mākena was the area of Mākena Bay and Landing but sometime in the mid-20<sup>th</sup> Century, the area encompassed by the name was expanded to the south to include the park area (de Naie and Donham 2007:22). The literal translation for Mākena is "abundance" and may refer to the wealth of marine resources along this shoreline of southwestern Maui (Pukui et al. 1974:142). The park includes the makai portion of 2 ahupua'a (Mo'oiki and Mo'oloa) in the moku of Honua'ula.

The name of the moku, Honua'ula, may be related to the mo'olelo of Mo'ikeha. A man named Honua'ula accompanied Mo'ikeha on his voyage from Tahiti and decided to stay on Maui.

Moikeha soon after set sail from Hilo, sailing along the north coast of Hawaii until they arrived at Kohala, when Mookini and Kaluawilinau express their desire to take up their residence at Kohala. Moikeha therefore landed them there. On leaving Kohala they sailed along the eastern coast of Maui until they reached Hana, when one of his men, Honuaula, expressed his desire of making this his place of residence, so he too was allowed to remain behind. (Formander 1916a:114-116)

#### **Traditional History**

Reference to the Mākena area in Hawaiian traditions and literature is limited. However, the traditional sources suggest the cultural significance of Pu'u Ōla'i:

*Pu'u-o-inaina takes Lohiau for her husband while he is living at Maalaea. Pele is angry and cuts her in two in the middle. The tail becomes the hill of Pu'u-o-lai at Makena, the head becomes the rock islet of Molokini.* (Beckwith 1970:189)

The large cave beneath Pu'u O-lai . . . has ever been a sacred dwelling place for these ancestral deities. (Ashdown 1971:22) NOTE: The deity being referred to is the mano (shark)

Inez Ashdown makes several references to Oneuli and the area around Keawala'i Church, about a mile north of Pu'u Õla'i (Ashdown 1971). She mentions a "bowling field for rolling the 'ulu maika stones in the game of that name, and a holu-sled [sic] slide also, in the area mauka of One'uli, but they are gone now" (ibid:51). She also states that Mākena was known for a "coconut grove where many types of niu grew, including the sacred Niu Hiwa used only for ceremonial purposes" (ibid:67). This coconut grove is called Nahawale and the remnants of the grove remain around Keawala'i Church. Nahawale was also known as a pu'uhonua. The heiau for Oneuli is just mauka of the church and is recorded as a healing heiau (ibid:50). These sites of Oneuli reflect the cultural importance of this area as a chiefly residence for the Honua'ula district.

In the story of Pu'u Ōla'i, there is a mo'olelo that speaks to the connection between prominent geological features and the Hawaiian pantheon both within Mākena State Park and 'Alalākeiki Channel. According to the mo'olelo, Molokini was a mo'o who until her death, was known as Puuoinaina. She lived most of her life on Kaho'olawe which was then called Kohemalamalama. Puuoinaina would become the wife of two brothers, the sons of the famed priest Luaho'omoe whose death brought on a severe drought across the Pae 'Āina. Eventually her time on Kaho'olawe

would cause her to forget her husbands. She fell for Pele's lover Lohiau and subsequently became the target of Pele's anger. As Puuoinaina was stretching from Kaho'olawe to Mākena, Pele cut her in two and separated the tail (Pu'u Ōla'i) from the head (Molokini) (Fornander 1916).

#### **Precontact Period**

Cordy and Athens evaluated the previous archaeological findings from the Makena area to develop a settlement-subsistence pattern for the late prehistoric to early contact period (Cordy and Athens 1988). They found that the sites in the Mākena area are late in age, most being post A.D. 1500. The cultivation zone was between <sup>1</sup>/<sub>4</sub> mile and 2 miles inland (80-1,200 foot elevations). Many of the sites are located in the lower portion of the zone, around 1/4 mile inland, and are agricultural with associated temporary habitation sites (cave shelters, C-shape shelters, terraces, platforms). These upland settlements were focused on the cultivation of 'uala and some dryland kalo. It is suggested that the dry, leeward environment of Honua'ula was not agriculturally productive which was a limiting factor for large-scale, permanent habitation. Scattered permanent housesites are found along the coast and connected to the inland sites by mauka-makai trails. Based on the distribution of archaeological sites, Cordy and Athens suggest that Ka'eo, which encompasses Ka'eo, Maluaka, Mo'oiki, and Mohopilo, may have been the occupation center for the Mākena area. A limited number of heiau are recorded in the Honua'ula district, suggesting that it lacked the political and religious significance of other areas such as Wailuku, Ke'anae, Waihe'e, and Nu'u that contain high numbers of heiau. However, the higher number of heiau at Ka'eo suggests its role as a cultural center for the Makena area.

Fishing was the major subsistence activity in Honua'ula. Various fishing methods have been recorded for the district that involve hukilau for akule at Mākena and special palu (bait) for kala and kole at Keone'ō'io (Maly and Maly 2005:962). The prominence of fishing is supported by the ko'a and ku'ula in the Mākena area. These ko'a could serve as landmarks for fishermen out at sea to identify the location of fishing grounds, as kilo or places to observe ocean conditions and sight schools of fish, and as places to ask for good fishing and offer the first catch. The ko'a on Pu'u Õla'i is described as a "square heap of black stone" where "fishermen made offerings before putting to sea" (Sterling 1998:229). This ko'a is believed to be the same as SIHP #3136, Feature G located on the makai side of the pu'u behind Pu'u Õla'i Beach. Pu'u Õla'i is associated with manō (sharks) which frequently an underwater cave (Ashdown 1970:22).

#### Early Western Contact

Captain James Cook sailed along the coastline of Maui in 1779 and Lt. James King made the following observation in the Mākena area:

The westernmost point... is made remarkable by a small hillock to the southward of which there is a fine sandy bay, with several huts on the shore, and a number of cocoanut growing about them. (Beaglehole 1967)

The hillock referred to is Pu'u Ōla'i and the sandy bay is Oneloa. The description indicates the presence of housesites and coconut trees behind Oneloa Beach and would suggest the potential for archaeological remains associated with this occupation.

French explorer La Perouse sailed along the shoreline of southern Maui in 1786 and was the first European to land on Maui. He was impressed with the waterfalls and lush vegetation of west Maui

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and noted the density and extensiveness of the settlements along this shoreline, which he described as "dwellings so numerous that a single village extends for 3 or 4 leagues [9-12 miles]" (Valentin 1969:20). However, as they sailed east along the southern shoreline, he recorded a decrease in the density of settlements with "villages consisting of only ten or twelve widely separated huts" (ibid:21). La Perouse also documented the volcanic flow at Cape Kīna'u and the villages at Keone'ō'io Bay where he landed and traded for supplies. While ashore, he encountered four settlements of ten to twelve houses each that were made of grass. Sailing along the southeastern shore of Maui, La Perouse traded for pig, banana, yam, and taro (ibid).

Handy relates the following on the settlement and subsistence pattern at Honua'ula:

Between Makena and the lava-covered terrain of Keoneoio (another famous fishing locality) the coastal region includes the small ahupua'a of Onau, Moomuku, Mooloa, Mooiki, Maluaka, and Kaeo. According to an old kamaaina, these ahupua'a had in former times a continuous population of fisher folk who cultivated potatoes and exchanged their fish for taro, bananas, and sweet potatoes grown by the upland residents of the Ulupalakua section. A few Hawaiians still live here. One living near Puu Olai has a sizable sweet potato patch in the dusty soil near the shore; another raises fine potatoes in a low flatland of white sand near the abandoned schoolhouse of Makena (Handy 1940:159).

From [Kaupo] through Kahikinui, Honuaula, and Kula the sweet potato was the staple food for a considerable population, supplemented with dry taro grown in the low forest zones. This is the greatest continuous dry planting area in the Hawaiian islands.... The fishermen along the coasts of Kahikinui and Honuaula used to exchange their fish for sweet potatoes and taro grown by those living up on the kula; Hawaiian tradition gives ample evidence that the population of this now almost depopulated country was considerable. (ibid:161)

Handy, Handy, and Pukui expand on this information, describing the area as one of the minor population centers of Maui:

On the south coast of East Maui, from Kula to 'Ulupalakua, a consistently dry and lava strewn country, Makena and Ke'oneo'io [sic] were notable for good fishing; this brought many people to live by the shore and inland. There were some patches of upland taro, not irrigated; but this was a notable area for sweet potato, which combined with the fishing, must have supported a sizable population although it cannot be counted as one of the chief centers (Handy, & Pukui 1972:272).

#### Māhele and Land Sales

In the historic period between 1831 and 1836, the Honua'ula District saw a severe population decline of 43%. This decline was believed to be a combined result of disease and economics where people were moving to towns for work and schools (Schmitt 1973:15-17). Many of the inhabitants who remained in the district continued as fishermen.

During the Māhele of 1848, the major portion of the lands in Honua'ula were claimed by the government. Ali'i John Pi'ikoi disclaimed any interest to the ahupua'a of Mo'oiki while ali'i Alika Mela disclaimed interest in Mo'oloa which is how both ahupua'a in the park became government land. Eight (8) Land Commission Awards (LCA) were granted within Mo'oiki and Mo'oloa,
generally consisting of a small houselot near the coastline and one or more corresponding large agricultural lots ('uala and dryland kalo) in the uplands with several grassland areas. None of these is located within the boundaries of Mākena State Park. Additional claims in the area showed a concentration of houselots at Keawakapu in Ka'eo, just north of Pu'u Ōla'i. Coulter (1931:22) estimates the population of Honua'ula District in 1853 to be 750, with the majority of people concentrated along the coast north of Pu'u Ōla'i.

The Kuleana Act in 1850 allowed the sale of government lands to individuals via Royal Patent Grants. This meant both native tenants and foreign residents could purchase these government lands. Linton Torbert acquired a number of parcels that now comprise the park, including Grants 1441 (4 parcels are in the park) and 1015 (Fig. 13). Torbert started farming potatoes and corn before starting a large sugar cane plantation mauka of Mākena. He would eventually purchase over half of the area of the park, including Pu'u Ōla'i (Land Grant Indices n.d.). Torbert prepared a map in the 1850s of the land around Pu'u Ōla'i and indicates the 3 wetlands (Fig. 14). He later used the land for ranching activities.

There are several letters from John T. Gower to John Young, Minister of the Interior, in 1853 regarding the fishponds in the Makena State Park area (copies of these letters provided in Appendix A). Gower was a government-appointed land agent for Maui who made a commission on the land sales he arranged for the government. In one letter dated March 1, 1853, Mr. Gower makes reference to a pond in Mo'oiki where all the cattle from all the region come to drink and in which is a patch of coconut trees said to belong to Mrs. Piikoi. It is believed this letter is referring to Maluaka Pond. In another correspondence dated March 1, 1853, Gower proposed to sell several lots of land, including the sale of an 11-acre lot in Mo'oloa, Honua'ula to Manu. Gower describes the lot as having a small angular pond called "Paniaka". Gower makes mention that he bargained this sale to Manu before receiving instructions not to sell any fishponds. Therefore, he was asking the Minister if the sale should be confirmed and if leasing the pond might be an option because he said there seems to be a demand for these ponds. In a subsequent letter to the Minister of the Interior dated April 1, 1853, Mr. Gower proposes to lease several fishponds in Honua'ula, including Paniaka Fish Pond to Manu for 50 years with the condition that free access be had to it by all the cattle in the region with no obstruction whatever. In 1854, Grant 1498, 'Apana 2, including Paniaka Fish Pond, was awarded to Manu. Grant 1498, 'Apana 2 encompasses the area of TMK Parcels 26, 80, and 102 within Makena State Park (Fig. 15).

A 1885 map of Mākena Bay and the surrounding coastline by George Jackson includes Pu'u  $\bar{O}$ la'i but the focus is further north (Fig. 16).

### Sugar Plantations and Ranching

In the late 1850's a sugar cane plantation was started in the uplands above Mākena at 'Ulupalakua. Mākena Landing served as the port for this plantation. Circa 1879, a long drought closed the plantation, and the operation was converted to cattle raising by Captain James Makee as Rose Ranch. Makee's daughter-in-law with her second husband Dr. J.H. Raymond grew the ranch to about 70,000 acres (DeNaie and Donham 2007:162). It was renamed 'Ulupalakua Ranch in 1922 when Frank Baldwin purchased controlling interest (ibid:163). This served to increase the shipping traffic at Mākena Landing as the cattle were transported by interisland steamships. During this period, the area around Mākena supported a population of over a hundred families.



Fig. 13. Northern and southern locations of the APE/project area relative to the Grant boundaries within the park. The northern location corresponds to Grant 1441, Apana 1 and 6 to L.L. Torbert and the southern location is within Grant 1441, Apana 4, also to L.L. Torbert. (Hawai' i State Survey of Plan 1101-A, 2005; Hawai' i State Survey Office)



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Fig. 15. Portion of 1894 map of Honua'ula showing Grant 1498, Apana 2 granted to Manu. (Registered Map 1763 by W.D. Alexander (1866-1879) and updated by Wall in 1894; Hawai'i State Survey Office)

In the mid-1920s, shipping and commerce shifted to Kahului following improvements to the harbor there. Mäkena Landing became little used, and the population of Mäkena rapidly declined (Clark 1989:38). In 1905, the slaughterhouse, cold storage plant, and landing were moved from Mäkena to La Perouse Bay, and in 1929 the slaughterhouse was moved upland to 'Ulupalakua and the cold storage and processing plants were moved to Kahului (DeNaie and Donham 2007:162).

# 20th Century Land Use

In the 1930s, a Radio Range Station was constructed to the south of Pu'u Ōla'i. This station provided a navigation system for aircraft using instrument flying. An area of approximately 20 acres was cleared of vegetation and probably graded to create a level ground surface. Five antenna towers to transmit directional radio signals, as well as three buildings were constructed, including a house, a generator building, and a radio station building. A 1949 photograph shows that much of the park area behind Oneloa Beach and south of Pu'u Ōla'i was substantially altered to create this station (Photos 4 and 5). The buildings and five antenna towers from the Radio Station were still present in a 1962 State Parks photo.



1885 map of Mākena Bay by George Jackson (Registered Map 1337; Hawai'i State Survey Office). Pu'u Öla'i is shown at the southern end but no structures are indicated within the park area. The Fig. 16. nearest settlement was north of Pu'u Ōla'i at Maluaka Point.

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Photo 4. Oneloa Beach in 1962 with the Radio Station visible to the south of Pu'u Ōla'i. State Parks photo.

During World War II, the military took over Maui's south shore as a defense zone and training ground. Amphibious training occurred in the protected waters and leeward beaches of southern Maui from Mā'alaea to Mākena. The Mākena area was used as a training area for the 4th Marine Division (Photo 6). Military units cleared the land surrounding Pu'u Ōla'i with bulldozers and built barracks, bunkers, pillboxes, and artillery platforms for mounting guns along the Mākena shoreline (DeNaie and Donham 2007:175). One concrete pillbox from World War II (SIHP 50-50-14-4665) existed along Oneloa Beach until it was demolished in July 2018 (Photo 7).



Photo 6. Landing craft on Oneloa Beach, 1945.

Photo 7. Military bunker, 2018.

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Photo 5. 1949 aerial of the park site to the south of Pu'u Öla'i. Photo shows antenna sites, houses, generator and radio buildings of the Radio Station. Farming area is in the cleared area between the pu'u and Station. Oneloa Wetland is the cleared area behind the beach (right side of photo).

Abner DeLima who lived at the park during the early 1940s remembers military maneuvers at Oneloa Beach with camps in the area near the southern parking lot (Lee-Greig 2021:60). He also recalls landing barges on the shore. This military activity drove many residents out of the area and few returned following the war (Clark 1989:38). However, the DeLima family remained in the park area in the 1940s to farm and raise pigs. The Nakasone family came into the park area in the 1950s to raise pigs and a number of the concrete structures remaining in the park are related to this economic venue that only lasted into the early 1960s.

As late as the 1970s, there was limited development in Mākena with only a jeep road connecting Mākena and Kīhei. In the 1960s and 1970s, part of the park area served as a settlement for transient residents (hippies). But the 1970s were marked by resort development and tourism. Seibu Holdings and Japanese real estate investors were purchasing the lands north of Pu'u Ōla'i to develop Mākena Resort. They paved Mākena Road and opened up access to Mākena and Keone'ō'io. The State owned 41 acres in the Mo'oiki portion of the park and established Mākena State Park in 1971. The park was expanded with the acquisition of other parcels in the 1980s from private landowners, including 2 parcels from Seibu. The final acquisition in 1990 created the existing 165.7-acre park.

# **Oral History**

The Kukahiko-DeLima family owned portions of the park area to the south of Pu'u Ōla'i and occupied one of the houses at the Radio Station from the mid-1940s until 1962. On two occasions, April 10 and May 31, 2018, State Parks Archaeologist Martha Yent walked the park with Ashford DeLima who grew up within the Mākena State Park area. Yent also met with Carol-Marie Ka'onohi Lee, sister of Ashford, in October 2018 to discuss the family history in the park.

Their grandfather, John Kauwekane Kukahiko, acquired the property at Mākena in a Deed of Exchange with Ulupalakua Ranch in 1931 and built the house between 1931-1933. He and his wife moved to Mākena from Kanahena (south of Mākena). John transferred the Mākena property to his daughter Caroline Kauwekane in 1934 and Caroline married Abner Wilcox DeLima in 1937. The DeLima family (parents, 5 children, aunt, and uncle) lived in the house mauka of Oneloa wetland (SIHP 50-50-14-4663) (Fig. 17). The concrete slab of the house remains along with the stone and mortar retaining wall that defined the house and garage area. The one-story wooden house extended beyond the concrete slab to cover part of area defined by the stone and mortar retaining wall of the garage. The house consisted of 3 bedrooms, a kitchen, dining room, and family room. The front door was on the north side where there are concrete steps. The family used the area to the north of the house to farm and raise pigs.

The DeLima family leased about 20 acres to the Civil Aeronautics Administration for the construction of the Radio Station. The exact date of the lease and construction of the Radio Station is uncertain, but the family knows that it predates 1948. Abner DeLima worked at the Radio Station and maintained the generator and antenna. He also worked at another station on Haleakala. The DeLima family lived in the Government House, also referred to as the "White House", between 1950 and 1952 (refer to Fig. 17). The family left the Mākena house around 1962.

Ashford said there were 6 family homes in the park area in the 1950s. The Nakasone family raised and sold pigs. They had about 50-60 pigs and constructed several structures, including the killing house (SIHP 50-50-14-4660A), loading ramp (SIHP 50-50-14-4660B), and pig pen (SIHP 50-50-14-4661). The killing house had a concrete floor and walls with a corrugated metal roof. There was screen in the area between the top of the wall and the roof. The structure was painted green.



Fig. 17. Structures in the southern portion of Mākena park area in the 1940s and 1950s based on information provided by Ashford DeLima.

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The pig pen consisted of the concrete slab with drainage ditches along the sides, a wooden post frame, and corrugated metal roof. In conjunction with the roofed pen was a concrete platform to store feed and a fireplace where the slop was cooked. The Nakasone's house was on the mauka side of the pig pen along with a furo.

The Ho family lived in a house makai of the DeLima's house. They were caretakers of the property and farmed cucumber, tomato, eggplant and potato. Mr. Kubo was a caretaker for the pigs and lived in a house between the DeLima house and the well/pump house. The Mitaka family lived behind the sand dune off the northwest corner of Paniaka Pond. The Nagamine family lived across the road and were farming and raising pigs. Ashford identified SIHP 50-50-14-4662 as a well and pump house to provide irrigation water for the farming areas. The family's drinking water came from Olinda.

Ashford referred to the other house at the southern end of the Radio Station as the government house. This house sat atop the rock ledge on the south side of the park parking lot. An asphalt driveway led from the Mākena Road to the house. The rock and mortar feature (SIHP 50-50-14-8791) was associated with this house and appears to be a fireplace.

The area south of the rock ledge and government house is at a lower elevation and Ashford remembers this area as being swampy. The Mitaka's wooden house off the northwest corner of Paniaka Pond was falling down in the 1950s. The pigs would wander into this area, but everyone remembers Paniaka as being overgrown and swampy. Abner DeLima, older brother of Ashford, also shared that they would gather the leaf of the pānini (prickly pear cactus) for slop and the wetland swamp areas were where the pigs would go when it rained (in CIA by Lee-Greig 2021:55).

Tracy Tam Sing, State Parks Archaeologist, spoke with Dan Nakasone on February 23, 2019. Dan's grandfather, Kamasuki Nakasone, built the pig killing house at Mākena in the late 1940s (maybe 1949). The killing house corresponds to Site 4660A (Photo 8). The large concrete building had an iron roof. Mr. Nakasone clarified that this was not a slaughterhouse because the pigs were not butchered there. Rather, the pigs were killed within the building and hung on the metal hooks until the customer came and picked up the whole dead pig. The business only ran for a couple of years, maybe until 1955 when Mr. Nakasone got married and moved to Pukalani.

Mr. Nakasone also mentioned a cook house for the pigs near the killing house (SIHP 4661; Photo 9). The cook house is where the pig slop was cooked before being given to the pigs. The cook house consisted of a concrete slab, brick oven, and iron roof over a section of it. The pigs were kept in the pen by the cook house and were not let loose.



Photo 8. Concrete pig killing house (Site 4660A).

Photo 9. Concrete slab of the pig pen (Site 4661).

The interviews with the DeLima siblings (Abner, Ashford, and Carol-Marie) as part of the Cultural Impact Assessment (CIA) provided some additional insight into land use and cultural practices (Lee-Greig 2021:53-63). In addition to small scale farming and the raising of pigs, the family was fishing, gathering nearshore resources, and collecting pānini (prickly pear cactus). Abner learned traditional fishing practices of kapapai and hukilau as well as spearfishing from his grandfather. Hukilau and spearfishing were done at Oneuli to catch uhu, palani, weke, and papio because of the reef while moi frequented Oneloa and were caught with net (bid:68). The women gathered limu līpoa, urchin, and opihi from the shoreline of Pu'u Ōla'i. Abner collected the leaf of the pānini along Mākena Road which he would cook and feed to the pigs.

Abner remembers wild sheep on Pu'u Ōla'i (ibid:61). They created trails on the slopes of the pu'u and would eat the kiawe beans. He notes that the sheep were gone probably around 1950. He also recounts hauling cinder from the southern base of the pu'u to use on the road and yard. Others would take cinder for orchids. Today, axis deer are frequently seen in the park and on the pu'u.

### PREVIOUS ARCHAEOLOGICAL RESEARCH

Numerous archaeological surveys have been conducted in the Mākena area since the 1970s. Many of these have been done in conjunction with residential and resort development of the area to the north of the park (Table 1, Figs. 18 and 19).

#### Surveys in the Mākena Area

John Stokes recorded in his fieldnotes that an informant told him of a heiau on the summit of Pu'u Ōla'i (John Stokes fieldnotes in Sterling 1998:229). Armine von Tempski described a small heiau or ko'a situated at the base of Pu'u Ōla'i:

After we'd eaten, Makalii saddled our two horses and took me to see an old heiau, temple, at the base of the Hill of Earthquakes (Pu'u Öla'i), just beyond the point where Pili had speared the ulua the day before. Reverently we inspected the square heap of black stones. "In this temple kahunas prayed and offered sacrifices in old times," Makalii said in Hawaiian. "This was the temple of the Shark God where fishermen made offerings before putting out to sea." (Tempski 1940 in Sterling 1998:229).

Winslow Walker of Bishop Museum conducted and island-wide survey of Maui archaeological sites in 1929 (Walker 1931). Working with native informants, he recorded a large ko'a at Pa'ako to the south of the project area (ibid:102-103). He also located a heiau near Keawala'i Church at Mākena Landing. Walker did not mention the ko'a described by Tempski at the base of Pu'u Ōla'i.

The 1973 Statewide Inventory of Historic Places (SIHP) identified the Mākena Complex (SIHP 50-50-14-1266). This complex extends from 200 meters south of Keawala'i Church on the north to Pu'u Ōla'i on the south (Fig. 19). Features are concentrated between the shoreline and Mākena Road and consist of stacked 'a'ā wall enclosures, walls, platforms, and pits. No midden or artifacts were recorded in association with these features.

In 1977, an archaeological survey was conducted for the proposed Mākena Road alignment that would run mauka of the existing road in the area north of Pu'u Ōla'i and join up with the old road

alignment just north of the pu'u (Muroda & Associates 1982). Site 50-50-14-250 was recorded at the south end of Oneloa Beach and is believed to be located in the vicinity of parcels 102 (park) and 103 (private). Site 250 is described as an extensive village complex consisting of badly collapsed structures, including wall segments, enclosures, platforms, pavements, and possible housesites. Coral fragments and midden were found scattered on the surface, along with bottle glass.

On the mauka side of Mākena Road in the vicinity of the southern end of Oneloa Beach and Paniaka Wetland were other sites. Site 50-50-14-249 consists of two large enclosures sharing a common wall. Coral and shell midden, terraces, and lava bubble shelters were found in association with the enclosures. Site 50-50-14-251 is a complex of enclosures, platforms, and lava shelters located on a bluff about 20 meters mauka of the road. Site 50-50-14-252 consisted of C-shaped shelters and a stone platform with 'ili'ili paving, coral, and shell midden.

 TABLE 1

 Summary of Archaeological Surveys in the Vicinity of Mākena State Park, Honua'ula District

AUTHOR	YEAR	AHUPUA'A	FINDINGS
State Inventory	1973	Ka'eo/Maluaka	50-50-14-1266 along coast to north of park; complex of enclosures, walls, platforms, and pits.
Muroda & Assoc.	1977	Moʻoloa	Mākena Road alignment that inventoried sites 50- 50-14-249 to 253; enclosures, platforms, walls.
Haun	1978	Ka'eo/Maluaka	Multiple agricultural features, ca. A.D.1600- 1700; 88 sites including walls, terraces, enclosures, C-shapes, mounds, pavings, pits.
Cordy	1978	Ka'eo/Maluaka	79 sites of pre-Contact and historic periods; modified outcrops, terraces, enclosure, platforms, pits, midden scatters.
Cordy & Athens	1985	Kaʻeo	Data recovery of Sites 50-50-14-1916 and 2101; agricultural complexes with temporary habitation; proposed range of A.D. 1600s for construction.
Donham	1992	Moʻoloa	Site 50-50-14-2909 with walls, terraces, mounds
Beggerly	1992	Mo'oloa	Located Paniaka Pond (50-50-14-2938) and boulder features (50-50-14-2939) on Parcel 102.
Donham	1993	Moʻoloa	Inventoried and mapped features of Site 2939
Fredericksen	1996-7	Moʻoloa	7 sites including modified outcrops, boundary walls, rock shelter, and ceremonial site (50-50-14-4185 to 4191).
Rotunno-Hazuka, Sinoto, Titchenal	2002	Moʻoiki	3 sites including Maluaka Fishpond (50-50-14- 5209) with wall remnants; boundary wall (Site 5210); enclosure and mound (Site 5089).
Rotunno-Hazuka and Pantaleo	2005	Kaʻeo	9 sites including ranching enclosures, agricultural sites, habitation sites, and possible religious site.
Rotunno-Hazuka, Hodgins, Sinoto and Pantaleo	2008	Maluaka	Site 50-50-14-6366 (historic homestead); 50-50- 14-6367 (late pre-contact to early historic habitation and agricultural site); 8 additional sites with majority being pre-contact habitation sites with agricultural components.
Perinski & Dega	2011	Ka'eo	5 sites including pre-contact habitation sites, agricultural features, ceremonial site, and historic ranching sites.
Perzinski & Dega	2015	Kaʻeo	17 sites including 6 temporary habitation, 4 ranching, 3 agricultural, 1 permanent habitation enclosure, 1 transportation, and 2 undetermined.





Fig. 19. Location of inventoried sites (SIHP 50-50-14-#) in proximity to Mäkena State Park and discussed in the previous archaeology section. NOTE: This map does not show the sites inventoried within the park after 2004. Refer to Figure 22 for a complete inventory of park sites.

During the 1970s and 1980s, numerous archaeological projects were conducted in the Mākena area in conjunction with resort and golf course development (Clarke 1974; Haun 1978; Cordy and Athens 1988). The archaeological work indicated a moderately dense settlement in the Mākena area which appears to have begun in the late prehistoric period. Many of the surveys encompassed the land between the elevations of 50 and 130 feet, approximately 250 to 800 meters inland which corresponds to Cordy's lower cultivation zone. Sites inventoried included walls, enclosures, C-shaped shelters, and agricultural terraces that appear to be distributed fairly uniformly within the survey area Cordy and Athens tested agricultural sites 50-50-14-1916 and 2101. These sites date to the late 1600s or 1700s and consist of small agricultural plots with associated temporary habitation features that were reused over time. The agricultural sites tend to be located on the slopes of the low ridges while the habitation sites utilized the ridge tops. Site 1916 has a feature that was determined to have a religious function.

Closer to the park and north of Pu'u Ōla'i, a 1988 survey by Bishop Museum was conducted on the old Mākena school parcel (TMK: 2-1-005:084) (Cleghorn, Kawachi, and Sinoto 1988). The Mākena School Parcel Historic Complex (SIHP 50-50-14-1007) was inventoried with walls, platforms, and a cement cistern (Fig. 19).

In 1996-97, Walter Fredericksen conducted archaeological work at Parcel 116 located across Mākena-Keone<sup>+</sup>ō<sup>+</sup>io Road from Paniaka Pond at the southern park boundary. Seven (7) sites were located on the 4.2-acre parcel (50-50-14-4185 to 4191). Site 4185 is a large enclosure that has been interpreted as a ceremonial structure with a possible burial (Fredericksen 1997:1). A Preservation Plan for this site established a permanent buffer around the site (Erik Fredericksen 1998). Other sites include modified outcrops, boundary wall, and historic wooden structure with a rock wall.

#### Archaeological Investigations within Mākena State Park

In 1988 and 1989, three burials were recovered from the southern slope of Pu'u Ōla'i (Yent 1989). These burials were assigned SIHP No. 50-50-14-1814. A Burial Treatment Plan was developed in 1993 and the remains were reinterred on the summit of the pu'u. During a period of particularly high surf in June 1995, a single human burial was exposed within the sand dune by the bunker along Oneloa Beach (Site 50-50-14-4120) (Donham 1995). This dune burial was approximately 400 feet north of Paniaka Pond.

In 1991, a survey was conducted on parcel 103 at the southern boundary of the park. Site 50-50-14-2909 was recorded during this survey and it is uncertain if it might overlap with Site 250 recorded in 1981. Site 2909 consisted of 11 surface features, including walls, enclosures, and mounds. It was suggested that several of the features may be associated with temporary or permanent habitation. Several other features are believed to be associated with a historic housesite reported on the site. Historic glass bottle fragments were noted when the grading work was monitored (Donham 1992a).

In 1992, Patricia Beggerly, archaeologist with the Army Corps of Engineers, inspected parcels 80, 102, and 103 at the southern end of the park. She referred to Paniaka as a fishpond and reported rock features in the area mauka (east) of the pond (Fig. 20) (Beggerly 1992). She noted a coral file and 'ili'ili pebbles on the surface in the area of these features. The features were tentatively identified as part of Site 250. Beggerly also recorded a rock wall to the southwest of the pond but this feature is believed to be associated with the grubbing of the site and was not given an archaeological site number.



Fig. 20. Map of Paniaka and the surrounding area prepared by Beggerly 1992. SIHP numbers added

Theresa Donham, SHPD Archaeologist, followed up with site visits to Parcels 80 and 102 in 1992 and 1993 and assigned SIHP No. 50-50-14-2938 to Paniaka and 50-50-14-2939 to the features on the east side of the pond. During a December 11, 1992 site visit, she noted that approximately 2/3 of parcel 102 to the south of Paniaka Pond had been grubbed and covered with fill but the area between the pond and road had not been affected (Fig. 21) (Donham 1992b). She found that the fill extended into parcel 80 and along the south and southwestern sides of the pond. It was estimated that the thickness of the fill varied from 40cm to 80cm. Donham surveyed the area where Beggerly had noted the rock mounds. She described 4 archaeological features, and assigned site number 2939A through 2939D to the 4 features (Donham 1992b):

<u>Feature A</u>: Low platform, square to D-shaped, and measuring 2.1m by 2.7m. Constructed of weathered 'a'ā boulders, cobbles, and pebbles. The perimeter along the west side of the platform is in good condition and consists of partially buried, aligned boulders. The fill consists of small cobbles and large pebbles with a few pieces of waterworn coral. Possible functions include burial or ko'a (shrine). Located 10m north of a metal pipe marking the boundary of Parcel 80. Disturbed by fallen kiawe tree.

<u>Feature B</u>: Rectangular pavement constructed of weathered 'a'ā and pāhoehoe cobbles. It measures 6m (N-S) by 2.3m with a single large cobble of coral in the center of the feature. Possible uses include habitation or shrine. Located 13.2m from Feature A at 45°. Also disturbed by kiawe trees.



Fig. 21. Extent of grubbing and clearing that occurred in 1991 (Donham 1992).

<u>Feature C</u>: Low platform or mound with an associated boulder alignment. The mounded portion is trapezoidal in plan and measures 23m by 2.0m across the center and 30-35cm in height. The alignment is 2.64m long and is on the west side of the mound. Possible function is burial or shrine. Located 13.5m from Feature A at 10°. Kiawe tree growing in center of mound.

<u>Feature D</u>: Boulder alignment oriented parallel to the bank of Paniaka Pond and 22m in length. The boulders are buried on the west side, creating a terrace-like feature that may have once defined the edge of the pond. Additional boulders and cobbles are scattered to the north of this feature and may represent a disturbed portion of the alignment. Located 2.0m west from the metal pipe marking the boundary of Parcel 80.

In addition to the 4 features, Donham recorded a bifaced, core-filled wall along the western boundary of parcel 102. She noted that the wall had been completely destroyed and/or radically disturbed in a number of locations. Much of this wall is within an easement to the County of Maui for future road widening. In a subsequent site visit in January 1993, Donham learned from the previous landowners of parcel 102 that some of the fill pushed into the pond was removed but fill still existed along the south and southeastern sides of the pond as indicated in Figure 21.

Four archaeological complexes and six concrete structures were identified during the 1992 survey of Mākena State Park (Yent 1993a). This survey was conducted at the same time that archaeological monitoring was being conducted for the construction of the new park entry road and parking lot at the northern end of Oneloa Beach and just south of Pu'u Ōla'i. No archaeological deposits were noted during this construction work. A supplemental archaeological survey of Mākena State Park in 1999 identified two additional archaeological complexes and State site numbers were given to the concrete structures located during the 1992 survey (Carpenter, Major and Yent 1999).

In July of 1995, archaeological monitoring for a second access road and parking lot was conducted toward the southern end of Oneloa Beach within Mākena State Park (Carpenter and Yent 1995). No archaeological remains were uncovered by the construction activities during this project.

Archaeological investigations were conducted prior to the construction of the security residence in 1998 (Carpenter, Major and Yent 1999). Two new sites (50-50-14-4666 and 4667) were identified during the survey of the project area, along with the previously recorded concrete structure #4 (Site 4663) from the 1992 survey. In addition to the survey of surface features, a series of 6 auger cores were placed along the alignment for the driveway at 25-meter intervals, at the house site, and along the waterline that would run to the house from Mäkena-Keone'ō'io Road. These cores found a lack of subsurface archaeological deposits in the project area. A representative stratigraphic profile is as follows:

LAYER	DEPTH	DESCRIPTION
Layer 0	0-5 cmbs	Very fine, dry, brown (10YR 4/4) clay mixed w/ organics (dried grass and twigs, goat scat) loose, single-grain, sticky, plastic, few subangular to subrounded pebbles; abrupt, wavy boundary.
Layer 1	5-33 cmbs	Very fine, dry, brown (10YR 5/8) silty clay; crumb, single-grain, sticky, plastic, very friable, no rocks; abrupt, level boundary.
Layer 2	33-40 cmbs	Black (10YR 2/1) cinder, loose, dry, gravel sized particles.

Prior to the restoration of Maluaka Wetland, State Parks archaeologist conducted a surface survey of the project area (Yent and Monahan 2005). Three (3) auger cores were placed along the backside of the dune of Onculi Beach with two indicating a continuum of aeolian sand associated with an active dune system. The transition from the dune deposits to the inland clayey loam and cinder was noted in the core slightly further inland. The 3 test units placed around the wetland did not indicate any cultural deposits but showed a sequence of a silt layer above a clayey loam layer and the lowermost cinder. A mapping of the surface features associated with the wetland were suggestive of ranching walls and the foundation of a rock wall that once lined the edge of the pond, perhaps in connection with the former use of the wetland as a fishpond. The wetland area had been previously studied in conjunction with the archaeological investigations on the adjacent private parcels 34 and 35 between 1999 and 2001 (Rotunno-Hazuka et al. 2002). During this work, Maluaka Wetland was given SIHP No. 50-50-14-5209 and described as a fishpond. A walled complex (50-50-14-5211) on the north side of the wetland was mapped and tested.

In 2009, State Parks archaeologists developed an Archaeological Monitoring Plan for the installation of a lifeguard facility on the makai side of the security residence (Yent 2009). Previously inventoried sites were relocated and buffers were created. Utility trenches excavated to a depth of 50cm were monitored. The stratigraphic profile followed the pattern noted above with no evidence of cultural deposits or archaeological remains.

Since 2012, State Parks archaeologists have been conducting a more comprehensive inventory survey of the entire Mākena State Park property that builds on the earlier surveys conducted in the 1990s. Deer had been eating the vegetation in the park which exposed many features that had not been previously identified. The reduced vegetation cover also allowed for mapping and photographing of the various sites and features. A total of 18 sites had been identified during the earlier surveys and an additional 17 new sites were recorded and mapped between 2012 and 2018.



These sites include knolls modified with retaining walls, terraces, and platforms, some with shell midden and coral. The other major site type is dry-stacked rock walls that may be associated with the raising of cattle and pigs in the area. The intact features are concentrated in the northern portion of the park including a possible heiau or ceremonial site based on the presence of coral (50-50-14-8787) (Photo 10). There is evidence of disturbance and possible bulldozing around the knolls.

Photo 10. Site 50-50-14-8787, walled enclosure atop a knoll with coral fragments. View NE.

All the inventoried sites have been assigned SIHP numbers (Table 2 and Fig. 22). Included in the inventory are 4 burial sites exposed through erosion of either the coastal sand dune of Oneloa Beach or the cinder of Pu'u Ōla'i.

In 2018, State Parks archaeologists conducted a survey of Site 2939 on the eastern side of Paniaka Pond to relocate the features previously identified by Donham in 1993. Plan-view maps of the 4 features were drawn and additional alignments on the upper bank of the pond were recorded. State Parks excavated 4 test units around Paniaka Pond in conjunction with planning for the removal of vegetation around the pond and the possible installation of a predator fence to protect the native waterbirds that frequent the pond (Fig. 23). Test Unit 4 placed on the southern edge of the pond confirmed the bulldozer push noted by Donham in 1992. Test Unit 5 on the northern side of the pond consisted of sterile dune sand to a depth of 45cm below surface where the water table was encountered. The other two units were placed within Site 2939 between Paniaka Pond and Mākena-Keone'ō'io Road. A broken ulu maika had been found on the surface and the units were placed in the vicinity of the rock mound/pavement features in an effort to assess function, age, and the presence/absence of subsurface cultural deposits. Test Units 6 and 7 were marked by a high density of 'a'ā cobbles within the silty loam matrix with boulders encountered at a depth of 40cm below the surface. A cultural layer in Test Unit 6 consisted of coral fragments, marine shell (cowry, conus, pipipi and urchin), fish bone, bird bone, and dog tooth fragments scattered within the soil and cobble matrix (14-32cm B.D.). A one-piece bone fishhook was found at a depth of 60cm B.D. but there was little else to suggest a lower cultural deposit. A similar cultural deposit was encountered in Test Unit 7 (20-50cm B.D.). In both units, the cultural layer is underlain by a reddish clayey loam that appears to be the culturally sterile soil deposit atop an 'a'ā bedrock (Photos 11 and 12). However, excavation to a depth of 80cm B.D. did not reach the bedrock in either unit. The findings are detailed in the Archaeological Inventory Survey being prepared for the Paniaka Pond Phase 1 restoration project (Yent, 2021).

TABLE 2 Archaeological Site Inventory at Mākena State Park

SIHP No. 50-50-14-#	TEMPORARY SITE #	SITE TYPE	LOCATION	COMMENTS
1814		Burials (4 from pu'u/reinterred)	SW slope of Pu'u Ōla'i	
2938		Paniaka wetland/fishpond	S end of Oneloa Beach	
2939		Rock mounds (4 features)	East of Paniaka Pond	
3136		Complex of walls, platforms	W slope of Pu'u Ōla'i	
3137		Complex of 'a'ā structures	Center of Pu'u Ōla'i	
3138		Complex of walls, platforms	S end of Oneloa Beach	
4120		Burial (eroding dune/removed)	Central Oneloa Beach	Pre-contact
4205		Burial (eroding dune/removed	Pu'u Ōla'i Beach	Pre-contact
4660A	DSP-TS-001	Concrete bldgpig killing house	E of Pu'u Ōla'i	Ranching <sup>1</sup>
4660B	DSP-TS-002	Loading Ramp		
4661	DSP-TS-003	Concrete slab & box - pig pen	E of Pu'u Ōla'i	Radio Station <sup>2</sup>
4662	DSP-TS-015	Concrete slab - pump house	E of Pu'u Ōla'i	Ranching
4663	DSP-TS-014	Concrete structure - Housesite	E of Pu'u Ōla'i	Radio Station
4664	DSP-TS-013	Concrete trough	NE of Pu'u Ōla'i	Ranching
4665		Concrete bunker	Central Oneloa Beach	Demolished
4666		Rock mounds (2)	E of security residence	
4667		Rock mounds (2)	E of security residence	
5209		Maluaka Wetland with retaining wall around perimeter of pond	E of Naupaka Beach	
5211		Stack wall enclosure at pond	E of Naupaka Beach	
8782	DSP-TS-004	Terraces on face of knoll	Mauka of Pu'u Ōla'i	
8783	DSP-TS-005	Terraced platform	SE of Maluaka Wetland	
8784	DSP-TS-006	Low-walled enclosure	SE of Maluaka Wetland	
8785	DSP-TS-007	Low wall with hearth	SE of Maluaka Wetland	
8786	DSP-TS-008	Complex of mounds, enclosure, retaining walls and alignments	SE of Maluaka Wetland	
8787	DSP-TS-009	Walled double enclosure w/ coral	E of Maluaka Wetland	
8788	DSP-TS-010	Walls on slope above Maluaka	E of Maluaka Wetland	Ranching
8789	DSP-TS-011	Platform within upright outcrop	E of Maluaka Wetland	
8790	DSP-TS-012	Alignment of upright boulders	SE of Maluaka Wetland	
8791	DSP-TS-019	Rock and mortar structure; road	On ledge; S of parking lot	Radio Station
8792	DSP-TS-020	Rock wall	On ledge; S of parking lot	Ranching
8793	DSP-TS-024	Rock wall and rock-lined trail	S of ledge; S of parking lot	20 <sup>th</sup> Century <sup>3</sup>
8794	DSP-TS-025	Terrace, retaining walls on knoll	Mauka of Pu'u Ōla'i	
8795	DSP-TS-026	Rock wall	Makai side of Mākena Rd	20th Century
8796	DSP-TS-027	Furo? Inscribed Otani 1929	N of Paniaka Pond	20th Century
8797	DSP-TS-028	Burial (eroding dune/removed)	S end of Oneloa Beach	Pre-contact
8798	DSP-TS-029	Small platform with upright slabs	SE of Maluaka Wetland	

<sup>1</sup> Ranching refers to both cattle (ca. 1900) and pigs (ca. 1950s)

<sup>2</sup> Radio Station dates to the period late 1930s to 1950s.

<sup>3</sup> 20th Century sites from 1920s to recent. Temporary Sites 16, 17, 18 not given SIHP # due to recent age, function, and integrity.

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Fig. 22. Archaeological sites inventoried within Mākena State Park. The burial and burial reinterment sites are noted with a red dot.



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Fig. 23. Location of the four test units placed at Paniaka Pond (TU-4 thru TU-7) and the five features of Site 2939 (A-E).



Photo 11. TU-6 at base of excavation (74cm B.D.) Photo 12. TU-7 at base of excavation (80cm B.D.).

# Sites in Vicinity of Northern Parking Lot and Entry Road

Archaeological surveys conducted by State Parks archaeologists in 1992, 1995, and 2004 identified 7 sites in the vicinity of the northern parking lot. These sites are reviewed here to assist in developing a predictive model of potential sites that could be located within the APE/project area. These known sites were also considered when selecting the locations for the new proposed facilities. Three (3) sites are located on Pu'u Ola'i and four (4) are concrete structures on the flat to the south and southeast of the pu'u. The archaeological site in closest proximity to this project area is SIHP 4661, the pig pen/cook house feature (Fig. 24). This site is about 115 meters (375 feet) southeast of the comfort station location. The waterline running from the comfort station to the road will run between archaeological Sites 4661 and 4660, Feature A in what was previously a farming area (refer to Fig. 16). The sites associated with Pu'u Ōla'i, including SIHP 50-50-14-3136 on the western slope, SIHP 50-50-14-3137 at the summit, and the burials associated with pu'u are considered in terms of their cultural significance, as well as proximity to the project area.

### Site 50-50-14-1814

This site encompasses 4 burials (2 complete and 2 fragmentary) found in the southwestern slope of Pu'u Ōla'i (Yent 1993). Most of these burials were exposed during mining of cinder from the pu'u and the iwi kūpuna have been reinterred at the summit of the pu'u.

#### Site 50-50-14-3136

This site is located on the western slope of Pu'u Ōla'i in the area behind Pu'u Ōla'i Beach. The complex of at least 22 features, including enclosures, platforms, and midden scatters, is suggestive of a temporary to semi-permanent habitation complex. Feature G is a possible ko'a that was initially recorded in 1992 (Photo 13) (Yent 1993). State Parks archaeologists initiated the mapping of the features in 2017 with additional features being recorded within the Site 3136 complex.

#### Site 50-50-14-3137

The summit of Pu'u Ola'i consists of a larger northern peak and 3 smaller peaks to the south. Five (5) features (A-E) were recorded within the depression between these peaks in 1992, including walled enclosures, raised platforms, and rock walls (Yent 1993:21-25). Feature A consists of a walled enclosure built into the interior slope with a 4m high retaining wall (Fig. 25; Photo 14). During a site visit in February 2017, an additional 2 features (F-G) were recorded. Feature F consists of a recent complex of low wall enclosures along the base of the north slope of the depression while Feature G is an alignment of boulders between the peaks.



Fig. 24. Proposed northern comfort station location and water line route relative to Pu'u Õla'i, Oneloa Wetland, and archaeological sites 4660, 4661 and 4662



Photo 13. Site 3136, Feat. G enclosure and detail of coral and shell on the makai (west) slope.





### Site 50-50-14-4660, Feature A

This concrete structure is the former pig killing house built in the late 1940s by the Nakasone family. The remains of this structure consist of the concrete slab floor, concrete walls, and a rock platform with concrete steps off the makai (west) side (Fig. 26; Photo 8). The structure measures 16.5 meters in length (N-S) and width varies from 2m to 4.5m. The long, narrow room on the southern end measures 6m by 4.5m with wall height of 1.7m. There are metal hooks on the southern wall to hang the pig after killing. The larger room to the north measures 9m by 5m with wall height averaging 1.8m. There is a small room off the southeast corner ( $2m \times 1.5m$ ) and a larger room ( $3m \times 3m$ ) off the center of the northern room. The rock platform on the western side of the building abuts the room on the northern end and is about 15m in length.

### Site 50-50-14-4660, Feature B

This loading ramp consists of two rock platforms, each measuring about 3m wide and 4.5m long with a height of 70cm (Fig. 27; Photo 15). They are separated by a ground level dirt floor that measures 6m in length. The rock platforms are defined by concrete and stone retaining walls on 3 sides with a concrete lip (10cm high) on the side facing the central open space. Two concrete squares (80cm x 80cm) abut each of the platform walls fronting the central space and may have supported a raised wooden floor. Within the central area are two additional concrete footings.





Pig Pes

Harles

Fig. 28. Plan-view map of Site 4661 (pig pen and cook house).

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DRAFT AIS for New Comfort Stations and Parking Lot Improvements, Mākena State Park

# Site 50-50-14-4661

This site consists of a long, rectangular concrete slab from the former pig pen that measures 19m long by 3m wide (Fig. 28; Photo 9). A narrow drainage ditch runs along the southern side of the slab with a perpendicular drainage channel diverting water onto the ground surface. Square post holes are found along the northern edge of the slab along with 5 postholes running down the center. These supported posts that held up a metal roof when in use. Off to the northeast is the former cook house consisting of a concrete platform (Feat. A), a depression in the concrete platform (Feat. B), and the fireplace lined with bricks (Feat. C). This feature is where the slop for the pigs was cooked.

#### Site 50-50-14-4662

The pump house foundation consists of a rectangular concrete slab with raised concrete siding that measures about 8m (E-W) by 2.5m (N-S) (Fig. 29; Photo 16). The height of the siding above the surrounding ground surface varies from 30cm to 55cm. The 50cm wide siding has protruding rebar that probably supported wooden walls. The central area lacks the concrete slab and may have housed the well and machinery used to pump the water. There is some damage to the foundation and debris has been dumped into the central depression.



Fig. 29. Plan-view map of Site 4662 (pump house).



View of north wall with concrete siding.



Site 4662. The west and east end have the concrete flooring while the central area appears to be where the machinery was placed. Center area now filled with trash.

Pump machinery found near the foundatio

## Sites in Vicinity of Southern Parking Lot and Entry Road

This location corresponds to the southern end of the former Radio Station, including the asphalt driveway and site of the former Government House. The comfort station location extends from the southern side of the parking lot to the northern edge of asphalt pavement of the former driveway, a distance of about 13.5 meters (40 feet). The comfort station is about 30 meters (100 feet) north of SIHP 50-50-14-8791 (rock and mortar fireplace), 42 meters (140 feet) north of the stacked rock wall (SIHP 50-50-14-8792), and 45 meters (150 feet) from the rock ledge and SIHP 50-50-14-3138 (Fig. 30). Oneloa Wetland is about 180 meters (600 feet) northwest of the parking lot.

#### Site 50-50-14-3138

A natural basalt rock ledge runs east-west from Mākena-Keone<sup> $\circ$ </sup><sup> $\circ$ </sup> io Road to the coastal sand dune. The height of this ledge reaches 6 meters (20 feet) and several features have been recorded on the south side at the base of the ledge. There are small shelters created by the overhangs and some stack rock walls define the outer edge of platforms adjacent to the overhangs (Fig. 31; Photo 17). One feature appears to be a rock ramp that ran from the top to the base of the ledge, possibly connected with ranching activities (Feat. F; Photo 18). The age of these features appears to range from the ranching era to the recent hippie occupation. Further research may yield a better understanding of the age and function of these features.



Fig. 30. Southern comfort station location and water line route relative to Oneloa Wetland to the northwest and archaeological sites 3138, 8791, and 8792 to the south.



Fig. 31. Features of Site 3138 located at the base of the vertical rock ledge. Feature G is at the makai end.



Photo 17. Site 3138, Feat. B consists of an overhang Photo 18. Site 3138, Feat. F ramp with view of shelter, level dirt surface in front, and stacked rock wall.

retaining wall. View is NE toward the top of the ledge.

# Sites 50-50-14-8791 and 50-50-14-8792

Located atop the ledge are two features. Site 8791 consists of remnants from the former Government House associated with the Radio Station. There is a rock and mortar fireplace feature that measures 2.1m (N-S) by 3.3m (E-W) with walls 60cm high (Fig. 32; Photo 19). An opening at the base of the south wall measures 40cm wide and 30cm high. The site exhibited extensive collapse when recorded in 2013 and was further damaged by a fallen kiawe in January 2019. Also in the site are remnants of the asphalt driveway that ran from Mākena-Keone'ō'io Road to the Government House. The house was in the vicinity of the fireplace feature.

Site 8792 is a stacked rock wall that parallels the top of the ledge and measures 38m long, averages 90cm high (4 courses), and 60cm wide (2-3 boulders) (Fig. 33; Photo 20). This wall may have been constructed as a barrier to keep cattle and pigs from falling over the ledge.



Fig. 32. Plan-view of Site 8791, rock and mortar fireplace with concrete pad.

Fig. 33. Plan-view of Site 8792, stacked rock wall running mauka-makai.



Photo 19. Rock and mortar fireplace (Site 8791), view east.



Photo 20. North face of Site 8792 rock wall toward the eastern end of the wall length.

### Predictive Model for Cultural Remains

The archaeological surveys have inventoried a total of 35 sites within Mākena State Park that fall into several categories of site types and age. Some of these sites consist of modified knolls with terraces, platforms, and enclosures that are suggestive of both permanent and temporary traditional Hawaiian habitation and dryland agricultural sites. A second category of sites are the wetlands which may have been used as fishponds. The third category are those sites related to ranching and use of the property as a piggery, including concrete troughs, foundations of pig pens and loading ramps, a concrete structure built as a pig killing house, foundation for a pump house, and remnants of post and wire fencing. A fourth category of sites is other concrete structures related to the Radio Station, circa 1930s to 1950s. A fifth category is the burials that have been found in the sand deposits of the beach and the cinder deposits of Pu'u Ōla'i.

The surveys, monitoring, and testing have shown a geographical distribution of surface sites and a lack of subsurface cultural deposits with the exception of the deposit associated with Site 2939 at Paniaka Pond (Fig. 34). Several sites have been identified on Pu'u Ōla'i. There is one complex #3136 on the makai slope of the pu'u behind Pu'u Ōla'i Beach which includes a ko'a. Another is #3137 within the central depression at the summit of the pu'u with one feature being a possible heiau. Additional, several burials have been recovered from the southern slope of the pu'u. These sites indicate the cultural significance of the pu'u for religious and ceremonial purposes.

One grouping of sites (A) is located at the northern end of the park, mauka of Maluaka Pond and Pu'u Ôla'i. These sites tend to be located on the higher elevation adjacent to Mākena-Keone'õ'io Road and are characterized as modified knolls with alignments, retaining walls, terraces, and enclosures constructed with 'a'ā cobbles and boulders. Most of these sites are suggestive of precontact habitation and agriculture. No testing has been conducted at these sites to determine age, function, or presence/absence of cultural deposits. A stacked rock wall running north-south along the atop of a steep drop-off (SIHP 50-50-14-8788) and a rock and mortar trough (SIHP 50-50-14-4664) in this area are indicative of ranching activities in the early 1900s.

A second grouping (B) is centrally located in the park to the southeast of Pu'u Õla'i. Sites 4660 to 4663 are 20<sup>th</sup> Century sites associated with the Radio Station and subsequent use of the area by families for truck farming and raising pigs. The northern location of the APE/project area occurs within this grouping. Archaeological monitoring in this area for park development has indicated that the previous disturbance from the former Radio Station has created a low probability for sites in this area.

The grouping (C) at the southern end of the park has scattered sites from a range of time periods. Paniaka Pond (50-50-14-2938) and associated features (50-50-14-2939) and several features of Site 3138 may be pre-contact to early contact habitation sites but there has been historic modification, including walls (Site 8791) and a 1929 structure (SIHP 50-50-14-8796). The southern location of the APE/project area is just north of this site grouping and appears to have been heavily impacted by the former Radio Station. The prior land use suggests a low potential for historic properties in the area.

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#### Assessment of Significance

In addition to reviewing the site inventory for the park, an assessment of significance was conducted for the sites in the vicinity of the APE/project area as background for this project. The following criteria were used to determine significance [HAR §13-275-6]:

a. Association with events or broad patterns important in the history of an area.

Within the moku of Honua'ula, the ahupua'a of Mo'oiki and Mo'oloa are part of the larger cultural complex that extended from Keawakapu (Kīhei Boat Ramp area) to Keone'ō'io (La Perouse) Bay. The relatively dense occupation along this coastline with its sandy beaches and good canoe landings, reflects the economic productivity of the land (upland agriculture and inland fishponds) and ocean waters while the numerous heiau reflect the religious and socio-political significance of the district. The presence of 3 wetland ponds within Mākena State Park suggests that this area around Pu'u Ōla'i may have been especially populous and the fishponds are significant under this criterion. With Western contact, the socio-economic pattern shifted from traditional fishing and farming to ranching (cattle and pigs) as reflected in the park area. Unfortunately, the 20<sup>th</sup> Century land use destroyed many of the traditional flawaiian sites that would demonstrate these cultural patterns in the history of Honua'ula and southern Maui.

b. Association with the lives of persons significant in our past.

The presence of chiefly persons in Honua'ula points to the political significance of the area. The chief 'Aikanaka of Hāna "died at Oneuli, Pu'u Ōla'i, Honua'ula and his bones were laid to rest at 'Iao" (Malo 1951:246). As a legendary chief predating the 12<sup>th</sup> Century, it is unclear what brought 'Aikanaka to Honua'ula. Kauhola-hui-mahu (ca. mid A.D. 1400) was a chief from Hawai'i Island who spent time at Honua'ula and is credited with building the fishponds of Keone'ō'io (Fornander 1918-19, Vol. 1-2:320). It is unclear if he played a role at other fishponds in the Honua'ula area.

c. Distinctive characteristics of a type, period, or method of construction.

The sites of Mākena State Park reflect a more traditional Hawaiian construction style of dry stack rock work and the 20<sup>th</sup> Century use of concrete. The traditional sites consist of modified outcrops with retaining walls, terraces, and pavings, as well as free-standing stacked rock walls without mortar. The sites associated with the former radio station and the piggery utilize the rock of the area with mortar and concrete that are characteristic of 20<sup>th</sup> Century construction.

d. Site yields information important in prehistory or history.

The sites surveyed between 2012 and 2017 have been mapped and a distribution plan has been discerned. There has been no testing conducted at these sites but further work is expected to yield information about site age and function as well as cultural settlement-subsistence patterns. The four features of Site 2939 (Paniaka Pond) were previously determined to be significant under this criterion (SHPD 1994). Test units (TU-6 and TU-7) confirmed the research potential of this site. Archaeological testing and monitoring conducted in various areas of the park have indicated an absence of subsurface cultural deposits that appears to be due in part to the historic land use and previous disturbances.

e. Traditional cultural value to the Hawaiian people with associations important to Hawaiian history and cultural identity.

Kāne and Kanaloa are said to have opened the springs of water and created the fishponds of Honua'ula (Nupepa Kuokoa, Jan. 12, 1865, translated by Maly 2006:20-21). The burials along the coast and in the pu'u are significant under this criterion. The mo'olelo of Pu'u Ôla'i refers to Pu'u-o-inaina who is cut into two parts by Pele with her tail becoming the hill of Pu'u Ôla'i and her head becoming Molokini. The cultural significance of Pu'u Ôla'i has led to its proposed designation as a traditional cultural place (TCP). The presence of burials in both Pu'u Õla'i and the coastal sand deposits also makes the areas significant under this criterion.

A significance assessment for the 9 sites in the vicinity of the two locations is summarized in Table 3. Sites 4660, 4661, and 4662 at the northern location are related to the use of the site in the latter half of the 20<sup>th</sup> century and are associated with small-scale farming and the raising of pigs. These sites are approximately 50 years old and significant for understanding land use and the socio-economic pattern of the Mākena area in this time period. The sites on Pu'u Õla'i include burials and religious features that make them significant for their traditional cultural values. Creating buffers around the pu'u can help protect the physical elements of these sites and promote respect for the cultural traditions and values. Identifying the pu'u as a traditional cultural property provides a better understanding of the cultural significance and establishes boundaries for park planning and development. Several sites in proximity to the southern location are related to the former Radio Station. However, the features of Site 3138 may reflect various periods of use and are important for their potential to yield information with additional research.

TABLE 3
Significance Assessment for Sites in the Vicinity of the APE/Project Area

SITE NO.	SITE TYPE	SIGNIFICANCE	TREATMENT			
Proximity to the N	Proximity to the Northern Location					
1814	Burials	d, e	Avoidance, Buffers, Preservation			
3136	Habitation complex with ko'a	d, e	Avoidance, Buffers, Preservation			
3137	Habitation complex with possible religious feature	d, e	Avoidance, Buffers, Preservation			
4660	Concrete structure, loading ramp	d	Avoidance, Buffers, Preservation			
4661	Concrete foundation of pig pen and cook house	d	Avoidance, Buffers, Preservation			
4662	Concrete foundation of pump house	d	Avoidance, Buffers, Preservation			
Proximity to the S	Southern Location					
3138	Shelters, walls, ramp	d	Avoidance, Buffers, Preservation			
8791	Fireplace, ca. 1940s-1950s	d	Avoidance, Buffers, Preservation			
8792	Rock Wall	d	Avoidance, Buffers, Preservation			





Fig. 34. Grouping of archaeological sites within Mākena State Park. APE/project area locations are shown in relationship to the site groups. Burial sites are found in association with the coastal sand dune deposits or the cinder of Pu'u Ōla'i.

# CONSULTATION

The Oneloa Coalition was formed in 2009 in response to a condition imposed on a permit issued to ATC Mākena Holdings by the County of Maui. This community-based committee is composed of Mākena residents and representatives of organizations including Maui Tomorrow, Surfrider Foundation, Maui Cultural Lands, Pacific Whale Foundation, Kīhei Community Association, Hawai'i Wildlife Fund, and Mākena Homeowner's Association. Meetings were held between April 2009 and May 2012 to work with consultant PBR Hawaii & Associates, Inc. on developing the Mākena State Park Plan (February 2013). This group of stakeholders were reconvened in March 2018 to discuss topics related to Mākena State Park, including the proposed construction of the two new comfort stations and the Phase 1 restoration of Paniaka Pond. Both of these projects had been supported by the community in the 2013 plan. Attendance at the Oneloa Coalition meetings has been open to other interested parties, including members of the Maui Aha Moku organization. A table of meetings held between March 2018 and January 2020 with the major topics of discussion is provided in Appendix B.

Both support for the project and reservations were heard at the Oneloa Coalition meetings. By having restrooms at the park, sanitation needs would be addressed and it would also reduce the pressure on the surrounding community where park users seek out restrooms and showers. Others expressed concern that restrooms and additional parking would increase the use of the park and could attract homeless people. Objections to the outdoor showers centered around the use of soap and shampoo and the leaching of these materials into the soil and impacting the resources.

Concerns were raised about the potential impact of leaching wastewater on the Hawaiian hawksbill turtles that use the sandy beaches of Mākena to lay their eggs. The wastewater may leach into the sandy soil and eventually into the ocean. Potential impacts to Oneloa Wetland and the waterbirds were also mentioned as potential impacts of the project. Those of Hawaiian ancestry expressed concerns about the potential for Hawaiian burials to be discovered, the leaching of wastewater into the soil that could impact the burials, and the proximity of the northern comfort station building to Pu'u Ōla'i, a significant cultural site.

Interviews with family members who grew up in the park area by Yent and Lee-Greig provided insight into land use in the 20<sup>th</sup> Century, especially sites associated with the Radio Station, farming, the piggery, and occupation of the park area from the 1940s to the 1960s. However, those interviewed were not able to share any additional information about cultural sites that pre-date the 20<sup>th</sup> Century within the project areas.

### Consulted Parties for Section 106 and §6E-8

Additional consultation was conducted in compliance with Section 106 for the federal LWCF grant and the State's HRS, §6E-8 project review process. Letters with information about the project and State Parks' proposed determination of "no adverse effect" under Section 106 and "no historic properties affected" under §6E-8 were emailed to both cultural descendants and community members in February 2021. It should be noted that this was prior to receipt of the CIA and the proposal of Pu'u Ōla'i as a Traditional Cultural Property (TCP). The letter described the undertaking/project and the APE/project area while indicating State Parks' intent to prepare an Archaeological Monitoring Plan (AMP) and conduct monitoring of ground disturbing activities to address concerns about the potential for iwi kūpuna within the APE/project area. A sample letter

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is included in Appendix C. Section 106 and §6E-8 consultation letters were mailed or emailed to the following organizations and individuals:

Oneloa Coalition (Community)

- Albert Perez, Maui Tommorrow
- Lucienne de Naie, Surfrider Foundation
- Ekolu Lindsey, Maui Cultural Lands
- Hannah Bernard, Hawai'i Wildlife Fund
- Sam Garcia, Mākena Homeowners Assoc.
- Mike Moran, Kīhei Community Assoc.
- Kristie Wigglesworth, Pacific Whale Foundation Daniel Kanahele
   Ka'imi Judd, Mākena Resort (ATC) Kuloloia 'Ohana
- Ka imi Judd, Makena Resort
- Cody "Koko" Tuivaiti
  Linda Stiles, Mākena SP neighbor
- Other
- Maui County Cultural Resources Commission
- Senator Rosalyn Baker, Rep. Tina Wildberger

Cultural Organizations and Individuals Office of Hawaiian Affairs Aha Moku Advisory Committee SHPD, Maui Burial Council Aha Moku o Maui Ashford DeLima Carol-Marie Ka'onohi Lee Daniel Kanahele Kuloloia 'Ohana Theresa Donham Bobby Luuwai

The consulted parties were given a 30-day comment period and an extension of 2 weeks was provided. Mr. Ekolu Lindsey of Maui Cultural Lands responded that he felt the plans and recommendations were appropriate and deferred to lineal descendants of the area for more intimate knowledge of the cultural properties and iwi kūpuna. Mr. Sam Garcia, President of the Mākena Homeowners Association provided support for the project and did not identify any cultural concerns. Ms. Theresa Donham, an archaeologist who has conducted numerous projects in the Mākena area and former archaeologist with SHPD on Maui, concurred with the determination.

State Parks presented the project to the Maui County Cultural Resources Commission (CRC) at their virtual meetings held on August 5 and September 2, 2021. The Draft AIS and CIA were provided to the CRC staff and commissioners for review prior to the meeting. The notes taken by State Parks at these meeting are found in Appendix C. The concerns expressed by the CRC Commissioners and those testifying before the Commission reflect many of the concerns discussed at the Oneloa Coalition meetings and are summarized below:

- The leaching of shower water, soap and shampoo into the soil that could impact iwi kūpuna and/or reach the shoreline where there could be an impact to turtles and marine life.
- More parking is not needed and will only attract more people to a dangerous beach. The pavement may impact the natural setting of the park.
- More archaeological testing should occur. It was not clear if this was because of concerns about
  potential iwi kūpuna or other cultural materials.
- The presence of more people in the park has the potential to impact cultural practices, especially
  in regards to Pu'u Ōla'i, fishing, and the gathering of plants. It may also mean that practitioners
  have more trouble accessing locations or practicing their traditions without interference.
- Has adequate consultation been conducted? This was expressed for both the CIA (broaden to Honua'ula, not just the immediate park area) and the project in general.
- · Reconsider the determination of effect based on cultural concerns and impact on practices.

### **Consulted Parties for the Cultural Impact Assessment**

Tanya Lee-Greig of 'Aina Archaeology conducted consultation between 2018 and 2020 as part of the CIA study (Lee-Greig 2021). Consulted parties included the following:

- Office of Hawaiian Affairs
- Kai Markell, Ka Pou Kakoo, Compliance Enforcement (no response)
- Thelma Shimaoka, Maui Community Resource Coordinator (no response)
- Cultural Descendants
- Leslie Kuloloio, Hui Alanui o Mākena
- Abner DeLima
- Ashford DeLima, Ho'oponopono O Mākena
- Carol-Marie "Ka'onohi" Lee, Aha Moku o Maui
- Cody Nemet Tuavaiti
- State Historic Preservation Division, Maui Culture and History Branch
- Christopher "Ikaika" Nakahashi, Cultural Historian
- Andrew "Kealana" Phillips, Burial Sites Specialist

The CIA involved interviews with the 5 cultural descendants identified above (ibid:53-65). The most extensive interview was conducted with Abner DeLima on June 15, 2019. Mr. DeLima and his siblings Ashford DeLima (interviewed September 10, 2019) and Carol-Marie Ka'onohi Lee (interviewed August 22, 2019) resided in the park area to the south of Pu'u Ōla'i from the 1940s to the 1960s. These interviews identified concerns about the project including increased recreational use, potential leaching and sewage leaks, potential impacts to Pu'u Ōla'i, and the potential for iwi kūpuna to be discovered during the ground disturbing activities (ibid:81-83). The use proper place names, such as Oneloa rather than Big Beach, was also emphasized.

Mr. Leslie Kuloloio responded by email on November 14, 2018 and expressed his concerns about the impact of the project on the natural resources, especially the additional asphalt pavement. He shared the lack of respect shown by park users that is in conflict with cultural uses and practices. Nude sunbathing at "Little Beach" was of special concern.

The concerns of Mr. Tuivaiti (interviewed August 29, 2020) also centered around respect for the cultural uses and practices of the wahi pana, especially the culturally inappropriate activities at Pu'u  $\bar{O}$ la'i. In his youth, he learned to gather limu and 'opihi in the area of Pu'u  $\bar{O}$ la'i. He refers to the pu'u as a kilo to study and observe the wind and cloud patterns and the landscape around the pu'u. Recognizing the pu'u as a resting place for iwi kūpuna, he expressed the potential for buildings to 'degrade the spiritual feel of the place'' (ibid:64).

# **Traditional Cultural Property**

The interviews indicated the cultural significance associated with Pu'u Ōla'i for Hawaiians and many recommended a buffer around the pu'u and greater respect by park users. They felt that locating the restrooms a distance from the base of the pu'u was needed to respect the cultural significance and values of the pu'u. Practitioners such as Tuavaiti expressed concern that their cultural practices were being impacted as more people were exploring the pu'u, damaging the cultural sites, and not recognizing the cultural significance of the place. Based on the consultations conducted by Lee-Greig, a traditional cultural property (TCP) that encompasses the cinder cone of Pu'u Ōla'i, the islet of Molokini, and the ocean waters connecting these two features was identified (Fig. 35). The exact boundaries of the TCP have not been delineated but the base of the pu'u appears to most closely relate to the interpretation of the mo'olelo. To incorporate Molokini into the TCP will involve consultation with other DLNR divisions, including the Division of Forestry and Wildlife (DOFAW) for the Molokini landform and the Division of Aquatic Resources (DAR) for the Marine Life Conservation District within the crescent shaped remnant of the volcanic cone that is 162 feet above sea level.



Fig. 35. The general area of the proposed TCP that encompasses Pu'u Ola'i, Molokini and the ocean waters in between these two land forms.

A TCP is defined as "one that is eligible for inclusion in the National Register of Historic Places because of its association with cultural practices or beliefs of a living community that are (a) rooted in the community's history and (b) important in maintaining the continuing cultural identity of the community" (Parker and King 1998). In the story of Pu'u Ōla'i, there is a mo'olelo or Hawaiian tradition, that speaks to the nature of the world in the origin story of prominent geological features and their connections to the Hawaiian pantheon both within Mākena State Park and 'Alalākeiki Channel (Lee-Greig, 2021). According to the mo'olelo, Molokini was a mo'o who until her death, was known as Puuoinaina. She lived most of her life on Kaho'olawe which was then called Kohemalamalama. Puuoinaina would become the wife of two brothers, the sons of the famed priest Luaho'omoe whose death brought on a severe drought across the Pae 'Āina. Eventually, her time on Kaho'olawe would cause her to forget her husbands. She fell for Pele's lover Lohiau and subsequently became the target of Pele's anger. As Puuoinaina was stretching from Kaho'olawe to Mākena, Pele cut her in two and separated the tail (Pu'u Õla'i) from the head (Molokini) (Fornander 1918:518).

The TCP recognizes the association of Pu'u Ōla'i with the cultural practices, traditions, beliefs, and lifeways of the living Hawaiian community. The physical boundaries of the TCP correspond to the base of the pu'u but there are also potential concerns about impacts to the cultural setting and the viewshed (Lee-Greig 2021:82). The northern parking lot is near the southern edge of the

TCP but the restroom and related facilities will be outside and set back from the pu'u approximately 275 feet. The potential impacts to the TCP were thought to be largely visual and while the restroom and associated infrastructure was acceptable, no additional construction in this area by the pu'u was recommended (ibid).

# Historical Connection between Pu'u Ola'i and Kaho'olawe

Besides the above mo'olelo of Puuoinaina, the link between Pu'u Ōla'i and Kaho'olawe is evident in the pre-contact history of Maui. Kamalalawalu, son of Kihapi'ilani, united Maui, Lana'i and Kaho'olawe, circa A.D. 1610-1630. While he held his court at Hāna, he had a compound at Honua'ula to manage Kaho'olawe (de Naie and Donham 2007:60). Kaho'olawe was valued for its fishing grounds, adze quarry, and navigational training. Likely, there were frequent canoe trips between the Mākena coastline and Kaho'olawe for trade and ceremonial practices.

A heiau has been documented in Mo'oiki on a ridge behind Pu'u Ōla'i (de Naie and Donham 2007:65) (Fig. 26). It is described as follows:

There are eleven separate features to the complex and several other enclosures nearby that are probably also related to it. The heiau is U-shaped with open terraces on the makai side. The heiau is positioned on the ridge in a spot which allows a dramatic view of Kaho'olawe, unblocked by the prominent shape of Pu'u Ōla'i. This relationship between the heiau site and Kaho'olawe Island in the distance is very compelling. Few have visited the site, but one cultural practitioner who has, believes the heiau complex is aligned with similar features on the shore of Kaho'olawe.

Another heiau has been mentioned on the summit of Pu<sup>4</sup>u 'Ōla<sup>4</sup>i (Stokes in Sterling 1998:229). No description of this heiau is offered but one site located by State Parks archaeologists within the depression at the summit may be associated with this site (SIHP 50-50-14-3137, Feature A).

### **Response to Comments and Concerns**

To address the cultural and environmental concerns raised by the community, State Parks has changed the design of the wastewater system for the comfort station to containment tanks which will avoid any leaching of wastewater into the soils and ocean. This will also address potential impacts to iwi kūpuna. The construction of foot rinsing stations rather than outdoor showers is being considered to address concerns about the leaching of shower water, soap, and shampoo.

A location for the northern comfort station has been chosen to provide a buffer from the base of Pu'u Öla'i while still making the restrooms readily accessible to park users. Located approximately 275 feet from the southern base of the pu'u, the building is not within the most significant viewplane between Pu'u Öla'i and Molokini or Kaho'olawe and therefore, should not have a direct impact on the TCP. The height of the building is 16 feet and paint colors and landscaping will be used to minimize visual intrusions of the modern structure from the pu'u.

Concerns about respect for the cultural traditions and values center around education and management. State Parks has designed interpretive signs to be installed at both the north and south parking lots. These signs seek to heighten awareness about the history and cultural significance of Oneloa and Pu'u Õla'i as well as informing park users of the park rules (Appendix D). These signs were shared with the Oneloa Coalition and cultural descendants for their review and comments.



### ARCHAEOLOGICAL INVENTORY SURVEY

To assess the potential for historical properties within the APE/project area, a review of the previous surface surveys, test excavations, and monitoring results was conducted in the two discontinuous locations. The locating of the proposed facilities and infrastructure was based in large part on the previously documented archaeological sites and the cultural sensitivity of Pu'u Õla'i. When considering alternative sites for the comfort stations, State Parks Archaeologist Martha Yent conducted pedestrian surveys in the areas to determine presence/absence of any surface features. Once the design was drafted, additional pedestrian surveys with 100% coverage were conducted to verify the absence of any surface features within the specified APE/project area.

# Pedestrian Survey of APE/Project Area

The northern comfort station location is situated off the southeastern corner of the parking lot, about 75 meters (250 feet) northeast of Oneloa Wetland, and about 75 meters (250 feet) southeast of the base of Pu'u Ōla'i (Fig. 37). The relatively level site is covered by a dense growth of kiawe trees, but the understory was visible due to the deer in the area eating much of the ground cover. The portion of the APE/project area where the comfort station, containment tank, and outdoor shower are proposed only extends about 20 meters (60 feet) south of the previously disturbed area as defined by the edge of the asphalt parking lot and guardrail. The waterline route ran through an area with scattered haole koa and good visibility which allowed a pedestrian survey in an area encompassing about 100 meters (300 feet) to the south of the paved entry road closer to the Mäkena-Keone'ō'io Road. The proposed paving and creation of parking stalls along the entry road is confined to the existing shoulders and therefore, no additional survey was conducted.



Fig. 37. Approximate limits of the pedestrian survey are indicated with red shading. The area surveyed went beyond the boundaries of the APE/project area to address potential design changes and staging areas

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The southern comfort station location and waterline route off the southern edge of parking lot and entry road are located in an area with good visibility. The deer had reduced the ground cover and the Parks' caretaker had been removing some of the haole koa in the area. A pedestrian survey was conducted between the parking lot/entry road and the former asphalt road associated with the Radio Station and to Mākena-Keone'ō'io Road.

### Archaeological Test Excavations

A total of three (3) test units were placed at the two proposed comfort station locations with another two (2) units at the containment tank locations, and 3 smaller units along the waterline routes from the comfort stations to Mākena-Keone'ō'io Road. These test units were excavated to assess the presence/absence of subsurface cultural deposits that could be impacted by the project and undertaking. The units were situated within the footprint of the restroom structures, outdoor showers, and the containment tanks where most of the impacts will occur due to the depth and horizontal extent of excavation (Fig. 38). The restroom/shower units were excavated by State Parks archaeologists from April 30 to May 2, 2019 and the units associated with the containment tanks and waterlines were excavated from July 8-10, 2020.

# Methodology

The numbering of the test units is consecutive with previous units placed in the park for other projects. Three units (TU-8, TU-9, and TU-11) were placed in the southern portion of the APE/project area and two units (TU-10 and TU-12) were located in the northern portion to address the comfort station/outdoor shower/containment tank locations. All these units measured 1m by 1m and were excavated to either bedrock or a depth sufficient to assess the presence/absence of cultural remains relative to the proposed disturbance. Smaller units measuring 50cm by 50cm were placed along the length of the waterlines at both locations to provide a sampling within the APE/project area. TU-13 was located along the southern waterline while TU-14 and TU-15 were located along the longer northern waterline. These units were excavated to a depth of at least 40cm to evaluate the 18-24" deep trenches to be dug. This depth was sufficient to encounter the black cinder layer which is an intact deposit that has not been impacted by previous land use.

Units were excavated by soil layers and 10cm levels with a datum being established at or near the ground surface. During the excavations, layers were distinguished by changes in soil color and texture and measurements were taken at boundaries between layers. Excavated soils were screened with 1/8" mesh screens. Collected materials were limited to modern materials located near the surface, including glass, metals, and plastic. These collected materials were bagged by layer and level for the description of materials found within the stratigraphic profiles of the different test units. These are not considered significant cultural materials for preservation, further analysis, or curation.

Upon completion of the excavation, stratigraphic profiles of the 4 walls of each unit were drawn and photographed to scale with soil descriptions following the USDA Soil Survey Manual and Munsell Soil Color Charts. After recordation, all excavated areas were backfilled. GPS readings were taken at the test unit locations as shown in Table 4.

TABLE 4	
GPS Readings for Test Unit Locations	

Test Unit	APE/Project Area	Reading Location	X UTM (E)	Y UTM (N)
TU-8	S Comfort Station	NW corner of 1m x 1m unit	766252	2283432
TU-9	S Comfort Station	SE corner of 1m x 1m unit	766265	2283437
TU-10	N Comfort Station	SW corner of 1m x 1m unit	766053	2283765
TU-11	S Containment Tank	1m x 1m unit	766290	2283439
TU-12	N Containment Tank	1m x 1m unit	766085	2283787
TU-13	S Waterline	50cm x 50cm unit	766305	2283423
TU-14	N Waterline	50cm x 50cm unit	766146	2283783
TU-15	N Waterline	50cm x 50cm unit	766302	2283790



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# Test Excavations in the Southern Portion of the APE/Project Area

The southern portion of the APE/project area shows some ground modification from the prior construction of the parking lot (Photo 21). There is a shallow swale that rises to a low berm located 5 meters from the southern side of the parking lot pavement such that the ground surface rises about 60cm above the level of the pavement.

It is approximately 45 meters (100 feet) from the berm to the natural vertical ledge (Site 3138) and the ground surface above is fairly level with medium sized kiawe trees and a ground cover of sourgrass. The former asphalt driveway from the former Radio Station runs parallel to the southern side of the parking lot at a distance of about 13 meters south of the parking lot guardrail (Photo 22). The asphalt pavement is at a slightly lower elevation (~40cm) than the dirt berm or ground surface between the driveway and parking lot.



Photo 21. View west (makai) along the southern side of the southern parking lot. A shallow swale on the south side of the parking lot gradually slopes up to a higher elevation where the trees are located.



Photo 22. Asphalt driveway that led from Mākena-Keone'ō'io Road to the Government House, part of the former Radio Station. The driveway is located about 13 meters south of the parking lot. View east.

# Test Unit 8

This unit was placed on the southern edge of the proposed comfort station footprint - 11 meters south of the guardrail and 11 meters west of TU-9 (Fig. 35; Photo 23). The unit is about one meter north of the northern edge of the former asphalt driveway. The unit was oriented to MN and laid out between kiawe trees in an effort to avoid significant roots.

The stratigraphic profile recorded at the northwestern corner of the unit was as follows (Fig. 39; Photos 24-26):

Surface	O horizon	Kiawe leaves and twigs; sourgrass.
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0-7cm	Layer 1	Dark yellowish brown (10YR3/6) silty loam; powdery and loose; slightly sticky and
		slightly plastic; fine rootlets; whole, few scattered asphalt pebbles from adjacen driveway; bottle glass fragments; wavy boundary.

- 7-34cm Layer 2 7.5YR5/6 silt; compact with dense amount of gravel size volcanic cinder and basalt pebbles to small cobbles; sticky and plastic; bottle glass fragments and 1944 U.S. penny; fish bone; wavy boundary.
- A lens of black volcanic cinder (~40%) mixed with Layer 2 silt; compact and hard; 24-28cm Lens pockets of 7.5YR5/6 silt within the deposit;
- 34-42cm 7.5YR5/8 silt; fine and powdery but compact; plastic and sticky; culturally sterile; Layer 3 uneven but distinct boundary with underlying 'a'ā bedrock.
- 42cm Bedrock Surface of undulating, rough weathering 'a'ā; base of excavation.



Fig. 39. Stratigraphic profile recorded on north and west walls of TU-8.

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# Test Unit 9

This unit was placed off the southeastern corner of the proposed comfort station footprint. It was 7.5 meters south of the guardrail on the southern edge of the parking lot and about 4 meters north of the asphalt driveway (Fig. 35). NOTE: In the final plans for the comfort station, the location shifted slightly so this unit was not directly within footprint of the restroom slab. A stratigraphic profile was recorded with depth below datum in the southeast corner (Fig. 40; Photos 27-30).

- Surface O horizon Kiawe leaves and twigs; sourgrass.
- Dark vellowish brown (10YR3/6) silty loam: fine, powdery and loose; slightly sticky 0-6cm Laver 1 and slightly plastic; fine rootlets; whole, medium size cowry; few scattered basalt cobbles and coral pebbles; scattered charcoal chunks; green bottle glass fragments; rubber floor mat (probably from a car) in the SW corner; wavy boundary.
- Strong brown (7.5YR5/6) silt; fine, compact with dense amount of gravel size volcanic 6-21cm Layer 2 cinder and basalt pebbles to small cobbles; sticky and plastic; medium size kiawe roots; military shell casing (223 practice round) found at 20cm B.D.; wavy but distinct boundary with cinder lens and Laver 3.
- 20-50+cm Feature 1 Large basalt boulder within possible pit feature filled with dark reddish brown (5YR3/4) silt in the northwest corner of the unit; boulder is about 12cm thick and underlain by the pit fill material; base of feature appears to correspond with bedrock at around 50cm B.D.
- A thick lens of black (10YR2/1) volcanic cinder noted only in the eastern half of the 21-36cm Lens unit; compact and hard with matrix of Layer 2 silt coating the cinder gravel; pockets of 7.5YR5/6 silt within the deposit; wavy, fairly distinct boundary with Layer 3.
- 36-50cm Layer 3 Strong brown (7.5YR5/8) silt; fine and powdery but compact; plastic and sticky; culturally sterile; uneven but distinct boundary with underlying 'a'ā bedrock.
- 50cm Bedrock Surface of undulating, rough weathering 'a'ā; base of excavation.



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# Test Unit 11

This 1m by 1m unit was placed 1.5m to the southeast of the guardrail at the southeast corner of the southern parking lot (Fig. 35). The location of the test unit corresponds to the eastern end of the containment tank location. Installation of the containment tank will involve excavation of an area approximately 23 feet long (E-W) by 8 feet wide (N-S). This area was previously disturbed during the construction of the parking lot and is generally in the swale between the parking lot and the berm to the south of the parking lot (Photo 31).

A datum was established at the ground surface in the southeast corner and depths in the stratigraphic profile are below datum/surface in the SE corner (Fig. 41; Photos 32-34).

- Surface O horizon Kiawe leaves and twigs; wood chips; sourgrass.
- 0-3cm Layer I Brown (10YR4/3) sandy loam; mix of fine, powdery silt with basaltic (black) and coralline (white) med. to fine sand grains; loose; nonsticky and nonplastic; fine rootlets; scattered basalt gravel on surface (probably from parking lot construction); no cultural material; wavy boundary.
- 3-24cm Layer 2 Strong brown (7.5YR5/6) silt; fine, compact with dense amount of gravel size volcanic cinder and basalt pebbles to small cobbles; sticky and plastic; no cultural material; wavy but distinct boundary with 'a'ā cobbles and small boulders.
- 24-42cm Bedrock Densely packed 'a'ā cobbles and small boulders; approximately 10-15cm thickness of cobbles removed to determine if there were any underlying deposits below the weathering 'a'ā cobbles; base of excavation.



Fig. 41. Stratigraphic profile recorded on the north and east walls of TU-11.





Photo 23. TU-8 off the southwest corner of the parking lot. View W.



Photo 25. South wall of TU-8 at 42cm below datum/surface (BOE).



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Photo 27. Location of TU-9 to south of southern parking lot. View N.



Photo 29. North wall of TU-9 at 50cm B.D. (BOE).

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Photo 30. View north of TU-9 at base of excavation (50cm B.D.).

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Photo 31. TU-11 located 1.5m to SE of the guardrail in swale. View NE. Photo 32. Excavation of TU-11 at 10cm below surface (Layer 1).



Photo 33. TU-11 floor at 20cm below surface (dense 'a'ā cobbles). Photo 34. TU-11 at base of excavation (~40cm below surface in south).

# Test Unit 13

This 50cm by 50cm unit was placed along the route of the waterline from the southern comfort station to Mākena-Keone'ō'io Road (Fig. 35). It was located 36 meters (120 feet) east of TU-11 within the area between the parking lot and asphalt road. The location is also about 36 meters from Mākena-Keone'ō'io Road. The area is marked by a scatter of medium-size kiawe trees with a ground cover of sourgrass (Photo 35). The ground surface is undulating.



Photo 35. TU-13 along waterline route toward Mākena-Keone<sup>•</sup>ō<sup>•</sup>io Road (view E). The old asphalt driveway is located to right of the unit.

A datum was established at the ground surface in the northeast corner and depths in the stratigraphic profile are below surface in the SE corner (Fig. 42; Photos 36-37).

Surface O horizon Kiawe leaves and twigs; wood chips; sourgrass.

0-3cm	Layer 1	Brown (10YR4/3) silty loam; fine, powdery; loose to small friable crumb; nonsticky and nonplastic; fine rootlets; no cultural material; wavy boundary.
3-20cm	Layer 2	Strong brown (7.5YR5/6) silt; fine and powdery to compact, friable crumb; sticky and plastic; no cultural material; mixing of silt with underlying volcanic cinder in transition between Layers 2 and 3; wavy but distinct boundary with cinder.
15-55cm	Feature 1	Pit of Layer 2 silt in the northeast corner extending into Layer 3; ${\sim}20\text{cm}$ in diameter.
20-55cm	Layer 3	Black (10YR2/1) volcanic cinder with pockets of Layer 2 silt and some mixing with Layer 2 at transition; loose but compact; non-sticky and non-plastic; culturally sterile; here of accounting

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Fig. 42. Stratigraphic profile recorded on east and south walls of TU-13.



Photo 36. TU-13 at 34cm below datum and at contact of Layers 2/3.

Photo 37. TU-13 at base of excavation (60cm B.D.) and entire unit is within Layer 3 with pit feature of Layer 2 silt fill in the NE corner of the unit.

# Test Excavations in the Northern Portion of the APE/Project Area

This northern portion of the APE/project area is previously disturbed from construction of the parking lot and installation of the guardrails. The test units were placed to the south of the parking lot and parking entry roadway (Fig. 43). The ground surface is relatively level with a dense growth of kiawe trees. Cut kiawe trunks line the edge of parking along the unpaved shoulder of the road.

## Test Unit 10

This 1m by 1m unit was placed within the footprint of the concrete slab based on the original plans for the comfort station. However, in the redesign, the unit actually corresponds to the outdoor shower and is slightly west of the comfort station slab (Fig. 43). It was located 12 meters south of the edge of pavement off the southeastern corner of the parking lot (Photos 38-39). The unit was within the kiawe forest and a location was selected to avoid large kiawe roots. The ground surface is relatively level with a ground cover of sourgrass and scattered lantana.



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Photo 38. General view west (makai) of the northern parking lot and park entry roadway with the proposed comfort station location on the south (left) side.



Photo 39. Detail of area at SE corner of the parking lot where TU-10 was located. View SE.

A datum was established in the northwest corner at 10cm above the ground surface. The depths in the stratigraphic profile are below surface in the NW corner (Fig. 44; Photos 40-43).

Surface	O horizon	Kiawe leaves and twigs; sourgrass.
0-4cm	Layer 1	Dark yellowish brown (10YR3/6) silty loam; fine, powdery and loose to small, friable crumb; slightly sticky and slightly plastic; fine rootlets; few scattered basalt cobbles and coral pebbles; bottle glass fragments and bottle cap, rusty metal fragments, kukui nut shell, eraser end of pencil, and 22 bullet casing; wavy but distinct boundary.
4-12cm	Layer 2	Strong brown (7.5YR5/6) silt; fine, loose to friable crumb with about 10% 'a'ā pea gravel to pebbles that increases with depth; sticky and plastic: medium size kiawe roots; wavy but distinct boundary with cinder of Layer 3
12-90cm	Layer 3	Black (10YR2/1) volcanic cinder with pockets and lens of Layer 2 silt and some mixing with Layer 2 at transition of Layers 2 and 3; loose but compact; non-sticky and non-plastic; culturally sterile.

90cm BOE Base of excavation; still encountering black cinder.



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Fig. 44. Stratigraphic profile recorded on north and west walls of TU-10.

Photo 40. Location of TU-10 to the south of the northern parking lot. Photo 41. North wall of TU-10 at base of excavation (90cm B.S.).

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Photo 42. East wall of TU-10 at BOE with pit feature into Layer 3 cinder.

Photo 43. Detail of north wall with pockets of silt and roots in the cinder.

# Test Unit 12

This 1m by 1m unit was placed approximately 27 meters east of TU-10 and 6 meters south of asphalt pavement of the park road (Fig. 43). It was placed to test the proposed location for the containment tank that will involve excavation in an area 41 feet (E-W) by 8 feet (N-S). Like TU-10, TU-12 is within the kiawe forest and the ground surface is relatively level with a ground cover of sourgrass and scattered lantana (Photo 44).



Photo 44. Location of TU-12 is about 6m south of the park roadway in the kiawe forest. View is west (makai).

A datum 5cm above the ground surface was established in the northeast corner and depths in the stratigraphic profile are below surface in the NE corner (Fig. 45; Photos 45-48).

Surface	O horizon	Kiawe leaves and twigs; sourgrass.
0-12cm	Layer 1	Dark yellowish brown (10YR3/6) silty loam; fine, powdery and loose tu small, friable crumb; slightly sticky and slightly plastic; fine rootlets; few scattered basalt cobbles and coral pebbles; bottle glass fragments; wavy bu distinct boundary.
12-36cm	Layer 2	Strong brown (7.5YR5/6) silt; fine, loose to friable, med. crumb; about 10% 'a'ā pea gravel to few pebbles; pea gravel increases to about 20% with depth at 15cm B.S., patches of dark brown (10YR5/4) silt that lacks any rock; sticky and plastic; medium size kiawe roots and single small 'a'ā boulder at 20cm B.S.; pea gravel increases to 15% content with cinder first encountered a 35cm B.S.; wavy but distinct boundary with cinder of Layer 3.
36-62cm	Layer 3	Black (10YR2/1) volcanic cinder with pockets of soil and some mixing with Layer 2 at transition; loose but compact; non-sticky and non-plastic; culturally sterile.
62cm	BOE	Base of excavation; still encountering black cinder.
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Fig. 45. Stratigraphic profile recorded on north and east walls of TU-12.

# Test Unit 14

This 50cm by 50cm unit was placed along the northern waterline route and about 60 meters (200 feet) east of TU-12 (Fig. 43). It was located 10 meters (30 feet) from the northwestern corner of the concrete slab of Site 4661 on the edge of the kiawe forest with a ground cover of sourgrass and lantana (Photo 49).



Photo 49. Location of TU-14 along the northern waterline at the edge of the kiawe forest.

A datum was established in the northeast corner at 5cm above the ground surface. The depths in the stratigraphic profile are below surface in the NE corner (Fig. 46; Photos 50-53).

Surface	O horizon	Kiawe leaves and twigs; sourgrass and lantana.
0-10cm	Layer 1	Dark yellowish brown (10YR3/6) silty loam; fine, powdery and loose to small, friable crumb; slightly sticky and slightly plastic; fine rootlets; no cultural material; wavy but distinct boundary.
10-25cm	Layer 2	Strong brown (7.5YR5/6) silt; fine, loose to friable crumb; sticky and plastic; wavy but distinct boundary with cinder of Layer 3.
25-35cm	Layer 3	Black (10YR2/1) volcanic cinder with pockets and lens of Layer 2 silt and some mixing with Layer 2 at transition of Layers 2 and 3; loose but compact; non-sticky and non-plastic; culturally sterile.
35cm	BOE	Base of excavation; still encountering black cinder.



Fig. 46. Stratigraphic profile recorded on east and south walls of TU-14.



Photo 47. TU-12 at 40cm B.D. near contact of Layers 2/3. View N.



Photo 52. TU-14 at 30cm B.D. and contact of Layer 2/3.

Photo 53. TU-14 at base of excavation (40cm B.D.) and within Layer 3.

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# Test Unit 15

This 50cm by 50cm test unit is located 150 meters (490 feet) east from TU-14 along the northern waterline (Fig. 43). It was placed 20 meters south of the southwest corner of concrete wall of Site 4660A. The ground surface in the area is relatively level and unit was situated between medium-sized kiawe trees with a ground cover of sourgrass (Photo 54).



Photo 54. Location of TU-15 to the south of Site 4660A. View is NW.

A datum was established at ground surface in the NE corner of the unit and depths in the stratigraphic profile are below datum/surface (Fig. 47; Photos 55-58):

Surface	O horizon	Kiawe leaves and twigs; sourgrass.
0-2cm	Layer 1	Dark yellowish brown (10YR3/6) silty loam; fine, powdery and loose; slightly sticky and slightly plastic; fine rootlets; wavy but distinct boundary.
2-31cm	Layer 2	Strong brown (7.5YR5/6) silt; fine, loose to friable crumb; sticky and plastic; wavy but distinct boundary with cinder of Layer 3.
31-40cm	Layer 3	Black (10YR2/1) volcanic cinder with pockets of soil and some mixing with Layer 2 at transition; loose and slightly compact with depth; non-sticky and non-plastic; culturally sterile.
40cm	BOE	Base of excavation; still encountering black cinder.



Photo 57. North wall of TU-15 at 40cm B.D. View N.

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Fig. 47. Stratigraphic profile recorded on north and east walls of TU-15.

# **Summary of Findings**

The eight (8) test units excavated within the APE/project area did not indicate the presence of any cultural deposits or materials besides a scattering of modern materials within the upper 10cm of several units. The APE/project area has been impacted by previous 20th Century land uses, including the former Radio Station, farming, the piggery, and park construction. The stratigraphic profiles noted in the units conform to the pattern seen during previous archaeological monitoring for the construction of the parking lots and the caretaker's residence. This profile consists of the upper silty loam underlain by black volcanic cinder and weathering 'a'ā bedrock. The silty loam varies in thickness from 15 to 30cm and the thickness of the volcanic cinder corresponds to the distance from Pu'u Ōla'i with the thickest deposits occurring nearest to the pu'u. The transition of these 2 layers is marked by intermixing and pockets of the silt extending into the cinder.

The potential for burials within the project areas is considered low but the presence of burials cannot be ruled out. To-date, no burials have been found in the cinder deposits outside of the pu'u. Neither of the two APE/project areas are within any sandy deposits where other iwi kūpuna have been found.

## PROJECT EFFECT

No surface historic properties or subsurface cultural deposits have been identified within the APE or project area that encompasses the locations for the comfort stations, containment tanks, outdoor showers and waterlines. These facilities are being constructed adjacent to and within areas previously disturbed by land use in the 20<sup>th</sup> Century. Archaeological monitoring of park construction from the 1990s did not indicate the presence of cultural materials within the APE/project area. The project design creates buffers from sites in close proximity to the project area such that they can be avoided during construction.

In regard to the parking improvements, the construction work will generally be within the areas previously disturbed to construct the existing entry roads and parking lots. However, the excavation of up to 8" for the base course and asphalt pavement adjacent to the paved roadways, as well as the 30" deep coring for the placement of new guardrail posts, suggests an impact subsurface soils not previously disturbed.

Based on these findings, State Parks believes there is sufficient evidence to make a determination of *no historic properties affected* per §13-275-7.

#### Assessment of Project Effect at the Northern Location

The testing to a depth of almost 1 meter at the comfort station and 60cm at containment tank locations did not locate any cultural deposits. The stratigraphic profiles in the 2 locations indicated a consistency with the upper orangish silty loam underlain by black cinder. The testing depth at the comfort station location addresses the 3 feet of disturbance anticipated for the concrete slab. However, the containment tank will be excavated to a depth of 3 meters (10 feet) so there will be disturbance of soils below what was seen in the archaeological testing. Although the probability of cultural deposits below 1 meter is believed to be low based on previous work in the park, there is value in documenting the stratigraphy below one meter.

The waterline route runs between the 3 surface features related to the piggery that was built and used from the 1950s to 1960s. The waterline will be placed about 3m (10') north of Site 4661 which is a sufficient buffer during construction with some mitigation measures (refer to Fig. 22). As the waterline gets near the Mäkena-Keone'ō'io Road, it will be placed about 20m (60') south of Site 4660A which also provides a sufficient buffer during construction. Much of the waterline traverses the former farming area where ground disturbance would have occurred previously.

The parking improvements will extend from the existing parking lot to approximately 500 feet toward Mākena-Keone<sup>6</sup>ō<sup>7</sup>io Road. The initial construction of the roadway established the dirt shoulders along the paved roadway that will be improved for perpendicular parking (Photos 59). However, the improvements have the potential to impact subsurface soils along the entry road because of the 8" depth of excavation for the base course and extended asphalt pavement. The parking improvements end about 500" makai (west) of Site 4660B so this site will not be affected.



Photo 59. Northern entry road and parking lot after paving in 1992. View makai (W).

# Assessment of Project Effect at the Southern Location

The testing conducted for the southern comfort station and containment tank locations indicated a soil deposit of approximately 50cm in thickness underlain by weathering 'a'ā and basalt bedrock. Recent cultural debris was found in the upper 10cm but there was no indication of an earlier (lower) cultural deposit. Based on these findings, it is expected that much of the excavation for the comfort station foundation and containment tank will be within basalt bedrock.

The waterline route will run directly east from the comfort station to Mākena-Keone'ō'io Road such that it will not affect Sites 8791 and 3138 (refer to Fig. 28). Both of these sites are around 40 meters (125 feet) south of the proposed restroom location which is a sufficient buffer to avoid disturbance during construction. The waterline traverses the area previously cleared and leveled for the Radio Station indicating previous ground disturbance.

The parking improvements will extend parking alongside the existing park entry road. Unlike the northern roadway, this southern location lacks the previously graded dirt shoulders. Therefore, existing guardrails will be removed and a strip measuring approximately 25 feet wide will be graded on both sides of the entry road for the new stalls. This will allow for 20-foot long parking stall, 5-foot wide walkway, and new guardrails. While previous park construction does not appear to have disturbed the shoulder areas, the construction of the Radio Station would have altered the surface. There appears to be a low probability for cultural deposits to be found during the grading and 8" excavation for the base course and asphalt pavement.

# Archaeological Monitoring for Identification Purposes

While the archaeological testing in the APE/project area has not indicated the presence of historic properties or subsurface cultural deposits, State Parks is proposing to prepare an Archaeological Monitoring Plan (AMP) for identification purposes. The AMP will identify the role of the State Parks archaeologist during construction of the two comfort stations, related infrastructure, and parking improvements. The archaeologist will document the subsurface soils and stratigraphic profiles in the excavations and will ensure limits of grading and staging areas are maintained during the construction.

- The archaeologist will participate in the pre-construction meeting, give a briefing about the
  potential for archaeological finds, and work closely with the contractor to ensure that the
  construction crews are aware of the archaeological sites to be avoided.
- In the event any cultural remains are encountered during excavation, the contractor will be
  instructed to stop work in the vicinity of the find and notify the State Parks archaeologist. The
  archaeologist has the authority to stop work in the area and will conduct a site inspection to
  evaluate the discovery. The find will be recorded, mapped, and photographed with a profile of
  the soil stratigraphy per HAR §13-279. All finds will be reported to SHPD through an
  archaeological monitoring report according to the requirements of HAR §13-279-5. All
  applicable provisions of HAR §13-275, §13-280, and §13-300 will be followed as appropriate.
- Monitor excavations, including foundations for the comfort station and outdoor shower, pit for
  installation of the containment tanks, trenching for the waterlines, and grading with excavation
  for the expanding parking. This will ensure oversight of the project and an opportunity to
  document subsurface stratigraphy in the park.
- Work with the contractor to ensure that staging areas are restricted to the APE/project area and limits of grading.
- Respond promptly to any cultural finds and ensure that proper procedures are followed per HAR §13-279. In the case of iwi kūpuna, the archaeologist will follow protocol in with HRS §6E-43.6 and HAR §13-300-40. Planning will include consultation with SHPD's Maui Island burials specialist, the appropriate Maui Island Burial Council member or members, OHA, any identified descendants of individuals buried in the general area, and other individuals who may come forward during the process will be consulted.
- State Parks will prepare a report at the completion of construction to document findings. This
  report will include soil descriptions and profiles, maps, and photographs. The report will be
  submitted to SHPD upon completion of the project/undertaking.

### **Traditional Cultural Property**

State Parks concurs with the recommendation from the CIA of designating Pu'u Ōla'i as a Traditional Cultural Property (TCP) that is eligible for listing on the National Register of Historic Places. Establishing the TCP falls under NHPA, Section 106 and the guidelines are set out in 1998 National Register Bulletin #38: *Guidelines for Evaluating and Documenting Traditional Cultural Properties*. Determining eligibility is a 4-step process:

- Ensure that the entity under consideration is a property. Pu'u Ōla'i is a tangible natural and cultural resource tied to cultural beliefs and activities. The 90-acre pu'u can be considered a site based on pre-contact occupation (presence of housesits/platforms/enclosures) and religious use (presence of ko'a and possible heiau). Its significance is also tied to mo'olelo (traditional beliefs) that are directly linked to the landform.
- 2. Consider the property's integrity. The pu'u retains its natural shape with physical alteration only a result of natural forces such as landslides. There is the potential for impacts to the natural and cultural landscape of the pu'u from park developments. The integrity of the pu'u is based on setting, feeling and association. To assess the integral relationship to traditional cultural practices and beliefs will require a continuation of the consultation initiated under the CIA.
- 3. Evaluate the property with reference to the National Register criteria.
  - A. Association with events that have made a significant contribution to the board patterns of our history. The traditional event in the mo'olelo of Pu'uoinaina recounts the creation of the landforms of Pu'u Ōla'i and Molokini. In this instance the tradition is rooted in the history of the groups and associates the property with traditional events.
  - B. Association with the lives of persons significant to our past. The moʻolelo of Puʻuoinaina involves herself, Lohiau, and Pele gods and demigods who feature in the Hawaiian traditions.
  - C. Embodiment of the distinctive characteristics of a type, period, or method of construction. Since this criterion refers more directly to constructed sites, more research is needed to understand if the pu'u is a cultural landmark that embodies cultural traditions that relate to this criterion.
  - D. History of yielding or potential to yield, information important in prehistory or history. Archaeological sites associated with Pu'u Ôla'i have the potential to yield information about the pre-contact occupation of this coastline of southwest Maui, including settlementsubsistence patterns and religious practices. Ethnographic studies have the potential to yield information about the cultural traditions associated with significant landforms.
- 4. Determine whether any of the National Register criteria considerations (36 CFR 60.4) make the property ineligible. The seven considerations are:
  - Owned by a religious institution or used for religious purposes
     NO
  - Relocated property NO
     Birthplaces, graves, cemeteries NO
  - Reconstruction
     NO
  - Commemoration
     NO
  - Significance within past 50 years
     NO

Assuming that Pu'u Ōla'i is eligible as a TCP, the next steps are:

1. Consult with DOFAW and DAR about the TCP and seek their concurrence with the nomination as they have jurisdiction over Molokini and the Marine Life Conservation District.

- 2. Draft a Memorandum of Agreement (MOA) with the State Historic Preservation Division, State Parks, and the National Park Service being the major parties involved. Other parties that may be invited include the Office of Hawaiian Affairs, Aha Moku o Maui, and the Oneloa Coalition.
- 3. Conduct a TCP study.
- 4. Prepare the nomination form for the Hawai'i and National Registers of Historic Places.

### **Future Park Improvements**

The cultural significance of Pu'u Ōla'i and the potential for park development to impact the historic properties on the pu'u as well as the physical and visual integrity of the geological and cultural feature has been recognized. In order to promote respect and protection for this cultural site, the CIA recommended that no new developments occur within the northern project area. This project proposes to mitigate the visual impacts of the comfort station by limiting the height of the building, using paint colors to blend with the environment, and implementing landscaping.

In the planning for the TCP, additional consideration will be given to limiting development within any of the lands in close proximity to the base of the pu'u. View corridors both to and from the pu'u will be taken into account.

State Parks does not consider Mākena to be a "wilderness park" as it does not possess a natural, primitive character without human habitation. However, the intention is to keep the park low development but to provide facilities for public health, safety, and passive recreation.

# **REFERENCES CITED**

# AECOS Consultants

2004 <u>Final Environmental Assessment for Enhancement of an Isolated Coastal Wetland</u> <u>at Mākena State Park, Mākena, Maui</u>. Prepared by Eric Guinther and Reginald David for DLNR, State Parks and Puu Olai North Wetland Management Association.

# Ashdown, Inez

1970 Ke Alaloa o Maui: The Broad Highway of Maui. Ace Printing Company, Wailuku, HI.

# Beckwith, Martha

1970 <u>Hawaiian Mythology</u>. Honolulu: University of Hawaii Press.

# Beaglehole, J. C. (Editor)

1967 <u>Voyage of the Resolution and Discovery, 1776-1780</u>. The University Press, Cambridge.

### Beggerly, Patricia

- 1992 Historic Preservation Archaeological Reconnaissance Level Study, Makena Beach, Island of Maui, Hawaii TMK: 2-1-06:102, 103. Report prepared for U.S. Army Corps of Engineers. April 23, 1992.
- Carpenter, Alan
  - 1998 Research Design and Proposed Mitigative Measures for Park Residence Construction, Mākena State Park, Maui, TMK: 2-1-06:28,53. State of Hawaii, Department of Land and Natural Resources, Division of State Parks, Honolulu.

### Carpenter, Alan and Martha Yent

- 1995 Archaeological Monitoring: Parking Lot Construction at Mākena State Park, Mo'oiki and Mo'oloa Ahupua'a, Honua'ula District, Island of Maui, TMK: 2-1-06:27,28. State of Hawaii, Department of Land and Natural Resources, Division of State Parks, Honolulu.
- 2004 Supplemental Archaeological Survey and Interim Preservation Plan for State Sites No. 50-50-14-5209 and 50-50-14-5211, Mākena State Park, Mo'oiki Ahupua'a, Honua'ula District, Maui (TMK: 2-1-06: 32 and 74). State of Hawaii, Department of Land and Natural Resources, Division of State Parks, Honolulu.

### Carpenter, Alan, Maurice Major, and Martha Yent

1999 Supplemental Archaeological Inventory Survey and Data Recovery in Conjunction with Proposed Security Residence at Mākena State Park, Mo'oiki and Mo'oloa Ahupua'a, Honua'ula District, Island of Maui (TMK: 2-1-06: 27, 28, 30, 31, 53). State of Hawaii, Department of Land and Natural Resources, Division of State Parks, Honolulu.
### Clark, John R. K.

1989 The Beaches of Maui County. University of Hawaii Press, Honolulu.

### Cordy, Ross and J. Stephen Athens

1988 Archaeological Survey and Excavation, Seibu Sites 1916 and 2101, Makena, Honuaula, Maui. Prepared by International Archaeological Research Institute, Inc., Honolulu.

### Coulter, John Wesley

- 1931 <u>Population and Utilization of Land and Sea in Hawaii, 1853</u>. Bernice P. Bishop Museum, Bulletin 88. Honolulu.
- De Naie, Lucienne and Theresa Donham
  - 2008 Project Ka'eo The Challenge to Preserve Cultural Landscapes in Modern Makena. Report written by Lucienne De Naie with maps and appendices by Theresa Donham. Project conducted under grant from OHA.

### DHM, Inc. and Applied Research Group of Bishop Museum

1990 Hawaiian Fishpond Study: Islands of Hawai'i, Maui, Lana'i and Kaua'i. Prepared for the Hawaii Coastal Zone Management Program of the Office of State Planning and the Department of Land and Natural Resources, Historic Preservation Division. Honolulu, Hawai'i.

### Donham, Theresa K.

- 1992a Surface Survey of Site 50-50-14-2909, Mo'oloa Ahupua'a, Makawao District, Maui (TMK: 2-1-06: 26, Lot 3). Prepared for DLNR, State Historic Preservation Division.
- 1992b *Field Inspection of TMK: 2-1-06:102, Mooloa, Honua 'ula, Maui.* Memorandum to Annie Griffin, State Historic Preservation Division, Honolulu. December 11, 1992.
- 1993 Follow-up Field Visit to TMK: 2-1-06:102 and 2-1-06:80 (Paniaka Pond), Mooloa, Honua'ula, Maui. Memorandum to Annie Griffin, State Historic Preservation Division, Honolulu. January 19, 1993.
- 1995 Burial Recovery at Site 50-50-14-4120, Makena State Park, Mo'oloa, Makawao District, Island of Maui (TMK: 2-1-06:27). Department of Land and Natural Resources, Historic Preservation Division. June 25, 1995.

### Foote, D.E., E.L. Hill, S. Nakamura, and F. Stephens

- 1972 Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii. U.S. Dept. of Agriculture, Soil Conservation Service. Washington D.C.
- Fornander, Abraham
  - 1916 History of Moikeha. In Fornander Collection of Hawaiian Antiquities and Folklore: The Hawaiians' Account of the Formation of Their Islands and Origin of Their Race, with the Traditions of Their Migrations, Etc., as Gathered from Original Sources, Vol. IV, Part 1, edited by T.G. Thrum, pp. 112-155. Bishop Museum Press, Honolulu.

DRAFT AIS for New Comfort Stations and Parking Lot Improvements, Mākena State Park

### Fornander, Abraham

1918 <u>Collection of Hawaiian Antiquities and Folklore</u>. Memoirs Bernice P. Bishop Museum. Honolulu: Bishop Museum Press.

### Fredericksen, Erik

- 1998a Draft Preservation Plan for Site 50-50-14-4185, TMK: (2) 2-1-05:116, Mo'oloa Ahupua'a, Honua'ula, Makawao District, Island of Maui. Prepared for Landowner Greg Kaufman.
- 1998b Burial Treatment Plan for Feature B, Site 50-50-14-4185, Located in Mo'oloa Ahupua'a, Honua'ula Moku, Makawao District, Maui Island (TMK: 2-1-05:116). Prepared for Landowners Greg and Merril Kaufman.

### Fredericksen, Erik and Demaris Fredericksen

1997 Archaeological Inventory Survey of a 4.186 acre Parcel Located in Mo'oloa Ahupua'a, Honua'ula, Makawao District, Island of Maui, TMK: 2-1-5-116). Prepared for Landowner Greg Kaufinan.

### Fredericksen, Walter

1997 Archaeological Monitoring Plan for Parcel of Land at Makena, Maui, Hawaii (TMK: (2) 2-1-05:116); Ahupua 'a of Mo 'oiki and Mo 'oloa, Maui Island. Prepared by Xamanek Researches for SHPD and Greg Kaufman, Landowner. July 1997.

### Gower, J.T.

- 1853a Letter to A.J. Thurston, Esq. dated March 1, 1853. Hawaii State Archives.
- 1853b Letter to the Minister of the Interior dated March 25, 1853. Hawaii State Archives, Index Card Collection, Land Index Cards for period 1830-1918.
- 1853c Letter to the Minister of the Interior dated April 1, 1853. Hawaii State Archives, Index Card Collection, Land Index Cards for period 1830-1918.

### Grant Index, Bureau of Conveyances

1854 Grant 1498 to Manu. Index of All Grants, pages 38-39.

### Griffin, Agnes

1988 *Puu Olai Burial #1.* Memorandum prepared for the Department of Land and Natural Resources, Historic Preservation Division, Honolulu.

### Handy, E.S. Craighill

1940 <u>The Hawaiian Planter, Volume 1</u>. Bishop Museum Bulletin 161, Bishop Museum Press, Honolulu.

### Handy, E.S. Craighill, Elizabeth Handy and Mary Kawena Pukui

1972 Native Planters in Old Hawaii: Their Life, Lore, and Environment. Bishop Museum Bulletin 233, Bishop Museum Press, Honolulu.

DRAFT AIS for New Comfort Stations and Parking Lot Improvements, Mākena State Park

### Hobdy, Robert

2019 Botanical and Fauna Survey for the Makena State Park Improvements, Maui, Hawaii. Prepared for DLNR, Division of State Parks as part of the Environmental Assessment by Munekiyo-Hiraga.

### Kikuchi, William

1973 Hawaiian Aquacultural System. Doctoral Thesis, University of Arizona. Manus.

### Lee-Greig, Tanya and Napali Souza

2021 Cultural Historical Genealogy – Traditional Cultural Practices Study for Makena State Parks and Analysis of Potential Cultural Impacts for Two Proposed Makena State Park Comfort Stations and Related Improvements, Mo'oiki and Mo'oloa Ahupua'a, Honua'ula Moku (Makawao Tax District), TMK: (2) 2-1-06:30. DRAFT prepared for DLNR, Division of State Parks.

### Malo, David

1951 <u>Hawaiian Antiquities</u>. Bernice P. Bishop Museum, Special Publication 2 (2<sup>nd</sup> Edition). Honolulu: Bishop Museum Press.

### Maly, Kepa and Onaona Maly

2005 He Mo'olelo 'Āina No Ka'eo Me Kāhi 'Āina E A'e Ma Honua'ula O Maui – A Cultural-Historical Study of Ka'eo and Other Lands in Honua'ula, Island of Maui (TMK: 2-1-07:67). Report prepared by Kumu Pono Associates LLC. For Sam Garcia Jr. and Jon Garcia.

### Muroda and Associates, Inc.

1982 <u>Revised Environmental Impact Statement for Makena Road, Makena, Maui,</u> <u>Hawaii</u>. Prepared for the County of Maui, Department of Public Works, February 1982.

### PBR Hawaii and Associates, Inc.

2013 <u>Mākena State Park Plan</u>. Prepared for ATC Mākena Holdings, LLC for use by DLNR, Division of State Parks.

### Pukui, Mary Kawena, Samuel Elbert and Esther Mookini

1974 <u>Place Names of Hawaii</u>. Honolulu: University of Hawaii Press.

### Rotunno-Hazuka, Lisa, Aki Sinoto and Paul Titchenal

2002 Archaeological Inventory Survey and Supplementary Subsurface Testing, Donaghy and Lonokailua Parcels, Mo'oiki, Makawao, Maui (TMK: 2-1-06: 34 & 35). Aki Sinoto Consulting with Archaeological Services Hawai'i, LLC. Honolulu and Wailuku.

### Schmitt, Robert

1973 <u>State of Hawaii Data Book</u>. State Department of Business and Economic Development.

### DRAFT AIS for New Comfort Stations and Parking Lot Improvements, Mākena State Park

### State Historic Preservation Division

1994 Section 106 Compliance: Proposed Acquisition by USFWS of Private Land Adjacent to the Makena-La Perouse Bay State Park, TMK: 2-1-06: 102 (por.). Letter to Ray Rauch of USFWS from Keith Ahue, SHPO dated March 16, 1994.

### Sterling, Elspeth P.

1998 Sites of Maui. Honolulu: Bishop Museum Press.

### Tempski, Armine von

1940 <u>Born in Paradise</u>. New York: Literary Guild of America.

### U.S. Army Corps of Engineers

- 1992 <u>Makena Beach Acquisition Study, Island of Maui, Hawaii</u>. Prepared by U.S. Army Corps of Engineers, Honolulu District. September 1992.
- Valentin, F. (Translated from French by Julius Gassner) 1969 <u>Voyages and Adventures of La Perouse</u>. Honolulu, Univ. of Hawaii Press.

### Walker, Winslow

1931 Archaeology of Maui. Manuscript on file at Bishop Museum, Honolulu.

### Yent, Martha

- 1989 Human Burials #2 and #3, State Site #50-50-14-1814: Puu Olai, Makena State Park, Makawao District, Maui (TMK: 2-1-06:30). Memorandum prepared for the Division of State Parks, Department of Land and Natural Resources, Honolulu. September 7, 1989.
- 1993a Archaeological Monitoring and Site Inventory Survey: Makena State Park, Mo'oiki and Mo'oloa Ahupua'a, Honua'ula (Makawao) District, Maui. Prepared for DLNR, Division of State Parks, Honolulu.
- 1993b Burial Treatment Plan: Pu'u Ola'i, Makena State Park, Mooiki, Honua'ula, Maui (TMK: 2-1-06: 30 and 81). Prepared for State of Hawai'i, Department of Land and Natural Resources, Division of State Parks, Honolulu.
- 2021 Draft Archaeological Inventory Survey and Phased Restoration of Paniaka Pond, Makena State Park, Ahupua'a of Mo'oloa, Moku of Honua'ula, Maui, TMK: (2) 2-1-006: 026, 080, and 102. Prepared for DLNR, State Parks.

### Yent, Martha and Christopher Monahan

2005 Archeological Monitoring Plan: North Pu'u Ola'i Wetland Restoration Project, Mākena State Park, Mo'oiki Ahupua'a, Honua'ula District, Maui, TMK: 2-1-06: 32, 34, and 74. Prepared for State of Hawai'i, Department of Land and Natural Resources, Division of State Parks, Honolulu. APPENDIX A Correspondence between John T. Gower and John Young Regarding Paniaka Fishpond March to April 1853

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A-1. Letter from John Gower to A.G. Thurston, Esq. dated March 1, 1853.

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A-2a. Page 1 of 2-page letter from J. Gower to John Young, Minister of the Interior, dated March 1, 1853. Reference to Paniaka Pond on page 2. The lost potenties on facturage of the loss potenties of August potenties on facturage of the former potenties on facturage of the loss in Thomas are good fotator from the The lots in Thomas and are mostly among the Climpers, are furthand only for Posturage une somet fortators . The lane is securingly bough are is worth no more than the frice officers.

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A-2b. Page 2 of 2-page letter from J. Gower to John Young, Minister of the Interior, dated March 1, 1853. Reference to Paniaka Pond is in the second paragraph.

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A-3a. Page 1 of 4-page letter from J. Gower to John Young, Minister of the Interior, dated March 25, 1853. Reference to Paniaka Pond is on page 4.

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A-3b. Page 4 of 4-page letter from J. Gower to John Young, Minister of the Interior, dated March 25, 1853. Reference to Paniaka Pond is found in the last paragraph.

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A-4. Letter from J. Gower to John Young, Minister of the Interior, dated April 1, 1853. Reference to Paniaka Pond is at the bottom of the page.

APPENDIX B Oneloa Coalition Meetings Held March 2018 to January 2020

### SUMMARY OF ONELOA COALITION MEETINGS March 2018 to January 2020

DATE	ATTENDANTS	TOPICS
3/27/18	Hannah Bernard, Jens Currie, Sam	· Members of the Oneloa Coalition from 2009 shared
	Garcia, Kaimi Judd, Daniel Kanahele,	the past history of the group; group of stakeholders
	Justin Kekiwi, Hattie King, Ekolu	formed in 2008 in conjunction with a County zoning
	Lindsey, Puanani Lindsey, Deb Merrill,	permit issued to Makena Resort with goal of
	Mike Moran, Albert Perez, Elizabeth	developing a park master plan; group became inactive
	Speith, Larry Stevens, Linda Stiles,	after the 2013 park plan was prepared by PBR Hawaii
	Kristie Wrigglesworth	and the Coalition
		<ul> <li>Wilderness or recreational park? Paving of the road</li> </ul>
	Guests: Tyson Au, Jeffery Cohn,	in the 1970s brought the public into the area and
	Vernon Kalanikau, Meli King, Melanie	changed the use and character of the area
	Trox, Cody Tuivaiti,	<ul> <li>SPAM (State Park at Mākena) was also shared as the community movement that led to the State's</li> </ul>
	DLNR:Russell Kumabe, Larry Pacheco,	acquisition of the park area
	Martha Yent	<ul> <li>State Parks reconvened the Coalition to seek</li> </ul>
		community input on the proposed restrooms (\$2.5m
		appropriated by State Legislature) and the restoration
		of Paniaka Fishpond initiated by PWF
		Pacific Whale Foundation (PWF) received \$20,000
		HTA grant for restoration of Paniaka Pond; initially to
		restore the ecosystem with option for fishpond
		restoration in the future; concern that this grant was
4/25/10	Long Comis Som Comis Kaini hald	applied for without Coalition input and participation
4/23/18	Jens Currie, Sam Garcia, Kaimi Judd,	• Defining the vision of the Oneloa Coalition –
	King Ekolu Lindsay Deb Marrill	the mission as stated in the 2012 Park Plan: "to ansure
	Mike Moron, Albert Parez, Elizabeth	the preservation of historical and cultural sites and the
	Spaith Larry Stayang Linda Stilas	restoration and management of the natural acology of
	Kristie Wrigglesworth	Oneloa State Park, while enhancing the stewardship of
	Kitsue witggiesworth	traditional and recreational uses for future
	DI NR: John Datiles, Russell Kumabe	generations": NOTE: reflects desire to change the
	Larry Pacheco Martha Yent	name of the park from Mākena to Oneloa
	Early Facheco, Marana Fent	Establish membership based on the 2009 group of
		stakeholders and request participation by at least one
		member of each organization
		DLNR provided background for project involving
		construction of new restrooms with EA and CIA
		· State Parks shared plans for archaeological work
		(AIS) in conjunction with the project
		· Formation of a committee to plan for the restoration
		of Paniaka Fishpond under a volunteer agreement
		between State Parks and the Pacific Whale Foundation
7/12/18	Hannah Bernard, Sam Garcia, Kaimi	Discussion about what kind of planning is needed for
	Judd, Justin Kekiwi, Ka'onohi Lee,	Mākena SP – master plan vs. management plan; State
	Ekolu Lindsey, Kelly McHugh, Deb	Parks shared the 1977 plan prepared for the park
	Merrill, Mike Moran, Albert Perez,	• Discussion of the drum circle gatherings at Little
	Elizabeth Speith, Linda Stiles, Cody	Beach (Pu'u Ola'ı) on Sundays, other illegal activities
	Tuivaiti, Kristie Wrigglesworth	(drinking, nudity, fires), and problems with enforcement; suggestions included Sunday closures
	Guest: Jacob Adolpho, Hattie King,	and more education about potential impact on turtles
	Maria Taylor, Lopaka White	and cultural practitioners
	DIND, Low Datas Mathe V	
	DLNK: Larry Pacheco, Martha Yent	

9/4/18	Hannah Bernard, Sam Garcia, Kaimi Judd, Ka'onohi Lee, Ekolu Lindsey, Kelly McHugh, Deb Merrill, Mike Moran, Albert Perez, Elizabeth Speith, Linda Stiles, Cody Tuivaiti, Kristie Wrigglesworth Guest: Hattie King, Jim Mothersbaugh, Kirk Tanaka, Maria Taylor DLNR: Russell Kumabe, Larry Pacheco, Martha Yent	Discussion of 2013 park plan that called for restrooms, camping, picnicking, and trails; is there a bigger vision for the park? State Parks notes some changes since 2013 including lifeguards & food concession with parking concession being planned • Management plan would address the situation now – how to manage people and protect resources • HI Wildlife Fund raised questions about leaching into wetlands and nearshore waters as well as lighting as impacts on turtle nesting sites • Location of restrooms not raised as an issue and concerns centered around the wastewater system options – pros and cons of compositing toilets
10/3/18	Jens Currie, Sam Garcia, Kaimi Judd, Justin Kekiwi, Hattie King, Ka'onohi Lee, Ekolu Lindsey, Deb Merrill, Mike Moran, Albert Perez, Elizabeth Speith, Linda Stiles, Cody Tuivaiti, Kristie Wrigglesworth Guest: Anthony DelleFave, Tim Lara, Puanani Lindsey, Tina Wildberger, Jim Mothersbaugh DLNR: John Datiles, Larry Pacheco,	<ul> <li>Presentation by Jim Mothersbaugh of Watertectonics on composting systems – no discharge, no soil disturbance, no water, no electricity; would need 8 units for level of use at Mäkena; costs for pumping with clean-out every 3-4 months</li> <li>Need for outdoor showers raised to address impact on community by people looking for showers; concerns about showers bringing more people and homeless; concern about leaching into the ground; drywell mentioned as an option</li> <li>State Parks shared plans to prepare an EA and CIA to address cultural and environmental impact/concerns</li> </ul>
	Martha Yent	Formation of fund development and outreach     committee
11/15/18	Sam Garcia, Hattie King, Ka'onohi Lee, Kelly McHugh, Deb Merrill, Mike Moran, Albert Perez, Elizabeth Speith, Linda Stiles, Cody Tuivaiti, Kelly Wilkinson, Kristie Wrigglesworth Guests: Paul Higashino (KIRC), Lopaka White DLNR: John Datiles, Russell Kumabe, Martha Yent	<ul> <li>Restroom/wastewater system options under consideration: composting toilets (Clivus Level 6)</li> <li>State Parks recommends looking at a vault system</li> <li>Concerns about leaching into the ground and potential impact on the fishing</li> <li>Restrooms needed for health and safety</li> <li>Concerns with vandalism of park facilities</li> <li>Formation of a planning committee (Sam Garcia lead) – develop action plan as State estimates</li> <li>\$400,000 to \$1m for a master plan &amp; EIS; use the plan developed for Hā'ena, Kaua' as a good example</li> </ul>
1/3/19	Sam Garcia, Kaimi Judd, Justin Kekiwi, Hattie King, Ka'onohi Lee, Kelly McHugh, Deb Merrill, Mike Moran, Albert Perez, Linda Stiles, Cody Tuivaiti, Kelly Wilkinson, Kristie Wrigglesworth DLNR: John Datiles, Renee Kamisugi, Russell Kumabe, Larry Pacheco, Martha Yent	State Parks provided an update on the Clivus composting toilet; concern that it is not the right choice for the level of use and costs involved Coalition proposes update to 2013 park plan that would address park facilities, carrying capacity, ocean safety, cultural traditions, dune restoration, sea level rise and climate change Continued discussion of various wastewater system options and concerns More outreach to the community recommended
2/13/19	Minutes not available	State Parks was informed of future option to connect to a sewer line that would run to a treatment plant on the ATC/Mäkena Resort property • Discussion of restrooms – moving away from idea of composting toilets towards holding tanks with future sewer hook-up to Mäkena Resort • Concern of ocean safety & spinal injuries and need to inform park users

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		1
3/14/19	Sam Garcia, Hattie King, Ekolu	<ul> <li>Peter Kafka who maintained vault toilets at</li> </ul>
	Lindsey, Deb Merrill, Mike Moran,	Haleakala NP shared his knowledge of system: did not
	Albert Perez, Linda Stiles, Cody	recommend composting toilets due to maintenance
	The Wind Wind Miles, Cody	D' C C C C C C C C C C C C C C C C C C C
	Tuivaiti, Kristie Wrigglesworth, Kelly	<ul> <li>Discussion of outdoor showers including drainage,</li> </ul>
	Wilkinson	drywell option, and rain garden to absorb run-off
		<ul> <li>Consider pervious surface for parking, not asphalt</li> </ul>
	Guests: Peter Kafka Robin Knox Kai	Hawaii Wildlife Fund provided written comments
	NU-1:1.:	in a state of a state of the st
	INISHIKI	against snowers, flush toffets, and water fountains
		<ul> <li>Lighting must consider wildlife (do not face ocean)</li> </ul>
	DLNR: Martha Yent	<ul> <li>Concerns of crowding and carrying capacity; need</li> </ul>
		space for locals; restroom will attract more people
		• Cody visited pu'u on a Sunday for cultural practices
		and avanythalmad by the out of control situation.
		and overwhelmed by the out-of-control situation,
		suggested formation of cultural advisory committee to
		make decisions based on cultural knowledge/traditions
		<ul> <li>Potential impact of park activities on fishermen</li> </ul>
		Community interest in seeing camping at the park
		Bassemmon dotion for duno restantion project
4/20/10	Sam Causia Kaimi Indd Dani 1	Discussion of the second to ite ite doubt of the second to the seco
4/30/19	Sam Garcia, Kaimi Judd, Daniel	• Discussion of the vault toffet – depth of excavation,
	Kanahele, Justin Kekiwi, Ka'onohi Lee,	need for pumping (costs and maintenance)
	Ekolu Lindsey, Deb Merrill, Linda	<ul> <li>Changes in restroom design to accommodate holding</li> </ul>
	Stiles, Cody Tuivaiti, Kristie	tanks will affect archaeology & CIA
	Wrigglesworth	<ul> <li>Discussion of outdoor showers and concern with</li> </ul>
	66	drainage: further consideration of a drywell or rain
	Guest: Meli King, Tanya Lee-Greig	garden: ask people not to use soan or shampoo
	V is Will she	Discussion of a second state Main and the for
	Kris wiineim	• Discussion of ocean safety – Makena is #1 site for
		spinal injuries; signs recommended
	DLNR: Holly McEldowney, Tracy Tam	<ul> <li>Review of draft interpretive &amp; spinal injury signs</li> </ul>
	Sing, Martha Yent	<ul> <li>Update on dune restoration with plantings</li> </ul>
6/25/19	Sam Garcia, Kaimi Judd, Justin Kekiwi,	Concern with outdoor showers
	Ka'onohi Lee, Deb Merrill, Mike	- Soaps, shampoos entering ground & ocean
	Moran Albert Perez, Cody Tuivaiti	- Will attract more people & homeless
	Viorali, Milocle Perez, Cody Pulvald,	Look of showing imposting the Malane community
	Klisue wligglesworu	- Lack of showers impacting the Makena community
		- Idea of rain gardens to absorb water
	Guest: Ashford DeLima	<ul> <li>Local people bring bottles of water to rinse</li> </ul>
		<ul> <li>Concern with restrooms for potential sewage leaks</li> </ul>
	DLNR: Larry Pacheco, Martha Yent	<ul> <li>Concern with additional parking and more people;</li> </ul>
	· · ·	need carrying capacity
		Concern with sunscreen and impact on ocean and
		marine recourses(mo'i)
		Char Bute Ölsti Daarh dening teetle neet
		• Close Fu u Ola i Beach during turtle nesting season
		<ul> <li>Promote proper place names on road signs</li> </ul>
L		<ul> <li>Update on archaeological testing provided</li> </ul>
8/6/19	Sam Garcia, Justin Kekiwi, Deb	<ul> <li>Update on dune restoration project – need for plants,</li> </ul>
	Merrill, Mike Moran, Albert Perez,	signs, and symbolic fencing
	Linda Stiles, Cody Tuivaiti	· Discussion of enforcement issues, esp. as related to
	,,	the Sunday gatherings at Pu'u Ola'i
	Guasta: Ashford DaLima, Lairos Vara	• Idea of a 60 day park alogura
	Mali King	De man terrine en later affine dan de
	wien King	<ul> <li>Do more lowing and stop off-road parking</li> </ul>
		<ul> <li>Allowing fishing at night</li> </ul>
	DLNR: Randy DeCambra (DOCARE),	<ul> <li>Ongoing discussion about restrooms and showers –</li> </ul>
	Larry Pacheco, Martha Yent	some objections still exist amongst members
		· Review of draft interpretive signs developed by State
		Parks (park history, resources rules ocean safety and
		respect messages)
		respect messages)
		respect messages)

9/17/19	Sam Garcia, Justin Kekiwi, Deb	State Parks shared plans for the parking pay stations
	Merrill, Albert Perez, Linda Stiles,	· Idea of shuttle between Makena Resort and the park
	Cody Tuivaiti, Kristie Wrigglesworth	Promote use of proper place names
		· Close Pu'u Ola'i on Sundays for management and to
	DLNR: Sang Kim & Korinne Gowin	control illegal activity; promote respect for the pu'u
	(Parks Property Management), Larry	· Summary of Action Plan with some objections being
	Pacheco, Martha Yent	raised about the restrooms and showers
1/23/2020	Hannah Bernard, Sam Garcia, Deb	· Update on the need for archaeological testing in
	Merrill, Albert Perez, Linda Stiles,	conjunction with design changes for the tanks
	Cody Tuivaiti, Kristie Wrigglesworth	· Restrooms will be designed for future sewer hook-up
		<ul> <li>Question about use of incinerator toilets; probably</li> </ul>
	DLNR: Larry Pacheco	wouldn't work for the level of use at Makena
		· Concern about the level of water use for toilets and
		showers; State Parks considering the use of sanitizer,
		non-water urinals; Coalition not in agreement about
		the need for showers
		<ul> <li>Cody Tuivaiti said he uses the area for cultural</li> </ul>
		reasons and the problem with restrooms is increased
		people; it is not a family beach; safety concerns
		· Impact of water run-off and people on the turtles
		· State Parks shared plans for paid parking for out-of-
		state visitors; concern about on-street parking

### Members and Guests of Oneloa Coalition

Hannah Bernard Hawai'i Wildlife Fund Sam Garcia Mākena Homeowners Association ATC / Mākena Resort Kaimi Judd Daniel Kanahele Sierra Club Justin Kekiwi Mākena Park Caretaker Mākena Resident Hattie King Aha Moku o Maui Ka'onohi Lee Ekolu and Puanani Lindsey Maui Cultural Lands Deb Merrill PWF (recorded minutes of meetings) Mike Moran Kīhei Community Association Albert Perez Maui Tomorrow Larry Stevens Maui Nui Linda Stiles Mākena Resident Cody (Koko) Tuivaiti Cultural Practitioner Kristie Wrigglesworth PWF

### Paniaka Restoration Project (PWF staff)

Jens Currie	Project Manager
Kelly McHugh	PWF
Elizabeth Speith	Consultant
Kelly Wilkinson	PWF

APPENDIX C Sample Section 106 and Chapter 6E-8 Consultation Letter and Notes from Meetings with the Maui County Cultural Resources Commission





STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES POST OFFICE BOX 621 HONOLUU, HAWAII 96609 ROBERT K. MAANDA BISTERNYY M. KALED MANTEL DRYTY DRITTON \* WATE MARKING AND CLASS HEREATON HEREATON AND CLASS HEREATON HEREATON AND CLASS HEREATON HEREATON AND CLASS HEREATON HEREATON HEREATON AND CLASS HEREATON HEREATON

SUZANNE D. CASE

CHAIRPERSON ID AND NATURAL RE

February 17, 2021

Ms. Sylvia Hussey, CEO Office of Hawaiian Affairs 560 N. Nimitz Highway, Suite 200 Honolulu, Hawai'i 96817

Dear Ms. Hussey:

SUBJECT: NHPA Section 106 and HRS Chapter 6E-8 Consultation Construction of Comfort Stations and Parking Lot Improvements at M\u00e4kena State Park Ahupua'a of Mo'oiki and Mo'oloa, Honua'ula District, Maui TMK; (2) 2-1-006:027 and 030

The Department of Land and Natural Resources (DLNR), Division of State Parks is proposing to construct two new comfort stations and make parking lot improvements at Mäkena State Park on the Island of Maui. This project will be jointly funded with federal and state funds which triggers consultation on historic properties through both the National Historic Preservation Act (NHPA), Section 106 and Hawai'i Revised Statutes (HRS), Chapter 6E-8. DLNR has submitted a Land and Water Conservation Fund (LWCF) grant application to the National Park Service (NPS) for this undertaking (LWCF Project 15-00176). NPS has delegated initiation of Section 106 consultation to DLNR, but NPS remains responsible for all findings and determinations per 36 CFR 800.2. These grant funds will be matched with the State's Capitol Improvement Project (CIP) funds (Job No. H70C805B) which requires compliance and review by the State Historic Preservation Division. This consultation document uses terminology from both State and Federal historic preservation laws as defined by HRS, §6E-2 and 36 CFR §800.16. Terms *Project* and *Undertaking*, as well as, *Project Area* and *Area of Potential Effect* may be used interchangeably throughout the document.

Since 1965, Hawai'i has received more than \$40 million from the LWCF State and Local Assistance program for the acquisition and development of public outdoor recreation areas and facilities. DLNR, State Parks has previously used LWCF funds for the acquisition and development of Mäkena State Park which protects the park in perpetuity for public outdoor recreation purposes through the LWCF Act of 1965.

Section 106 Undertaking and Area of Potential Effect (36 CFR 800.2)

The undertaking for this LWCF grant involves park improvements at Mäkena State Park on the southeastern coastline of Maui. The park consists of 165.7 acres with Pu'u Ola'i, the prominent cinder cone within the park, encompassing approximately 90 acres. Existing park development includes two paved parking lots and entry roads, one at each end of Oneloa Beach located to the south of Pu'u Ola'i. The new comfort stations are proposed adjacent to each parking lot. Parking lot improvements will organize parking within the existing footprint by paving the shoulders of the entry roads. The undertaking consisting of two Areas of Potential Effect (APE), one at each of the existing parking lots where the construction will occur.

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The attachment provides details about the undertaking and APEs as well as providing historical and archaeological background.

### Section 106 Consultation (36 CFR 800.3)

Consultation for this undertaking has been ongoing since the project was initially proposed by State Parks in 2018. The Oneloa Coalition is a community-based committee composed of Mākena residents and representatives of organizations including Maui Tomorrow, Surfrider Foundation, Maui Cultural Lands, Pacific Whale Foundation, Kīhei Community Association, Hawai'i Wildlife Fund, Mākena Homeowner's Association, and Aha Moku o Maui. This undertaking was discussed with the Oneloa Coalition at their meetings held between 2018 and 2019. Consultation has also been conducted through a Cultural Impact Assessment (CIA) study initiated by Tanya Lee-Greig of 'Aina Archaeology in 2018. This CIA involves consultation with individuals who have traditional and cultural ties to the Mäkena area. During the CIA study, Pu'u Ôla'i, the culturall yroperty (TCP). There were concerns expressed about the potential for iwi kūpuna to be within the APEs based on previous discoveries of human remains in the pu'u and the sand dune of Oneloa Beach. Additional consultation is being conducted with the Maui Island Burial Council, Maui County Cultural Resources Commission, and the Maui Council of the Association of Hawaiian Civic Clubs. The attachment provides more details about the parties being consulted for this undertaking.

As part of the Section 106 consultation process, I am writing to inform you of the project, inquire about historic properties and cultural sites that you may be aware of within the proposed APEs, and seek your input on the designation of Pu'u Ōla'i as a Traditional Cultural Property (TCP). Identification of a TCP recognizes the cultural significance of the pu'u as a physical property associated with cultural practices, traditions, beliefs and lifeways of a living Hawaiian community (36 CFR Part 60.4). We would also appreciate knowing of any potential impacts this project could have and recommendation for protecting and preserving sensitive cultural resources.

### Inventory of Historic Properties (36 CFR 800.4)

In addition to consultation, State Parks archaeologists have conducted background research, archaeological surface surveys, and test excavations to evaluate the presence of any historic properties and cultural resources within the APEs. These investigations have indicated a lack of historic properties and subsurface cultural deposits within the APEs. Historic properties located in the vicinity of the APEs can be protected with buffers and avoidance. Potential adverse effects to the TCP were addressed by situating the northern comfort station at least 200 feet from the base of the pu'u and not obstructing any significant view corridors.

### Determination of "No Adverse Effect" and "No Historic Properties Affected"

DLNR in consultation with NPS, has made a determination of "no adverse effect" due to the lack of known historic properties within the APEs (36 CFR 800.5). The potential for the undertaking to have an adverse effect on the TCP has been assessed and the location selected for the comfort station nearest Pu'u Ola'i has created a physical buffer. The APE does not intrude into the physical property of Pu'u Õla'i and provides a buffer of 200 feet from the base of the southern slope of the pu'u. The structures being proposed in the undertaking do not intrude into the view plane between Pu'u Õla'i and Molokini, the two physical properties of the TCP.

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Likewise, DLNR has made a determination of "no historic properties affected" (HAR, §13-275-7). This is based on the absence of significant historic properties within the project areas and the measures proposed to protect Pu'u Ōlai, including buffers, avoidance, and preservation of the significant view corridors.

Based on the archaeological investigations and previous land uses, there appears to be a low probability that any iwi kūpuna or cultural deposits will be found during the ground disturbing activities. However, as a precaution, State Parks is making the following commitments:

- State Parks will prepare an Archaeological Monitoring Plan (AMP) that will be submitted for approval by the State Historic Preservation Division (SHPD). The plan will require that a qualified archaeologist be on-site during ground disturbing activities and available to address any cultural finds, including ivi ktpuna. All applicable laws and regulations will be followed.
- The State Parks archaeologist will attend the pre-construction meeting and coordinate with the contractor on the identification of construction and staging areas. Archaeological sites will be pointed out and marked as needed to ensure buffers are maintained and sites are avoided.
- The State Parks archaeologist will have the authority to stop all work in the event that any cultural
  materials are discovered during the work. If a significant cultural deposit or subsurface feature is
  discovered, the archaeologist will follow standard field procedures to record sufficient information to
  fulfill the requirements. A report documenting any discoveries will be submitted to SHPD.
- If any human remains are discovered, all work will stop in the immediate area of the discovery, the remains will be covered and protected, and the SHPD archaeologist and burial specialist will be notified along with the Maui Police Department and DOCARE. No work within the area will occur until requirements set out in HR5§6E-43.6(b)(d) and (c) and HR5§13-300-40 are fulfilled.

Please review the undertaking pursuant to 36 CFR 800.5 and determine if your agency concurs with the determination of "no adverse effect". We also request your input regarding a determination of "no historic properties effected" per HRS, Chapter 6E-8. Please respond with any comments within 30 days upon receipt of this letter.

If you have any questions, please do not hesitate to contact Martha Yent, Hawai'i LWCF Coordinator (808-587-0287 or Martha.E.Yent@hawaii.gov).

Thank you for your kind assistance.

Very truly yours,

CURT COTTRELL State Parks Administrator

Attachment

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### Maui County Cultural Resources Commission Meeting August 5, 2021

Commissioners: Daniel Kanahele (Kihei), Vice-Chair Ian Bassford (Makawao), Archaeologist Karen Poepoe (Moloka'i) Alexander dela Cruz (Lana'i) Emily Spenser (Pukalani) Yvette Celiz (Laahaina Tanya Lee-Greig (Kihei) – recused for the Makena agenda item

### Planning Dept. Staff: Annalise Kehler

- Project Team: Valerie Suzuki, DLNR, Engineering Martha Yent, State Parks Archaeologist and LWCF Coordinator Kirk Tanaka, Tanaka Engineering Gwen Rivera, Munekiyo-Haraga
- Agenda Item: Section 106 and §6E-8 Consultation for Proposed New Comfort Stations and Parking Lot Improvements for Mākena State Park Agenda item heard around 2:30pm

### PUBLIC TESTIMONY:

- · Written testimony from Justin Kekiwi (attached)
- Kanahele asked if commissioners had an opportunity to read this testimony and would provide time for them to read it if needed.
- Luciene deNaie (Sierra Club)
- She is concerned that more people will be coming to the park and there is a need to reserve parking for locals.
- Objects to showers as they will introduce a new source of water that will make it to the ocean.
- She has concerns for fishing and gathering.
- Janet Six (County of Maui Archaeologist)
- She shared the County's project at Laniaupoko Park to use reclaimed water from the showers for irrigation. She said 3 million gallons of water will be saved each year at Laniaupoko and expects more would be used/saved at Mākena.
- She asked about the depth of the water table at the park and if the containment tanks would be within the water table.
- She has concerns about adding more asphalt to the park for parking. Feels there could be impacts on the natural resources.
- The current water shortage on Maui was noted and said we should rethink shower and this use of water when it is needed for other priorities.
- Agreed that the park needs to deal with waste, but the State needs to do more to address leaching into the soil.
- She supports the TCP and NRHP nomination.
- Cody Nemet Tuivaiti (Aha Moku Kuʻula Kai)
- Recognizes that people are coming to Makena SP for diving, fishing, snorkeling, and surf.
   He is concerned that the comfort station will attract more people and he has safety

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concerns. Mākena is not a family beach and it is the highest in the State for spinal injuries. He agreed that signs don't work. He added that lifeguards don't support the comfort station.

- He expressed concern about the water table and potential impacts on the wetlands. He said this is a pristine area that needs more native plants.
- He also supports the TCP.
- Albert Perez (Maui Tommorrow)
  - Suggested that there would be impacts to the turtles from the showers and leaching into the soil. He said there is no way to enforce "no soap/shampoo" and signs don't work.
  - Said he did not believe that the Oneloa Coalition was consulted for the Section 106 process.
  - He recommended limiting the visitation and provided 3 mitigation measures: 1. All wastewater should go the Resort treatment plant
  - 2. An 'āina-based carrying capacity study should be conducted prior to construction
  - 3. 50% of the parking stalls should be reserved for residents
  - He said he supports the comfort station but not the showers or parking.

<u>PRESENTATION</u>: Martha Yent, State Parks, attempted a powerpoint presentation of the project but had technical problems and was not able to give the presentation. She provided some information about the project, archaeological historical research, CIA, TCP, potential impacts, and mitigation.

### **QUESTIONS FROM COMMISSIONERS:**

- Poepoe asked about the burials. Yent mentioned the ones from the pu'u were exposed due to cinder mining and were reinterred at the summit of the pu'u by Leslie Kuloloio in 1992. The burials from the sand dune behind Oneloa Beach have been curated by SHPD and planning is underway for reinterment in the park.
- Kanahele asked about water usage. Kirk Tanaka said he has made contact with the County to
  discuss their project at Laniaupoko. He felt 3 million gallons might be too high because this
  calculates to about 5 gallon per minute. He also mentioned the high cost of developing
  irrigation systems to be able to use the reclaimed water.
- Kanahele asked about the depth of the water table. Tanaka said this was not studied (no borings) but the containment tanks will be anchored so they don't float when emptied. He added that the tanks are about 2 feet above sea level.
- · Kanahele inquired about pumping and hauling off-site.

### COUNTY STAFF REPORT:

Annalise Kehler read the County Dept. of Planning staff report (attached). Several recommendations were made:

- Need context sensitive design which might include reducing the size of the comfort station
   and using landscaping
- · Eliminate paving.
- COMMISSIÓN DISCUSSION:
- Kanahele recommended deferral. He felt Mākena is too important and deserves more time and discussion. He felt that there is so much information to absorb and commissioners need time to digest this information.

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- · Kanahele asked Yent if State Parks would be able to return to the next CRC meeting and try again to share the powerpoint. Yent acknowledged and thanked the CRC for this second opportunity.
- · Bassford said an EIS is needed and that the AIS is not adequate. He believes the AIS is more of an assessment and it does not address staging and storage in the APE as required. Does not think SHPD will accept the document.

### COMMISSION MOTION:

- · A motion was made by Kanahele to defer the item to the September 2, 2021 meeting.
- Motion passed
- · Agenda item completed at 4:00pm

Notes prepared by Martha Yent State Parks

Attachment: Justin Kekiwi Testimony

#### Annalise Kehler - Fwd: Makena State Park

From:	Annalise Kehler
Date:	8/5/2021 8:00 AM
Subject:	Fwd: Makena State Park
Cc:	Stephanie.M.Chen@co.maui.hi.us, Suzette.Esmeralda@co.maui.hi.us
Bc:	tanya@ainaarch.com, blsarich@aol.com, annekaliko@gmail.com,

Aloha Commissioners:

I am transmitting testimony submitted on item D. 1 (the Mäkena State Park item)

See you all at 11 am

Annalise

>>> whitehawaiian11 <whitehawaiian11@gmail.com> 08/04/21 4:31 PM >>>

Aloha mai kākou

I am writing to the CRC as a concerned community member and a cultural advocate in opposition to the Makena State Parks proposal to construct restroom/shower facilities in the park at this present time. I want to be very clear that I am the park caretaker for Makena State Park(MSP), I have lived and worked in resident caretaker facility in the park for the past six years, and I currently reside there with my family. This testimony does not represent me as an employee of the State but instead as a lineal descendant of Honua'ula moku. I have been meeting with developers, government officials, and non profit groups to assist in paving the future of Maui and more specifically Honua'ula moku for the past several years. My biggest concern on this project is that currently, the State of Hawaii is avoiding the EIS process for this restroom project and instead doing an EA. If you are grading, excavating, diverting water from another moku, and building in the SMA in close proximity to natural wetlands and culturally significant sites/landscapes, there will most certainly be significant environmental impacts and the State should do the due diligence and conduct an EIS! This EA study will conclude with an AFONSI, as most projects do which is total bogus because AFONSI's are being handed out to so many developers for projects that need the EIS. It completely disregards the soul purpose of why EIS's were created which is to conduct accurate reports and studies on the impacts these projects will have short and long term. Bottom line is we need more in depth studies to be done before moving forward with this project and an EIS will ensure that.

am going to guote Hannah Bernard in an Oneloa Coalition meeting a few years back. "You guys(State) are putting the cart before the horse."

I look back now and see why she said those words. Although we are checking the box on one of the goals of the original "master plan" to provide restroom facilities in the park we are doing it in the wrong order. -MSP has iwi kupuna that are being exposed in the park due to swells and erosion with no dune restoration of resource efforts to prevent that.

-We have 3 natural wetlands that need management and protection but only one has gotten resources and been restored because of wealthy neighbors.

 MSP currently has mass fire hazards and fuel loads waiting to combust and destroy the parks wilderness landscape. We need more mitigation efforts and resources to remove these fuel loads. - There needs to be a capacity cap so we can build the right facility that will accommodate the daily demands

we will have. Wainapanapa State park is currently in the process to expand new restrooms as the current infrastructure cannot supply the demand. Are we doing the same thing they did 20 years ago and then will have to expand the facilities in several years for the same reasons? Have we not learned from thos mistakes? No one knows on average how much people are using the park daily and I believe that's the first accurate study we need. From there we can plan and build the adequate infrastructure.

If you build it they will come, as said from centuries ago. Adding more luxurious features such as restrooms and showers will attract more people, and people who are not educated nor respect the waters of Oneloa. MSP lost funding for our Lifegaurds for more than a year due to covid financial deficits, the one beach in the

file:///C:/Users/ankeh/AppData/Local/Temp/XPgrpwise/610B9A9Fgw55domaingw55po100... 9/1/2021

State with the highest fatalities and spinal injuries! But yet the money for the restrooms sat in the bank while hwo possibly three lives could have been saved this past year. That's heartbreaking to say the least! These funds for the restrooms have lapsed, have been extended already, and it will probably happen again as we are approaching that deadline scon, so it's pretty obvious the State is not ready to move forward just yet. Maul State parks is understated with only three caretakers for Kaumahina, Polipoli, lao, Haleki/IP/Hana, and Makena State parks. They need more employees and resources to currently manage these parks and yet the State is proposing to add fadilities to promote more visitors while the resources are being damaged. They are billing off more then they can chew from my perspective. The State can't afford to maintain it nor does it have the resources and man power to do so currently. If the State hirrs more employees, keepe the things like lifeguards properly funded, protect the current threatened dunes and wetlands, and then talk about building the restrooms. The priorities of our resources before catering to people's laxurise need to be weighed. The shower's have no place in this park. The negative impacts it will bring far out weigh any positives. Shampoos, soaps, and chemics leaking into the wetlands and our aquatic class A manne ocean protected waters are all affected significantly by these showers. Not to mention the diverted water coming from another moku which nalve Kalo farmers have been fighting for decades to receive these water benefits and rights returned to their 'aina.

The list goes on but hi close will

#### For the AIS and CIA,

I'm hoping to see more consultation with a lot more families and lineal descendants from Honua'ula. Also I would like to see the present day cultural practitioners like the fisherman, divers, those who kilo in the park, and use Pu'u Ola'i as a religious site included in the consulting to get their mana'o on how this project will affect their heritage.

I most certainly understand the desire and need for better restroom facilities, but I personally don't think the State is ready for it yet. Remember now, this is a State park, not County Parks and Recreations. State parks are set aside for their cultural and environmental significance which here are Pu'u Ola'i, the dunes, the wetlands, the wir kupuna, class AA protected ocean waters, the reef systems, and all the cultural elements like the endangered ope'ape'a and honu 'ea, and the ko'a sites that this treasure box holds. The mission for DLNR is to "Enhance, protect, conserve and manage Hawaii's unique and limited natural, cultural and historic resources held in public trust for current and future generations of the people of Hawaii nei, and its visitors, in partnership with others from the public and private sectors."

It is such an awesome idea and statement but I have been waiting for the State to take ownership of these words and bring them to life.

Really read and understand these words. Human Luxury and amenities do not fall in this category nor shall it. Our State parks should hold a higher standard ensuring the resources are protected first so our future beneficiaries can have the resources we are obliged to protect. It starts with the EIS and community consultation, then we build from there. There is no reason to take short cuts and rush because of the deadline to spend this money. More money will come but we only have one shot to do this right. If our foundation is weak our house will fall, so let us all come together and take our time to set the blocks in building the most beautiful park on the planet.

Justin Kekiwi

Sent from my Verizon, Samsung Galaxy smartphone

### DRAFT AIS for New Comfort Stations and Parking Lot Improvements, Mākena State Park

### Maui County Cultural Resources Commission Meeting September 2, 2021

Commissioners: Daniel Kanahele (Kihei), Vice-Chair Ian Bassford (Makawao), Archaeologist Karen Poepoe (Moloka'i) Alexander dela Cruz (Lana'i) Emily Spenser (Pukalani) Tanya Lee-Greig (Kihei) – recused for the Mākena agenda item

Planning Dept. Staff: Annalise Kehler

- Project Team: John Datiles, DLNR, Engineering Larry Pacheco, Maui State Parks Superintendent Martha Yent, State Parks Archaeologist and LWCF Coordinator Kirk Tanaka, Tanaka Engineering Mark Roy and Gwen Rivera, Munekiyo-Haraga
- Agenda Item: Section 106 and §6E-8 Consultation for Proposed New Comfort Stations and Parking Lot Improvements for Mākena State Park Agenda item heard at 12:35pm

### PUBLIC TESTIMONY:

· Albert Perez, Maui Tomorrow and Oneloa Coalition

- Used google maps to estimate 102 current parking stalls and the proposed new 138 stall will more than double the parking available which will increase the number of park users – need to limit the numbers and allow for more local use.
- Park has important resources and there is a concern about impacts on the pu'u.
- Concern about leaching from showers signs don't work.
- Kanahele asked about the Oneloa Coalition and Perez said it is a group of community organizations, neighboring individuals, and State Parks. The project was discussed in the Coalition meetings and various wastewater systems were considered.
- Perez agreed there is a need for restrooms but disagrees that we need showers. He felt showers may attract families to a dangerous beach.
- Felt that EIS needed because of the significant impacts. Poepoe asked if the Coalition would recommend an EIS. Perez said there was no consensus on this but Maui Tomorrow believes an EIS is needed. Perez explained that Maui Tomorrow came out of SPAM.
- Poepoe asked how many descendants are involved with the Coalition. Perez said many Hawaiians came out for the Paniaka restoration meetings but estimated about 40% Hawaiian participants otherwise.

Written testimony by Rene Long requested planting of shade trees at the parking lots.
Cody Nemet Tuavaiti

- Pu'u Öla'i is culturally significant with strong educational component. He mentioned a
  program for native Hawaiian students in Honua'ula with fieldtrips to the pu'u. We need to
  allow these programs to grow.
- Knowing the 'āina is important and he is worried about safety. Mākena has the highest rate
  of spinal injuries and we should not be inviting families.
- Prefers not to have any modern development.

DRAFT AIS for New Comfort Stations and Parking Lot Improvements, Mākena State Park

Carol Kamekona

- Descendant of Honua'ula and objects to any digging because of iwi and objects to development.
- She is concerned that the quality of the beaches will be affected. • Jacob Adolpho
- Collects la'au and practices cultural traditions at the pu'u.
- Opposed to any development and mentioned a tour group on the pu'u last year.
- People are not using the parking lots and parking on the road to avoid paying the fees.
- Kanahele asked about the impacts of the project on cultural practices. Jacob said the la'au would be affected by development near the pu'u and plants growing in the cinder.

<u>PRESENTATION</u>: Martha Yent, State Parks, provided a powerpoint presentation of the project, archaeological historical research, CIA, TCP, potential impacts, and mitigation.

### **QUESTIONS FROM COMMISSIONERS:**

- Bassford asked if AIS going to be submitted to SHPD. He said more testing is needed and
  excavations should be to the depth of disturbance. He did not feel the AIS was adequate and it
  also did not address staging areas which is a requirement of Section 106. He didn't agree that
  the archaeologist should be making these decisions. He had a concern about the parking and
  the park getting overwhelmed. Said the project is a bad idea he understands the need for
  sanitation but may not need restrooms or showers.
- Kanahele asked why State Parks cannot continue to use portable toilets? Pacheco cited the cost and overuse. Kanahele responded that he didn't feel like \$1,800 per month was that much. Pacheco also cited the 2013 community survey about what people wanted to see at Makena SP and restrooms was the number one answer.
- Kanahele asked if a carrying capacity study had been done. Yent answered no and said it is
  not easy to do as there are many factors affecting people's perceptions. Mark Roy was asked
  if it was addressed in the EA or if he is familiar with such studies for parks. He said no and
  proceeded to give an update on the status of the EA which is not yet published or available for
  public review.
- Kanahele and Bassford both said they support the effort but "it is too soon" and more things need to be worked through. They questioned if enough consultation has been conducted as many are testifying with concerns. Yent answer that consultation occurred with the community through the Oneloa Coalition and that many emails and letters were sent to Hawaiian organizations, community groups, and individuals as part of the consultation process. She acknowledged that the response was low and that the CIA was intended to address the more specific cultural consultation required. Yent asked if Tanya Lee-Greig could respond to the question because State Parks did not want to answer for her methodology in identifying who to Interview for the CIA. The County's Corporation Counsel for the meeting recommended that Lee-Greig not participate in the discussion. Yent asked if the CRC wished to provide recommendations on others to consult if they feel any key individuals have been missed.
- Kehler asked if there would be grubbing for the removal of the kiawe trees and if this would be monitored by an archaeologist. Yent responded yes and added that all ground disturbing activities would be addressed in the Archaeological Monitoring Plan (AMP).

### COMMISSION DISCUSSION:

- Poepoe objected to the term "improvements" as this implies you are making things better. She
  felt expansion was a better term for this project. She wants to see the State address the cultural
  side (preservation and protection) per Article 12, Section 7. She felt more people need to be
  consulted about resources and practices, including the iwi kūpuna. She said the plan is full of
  puka and needs more consultation that is not an attitude of "mahalo for your mana'o" which is
  where comments and input are ignored. She supports the testimony of Justin Kekiwi who
  knows the place and added that this is Poepoe land.
- Bassford said he is on the fence and "once it's gone, it's gone". Makena is a special place and State Parks needs to be held to the same standard as others, including both archaeology and development. State Parks should do an EIS, not just an EA.
- Kanahele asked is Mākena is a wilderness park? Is it a recreation area? Is it a cultural
  landscape? Is it for visitors or residents? He believes it is all these things and is concerned that
  recreation and tourists are taking over while locals are getting pushed out. He feels an EA is
  too narrow a review and Mākena requires a broader review. Acknowledged that we still need
  a Master Plan for the park and Yent explained the history behind the 2013 park plan that is not
  considered to be to the level of a park master plan. He cited the importance of access. He is
  against showers and high level of water usage. He added that there will definitely be an
  impact from the project.
- Poepoe said she appreciated the work but asked State Parks to scale back the parking lot. She said we are providing luxuries that are not needed.
- · Kehler was asked to review the comments. The key points:
- Appreciate the situation where the State has a potential loss of funding but project is not ready to move forward.
- There is a preference for waiting for the sewer line to the treatment plant rather than moving forward with the interim containment tanks.
- Showers don't belong and there was no support for showers from the commissioners.
- Need an 'āina based carrying capacity study.
- Kanahele asked about the status of lifeguards. Pacheco answered that State Parks had to drop the contract at the start of the pandemic due to lack of funding. State Parks has a new agreement with the County but awaiting the filling of positions to staff Mākena.
- Poepoe said she is an advocate for culture and dela Cruz reminded everyone that the focus of the CRC is the cultural resources.
- Bassford said he expects the project to move forward but State Parks needs to be held accountable.

### COMMISSION MOTION:

- A motion was made by Kanahele to send the Commission's comments and recommendations
  to State Parks
- · Motion passed
- Agenda item completed at 3:40pm

Notes taken by Martha Yent, State Parks



Schematic of sign locations at north parking lot (left) and south parking lot.

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APPENDIX D Interpretive Signs at Mākena State Park (NOTE: Signs installed in March 2022)



DRAFT AIS for New Comfort Stations and Parking Lot Improvements, Mākena State Park

## **APPENDIX**



# ARCHAEOLOGICAL MONITORING PLAN

### REVISED DRAFT #2 ARCHAEOLOGICAL MONITORING PLAN

Construction of New Comfort Stations and Parking Lot Improvements

Mākena State Park Ahupua'a of Mo'oiki, Mo'oloa, and Mohopilo Moku of Honua'ula, Maui TMK: (2) 2-1-006:030 por.



Piggery Site 4660A, Mākena State Park



STATE OF HAWAI'I Department of Land & Natural Resources Division of State Parks

### ARCHAEOLOGICAL MONITORING PLAN

Construction of New Comfort Stations and Parking Lot Improvements

Mākena State Park Ahupua'a of Mo'oloa, Mo'oiki, and Mohopilo Moku of Honua'ula, Maui TMK: (2) 2-1-006:030 por.

> Prepared by: Martha Yent, M.A. Archaeology Program Division of State Parks Department of Land & Natural Resources



REVISED DRAFT #2 September 2022

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### INTRODUCTION

The Department of Land and Natural Resources, Division of State Parks (State Parks) proposes to construct two new comfort stations with either outdoor showers or foot rinsing stations, associated wastewater systems, walkways, and water and sewer lines, and to make improvements to the two existing paved parking lots and entry roads within Mākena State Park, ahupua'a of Mo'oloa, Mo'oiki, and Mohopilo, moku of Honua'ula, Island of Maui. This project was subject to HRS §6E-8 historic preservation review (DLNR, CIP Job No. F73C680B) and was an undertaking subject to Section 106 of the National Historic Preservation Act (NHPA) per 36 CFR Part 800 due to the use of federal grant funds through the Land and Water Conservation Fund (LWCF) Program (Grant 15-00176). The project area and area of potential effect (APE) are synonymous and refer to the total of 3 acres that consists of two discontinuous locations encompassed by the project/undertaking.

The comfort stations will be built adjacent to the existing parking lots which creates the two discontinuous locations for the project area/APE, one at each end of Oneloa Beach (Figs. 1-3). An archaeological inventory survey (AIS) was conducted and several sites were recorded in the vicinity but not within the project area/APE. Archaeological test excavations conducted in conjunction with the AIS, as well as previous test excavations and monitoring in the park, have indicated a low probability for historic sites or subsurface cultural deposits. However, archaeological monitoring was recommended due to cultural concerns regarding the possibility of iwi kūpuna and proximity to Pu'u Õla'i, a culturally significant site that was identified as a traditional cultural property (TCP) in the Cultural Impact Assessment (Lee-Greig 2021:77).

This archaeological monitoring plan (AMP) for the proposed Mākena comfort stations and parking lots improvements has been prepared in compliance with HAR §13-279-4 (*Rules Governing Standards for Archaeological Monitoring Studies and Reports*) and addresses the following:

- The types of historic properties that could be discovered during monitoring and/or may need protection;
- Anticipated locations of historic properties within the project area if any are found to be present or were previously located;
- Fieldwork needed if significant historic properties or human remains are discovered through the proposed tree removal work;
- Confirmation that the monitoring archaeologist has the authority to halt work should an unanticipated discovery be made;
- Efforts to ensure coordination between the construction crew and the archaeologist prior to and during all project activities;
- Laboratory work expected if unanticipated historic properties are discovered and immediate data recovery is determined to be the appropriate treatment;
- 7. Commitment to prepare a monitoring report after the conclusion of all repair work;
- 8. Disposition and achiving of project records and potential collections.

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Fig. 1. The project area/APE consists of two discontinuous locations behind Oneloa Beach within Mākena State Park, Maui (USGS, 7.5 minute series, Mākena Quad. 2017). Both locations are south of Pu'u Ōla'i and the waterlines connect the comfort stations to the main County waterline along Mākena-Keone'ō'io Road.

2



Maluaka

Fig. 2. Detail of the two discontinuous locations of the project area/APE which correspond to the northern and southern ends of Oneloa Beach. The project area/APE in each location includes portions of the existing parking lots, the proposed comfort station sites, and the waterline routes.



Fig. 3. Location of the park boundaries, facilities, parking lots, and the 3 wetland areas within the park.

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### PROJECT LOCATION AND PARK SETTING

Mākena State Park was established in 1971 and consists of 165.7 acres between the shoreline and Mākena-Keone'ō'io Road in the ahupua'a of Mo'oiki,Mo'oloa and Mohopilo in the district of Honua'ula on the southwestern coast of the island of Maui (Figs. 1-3). While the park is recorded in the Mohopilo Ahupua'a in the Hawaii Statewide GIS Program used by SHPD, the traditional boundaries of Mohopilo based on historic maps from the late 1800s appear to be mauka of the park. Therefore, Mo'oiki and Mo'oloa are considered the traditional boundaries for the ahupua'a in the park and the project area/APE.

Pu'u Ōla'i, the prominent cinder cone along this shoreline, is centrally located in the park. It reaches an elevation of 360 feet above sea level and covers approximately 90 acres of the park property. There has been previous erosion of the pu'u on the makai side and mining of cinder along the southern slopes.

Within the park are sandy beaches on the northern, western, and southern sides of Pu'u Ōla'i (Fig. 3). The northern beach is called Oneuli or Naupaka (Black Sand) Beach and is accessed by a dirt road from Mākena-Keone'ō'io Road. Oneloa (Big) Beach runs for almost 0.5 mile on the southern side of Pu'u Ōla'i. Two paved entry roads and parking lots constructed in the early 1990s provide access to both ends of this beach. On the western (makai) side of Pu'u Ōla'i is Pu'u Ōla'i (Little) Beach that is reached by hiking over a protruding remnant of the pu'u at the northern end of Oneloa Beach. The visitation to the park was estimated at 525,000 in 2007 with park users participating in beach and ocean recreation. The visitation numbers have continued to increase since this time.

There are three wetland (pond) features within the park that are situated inland of the sand dunes backing Oneuli and Oneloa Beaches. Maluaka is a 3-acre wetland at the northern end of the park. This pond has been referred to as a fishpond and was used as a watering hole for cattle in the 1850s. The pond was restored in 2004 with the removal of the kiawe trees lining the pond edge. Oneloa is a 4-acre wetland located to the south of Pu'u Ōla'i. This wetland serves as a sediment basin during heavy rains which prevents runoff into the ocean. Paniaka is a 1-acre wetland located at the southern end of the park. This pond is recorded as a fishpond in documents from 1853.

Mākena State Park is characterized as a kiawe forest with an understory dominated by sourgrass. Date palms have become established in the southern portion of the park and continue to expand to the south side of Pu'u Ōla'i. Shrubs include 'ilima, lantana, and pluchea. Weedy growth includes lion's ear and wild basil.

The development of the park has been limited. Besides the paved parking lots, there is a security (caretaker's) residence located approximately 100 meters makai (west) of the Mākena-Keone'ō'io Road and between the entry roads to the two parking areas at Oneloa Beach (Fig. 3). This residence was constructed in 2000 and includes a house, garage, leachfield, driveway, and chainlink fence. In 2010, the County of Maui built a small baseyard on the makai side of the security residence for their lifeguards who provide services in the park. Portable toilets and a single picnic table are available at each of the parking lots.

The park consists of multiple parcels [TMK: (2) 2-1-006: 026, 030, 080, 081, and 102] with the project occurring within Parcel 30 (Fig. 4). The project area/APE encompasses approximately 3 acres at the 2 locations, including 1.7 acre at the northern location and 1.3 at the southern location. The locations correspond to the two parking lots and entry roads in the park (Fig. 5; Photos 1-4).





Fig. 4. The northern and southern locations of the project area/APE within TMK: 2-1-006:030. Both locations partially overlap with the existing parking lots and entry roads.



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### Northern Location

The northern location is just south of Pu'u Ōla'i in the ahupua'a of Mo'oiki. The comfort station and containment tank will be placed off the southeastern corner of the parking lot (Figs. 5-7). This location is 85 meters (275 feet) from the base of the pu'u and 60 meters (200 feet) mauka (east) of Oneloa Wetland. The comfort station is approximately 10 meters (30 feet) south of the edge of the parking lot pavement and about 750 feet mauka of the shoreline of Oneloa Beach. The water line will run from the comfort station to Mākena-Keone'ō'io Road. This location encompasses approximately 1.7 acres.

### Southern Location

The southern location is about 1,500 feet south of the northern project area in the ahupua'a of Mo'oloa. The comfort station is about 30' (10 meters) south of the parking lot pavement (Figs. 5-7). The site is between the parking lot and the former asphalt driveway from the 1940s. This site is also about 350 feet mauka of the dune and shoreline of Oneloa Beach. The water line will run from the comfort station to Mäkena-Keone'ō'io Road. This location encompasses about 1.3 acres.

### **DESCRIPTION OF PROJECT/UNDERTAKING**

The project/undertaking involves similar construction elements at the north and south locations. This includes the construction of a new comfort station with an outdoor shower or foot washing station, a wastewater system consisting of a containment tank and sewer lines, walkways, waterlines, and parking lot improvements.

### **Comfort Station and Related Features**

- Construction of a new comfort station. The structure will measure 32' by 41' and be built on a concrete slab. The footings for the CMU walls and underground plumbing will involve excavation up to a depth of 100cm (3') (Fig. 8).
- Containment tanks are located about 40 feet from the comfort station. The installation of the larger containment tank at the northern site will require an area measuring 41' (12m) by 8' (2.5m) and excavation to a depth of approximately 10' (3m) (Fig. 9). The smaller containment tank at the southern site will measure 23' (7m) by 8' (2.5m) with excavation to a depth of 10' (3m).
- Sewer lines connecting the comfort station and the containment tank. This will require trenching to a depth of 24" (60cm) for a distance of approximately 40 feet (12m).
- Outdoor shower or foot rinsing station. This feature will be located about 5' (1.5m) from the
  restroom slab and connected by a concrete walkway. The circular concrete slab will measure
  approximately 16' in diameter. Excavation for the footing will be at least 24" (60cm) (Fig. 10).
  To accommodate water runoff, a concrete lined ditch measuring 4' (1.2m) wide and about 15'
  (5m) long will lead to 24" (60cm) deep drainage sump measuring 35' by 35' (10.5m by 10.5m).



Photo 1. Northern entry road and parking lot (view makai/west).





Photo 3. Southern entry road and parking lot (view makai/west).

Photo 4. Comfort station off the southern side of the southern parking lot.

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Fig. 6. Site plan showing the 2 locations of the project area/APE with the various project elements. Archaeological sites in proximity to the project area/APE are indicated.







Fig. 8. Footing for the CMU walls and concrete slab of the comfort station.



Fig. 9. Cross-section of the 13,000 gallon containment tank proposed at the northern location with depth of excavation at about 10 feet (3m) below ground surface.

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Fig. 10. Cross-section of the shower with footing, curbing, and gutter. The shower equipment may be changed to a foot rinsing station to reduce water usage and avoid soaps and shampoos.



Fig. 11. Cross-section of the concrete walkways indicating excavation to a depth of 8-12" (20-30cm).

- Concrete walkways will be constructed around the comfort station structure and will connect the comfort station to the parking lot. These walkways will measure 4 feet wide to meet ADA requirements and require excavation to a maximum depth of 12" (30cm) (Fig. 11).
- A waterline will be installed at each comfort station to connect with the existing County waterline along Mākena-Keone'ō'io Road. Trenching for the waterline will involve a depth of 24" (60cm). The length of the waterline at the northern site is estimated at 850' (260m) while the length at the southern site is about 320' (100m). The width of the limits of grading for these waterlines is 20' (60m) but actual trenching is expected to be about 24" (60cm) wide.

### Parking Lot Improvements

The parking lot improvements will mostly involve the reconfiguration of stalls within the existing footprint of the previously disturbed areas. Work will involve the paving of the gravel parking areas and paving of the shoulders along the entry roads. There will be up to 8" (20cm) of excavation below the existing ground surface to place 6"-thick base course aggregate below 2" of asphalt pavement (Fig. 12). New guardrails will be installed along the outer edge of the parking stalls. This will involve excavation to a depth of 30" (76cm) to install the posts. In addition, a new 5-foot wide asphalt paved walkway will be constructed between the parking stalls and guardrails to provide an alternative to having park users walk on the busy park entry road.



Fig. 12. Cross-section of the parking addition and pavement.

### **PROJECT AREA/AREA OF POTENTIAL EFFECT**

The project area/APE consists of two discontinuous locations with the boundaries conforming to the limits of grading identified on the plans for the proposed park development. Access will utilize the existing park entry roads and staging areas are located with the parking lot improvement areas. The boundaries and size of the project area/APE vary slightly at the 2 locations.

### Northern Location

The northern location encompasses approximately 1.7 acres (Fig. 13). The comfort station, containment tank, and outdoor shower are located off the southeastern corner of the parking lot. The waterline from the comfort station to Mākena-Keone'ō'io Road is 850 feet (260m) in length with a 20' width defining the limits of grading. The improvements to the northern entry road will create perpendicular paved, lined stalls with concrete headers in the existing graded dirt shoulders. A total of 87 additional stalls along with 6 new ADA stalls will be delineated along the entry road. The triangular area at the eastern end of the existing parking lot will be paved with 10 new stalls created. A staging area has been designated on the southern side of the entry road in the existing footprint of the road shoulder that will be improved for parking.

### Southern Location

The southern location encompasses approximately 1.3 acres (Fig. 14). The comfort station, containment tank, and outdoor shower are located off the south side of the parking lot. The waterline from the comfort station to Mākena-Keone'ō'io Road is 320 feet (100m) in length with a 20' width defining the limits of grading. The improvements to the southern parking lot will create 35 additional stalls along the entry road. The southern lot lacks the dirt shoulders so additional grading will be needed. Existing guardrails will be removed and a strip 25 feet wide will be graded to allow for the 20-foot long parking stall and a 5-foot wide walkway with new guardrails. There are 20 stalls planned on the southern side of the entry road for a length of about 200 feet and 13 stalls are planned on the northern side for a length of about 120 feet. The other 2 stalls are where the entry and exit lanes merge. A staging area has been designated on the southern side of the entry road that will be improved for parking.



Fig. 13. Northern location of the project area/APE corresponds to the limits of grading and encompasses the new comfort station, shower, drainage sump, containment tank, sewer line, and water line. Design for additional parking stalls at the northern parking lot and along the entry road is also shown. This portion of the project area/APE is estimated to encompass 1.75 acres, including the staging area.

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Fig. 14. Southern location of the project area/APE corresponds to the limits of grading and encompass the new comfort station, shower, drainage sump, containment tank, sewer line, and water line. Design for additional parking stalls at the southern parking lot and along the entry road is also shown. This portion of the project area/APE is estimated to encompass 1.3 acres, including the staging area.

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### HISTORICAL OVERVIEW

Although the park is named Mākena, it does not fall within the boundaries of the area referred to as Mākena in older historic documents. Traditionally, Mākena was that area of Mākena Bay and Landing but sometime in the mid-20<sup>th</sup> Century, the area encompassed by the name was expanded to the south to include the park area (de Naie and Donham 2007:22). The park includes the makai portion of 2 ahupua'a (Mo'oiki and Mo'oloa) in the moku of Honua'ula.

A brief overview is provided here for context with a more comprehensive historical background available in the Cultural Impact Assessment prepared for the project (Lee-Greig 2021).

### **Traditional History**

Reference to the Mākena area in Hawaiian traditions and literature is limited. However, the traditional sources suggest the cultural significance of Pu'u Ōla'i:

Pu'u-o-inaina takes Lohiau for her husband while he is living at Maalaea. Pele is angry and cuts her in two in the middle. The tail becomes the hill of Pu'u-o-lai at Makena, the head becomes the rock islet of Molokini. (Beckwith 1970:189)

The large cave beneath Pu'u O-lai . . . has ever been a sacred dwelling place for these ancestral deities. (Ashdown 1970:22)

### **Precontact Period**

The sites in the Mākena area are late in age, most being post A.D. 1500 (Cordy and Athens 1988). The cultivation zone was between ¼ mile and 2 miles inland (80-1,200 foot elevations). Many of the sites are located in the lower portion of the zone, around ¼ mile inland, and are agricultural with associated temporary habitation sites (cave shelters, C-shape shelters, terraces, platforms). These upland settlements were focused on the cultivation of 'uala and some dryland kalo. It is suggested that the dry, leeward environment of Honua'ula was not agriculturally productive which was a limiting factor for large-scale, permanent habitation. Scattered permanent housesites are found along the coast and connected to the inland sites by mauka-makai trails. Based on the distribution of archaeological sites, Cordy and Athens suggest that Ka'eo, which encompasses Ka'eo, Maluaka, Mo'oiki, and Mohopilo, may have been the occupation center for the Mākena area. A limited number of heiau are recorded in the Honua'ula district, but the higher number of heiau at Ka'eo suggests its role as a cultural center for the Mākena area.

### Early Western Contact

Handy relates the following on the settlement and subsistence pattern at Honua'ula:

Between Makena and the lava-covered terrain of Keoneoio (another famous fishing locality) the coastal region includes the small ahupua'a of Onau, Moomuku, Mooloa, Mooiki, Maluaka, and Kaeo. According to an old kamaaina, these ahupua'a had in former times a continuous population of fisher folk who cultivated potatoes and exchanged their fish for taro, bananas, and sweet potatoes grown by the upland residents of the Ulupalakua section. A few Hawaiians still live here. One living near Puu Olai has a sizable sweet potato patch in the dusty soil near the shore; another raises fine potatoes in a low flatland of white sand near the abandoned schoolhouse of Makena (Handy 1940:159).

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Handy, Handy, and Pukui expand on this information, describing the area as one of the minor population centers of Maui:

On the south coast of East Maui, from Kula to 'Ulupalakua, a consistently dry and lava strewn country, Makena and Ke'oneo'io [sic] were notable for good fishing; this brought many people to live by the shore and inland. There were some patches of upland taro, not irrigated; but this was a notable area for sweet potato, which combined with the fishing, must have supported a sizable population although it cannot be counted as one of the chief centers (Handy, Handy, & Pukui 1972:272).

### **Historic Period**

In the historic period between 1831 and 1836, the Honua'ula District saw a severe population decline and many of the inhabitants who remained in the district continued as fishermen. Coulter (1931:22) estimates the population of Honua'ula District in 1853 to be 750, with the bulk of that number concentrated along the coast north of Pu'u Ōla'i.

In 1854, Grant 1498, 'Āpana 2, including Paniaka Fish Pond, was awarded to Manu. Grant 1498, 'Āpana 2 encompasses the area of TMK Parcels 26, 80, and 102 within Mākena State Park (Fig. 15). Numerous government land grants were awarded within the Mākena State Park area in the mid-1800s. L.L. Torbert who would start the large sugar cane plantation mauka of Mākena, purchased over half of the area of the park, including Pu'u Õla'i, in 1884 (Land Grant Indices n.d.). Torbert later used the land for ranching activities.

In the late 1850's a sugar cane plantation was started in the uplands above Mākena at 'Ulupalakua. Mākena Landing served as the port for this plantation. Circa 1879, a long drought closed the plantation, and the operation was converted to cattle raising and was renamed 'Ulupalakua Ranch.

Circa the 1930s, a Radio Range Station was constructed to the south of Pu'u Ōla'i. This station provided a navigation system for aircraft using instrument flying. An area of approximately 20 acres was cleared of vegetation and probably graded to create a level ground surface. Five antenna towers to transmit directional radio signals, as well as four buildings were constructed, including a house, a generator building, and a radio station building. A 1949 photograph shows that much of the park area behind Oneloa Beach and south of Pu'u Ōla'i was substantially altered to create this station (Fig. 16). The buildings and five antenna towers from the Radio Station were still present in a 1962 State Parks photo (Photo 5).

During World War II, the military took over Maui's south shore as a defense zone and training ground. Amphibious training occurred from Mā'alaea to Mākena. The military built barracks, bunkers, pillboxes, and artillery platforms for mounting guns along the Mākena shoreline. One concrete pillbox (SIHP 50-50-13-4665) existed along Oneloa Beach until it was demolished in July 2018.

In the 1940s, six families were living the park area. The De Lima and Nakasone families were raising and selling pigs in the 1950s to early 1960s. The Nakasones constructed several structures, including the slaughter house (SIHP 50-50-13-4660A), loading ramp (SIHP 50-50-13-4660B), and pig pen (SIHP 50-50-13-4661) mauka of Pu'u Ōla'i at the northern end of Oneloa Beach.



Fig. 15. Portion of 1894 map of Honua'ula showing Grant 1498, Āpana 2 granted to Manu.





Fig. 16. Structures in the southern portion of Mākena park area in the 1940s and 1950s based on information provided by Ashford de Lima.

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### PREVIOUS ARCHAEOLOGICAL RESEARCH

An archaeological inventory survey for Mākena State Park was initiated by State Parks archaeologists in the early 1990s (Yent 1993) with additional surveys being conducted in association with park development projects (Carpenter et al. 1999; Carpenter and Yent 1995 and 2004). Beginning in 2012, State Parks archaeologists conducted an archaeological inventory survey for the entire park area to assist with future park planning and provide a better understanding of site types and distribution. A total of 35 sites have been inventoried within the park, including 4 burial sites (Fig. 17). Sites include knolls modified with retaining walls, terraces, and platforms, some with shell midden and coral. The other major site type is dry-stacked rock walls that may be associated with the raising of cattle and pigs in the area. The intact features are concentrated in the northern portion of the park including a possible heiau or ceremonial site.

The only location within the park where cultural deposits have been identified is on the mauka side of Paniaka Pond (SIHP 50-50-14-2939) (Yent 2021). Test Units 6 and 7 were marked by a high density of 'a'ā cobbles within the silty loam matrix with boulders encountered at a depth of 40cm below the surface (Fig. 18; Photos 6-7). A cultural layer in Test Unit 6 consisted of coral fragments, marine shell (cowry, conus, pipipi and urchin), fish bone, bird bone, and dog tooth fragments scattered within the soil and cobble matrix (14-32cm B.D.). A one-piece bone fishhook was found at a depth of 60cm B.D. but there was little else to suggest a lower cultural deposit. A similar cultural deposit was encountered in Test Unit 7 (20-50cm B.D.). In both units, the cultural layer is underlain by a reddish clayey loam that appears to be the culturally sterile soil deposit atop an 'a'ā bedrock. However, excavation to a depth of 80cm B.D. did not reach the bedrock in either unit.

The pedestrian survey conducted by State Parks archaeologists in 2012 and subsequent site visits in 2015 as part of the planning to select the location of the comfort stations did not locate any surface features within the project area/APE. The sites in the general area were mapped and avoided in the project design. To test for the presence/absence of subsurface cultural deposits, 4 test units were excavated in the northern location and 4 test units were placed in the southern location between 2019 and 2020 (Figs. 19-20). The units were 1m by 1m in the area of the comfort stations and containment tanks and 50cm by 50cm along the waterline route. In both locations, an upper deposit of yellowish brown (10YR3/6) silty loam was present. In the northern location, this loam was underlain by a thick deposit of black cinder associated with Pu'u Ola'i (Photos 8-9). One unit in the area of the comfort station was taken to a depth of 100cm with a second one taken to 70cm where the containment tank is proposed. The units along the waterline were taken to a depth of 60cm with the black cinder being encountered at about 30cm below surface. The cinder was not as thick in the southern location and the 'a'ā bedrock was encountered at about 40cm below the surface at the proposed sites for the comfort station and containment tank (Photos 10-11). The unit along the waterline had a 20cm deposit of the upper silty loam underlain by a thicker deposit of the black cinder. No cultural remains with the exception of some recent debris (glass, metal, plastic) near the surface were found during this testing.

Located in proximity to the northern waterline are two sites related to the piggery, circa early 1960s. Maps of these sites were drawn and precautionary protection measures are proposed.

<u>SIHP 50-50-14-4660, Feature A.</u> This concrete structure is the former pig killing house built in the late 1940s by the Nakasone family. The remains of this structure consist of the concrete slab floor,

concrete walls, and a rock platform with concrete steps off the makai (west) side (Fig. 21; Photo 12). This site is 100 meters (300 feet) southeast of the comfort station location.

<u>SIHP 50-50-14-4661.</u> This site consists of a long, rectangular concrete slab from the former pig pen with fireplace feature (Fig. 22; Photo 13). This site is about 375' southeast of the comfort station.



Fig. 17. Archaeological sites inventoried within M\u00e4ken State Park. Red dots indicate burial sites. The two discontinuous locations of the project area/APE correspond in large part to the northern and southern parking lots.

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Fig. 18. Test units placed within Site 2939 with cultural deposits found in TU-6 and TU-7. No cultural remains were found in TU-4 due to previous bulldozing disturbance nor in TU-5. The letters refer to features of the site, including rock mounds and alignments.







Photo 7. TU-7 at base of excavation (80cm B.D.).

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Fig. 19. Location of 4 test units in the northern location. TU-10 was located in the area of the comfort station, TU-12in the area of the containment tank, and TU-14 and TU-15were placed along the waterline route.

Fig. 20. Location of 4 test units in the southern location. TU8 and TU-9 in the comfort station location, TU-11 at the containment tank site, and TU-13 along the water line.



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Fig. 22. Plan-view map of Site 4661.

Fig. 21. Plan-view map of Site 4660, Feat. A.





Photo 13. Concrete slab of the pig pen (Site 4661). Slab measures 19m long by 3m wide with ditch along S side and postholes to support corrugated metal roof. Fireplace at NE corner to cook slop for pigs.



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### MONITORING PLAN

This monitoring plan has been developed to address the potential for identification purposes. There is a low probability for cultural remains to be discovered during excavations for the slabs and footings, drainage sump, and containment tank as well as trenching for the sewer and water lines. Archaeological testing in the project area/APE has supported this low probability for cultural remains but monitoring will provide an opportunity to identify and document the subsurface stratigraphic profiles where excavation exceeds the depth seen during the archaeological testing. In addition, the archaeologist will work with contractor to ensure the protection and avoidance of archaeological sites in the vicinity of the project area/APE.

### Anticipated Archaeological Remains

Mākena is located on the western flank of Haleakalā volcano and the leeward side of East Maui. Pu'u Õla'i is a 360-foot high cinder cone that represents a geologically recent vent of the Hāna series of eruptions from Haleakalā. The pu'u is classified as cinder land, a mixture of cinder, pumice, and ash. Soils around the pu'u and in the park are classified as Mākena loam which have been deposited atop 'a'ā and pāhoehoe flows from the Hāna volcanic series. Near Pu'u Õla'i, the cinder is overlain by the loam. Archaeological testing and monitoring have confirmed an upper layer of yellowish brown silty loam underlain by the black cinder deposit. The thickness of the cinder decreases with distance from the pu'u. The weathering 'a'ā basalt bedrock was encountered about 40cm below the surface at the southern end of Oneloa Beach and about 0.5 mile from the pu'u. However, bedrock was not encountered in excavations to a depth of 100cm in the northern location or near the pu'u. It is anticipated that the soils and stratigraphic profiles recorded during the testing will be fairly consistent with what is exposed during construction.

Archaeological monitoring and testing have indicated a lack of subsurface cultural deposits with the exception of the deposit associated with Site 2939 at Paniaka Pond. The absence of the cultural deposit on the northern end of the pond toward the southern parking lot would indicate the cultural layer does not extend toward the project area/APE. As a result, there is no suggestion of cultural deposits located within the project area/APE and none are anticipated.

To date, burials have been found eroding from the cinder deposits of the pu'u or the sand deposits in the dune behind Oneloa Beach. There is currently no indication of burials mauka of the dune or outside base of the pu'u and thus, it appears less likely that iwi kūpuna will be found in the project area/APE.

The lack of cultural remains found within the project area/APE is largely due to the previous land use, especially the construction of the Radio Station in the late 1930s. The creation of this station impacted about 20 acres where the land area was cleared and leveled. The impacts of habitation mauka of Oneloa Beach from the 1930s to the 1970s, including the piggery and farming, do not appear to have caused substantial impacts beyond those caused by the Radio Station.

### Activities to be Monitored

Of special interest for identification purposes is full-time monitoring of the excavation to a depth of about 10' (3m) for the containment tanks. At the northern location, it is uncertain if the black cinder will be uniform throughout or if 'a'ā bedrock will be encountered. It is also uncertain at what depth the water table will be found. At the southern location, it is anticipated that the 'a'ā bedrock will be shallow and much of the excavation will involve removal of weathering 'a' $\bar{a}$  and possibly some denser basalt with depth.

Other excavations where full-time monitoring is recommended are the footing for the comfort station and showers, trenching for the sewer and water lines, and excavation of the drainage sumps. Most of these excavations will involve depths of 18" to 24" (45-60cm) which should be deeper than previous disturbance from the 20<sup>th</sup> Century land use, such as farming, the piggery, ranching, and the Radio Station.

In regards to the parking improvements, the construction work will generally be within the areas previously disturbed to construct the existing entry roads and parking lots. However, the excavation of up to 8" for the base course and asphalt pavement adjacent to the paved roadways, as well as the 30" deep coring for the placement of new guardrail posts, suggests a potential to impact subsurface soils not previously disturbed. Spot monitoring for the grading and corings is recommended at both locations.

No monitoring will be conducted for the above ground construction of the comfort station, framing and concrete pours, and the installation of fixtures such as the shower and manhole covers.

### **Monitoring Commitments**

Archaeological monitoring is being proposed to document the stratigraphic profiles during the excavations to depths up to 3 meters (10 feet) and address the community concerns about the potential for iwi kūpuna to be found within the project area/APE, especially the northern location by Pu'u Ōla'i. The role of the monitoring archaeologist during the construction will include:

- A coordination meeting will be conducted between the construction team and the monitoring archaeologist prior to construction activities so the construction team is aware of the archaeological monitoring requirements and details in the plan.
- Prior to the initiation of construction activities, the archaeological monitor will verify the
  installation of the interim protection measures around SIHP #s 50-50-14-4660 Feature A
  (killing house) and 50-50-14-4661 (pig pen) including 3-meter buffer zones marked with orange
  construction fencing.
- On-site monitoring will be conducted for all ground disturbing activities. One monitor is required for each piece of ground altering machinery during this project.
- The archaeological monitor has the authority to temporarily halt all activity in the area in the event of a potential historic property being identified, or to record archaeological information for cultural deposits or features.
- If non-burial historic properties are identified, documentation shall include, as appropriate, recording stratigraphy using USDA soil descriptions, GPS point collection with a receiver cable of sub-meter accuracy, recordation of feature contents through excavation or sampling of features, screening of features, representative scaled profile drawings, photo documentation using a scale and north arrow, and appropriate laboratory analysis of collected samples and artifacts. Additionally, photographs and profiles of excavations will be collected from across the project area even if no significant historic properties are encountered. Representative soil

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profiles shall be at least 2-meter sections and their locations shall be recorded on a USGS topographic map.

- If human remains are identified, work will cease in the vicinity and the find shall be secured, and provisions outlined within the Hawaii Revised statues (HRS) §6E-43 and HAR §13-300-40 and any SHPD directives shall be followed.
- Collected materials not associated with burials will be temporarily stored at the Division of State Parks office in Honolulu until an appropriate curation facility is selected, in consultation with the SHPD.
- · Any changes to these provisions shall occur only with written approval from the SHPD.

### **Establishing and Marking Buffers**

Buffers are recommended for the sites in the vicinity of the northern location as an extra measure to ensure avoidance and protection during the construction and movement of machinery. The buffers of 3 meters (10 feet) are recommended for Sites 4660A (killing house) and 4661 (pig pen) (Fig. 23) because both sites are close to the limits of grading for the northern water line that runs from the comfort station to Mākena-Keone'ō'io Road. These buffers will be marked with orange construction fencing.



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The sites to the south of the southern location are located further away and separated from the project area/APE and limits of grading by the asphalt roadway from the former Radio Station. The distance of 100 feet is believed to be adequate to avoid disturbance. However, the archaeologist will point out the road as a delineation and monitor that no machinery or grading occurs to the south of the asphalt roadway.

### **Field Procedures**

The following standard field procedures will, at a minimum, be used by the State Parks archaeologist to document the work monitored and any findings.

- A daily record will be maintained of sampling and monitoring activities occurring on that day or any pertinent observations or findings, including narrative descriptions as appropriate.
- 2. If no intact cultural deposits or subsurface features are uncovered, several representative profiles of exposed stratigraphic layers will be drawn, described, and photographed using standard recording methods. The location of the representative profiles will be plotted on an accurate, scaled map of the project area.
- Photographs will be taken prior to, during, and after of all subsurface activities, and the general areas in which these activities will take place.
- 4. If significant cultural deposits or subsurface features are discovered, the monitoring archaeologist will follow standard field procedures to record sufficient information to fulfill the requirements of a monitoring report prepared in accordance with §13-279-5(D) and (E). These standard professional procedures would include, but are not limited to, the following:
  - a. The location and horizontal extent of all identified cultural deposits or features will be plotted on an accurate, to scale plan map.
  - b. Profiles, drawn to scale, will be prepared of all significant cultural deposits, features, artifacts, or objects identified to document these finds within their stratigraphic context. The location of drawn profiles will be plotted on an accurate map of the project area.
  - c. Photographs will be taken to document all finds, with the exception of human remains, and stratigraphic profiles, including their setting within the project area.
  - d. Standard methods will be used to describe any significant cultural deposits and their contents, subsurface features, soils, artifacts, and stratigraphic layers. All soils will be described according to the U.S. Dept. Agriculture Handbook 18- Soil Survey Manual and Munsell Soil Color Charts.
  - e. Isolated artifacts found in clearly secondary, disturbed deposits, will be collected, by State Parks archaeologist, and stored in the State Parks Honolulu office. Their locations will be described and plotted on a map of the area. Analysis of these artifacts will be included in the monitoring report. Representative examples of marine shells, non-human bone, or plant material observed in disturbed deposits will be noted but not collected.

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- f. If systematic excavations are to be conducted as part of an approved mitigation plan under HAR §13-300-40, standard professional methods will be used. Unit excavations will be controlled vertically and horizontally and deposits removed from cultural layers or features will be screened through a 1/8" mesh to ensure recovery of data from the cultural deposits. Charcoal will be collected for radiocarbon dating if adequate samples are found.
- g. All materials, samples, soils, and artifacts (including pre-contact and historic artifacts, to include all glass, pottery, bottles, lithics, and metal) recovered during monitoring or through controlled excavations will be described and analyzed using standard professional archaeological methods consistent with that required to prepare an adequate monitoring report [HAR §13-279-5(6)]. Faunal remains and shell midden will be cleaned, sorted to identifiable taxa, and tabulated by weight. Artifacts recovered will be described, photographed, and analyzed and charcoal collected for dating will be submitted for species identification prior to being submitted for radiometric age determination. All materials, samples, soils, and artifacts will be collected and stored in the State Parks Honolulu office.

### **Monitoring Report**

As required under HAR chapter 13-279, a monitoring report will be prepared by the principle investigators after all monitoring activities at the project site have ended. All attempts will be made to complete the report within 90 days. The report will be submitted to SHPD for review and will be revised, if requested, prior to final approval. The report will include the following general components and all applicable requirements set out in HAR §13-279-5:

- A general description of the project/undertaking to include soil sampling, a summary of previous land use, and archaeological work occuring within the project area, and the rationale for monitoring the project [HAR §13-279-5(2) (3) and (5)(B)].
- A summary of monitoring methods and approaches used for all subsurface excavations/activities monitored, the dates on which monitoring occured, and the individuals monitoring the work [HAR §13-279-5(4)].
- 3. A description and discussion of all findings, including negative findings, made during monitoring. If significant cultural deposits of subsurface features are uncovered, the report will include maps, profiles, and photographs generated to document the finds. Also discussed will be the site formation processes or depositional history that potentially created the significant cultural deposits or, if possible, the function and age of identified subsurface features [HAR §13-279-5(5)(A) through (E)].
- 4. A description and discussion of all laboratory analyses performed on samples or artifacts recovered during monitoring, including descriptions of procedures or techniques used and the results of any specialized analyses [HAR §13-279-5(6)]. Data generated by the analysis of any shell midden, faunal and botanical remains, lithic materials, or artifacts will be presented in tables by provenience and layer.
- 5. An evaluation of the significance of the finds within the context of our current understanding of the nature and distribution of historic properties found within the project area, and surrounding area. Directly addressed will be factors potentially explaining why these finds were present according to their probability.

- 6. Propose measures for the long-term treatment/protective works of any historic properties identified through monitoring and any recommendations for additional work that would allow State Parks to better understand, protect, and interpret these resources within the park. Recommendations will also be made on the placement and nature of future facilities and infrastructure in relation to these newly discovered historic properties within the park.
- 7. A summary of any inadvertently discovered human remains or burial sites and of commitments made for their long-term treatment whether they are preserved in place or relocated. Detailed burial treatment issues would be discussed in a separate Burial Treatment Plan.

### **Final Disposition of Collections and Records**

All records, collections, and analyzed materials generated by this monitoring project will be archived in the Honolulu Office of the Division of State Parks until an official facility on Maui Island is identified or SHPD suggests an alternative.

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### **REFERENCES CITED**

### Ashdown, Inez

1970 Ke Alaloa o Maui: The Broad Highway of Maui. Ace Printing Company, Wailuku, HI.

### Beckwith, Martha

1970 <u>Hawaiian Mythology</u>. Honolulu: University of Hawaii Press.

### Carpenter, Alan and Martha Yent

- 1995 Archaeological Monitoring: Parking Lot Construction at Mākena State Park, Mo'oiki and Mo'oloa Ahupua'a, Honua'ula District, Island of Maui, TMK: 2-1-06:27,28. State of Hawaii, Department of Land and Natural Resources, Division of State Parks, Honolulu.
- 2004 Supplemental Archaeological Survey and Interim Preservation Plan for State Sites No. 50-50-14-5209 and 50-50-14-5211, Mākena State Park, Mo'oiki Ahupua'a, Honua'ula District, Maui (TMK: 2-1-06: 32 and 74). State of Hawaii, Department of Land and Natural Resources, Division of State Parks, Honolulu.

### Carpenter, Alan, Maurice Major, and Martha Yent

1999 Supplemental Archaeological Inventory Survey and Data Recovery in Conjunction with Proposed Security Residence at Mākena State Park, Mo'oiki and Mo'oloa Ahupua'a, Honua'ula District, Island of Maui (TMK: 2-1-06: 27, 28, 30, 31, 53). State of Hawaii, Department of Land and Natural Resources, Division of State Parks, Honolulu.

### Cordy, Ross and J. Stephen Athens

1988 Archaeological Survey and Excavation, Seibu Sites 1916 and 2101, Makena, Honuaula, Maui. Prepared by International Archaeological Research Institute, Inc., Honolulu.

### Coulter, John Wesley

- 1931 <u>Population and Utilization of Land and Sea in Hawaii, 1853</u>. Bernice P. Bishop Museum, Bulletin 88. Honolulu: Bishop Museum Press.
- De Naie, Lucienne and Theresa Donham
  - 2008 Project Ka'eo The Challenge to Preserve Cultural Landscapes in Modern Makena. Report written by Lucienne De Naie with maps and appendices by Theresa Donham. Project conducted under grant from OHA.

### Grant Index, Bureau of Conveyances

1854 Grant 1498 to Manu. Index of All Grants, pages 38-39.

### Handy, E.S. Craighill

 1940
 The Hawaiian Planter, Volume 1.
 Bishop Museum Bulletin 161.
 Honolulu: Bishop Museum Press.

30

Handy, E.S. Craighill, Elizabeth Handy and Mary Kawena Pukui

1972 *Native Planters in Old Hawaii: Their Life, Lore, and Environment.* Bishop Museum Bulletin 233. Honolulu: Bishop Museum Press.

### Lee-Greig, Tanya and Napali Souza

2021 Cultural Historical Genealogy – Traditional Cultural Practices Study for Makena State Parks and Analysis of Potential Cultural Impacts for Two Proposed Makena State Park Comfort Stations and Related Improvements, Mo'oiki and Mo'oloa Ahupua'a, Honua'ula Moku (Makawao Tax District), TMK: (2) 2-1-06:30. DRAFT prepared for DLNR, Division of State Parks.

### PBR Hawaii and Associates, Inc.

2013 <u>Mākena State Park Plan</u>. Prepared for ATC Mākena Holdings, LLC for use by DLNR, Division of State Parks.

### Yent, Martha

- 1993 Archaeological Monitoring and Site Inventory Survey: Makena State Park, Mo'oiki and Mo'oloa Ahupua'a, Honua'ula (Makawao) District, Maui. Prepared for State of Hawai'i, Department of Land and Natural Resources, Division of State Parks, Honolulu.
- 2021 Draft Archaeological Inventory Survey and Phased Restoration of Paniaka Pond, Makena State Park, Ahupua'a of Mo'oloa, Moku of Honua'ula, Maui, TMK: (2) 2-1-006: 026, 080, and 102. Prepared for DLNR, State Parks.
- 2022 Draft Archaeological Inventory Survey for Construction of New Comfort Stations and Parking Lot Improvements, Mākena State Park, Ahupua'a of Mo'oiki and Mo'oloa, Moku of Honua'ula, Maui, TMK: (2) 2-1-006:030 por. Prepared for State of Hawai'i, Department of Land and Natural Resources, Division of State Parks, Honolulu

## **APPENDIX**

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# CULTURAL IMPACT ASSESSMENT REPORT
## Final

TRADITIONAL CULTURAL PRACTICES STUDY FOR MĀKENA STATE PARK AND ANALYSIS OF POTENTIAL CULTURAL IMPACTS FOR TWO PROPOSED MĀKENA STATE PARK COMFORT STATIONS AND RELATED IMPROVEMENTS Mo'oiki and Mo'oloa Ahupua'a, Honua'ula Moku (Makawao Modern Tax District), Mokupuni o Maui TMK (2) 2-1-006: 030 Cover Photo - Kahoʻolawe and the Wahi Pana o Puuoinaina, from Molokini (Photo Center) to Puʻu Ōlaʻi, with Oneloa to the Right of the Frame (Photo Copyright: ʻĀina Archaeology)

PUUOINAINA -- THE CRESCENT-SHAPED ISLET OF MOLOKINI IS LOCATED IN 'ALALÄKEIKI CHANNEL BETWEEN KAHO'OLAWE AND MAUI, OFF THE COAST OF HONUA'ULA. MOLOKINI'S ORIGIN STORY TIES THE TINY ISLET TO PU'U ÖLA'I, THE PROMINENT SHORELINE HILL THAT'S A CENTRAL GEOLOGICAL FEATURE OF MÄKENA STATE PARK. ACCORDING TO *MO'OLELO*, MOLOKINI WAS A *MO'O* (LARGE MYTHOLOGICAL LIZARD) WHO, UNTIL HER DEATH, WAS KNOWN AS PUU-O-INAINA. HER FATHER WAS PUU-HELE AND MOTHER WAS PUU-O-KALI. THEY WERE ALSO *MO'O* WHO BECAME THE HILLS OF PU'UHELE STANDING JUST BEYOND KAMAALAEA (MODERN DAY MA'ALAEA AND NOW DESTROYED) AND PU'U O KALI IN THE MID-ELEVATIONS OF KEÖKEA AHUPUA'A OVERLOOKING THE KULA KAI SHORELINE. SHE LIVED MOST OF HER LIFE ON KAHO'OLAWE, WHICH WAS THEN CALLED KOHEMALAMAL

# TRADITIONAL CULTURAL PRACTICES STUDY FOR MĀKENA STATE PARK AND ANALYSIS OF POTENTIAL CULTURAL IMPACTS FOR TWO PROPOSED MĀKENA STATE PARK COMFORT STATIONS AND RELATED IMPROVEMENTS

Moʻoiki and Moʻoloa Ahupuaʻa, Honuaʻula Moku (Makawao Modern Tax District), Mokupuni o Maui TMK (2) 2-1-006: 030

6/15/2021 Final

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## 1.0 INTRODUCTION

At the request of the Department of Land and Natural Resources' Division of State Parks, 'Āina Archaeology completed a study of traditional cultural practices for the lands within and surrounding Mākena State Park (park). Situated within the coastal zone of Honua'ula Moku (traditional district), the lands of the park are comprised of approximately 165.7 acres that encompass Pu'u  $\overline{O}$ la'i cinder cone and the majority of Oneloa Beach to the south of the *pu'u* (hill or cinder cone) (Figure 1-1 and Figure 1-2).

#### 1.1 PROJECT DESCRIPTION

The area of potential effect (APE), hereafter referred to as the "project area", consists of two locations for the proposed comfort stations with parking improvements at Oneloa Beach (North Site [3 options] and South Site), as well as the area of Paniaka Pond located in the southern extent of the State Park parcel (Figure 1-3 and Figure 1-4).

#### 1.2 PROJECT AREA OF POTENTIAL EFFECTS (APE)

The purpose of this study was to identify past and present traditional and customary practices within and adjacent to the proposed project footprint within the park to identify potential impacts that may result from the construction and operation of proposed Comfort Stations and Related Improvements, as well as provide some information that might support the future restoration of Paniaka fishpond and surrounding wetland which would include vegetation removal and the possible installation of a predator fence. Finally, with the discovery of *iwi kūpuna* within the park boundaries over the years, the research and information gathered as a part of this study may assist in gaining a better understanding of the potential for the presence of other prosed project is considered the "project area" while the lands and resources within the park boundary, including the geological landform of Pu'u Ōla'i and the encompassing *ahupua'a* of Mo'oiki and Mo'oloa, are identified as the overall "study area".

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Figure 1-1. Portion of the USGS National Map (2019), Måkena Quadrangle, showing the location of the proposed comfort stations in relation to the overall lands encompassed by Måkena State Park (shaded in blue).

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## 2.0 CULTURAL HISTORICAL BACKGROUND

The first major delineation of land boundaries on the island of Maui occurred during the rule of Kaka'alaneo and was overseen by a kahuna named Kalaihaohi'a (Beckwith 1970a:383). This resulted in the creation of large land divisions called *moku* (districts), which were further broken down into subdistricts, the primary ones being *ahupua'a* and *'ili*, and managed by agents of the ruling chiefs (Beckwith 1970a:383). The *moku o loko*, or *moku* as it is most commonly called, literally means "to cut across, divide, separate" (Lucas 1995:77). When used as a term of traditional land tenure, a *moku* is similar to a modern political district. Maui is divided into twelve *moku*: Hāmākuapoko, Hāmākualoa, Ko'olau, Hāna, Kīpahulu, Kaupō, Kahikinui, Honua'ula, Kula, Wailuku, Kā'anapali, and Lāhaina.

Within these *moku* are smaller units of land termed the *ahupua'a*, the name of which is derived from the Hawaiian term *ahu* (altar), which was erected at the point where the boundary of land was intersected by the *Alaloa* (main road encircling the island), upon which a carved *pua'a* (hog) image, made of *kukui* wood and stained with red ochre was placed along with the tax of food items from that particular land unit as payment to the *ali'i* (chief) during the annual progression of the *akua makahiki*, (Alexander 1882:4).

Typically, the configuration of the *ahupua'a* division would extend from the sea (*ma kai*) to the mountain (*ma uka*)so that the *ali'i* (chiefs), as well as the *maka'āinana* (native tenant) could have access to resources of the *wao lā'au* or *wao nahele* (forested region), the *wao 'ama'u* and *wao kanaka* (cultivated land), and the *kula uka and kula kai* (the lower grasslands and shoreline) (Alexander 1882:4; Mueller-Dombois 2007). While the boundaries of an *ahupua'a* generally followed prominent landforms (i.e. ridge lines, the bottom of a ravine, or defined by a depression) there were times where a stone or rock that was notable from a tradition or sacred use would mark a corner or determine a line (Alexander 1890:105-106). Along similar lines, the growth of a certain kind of tree, herb or grass, or the habitat of a certain kind of bird would sometimes define a division (Alexander 1890:105-106).

Honua'ula is comprised of some twenty *ahupua'a*, which, from north to south, include: Paeahu, Palauea, Keauhou, Kalihi, Waipao, Pāpa'anui, Kā'eo, Maluaka (which does not appear to extend to the summit), Mo'oiki (fronting the islet of Molokini), Mohopilo (which does not reach the shoreline), Mo'oloa, Mo'omoku, Onau, Kanahena, Kualapa, Kalihi, Papaka Kai, Kaunuahane, Kaloi, and Kanaio. While the *ahupua'a* in the northernmost and southernmost extents of Honua'ula cover lands from *ma uka* to *ma kai*, it is unclear if the *ahupua'a* located *ma uka* of Pu'u Öla'i, between Maluaka and Onau, extend to the summit. Additionally, Mohopilo Ahupua'a appears to be land-locked without a corresponding *ma kai lele* or section near the shoreline.

Mākena State Park straddles the *ahupua'a* of Mo'oiki to the north and Mo'oloa to the south. The entirety of the Oneloa beach area (also known as Big Beach) is situated within the *ahupua'a* of Mo'oloa, while the northern half of Mākena State Park, which includes Pu'u Ōla'i, is located in the *ahupua'a* of Mo'oiki. These ahupua'a begin in the sea and include 'Āhihi Bay (literally,

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entwined), which is bounded by Pu'u Ōla'i to the north and Ka Lae Mamane to the south. The Park's prominent features include Pu'u Ōla'i, a 360-foot high cinder cone, and the beaches of Oneloa (literally, long sands) on the south side of Pu'u Ōla'i, and Pu'u Ōla'i beach, better known as Little Beach, as well as Oneuli (Onouli) beach, also known as Naupaka Beach, on the north side. From the shore, the land rises in elevation and becomes the *kula* (open plain lands) where much of the *ahupua'a*'s agricultural activities occurred in the past.

## 2.1 HE MAU MO'OLELO O NĂ AHUPUA'A O MO'OIKI A ME MO'OLOA I KA WĂ KAHIKO – TRADITIONS OF THE MO'OIKI AND MO'OLOA REGIONS AT HONUA'ULA AHUPUA'A PRIOR TO WESTERN ARRIVAL

One of the origin stories of the Hawaiian people speaks to the creation of their islands as being born to the gods Papa and Wakea. In an ancient *oli* (chant) which tells this origin story, Hawai'i Island is first to be born, followed by Maui, and then the rest:

Hanau o Maui he moku, he aina, Na kama o Kamalawalu e noho. Maui was born an island, a land, A dwelling place for the children of Kamalalawalu. (Fornander 1916b:2-3)

In the chant, Maui is called "a dwelling place for the children of Kamalalawalu," who was the grandson of Pi'ilani, a 16th century Mõ'ī (paramount ruler) of Maui and founder of one of its greatest dynasties (Barrere 1975:1). One of the traditional poetic names for Maui is Maui-a-Kama, named after Kamalalawalu, whose children are the people of Maui. It's because of them that we have the ability to know the historical names, mo'olelo, cultural sites and practices of the area in and around Mākena State Park.

#### 2.1.1 Wahi 'Inoa – Place Names of Mo'oiki and Mo'oloa Ahupua'a and Adjacent Areas

In Hawai'i, names have traditionally been given to virtually everything. In the preface of *Place Names of Hawaii*, Samuel Elbert states that:

Hawaiians named taro patches, rocks and trees that represented deities and ancestors, sites of houses and heiau, canoe landings, fishing stations in the sea, resting places in the forests, and the tiniest spots where miraculous or interesting events are believed to have taken place.

Place names are far from static ... names are constantly being given to new houses and buildings, land holdings, airstrips, streets, and towns and old names are replaced by new ones ... it is all the more essential, then to record the names and the lore associated with them (the ancient names) now. (Pukui et al. 1974:x)

Lyons also notes that as a consequence of the long tenancy of the people on land, "every piece of land had its name, as individual and characteristic as that of its cultivation" (Lyons 1903:23). Intrinsic in these statements is the knowledge that the oldest place names held meaning and could tell the story of an area, or recorded the resources of a particular place, prior to European contact. Consideration of the place name meanings for the study area may yield some insight into the stories, patterns of life, and land use within the *ahupua'a* of Mo'oiki and Mo'oloa. The

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names listed below are for areas, divisions, and features of the land and sea that comprise these two *ahupua'a*, as identified through research of the Māhele 'Āina documents, Hawaiian language newspapers, and other available historic literary resources. Unless indicated otherwise, the spelling and orthography presented below are taken from Pukui and others (1974).

ʻĀhihi	Entwined; the name for the bay that fronts Oneloa beach (Pukui et al. 1974)
'Alalākeiki	Child's wail; the name for the channel that separates Kahoʻolawe and Maui. (Pukui et al. 1974:9)
Haleola ( <i>ʻili</i> )	House [of] life (Pukui et al. 1974:38); 'ili of Mo'oloa (Bailey 1929:572)
Ka Lae Mamane	The $\ensuremath{\textit{m}\bar{a}\xspace{main}}\xspace{main}$ tree point; the name for the point that bounds the south end of 'Āhihi Bay
Mākena or Makena (wahi 'inoɑ and bay)	Abundance (Pukui et al. 1974:142). Without the macron over the first "a" it means "mourning, wailing, lamentation" and "calm, of sea, atmosphere" (Pukui and Elbert 1986:229); a place name and bay
Maluaka ( <i>ahupua'a</i> )	The cast shadow (Thomas G. Thrum 1922:658)
Māniania ('ili)	A shuddering sensation (Pukui et al. 1974:145); <i>'ili</i> of Mo'oloa (Bailey 1929:572)
Mohopilo ( <i>ahupua'a</i> and stream)	Rail bird bad smell [from droppings] (Pukui et al. 1974:153)
Moʻoiki (ahupuaʻa)	Small lizard or land parcel(Pukui et al. 1974:158) (Pukui and Elbert 1986:97, 253); <i>ahupua'a</i> of Honua'ula, Maui (Bailey 1929:572)
Moʻoloa (ahupuaʻa)	Long lizard or long ridge (Pukui et al. 1974:158); <i>ahupua'a</i> of Honua'ula, Maui (Bailey 1929:572)
Oneloa	Long sand; also known as Big Beach; a 3,300 foot-long beach that forms Mākena State Park's popular shoreline (J. R. K. Clark 1989:35-36)
Oneuli or Onouli	Dark sands; also known as Black Sand Beach and Naupaka Beach; a beach at the north end of Mākena State Park (J. R. K. Clark 1989:37-38)
	Families of the region know the beach and bay as Onouli. Literally, the name refers to dark <i>ono</i> ( <i>Acanthocybium solandri</i> ) (Pukui et al. 1974:171) a fish that can be found in the epipelagic zone, or surface layer, of the open ocean ( <u>https://oceana.org/marine-life/ocean-fishes/wahoo</u> ).
Pahe'e-o-Lono	Lono's slide; point on the Molokini islet (Pukui et al. 1974:174)
Pualoalo	Short for <i>pua aloalo</i> (Pukui and Elbert 1986:347), hibiscus flower (Pukui and Elbert 1986:345); ' <i>ili</i> of Mo'oloa (Bailey 1929:572)

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Pu'u Ōla'i Pu'uolae	Earthquake hill; the 360-foot high hill and beach, also known as Little Beach, along the shoreline at the boundary between Mo'oiki and Mo'oloa
	(Pukui et al. 1974:204) (J. R. K. Clark 1989:36)

Handy et al. (1991) summarize the relationship between Hawaiians and the natural environment best in the following passage:

The sky, sea, and earth, and all in and on them are alive with meaning indelibly impressed upon every fiber of the unconscious as well as the conscious psyche. Hawaiian poetry and folklore reveal this intimate rapport with the elements, (Handy et al. 1991:23-24)

(T)he relationship which existed from very early times between the Hawaiian people ... is abundantly exemplified in traditional mele (songs), in pule (prayer chants), and in genealogical records which associate the ancestors, primordial and more recent, with their individual homelands, celebrating always the outstanding qualities and features of those lands. (Handy et al. 1991:42)

This relationship of Hawaiians to the natural environment is especially prevalent in the *mo'olelo* (traditional knowledge) of the wider *moku* of Honua'ula, a large part of which revolves around the lyrical descriptions of the elemental characteristics of the 'āina (land) where the names of the *ahupua'a* are noted in name chants and the winds and rains of the region are recounted in legends and poems. One of the most valuable repositories of Hawaiian wind names is a book called *The Wind Gourd of La'amaomao*, which is a translation of a traditional legend, compiled by Moses Kuaea Nakuina and published in 1902. The titular wind gourd was believed to contain all the winds of Hawai'i, which could be summoned by chanting their names. Papa, a name for a Honua'ula wind, is included in a chant that names the winds of Maui and Moloka'i, and the excerpt below contains the names of some neighboring winds:

'Ai-loli is of Kaupō, Moa'e is of Kahikinui, **Papa is of Honua'ula** Nāulu is at Kanaloa, Hau descends from the uplands of Kula, It's the wind of that place, Searching the pili, Nau is the wind of Kula, (Nakuina 1990:55, emphasis added)

The various rains of Hawai'i were also given names. Some were named after people, others after their particular traits or the way they interacted with the area and local vegetation. Different rains from different parts of the islands often share the same name. The book *Hānau Ka Ua Hawaiian Rain Names* (Akana and Gonzalez 2015) contains many of the rain names that were recorded in newspapers from the 1800s and other primary source materials. There are at least two rains associated with the *moku* of Honua'ula: Lanipa'ina and Nāulu.

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"Ka ua Lanipa'ina o 'Ulupalakua" is "[t]he Sky-crackling [Lanipa'ina] rain of 'Ulupalakua" (Pukui 1983:170), which is an area in higher elevations above Mākena State Park. The Lanipa'ina rain features prominently in a lengthy letter written by someone named Makaikai and published in the newspaper Ka Lahui Hawaii, which describes the events one Fourth of July at James Makee's Rose Ranch in 'Ulupalakua (discussed below):

E 'olu'olu 'oe a me kou kāpena e ho'okomo iho i nā mea 'ano hou i hana 'ia ma 'Ulupalakua i ka lā 4 iho nei o Iulai, 'oiai ho'i ka ua Lani Pa'ina e kilihune ana i luna o "Prospect Hill."

Aia hoʻi i ka hiki 'ana aku i ka hora 12 awakea, i ka wā hoʻi a nā pua e luhe mālie mai ana i ka nani, a e kilihune kili hau ana ka ua Lanipa'ina i ka liko o ka pua, pēlā i 'ike 'ia aku ai ka pū'ali koa, "Ka Ua Lanipa'ina Military Company" e paikau hoʻokahakaha mai ana ma lalo o ke alaka'i maiau 'ana a ko lākou Kāpena R. W. Wilcox... You and your captain, please add the new events that took place at 'Ulupalakua this past Fourth of July while the Lanipa'ina rain was drizzling over "Prospect Hill."

When 12 noon came, indeed the period when flowers gently droop in their beauty, and the Lanipa'ina rain was coming down in a cold drizzle over the buds of the flowers, that was when the group of soldiers, "Ka Ua Lanipa'ina Military Company," could be seen parading back and forth under the expert leadership of their captain, R. W. Wilcox...

> (Akana and Gonzalez 2015:136-137) (Translation: Collette Leimomi Akana)

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A second rain of the area is called Nāulu and is usually associated with Makawao. One reference to it, in relation to Honua'ula, comes to us indirectly by way of a wind name from a 1910 report by Ralph S. Hosmer, who was the Territory of Hawai'i's first forester. In the report he says:

There is much verbal testimony that in former days, say 25 years ago and before, there were many light drifting showers at the south end of East Maui, at 'Ulupalakua, which originated over Kaho'olawe and drifted across the channel with the Nāulu breeze. (Akana and Gonzalez 2015:127)

Hawaiian proverbs, or ' $\bar{o}lelo no'eau$ , have also been passed down through oral traditions. Many ' $\bar{o}lelo no'eau$  have been collected and published in Hawaiian language newspapers and other primary and secondary sources. They often have both a literal and metaphorical meaning (called *kaona*), which is given where applicable. ' $\bar{O}lelo no'eau$  about geography can help us to understand natural phenomenon, land use, and the history of a place. While there aren't any ' $\bar{o}lelo no'eau$  that refer specifically to Mo'oiki or Mo'oloa, there are two for the *moku* of Honua'ula and one for *wahi* (place) of 'Ulupalakua.

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The two 'olelo no'eau about Honua'ula speak to the strength of its people:

Honua'ula, e pāluku 'ia ana na kihi po'ohiwi e na 'ale o ka Moa'e. Honua'ula whose shoulders are pummeled by the Moa'e wind. A poetical expression for a person being buffeted by the wind. Honua'ula, Maui, is a windy place.

#### Honua'ula kua la'ola'o.

Callous-backed Honua'ula. Said of the people of Honua'ula, Maui, who were hard workers. The loads they carried often caused callouses on their backs. (Pukui 1983:79)

The one '*olelo no'eau* for 'Ulupalakua is referred to above and refers to the name and quality of its rain:

Ka ua Lanipa'ina o 'Ulupalakua. the Sky-crackling rain of 'Ulupalakua. Refers to 'Ulupalakua, Maui. (Pukui 1983:170)

#### 2.1.2 The Mythical Era

Preserved in *mo'olelo* (traditional stories) are tales about a period in Hawai'i before *kānaka* (humans), when gods and deities inhabited the islands, often bringing about the creation of lands and resources. Below are excerpts of *mo'olelo* about this era set in Honua'ula.

#### 2.1.2.1 Mo'ikeha and His Traveling Companion Honua'ula

Place names are often inspired by the physical characteristics of the area being named. Honua'ula translates to mean "red land" (Pukui et al. 1974:51). It's possible that the origin of the name lies elsewhere, because reddish soils are not common in Honua'ula, where black lava fields and brown soils cover the landscape.

One theory is that the name Honua'ula comes from the *mo'olelo* of Mo'ikeha, a chief from Tahiti who resettled in Hawai'i and eventually became the king of Kaua'i. Among those who joined Mo'ikeha on his voyage from Tahiti was a man named Honua'ula. In the story, as recounted by Fornander, when the canoe reached Maui, Honua'ula elected to stay behind, perhaps settling in the district that now shares his name:

One early morning at dawn, just at the rise of the star Sinus, Moikeha boarded his double canoe, taking with him all his attendants and followers, and set out from Tahiti. From that morn until sunrise when they first beheld Hilo all went well, whereupon Kamahualele stood up and prayed by way of a mele their voyage hither. Upon their arrival at Hilo, Kumukahi and Haehae became charmed with Hilo, and so expressed to Moikeha their desire to remain there, whereupon Moikeha allowed them to take up their residence at Hilo.

Moikeha soon after set sail from Hilo, sailing along the north coast of Hawaii until they arrived at Kohala, when Mookini and Kaluawilinau expressed their desire to take up their residence at Kohala. Moikeha therefore landed them there. On leaving Kohala they sailed along the eastern coast of Maui until they reached Hana, when one of his men, Honuaula, expressed his desire of making this his place of residence, so he too was allowed to remain behind. (Fornander 1916a:114-116)

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#### 2.1.2.2 A Riddle for Ka-Miki

The following passage comes from a *mo'olelo* called *"Kaao Hooniua Puuwai no Ka-Miki"* (The Heart-Stirring Story of Ka-Miki). Published between 1914 and 1917 in the Hawaiian language newspaper *Ka Hoku o Hawaii*, the story features two brothers, descendants of the goddess Haumea, who possessed magical powers. In the following excerpt, Ka-Miki is asked by a chief named Kahuku to solve a riddle relating to Maui, and in his answer, Ka-Miki describes Maui's various lands, including Honua'ula and Mākena. Implied in this excerpt is that the name commonly used for Mākena may have been "makena" (without the *kahakō*), because of it being a place where the winds die down. One definition for "makena" is "calm, of sea, atmosphere."

O ka ua hoelo a ka Ukui i ka ulawena, o Honuaula ia, ilaila i make ai ka makani. A make i ke kula; o Makena ia he okana aina a me Kula, o kauwahi moe kokolo alualu hele a ke kula hoi mai, he aina ua kaulana mai na lii kahiki loa mai And where the cold 'Ūkiu wind bears down, glowing red [driving the dust], is Honua'ula where the winds begin to die. Where the wind dies upon the *kula* (plains), is the sub-region of Makena and Kula, where the mists are seen creeping low, traveling to and fro along the plain. This is a land famous with the chiefs from the distant past.

(Kepā Maly and Maly 2005:29) (Translation: Kepā Maly)

#### 2.1.3 Puuoinaina and the Parentage of Pu'u Ōla'i and Molokini

The crescent-shaped islet of Molokini is located in 'Alalākeiki Channel between Kaho'olawe and Maui, off the coast of Honua'ula. Molokini's origin story ties the tiny islet to Pu'u Ōla'i, the prominent shoreline hill that is a central landmark of Mākena State Park. According to *mo'olelo*, Molokini was a *mo'o* (large mythological lizard) who, until her death, was known as Puuoinaina. She lived most of her life on Kaho'olawe, which was then called Kohemalamalama. She took two brothers as her husbands before falling for Pele's lover Lohiau and becoming the target of the fire goddess' wrath, which led to the creation of Molokini and Pu'u Ōla'i. Her story as *mo'o* is intertwined with the story of the *mo'o* lineage of Pu'uhele and Pu'u-o-kali, with the great drought caused by Hua, an *ali'i* of Lāhaina, and the role that the great *kahuna* Luaho'omoe and his sons played in that time; as well as Pele and Lohiau is retold by J.K. Kahele Jr in the Hawaiian language newspaper Ke Alakai o Hawaii (July 24, 1930, Appendix A) and translated as follows:

Molokini is a very tiny islet, one of the islands here in Hawai'i. It's size is in close comparison to Ka'ula, Nihoa, and Lehua. Those are the smallest islands of the Hawaiian archipelago. It is not feasible for man to live on them.

The island in which this story is about is located between Kaho'olawe and Mākena, Maui; southeast of Lāhaina. But what is desired is the reason for how Molokini came to be.

I have two main justifications that will clarify the root reason as to how this beloved island came about floating in the ocean.

One-From being truly born of his parents

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Two-From Hā'upu, a hill standing on Moloka'i.

Pu'uhele (k) and Pu'uokali (w) are the parents of Molokini, and they were lizards that became hills standing in Ma'alaea beyond the center of the landing place of Maui.

When they lived as man and wife, Pu'uokali became pregnant with their first-born which turned out to be a girl, reptilian like them. They named her Pu'uoinaina.

When Pu'uoinaina was born, she was placed to live on Kaho'olawe, formerly known as Kohemalamalama, a very sacred place in those times due to these extraordinary people. No chief or commoner dared to go on the island like they do now.

There was a chief by the name of Hua who resided in Olowalu, south of Lāhaina. He had an elder brother, Namakaohua who resided on Hawai'i at the time.

One day, Hua craved to eat ua'u. He ordered his servants to go inland to get the ua'u birds in the forest because he didn't want to eat the ua'u birds near the ocean. He told his servants to take the ua'u bird that they catch to a priest to determine if it was truly caught in the mountains. If the priest determines that the bird was not caught in the mountains, the servants would be killed.

The priest, Luaho'omoe had children who took on two forms; human and bird. When the servants went to the forest, they did not find any ua'u birds. So they turned around and walked back down towards the ocean. They thought that they would catch a bird there, and be safe. When they caught a bird, they rubbed it's red feathers in dirt thinking that the chief will believe that it came from the forest.

When the bird was presented in front of the priest, he immediately knew that the bird was caught oceanside, not in the mountains. The priest went on and told the chief that the bird came from the ocean, and not the forest.

At that time, the chief said in anguish to the priest that he was going to die since the bird clearly looks like it came from the forest and not the ocean. The imu was prepared to burn the priest.

Before he was put into the imu, the priest told his children, "Stay until the imu is lit, and when the smoke rises above and sets on the Olowalu forest, that is the path that I created for you. When the smoke rises and stays in only one place, that is where you two shall live. Do not think to go and get a wife. The girl of Pu'uhele folks is the wife to live with and flourish because I will take the rain from the earth within 3 years of today. The rain will not return for the chiefs and commoners."

When the fire was ready, the priest was put into the imu and it was closed. The dark smoke lasted for six days, and then the fire died out.

In 2 days of the priest being in the imu, he came out without anyone seeing. The chief thought he was dead, however he was not.

As the smoke settled upland from Olowalu, the children went where the smoke was, and settled on a hill called Hana'ula. There, the smoke stood calmly in one place. So the children climbed and stayed there as their father directed them to.

At that time, Maui had no rain. People died of thirst, and there was a big drought because there was no rain coming from the skies. This is probably why our elders say, "The rain is stuck in the sky." (Pa'a ka ua i ka lani.)

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As the smoke remained above Hana'ula, rain clouds formed and rain fell in that place alone. The rain wasn't like a flow of water in the streams, like how we see it when it falls from the clouds, and into the mountains, we hear the water roaring towards the ocean. The men became farmers to feed their in-laws and wife, Pu'uoinaina.

Hua was still alive. He had an idea to flee to Hawai'i where his brother lived thinking that there might be water there. However, there was no water there as well. So Hua returned to Maui and lived in Wailuku.

There was no water in Wailuku. The entire land had a big problem without rain and food to live. And because of that, Hua regretted everything and became depressed. He eventually climbed to the edge of a cliff and died. That is why "The bones of Hua are lost to the sun." (Ahu wale nā iwi o Hua i ka lā).

As the men lived, their food became ripe, cooked, and ready to eat. The food was taken to their in-laws and Pu'uoinaina on the shore of Kohemālamalama (Kaho'olawe).

The two men were born with two body forms, a bird, and a human. Ka'akakai is the first-born, and Kuanahua is the younger of the two.

The land was really in trouble because of this drought, and there were no rain clouds seen in the sky. A prophet of Kaua'i saw the clouds resting right above Hana'ula, and clearly knew there was water there. He sailed there with 8 pigs to lay before the men as a sacrifice so that the land of Hawai'i could live.

When the prophet arrived on Maui and climbed to the forests of Olowalu towards Hana'ula, the two men flew to the hills of their in-laws and the prophet followed. The men flew again and landed on their wife's land of Kaho'olawe, and the prophet followed. From there, the men flew back to their home on Hana'ula where they were met by the prophet. They were offered the sacrifice, and the rain returned.

While these children lived in Hana'ula, telling their thoughts and stories to Pu'uoinaina, they did not know what she was up to. The mana returned to her parents because their daughter did what she wanted, by wrongly fraternizing with another person, meanwhile the men were caring for them. And that is how we get here.

Right after that, Pu'uoinaina was caught as a human with Lohi'au. She stopped loving her husbands.

Pele was engulfed with rage when she heard what Pu'uoinaina did, having relations with her husband.

She said horrible things in front of Pu'uoinaina and talked about how her husbands would be jealous.

And the author remembers these lines from a children's song:

Where are you my spouses

The only lightning of Pu'ukapele

I strip first

You are food remnants to throw away

If you throw me away

When Pu'uoinaina heard Pele's insults towards her, she became ashamed. She ran into the sea and left Kohemālamalama.

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Pele stayed at Kahikinui, while Lohi'au remained at Kealia, Kama'alaea. As she traveled towards Lohi'au, she was stopped by Pu'uoinaina's mother, Pu'uhele. From there, she headed towards the ocean and saw her sister-in-law lizard lying from Kaho'olawe all the way to Mäkena. Pele went up to her, and cut her right through the center of her body, separating her head from her tail.

Her tail end is Pu'uola'i in Mākena, and her head is Molokini.

When the husbands heard of the death of their wife, they looked and saw the head of their wife standing in the sea. Because of how much they loved their wife, they named this beloved island, Molokini. And that is the story of her birth by her parents. (translation by Cori-Ann Kaipolani Lorenzo)

#### 2.1.4 Nā Po'e Kahiko o Mo'oiki a me Mo'oloa Ahupua'a – Traditional Hawaiian Settlement of Mo'oloa and Mo'oiki Ahupua'a

Settlements of early Hawai'i often followed a common pattern whereby canoe landing sites evolved into coastal settlements, with footpaths and trails connecting these coastal settlements to fishponds, agricultural plots, the upland forests, *heiau* and other sacred sites (de Naie and Donham 2007:42). It's likely that the bays and beaches of Mo'oiki and Mo'oloa served as canoe landings since the earliest days of Honua'ula's settlement with a possible network of trails branching outward (de Naie and Donham 2007:42).

The *kona* environment of the southeastern region of Maui is generally dry with scarce water resources, with scholars theorizing that the settlement of Honua'ula occurred with population expansion from the more hospitable windward areas (Matsuoka et al. 1996:72). The shortage of water dictated where and when people resided and cultivated during the year. Matsuoka describes a seasonal pattern of moving between *mauka* and *makai* in accordance with the planting cycle, as documented by a *kama'āina* named Sam Po:

According to [Sam Po], even up through the latter half of the 19th century, the Hawaiians in the district continued to live *mauka* or *makai* and plant in accordance with the annual rains. About one month before the rainy season began, they would carry dirt down from the mountains to the coast in *lauhala* baskets and fill holes in the lava in preparation for planting. . . . While on the coast, the Hawaiians would subsist on fishing and various vegetable foods that they cultivated in soil placed in the pockets of lava and nurtured by the rain. When the vegetables matured (Hawaiian watermelon, Ipu oloolo, Ipu nuhou-lani, pumpkin, and poha or Ipu 'ala) they were consumed. After a period of about six months, just when the climate became dry, the families would make the return journey to their upland habitation sites. (Matsuoka et al. 1996:73)

In the June 8, 1836 issue of the newspaper *Ke Kumu Hawai'i*, someone named Naleipuleho provided one of the earliest first-hand accounts of life in Honua'ula on record. It also speaks to how the availability of water and other resources dictated patterns of residency and travel. Translated by Kepā Maly, the following excerpt gives a glimpse of life in Honua'ula as it may have been since the earliest days of settlement:

He aina wi, o Honuaula. O ka uwala ko laila ai, a me ka kalo, he Honuaula is a land of famines. The sweet potato is the food there, and the

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ai pau wale no ia. Eia ka ai mau loa, heko, heki lau o ke aa, o ke ki lau a me ka muo, o na ai mau loa ia.

Eia ke ano o ka noho ana o na kanaka; elua wahi noho. Ma kahakai, mauka ma waena o ka aina. O ke kii ana o ka ai a na kanaka ma kahakai he loihi loa. He kokoke ka wai o lakou. Pomaikai lakou i ke kokoke o ka wai a me ka ia. Poino ko lakou mau ai i ka loihi o ka ai.

O na kanaka i noho ma waena o ka aina.— pomaikai lakou i ka ai i ke kokoke o ka ai. Poino lakou i ka wai i ka loihi o ke ana o ka wai. Aia no i kahakai kawai e kii ai. Ina e kii i uka i ka wai, he loihi ke pii aku i luna, he naenae ka pii ana,—aia no i ka lae laau ka wai, i hoi mai he lole ke kuli i ka loihi o ka hoi ana mai, i ke kii ana o ka wai elua ipu nui e ukuhi ai i ka wai, a piha, hoi mai. Hooheehee i na huewai, liilii, a piha, a koe ke koena he wai auau, he wai hoopulu hana wauke, i mea kapa. Na I. Naleipuleho

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taro, but they are foods which do not last. Here are the foods which are always available, sugar cane, ti leaf roots, and the budding leaves of the ti are the steady foods. Here is how the people live; there are two places of residency. Along the shore, and in the mid uplands of the land. The people who live on the shore, must travel a great distance to get vegetable foods. But the fresh water is close to them. They are blessed to be near the drinking water and fish. Though they are greatly burdened in having to travel far for their other foods.

The people who reside in the middle of the land, are fortunate that their foods are close to them. But they are unfortunate because the fresh water is a great distance from them in the caves. There is water which they can get from the shore. If they travel to the uplands to get water, it is a great ascent, and fatiguing — the water is there in the forest groves; returning causes pain in the knees, for the great distance of the trip, and for only two large water containers in which to pour the water and return. The water gourds hang down, and there is a little that remains for bathing, and moistening the wauke, made into kapa. (Kepā Maly and Maly 2005:14) (Translation: Kepā Maly)

# 2.1.4.1 Ka 'Oihana Mahi 'Ai i Loko o nā Ahupua'a o Mo'oloa a me Mo'oiki – Traditional Agriculture within Mo'oloa and Mo'oiki

While farming in Honua'ula primarily occurred along the lower uplands, where rain fell almost daily, despite the scarcity of water, Handy states that "the eastern and coastal portion of Honua'ula was thickly populated by Hawaiian planters until recent years" (Handy and Handy 1972:508). During a time prior to the introduction of cattle when the uplands were still heavily forested and rain fell more frequently (Handy and Handy 1972:508), as well as shortly thereafter, archaeological studies across Honua'ula have shown that agricultural fields and related features

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once occupied relatively large areas (S. D. Clark et al. 1997; Cordy and Athens 1988; Haun 1978; Lee-Greig et al. 2019; Perzinski et al. 2014). 'Uala (sweet potatoes) grew reliably well, and dryland *kalo* was also grown further upland and in the forests when they were more prevalant (Handy and Handy 1972:272, 508). With regard to 'uala at Honua'ula, Handy and others note that this particular crop was the primary staple of the district and explain the most common method of 'uala agriculture as follows:

Where soil is powdery and dry ... the earth is heaped up carelessly into low mounds spaced with no particular precisions or care. The slips are planted two or three in a mound, being placed vertically in holes made with the digging stick. The base of the cutting is stuck six to eight inches into the ground and the earth is pressed down around it. After the entire field is planted, the mounds are covered with mulch to hold the moisture. The potato leaves are not covered. In an old patch where aftergrowth [sic] of old vines and roots is growing, the shoots from old stock are covered with earth, as they bear along with the new slips. (Handy et al. 1991:130-131)

Where potatoes are planted in crumbling lava combined with humus . . . the soil is softened and heaped carelessly in little pockets and patches utilizing favorable spots on slopes. The crumbling porous lava gives ample aeration without much mounding. (Handy et al. 1991:131)

When lava flows buried some agricultural lands, holes were dug into the rock, filled with soil, and used to grow sweet potatoes (Matsuoka et al. 1996:74). Evidence of these unique cultivation practices can still be found among the lava fields of Honua'ula, Luala'ilua, and at Pu'u-o-kali (Matsuoka et al. 1996:74). As a part of the division of lands that occurred during between 1845 and 1851 and passage of the *Kuleana Act* of 1850, the native tenants who lived and worked on Crown, Government, or *Konohiki* lands were able to claim these lands if they could show that they had occupied, improved, or cultivated the lands they were claiming (Garovoy 2005). Though the testimony provided by both the claimant and witnesses for the claimant provides a specific snapshot of life, land use, and traditional resources at the time of the Mähele, in can be inferred that such practices and reliance on resources were a continuation of generational practices within the *ahupua'a*. One such instance, in relation to the above practice of potato cultivation in the 'a'ā or lava flow, can be found in the claims awarded *mauka* of Onouli where descriptions for *apana* as being "wahi aa, a me uala maole [sic]" or 'a'ā lands and native or indigenous sweet potato (Helu 2588 Ap. 1 to Kinakua, Helu 2427 Ap. 2-4 to Kanakahou, and Helu 2581 Apana 2 to Hualii) (Figure 2-1) were included on the survey notes of the award.

While 'uala was arguably the staple crop of the traditional agricultural system of the upland area of Mo'oiki and Mo'oloa (Figure 2-2), in much of the Mo'oloa kuleana lands of entire 'ili 'āina were also awarded, though no specific land uses were indicated in the claims or survey notes (see also Figure 2-2).

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Figure 2-1. Land Commission Award for Kuleana Helu 2427 related to the cultivation of 'uala maoli to Kanakahou (Office of Hawaiian Affairs 2014).

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Figure 2-2. A portion of the ESRI World Imagery data set (ESRI et al. 2018) and Honua'ula Title Map (Wall 1894) showing the location of the proposed project (cross-hatched in red) in relation to Land Commission Awards with land use information.

#### 2.1.4.2 Ka 'Oihana Lawai'a nā Ahupua'a o Mo'oloa a me Mo'oiki – Aquaculture and the Fishing Traditions of Mo'oloa and Mo'oiki

Honua'ula is mentioned in the historical record in ways which suggest that its coastline has long been a point of arrival and departure for canoes traveling to and from Maui. Channel waters between the islands can be notoriously rough, and parties must occasionally wait for better weather, as indicated in the following exerpt from the story of Lā'ieikawai, a chiefess from Hawaiian mythology, recorded and published in the newspaper *Kuokoa* in 1862 by S. N. Hale'ole. In this part of the story, Lā'ieikawai and her lover 'Aiwohi are making their way from Maui to Hawai'i Island, and they end up spending a month in Honua'ula as they wait for the ocean conditions to improve:

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[P]ae i Mala, ma Lahaina, e haalele lakou ia wahi, hiki lakou i Keoneoio, ma Honuaula, a malaila i noho loihi ai ekolu anahulu. No ka mea, ua nui ka ino ma ka moana, a pau na la ino, alaila, ua ike ia mai ka maikai o ka moana. Ia manawa ko lakou haalele ana ia Honuaula, a holo aku la a hiki ma Kaelehuluhulu, ma Kona, Hawaii.

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Having landed at Māla, at Lāhaina, they then departed from that place and arrived at Keone'ō'io, in Honua'ula. There, they resided for a period of three *anahulu* [a total of thirty days]. They did this because the sea was extremely rough. When the stormy days ended, they saw the ocean was good. (Kepā Maly and Maly 2005:23) (Translation: Kepā Maly)

The story of Lauka'ie'ie adds some visual detail to the picture of Honua'ula as an ancient canoe landing site. Published as a series of articles in the newspaper *Nupepa Ka Oiaio* between January 5, 1894 and September 13, 1895, it tells the tale of Lauka'ie'ie, her brother Makanikeo, and their traveling companions as they visit various parts of Hawai'i. The following exerpts are set in Honua'ula:

la Makanikeoe, malaila e nanea nei, aia na manowaa mawaho ae o Keoneioio ma Honuaula, ke pii pono ala i ke alo makani. A eia no ka maka hope mawaho ae o Puuolai a ua hoomalu aku ka holo ana o na waa no ka moana kaulana o Alenuihaha me ka pii wahi ale ole o ua moana huhu ala o ale ahiu. Aia ke kiei iho la ke kuahiwi kamehai o Haleakala. a ke oni mai la o Maunakea me Maunaloa a me Hualalai, mamua pono me ko lakou kulana kilakila o ka nani.

[Passing between Maui and Kaho'olawe]: Makanikeoe had the fleet of canoes rest at Keone'ō'io, in Honua'ula, which rises up in the face of the wind. It is marked by Pu'u Ōla'i, where on the side the canoes find shelter, before entering the famous sea of 'Alenuihāhā, where there is no place that the angry and wild waves of the sea do not rise. From here [Honua'ula], one may gaze upon the wondrous mountain of Haleakalā, as Mauna Kea, Mauna Loa and Hualālai appear to move before you, in their outstanding beauty. (Kepā Maly and Maly 2005:24) (Translation: Kepā Maly)

#### 2.1.4.2.1 Fisheries and Fishponds

The people of Honua'ula were strongly connected to the ocean. Its waters were noted by 19th century historians and writers for its well-stocked fisheries. According to Handy, the Honua'ula coastline supported continuous populations of people who relied on the ocean for food and trade:

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Between Makena and the lava-covered terrain of Keoneoio (another famous fishing locality) the coastal region includes the small *ahupua'a* of Onau, Moomuku, Mooloa, Mooiki, Maluaka, Kaeo. According to an old *Kamaaina*, these *ahupua'a* had in former times a continuous population of fisher folk who cultivated potatoes and exchanged their fish for taro, bananas, and sweet potatoes grown by the upland residents of the Ulupalakua section. A few Hawaiians still live here. One living near Puu Olai has a sizable sweet potato patch in the dusty soil near the shore; another raises fine potatoes in a low flatland of white sand near the abandoned schoolhouse of Makena. (Sterling 1998:229)

The following traditional names and locations of Honua'ula's fishing grounds were gathered from the Hawaiian Ethnological Notes archived at the Bishop Museum and published in Elspeth Sterling's book *Sites of Maui*, and they reveal an intimate knowledge of the sea. Some of the descriptions have been abbreviated:

Pahua is the first and is located at Kanaio. Laeloa is (one of the) landmarks; when it appears directly over Holu Point, that is the upper mark. Puwai is the lower mark and it is called Ka-hope-o-ka-waa. It is a cave on the beach at Kanaio. The stone within the cave resembles a man standing there and when it appears slightly toward the windward side, the canoe is over the spot. It is 40 or more fathoms deep. Hiu is another fishing ground . . .

Keahua is another . . .

Kalawa is another fishing ground . . .

Pohaku-ula is another fishing ground . . .

Kiele is another, it is situated at Lualailua . . .

Papuaa is another fishing ground . . .

Koa-hau is another. When the hill of Keoneoio appears above Puu-olai that is its upper landmark. When the hill of Kaka on Kahoolawe appears above (in line with) Pahee-o-lono Point on Molokini, that is the lower mark.

Na-ia-a-Kamahalu is another one. When Hoaka, which is in the upland of Kahoolawe on the western side appear to be in line with the cape of Ke-ala-i-kahiki that is the upper landmark. When the hill of Keoneoio appears to be in line of the seaward side of Puu-olai, that is the lower landmark.

Na-i'a-a-Kamali'i is another. When the cave on Makena appears to be close to the point of Paopao at Puu-olai, that is the upper landmark. The cave at Pali ku in Keonioio is the other landmark. When it appears between the two stone at Mokuha and Kanahena, that is the low landmark. (Sterling 1998:215-216)

With regard to *loko i'a*, or fishponds, Honua'ula Moku contains two types of *loko i'a*, as categorized by Kikuchi (1973), which consists of *loko kuapā* (Type I) and *loko pu'uone* or *haku'one* (Type II and IIa). *Loko kuapā* are the "classic" fishpond types that consisted of a *kuapā* (seawall) constructed along a shallow shoal and reef projected shoreline. Although there are variations of the *loko kuapā* depending on the geology of the shoreline, the common feature for this type of pond is the construction of a *kuapā*. The enclosing *kuapā* would be augmented with sluice grates and shelters constructed on the walls next to the sluice grates (Kikuchi 1973:213 and 227). *Loko* 

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*pu'uone*, or *haku'one*, were isolated *loko i'a* along the shoreline that were usually formed by the development of a *pu'uone* or *haku'one* (single, elongated sand ridge) that ran parallel to the coastline (Kikuchi 1973:9 and 228). These types of *loko* generally contained one or more ditches leading the ocean and sluice grates (Kikuchi 1973:228). Variations of this type of pond is also dependent on the shoreline geology where one sub-type, Type IIa, is found in young lava flows where the flow surrounded the pond and thus isolated it from the sea, and another, Type IIa<sub>1</sub>, is formed by limestone or beach rock sinks.

Two of the more well-known ponds within Honua'ula Moku, one at 'Apuakehau and the other at Keone'o'io, both of which are *loko kuapā* (Figure 2-3 and Figure 2-4). Beyond the location of the pond at 'Apuakehau, as noted in the boundary description for Grant 234 to Torbert and Wilcox (in Sterling 1998:231), the field sketches of E.D. Baldwin (in Kepā Maly and Maly 2005:217), as well as, placement on both the Honua'ula title map (Wall 1894) and coastal survey map for Makena Bay (Jackson 1885), not much is known about the construction of this pond, which was said to have been destroyed as a result of surf impacts by 1931 (Winslow M. Walker 1931:299). The more widely recognized fishpond within Honua'ula was built at Keone'o'io, to which Malo attributes the following tradition:

There was a king named Kahoukapu, whose wife was barren, so they had no children. But being very desirous of offspring, she went to consult with Paao, the priest, about it. "Here I am," said Paao. "What shall I do to beget a child?" asked Laakapu. "You must go and fetch a fish as an offering to the deity for yourself," said Paao. Then she went away, and having obtained a fish, returned to Paao, saying, "Here is a fish for the deity." "What sort of a fish is it?" asked Paao "A weke," said Laakapu. "Throw it away," said Paao, "the deity will not eat such a fish as that. It is like a rat. It's full of bones; so is a rat. It has a beard; so has a rat. It is lean; so is a rat. Go and fetch another fish." Laakapu then brought a maomao; but Paao declared it also was a rat. Laakapu, now discouraged and out of patience, said to Paao, "Tell me what sort of a fish you want." "A paoo, that is no rat," said he. Then Laakapu brought a paoo to the priest .... Then Paao offered the fish as a sacrifice to the idol deity with the prayer, "Grant a child unto Laakapu." And in due season Laakapu gave birth to a child. But it was of doubtful sex, and she named it Kauholanuimahu. On the death of Kahoukapu, the kingdom passed into the hands of Kauholanuimahu. After reigning for a few years, Kauholanuimahu sailed over to Maui and made his residence at Honua-ula. He it was that constructed that fishpond at Keoneoio. The wife of Kauholanuimahu remained on Hawaii and took to herself another husband; his kingdom remained on Hawaii and took to herself another husband; his kingdom also revolted from him but Kauholanimahu returned to Hawaii and recovered it by war. (Malo 1951:255-256)

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Fornander asserts that the residence of Kauholanuimahu at Honua'ula was contemporaneous with the chief Kaka'alaneo of Maui and that he spent an extensive amount of time at Honua'ula where he exercised royal oversight. His wife, Neula, was thought to have been a Maui chiefess, an implication which leads Fornander to speculate that Honua'ula may have been her patrimonial estate and the reason for the frequent residence of Kauholanuimahu. (Fornander 1880:71)





Figure 2-4. Excerpt F.S. Dodge and E.D. Baldwin's field book (1883:25) for the survey of Honua'ula Maui showing Keone'o'io Village in relation to the pond.

Figure 2-3. Excerpt F.S. Dodge and E.D. Baldwin's relation to the pond. field book (1883:30) for the survey of Honua'ula Maui showing the fishpond at 'Apuakehau in relation to Makena Bay and Landing and Keawala'i Church.

The other known fishponds within Honua'ula are located at the edge of the lava flow from Keone'o'io to Kanahena (Figure 2-5 and Figure 2-6) and just back of the coastline along the sandy beaches of Oneloa and Oneuli (Onouli), all of which are of the *loko pu'uone* or *loko haku'one* type. Along the rocky shoreline are Pohakuapaeia (Pohaku Paea), Pohakukahi, Kahiloa, Kauhipaiakini, Halua, Kahikamao, and Owi (spelling uncertain) which are Type IIa under Kikuchi's pond type classification, while Paniaka, along a section of Oneloa within Mo'oloa (Figure 2-7 and Figure 2-8), and an un-named pond noted in the boundary survey of Land Grant 1510 to Torbert at Oneuli (Onouli) (Figure 2-9) is of the classic Type II under Kikuchi's pond type classification (Kikuchi 1973:Appendix A).

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Figure 2-5. Excerpt F.S. Dodge and E.D. Baldwin's field book (1883:42) for the survey of Honua'ula Maui showing Keone'o'io pond (top of frame) in relation to nearby Type IIa ponds.

Figure 2-6. Excerpt F.S. Dodge and E.D. Baldwin's field book (1883:46) for the survey of Honua'ula Maui showing the twin ponds of Kauhipaiakini and Halua; as well as Pohakupaea.

Then were Hertesones to the anount of 3.1000 veres taken one of the land the prostant hope thes 24. To Merister of P. Instruction the marts the fame amount allows on the prose that it he done to that he pay the full price for The four acres showed An Manuels, drog is a small thirt Dond career, Passados I have written inquise of the May be continue I have written auguster of the man he considered by the constants Jam Fit. Sint

Figure 2-7. A portion of page 4 in a letter dated March 25, 1853 from Maui Land Agent John Gower to John Young noting the name of the fishpond as 'Paniaka' within Land Grant 1498 sold to Manu.

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AA PROJECT NO. 1708 1498. HELU PALAPALA SILA MUL. Ma teia Palapala Sila Nui ke hoike aku nei o Kamehameha III , ke Alii nui a ke Akua i kona lokomaikai i hoonoho si maluo" o ko Hawaii Pao Ains, i na kanaka a pau, i keia la, ncna iho, a no kona mau hope Alii, ua haawi lilo lou aku ola ma ke ano alodio la Manue un haaven mo gou aku osa ma te ano onno a co-ahui kanaka i manao pono ia iu, i kela apana aina -pau e waiho la mu Alennaula ma ka Mokupuni o Manui ; a perei hoi ka waiho ana o na Mokuna : Apanal. Ina Moomuke Chromate ma Re Riki Nom. , the Painter aina Ruai, the kiki atau hoi . Reia apana, a chole and to so of 190 kaul ma ke Polena ; to at 5 16 10 ; Raul make Rafua - ste, 413 de gig tant ai taki tumu wiliwili An "to 10.10 Hand ma Aula dupuni : A 465 Hi 19 to Raul ma to have A 4/2 VE. 6.95 Kaul ma to Painter a hiki i kahi i hormakai 23. No Para Apana 2 ma Rooloa Alema , their ma the Alanni e fili ana i tho Vortest apana 4. a cholo ana 1/ 100 vil 10.00 Raul and to Vorhart aina - the un' the 18.11 Kand Ina Rahakai . A. 62 Hi Joy Raul ma to dupun A. 19 50 Bob Raul ha kapa alance a i Rahi i hormakai \_ 11 Pha thre was horthati etta via the loto is , i lito puele me these aina e fini and tofte tenleana o na Ranaka

Figure 2-8. Land Grant 1498 to Manu highlighting the survey notes showing the presence of a one-acre fishpond (loko i'a) within the overall grant.

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AA PROJECT NO. 1708 15101 NO. KAMEHAMEHA III., By the grare of God, King of the Hawanian Islands, by this His Royal Patent, makes known unto all men, that he has for himself and his successors in office, this day granted and given absolutely, in Fee Simple unto Reiters & Sorbert Lunton faithful and loyally disposed subject for the consideration of thety A64. N Royal Exchequer, all that piece of Land situated at Semiaula in the Island of Mary , and described as follows at a file of stoney at R & P. Chalman's Braranut Sot, heating tree hattai d. 115 8 . by chains along for land manke of corrants Rapilas lat Andren's Brown 0.04 1.30 . Sinclain's Butui 140 W. lile this de alun 037 · · last 1 0.00 . Port to Badne of a crashet good 1 200 6 1.40 Rear fish found Le: 1.00 1 21° W. 0.04 . fishfrond to armen Millen hile 1 by to: 1.24 . Neathole, highwater mark to to adver of the famory

Figure 2-9. Land Grant 1510 to Linton L. Torbert highlighting the survey notes showing the boundary following an un-named fishpond, note that Miller's Hill is a reference to  $Pu'u \bar{O}la'i$ .

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In his dissertation on Hawaiian aquaculture systems, Kikuchi refers to the statements of Kamakau and Summers regarding "ownership" and management of the ponds and pond resources. With regard to *loko pu'uone* or *haku'one*, these types of ponds were owned by the commoner as a tenant of the land who was in turn "owned" by the chief and *konohiki* (land manager), with Summers making a further distinction based on size whereby a small *pu'uone* requiring little construction effort was attributed to commoners, while larger *pu'uone* were attributed to chiefs (Kikuchi 1973:109-110). Kikuchi's research, however, found that 18 of the *pu'uone* included in his study were controlled by the *ali'i* or *konohiki*, and according to 19<sup>th</sup> century observations recorded by J.G. Wood (1878:1086), "the size of the pond is an invariable test of the rank and wealth of the owner." When taking in to account Kikuchi's research, coupled with the fact that the ponds were retained for lease or sale by the Hawaiian Government at the time of the Mähele at least as far as the ponds at Honua'ula were concerned, it would seem that the "ownership" of the fishponds lay with either the *ali'i* or *konohiki* rather than *maka'āinana*. With regard to the reliance on fishpond resources and the labor that went into maintaining and harvesting fish from the ponds, Wood makes the following observation:

These fishponds are very common in Hawaii, and are mostly made by the women. They are formed by taking advantage of the coral beach, which has numerous small bays or inlets with comparatively narrow mouths. Across the mouths of these bays the natives pile pieces of coral rock so as to prevent any fish from escaping. They are deepened as occasion may require, and it is not an uncommon thing to see a number of women up to their waists in mud and water busily employed in cleaning out a fishpond, and evidently enjoying the work rather than thinking it a hardship. While they are thus at work on land, their husbands and brothers are equally hard at work on sea, catching the fish which are to be transferred to the pond.

The natives rely much for their supplies of food on these ponds, as fish forms a considerable portion of their diet, pork and fowls being too expensive to be considered anything but luxuries, and only to be eaten constantly by the rich....

They are watched as carefully as game preserved in our own country, and suffer as much from poachers, who however, seldom escape detection. (Wood 1878:1086)

#### 2.1.4.2.2 Fishing Methods and Practices

Drying fish was a regular practice in Honua'ula, where it could be traded and stored for times when food ran short, which occurred with some regularity. Drying fish went hand-in-hand with the production of salt, which was gathered from from basins along the shoreline of Oneuli (Sterling 1998:5, 213).

A traditional fishing method of Honua'ula has been preserved by Daniel Kahā'ulelio, who recalled how his parents would fish for *kala* and *kole* (two species of surgeonfish) using a special blend of *palu* (bait). His parents were from Keone'ō'io and would have been alive during the early-to-mid-1800s:

They used coconut milk with the ink sac that had been well-broiled over a charcoal fire. It was rubbed fine with an 'alā stone, then the coconut milk was added. That was the *palu* they used at Keone'ô'io, Honua'ula, their birthplace. Their *lauhala* bags were filled to the brim with *kala* and *kole*. (Kahā'ulelio 2006:116)

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At Mākena, *hukilau* was the method fishermen and their families used to gather *akule* (big eyed scad). In a 2003 oral history interview with Samuel Ponopake Chang, conducted by Kepā Maly and Nanea Armstrong, Chang, who was born in Mākena in 1911, describes how his tūtū would watch for the school of *akule* from the shore and direct the fishermen in their canoes as they surrounded the fish with a net that would be pulled in from the beach (Kepa Maly and Maly 2003:962).

At least four sites in the vicinity of Mākena State Park have been identified by researchers and informants as fishing ko'a or ku'ula. Ko'a had multiple functions. They were landmarks used by fishermen out at sea to help identify the location of fishing grounds. Some were used as places to kilo, to observe ocean and weather conditions and to sight schools of fish. They could also be places of spirituality and ritual. The presence of an upright stone at a ko'a is referred to as a ku'ula with the first fish caught by a fisherman, or anyone, was marked and dedicated to Ku'ula, or Ku'ula-kai (Ku of abundance in the sea), the principal deity of fishing (Beckwith 1970a:19; Keliipio 1900). In Beckwith offers the following account of the Ku'ula and fishing ritual related to him:

Ku-ula-kai (Ku of abundance in the sea) was one of (the fishing) gods, some say the one who had control over all the gods of the sea. Reddish things were sacred to him. The fisherman's heiau set up at a fishing beach is called after him a kuula. The god lived as a man on earth on East Maui in the land called Alea-mai at a place called Leho-ula (Red cowry) on the side of the hill Ka-iwi-o-Pele (The bones of Pele). There he built the first fishpond; and when he died he gave to his son Aiai the four magic objects with which he controlled the fish and taught him how to address the gods in prayer and how to set up fish altars. The objects were a decoy stick called Phaiaku-kahuoi (kahuai), a cowr called Leho-ula, a hook called Manai-a-ka-lani, and stone called Kuula which, if dropped into a pool, had the power to draw the fish thither. His son Aiai, following his instructions, traveled abou tht eislands establishing fishing station (ko'a) at fishing grounds (ko'a aina) where fish were accustomed to feed and setting up altars (kuula) upon which to lay, as offerings to the fishing gods, two fish from the first catch: one fo other male, the other for the female aumakua...(Beckwith 1970a:20)

Onouli (Oneuli) *ko'a* was first recorded in 1929 by an archaeologist from Bishop Museum named Winslow M. Walker, who described the site in his unpublished manuscript as follows:

The *ko'a* at Onouli [sic] is located below the [former Makena] school and about 100 feet back from the shore. It is a rough platform 13 by 14 ft and 5 ft high at the front. A low wall surrounds it on three sides. Blocks of *Aa*, *iliili*, and a few pebbles and coral fragments were found in its construction. (Winslow M. Walker 1931:103)

Another *ko'a* was located near the southern end of Maluaka Beach. There is some question as to when it was destroyed, because as recent as the 1960s, there were reports by *kama'āina* (nativeborn residents) of its use (de Naie and Donham 2007:87). Winslow Walker stated that a "small *heiau*, probably a *ko'a*, formerly stood on a rocky point now occupied by the Baldwin cottage at Mākena at the spot known as Kilauea in Ka'eo" (Winslow M. Walker 1931). Although Walker concluded that the site had already been destroyed, it's believed that the *ko'a* was actually in existence until 1979 or 1980, when it was demolished along with various other cultural sites to make way for the Mākena Resort's golf course.

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Pu'u Ōla'i features prominently in the fishing traditions of the area. Certain *manō* (sharks) are considered to be ancestral gods in Hawaiian tradition, and Pu'u Ōla'i is reported to be the site of a large underwater cave, which Ashdown states as having been "a sacred dwelling-place for these ancestral deities [sharks]" (Ashdown 1971:22). Many families of this region claim the shark as their '*aumakua* (ancestral god), and this cave is where they would interact with their '*aumakua* and carry out their duties (Mr. Robert Kalani in Tau'a and Kapahulehua 2007:45-57). In addition to the cave, it has been reported that at the base of Pu'u Ōla'i, there was a *ko'a* in the form of a "square heap of black stone" where "fishermen made offerings before putting out to sea" (Sterling 1998:229).

#### 2.1.4.3 Traditional Ceremony and Religion

In the vicinity of Mākena State Park, the archaeological and historical record documents the existence of at least six *heiau*, or temples of the Hawaiian religion. They are: Kalani, Ke'eke'ehia, Kalailani, Kalaniana, Kamahina, Pu'u Ōla'i, and Mo'oiki.

#### 2.1.4.3.1 Kalani Heiau

Kalani Heiau is located on a 5.5-acre parcel of privately owned land in Kā'eo near the Maluaka Beach Parking Lot. It has been dated between 1420 and 1460. Ashdown has concluded that the *heiau* was built by Kauholanuimahu, a Honua'ula chief from the mid-1400s, although she doesn't refer to it by the name "Kalani" (Ashdown 1971:50). She calls it "the *heiau* in One'uli" and "One lau'ena, the land of plenty" (Ashdown 1971:50). The *heiau*, according to Ashdown, was part of a larger complex situated in what was once a sacred coconut grove called Nahawale (ibid). In ancient times, Nahawale was considered a *pu'uhonua*, or place of refuge, and the *heiau* is where the sick came for healing (ibid).

The *heiau* was first referenced in a study conducted in 1916 by an archaeologist from the Bishop Museum named J.F.G. Stokes, who noted only the name he was given but did not actually visit the site (Kepā Maly and Maly 2005:233). Later, Walker provided this early description of the heiau, which he visited during an archaeological survey of Maui in 1929 and 1930:

At Kaeo, not far from the shore. A large *heiau* said to be of sacrificial also but reduced largely to a shapeless pile of rock. It measures 126 feet across the front and has a width of 98 feet. No walls are in evidence, it being apparently an open platform 8 feet above the surrounding country built of rough *Aa* blocks with some coral and pebbles on top. Interior structure has been demolished by cattle. (Winslow M Walker 1931:268)

These intial accounts of Kalani Heiau make note of its basic features. It has a notched L-shape. It is one of the largest *heiau* in the *moku* of Honua'ula, and although Ashdown posits that it was a place of healing (Ashdown 1971:50), it has also been classified as a sacrificial *heiau*. The archaeologists' accounts note further that on particular nights of the moon, their informants reported hearing the sound of drumming in the vicinity of the *heiau* (Kepā Maly and Maly 2005:231).

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#### 2.1.4.3.2 The Heiau at Pu'u Ke'eke'ehia

Pu'u Ke'eke'ehia (literally, Hill of the Zigzag Path) is the name of a hill *mauka* of Mākena State Park, in the neighboring *ahupua'a* of Maluaka. The hill has also been known as Mausoleum Hill, because the former landowner Captain James Makee built a burial place there (Ashdown 1971:44). Historic maps and newspaper articles published in the 1800s indicate that at one time, this hill was the site of a *heiau*, although it has not been relocated.

One of the few references of the *heiau* comes from someone named J. Kealohapauole, who submitted a letter to the editor of the newspaper *Kuokoa* in 1872. His letter describes some of the features of the 'Ulupalakua, including Ke'eke'ehia:

Na Hiohiona o Ulupalakua. Eia no keia kulanaakauhale, mawaena o na kakai pii e hoopuni ana, a huli aku ia kona alo a nana ia Kahoolawe, a ma kona aoao akau ka puu o Keekeehia, aia maluna pono iho he heiau mai ka po mai, a e lohe ana no oe i ka leo o ka pahu i na po i o Kane a me Lono[.] The Appearance of 'Ulupalakua. The village is between the rising cliffs which surround it, and it faces Kaho'olawe. On the north side is the hill Ke'eke'ehia. There is atop that hill, a heiau from ancient times, and from which, on the nights of Kāne and Lono, may be heard the voices of the drums. (Kepā Maly and Maly 2005:39) (Translation: Kepā Maly)

Ashdown provides an additional, if somewhat confusing, account of the Ke'eke'ehia *heiau*. She gives it the name "Hale Pue'o," and while it's possible that she meant "pueo," the Hawaiian word for owl, she states that "according to the old Hawaiians," the name meant "[s]tand firmly on your own two feet when you know it is right" (Ashdown 1971:44). That definition aligns with its ancient function, according to Ashdown, as a place where judgments and decrees were made and evil rejected (ibid).

#### 2.1.4.3.3 Kalailani, Kalaniana, and Kamahina

Walker made note of the *heiau* at Ke'eke'ehia and also briefly mentioned the names of three others that once existed, all presumably in the same region: "*Heiaus* Kalailani, Keekeehia, Kalaniana, and Kamahina said to have been in this region are all gone" (Winslow M. Walker 1931:270). The only evidence he found of any of the *heiau* was a three-foot-high platform, measuring over 4,500 square feet, which had at one time been used as a house site (Sterling 1998:232).

#### 2.1.4.3.4 The Heiau at Pu'u Ōlai'i

There is at least one reference to a *heiau* having once existed at Pu'u Ōla'i. In the notes of the archaelogist J.F.G. Stokes, he wrote that at Pu'u Ōla'i, there is "[s]aid to be a heiau on top by son of Mawai" (Sterling 1998) There has been no confirmation that any stone structures there at present are in fact the remnants of a former *heiau*.



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#### 2.1.4.3.5 The Heiau at Moʻoiki

A name has yet to be attributed to the *heiau* at Mo'oiki, which is located on a ridge behind Pu'u Ōla'i. Little is known about the *heiau*. Lucienne de Naie, in *Project Ka'eo*, provides this description:

There are eleven separate features to the complex and several other enclosures nearby that are probably also related to it. The *heiau* is U-shaped with open terraces on the *makai* side. The *heiau* is positioned on the ridge in a spot which allows a dramatic view of Kaho'olawe, unblocked by the prominent shape of Pu'u Ōla'i. This relationship between the *heiau* site and Kaho'olawe Island in the distance is very compelling. Few have visited the site, but one cultural practitioner who has, believes the *heiau* complex is aligned with similar features on the shore of Kaho'olawe. (de Naie and Donham 2007:84)

#### 2.1.4.4 Nā Moʻolelo o nā Aliʻi ma Honua'ula – The Stories of Chiefs at Honua'ula

The *mo'olelo* of Maui's *ali'i* document the famous battles, journeys, alliances, romances, and accomplishments that occurred throughout history and often reveal a little bit about the places where these events occurred. The excerpts below come from some of these *mo'olelo*, where certain events are said to have occurred in Honua'ula.

#### 2.1.4.4.1 Kauholanuimahu, the Ali'i from Hawai'i Island

Kauholanuimahu was a Hawai'i Island chief who ruled in the mid-1400s and spent considerable time in, and exercised influence over, Honua'ula. Kauholanuimahu was the son of La'akapu, who came from Honua'ula, and a Hawai'i Island chief named Kahoukapu (Matsuoka et al. 1996:76). When his father died, his mother returned to Honua'ula and her lands became his. Fornander states that he "resided a great portion of his time at Honuaula, Maui where he exercised royal authority, and, among other useful works, built the fishpond at Keoneoio" (Fornander 1880:8). He is also credited with buidling a *heiau* in Kā'eo, *mauka* of Keawala'i Church (Matsuoka et al. 1996:76).

#### 2.1.4.4.2 Kiha-a-Pi'ilani and Ke Alaloa

Kiha-a-Pi'ilani was the son of Pi'ilani and ruled as King of Maui during the late-1500s. For a short while prior to his reign, Kiha-a-Pi'ilani resided in Honua'ula. He lived in secret among the *maka'āinana* to avoid execution by his brother (Kamakau 1992:22).

Kiha-a-Pi'ilani's older brother Lono-a-Pi'ilani became King upon the death of their father Pi'ilani, despite Pi'ilani's stated wish that his sons share Maui's rule. For a short time, the two had a harmonious relationship. Kiha-a-Pi'ilani was a kind *ali'i*. He was attentive to well-being of the *maka'āinana*, offering them food in times of shortage. His older brother viewed his generosity as an attempt to curry favor and undermine his rule, and so a rift developed. One day, the two got into a fight, and Lono-a-Pi'ilani became so certain of his brother's disloyalty, that he resolved to have him killed.

Kiha-a-Pi'ilani fled first to Moloka'i and then to Lana'i before returning in secret to Maui. He and his wife managed to reach the uplands of Honua'ula without being discovered by Lono-a-Pi'ilani's

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men, and there they were welcomed by the *maka'āinana* there. According to Kamakau, they first lived at a place called Ke'eke'e (Kamakau 1992:23), which De Naie suggests likely refers Pu'u Ke'eke'ehia (de Naie and Donham 2007:105). Eventually, they relocated to the vicinity of Kula and Makawao before Kiha-a-Pi'ilani's sought to wrest Maui from his brother's control, which he accomplished with the help of his brother-in-law 'Umi-a-Liloa, the Hawai'i Island chief.

During his reign, he managed to finish the construction of Ke Alaloa (The Long Road), a paved footpath that encircled both Maui's east and west ends, a length of approximately 138 miles (de Naie and Donham 2007:75). The project was started under his father, the chief Pi'ilani in circa 1516. It improved travel, trade, and communication, and the collection of *ho'okupu* (taxes). In Honua'ula, Ke Alaloa travelled along the coastline, crossing the beaches from Wailea heading south to Po'olenalena and Maluaka and then over the lava fields to Keone'o'io. Large sections were paved with stone, about which Martha Fleming provides some insight:

The Alii had a line of men stand from the sea and hand stones along the line till they reached the required place. Here the stones were artfully put into position. The trail was paved with flat, hard beach stones Those on the steeper grades were very flat, while those in less sloping country were more rounded. In open country, each side of the trail was flanked with large field boulders solidly sunk into the ground and standing above the center from one to five feet. . . . On the steep gulches, only one side of the trail had this guard. The stones, or flags, on the floor of the trail were placed horizontally to abutments in quite regular lines. It took four or five stones to make a line across. The second row of horizontal stones was placed parallel to the other in a checker-board fashion to prevent wash. The width of the trail between the balustrades was from four to five feet, giving a regular appearance as it stretched over the country. There were few turns in the trail, even where the grade was steepest. (Fleming 1933:5)

#### 2.1.4.4.3 The Invasion of Kalani'ōpu'u

Just prior to the reign of Kamehameha, Maui was controlled by Kahekili and Hawai'i Island by Kalani'õpu'u. Kamakau writes that in 1776, war broke out in Honua'ula when Kalani'õpu'u and his army invaded the district and terrorized its people, prompting Kahekili to come their defense and defend his rule over the island:

In the year 1776 Ka-lani-'opu'u and the chiefs returned to war on Maui, and in the battle with Ka-hekili's forces at Wailuku were completely overthrown. The army landed at Keone'o'io, their double canoes extending to Makena at Honua'ula. There they ravaged the countryside, and many of the people of Honua'ula fled to the bush. When Ka-hekili heard of the fighting at Honua'ula hego this forces together-chiefs, fighting men, and left-handed warriors whose sling-shots missed not a hair of the head or a blade of grass. Ka-lani-'opu'u landed his forces before noon, a great multitude filling the land from Kiheipuko'a at Kealia to Kapa'ahu, all eager with the thought that the Alapa were to drink the waters of Wailuku. (Kamakau 1992:85)

#### 2.1.4.4.4 Kalola and the Olowalu Massacre of 1790

The chiefess Kalola was the daughter of Kekaulike,  $M\bar{o}'\bar{1}$  of Maui during the 1700s. Her brother was Kahekili, the famous warrior king mentioned above who came to control seven of the eight

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Hawaiian islands and paved the way for Kamehameha's eventual unification. There are accounts documented by Fornander and Kamakau of Kalola residing or spending time in Honua'ula (Kamakau 1992:145) (Fornander 1880:214, 228).

Kalola and her husband Ka'opuiki were involved in one of Maui's most infamous attacks, the Olowalu Massacre of 1790. The massacre itself resulted in the brutal murder of more than a hundred Hawaiians at a village located in what is now known as Olowalu. This event was precipitated by a series of incidents involving the British-American captain Simon Metcalf and the crew of a fur trading ship called Eleanora (also called the Eleanor), which anchored at Honua'ula in 1790. Barrere suggests that this was Mākena Bay (Barrere 1975:21). An anonymous officer's account of the event was published in 1792 in a London journal called *Gentleman's Magazine*.

Kalola and Ka'opuiki were present when the Eleanora first docked at Honua'ula. They went out to greet the foreigners and offer goods to trade, at which point Ka'opoiki took notice of a smaller boat, called a cutter, tied to the Eleanora's stern. The boat was constructed with highly coveted metal parts. That night, Ka'opuiki and some others snuck out to the ship and cut the smaller boat loose. Sleeping inside was one of Metcalf's crewmen, who was killed during the mission. Realizing that the boat was missing, Metcalf sent out a search party but found nothing.

The next day, several more canoes came out to the Eleanora with pigs and fruit to offer. They were told to go away but didn't obey, and so, Metcalf fired on them, killing and wounding several Hawaiians. The next day, according to an officer's account, "four or five thousand people" gathered at the shoreline, "all armed with slings, spears, and arrows" ("Americans at Otaheite" 1792:318). A battle ensued, with the boat firing its cannons at the beach and likely killing and wounding many. A crew went to shore and set fire to the village and *heiau*, and any survivors eventually fled *mauka* to avoid being shot at.

After that, the Eleanora left Honua'ula and headed north. The officer wrote, "We had been under way about an hour and a half, with a light breeze, when the natives in canoe alongside, informed us that the chief of the people that had stolen the boat, lived behind a point, to the northward, we then hauled our wind, went round the point and came to anchor" ("Americans at Otaheite" 1792:319).

The next day, Ka'opuiki came aboard the ship and offered to return the boat, which had been stripped for its metal parts, and the boat's keeper, who was dead, in exchange for a reward. Ka'opuiki later returned with just the boat's keel, angering Metcalf.

Sensing danger, Kalola had declared a kapu forbidding anyone from making conact with the ship. It lasted three days, and when it was over, hundreds of villagers paddled out to the Eleanora in the hopes of trading with the crew. Presenting a friendly demeanor, Metcalf managed to corral the canoes along one side of his ship, and once they were packed tightly together, he ordered his crew to fire the guns. It was a scene of carnage, with at least a hundred dead and a hundred wounded. Kamakau describes the aftermath:

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Even those who swam away were shot down. John Young was an eyewitness on board the ship and has testified to the great number who were killed at this time. At noon that day the *Eleanor* sailed, and the people went out and brought the dead ashore, some diving down into the sea with ropes and others using hooks; and the dead were heaped on the sands at Olowalu. Because the brains of many were oozing out where they had been shot in the head, this battle with the ship *Eleanor* and her captain was called "The spilled brains" (Kalolo-pahu). It was a sickening sight, as Mahulu and others have reported it; the slaughtered dead were heaped upon the sand; wives, children, parents, and friends came to view and mourn over their dead; and the sound of loud wailing arose. (Kamakau 1992:146)

#### 2.2 ARRIVAL OF WESTERN VESSELS AND 19<sup>TH</sup> CENTURY CULTURE CHANGE

In 1778, Captain James Cook made Hawai'i known to the West, and the flow of seamen, merchants, missionaries, and plantation owners that followed forever altered the land, people, and culture of Hawai'i. The sections below explain how these changes impacted the people and lands of Mo'oiki, Mo'oloa, and the surrounding district of Honua'ula.

#### 2.2.1 Transitions in Population and Land Use

In May of 1786, the French explorer Jean-François de La Pérouse sailed past Maui and landed briefly to the south of Mākena State Park at Keone'õ'io, anchoring in the bay that now bears his name. It was his belief that he was the first European to set foot on Maui and spent one day ashore engaging in trade and exploring the area (Dunmore 1985:227). Accounts from this expedition suggest a relatively large and well-established community with ready access to resources:

More than one hundred and twenty of them, men, women, and children had been out in their cances since the crack of dawn and immediately offered to begin trading. Two of them, who seemed to be the men of authority, approached. They made a long, serious speech to La Pérouse, who did not understand a single word, and presented him with a pig, which he accepted. In return he gave them some medals, hatchets, and pieces of iron, which they valued very highly. By this generosity, the French succeeded in winning the friendship of the islanders.

During his reconnaissance, La Pérouse saw four small villages of ten or twelve houses. These are made of grass and are covered with the same material. They have the same shape as the thatched cottages found in certain parts of France. The roofs are pitched on two sides, and the door, which is located on the gable end, is only three feet high, so that it is necessary to stoop when entering. The furnishings consist of mats, which like our carpets make a very neat flooring on which the islanders sleep. The only cooking utensils they have are gourds painted in various colors. Their cloth is made from the paper mulberry tree, but, although painted in a great variety of colors, it appears less skillfully made than the cloth of other South Sea islanders.

When he returned aboard, the commander learned that Captain Clonard, his executive officer, had received a chief and had bought a cape and a fine red helmet from him; he had also acquired more than one hundred pigs, some bananas, yams, taro, mats, and various small objects made of feathers and shells. (Jean-François de Galaup 1969:24-25)

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Another early description that we have of Honua'ula is from the account of Archibald Menzies, a Scottish naturalist who was on Captain George Vancouver's 1793 voyage through the Hawai'i. The impression the Menzies got was of a "barren" and "thinly inhabited" place:

[E]arly in the morning of 10<sup>th</sup>, when we bore away along the southern shore, with a steady breeze, till we came to Molokini, and ther it became light and fluctuating in its direction, by the high land of Maui intercepting the regular trade wind. We had some cances off from the latter island, but they brought no refreshments: indeed this part of the island appeared to be very barren and thinly inhabited. (Thomas G. Thrum 1909:92-93)

The century that followed is characterized by immense change. Contact with the foreigners from the U.S. and Europe brought new customs and practices, new ways of organzing land and labor, new technologies, as well as new threats and, for a few, new opportunities. Honua'ula, as elsewhere throughout Hawai'i, felt the effects of these changes in large and small ways.

#### 2.2.1.1 A Declining Population

One of the more consequential aspects of this period was a steady decline in population beginning in the 1830s. The first formal population counts were conducted by the missionaries in 1831-1832 (Schmitt 1973:5), when 3,340 people were counted in Honua'ula, which made it Maui's fourth most populated district behind Lahaina, Hamakualoa, and Hāna (de Naie and Donham 2007:113). This was likely near its peak before exposure to foreign epidemics and disease took its toll.

Contact with the wider world brought Hawai'i into a global market economy and transformed traditional Hawaiian society in complex ways. Whaling was one of the first industries to find a foothold in Hawai'i, and as it drew young Hawaiian men away from the land and their families and onto whaling ships, the communities of Honua'ula felt the effects. In an 1846 letter to editor of *The Polynesian*, a missionary named Jonathan S. Green expressed his dismay at the threat such a loss posed:

The fact that the number of young men who leave home, and engage their services on board whale ships, is rapidly increasing, is one of the facts, so far as my people are concerned, which fills me with painful apprehension. More or less of the Hawaiian youth, I am aware, have engaged in this business for many years, especially those living in the vicinity of Honolulu, Lahaina, Hilo and Kaawaloa. But of late the number of these has greatly increased—at least in our vicinity—so that the present season not a few of the most promising young men from Kula, Honuaula and Wailuku have gone to sea. During the three years past we have had an excellent native school at Makawao, taught by a graduate of Lahaina Seminary. Many of these young men had made good proficiency in their studies—had nearly completed their course of education, and some few of them had commenced teaching. Now that these youth were just ready to engage in labors for the good of the nation, they have nearly all gone on board whale ships, and thus our hopes of good to the nation through them is for the present, utterly blighted. (Kepā Maly and Maly 2005:18)

#### 2.2.1.2 The Nuisance of Cattle

In places like Honua'ula, the presence of cattle had profound impacts to the land and to people's livelihoods. Cattle were first given to Kamehameha by Captain George Vancouver in 1793, who

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hoped it would become "a convenient source of beef provisions for ships in the mid-Pacific, as well as a civilizing tool to transform the Hawaiian people" (Fischer 2015:31). Kamehameha placed a *kapu* (prohibition) on the animals, and over the ensuing decades, their numbers multiplied. It's not known when cattle were brought to Maui, but by 1841 they appear to have been well established along the central isthmus (Wilkes 1844:251). The first reliable population count was taken in 1852 and counted a total of 40,700 cattle on all islands (Fischer 2015:58).

The herds of wild cattle were a destructive force on the native environment, with the ecologist Christopher Lever noting that in Hawai'i, "feral cattle have had a serious negative impact on the vegetation of dry, mesic, and wet forests at both high and low altitudes. Indeed, it has been claimed that they have been the single most destructive animal in the islands" (Lever 1994:44). Appreciating the scale of such impacts, Handy concludes that Honua'ula was more hospitable before the cattle transformed it:

In Honuaula, as in Kaupo and Kahikinui, the forest zone was much lower and rain more abundant before the introduction of cattle. The usual forest-zone plants were cultivated in the lower upland above the inhabited area. Despite two recent (geologically speaking) lava flows which erupted from fissures below the crater and only a few miles inland and which covered many square miles of land, the eastern and coastal portion of Honuaula was thickly populated by Hawaiian planters until recent years. (Handy et al. 1991:113-114)

In these conditions, and in an area already prone to drought, the deforestation of the land made Honua'ula's residents even more vulnerable. On June 8, 1838, Jonathan S. Green submitted this report to the *Hawaiian Spectator*, describing a time when the conditions were so bad, it forced the people of Honua'ula to seek food in other districts:

Hoapilikane [Governor or Maui] is now ordering all the people from Honuaula, one of our out stations, away from home, 20 miles to dig fishponds. They have been here by fifties to request food. For they work for naught and board themselves. They have no food on their own land, it being a time of famine at that place, so they have to get food where they can find it. They carry their food to the place of their labor, leaving their families to seek sustenance as they can. (Kepā Maly and Maly 2005:61)

Not only did cattle cause deforestation, they threatend farmers' crops. There are numerous reports of cattle driving farmers off of their lands. In an 1846 article published in *The Polynesian*, the writer, while summarizing Kamehameha III's visit to Maui, notes that "the cattle have done much mischief by trespassing on the plantations, and driving the owners from their little farms. Two districts have in consequence been deserted" (Kepā Maly and Maly 2005:17).

One of the more tragic incidences resulted in the death of a man named Aki from Honua'ula (Kepā Maly and Maly 2005:16-17). Linton Torbert, who owned much of 'Ulupalakua and the surrounding lands, owned some cattle that had allegedly trampled on Aki's farmland. Aki allegedly cut several of their legs, injuring Torbert's cattle. Torbert and his blacksmith Benjamin Furbush confronted Aki, they got into a scuffle, and while Aki was attempting to flee, he was shot in the back and killed. Torbert and Furbush were sentenced to four years in prison, which was commuted with the payment of a fine, \$200 each.

#### 2.2.2 1840-1851 – The Great Māhele

The Māhele reformed Hawai'i's traditional system of land tenure, from one where the chiefs and people held the land in common, to one of private ownership modeled off of Western land regimes. It was a multi-part process that began in 1845 with the establishment of a Board of Commissioners to Quiet Land Titles, also known as the Land Commission. Those who intended to secure rights or title to any lands would submit their claims to the five-member Land Commission Board. The Board would then determine the validity of those claims and issue a Land Commission Award (LCA) to successful claimants (Chinen 1958:8-9). Upon payment of a commutation fee to the government, a Royal Patent would be issued, perfecting title to the land (Chinen 1958:21).

The actual land division, or *mahele*, began 1848. It required an initial process of clarifying and separating out the respective property interests of the King, the chiefs and *konohiki* (*ahupua'a* managers), and the native tenants or *hoa 'âina* (Chinen 1958:15). The intent was for the King (Kamehameha III) to retain his own individual lands (known as the Crown Lands), and for the remaining lands to be divided into thirds and entitled to the government, the chiefs and konohiki, and the native tenants (Chinen 1958:15-16). These three land categories are known as Government Lands, Konohiki Lands, and Kuleana Lands. This *mahele* (division) between the King and more than 240 chiefs and *konohiki* occurred between January and March of 1848. In what's called the *Buke Mahele* (Māhele Book), the chiefs and *konohiki* surrendered all interests in any lands the King wanted to retain, and he did the same with any lands they wanted to retain. The *ali'i* and *konohiki* claims were tyipically for entire *ahupua'a* or smaller, whole subdivisions within *ahupua'a*. Commutation fees were often paid in land, at a rate of one-third of an awardee's total award, and placed into the inventory of Government Lands (Alexander 1890:114).

The distinction between Crown and Government Lands is an important one. From their inception, they were regarded as separate and distinct classifications of property. Crown Lands were defined as the:

... private lands of His Majesty Kamehameha III., to have and to hold for himself, his heirs and successors forever; and said lands shall be regulated and disposed of according to his royal will and pleasure subject only to the rights of tenants. (Kingdom of Hawaii 1848)

At the death of Kamehameha III, the Crown Lands passed to Kamehameha IV. But at the death of Kamehameha IV, there was no immediate heir to the throne, which created some confusion as to the inheritance of Crown Lands and whether or not it followed the family line or the throne.

It was decided by the Supreme Court that under the confirmatory Act of June 7th, 1848, "the inheritance is limited to the *successors* to the *throne*," "the wearers of the crown which the conqueror had won," and that at the same time "each successive possessor may regulate and dispose of the same according to his will and pleasure as private property, in the manner as was done by Kamehameha III" (Alexander 1890:121).

In contrast to the Crown Lands were the Government Lands, which were defined and set aside in a manner more typical of public lands. They were defined as:

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... those lands to be set apart as the lands of the Hawaiian Government, subject always to the rights of tenants. And we do hereby appoint the Minister of the Interior and his successors in office, to direct, superintend, and dispose of said lands, as provided in the Act ... (p)rovided, however, that the Minister ... shall have the power, upon the approval of the King in Privy Council, to dispose of the government lands to Hawaiian subject, upon such other terms and conditions as to him and the King in Privy Council, may seem best for the promotion of agriculture, and the best interests for the Hawaiian Kingdom ... (Kingdom of Hawaii 1848)

In designations of lands as either Crown or Government, and through all awards of whole *ahupua'a*, *'ili*, and later land sales to foreigners, the rights of the native tenants were expressly reserved, *"Koe na Kuleana o Kanaka"* (Reserving the Rights of Native Tenants) (Alexander 1890:114). For the native tenants, it took the passage of the Act of August 6, 1850, commonly known as the Kuleana Act, to facilitate the process of taking title to their own landholdings, which became known as Kuleana Lands. The Act waived the commutation fee, although a survey was still required. The tenants were permitted to make claims for any lands that they actually cultivated and were required to provide evidence of such through testimony, and claims often included multiple *'ili*, or *apana*, located both *mauka* and *makai*. Kuleana Land claims were presented to and heard by the Land Commission.

Although the intent was for the land to be divided equally among the government, chiefs, and native tenants, the outcome was far from equitable, with the native tentants receiving less than one percent of all the land in Hawai'i, a total of 28,658 acres (Van Dyke 2008:48).

Over the course of the Māhele, both *ahupua'a* of Mo'oiki and Mo'oloa ended up as Government Lands, with various parcels awarded as Kuleana Lands or sold to individuals via Royal Patent Grants, discussed below. In the Māhele, the *ali'i* Jonah Pi'ikoi first disclaimed any interest to the *ahupua'a* of Mo'oiki and it thereafter became Government Lands. For Mo'oloa, the *ali'i* Alika Mela first disclaimed any interest in the *ahupua'a*, and it thereafter became Government Lands.

#### 2.2.2.1.1 Claims of Native Tenants

In Mo'oiki and Mo'oloa, total of eight claims each were made to the Land Commission for *kuleana* lands with only three were awarded at Mo'oiki and five awarded at Mo'oloa (Table 2-1 and Table 2-2). Types of land uses noted within claimant testimony include potato planting areas (Helu [Claim Number] 2427, 4157, 5402B), *kalo* or dryland taro (Helu 2505 and 4157), *'ili 'āina* or *kula* '*ili* (Helu 2388, 2397, 2398, 2416, 2602, 5455), and *moku mau'u* or grassland areas (Helu 2427, 2563, 2566, 2585, 5263, 2397, 2427, and 5455)

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Table 2-1. Summary of Kuleana Claims Land Commission Awards for Mo'oiki Ahupua'a (Office of Hawaiian Affairs 2011, 2014)

Helu	Claimant	ʻlli	Notes on the Land Claim	Award Acreage
2427	Kanakahou		<u>Claimant Testimony:</u> 4 grass land areas (moku mau'u), witness is Koea	Apana 2 and 3 (a'a land [he wahi a'a]): 6.9 Acres;
				Apana 4 (native potato in the a'a ['uala maoli]: 4.04 Acres;
				Apana 1: abandoned
2505	Ohule	Piihale	Native Testimony – Nika sworn:	Not Awarded
			1 taro 'ili (kalo) (Apana 6)	
2563	Wawaiki		Claimant Testimony:	Not Awarded
			2 grass land areas (moku mau'u), witnesses are Kaea and Waiauia	
2566	Nahualaalaau		Claimant Testimony:	Not Awarded
			1 grass land area (moku mau'u), I worked the land and believe it is my	
			right/responsibility, witness is Upai	
2585	Honuakaha		Claimant Testimony:	Not Awarded
	(wahine)		2 grass land areas (moku mau'u), witness is Koea	
4157	Kahaleokaia		Claimant Testimony:	Apana 2 (native potato in the a'a
			6 kihapai sweet potato ('uala maoli	['uala maoli]: 11.4 Acres
5263	Kauhola		Claimant Testimony:	Not Awarded
			1 grass land area (moku mau'u), witness is Hoea	
5402B	Nawaiki		Native Testimony – Hahaloa sworn:	Apana 2 (native potato in the a'a
			1 Irish Potato ('uala haole);	['uala maoli]): 5.14 Acres;
			3 kula (Apana 5, 8-10),	Apana 3 (native potato): 7/8
			Apana 9 and 10 bound on the Kula side by the mountain/inland road (alanui pi'i); Nawaiki inherited from parents in 1819	Acres

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Table 2-2. Summary of Kuleana Claims and Land Commission Awards for Mo'oloa Ahupua'a (Office of Hawaiian Affairs 2011, 2014)

Helu	Claimant	ʻlli	Notes on the Land Claim	Award Acreage
2388	Kamaka	Haleola	Native Testimony – Kekaula sworn:	Not Awarded
			kula 'ili (Apana 6), farmed since 1848	
2397	Kauliilii	Pualoalo;	Claimant Testimony:	Helu 2397 (Pualoalo 'Ili): 3.6
		Haleola,	The seaward portion of Mo'oloa Ahupua'a, 8 poalima, the 'ili of Pualoalo,	Acres
		Haleola 2	1 grass land area (moku mau'u), 1 farmland area; witnesses are Kiha and Alika.	
			Native Testimony – Piena sworn:	
			1 kula 'ili (Apana 1), inherited from parents in the time of Kamehameha I, bound on the Kula and Kahikinui sides by government land.	
2398	Kinolua	Pualoalo;	Claimant Testimony:	Apana 1 (Pualoalo 'Ili): 8.65
		Haleola,	'ili claim at Haleola, bound to the west by the sea witness is Kaialiilii	Acres;
		Kupune,	1 house lot (pahale) claim is bound to the north by the fence/wall of Kiha	Apana 2: let go;
		Maniania	(pa o Kiha), to the east by fenced/enclosed land (pa 'āina), south by a valley/gulch/ravine, west by a canoe landing	Apana 3 (Maniania 'Ili pahale): 0.37 Acres;
			Native Testimony – Pieno sworn:	Apana 4 (Haleola 'Ili): 1.5
			1 kula 'ili at Pualoalo (Apana 1),	Acres;
			2 kula 'ili at Haleola (Apana 2 and 4), Apana 4 mauka by the government fence/wall (pa aupuni), makai by the sea;	Apana 5 (Maniania 'Ili): 6 Acres
			1 kula 'ili at Kupune (Apana 3);	
			1 kula 'ili at Maniania (Apana 5); Inherited from parents.	
			Foreign Testimony:	
			Kinolua is disputed on good grounds at Honua'ula	
			Mähele Survey Document:	
			Apana 1 west corner marked by a wiliwili and east corner marked by a big rock (pohaku nui);	
			Apana 5 easternmost corner marked by a cattle corral (pā bipi)	

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Table 2-2 (continued). Summary of Kuleana Claims and Land Commission Awards for Mo'oloa Ahupua'a (Office of Hawaiian Affairs 2011, 2014)

Helu	Claimant	ʻlli	Notes on the Land Claim	Award Acreage
2427	Kanakahou		Claimant Testimony:	Not Awarded
			1 grass land area (moku mau'u), witness is Kalili	
2431	Kiha	Kuauli	Native Testimony – Kanui sworn:	Apana 3 (Kuauli 'Ili):
			1 kula 'ili (Apana 3), this was an very ancient land in the time of Kamehameha $\ensuremath{I}$	2.5 Acres
2602	Piena	Haleola	Claimant Testimony:	Apana 1 (Haleola 'Ili):
			2 'ili	6.4 Acres
			Native Testimony – Kinolua sworn:	
			2 kula 'ili (Apana 1 and 2), received from Alika in 1847	
			Apana 1 bound makai by the sea	
			Apana 2 bound mauka by the government fence/wall (pa aina) and makai	
			by the sea	
4157	Kahaleokaia	Paliuli	Claimant Testimony:	Apana 3 ('uala maoli):
			1 kihapai kalo (taro), the kihapai is overgrown/uncultivated	10.05 Acres
5455	Polena	Kamamaki	Claimant Testimony:	Not Awarded
			1 grass land area (moku mau'u), Hika has seen it.	
			Native Testimony – Piho sworn:	
			1 kula 'ili (Apana 3), inherited from his parents.	

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Figure 2-10. A portion of the the USGS National Map (2019) and Honua'ula Title Map (Wall 1894) showing the lands of Mākena State Park (outlined in blue) in relation to Land Commission Awards of Mo'oiki and Mo'oloa Ahupua'a by awardee.

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#### 2.2.2.1.2 Land Grants

While the Māhele was underway, it became clear that the process did not adequately meet the needs of native tenants, nor did it address the demands of foreign residents. Often, native tenant claims went unawarded, or the land that was awarded was insufficient to support a family's subsistence lifestyle. At the same time, foreigners were seeking larger and larger tracts of land to further their business interests. And so, a provision of the Kuleana Act provided a mechanism that enabled both groups to purchase land from the inventory of Government Lands, although it was foreign buyers who largely benefited from it (Kepā Maly and Maly 2005:152).

A number of these Palapala Sila Nui (Royal Patent Grants) were issued for lands in Mo'oiki, Mo'oloa, and in fact, all of the parcels within Mākena State Park that were not retained by the government were transferred to individuals by way of a Royal Patent Grant (figure).

On the south end of Oneloa, in the *ahupua'a* of Mo'oloa, Manu acquired a parcel totaling 10 acres through Royal Patent Grant number 1498. The transfer of a *kula* parcel in neighboring Mo'omuku was also made under the same grant.

Linton L. Torbert acquired several parcels that now comprise Mākena State Park as part of two Royal Patent Grants, numbers 1441 and 1015. Grant 1441 covered 6 parcels, 4 of which sit within in the Park (2 in Mo'oloa and 2 in Mo'oiki). The largest of these parcels was almost 55 acres and comprised roughly two-thirds of Pu'u Ōla'i. Through Royal Patent Grant 1015, he also purchased the lands that comprise Oneuli beach.

Also in Mo'oloa, Nahualalaau acquired just over 11 acres through Royal Patent Grant 1482, and to the north, Kaleo acquired a 12.5 acre parcel through Royal Patent Grant 1484. Through Royal Patent Grant 1483, Maaweiki acquired the northernmost edge of Mo'oloa lands within the Park, in the vicinity of the roadway entrance, totalling 6.75 acres.

The Park's Mo'oiki side included several parcels of Government Lands, along with Torbert's parcels noted above. The only other grantee was named Kukaheku who purchased 6.2 acres under Royal Patent Grant 1495.

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Figure 2-11. A portion of the portion of ESRI World Imagery data set (ESRI et al. 2018) showing the location of the North Comfort Station (in yellow) and South Comfort Station (in blue) in relation to the respective land grants to L.L. Torbert (Grant 1441, Apana 1 and 4) and Maaweiki (Grant 1483, Apana1).

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#### 2.2.3 1850-1900 - Foreign Influence and Changing Economies

Even prior to the Māhele, lands in the Honua'ula district were being used to support commercial enterprises, namely sugar and cattle. In December of 1845 and January of 1846, King Kamehameha III traveled to Maui to speak to the issue of land privatization. A newspaper article published on February 14, 1846 in *The Polynesian* gave readers a recap of the visit, and the author tells of the agricultural developments in Honua'ula, giving us a glimpse at some of the developments and challenges to come:

Agriculture on Maui is in a forward state, compared with Oahu. At Honuaula there are 178 acres under cultivation of sugar cane with a good sugar mill managed chiefly by natives. One farm, besides sugar, raises \$5000 worth of Irish potatoes annually. There are 12 foreigners here, one of whom John White, arrived in 1799. On some parts of Maui the cattle have done much mischeif by trespassing on the plantations, and driving the owners from their little farms. Two districts have in consequence been deserted. (Kepā Maly and Maly 2005:16)

#### 2.2.3.1.1 Linton Torbert

One of the early players in Honua'ula's new economy was a man named Linton L. Torbert. An active member of the Royal Hawaiian Agricultural Society, he began his farming operation on 2,300 acres of leased land in 'Ulupalakua. He first grew potatoes and corn to sell to merchant ships and to meet a sudden spike in demand fueled by California's Gold Rush. Later, he planted sugar.

Torbert purchased lands in Mo'oiki and Mo'oloa, but his largest acquisitions were to the north, in Kā'eo and Pāpa'anui. In a letter to Keoni Ana, he stated his intent for his properties:

If I get this land my intention is this. To manufacture sugar as extensively as possible. To accomplish this end I shall get 30 or 40 families of natives to come and live on the farm. I will find them houses and food, school their children & learn them to work. (Kepā Maly and Maly 2005:160)

#### 2.2.3.1.2 Captain James Makee

Captain James Makee was a whaler from Massachusetts who settled in Hawai'i in 1843. In 1854, Makee acquired an interest in Torbert's 'Ulupalakua estate and by 1858, financial difficulties forced the sale of Torbert's remaining Honua'ula lands to Makee, which is how he came to establish a plantation and sugar sugar in 'Ulupalakua. He named his estate Rose Ranch after his wife's favorite flower (Kepā Maly and Maly 2005:172).

One of Makee's signature improvements was in locating a reliable source of water, as reported on in an article from the July 7, 1866 issue of *Nupepa Kuokoa*:

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Hunahuna mea hou o Hawaii Nei. PAU KA PILIKIA. Ma keia pa hana, ua kukulu ae o J. Makee i na hale laau a me na punawai hohonu ma na hakala o na hale laau. Ua pau ka pilikia o na kanaka a me na wahine ma keia pa hana, ua ulakolako maoli i ka wai. O keia aina i ka wa kahiko, he kula panoa wale no, he a-a, he haoa, aohe wai e loaa. O ka wai o keia aina i ka wa mamua, he pu-maia, he lau kakonakona; a i keia wa, limua ka wai, pau ka pilikia. Me ka mahalo. E wiki oe e ke Kuokoa. JOHN KELIIKANAKAOLE. Ulupalakua, Maui, lune 12, 1866.

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Bits of News About Hawai'i. The trouble has ended. By this work, J. Makee has built a wooden house and deep reservoir on the side of the house. The troubles of the men and women are now ended by this work, they are now truly well supplied with water. This land, in ancient times, was a barren open place, a rocky, scorched land, where water could not be gotten. The water of this land in times before, was from the stumps of the banana trees, and from the leaves of the kākonakona grass; but now there is water where moss can grow. The problem is resolved. (Kepā Maly and Maly 2005:37) (Translation: Kepā Maly)

Makee's plantation was renowned for its beauty, productivity, and the hospitality of its owners. King Kalākaua and his wife Queen Kapi'olani were frequent guests. Makee's wife Catherine planted gardens decorated with roses, exotics plants, and other flowers that visitors to 'Ulupalakua Ranch can still enjoy today. Here's another visitor's report, published in the November 14, 1868 issue of *Nupepa Kuokoa*:

The nature of this land is like that of a rose garden filled with blossoms. The beautiful home of J. Makee, Esq., has no equal... The things grown there are like nothing else seen, there are beautiful flowers, and trees of all kinds. The road passes through the gardens, and to the large reservoir within the arboretum, it looks like a pond. When he finished showing us around the gardens, he took us to meet his lady (his wife), the one about whom visitors say, "She is the queen of the rose garden." (Kepā Maly and Maly 2005:38)

Makee managed the plantation and mill for just over 20 years. Through a series of conveyances shortly before and after his death in September of 1878, most of the Rose Ranch lands ended up going to the Makee children. By 1883, the sugar growing operation was replaced with cattle ranching. In 1886, James Dowsett, father-in-law to one of James Makee's sons, purchased the Rose Ranch estate from the Makee children. Between 1886 and his death in 1898, Dowsett bought and leased additional lands, expanding the ranch's holdings. His daughter Pheobe, wife of Charles Makee, inherited the estate. When her husband Charles died, she married Dr. James Raymond, who bought the ranch in 1900, renamed it Raymond Ranch, and concentrated operations on raising and slaughtering cattle.

These vast ranchlands were the domain of Hawaiian *paniolo* (cowboys), and one of Hawai'i's most celebrated *paniolo*, Daniel Ikua Purdy, would eventually come to work at the Raymond Ranch. Purdy earned international fame when he won the World's Steer Roping Championship

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in 1908 at the Cheyenne Frontier Days Rodeo. In 1914, he came to 'Ulupalakua from the Parker Ranch on Hawai'i Island to work as Raymond's ranch foreman. He remained in 'Ulupalakua until his death in 1945.

#### 2.3 MO'OLOA AND MO'OIKI IN THE 20<sup>TH</sup> CENTURY

The legacy of ranching continued well into the 20th century, with a burst of wartime activity giving way to a search for new sources of industry. With vast stretches of undeveloped land, perfect weather, and sandy beaches, Honua'ula was primed for the boom in resort development that has characterized the modern era. The sections below provide an overview of the events that bring us to today.

#### 2.3.1 The 'Ulupalakua Ranch

In 1922, the ranch was sold to Frank Fowler Baldwin, manager and owner of the Hawaiian Commercial & Sugar Company. The Baldwins gave it the name 'Ulupalakua Ranch. In the 1920s, Mākena Bay just to the north was one of the busiest ports on Maui. As the export of beef produced at 'Ulupalakua Ranch grew, so too did the traffic of interisland steamers at Mākena's landing. By the mid-1920s, there were over one hundred families living in the area (J. R. K. Clark 1989:38). Improvements to Kahului Harbor slowed the flow of traffic to the landing at Mākena, diminishing travel and commerce in the area and causing population levels to fall.

The Baldwin family retained ownership of the 'Ulupalakua Ranch until 1963, when it was sold to the Ranch's present owner Pardee Erdman, along with James Coberly and his wife Jean Coberly. Mr. Erdman acquired the Ranch's 'Ulupalakua lands, and the Coberlys acquired its Kipahulu lands. In 1974, Pardee Erdman partnered with Emil Tedeschi, a winemaker from California, to bring vinewards and a winery to 'Ulupalakua, which now does business as MauiWine.

#### 2.3.2 World War II Military Exercises

Prior to the war, sometime in the 1930s, twenty acres of land fronting Oneloa were cleared for the installation of radio range station, which consisted of a network of five radio towers that transmitted directional signals to assist aircraft with navigation (Cottrell 2018:2). It's not known whether this station was intended for civilain or military use.

During World War II, the U.S. military used Hawai'i as a major training, staging, and supply base for its Pacific command. During the war years, the military population on Maui outnumbered the local resident population by a factor of four (*Maui General Plan 2030* 2006:7). Dozens of training sites were located on the island. Up and down the coastline between Ma'alaea and Cape Kīna'u, including Molokini, the military ran combat training exercises involving amphibious equipment and tactics. Military exercises were also staged at Kaho'olawe, and the proximity of this stretch of coastline, as well as Oneloa's long stretch of beach, made it useful for various training drills (Cottrell 2018:2). Small concrete structures called "pillboxes" were built, and one was located on the beach at Oneloa. The military made other changes to the area, including the construction or widening of roads and the dismantling of the Mākena Landing pier.

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Those families who lived near the Landing were forced to evacuate and had their homes razed. In an interview, Annie Leimomi Chang Wilmington, who was born in Mākena in 1907, shared her recollections of the wartime upheaval: "When the war started coming, they told everybody from the beach they had to move. [People] were selling their houses . . . but they [the military] took [bulldozed] all the homes so we didn't get anything but fifty dollars for it." (Lee-Greig 2002:C-8). After the war, little was left for former residents to return to, and many stayed away (J. R. K. Clark 1989:38).

#### 2.3.3 Resort Development

Following the war, Maui saw a steady decrease in population as the sugar and pineapple industries began to shrink and opportunities on O'ahu and the U.S. mainland drew residents, younger ones in particular, away. This prompted a search for new sources of industry, and in a 1959 *Report of Land Use for the Island of Maui*, tourism was identified as a potential growth engine (*Maui General Plan 2030* 2006:10). One of the biggest barriers to capturing a greater share of the Hawai'i visitor market was Maui's lack of hotel accommodations. From this need arose the concept of the resort destination development, with a range of amenities to serve guests, including hotels, restaurants, shopping centers, and golf courses. In 1961, Ka'anapali pioneered the resort model on Maui and set a precedent for the developments that would follow (*Maui General Plan 2030* 2006:11).

Maui's business and political leadership soon looked towards the sparsely populated Kihei region and identified its potential as a future residential, resort, and employment hub. Another report was prepared, the *Kihei Civic Development Plan*, which provided a long-range plan to steer development of the region between 1970 and 1990 and set the stage for a massive real estate speculation and development boom (*Maui General Plan 2030* 2006:11).

The report identified Wailea as having major resort community potential, and in 1970, the Wailea Development Company formed and quickly broke ground on the first of four golf courses in Wailea, which would provide an immediate source of cashflow. The original plan envisioned a densely populated mini-city for locals and visitors alike, and so residential condominium development came next, beginning in 1974. The Wailea 'Ekahi, 'Elua, and 'Ekolu condos opened between 1976 and 1978 to strong demand and high prices. Alongside the condominium development came the 558-room Hotel Inter-Continental Maui in 1976 (now the Wailea Beach Resort) and the 350-room Wailea Beach Hotel in 1978.

Development to the south of Wailea, just north of Mākena State Park, was spearheaded by Japanese real estate investors through an entity called Seibu Holdings, Inc. (hereafter, "Seibu"). In 1973, 'Ulupalakua Ranch sold 16 acres of beachfront property and an additional 1,000 acres to Seibu for the creation of its proposed Mākena Resort. In the period that followed, Seibu paved part of the old dirt Mākena Road, developed two golf courses plus the Mākena Golf Clubhouse, added public comfort stations, tennis courts, and parking and picnic areas, and completed the \$40 million, 300-room Maui Prince Hotel in 1986. The hotel was situated on a 38-acre beachside parcel, and its design was inspired by a modern interpretation of a traditional Japanese castle.

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The property featured five restaurants and bars, swimming and wading pools, retail and meeting spaces, as well as outdoor locations for weddings and events.

During the entitlement process, Seibu sought to close a portion of the Mākena-Keoneoio Road in exchange for the construction of a new road (now called Mākena Alanui Road) and land contributions to Mākena State Park. This portion of the Mākena-Keoneoio Road in question was actually a segment of Ke Alaloa, and a group called Hui Ala Nui O Mākena formed to preserve the road and thereby protect a traditional right-of-way. The effort was largely successful, with Seibu agreeing to preserve, in perpetuity, an 1,100-foot section of the trail, which bisected its Maui Prince Hotel property (De Leon 1987). The agreement caused it to be closed to vehicular traffic and improved as a 20-foot wide, stone-paved pedestrian walkway (De Leon 1987).

In 2007, Seibu sold the hotel for \$575 million to Makena Hotel LLC, a partnership of Maui-based developer Everett R. Dowling and the investment firm Morgan Stanley (Perry 2016). In 2009, the hotel was rebranded as the Makena Beach and Golf Resort and operated by Benchmark Hospitality International (Dingeman 2009). Three years later, the property went into foreclosure. A consortium called ATC Makena Holdings purchased the property in 2010, and it operated until 2016, when it closed in preparation for a complete overhaul of the hotel property. Principal construction began in May of 2017 to turn it into the Makena Golf and Beach Club, a luxury condo residential development. The project plans call for 65 units in a range of structures, none higher than four stories (Tanji 2018).

#### 2.3.4 Mākena State Park

Between 1968 and 1972, Oneloa and Pu'u Ōla'i had briefly attracted a community of back-tonature hippie transients and squatters, mostly from the U.S. mainland. They created a semipermanent colony along the beach, living in tents and makeshift structures. It's believed that it is during this time period that the Oneloa began to be referred to as Mākena Beach and Pu'u Ōla'i as Little Beach (J. R. K. Clark 1989:36). The first evictions came in 1970, but only some participated, so the community relocated from the immediate area but managed to remain nearby. Two years later, with the participation of all the affected landowners, the police and health officials managed to evict the colony for good, although its hippie spirit is still felt at Little Beach, where nude sunbathing remains popular.

Shortly after their eviction, plans for a park began to surface. In 1977, the first study of the area was conducted by H. Mogi Planning and Research, Inc. and submitted to the State of Hawai'i and Department of Land and Natural Resources. It set out three goals for the park:

- 1. Preserve the ecological balance of a valuable natural area of the Eastern Maui coast.
- 2. Preserve and protect for future reference to the Hawaiian heritage, significant historic and archaeological sites, both those discovered and as yet undiscovered sites.
- Promote preservation of a local "Hawaiian Way of Life", i.e. fishing and opihi picking in rugged areas both for recreation and livelihood. (Department of Land and Natural Resources 1981:5, 6)

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In the early 1980s, the State began to acquire the lands needed to create Mākena State Park. On the northern Mo'oiki side of the Park, the State already owned approximately 41 acres of land; the rest was owned by the Edwin Kam Trust Estate (Department of Land and Natural Resources 1981:2). The State initiated eminent domain proceedings and acquired the remaining 87.9 acres (TMK 2-1-06:16) from the Edwin Kam Trust Estate for \$4.7 million in August of 1987 (U.S. Army Corps of Engineers 1992:3).

Most of the southern Mo'oloa side of the Park was privately held, including the four beachfront parcels fronting Oneloa. They included a 12.2 acre parcel (TMK 2-01-06:53) owned by Edoki Hui II, a 9.3 acre parcel (TMK 2-01-06:28) owned by Makena Beach Group, an 8.8 acre parcel (TMK 2-01-06:27) owned by Seibu Fudosan, Inc., and an 8.1 acre parcel (TMK 2-01-06:26) owned by Makena Beach Investors (U.S. Army Corps of Engineers 1992:3). Through a series of acquisitions, the State managed to purchase most of the lands. In 1984, it acquired the Seibu Fudoson parcel for \$3.8 million in a deal that also involved a land exchange (U.S. Army Corps of Engineers 1992:4). In 1988, the State acquired both the Edoki Hui II and Makena Beach Group parcels for \$6.8 and \$5.2 million, respectively (U.S. Army Corps of Engineers 1992:4). The State's initial offer for the Makena Beach Investors' property was rejected, and then it attempted to acquire the property by way of eminent domain, which it subsequently abandoned. It wasn't until 1990, after the property was subdivided into three parcels, that the State succeeded in purchasing a now 5.5- acre parcel of land that abutted the Park for \$5 million (U.S. Army Corps of Engineers 1992:4).

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## 3.0 CONSULTATION METHODS AND RESULTS

#### 3.1 SCOPING AND COMMUNITY OUTREACH

In order to identify individuals with knowledge of the traditional cultural practices within and adjacent to the proposed project as it relates to this study, contact was initiated with government agencies, advisory councils, local community organizations, and traditional cultural practitioners, along with kama'āina and kūpuna with generational ties to the proposed project area between the fall of 2018 and summer of 2020. Letters and project area maps showing the location of the project and proposed design were mailed out with the following accompanying text:

'Āina Archaeology is conducting a cultural impact assessment (CIA) for the proposed Mākena State Park Comfort Stations and Related Improvements, as well as, restoration activities at Paniaka Pond. Mākena State Park is comprised of an approximate 168-acre parcel of land in Mo'oiki and Mo'oloa Ahupua'a, Honua'ula Moku (Makawao Modern Tax District) TMK (2) 2-1-06: 30). The area of potential effect (APE), hereafter referred to as the "project area", consists of two locations for the proposed comfort stations at Oneloa Beach (North Site and South Site), as well as the area of Paniaka Pond in Land Grant 1498, Apana 2 at the southern extent of the State Park parcel. The Guidelines for Assessing Cultural Impacts adopted on November 19, 1997 by the Environmental Council, State of Hawai'i states:

(For) the cultural portion of an environmental assessment, the geographical extent of the inquiry should, in most instances, be greater than the area over which the proposed action will take place (proposed project area). This is to ensure that cultural practices which may not occur within the boundaries of the project area, but which may nonetheless be affected, are included in the assessment.... An ahupua'a is usually the appropriate geographical unit to begin an assessment of cultural impacts of a proposed action, particularly if it includes all of the types of cultural practices associated with the project area. (State of Hawaii Office of Environmental Quality Control 2012:11)

For this cultural impact assessment, the *ahupua'a* of Mo'oiki and Mo'oloa is considered the overall "study area" while the footprint of the proposed project is identified as the "project area." The purpose of the cultural impact assessment is to evaluate potential impacts to traditional cultural practices as a result of the proposed project.

We are seeking your kokua or help and guidance regarding the following aspects of our study:

General history and present and past land use of the project area.

Knowledge of cultural resources which may be impacted by either the proposed comfort station installation or potential restoration efforts at Paniaka Pond - for example, traditional plant gathering sites, historic sites, archaeological sites, and burials.

Knowledge of traditional gathering or *lawai'a* practices at Oneloa – both past and ongoing.

Cultural associations of the Oneloa project area, such as legends and traditional uses.

Referrals of *kūpuna* or elders who might be willing to share their cultural knowledge of the project area as well as the *mauka* lands of the overall study area.

Any other cultural concerns the community might have related to Hawaiian or cultural practices within or in the vicinity of the proposed project area.

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Table 3-1 presents the community consultation effort conducted with *kama'āina*, Hawaiian cultural advisors and Hawaiian organizations. Individuals who expressed personal knowledge of the study area and gave their consent to share their *mana'o* for this study, are presented in subsequent sections.

#### Table 3-1. Outreach Summary

Name	Affiliation	Contacted <sup>1</sup> (Y/N)	Personal Knowledge (Y/N)	Comments
Ms. Thelma Shimaoka	Office of Hawaiian Affairs – Maui Office	Ν		No response
Mr. Kai Markell	Office of Hawaiian Affairs – Native Hawaiian Historic Preservation Council	Ν		No response
Mr. Kalani Akana	Office of Hawaiian Affairs – Culture Specialist			Referred to Mr. Kai Markell
Mr. Chris Nakahashi	State Historic Preservation Division – Culture and History Branch	Y	Ν	Referral to Aha Moku o Maui
Mr. Hinano Rodrigues	State Historic Preservation Division – Cultural and History Branch Chief	Y	Ν	Referral to Aha Moku o Maui
Mr. Andrew Phillips	State Historic Preservation Division – Maui/Lāna'i Islands Burial Council Staff	Ν		No response
Ms. Carol-Marie "Ka'onohi" Lee (DeLima)	Honua'ula Moku Po'o Cultural Descendant Honua'ula Moku (Papa'anui, Kā'eo, Mo'oloa, Mo'oiki, Mohopilo, Kanahena Ahupua'a)	Y	Y	Mana'o given during meeting of the 'Oneloa Coalition (see Section 3.4)

 $^1$  A minimum of three attempts following the initial mail-outs were made via email or phone call, "Y" indicates that contact was made with the individual listed, "N" indicates no response

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#### Table 3-1 (continued). Outreach Summary

Name	Affiliation	Contacted <sup>1</sup> (Y/N)	Personal Knowledge (Y/N)	Comments
Mr. Leslie Kuloloio (aka Kuloloi'a)	Kupunakāne (deceased), Cultural Descendant Honua'ula Moku	Y	Y	Summary provided
Mr. Abner DeLima	Cultural Descendant Honua'ula Moku (Papa'anui, Ka'eo, Mo'oloa, Mo'oiki, Mohopilo, Kanahena Ahupua'a)	Y	Y	Summary provided (Section 3.2)
Mr. Ashford DeLima	Cultural Descendant Honua'ula Moku (Papa'anui, Ka'eo, Mo'oloa, Mo'oiki, Mohopilo, Kanahena Ahupua'a), Ho'oponopono o Mākena	Y	Y	Summary provided
Mr. Cody Nemet Tuivaiti	Cultural Practitioner	Y	Y	Summary provided

#### 3.2 Mr. Abner Kauwekane DeLima – June 15, 2019

Mr. Abner Kauwekane DeLima was born in 1937 at Kula Sanatorium and grew up on the Oneloa (Big Beach) side of Pu'u Ōla'i. At age 13, when he was in his 7<sup>th</sup> grade year, Mr. DeLima moved to Pu'unēnē to attend Pu'unēnē School followed by Lahainaluna as a boarder until he graduated in 1955. From Lahainaluna, Mr. DeLima attended the University of Hawai'i at Mānoa on a football scholarship, eventually married, joined the Honolulu Police Department, and raised his family on O'ahu. While away at school in Lāhainā he would return to Pu'u Ōla'i periodically and after he began his family he would return to Maui periodically to visit with his parents who moved to Kahului in the mid-1960s but still maintained property in the Mākena area.

With regard to his early childhood at Oneloa, Mr. DeLima shared the stories of his grandfather, Kauwekane Kukahiko (Figure 3-1 through Figure 3-3), who built his childhood home, the foundation for which is located adjacent to the DLNR caretaker's cottage, and the generational knowledge that was passed down through him:

Kauwekane (built the house). We just moved in. I don't know who else helped him, but I remember him working as a carpenter. You know, he got one mūmū (rounded) hand right?

Grandpa Kauwekane used to do tomatoes. Had a small little garden at the Makena house, Pu'u Ōla'i house until he was too old. I was about four or five years old when he was still

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raising the tomatoes, tomato patches and stuff. I was nine years old when he passed away.Yeah, I was very close to him. I used to make him mad sometimes... Just play around. The pigs come in the yard, I chase them all over the place. He's yelling at me. That's how I learn how to talk Hawaiian. I used to talk Hawaiian to him. He wants something or do this or that. Physically he was able to walk until he died. He wasn't bedridden or anything. But he used to get aches and pains ... He still could walk until the day he died. And he was slim and trim. We used to travel. Go to town or go sightseeing someplace. Visit family. He always had his hat and his dress clothes. Coat, hat, dress shirt, pants.

Besides being fisherman and whatever else. He was like the man for Makena. I mean when old folks came Makena, they always came to see him. That's the Hawaiian custom. All the old timers. When they came to Makena. Came all the way to the house. Sit down, talk story, eat something, then they go. In fact, I don't know if you heard about the Hinau family? They used to come and we used to go there. I remember going with him [Grandpa Kauwekane] all the way to Lāhainā one time. Woo, that was a ride. I was young. I remember them coming once. It was good. And my grandpa, my father, that's how he learned how to fish. Grandpa Kauwekane . He taught them everything, how to lay the net, the spots to fish, taught him all. He used to make net too. My father learned how to make net, patch net. That's one thing I've never learned, patch net. Oh, I could sew, help make net but not patch. That's another story though.

(When) the net rip, you got to cut them all up and then you got to know how to sew. My dad used to do that. That was too much for me. I'd go fish, I'd go fix the lau, and then all that stuff, load the boat or whatever. But patching it, not me.





Figure 3-1. Kauwekane Kukahiko, at Mākena Figure 3-2. Tomato farming at Pu'uōla'i, 1938, Landing circa 1930 (photo from private collection of Caroline DeLima, reproduction prohibited collection of Caroline DeLima, reproduction without permission)

Pu'uōla'i in the background (photo from private prohibited without permission)

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are actual participants in the gloric s history and development of the region. Left to right are Hae-hae Kukahiko, Moloa Auweloa, laundresses for Captain Makee, and John Kauwekane and Daniel Kauai, who worked on his fantation.

Figure 3-3. News clipping of Haehae Kukahiko, Moloa Auweloa (Kukahiko), John Kauwekane (Kukahiko), and Daniel Kauai at Ulupalakua Day, Maui News, June 10, 1939 (courtesy of the Leslie Kuloloio [aka Kuloloi'al).

When visiting Oneloa as it is today, Mr. DeLima expressed surprise at all the kiawe growth and changes. He goes on to explain that his family also raised pigs at Oneloa for subsistence purposes where part of his tasks as a boy was to gather the leaf of the pānini (prickly pear) for slop and noted that the wetland swamp areas were where the pigs would go when it rained:

I used to feed pigs by myself. Oh wow. They all still home (referring to his siblings), in the dark and I'm out feeding them. I started feeding pigs when I was 7, 8 years old. I used to go drive to get pāninis for the pigs with the truck along Makena road. I had my own sickel with a long rod and I had my little thing where I could poke the (young) panini leaf and throw it in the truck... then I used to cook them and feed them to the pigs

And this swamp that you're talking about (the wetland areas within the park). The swamp was this area right inside here. Our pigs used to go over there, when it rained this whole area filled with water, but over here, always had water over there (the wetland area at second entrance). The small little area over here, so the pigs used to go over there, lie in the water, sleeping in the mud and stuff. But over here had all kiawe tree stumps. And I think it was because, you know they had the radio station and my dad took care of the radio station with the tower and stuff. So I had that, that whole area they had to dig out all the kiawe trees and the later on it's all kiawe stumps over here. I think that's how they cleared it out. But now

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you go over there and all the kiawe trees are back again. You would never think that there was a radio station over there.

Mr. DeLima also recalled that in addition to his own family, the neighboring Nakasone family and a gentleman referred to as Ito Man also raised hogs on lands around Pu'u Ōla'i. The Nakasone's maintained a more formal pig farm while Ito Man raised hogs and served as the caretaker for the Kapohakimohewa family property while primary owner, Duke Kapohakimohewa, was living in Honolulu. Other nearby families included another pig farmer on the Oneloa side of Pu'u Ōla'i by the name of Nagamine, who resided there up until he left for Pu'unēnē School, and the Poepoe's near Maluaka Beach and Oneuli (Onouli). He provides the following recollection:

Okay. Makena Beach (Oneloa), this is the house? (indicating the remnant concrete foundation near the DLNR caretaker's cottage) Yeah, this is the area. It would be someplace down this side.

... There was a slaughter house up here and below the slaughter house. That's, that's where Nakasone and Ito Man he used to stay ... near the pig pen was right inside this area. And that had concrete slabs over there too. And the slaughter house had concrete slab too. So if nobody demolished it I could find a slaughterhouse and a pig pen area for Ito Man, that was his. Now further down was the Nakasone's pig farm. Okay. How did the name come up? They weren't there that long.

Ito Man was the one that came there, yeah, I used to cut his hair. Yeah my grandpa Kauwekane. I used to cut it with clippers.

He was the one taking care of the ... Duke Kapohakimohewa property as the same family with a Makua on the other side. But Duke, him and his wife were living in Honolulu, and that was the old man, Ito, use to take care of the property for them.

Well, um they had a pig farm up here at one time (indicating an area in the more southern portion of the park). Nagamine was his name, but he was there for a few years and when I left (to go to Pu'unēnē School) he was still there. But when after that ... I never did see him.

Mr. DeLima recalled that the sandy beach at Maluaka was owned entirely by the Baldwin family who had a house on the beach that was also taken care of by Poepoe. Other 'ohana who also lived in the general Mākena area during his time included the Shays who were just before the hotel, the John Buck family who preceded the Garcia's, and the Auweloa family. Next to Keawala'i church (likely at Apuakehau) Mr. DeLima recalled that there was a man named Gifford who had a pond that they called Gifford's Pond (possibly the old fishpond at Apuakehau) where there used to be clams and from there, he pointed out his family *kuleana* at Mökolea in Ka'eo, noting that they would go *kapapai* between 'Apuakehau and Mõkolea. The other place he knew for *kapapai* was south of Oneloa at a place called Kalua in Kanahena near where his mother, Caroline Kauwekane Antone Bechtle (DeLima), was raised by her *hanai* father Kauwekane. Mr. DeLima shared that the *kapapai* style of fishing at Kalua was carried out as follows:

.... it's a small bay. We set the net right across point to point here. And then the guys who stand. The road was close to the ocean. So over here guys, two or three guys would swim towards the net this way. And then if get extra guys, they can throw stones from this side and then chase the fish up to here. And that's where we'd go underneath, grab the net, then wrap the net on the fish. Well that was easy. That was fun.

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.... you need divers. It's not a one man, you need at least, I would say two guys to pull the net and three guys to slap the water. If you get five guys, easy. But they all gotta know how to swim. So the three guys come in, they straight up the middle, grab the net, pull em up. And then the guys ... the two guys on each end grabbed up the end spot, wrap em. And then we all come up with the net.

In the area of Kalua, Mr. DeLima also recalled the presence of a fishpond that was a place to find *uhu* (parrot fish, Scaridae):

... at one time had uhu in this pond. Oh the thing was big and you could see the fins. Yeah. Top of the back going. Oh my father (Abner W. DeLima) was so excited. He couldn't do nothing because you want to go home and get the net and the tide was coming up, but we never went. But just to see that and the water wasn't that deep, like maybe this (indicating a low waterline). Yeah. That was the exciting part for that pond. I never forget that.

When asked about the difference between *kapapai* and *hukilau*, Mr. DeLima noted that for *hukilau* you needed a rope with *lau kī* (tī leaf) attached and that is referred to as the *lau*. The *lau* would be loaded into the boat and you would extend the *lau* from point to point and the people on the shoreline would pull the *lau* that was strung with *wiliwili* floaters to keep the *lau* about three feet above the bottom of the ocean floor. Mr. DeLima describes dried *wiliwili* as being very good for net floats and specifically stated that these floats were used by his father for *hukilau* with the following description:

... that was the floaters for hukilau, wiliwili tree. And then the rocks, we would tie them on the rope too, between the floaters so many feet ... you would have two floaters here, then place one rock here below, so the rock goes on and then you could adjust it and set the floater. So you have the rock here and tied a rope with a rock and then the clearance between the rock and a rope is about 6 inches ... and then you place the floater and then the lau. So that's how you raised the rope with the floater... or you loosen the ties up so that the lau goes down because you get the peaks and valleys on the ground. So you adjust for that.

The divers would then be out in the water to help carry the *lau* over rocks in case it got caught up, the *lau* being the mechanism that chased the fish inside. When the *lau* would reach an area of sand, the people would *huki* (pull or tug) the *lau* until the fish starts to circle the sand area. When the fish had been corralled into the sandy area, the fishermen would get the boat with the net, surround the fish, and push the net toward and into the bag net that contained a small opening that sat on the bottom of the ocean. The divers would then go down to the bottom to pull bag net up and load it on to the boat. So in *hukilau* there is no need to slap the water to chase the fish into the net, the *lau* goes deep and brings all the fish inside to be surrounded resulting in a much bigger catch. Mr. DeLima noted that there were all kinds of fish during his time like *uhu*, *palani*, *weke*, *papio* and when they would *hukilau* people from Mākena, 'Ulupalakua, and Pu'unēnē would come to help his father and brothers, along with the Chang '*ohana* and his larger Kukahiko '*ohana*. At the end of the catch, his father would divide the fish with whoever would help to bring the *lau* in to take home for their individual families.

With regard to the differences between Oneloa and Oneuli (Onouli), the black sand beach on the north side of Pu'u Ōla'i, Mr. DeLima recalls that this bay was an area that the families would go

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for *hukilau*. He went on to share the following description of *hukilau* at Oneuli (Onouli) and his love of spearfishing:

... by Onouli side, that's another place we used to go hukilau. Plenty fish over there, plenty holes too. When the lau comes past, you check the holes that's loaded with fish inside there. So after we go inside, as soon as they bagged the fish, put them on the boat, there's another boat, I get my spear and poke the fish in the hole. I shoot one time I catch about two, three in one crack, loaded and them dump them on the boat, I would go back I'd say for about a good five to 10 minutes. After a while I stop to look around, then you see the eels coming out from the rocks. I grabbed my spear, then jump on a boat and pau. That's it. That's when I stop. That [the spear fishing after the lau went through] was the best part of the hukilau. Big kine holes, with fish just running like that [gesturing to reflect plentiful fish]. Wowl [Imitating spearfishing sounds]. Caught my spear, go down again. That was fun.

The other side [Oneloa (Big Beach)], not much holes, but on the Onouli side, good for fish and plenty of holes. Plenty, plenty eels. We call that puhi, the brown ones. I would look, I would see one, then another one or two, then I'm gone. I see two, three here, forget it. That's it [for spearfishing]. So that was my experience.

9-10 a.m. we would lay the lau and you would pull toward the sandy spot. The people on shore and in the cance or skiff would be guided and orchestrated by the diver. When you would get to the sand spot then the diver would get the bag to guide the fish in. You know its time when the fish started swirling in one spot. When you do hukilau here you would have to lay out the lau way out ... if your lau wasn't long enough then you tie it to a rope so that your lau could go out 30-50 feet more.

Specific to Oneloa, Mr. DeLima spoke of the abundance of *moi* (*Polydactylus sexfilis*) and the presence of a *moi* hole that required immense skill to fish with a net, an accomplishment which was otherwise dangerous and life threatening for those that were not schooled in the behavior of the water at certain times of the day:

There was a season for that (moi).. I know when my father used to go fishing, he took me with him and the pond (hole) was about the size of this area here (gesturing to a portion of the living room we were in), but it was kinda rough.... When he would throw the net, he'd come up, I would say maybe anywhere from eighty to a hundred (fish) fill up the ice box. You got to know how to swim to go in that hole.

Not anybody.... You gotto know how to swim. It was rough! Yeah, it was rough. But you gotta know the spot. Like you know Hawaiian fishermen, you gotto know the area. You just don't go in there blind. That wave will knock you out. The wave come in series right. So as the waves come you watching, and then when it starts really getting rough, then you go down and still working on then net and you come up for air, grabbing. You gotta know when to come out. You can ride the wave and come right out.

I just stayed up and watched. But he would, he would know when to come out cause he get steps (to follow) and stuff. So when the wave, come up, he come right out. It takes a while. After he throw the net it would take about, I don't know, maybe 8, 10 minutes to get all the net and come up. Not that easy. You gotta know what you're doing. He was superstitious too, you know? Oh yeah. When you go fishing like that, I would say where you going? Oh, he got all upset. 'Don't ask me, just follow me.' I know already we going fishing someplace. He don't take bag nothing. Was bad luck. But you know, everybody get their own ways of doing things.

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And he'd go up to the hole. He checked, and if he sees (fish), he takes a few step back and then he set up his net and then he'd crouch down then as a wave of come, boom, throw his net in there. You got all that takes timing. I just stand on the side and I watch. One time I went in the front (laughing) and he yelled, 'get out!' I was chase the fish away, cause they can see yeah. So you gotta know all that kine stuff so I just stayed back. When he'd throw the net, go in, I'd walk close and I'd watch him bring up the net and help carry the fish back. I was a young boy at that time. I was maybe 6, 7 years old.

And then Big Beach when the moi was running. I tried it one time. Just blind throw (from the shore). I caught about four or five moi. Yeah. Cause I heard stories. 'Hey, you try go throw the net, just blind throw.' So I did. I was about, I don't know, nine, 10 years old by myself. You gotta pick your own area where it's flat and safe. Whoomp! (demonstrating a throw) Caught four or five on a blind throw. That was it. Just to see right? That was it. I never did throw again. I was satisfied to see.

Mr. DeLima also recalled laying *moemoe* net at a beach colloquially referred to as Little or Small Beach, which is a smaller sandy beach on the western most coastline of Pu'u Ōla'i and directly south and west of Oneuli (Onouli). He explained that they would lay the net down the night before then pick it up the next morning. To illustrate what it was like, Mr. DeLima relayed the following experience which shows that the seas in this area were rough to navigate and fishing would require a high level of familiarity with the nature of the swells, the presence of a rip current, and the Ma'alaea winds:

... we lay net across here and then the next morning we went in to pick up the net, it was kinda rough. The boat flipped. Yeah, was rough. I don't know what happened, but the guy that was supposed to steer the boat, the boat was sideways, the wave was coming, you gotto keep the nose up facing the wave. But, by the time the wave came he started to turn too late, and the wave caught him sideways. My father them was in the water picking the net right there. I was picking up the net too, but the guy that was in charge of the boat needed to keep the boat straight, but the boat flipped. And then, uh, Uncle Richard ... he was just like my brother, he was one year older than me. He started swimming out this way (pointing to an aerial photo). The boat was about here. And he panicked. He and two other guys started swimming this way. They got caught in the current...

So they got caught in the current ... we started yelling to them, don't fight it, you know, just go with the current but edge your way out as you go. And finally they caught on, by time they was out here already. So they had to come around like this. It was spooky man, but we picked up the boat that flipped over. By the time the boat was up shore we had about six, eight guys. So he flipped up boat, put up the net ... came around this way towards the church way. So that's my experience with Little Beach.

At Little Beach, you can catch weke or any kind of other fish.

At Oneloa, even to the experienced swimmer who was raised on this beach and instilled with generational knowledge of the resources and conditions, the power of the waves and current were still something to be revered and respected:

I did go out there (Big Beach) to swim and you know, I dive in deep, but just to see. The water was clean. You could see a good 10, 20 feet deep. But see when I go up Big Beach I always took my fins with me. And if the waves are rough, all you gotta do is go down. You're underneath. Nice, quiet. But if you come up, the wave hit you, you're going to be tumbling

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over. Pound you in the sand. I experienced all of that with Big Beach. I was lucky. But I ride the wave right? If you fight the wave that wave will pound you into the sand. And then I tried, when I see the wave coming, I went underneath, it passed me right over. I swam in the deep too.

With regard to the wind that comes across 'Alalākeiki Channel, Mr. DeLima shared the following story with the wind rising when returning by boat toward Pu'u Ōla'i from Kanahena:

... if we go Kanahena to hukilau. Ho man. When we come back, once we pass Pu'u Ōla'i, coming to the bay by the [Mākena] landing, you see the Ma'alaea wind coming. White caps. Where you see white caps it's like monsters. So you go down, you look up, the wave just start breaking the boat down. Up and down and when you go down, you no see land. I don't see nothing. I grabbed my fins and I sat on the side of the boat think that if the boat does down I'm bailing out of the side of the boat with my fins ... when I see the white cap, I'm like, God, I grabbed my fins and goggles and I just wait. But they [the boat operators] know how to ride the waves. But when you see the white caps that means the wave breaking. When you go Kanehana fishing, I look at the time, oh I know after 12 that's it. And that is when it's [the Ma'alaea wind] is coming.

At the time of World War II, Mr. DeLima was four or five years old and recalled how the military would practice maneuvers at Oneloa, further recalling the presence of military camps in the area near second entrance, as well as the shift in how folks went about their daily lives in Mākena:

And then during the war, the military used to come over and we had military camps here here (pointing to the area near second entrance). Yeah. And they used to uh, do maneuvers over here. The barges. The big boats would be out here. They come with the landing barge, drive up to the shore, drop the ledge, and then the guys run off. Like how you see in the movie.

When the war broke out, the day that they bombed Pearl Harbor, I didn't know what was going on, but man, my father, Chang, and all those guys, they were all alerted so they had to go up Pu'u Ōla'i to be on the lookout watching. They cut down kiawe trees to block the road. The road going towards Kanahena. That was right after Big Beach, inside this area. Cut down the trees just to block the road. We were in a car moving around, and they went back home. The night that, that Pearl Harbor was bombed. I didn't know the specifics, but all I know was that Pearl Harbor was bombed. The Japanese are here, they're going to attack us. Oh God. And my father and them had to go up Pu'u Ōla'i at night on the top and then Uncle Eddie Chang (Sr.) and few other guys. I forget who he was, but that was their job at night.

(To watch for) anything unusual and stuff like that. But nothing happened, just a thought, you know. And then after a while ... the military started and moving in, then they had maneuvers over there, and then they had a military camp right inside here (in the beach vicinity of second entrance). I would say, I don't know, six months, maybe a year. They put up barracks, slept there. Yeah. Had about, I don't know, four or five barracks and slept overnight. And we all were up here right at our house. You could see the lights at night working. That was the during the war. And they even came to our place. Makena. One night they had maneuvers. They came here during the day, they dug foxhole right around our house, that whole area. The place didn't have Kiawe trees, it was clean and they had maneuvers at night. Big search lights, and they had one plane flew out by the ocean, by Big Beach, put in one target, and then had machine guns. Guys are shooting at the target. Just that one night.

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They just came in and took over. I dunno, maybe they told grandma (Caroline DeLima) and I don't know. But grandpa Kauwekane was over there watching. They all come in by the yard and fill up the canteen with water. I'm on a step sitting watching them. Some guys come by and give me a quarter to pay for the water. That was my experience.

Mr. DeLima also shared his memories of the park landmark of Pu'u  $\overline{O}$ la'i, from climbing the *pu'u* and harvesting cinder, to the presence of sheep atop the *pu'u*:

I climbed the mountain three times in my young days. We used to have sheep on Pu'u Ōla'i. In the evening time you see them coming up, line up. They have their own trails. Wild. I don't know .... somebody, I'm sure somebody put them up there, but yeah ...

They would come down to the side... eat kiawe beans and get water. I don't know where they get the water from, but there wasn't there was self sustaining until eventually, I don't know. I don't know when, by the time I left for high school, they were gone already.

I was in shape. You take one step (up) you come down half step, one step (up) come down half step. And then go sideways. Yeah, you go straight up, cannot. You've got to go sideways walk. Yeah. And then, uh, let me see, you know, Big Beach. I used to haul cinders back here inside here someplace. Wait, no, the parking lot here (first entrance), maybe about here. You see one driveway, go up small hill and I used to go with a truck and fill up the truck with cinders and take it to the house and drop it for the road for the yard. And then you come down a few more feet on the level spot. There's a big side of the hill. Black cinders. Good for orchids and stuff. So I used to, my dad had friends at Pu'unene that this one guy ... Poison (his name). I filled up his military Jeep trailer with black cinders. He used to raise orchids. He owned one service station, him and my father was good friends with all those guys and they came down to help re-roof the house, the Makena house (near the landing) ... So they helped my father re-roof the whole the house one day and my job was to fill up that trailer with black cinders. I was driving already at that time. I was about 9, 10 years old.

With regard to the *mauka* view plane from Pu'u Õla'i, Mr. DeLima noted that on clear days, when he was atop the pu'u, he could see his grandmother's (Francis Wilcox) home at 'Ulupalakua:

So I just roam the top on one side, went down to other side. See what it's like ... if you know 'Ulupalakua, Grandma Wilcox, she had a house, in 'Ulupalakua. And was straight up from the house (at Oneloa), you could look straight down (from 'Ulupalakua) and you could see Pu'u Öla'i and Makena house. That close. So when I was up there ('Ulupalakua), you know, I could see Pu'u Õla'i. So when I went up there (to the pu'u) I could see how close it was. And I remember they had a porch door and, at a certain time, the door would be open at the 'Ulupalakua, six miles apart. So I could tell when the doors open or not. You could see it. Yeah. You could see! Cause when the door is closed, it was a white door. So if I look up, I don't see the white I know the door is open. And there's a little porch over there with a bench. And then my grandma sit over there. But I couldn't see her, but I know that the door was open.

Finally, when asked about the differences between now and his childhood with regard to the popularity of Oneloa with residents and visitors, Mr. DeLima shared the following memory and closing thoughts on recreational use of Maui's shoreline areas:

Nobody. Not like now. That place when I grew up over there, it was only me on the beach. That's where I worked on my, my senior year... (the Lahainaluna football) coach told my dad that he wanted to put me as a running back for football, I was playing end, but my dad didn't

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tell me that part. He just said, I want you to come home. Stay home and work out and get ready for football the next year. But somebody else told me that the coach is thinking of putting you as a running back... but my dad knew so I went home and that's where I trained, Big Beach. On the sand, morning and afternoon. One lap down, one lap back. From end to end. Yeah. In the middle I would be sprinting hundred yards. That's in the morning. And then afternoon, same thing. For one month... But I used to sprint on the sand, like hundred yard syrints...

(Now) no more enforcement. Of all these guys kayaking, how many are legal? They just ripping off the state. I'm sure they get business taking all these kayakers out there, right? I think DLNR should be the one controlling that. Where's your business license? Let me check where you working. Doing investigation. Now that's in Makena, what about the other places? Lahaina. In Lahaina yesterday, all the boats, you know, taking people to ride, scuba diving. I saw about four, five. Some going Molokini. Some right around by (the) Pali. You get about 50 people, diving, snorkeling. Calm looking area, calm waters, anybody checking on them?

#### 3.3 Mr. ASHFORD DELIMA - SEPTEMBER 10, 2019

Mr. Ashford DeLima was raised at Pu'u Ōla'i and is the youngest brother of both Mr. Abner DeLima and Ms. Carol-Marie Lee (DeLima), as well as, the President of Ho'oponopono o Mākena, a Native Hawaiian Organization. During an informal phone call on September 10, 2019, Mr. DeLima expressed project specific concerns regarding the potential for increasing recreational use of Oneloa as a result of the proposed comfort station creating greater accessibility and more amenities for both the general and visiting population. Mr. DeLima noted that with increasing use, there is increasing pressure on resources. During the June 25, 2019 meeting of the Oneloa Coalition, Mr. DeLima wanted to be sure that the proper *wahi 'inoa* of Oneloa, rather than the colloquial name of Big Beach, was recognized and used in conversation and planning. He further expressed concerns with regard to the placement of the proposed future sewer line from the comfort stations to the County sewer system and wanted to know what the procedures would be in the event of sewer line break.

#### 3.4 Ms. Carol-Marie Ka'onohiokalā Lee (DeLima) - August 22, 2019

Ms. Carol-Marie 'Ka'onohi' Lee (DeLima) is the youngest sibling of Mr. Abner DeLima (junior) and Mr. Ashford DeLima. Ms. Lee was born at Kula Sanatorium and raised at Pu'u Ōla'i, residing in both the home that was constructed by their maternal grandfather Kauwekane Kukahiko, as well as, the FAA house at Oneloa. Kauwekane Kukahiko, obtained the land by exchanging his Kanahena land with 'Ulupalakua Ranch while their fraternal great-great grandfather was William Slocum Wilcox, a whaling captain and the patriarch of a strong Hawaiian family, thus laying the foundation of generational ties throughout Maui and particularly along the south shore from Kanahena to Kīhei.

Where her brothers recalled the active leadership role and expertise of their father in offshore fishing, Ms. Lee recalled that their mother would gather the ocean resources that were available in the waters near their home:

There is a papa in the front of Pu'u Ōla'i, not on the Little Beach side, but in the front, off the point. Had limu līpoa there and I would go with my mother with the rice bag and collect limu,

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'opihi, and hā'uke'uke (urchin). While she picked 'opihi, I would watch for the waves, the sets to come in, to be able to warn her when they were coming. There is a spring there, freshwater spring, at the papa, where the limu grew.

Ms. Lee also recalled being tasked with harvesting from the *pānini*, although unlike her brother Abner who picked the leaves, Ms. Lee gathered the fruit of the *pānini* as a food resource. She shared the following description of what the fruit was like and how it was collected off of the cactus plant:

... (we) gathered pānini to eat because it was cooling and it tasted like watermelon. It was hell to pick because of the heu, the prickly part or needles, but it was worth it. We would need to put a bag like old rice bag, the old muslin type of bags, at the end of a stick and then put it at the end of a stick like fruit picker. When the fruit was in the bag you would need to swish around the bag to remove heu<sup>2</sup> and put it in the bucket. To prepare the fruit you would cut the skin off and the fruit is inside - like dragon fruit. We would gather pānini at Mo'oloa mauka of Keone'oio-Mākena Road. Don't see too much of it anymore.

As the Moku representative for Honua'ula, Ms. Lee also participated in discussions related to the proposed project as a member of the Oneloa Coalition (see Section 3.7) in seeking to balance the needs of the park with the cultural resources and *mo'olelo* of her childhood home. Important in this is understanding the *wahi 'inoa* of a place and at their February 13, 2019, Ms. Lee wanted to be sure that those who were in those meetings, as well as those who use the area knew that the placename of Oneloa translated to long sand or beach which is descriptive of the place itself.

#### 3.5 MR. LESLIE KULOLOIO (AKA KULOLOI'A) – E-MAIL CORRESPONDENCE NOVEMBER 14, 2018

The late Mr. Leslie Kuloloio was genealogically connected to Honua'ula and Makena through the familial lines of both his mother and father. Also, a founding member of Hui Alanui o Makena, a Hawaiian Organization and non-profit that was organized in 1985 in response to the then proposed closure of a section of the traditional Alaloa and blockade of shoreline access fronting the former Maui Prince Hotel, Mr. Kuloloio actively consulted and advised on various issues as they related to the traditional cultural resources of Honua'ula Moku to ensure preservation of the Alaloa and recognition of resources in the area. In e-mail correspondence and follow up conversations, Mr. Kuloloio expressed strong opposition to the expansion of parking and placement of additional asphalt which would result in a loss and destruction of natural resources. He went on to note that the manner in which folks were using the area, specifically Little or Small Beach for nude sunbathing and other activities, was disrespectful and not in-line with cultural uses and practices of the area. He went on to name the prominent landmarks of Pu'u Ōla'i and the lava flow at Ahihi-Kina'u, along with the places of Mo'oiki, Mo'oloa, and Mo'omuku between the two as being a large and continuously significant shoreline of volcanic and coral papa (shelves) that retained historic significance prior to 1700 and deserving of listing on the National Register of Historic Places.

<sup>&</sup>lt;sup>2</sup> down or fine hair on fruits or leaves, hairlike growths or spines on sugar cane stalks or cactus (Pukui and Elbert 1986:67)

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#### 3.6 Mr. CODY NEMET TUIVAITI – AUGUST 29, 2020

Mr. Cody 'Koko' Nemet Tuivaiti was born in Upolu, Samoa and came to Hawai'i at six-months old. Mr. Tuivaiti was fostered by Aunty Rose Hapakuka at Hawaiian Homes, Uncle Kenneth Kahalekai for a time in Waihe'e, with the Akina Ohana in Kula Kai, and finally Ms. Myra Nemet who would formally adopt him into her Kihei home. Through out his upbringing with these well-known Hawaiian *ohana*, he learned about traditional Hawaiian *mahi 'ai* (farming) and *hana lawai'a* (fishing) with much time spent in Kihei , or South Maui, being raised on the fishing stories of the region. Throughout his childhood and early adult hood, Mr. Tuivaiti would continue to go to Waihe'e in the summer while staying with Akina Ohana in Kihei during the school year. He had fond memories of fishing at Po'olenalena, colloquially known as Chang's Beach, and Palauea with the *ohana*. At Palauea, Mr. Tuivaiti remembers the *heiau* being a place of reverence and a constant through life, with the changes to the area, which appears to have happened overnight, he wonders what has happened to this *heiau*, the place which led to his interest in cultural issues.

With regard to Oneloa and Pu'u Ōla'i, Mr. Tuivaiti recalls that his connection to the *pu'u* began while he was being fostered. He also remembers gathering *limu* and 'opihi in the area as a youth while also trying to manage Western influences. As a youth, he would hitchhike to Oneloa to spend all day at the beach and with his increasing cultural awareness as an adult following his acceptance into the Nā Koa Pā and mentorship by Ke'eaumoku Kapu he understood that by bringing practices to life you begin to revive a place. It was at this time that started to dive into the *mo'olelo* of areas and started *huaka'i* (travels or visits) through Keone'o'io. Gathering *ho'okupu or makana* (gifts or offerings), he would bring these to the *ohana* of the places he would go. His interest in regional *mo'olelo* and traditional spaces would lead him to Pu'u Ōla'i where he acknowledges the *mo'olelo* of Puuoinaina, Puuhele, the rising of Makali'i (known in Western astronomy as Pleiades) and the opening of Makahiki Season. For Mr. Tuivaiti, the *pu'u* is important for *kilo* (study, observe, forecast, examine) where you can begin to understand wind and cloud patterns, the landscape surrounding you, as well as a grounding space.

With regard to the proposed project, Mr. Tuivaiti believes that adding built features degrades the spiritual feel of the place knowing that Pu'u Öla'i is also a resting place for *'iwi kūpuna* (ancestral burials). He also wanted to stress that Oneloa should not be considered a family beach as it is dangerous and records the highest frequency of injuries. Mr. Tuivaiti points out that when you create comfort stations, you can also create a sense of safety and false security. Cumulatively, he notes that developments contribute to the need for improvements in these types of spaces and wonders what that will hold for the future of our natural areas. For the park at large, Mr. Tuivaiti stresses the implementation of online information bases that provide injury statistics for Oneloa, as well as basic ocean safety and cultural education. He goes on to assert that nearby developments which may contribute to increased use of Oneloa (Makena) State Park by visitors and new residents alike should be responsible for contributing to the development and maintenance of such information, noting that such points of information dissemination could be through social media, the Maui tourist channel, Maui and Hawaii Visitors Bureau, hotel

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information centers, rental car kiosks and centers, and other visitor platforms like Yelp and Trip Advisor.

## 3.7 ONELOA COALITION – SUMMARY OF PROJECT SPECIFIC CONCERNS FROM MEETINGS HELD BETWEEN OCTOBER 2018 AND APRIL 2019

The mission statement of the Oneloa Coalition (Coalition) states that those who make up the Coalition are a consortium of stakeholders working in the spirit of cooperation and collaboration to ensure the preservation of historical and cultural sites and the restoration and management of the natural ecology of Oneloa State Park, while enhancing the stewardship of traditional and recreational uses for future generations. On the topic of the proposed project, while some members of the Coalition were in favor of the project, others expressed reservations about the development of the comfort stations with opposition to the proposed showers.

Those who were in favor of the project noted that many of the users of the comfort stations located across from Keawala'i Church and at Makena Landing Park come in from Oneloa and Onouli. By having comfort stations situated at Mākena State Park, those in support felt that some of the pressures, which included intensive use of the facilities and vehicular congestion along Old Makena Road, could be relieved in the more residential areas of Mākena. By that same token, those who expressed reservations noted that construction of the proposed project could ultimately lead to an increased use of the park which would heighten pressures on resources or lead to resource degradation through run-off contaminants from the shower in particular. Along similar lines, some felt that there would be an increased visitor/residential presence as a result of a false sense of safety with the presence of comfort stations and referred to the rough nature of the water and strength of the currents that result in a notoriously high injury rate at Oneloa, further asserting the area should remain in a natural state.

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### 4.0 TRADITIONAL AND CUSTOMARY PRACTICES OF COASTAL MO'OIKI AND MO'OLOA AHUPUA'A AT ONELOA

#### 4.1 TRADITIONAL HAWAIIAN AGRICULTURE AND PLANT RESOURCE GATHERING PRACTICES

#### 4.1.1 Ka 'Oihana Mahi 'Ai – Agricultural Practices

The late Sam Po described how the seasonality of water availability in the Honua'ula region dictated agricultural patterns, adaptation, and types of crops that were successful along the coastline (see also Section 2.1.4.1). For the most part, Mr. Po noted that gourds and melons did very well during the coastal growing season and listed the following varieties as being grown in the lower elevations of Honua'ula: *ipu oloolo* (Hawaiian watermelon), *ipu nuhou-lani*, pumpkin, and *poha* or *ipu 'ala* (Cantaloupe melon [*Cucumis melo var. cantalupensis*]). Such gourd and melon type crops were important for both dietary subsistence, as well as *'umeke pōhue* (gourd containers) for the storage and transport of *poi* and water (Abbott 1992:90).

While gourd and melon crops were an important part of Hawaiian livelihood, it is also well known that the primary agricultural staple noted for Honua'ula in general was 'uala (potato) (see also Section 2.1.4.1). Based on the testimony for *kuleana* claims during the Māhele 'Āina and the writings of Handy and others (1991), it is clear that traditional potato cultivation was likely carried out in both *kīpuka* (soil pockets) within the younger 'a'a flows, as well as cleared lands adjacent to Mākena State Park. Historic accounts of agricultural endeavors at the former location of Mākena School, just *mauka* of Oneuli, in the early part of the 20<sup>th</sup> century also shows that the soils of the region were well suited for agriculture as it was home to one of the largest school yard vegetable gardens on Maui, at 1.5-acres, which was primarily given over to the cultivation of sweet potatoes (The Maui News 1918).

# 4.1.2 Integration of Historically Introduced Plants into Subsistence Gathering and Household Uses

In addition to the traditional crops noted above, historically introduced plants would become an important part of both the Hawaiian diet, as well as, support crops for farm animals. Mr. Abner DeLima and Ms. Carol-Marie Lee (DeLima) shared memories of gathering *pānini* (*Opuntia ficus-indica*) from lands directly adjacent to the project area (see Sections 3.2 and 3.4). Introduced prior to 1809 (Fish and Wildlife Service 1995:51428) by Don Francisco Marin, one of the three most influential foreigners who assisted Kamehameha I with his wars of conquest (Apple and Apple 1977), prickly pear cactus (*Opuntia ficus-indica*) was given the Hawaiian name of *pānini*, or *pāpipi*, which means fence or wall. It was thought that the *pānini* was brought by Marin to project his vineyards in Honolulu from animals and would be thieves (Apple and Apple 1977). The plant has since become naturalized in dry, disturbed habitats on Maui (Fish and Wildlife Service 1995:51428), with only small stands remaining near the project area. With regard to gathering, and aside from cattle forage, the fruit of the *pānini* is eaten either raw, as in Ms. Lee's experience,

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or used in jellies and as a base in homebrewed swipe or moonshine (Taylor 1949a:36). The young joints were either pickled or cut and dried, while the expressed juice was used in whitewash for exterior work. The pulp of the fruit was also used for poultices and the production of cactus candy (McClelland 1916:35), while the school children of 'Ulupalakua School substituted gum for the sap of the *pānini* leaves that would be gathered into a white gum. Mr. Miranda, a teacher at the school, noted that the *pānini* gum was highly nutritious and gave the students strong white teeth (Taylor 1949b:24). As Mr. DeLima explained, and in addition to the uses by the school children, the young leaves were also gathered and cooked down for pig feed.

With regard to the footprint of Mākena State Park, historic era agricultural and animal husbandry practices are known to have supported the families and individuals who called these lands home. For the DeLima Ohana, growing up in the shadow of Pu'u Ōla'i began with their grandfather Kauwekane Kukahiko, who constructed their childhood home himself and was familiar with the fertility of the soils at the base of the pu'u as he successfully grew tomatoes in the latter years (Figure 4-1) and farmed alfalfa for cattle feed with Angus McPhee, the former operator of Kūheia Ranch on Kaho'olawe, in the earlier years:

... at the alfalfa field, used to be the alfalfa field, that's where he used to work at Pu'u Ōla'i... he was working for Macfee (sic). And Macfee had a place there at the alfalfa fields, they call it hay, they pile some kind of alfalfa and they dry and you get hay. (Lee-Greig 2002:C-2 and C-3)



Figure 4-1. Kauwekane farming tomatoes, Pu'u Ōla'i in the background.

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# 4.2 KA 'OIHANA LAWAI'A -- MAKAI RESOURCES AND THE TRADITIONAL CULTURAL PRACTICES OF THE SHORELINE AND OFFSHORE AREA

The lands of Mākena State Park are comprised of a portion of the Oneuli (Onouli) shoreline, including the landmark of Pu'u Ōla'i, and encompasses the stretch of beach known as Oneloa. Use of shoreline resources and preference for residency along the coastline from a time period prior to Western contact to the present is evident in the *mo'olelo* of the region (Section 2.1.4) and the continuation of fishing traditions practiced by families of the Mākena region (see Sections 2.1.4.2). The nearshore and offshore marine environment Mākena State Park provides excellent opportunities for fishing and *limu* (seaweed) gathering.

The fishing traditions of Mākena, and the waters off of the State Park specifically, were shared by Mr. Abner DeLima (junior) (Section 3.2) who recalled that his family engaged in traditional fishing practices of *kapapai* and *hukilau* and spearfishing immediately following *hukilau* at Oneuli (Onouli) and *moi* fishing at Oneloa (Figure 4-2). Mr. Abner DeLima noted that *hukilau* and spearfishing was carried out on the Oneuli (Onouli) side of Pu'u Õla'i because of the reef there:

Plenty fish over there, plenty holes too. When the lau comes past, you check the holes that's loaded with fish inside there. So after we go inside, as soon as they bagged the fish, put them on the boat, there's another boat, I get my spear and poke the fish in the hole. I shoot one time I catch about two, three in one crack, loaded and them dump them on the boat, I would go back I'd say for about a good five to 10 minutes. After a while I stop to look around, then you see the eels coming out from the rocks. I grabbed my spear, then jump on a boat and pau.

...The other side [Oneloa (Big Beach)], not much holes, but on the Onouli side, good for fish and plenty of holes. Plenty, plenty eels. We call that puhi, the brown ones. I would look, I would see one, then another one or two, then I'm gone. I see two, three here, forget it. That's it [for spearfishing].

Mr. Abner DeLima recalled the presence of *uhu*, *palani*, *weke*, and *papio* at Oneuli (Onouli). *Uhu* (*Scaridae*), or parrot fish, generally travels in schools and are noted to have been a favored fish with Hawaiians. Though eaten dried or broiled, *uhu* was generally eaten raw and preferred when combined with pieces of the fat liver:

When the fishermen's meal was ready there were sour poi, balls of sweet potatoes, pieces of *uhu* fish mashed with fat chunks of *uhu* liver, mixed with finely pounded *lipa'akai* seaweed, a dish of *uhu* fish cooked with hot stones in a calabash, with gravy heavy with the fat of the liver, *uhu* cooked with pieces of liver inserted in the flesh, and the cups of '*awa*. They ate hetily, ate till they were filled, ate till they could eat no more (Kamakau in Titcomb and Pukui 1977:148)

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Figure 4-2. Kauwekane at Mākena with an outrigger and fishing nets in a flatbed Ford after a day of fishing, circa 1930-1940.

According Titcomb and Pukui (Titcomb and Pukui 1977:148-149), for fishermen in the ancient days, the *uhu* revealed what sort of behavior was going on at the fisherman's home. Where *uhu* frolicked in the water, that was a sign of too much levity at home, if two *uhu* seemed to be rubbing noses, it was a sign that there was flirting going on at home – which then would be a reason to guit fishing and go home to confront his wife.

*Palani* (Acanthurus dussumieri), or *palani-maha-o'o* was well liked as a food despite the strong odor of this particular fish. The odor of the *palani* is mythical tied to the tale of Ke'emalu:

As she floated around in the ocean she recalled what her grandmother, Hina, had told her, that she had an ancestor among the fishes of the sea, named Palani-nui-mahao'o. She called to him and in a short time she found herself on her ancestor's back, being borne shoreward. As she was taken back to shore, she was seized with such a desire to urinate that she was unable to control herself and so she urinated on her ancestor. Her ancestor became very angry and left her out at sea. It is said that was how the *palani* got its strong odour (sic). (Titcomb and Pukui 1977:139)

An alternative explanation for the origin of the odor comes from the tale of Punia where the hero of the story killed multitudes of ghosts and rolled them up in a fish net. It may be the ghosts tainted the *palani* net and is therefore the reason for the odor (Titcomb and Pukui 1977:139). In preparation for consumption, the skin was always removed and the fish eaten raw, broiled, or cooked in a calabash. While broiling has been specifically noted as a preferred method of cooking for getting rid of the odor, an additional method of cooking *palani* in an *ipu haona* (calabash) is

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detailed in the story of Kamiki and translated by Mary Kawena Pukui (in Titcomb and Pukui 1977:27):

Ku ana keia ma ka puka o ka hale, a o ka mama iho la no ia o ka awa. Kena aku la keia I ke kaikuaana e hakui il ka i'a oia ka Palani Maha-oo, a eleu aku la ke kaikuaana a a ke ahi, kau na pohaku eho iluna, a okioki ka i'a a loko o ka ipu haona, komo kahi wai, a o ka haku'i (hākui ?) iho la no ia a po'i a paa<sup>3</sup> ("Kaao Hooniua Puuwai No Ka-Miki" 1911) He asked his brother to cook the fish, that is the *palani-mahao'o* in a calabash. The brother lit the fire quickly, placed some *eho* stones on it, cut up the fish, put it in a calabash, added water, then the hot stones, and put the lid on the calabash.

Mary Kawena-Pukui (translator)

Titcomb and Pukui (1977:139) further note that this fish was *kapu*, or forbidden, for men but free to women.

*Papio* is the young *ulua* (*Carangidae*) which is eaten raw or cooked with small *ulua* being broiled as the preferred method of cooking. The area around the eyeball of the fish was also considered a delicacy but the eyeball itself when cooked would become hard and inedible (Titcomb and Pukui 1977:156).

Lastly, *weke* (*Mullidae*), are large-scaled fish that are usually found inside the reefs and sometimes in the deeper waters but always near the reefs. A popular fish for food, *oama* (young *weke*) was eaten either raw after being salted or dried, while full-grown *weke* were sometimes eaten raw, but more commonly cooked by broiling in *tī* leaves over hot coals (Titcomb and Pukui 1977:162). Titcomb and Pukui (1977:162) also describe the following method for descaling *weke* of their large scales:

To remove the scales, the oama were put into a large container with pebbles and sand, stirred until the scales were loosened or rubbed off, then rinsed in sea-water. Large weke were scaled by scraping.

Besides food, both red and light-colored *weke* were popular as offerings and chosen as demanded by custom with red offered for particular ceremonies or reasons and white for others. *Weke* was also used in sorcery, drawing on the meaning of the word "to open" and offering the fish with a prayer to open or release either something unwanted, in preparation for forgiveness, or in prayer to open a door to reveal truth. Finally, the flesh of the head of some *weke*, like *weke pahulu*, is known to have a poisonous substance that causes those who eat it to have restless sleep or nightmares where the head feels lower than the feet thus producing a sort of delirium (Titcomb and Pukui 1977:161). *Mo'olelo* also associates *weke pahulu* with Kaululā'au's encounter with Pahulu, the chiefs of the ghosts that resided on Lāna'i, during his banishment on Lāna'i and



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before he expelled the spirits and made the island hospitable for man (Fornander 1880:82; 1917, 1919b). Articles recounting *mo'olelo* as it relates to Kaululā'au and the effects of eating the head flesh of *weke pahulu* were also published in the Hawaiian language newspapers. Pukui (in Titcomb and Pukui 1977:162) gives the following translations for a section of *Na Wahi Pana o Lanai* (*Nupepa Kuokoa 1912*)

Kaululaau sat in the *milo* tree with a flat stone. He saw Pahulu peer into the spring, for the light of the moon shone fully upon it. As Pahulu stooped to dip up some water, Kaululaau pushed aside some of the milo leaves. The moon cast his reflection in the water. He made grimaces, and when Pahulu saw the reflection making faces (he was deceived), and he dived to catch him. As soon as Kaululaau saw that Pahulu's whole body had gone into the water, he threw the stone down. The spark of life went out of Pahulu's body and he died. His spirit leaped into the sea, and that is why the people who eat weke are troubled with nightmares.

An excerpt from the story of Eleio as it relates to Kaulula'āu that was published in the Hawaiian language newspaper Ke Au Hou (October 31, 1863) was also translated by Pukui (in Titcomb and Pukui 1977:162)as follows:

Then Kaululaau went and sat over the pool where he dropped a stone on Pahulu, killing him. Pahulu died but he lived on in the itching caused by certain fish. That is why there is itching in the head of the weke and the itch is always there in the fish caught off Lanai to this day.

At Oneloa, Mr. DeLima noted the abundance of *moi* both at a fishing hole that only an experienced fisherman like his father, who was taught to fish that hole from his father-in-law, would be able to safely net *moi*:

You got to know how to swim to go in that hole.

Not anybody.... You gotto know how to swim. It was rough! Yeah, it was rough. But you gotta know the spot. Like you know Hawaiian fishermen, you gotto know the area. You just don't go in there blind. That wave will knock you out.

... when it starts really getting rough, then you go down and still working on then net and you come up for air, grabbing. You gotta know when to come out. You can ride the wave and come right out... Not that easy. You gotta know what you're doing.

*Moi* (*Polydactylus sexfilis*) was so abundant during his time that large schools of *moi* would also run near and parallel to the shoreline. During a visit to Oneloa, Mr. DeLima explained that you could see the schools of *moi* magnified in the wave at the sand line just as it was about to break. With regard to the abundance of *moi*, Mr. DeLima had this to say:

And then Big Beach when the moi was running. I tried it one time. Just blind throw (from the shore). I caught about four or five moi. Yeah. Cause I heard stories. 'Hey, you try go throw the net, just blind throw.' So I did. I was about, I don't know, nine, 10 years old by myself. You gotta pick your own area where it's flat and safe. Whoomp! (demonstrating a throw) Caught four or five on a blind throw. That was it. Just to see right? That was it. I never did throw again. I was satisfied to see.

Moi is well known as a fish that was reserved for chiefs and in the time of the kapu system, forbidden to maka'āinana. Titcomb and Pukui Titcomb and Pukui (1977:110-111) note that this

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<sup>&</sup>lt;sup>3</sup> Diacriticals included in the quote when included in the original article

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particular fish was not common, and in keeping with the recollection and experiences of Mr. DeLima at Oneloa, assert that it was a hard to catch as this fish is a fighter and loves foamy, rough places in relatively shallow water. With regard to preparation, as a result of their study on the native uses of fish, Titcomb and Pukui (1977:111) report that some of those that they spoke to said that *moi* was always eaten raw, but others said that it was salted, dried, or cooked in *ti* leaves or in the *imu*.

Ms. Lee (DeLima) (Section 3.4) noted that the intertidal areas at Oneloa were also rich with marine resources that her family also relied upon. As a child, she would help her mother gather *limu līpoa* (seaweed), *hā'uke'uke* or shingle urchin (*Colobocentrotus atratus*), and *opihi* (*Cellana* sp.) at the *papa* just off of Pu'u Öla'i, which was also a notable location of a freshwater spring. *Limu līpoa* (*Dictyopteris plagiogramma*), a much sought-after seasonal seaweed that was favored for its fragrance and storage life, was gathered both as a food resource, for medicinal purposes, and later as an important market commodity for women and children near the turn of the 20<sup>th</sup> century (Aiona 2003:18; Setchell 1907; United States Bureau of Fisheries 1905:751). To treat thrush in a child between four and six weeks old, *limu līpoa*, *limu kala*, and broiled *kalo* (taro) would be chewed together by the mother and transferred to the child's mouth (Krauss 2001:76). Kaaiakamanu and Akina (1922:60) refer to *limu līpoa kai* and it's '*āina* counterpart *limu līpoa kuahiwi*, a salty mountain weed with green shiny leaves, as being used for children with thrush or afflicted with a general weakness in the body. As a part of the Hawaiian diet, *limu līpoa* is popular for its spicy flavor and was frequently used as a condiment, similar to pepper or sage in the Western diet (Rose 1912), and eaten with fish (Aiona 2003:Table 1).

Finally, the development of aquaculture systems, in the form of *loko kuapā* and *loko pu'uone/haku'one*, may have once supplemented the open ocean fishing and communal surrounds along the Honua'ula coastline. As previously stated (see also Section 2.1.4.2.1), these ponds would have been depended upon as a more consistent and reliable food resource both for fish and *limu* by the tenants of the *ahupua'a* in which the pond was located. Within the boundaries of Mākena State Park, on the Oneloa side of the park, there is one fishpond of the Type II or *loko pu'uone* type. Paniaka pond, formerly a Government pond that was sold to Manu as a part of Grant 1498, notes that the pond itself was approximately one-acre in size (see Figure 2-8). Though no longer in use or maintained at the present time, this pond may have likely have been relied upon and cared for by *maka'āinana* who lived in proximity to the pond; as well as the *konohiki* of the region.

#### 4.3 TRADITIONAL HAWAIIAN BURIALS

The most common and widespread method of interment as a part of traditional Hawaiian mortuary practices was burial within sand dunes, with nearly all dune land environments across the island chain being known to contain large numbers of traditional, pre-contact burials. In addition to sand dune burials, and particularly relevant for the park, are cinder cone features as focal points for traditional interment and mortuary practices. The individual burial takes a variety of forms that range from secondary bundle burials (cranium and long-bones) to primary fully

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flexed burials (most common), to fully extended burials. According to David Malo (in Westervelt 1917) the process of interment in the earth occurred as follows:

Two or three persons only, not a large number, take the body away secretly. This is done by night, not by day. Then a grave is dug - a round pit like the hole in which bananas are planted. The proper depth is just above the hips. The grave is made smooth and sloping. While digging they take the dirt away in a mat or dish, lest traces should be seen.... The natives think that if anyone knows the place the ones would be taken away and made into fish-hooks and the flesh be made food for a shark.

At Mākena State Park, at least five individuals are known to have been lain to rest within the southern cinder slope of Pu'u Ōla'i and reinterred within the same substrate, while a minimum of four individuals have been exposed within the sandy shoreline area because of high surf and erosion.

#### 4.4 TRADITIONAL HAWAIIAN SPIRITUALITY AND CEREMONY

Historic properties that have been interpreted as ceremonial or ritual sites and features have included:

- Modification of prominent natural features,
- Large heiau (temples constructed for either the entire political district under powerful ali'i and their kahuna [priests] or at the 'ili 'āina level for the maka'āinana),
- Shrines such as *ko'a*, which are dedicated to fishing, or other occupational endeavors that are generally dedicated to the *akua* (god) that presided over that skill, and,
- Pohaku a Kāne (also noted as a family altar, a single stone meant to provide a vessel for Kāne to increase abundance) (Beckwith 1970b:46-47; Hommon 2013:88-98; Kirch 1985:38).

While there were several ceremonial features like *ko'a*, or shrines, dedicated to fishing and the worship of *Kū'ula* known to the families of Mākena (Mr. Robert Kalani in Tau'a and Kapahulehua 2007:45-57), as well as, major *heiau* documented within lands adjacent to the footprint of the proposed project area (see Section 2.1.4.3 Traditional Ceremony and Religion), no extant *heiau* or traditional ceremonial structures were identified within the construction footprint of the proposed project. This factor notwithstanding, such sites and features have been identified and documented with the boundary of the overall park, including the immediate area of Pu'u Ōla'i (Figure 4-3). Informant testimony was gathered by J.F.G Stokes from the young Mawai (Mawai *'āpio*) about a *heiau* that was said to have been located on top of Pu'u Ōla'i (J.F.G. Stokes, *Maui Heiau*, *December 1916*, Maui Historical Society AR7-2-24). Although the reported *heiau* was not seen by Stokes during his 1916 reconnaissance of Maui and subsequently verified by Mawai, it is possible that the structures that Mawai spoke of as *heiau* (see Figure 4-3).

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Figure 4-3. A portion of the the USGS National Map (2019) and Honua'ula Title Map (Wall 1894) showing the locations of the North (light blue) and South (Pink) Comfort Stations in relation to previously identified historic properties focus on sites and features interpreted as having a ceremonial function.

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Initially identified during an inventory survey that occurred concurrently with archaeological monitoring within the Park (Yent 1993) and revisited as a part of the current project effort (Yent 2021), SIHP -03137, which is located within the central crater of Pu'u Ōla'i consists of seven features, two of which (Features A and B) may be traditional Hawaiian structures, while the three (Features C through E) may be associated with circa-1970 "Hippie" occupation of the area (Yent 1993:23 and 25) and Features F and G, which were identified during a 2017 site visit by park archaeologists, are modern additions to the complex (Yent 2021:43). With regard to the traditional Hawaiian features, SIHP -03137 Feature A is a small enclosure constructed on the southern slope of the crater, the architecture for which consists of stacked a'a cobbles, whereby wall measures 3m long and one boulder wide. At the time of the 1993 survey, the interior height of the feature was documented at 0.5m high while the exterior height was documented at 2.2 m in height (Yent 1993:23). The exterior height of the retaining wall has since been updated to nearly twice that high at 4m as a part of the follow up inventory survey associated with the current project effort (Yent 2021:43). Feature B is a retaining wall constructed at the base of the crater slope and located to the east of Feature A. Measuring 0.9 m high and a minimum of 2 m long, there is an area that gives the appearance of an a'a filled platform on the upslope side of the retaining wall and covers an approximate area of 1.7 m by 3.5 m. A single waterworn basalt boulder was found in association with this feature (Yent 1993:21-23). Based on the level of effort that would have been necessary for the construction of Feature A, as indicated by the neatly stacked retaining wall construction within the crater of the pu'u (Figure 4-4); as well as the lack of associated historic materials, these features were interpreted as possible ceremonial features (Yent 1993:23) that may be consistent with the *heigu* noted by Mawai (Yent 2021:40).

As noted above, shrines such as ko'a, are dedicated to fishing, or other occupational endeavors that are generally dedicated to the akua (god) that presided over that particular skill. As noted in Section 2.1.4.2.2, Elspeth Sterling reported that at the base of Pu'u Ola'i, there was a ko'a in the form of a "square heap of black stone" where "fishermen made offerings before putting out to sea" (Sterling 1998:229). Twenty-two features (A-V), altogether documented as SIHP 50-14-03136, is located north of Small Beach on the lower western slope of Pu'u Ōla'i and includes enclosures and fishing shelters associated with early modern era use of the area, as well precontact enclosures and platforms (Yent 1993:16). Of particular interest, with regard to this section, are Features F and G which may collectively represent a ko'a associated with traditional Hawaiian ceremonial practices. Feature F is a paved platform defined by a natural outcrop and low stacked aa wall, the interior of which is level and loosely paved with coral pebbles. An approximate 5m by 1.5m area upslope of Feature F, and between features F and G, is also densely payed with coral pebbles. Finally Feature G is a small walled enclosure, constructed of stacked a'a boulders measuring 3m by 3m with walls approximately 0.7 m high by 0.6 m wide (Figure 4-5). Located on a rise above Feature F, the interior of the enclosure also contains a'a boulders and offerings of branch coral (Yent 1993:19). Based on the locational, as well as physical description of Feature G, this feature may be consistent with the ko'a noted by Sterling.

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#### Site 3137

The summit of Pu'u Ōla'i consists of a larger northern peak and 3 smaller peaks to the south. Five (5) features (A-E) were recorded within the depression between these peaks in 1992, including walled enclosures, raised platforms, and rock walls (Yent 1993;21-25). Feature A consists of a walled enclosure built into the interior slope with a 4m high retaining wall (Fig. 24; Photo 13).



Fig. 24. Plan-view map of 3137, Feat. A. Photo 13. Retaining wall of Site 3137, Feature A (view SE)

Figure 4-4. Updated plan view map and photo of SIHP 50-01-03137 Feature A, possible heiau noted by Mawai Ōpio (provided courtesy of State Parks (Yent 2021).

#### Site 3136

This site is located on the western slope of Pu'u Ōla'i in the area behind Pu'u Ōla'i Beach. The complex of at least 22 features, including enclosures, platforms, and midden scatters, is suggestive of a temporary to semi-permanent habitation complex. Feature G is a possible ko'a that was initially recorded in 1992 (Photo 12) (Yent 1993). State Parks archaeologists initiated the mapping of the features in 2017 with additional features being recorded with the Site 3136 complex.



Photo 12. Site 3136, Feat. G enclosure and detail of coral and shell on the makai (west) slope

Figure 4-5. Updated photo of SIHP 50-01-03136 Feature G, ko'a possibly noted by Elspeth Sterling in Site of Maui (provided courtesy of State Parks (Yent 2021)

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Finally, *mo'olelo* recorded in Hawaiian academic literature, along with stories shared by Mr. Robert Kalani (in Tau'a and Kapahulehua 2007:45-57), shows a reverence for the *manō* (shark) 'aumakua (ancestral gods) for many of the families of Mākena through their affinity to the sea and their connectivity to the underwater caves at nearby Pu'u Ōla'i. The guardians, or 'aumakua, are the embodiment of ancestral spirits in either animal like sharks, frigate birds, limpets, lizards, insects, and quadruped mammals, or elemental forms, like a flame burning in service of Pele, stones, certain trees or other natural phenomena (Beckwith 1917). Where *manō* was concerned, their obedience was bound to their devotee, who in turn, became their keeper with their worship and consequent service, extending to his family and handed down from generation to generation (Beckwith 1917). In her article on *manō*, Martha Beckwith summarizes Emerson's notes regarding his research into the care and keeping of this 'aumakua:

Shark gods may be male or female. Those described are invariably red, shining, light or spotted, to correspond with, their sacred character, as allied to the gods. They are of human origin, the constant reference of shark or lizard gods to an abortive child being possibly suggested by the appearance of the partly formed foetus (sic). Their worship is handed down from father to son, a special keeper (Kahu) being entrusted with their care. They are invoked with particular prayers and have temples erected for their worship. Their special function is to aid in the food supply of the household-generally by giving the fisherman good luck at seaand to protect him from drowning. They are, in fact, regarded as spirits of half-human beings which, rendered strong by prayer and sacrifice, take up their abode in some shark body and act as supernatural counselors to their kin, who accordingly honor them as household divinities. (Beckwith 1917)

This description is also reflected in the interview of Mr. Kalani where he describes how and why his grandfather and uncles would take care of their *'aumakua* who resided in the underwater caves of Pu'u Ōla'i.

# 4.5 WAHI PANA O PUUOINAINA – THE EXPANSE FROM MOLOKINI TO PU'U ÕLA'I AS THE PERSONIFICATION OF PUUOINAINA

Wahi pana, in Hawaiian language, is defined as a legendary place (Pukui and Elbert 1986:377). Such storied places may include *heiau*, birthing places and residences of high *ali'i*, and legendary landscapes. A traditional cultural property (TCP) "can be defined generally as one that is eligible for inclusion in the National Register of Historic Places because of its association with cultural practices or beliefs of a living community that are (a) rooted in the community's history and (b) important in maintaining the continuing cultural identity of the community" (Parker and King 1998):

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. Examples of properties possessing
such significance include:

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- a location associated with the traditional beliefs of a Native American (Native Hawaiian) group about its origins, its cultural history, or the nature of the world;
- a rural community whose organization, buildings and structures, or patterns of land use reflect the cultural traditions valued by its long-term residents;
- an urban neighborhood that is the traditional home of a particular cultural group, and that reflects its beliefs and practices;
- a location where Native American (Native Hawaiian) religious practitioners have historically gone, and are known or thought to go today, to perform ceremonial activities in accordance with traditional cultural rules of practice; and
- a location where a community has traditionally carried out economic, artistic, or other cultural practices important in maintaining its historic identity

Given the above, areas that are recognized as *wahi pana* could also be classified as traditional cultural properties as such spaces embody one or more of the above examples. In the story of Pu'u Ōla'i, we have a *mo'olelo*, or Hawaiian tradition, that speaks to the nature of the world in the origin story of prominent geological features and their connections to the Hawaiian pantheon both within Mākena State Park and Alalākeiki Channel.

The crescent-shaped islet of Molokini is located in 'Alalākeiki Channel between Kaho'olawe and Maui, off the coast of Honua'ula. Molokini's origin story ties the tiny islet to Pu'u Ōla'i, the prominent shoreline hill that's a central feature of the Park. According to *mo'olelo*, Molokini was a *mo'o* (large mythological lizard) who, until her death, was known as Puu-o-inaina. Her the parents were Puu-hele, the father, and Puu-o-kali, the mother. They were also *mo'o* who became the hills of Pu'uhele standing just beyond Kamaalaea (modern day Ma'alaea and now destroyed) and Pu'u o Kali in the mid-elevations of Keōkea Ahupua'a overlooking the Kula Kai shoreline. She lived most of her life on Kaho'olawe, which was then called Kohemalamalama. Puu-o-inaina would become the wife of two brothers, the sons of the famed priest Luaho'omoe whose death, on the orders of Hua of Lāhainā, brought on a severe drought across the Pae' Äina. Eventually her time on Kaho'olawe would cause her to forget her own husbands as she fell for Pele's lover Lohiau and subsequently became the target of the fire goddess' anger. Pele's wrath toward Puuoiania would lead to the creation of Molokini and Pu'u Ōla'i and her connection to Honua'ula as recounted by Fornander:

While these sons [of Luahoomoe] lived at Hanaula (above Olowalu), they thought a great deal of Puuoinaina, their wife, but they did not know what she was doing. Because after that, Puuoinaina took for her the husband of Pele, Lohiau, and forgot her own husbands.

But when Pele heard what Puuoinaina had done she became angry, she then cursed Puuoinaina. When Puuoinaina heard this cursing from Pele she felt so ashamed that she ran into the sea. She left her home, Kohemalamalama, now called Kahoolawe. Pele, residing at Kahikinui, thought so much of her husband, Lohiau, who was living at Kealia, Kamaalaea, that she started out to meet him; but she found her way blocked by Puuhele, so she went from there and waded through the sea. She saw her lizard rival, Puuoinaina, stretching from Kahoolawe to Makena, so she came along and cut the lizard in two, right in the middle,

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separating the tail from the head. The tail became Puuolai at Makena, and the head became Molokini. When the husbands heard that their wife was dead, they looked and beheld the head of their beloved standing in the sea, so they called the name of the islet Molokini. That is the story of how it was born of its parents and how it obtained this new name Molokini. (Fornander 1918:518)

Kepelino, a mid-19<sup>th</sup> century historian and contemporary of David Malo, Samuel Kamakau, and John Papa I'i, dedicated some time to recording the stories of the gods of the Hawaiian pantheon and wrote the following with regard to the two classes of gods:

Kane, Kanaloa, Lono, this is the great Godhead of the forefathers of Hawaii, and these gods belong to class one. They are male gods. They have no source. They made all things and all power was theirs... And these gods made many gods, the hosts of gods, innumerable gods to serve them, and they, Kane, Kanaloa and Lono, made man and all things.

There are very many gods in class two, millions upon millions of them, and this class is subdivided into three kinds....

- 1. Bodiless spirits: these are the spirits created by Kane as servants to serve the gods....
- The aumakua: these are the spirits of the dead who have passed on from this earth and are perhaps counted in this class because they have become bodiless spirits or perhaps because of the character of their deeds done after death....
- The district chiefs: these ruling chiefs were put into the class of gods because of the great power they had and the tapu observed toward them... (Kepelino 2007:10-12)

Where Kāne was the principal creator and embodiment of light and day in one of his forms, Pele, was a physical creator of land upon the earth, as well as a destroyer for renewal through control of fire that could consume along with her command of volcanoes. In Westervelt's account of Pele, he notes that integral to Pele's story is her wanderlust that fueled her travels across the Pacific (Westervelt 1916:4-10). Pele's arrival to east Maui and Haleakala is also recounted by both Fornander and Westervelt (Fornander 1919c; Westervelt 1916:11), which for Honua'ula is significant in the formation of Pu'u 'Ōlai and Molokini following her punishment of the *mo'o* Puu-o-inaina (Fornander 1919a). The *mo'o*, as noted in the above *mo'olelo*, have been described as reptilian in form and "terrifying" in size that is somewhat akin to a dragon form rather than the more common gecko and have been described as follows by Kamakau:

The mo'o that guarded these ponds were not the common gecko or skink; no, indeed! Once can guess at their shape from these little creatures but this is not their real form. They had a terrifying body such as was often seen in old days; not commonly, but they were often visible when fires were lighted on altars close to their homes. Once seen, no one could preserve his skepticism. They lay in the water from two to five fathoms in length (twelve to thirty feet) and as black in color as the blackest negro. If given a drink of awa they would turn from side to side like the keel of a cone in the water (in Beckwith 1970a:125).

Given the above it seems apparent that the cinder cone of Pu'u Öla'i, the islet of Molokini, and the expanse of water between that connects the two parts of Puu-o-inaina can be collectively

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considered a traditional cultural property and therefore eligible to the National Register of Historic Places.



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### 5.0 ANALYSIS AND RECOMMENDATIONS

The State of Hawai'i has a constitutional and statutory obligation to protect native Hawaiian customary and traditional gathering rights. We offer this introductory section to explain the basis and substance of the state's obligations, as well as the impact of this protection upon traditional western private property rights and the role of private landowners in the necessary research and analysis of traditional and customary practices. To provide the appropriate historical context for such traditional and customary practices, an authoritative treatise on this subject state:

At the time of Western contact in 1778, Native Hawaiians "lived in a highly organized, selfsufficient, subsistent social system based on communal land tenure with a sophisticated language, culture, and religion." Access from one area to another—along the shore, between adjacent ahupua'a (land divisions [usually extending from the mountains to the sea along rational lines, such as ridges or other natural characteristics]), to the mountains and the sea, and to small plots of land cultivated or harvested by native tenants—was a necessary part of early Hawaiian life. Gathering activities supplemented everyday food and medicinal supplies, while cultural and religious practices sustained the people in a variety of ways.

Prior to 1839, ancient Hawaiian custom and usage governed the islands. To ensure the political existence of the kingdom in the face of expanding foreign influence, Kamehameha III developed a system of codified laws that incorporated protections for ancient tradition, custom, and usage. In other words, the laws in force at the time of the Mähele in the mid-1800s and for some time thereafter recognized the importance of traditional and customary practices to the native people. Many of these laws survived later political transformations and continue to apply as background principles of private property law in the State of Hawai'i. (MacKenzie et al. 2015:1082).

With respect to "laws [that] survived later political transformations", the present-day obligation of the State to protect native Hawaiian traditional and customary practices is based, first, upon the State Constitution and, in addition, upon the legislature's acts as codified in the Hawai'i Revised Statutes and the judiciary's interpretation of the state constitution and state statutes through case law. These authoritative sources of law, in essence, describe how the state seeks to integrate and protect native Hawaiian traditional and customary practices in a western system of private property ownership.

Article XII, section 7 of the Hawai'i Constitution provides:

The State reaffirms and shall 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, subject to the right of the State to regulate such rights.

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#### Delegates to the 1978 Hawai'i Constitutional Convention explained:

The proposed new section reaffirms all rights customarily and traditionally held by ancient Hawaiians. . . . [B]esides fishing rights, other rights for sustenance, cultural and religious purposes exist. Hunting, gathering, access and water rights, while not provided for in the State Constitution, were nevertheless an integral part of the ancient Hawaiian civilization and are retained by its descendants." Hawaiian Affairs Comm., Standing Comm. Rep. No. 57, reprinted in 1 Proceedings of the Constitutional Convention of Hawai'i of 1978, at 637, 640 (1980).

With respect to legislative acts, Section 7-1 of the HRS specifically protects the right to gather, although that right is limited in scope to the enumerated items that are primarily used for constructing a house or starting a fire. Section 1-1 of the HRS offers broader protection for the exercise of traditional and customary rights. By codifying "Hawaiian usage" as an exception to the common law of the state, this statutory provision provides "a vehicle for the continued existence of those customary rights which continued to be practiced" after November 25, 1892. *Kalipi v. Hawaiian Trust Co.*, 66 Haw. 1, 10, 656 P.2d 745, 750–51 (1982).

In a series of landmark cases beginning with *Kalipi*, the Hawai'i Supreme Court reaffirmed the customary and traditional gathering rights of *ahupua'a* tenants, particularly under article XII, section 7 of the Hawai'i Constitution *See Kalipi*, 66 Haw. at 10–12, 656 P.2d at 750–52; *Pele Defense Fund v. Paty*, 73 Haw. 578, 837 P.2d 1247 (1992), *cert. denied*, 507 U.S. 918 (1993); *Public Access Shoreline Haw. v. Haw. Cnty. Planning Comm'n*, 79 Hawai'i 425, 903 P.2d 1246 (1995), cert. denied, 517 U.S. 1163 (1996) (commonly known as "*PASH*"); *Ka Pa'akai O Ka 'Āina v. Land Use Com'n, State of Hawai'i*, 94 Hawai'i 31, 7P.3d 1068 (2000). Through this line of cases, the Supreme Court established the manner in which state agencies must apply constitutional protections of native Hawaiian gathering rights in the development of private real property.

In *Kalipi*, the Hawai'i Supreme Court ruled that "any argument for the extinguishing of traditional rights based simply upon the possible inconsistency of purported native rights with our modern system of land tenure must fail." *Kalipi*, 66 Haw. at 4, 656 P.2d at 748. *In Pele Defense Fund v. Paty*, the Court held that "native Hawaiian rights protected by article XII, section 7 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. at 620, 837 P.2d 1272. In the PASH case, the Court stated that "legitimate customary and traditional practices must be protected to the extent feasible in accordance with article XII, section 7." *PASH*, 79 Hawai'i at 451, 903 P.2d at 1272

The Court in PASH stated that the "State retains the ability to reconcile competing interests under article XII, section 7". *PASH*, 79 Hawai'i at 447, 903 P.2d at 1268. As part of this balance of interests, the Court stated: (a) "[although access is only guaranteed in connection with undeveloped lands, and article XII, section 7 does not require the preservation of such lands, the State does not have the unfettered discretion to regulate the rights of ahupua'a tenants out of existence", *id.* at 451, 903 P.2d at 1272, and (b) "the balance of interests and harms clearly favors

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a right of exclusion for private property owners as against persons pursuing non-traditional practices or exercising otherwise valid customary rights in an unreasonable manner", although, "[0]n the other hand, the reasonable exercise of ancient Hawaiian usage is entitled to protection under article XII, section 7", *id.* at 442, 903 P.2d at 1272.

In Ka Pa'akai O Ka 'Āina, the Supreme Court provided further direction on the constitutional and statutory responsibility of state agencies to preserve and protect the rights of native Hawaiians to carry-out their traditional and customary practices to the extent feasible and, in so doing, "the Court introduced an analytical framework that governmental agencies must specifically consider when balancing their obligations to protect traditional and customary practices against private property (as well as competing public) interests." (MacKenzie et al. 2015:1109).

In *Ka Pa'akai O Ka 'Āina*, 94 Haw. at 35, 7 P.3d at 1072, the Court held that the State Land Use Commission (LUC) failed to satisfy its constitutional and statutory obligations to preserve and protect customary and traditional rights of native Hawaiians (Belatti 2003). At issue was the LUC's grant of a petition to reclassify over 1,000 acres of land in the *ahupua'a* of Ka'upulehu on Hawai'i Island from the State Land Use "Conservation District" to the State Land Use "Urban District" in order to allow the development of a new resort. The Court acknowledged a variety of traditional and customary rights asserted by the petitioners, who were comprised of a coalition of Native Hawaiian community organizations. These rights included "fishing [and] gathering salt, 'opihi, limu, kūpe'e (edible marine snails whose shells are used for ornaments; the rare ones by chiefs), Pele's Tears (tear drops made from pahoehoe lava), and hā'uke'uke (edible sea urchins)." *Ka Pa'akai O Ka 'Āina*, 94 Haw. at 43 and nn.19-21, 7 P.3d at 1080 and nn. 19-21. The Court also recognized the "special religious significance" of an 1800-1801 lava flow to gather salt for subsistence and religious purposes. *Id*.

The petitioners further asserted that "the petition area is associated with important personages and events in Hawaiian history, contains well-known physical entities (such as the shoreline, Ka Lae Mano and the 1800-1801 lava flow) and remnants of the native tenants' lateral shoreline and mauka-makai trail system, living areas and burials." *Id.* at 43, 7 P.3d at 1080. Agreeing with the petitioners that their interests as native Hawaiians and as tenants of the *ahupua'a* of Ka'upulehu would be impaired by the proposed development in relation to the use of ancient trails and the shoreline area to practice traditional and customary gathering rights, the Court held the LUC had failed to develop a proper record on such rights and consider and analyze the extent of Native Hawaiian practitioners' exercise of traditional and customary rights in the affected area. The Court stated that the LUC, as the reviewing state agency, must consider and make express findings of fact and conclusions of law regarding the cultural, historical, and natural resources of a subject property as they relate to Native Hawaiian rights when determining what restrictions should be placed on land use. *Ka Pa'akai O Ka 'Âina*, 94 Haw. at 35, 7 P.3d at 1072.

The Court further held that the LUC, by directing the developer to work independently to protect cultural rights, impermissibly delegated the LUC's constitutional and statutory responsibility, as a State agency, to protect and preserve cultural resources and native Hawaiian rights. The Court

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vacated the LUC's grant of the developer's application for a land use boundary reclassification and remanded the case to the LUC to make findings of fact and conclusions of law relating to:

 the identity and scope of "valued cultural, historical, or natural resources" in the petition area, including the extent to which traditional and customary native Hawaiian rights are exercised in the petition area;

(2) the extent to which those resources - including traditional and customary native Hawaiian rights - will be affected or impaired by the proposed action; and,

(3) the feasible action, if any, to be taken by the LUC to reasonably protect native Hawaiian rights if they are found to exist. Ka Pa'akai O Ka 'Āina, 94 Haw. at 35, 7 P.3d at 1072.

The Court's framework seeks "to effectuate the State's obligation to protect native Hawaiian customary and traditional practices while reasonably accommodating competing private [property] interests". *Id.* at 46-47, 7 P.3d at 1083-84. Beyond the directives to the LUC in this specific case, this three-part framework provides specific direction to state and county agencies when considering land use and development projects on previously undeveloped land and should provide guidance to developers with respect to the record that must be prepared for a discretionary land use authorization or permit.

In attempting to comply with the *PASH* and *Ka Pa'akai O Ka 'Āina* cases, the LUC had to address the issue of who has the responsibility to identify (and place on the record) any pre-existing native Hawaiian gathering rights. In subsequent boundary amendment proceedings, the LUC directed the petitioner to consult with the Office of Hawaiian Affairs (OHA) and with *kūpuna* in the area regarding past and present practices. The Office of Planning (OP) also consults with OHA. The LUC does not do any independent investigation, rather relies on the record made by the petitioner and OP (and any intervenor) and determines whether that record is sufficient.

Once the rights have been identified and the impacts assessed, the LUC is faced with the difficult problem of reconciling the private property rights, particularly the right of exclusion, with the gathering rights of native Hawaiians, which of themselves can require a certain amount of privacy and seclusion. Following the Supreme Court's remand in *Ka Pa'akai O Ka 'Āina* and in another case, *In the Matter of the Petition of Destination Villages Kauai*, Docket No. A00731 (2001) in which native Hawaiian gathering rights were shown to exist, the LUC put conditions on its approval of reclassification of property that in each case required the formation of a committee made of up a developer's representative and a representative from the local native Hawaiian community to develop a plan to ensure that the gathering rights are protected. The plans are subject to LUC approval; any controversy arising from the plan is to be resolved by the committee. In the event the committee members cannot agree, they must agree on a third person who then will break the tie.

The LUC chose the committee approach because it did not believe it had sufficient information on resource conservation and management for the area in either of the two cases to make the final decision and, as a practical matter, would not be able to create such a record within the AA PROJECT NO. 1708

statutorily-mandated (365-day) time frame for making a decision. Because the Supreme Court has forbidden the LUC to delegate its decision-making power over balancing the private property rights and native Hawaiian gathering rights, forming a committee with each party having an equal vote in the outcome and requiring that any plans be approved by the LUC ensured that both sides would have their interests adequately represented and that the LUC would be the final arbiter that the balance reached meets the requirements of the law.

For purposes of the present project, the following sections provide an analysis of potential effects to currently known traditional and customary practices within and adjacent to the proposed project footprint. Recommendations for managing potential impacts to on-going practices or protecting the integrity of traditional cultural resources that may be present within and adjacent to the project area should traditional cultural practices that were once carried out in the area be re-established.

#### 5.1 POTENTIAL PROJECT EFFECT AND RECOMMENDATIONS

#### 5.1.1 Traditional Cultural Resources and Customary Practices Specific to the Project Footprint

Within the specific construction footprint of each proposed comfort station and parking area expansion, this study did not identify any plant or animal resources that would be utilized in either traditional customary practices or for traditional dietary needs. The dominant plants within the project footprint at both locations are non-native and include kiawe (*Prosopis pallida*), which makes up the entire forest canopy, and sour grass (*Digitaria insularis*) (Hobdy 2019). In general, the project area at both locations have been previously graded and disturbed to accommodate the existing parking area.

#### 5.1.2 <u>Traditional Cultural Resources and Customary Practices Identified within Mākena State</u> Park and adjacent to the Proposed Footprint

While it does not appear that the construction of the comfort stations would directly eliminate resources necessary and important for carrying out traditional and customary practices, concerns about the operation and maintenance of the comfort stations, the potential for increased use of the park as a result of the presence of the comfort stations, as well as the presence of the structure itself in relation to Pu'u  $\bar{O}$ la'i at the North Site were raised.

With regard to the operation and maintenance of the comfort stations, both stations were sited as far from the shoreline and wetland areas as possible in order to address concerns regarding impact to these areas. Prior comfort station designs included the development of a leach field to process and dissipate effluent resulting from use of the comfort stations. Following intensive community consultation, and in response to community concerns regarding contamination of ground resources and eventual seepage of effluent into the marine environment, the design shifted to a self-contained unit that would be pumped and transported off-site, with plans to potentially connect to the wastewater treatment facility in Mākena in the future. Additionally, a drainage sump designed to collect shower water or surface runoff is also incorporated into the

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overall project design. Examination of distances from the project area limits shows that the north site limits are located over 150 ft. from the proposed drainage sump and over 600 ft. from the shoreline, while the southern site limits for the comfort station is located over 600 ft. from the nearest wetland areas to the north and south and roughly 200 ft. from the shoreline. Barring rupturing of lines or waste collections system, as is the risk with any project, based on discussions with the project engineer as confirmed by the design consultant, the self-contained effluent storage and shower drainage sump should provide adequate protection to both wetland and marine resources of the area. Concerns with regard to the use of non-biodegradable detergents at the showers, and the potential for these detergents to enter the ecosystem regardless of the catchment system were also raised. To this end, and though potentially not entirely foolproof, the Park has committed to actively discouraging the use of shampoo and soap at the showers through signage banning the use of detergent located in the shower and comfort station areas.

With regard to Pu'u Ōla'i, one of the main geological features of the Traditional Cultural Property of Puuoinaina, concerns were raised about the proximity of the North Comfort Station to the pu'u, including encroachment into the base of the pu'u and potential degradation of the overall setting and viewshed from the pu'u. Prior to the location of the comfort station as currently proposed, several alternatives, including a location on the north side and closest to the pu'u were evaluated. The currently proposed location is situated to the south and east of the paved parking lot and set back from the base of the pu'u by approximately 275 ft. in an effort to set the facility back while still fulfilling the purpose and need of the comfort station. Though not directly affecting the body of the pu'u itself, Mr. Kuloloia expressed strong opposition to the expansion of parking and placement of additional asphalt due to loss and destruction of the natural resources, while Mr. Tuivaiti points out that adding to the current to the built environment surrounding the pu'u degrades the spiritual feel of the place. With these concerns in mind, any further construction and addition to the built environment above and beyond the current proposal is discouraged. Additionally, submittal of nomination forms for Wahi Pana o Puuoinaina to the National Register of Historic Places is recommended. Such listing could lead to either grant or other funding opportunities, along with potential partnerships, to develop educational signage and other resources for residents and visitors alike. Such resources could serve to perpetuate Hawaiian mo'olelo while honoring the footprint of the legendary kūpuna of this wahi, while potentially being able to manage the area as a traditional cultural property and return to a system that encourages seasonal rest of areas in order to revitalize and promote restoration of the resources from Molokini to Pu'u Ōla'i and by association Mākena State Park as well.

Finally, concerns regarding the attraction of more park users to the area as a result of the presence of the comfort stations were expressed. With increased user traffic, concerns pointed toward added pressures of consistent crowds on the beaches and pedestrian traffic through wetland areas from the parking lots and Makena-Keone'o'io Road. Such pressures are perceived to have potential cumulative impact on the integrity of the environment in which the marine resources that were identified in the preceding sections rely upon. While it may be difficult to measure direct association between increased use due to the presence of the proposed comfort

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stations vs. increase in tourism and population growth on Maui in general, working toward developing a system of monitoring, or checks and balances, through community and visitor industry advocacy is recommended as a means to fulfill long-term management goals that would fulfill the mission statement of the Department of Land and Natural Resources to "(e)nhance, protect, conserve and manage Hawaii's unique and limited natural, cultural and historic resources held in public trust for current and future generations of the people of Hawaii nei, and its visitors, in partnership with others from the public and private sectors." (https://dlnr.hawaii.gov/)

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### 6.0 REFERENCES CITED

#### Abbott, Isabella Aiona

1992 Lā'au Hawai'i : Traditional Hawaiian Uses of Plants. Bishop Museum Press, Honolulu, HI.

#### Aiona, Kamaui

2003 Ike Kuuna Limu: Learning About Hawaii's Limu. Master of Science, Botanical Sciences, University of Hawai'i-Mānoa, Honolulu, HI.

#### Akana, Collette Leimomi and Kiele Gonzalez

2015 Hānau Ka Ua: Hawaiian Rain Names. Kamehameha Publishing, 597 South King St. Honolulu Hawai'i 96813.

#### Alexander, W.D.

1882 Interior Department, Appendix 1, to Surveyor Generals Report. A Brief History of Land Titles in the Hawaiian Kingdom. P. C. Advertiser Company Steam Print, Honolulu, HI.

1890 A Brief History of Land Titles in the Hawaiian Kingdom. In *Hawaiian Almanac and Annual for 1891*, edited by T. G. Thrum. Press Publishing Company Print, Honolulu, HI.

#### Americans at Otaheite

1792. In *The Gentleman's Magazine*. Vol. 26, No. 4. London.

#### Apple, Russell A. and Peg Apple.

1977 "Don Francisco Marin." *Honolulu Star-Bulletin*, 02 Dec 1977. Vol. 66, No. 336 No. Honolulu, HI.

#### Ashdown, Inez

1971 Ke Alaloa O Maui, The Broad Highay of Maui. Ace Printing Company, Wailuku, HI.

#### Bailey, Charles T.

1929 Indices of Awards Made by the Board of Commissioners to Quiet Land Titles in the Hawaiian Islands Prepared for Office of the Commissioner of Public Lands of the Territory of Hawaii, Honolulu, HI. Star-Bulletin Press, Honolulu, HI.

#### Barrere, Dorothy B.

1975 *Waile'a: Waters of Pleasure for the Children of Kama*. Prepared for Bishop Museium Department of Anthropology, Honolulu, Hawai'i Bernice P. Bishop Museum, Honolulu, Hawai'i

Traditional Cultural Practices Study for Mäkena State Park and Analysis of Potential Cultural Impacts for Two P a g e 88 Proposed Mäkena State Park Comfort Stations and Related Improvements Final = 6/15/2011 

#### AA PROJECT NO. 1708

#### Beckwith, Martha W.

1917 Hawaiian Shark Aumakua. American Anthropologist 19.

1970a Hawaiian Mythology. University of Hawai'i Press, Honolulu, HI.

1970b Hawaiian Mythology. University of Hawaii Press, Honolulu, HI.

#### Belatti, Della Au

2003 Act 50: The Protections, Pitfalls, and Possibilites of the New Cultural Assessment Requirement for Hawai'i's Diverse Communities. In *He Mau Mo'olelo Kānāwai o ka 'Āina "Stories of the Law of the Land"*, pp. 3-28. Hawai'i Environmental Law Program, University of Hawai'i at Mānoa.

#### Chinen, Jon J.

1958 The Great Māhele, Hawai'i's Land Division of 1848. University of Hawai'i Press, Honolulu.

#### Clark, John R. K.

1989 The Beaches of Maui County. University of Hawaii Press, Honolulu, HI.

#### Clark, Stephan D., Dennis Gosser, Jeffrey Pantaleo, Boyd Dixon, Lisa J. Rotunno-Hazuka, Gwen Hurst, Paul Klieger and Susan Lebo

1997 Data Recovery Procedures in Parcels III and IV Makena Resort Corporation, Mākena, Makawao, Maui, Volume I. Prepared for Makena Resort Corporation, Kihei, HI. Dept. Anthropology, B. P. Bishop Museum, Honolulu, HI. On file at State of Hawai'i Department of Land and Natural Resources State Historic Preservation Division.

#### Cordy, Ross and J. Stephen Athens

1988 Archaeological Survey and Excavation, Seibu Site 1916 and 2101, Makena, Honuaula, Maui. Prepared for Seibu Hawai'i, Inc., Kihei, HI. International Archaeological Research Institute, Inc, Honolulu, HI.

#### Cottrell, Curt

2018 Alan Downer, Administrator, State Historic Preservation Division. HRS §6E-8: Request to Demolish Site 50-50-14-4665 (Military Pillbox) and Determination of "Historic Property Affected with Mitigation Commitments" Mākena State Park, Ahupua'a of Mo'oiki, District of Honua'ula, Maui

TMK: (2) 2-1-006:027. March 20, 2018. Cottrell, Curt. Honolulu, HI.

#### De Leon, David.

1987 "1987 Makena Road Settlement on Record." *Maui News*, July 20, 1987.Wailuku, Hawai'i.

Traditional Cultural Practices Study for Mäkena State Park and Analysis of Potential Cultural Impacts for Two P Proposed Mäkena State Park Comfort Stations and Related Improvements Final = 6/15/2021



#### de Naie, Lucienne and Theresa Donham

2007 Project Ka'eo: The Challenge to Preserve Cultural Landscapes in Modern Makena, a Land Famous with the Chiefs from the Distant Past.

#### Department of Land and Natural Resources

1981 A Study on the Acquisition of the Big Beach Area of Makena, Maui, for a State Park as Requested by House Concurrent Resolution No. 147/1981. Department of Land and Natural Resources, Honolulu, Hawai'i.

#### Dingeman, Robbie.

2009 "Rebranded Maui Hotel Open." *The Honolulu Advertiser,* September 17, 2009.Honolulu, HI.

#### Dodge, F. S. and E.D. Baldwin

1883 Honuaula, Maui, Reg. No. 228 (field book). Hawaiian Government Survey. On file at Department of Accounting and General Services (DAGS) Land Survey Division.

#### Dunmore, John

1985 *Pacific Explorer: The Life of Jean François de Lq Pérouse 1741-1788.* The Dunmore Press Limited, Palmerston North, New Zealand.

ESRI, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, U.S. Department of Agriculture, USGS, AeroGRID, IGN and GIS User Community 2018 World Imagery - 1m Imagery [GIS Layer].

#### Fischer, John Ryan

2015 Cattle Colonialism: An Environmental History of the Conquest of California and Hawai'i. University of North Carolina Press, Chapel Hill.

#### Fish and Wildlife Service

1995 *50 CFR Part 17 Endangered and Threatened Wildlife and Plants; Proposed Endangered or Threatened Status for Fourteen Plant Taxa From teh Hawaiian Islands.* Honolulu, HI. Office of the Federal Register, National Archives and Records Administration, Washington D.C.

#### Fleming, Martha Foss

1933 *Old Trails of Maui*. Daughters of the American Revolution, William & Mary Alexander Chapter.

#### Fornander, Abraham

1880 An Account of the Polynesian Race, its Origins and Migrations, and the Ancient History of the Hawaiian People to the Times of Kamehameha I. Vol. II, 6 Vols, edited by J. F. G. Stokes. Trubner & Co., London.

Traditional Cultural Practices Study for Mäkena State Park and Analysis of Potential Cultural Impacts for Two P a g e 90 Proposed Mäkena State Park Comfort Stations and Related Improvements Final = 6/15/2011 AA PROJECT NO. 1708

#### Fornander, Abraham (continued)

1916a History of Moikeha. In Fornander Collection of Hawaiian Antiquities and Folk-lore: The Hawaiians' Account of the Formation of Their Islands and Origin of Their Race, with the Traditions of Their Migrations, Etc., as Gathered from Original Sources, Vol. IV, Part 1, edited by T. G. Thrum, pp. 112-155. Bishop Museum Press, Honolulu.

1916b Story of Islands' Formation and Origin of Race. In *Fornander Collection of Hawaiian Antiquities and Folk-Lore the Hawaiians' Account of the Formation of Their Islands and Origin of Their Race, with the Traditions of Their Migration, Etc., as Gathered from Original Sources,* Vol. IV, edited by T. G. Thrum. Memoirs of the Bernice Pauahi Bishop Museum. Bishop Museum Press, Honolulu, HI.

1917 Legend of Eleio, Relating to Kaululaau. In *Fornander Collection of Hawaiian Antiquities and Folk-Lore The Hawaiian Account of the Formation of their Islands and Origin of their Race with the Traditions of their Migrations, Etc., as Gathered from Original Sources,* Vol. IV, Part III, edited by T. G. Thrum, pp. 486-488. Bishop Museum Press, Honolulu, HI.

1918 Mythical Tales. In Fornander Collection of Hawaiian Antiquities and Folk-lore: The Hawaiians' Account of the Formation of Their Islands and Origin of Their Race, with the Traditions of Their Migrations, Etc., as Gathered from Original Sources, Vol. V, Part 3, pp. 506-569.

1919a Myth Concerning Molokini. In *Fornander Collection of Hawaiian Antiquities and Folk-Lore the Hawaiians' Account of the Formation of their Islands and Origin of their Race, with the Traditions of their Migrations, Etc., as Gathered from Original Sources,* Vol. V, Part III, pp. 514-520. Bishop Museum Press, Honolulu.

1919b Relating to Kekaa. In Fornander Collection of Hawaiian Antiquities and Folk-Lore the Hawaiians' Account of the Formation of Their Islands and Origin of Their Race, with the Traditions of Their Migration, Etc., as Gathered from Original Sources, Vol. V, Part III, edited by T. G. Thrum, pp. 540-544. Bishop Museum Press, Honolulu, HI.

1919c Story of Puulaina. In Fornander's Collection of Hawaiian Antiquities and Folklore the Hawaiian Account of the Formation of their Islands and Origin of their Race with the Traditions of their Migrations, Etc., as Gathered from Original Sources, Vol. V Part III, pp. 532-536. Bishop Museum Press, Honolulu, HI.

#### Garovoy, Jocelyn B.

2005 "Ua Koe ke Kuleana o na Kanaka" (Reserving the Rights of Native Tenants): Integrating *Kuleana* Rights and Land Trust Priorities in Hawaii. *Harvard Environmental Law Review* 29:523-571.

Traditional Cultural Practices Study for Måkena State Park and Analysis of Potential Cultural Impacts for Two P a g e 91 Proposed Måkena State Park Comfort Stations and Related Improvements Final = -6/15/2021



#### Handy, E. S. Craighill and Elizabeth G. Handy

1972 Native Planters in Old Hawaii: Their Life, Lore, and Environment. Bishop Museum Press, Honolulu.

#### Handy, E. S. Craighill, Elizabeth Green Handy and Mary Kawena Pukui

1991 Native Planters in Old Hawaii : Their Life, Lore, and Environment. Rev. ed. Bernice P Bishop Museum Bulletin 233. Bishop Museum Press, Honolulu, HI.

#### Haun, Alan E.

1978 Archaeological Survey and Salvage Excavation in Mooiki and Maluaka, Makawao District, Maui. Prepared for Seibu Hawaii, Inc. Department of Anthropology Bernice P. Bishop Museum, Honolulu, HI. On file at State of Hawai'i Department of Land and Natural Resources, State Historic Preservation Division.

#### Hobdy, Robert W.

2019 Botancial and Fauna Survey for the Mākena State Park Comfort Station Improvements Mākena, Maui. Prepared for Department of Land and Natural Resources, Division of State Parks, Honolulu, HI. Robert W. Hobdy, Environmental Consultant, Kokomo, HI.

#### Hommon, Robert J.

2013 *The Ancient Hawaiian State: Origins of a Political Society.* Oxford University Press, New York, NY.

#### Jean-François de Galaup, La Pérouse

1969 Voyages and Adventures of La Pérouse. Translated by J. S. Gassner. University of Hawaii Press, Honolulu, Hawai'i.

#### Kaaiakamanu, D.M. and J.K. Akina

1922 Hawaiian Herbs of Medicinal Value: Found Among the Mountains and Elsewhere in the Hawaiian Islands, and Known to the Hawaiians to Possess Curative and Palliative Properties Most Effective in Removing Physical Ailments. Translated by A. Akana. Board of Health of the Territory of Hawaii, Honolulu, HI.

#### "Kaao Hooniua Puuwai No Ka-Miki."

1911 Ke Au Hou, 1 Malaki 1911. Vol. 2 No. 9:13-15, Honolulu, HI.

#### Kahā'ulelio, Daniel

2006 *Ka 'Oihana Lawai'a - Hawaiian Fishing Traditions*, edited by M. P. Nogelmeier. Translated by M. K. Pukui. Bishop Museum Press, Honolulu, HI.

#### Kahele Jr., J.K.

1930 "He Moolelo no Molokini a me Kona Wahi i Loaa Mai Ai." *Ke Alakai o Hawaii,* 24 Iulai 1930. Vol. 3 No. 12:2, Honolulu, HI.

Traditional Cultural Practices Study for Mäkena State Park and Analysis of Potential Cultural Impacts for Two P a g e 92 Proposed Mäkena State Park Comfort Stations and Related Improvements Final = 6/15/2021



#### AA PROJECT NO. 1708

#### Kamakau, S.M.

1992 Ruling Chiefs of Hawaii. Revised ed. The Kamehameha Schools Press, Honolulu, HI.

#### Keliipio, L.D.

1900 Hawaiian Fish Stories and Superstitions. In *Hawaiian Almanac and Annual for 1901*, Vol. 27, edited by T. G. Thrum, pp. 110-114. Translated by M. K. Nakuina. Hawaiian Gazette Company, Honolulu.

#### Kepelino

2007 *Kepelino's Traditions of Hawaii*. Rev. ed. ed, edited by M. W. Beckwith. Bernice P. Bishop Museum bulletin ; 95. Bishop Museum Press, Honolulu, HI.

#### Kikuchi, William K.

1973 Hawaiian Aquacultural System. PhD Dissertation, Department of Anthropology, University of Arizona.

#### Kingdom of Hawaii

1848 An Act Relating to the Lands of His Majesty the King and of the Government. In A Supplement to the Statute Laws of His Majesty, Kamehameha III., King of the Hawaiian Islands, Containing the Acts and Resoultions Passed by the Houses of Nobels and Representatives, During the Twenty-Third Year of His Reign and the Sixth Year of His Public Recognition, A.D. 1848, pp. 22-43. Government Press, Honolulu, HI.

#### Kirch, Patrick Vinton

1985 Feathered Gods and Fishhooks : An Introduction to Hawaiian Archaeology and Prehistory. University of Hawaii Press, Honolulu, HI.

#### Krauss, Beatrice H.

2001 Plants in Hawaiian Medicine. Bess Press, Honolulu, HI.

#### Lee-Greig, Tanya L.

2002 Archaeological Inventory Survey of the Chang Family Property, Keauhou and Kalihi Ahupua'a, Honoua'ula, Maui. Prepared for Mr. and Mrs. Joseph Noland, Wailuku, HI. Island Archaeology, Makawao, HI. On file at State of Hawai'i Department of Land and Natural Resources State Historic Preservation Division.

#### Lee-Greig, Tanya L., Hannah Zanotto, Ben Pelletier, Amanda Ruberti, Nikki Mills, Deidra Moore, Teresa Godinez and Napali Souza

2019 A Supplemental Archaeological Inventory Survey (SAIS) Report for the Makena Golf and Beach Resort's Ka'eo North and South Development, Ka'eo Ahupua'a, Honua'ula Moku, Makawao Modern Tax District, Maui Island, TMK: (2) 2-1-008:098, 099 por.,100 and 106. Prepared for Makena Golf & Beach Resort, Makena, HI. 'Āina Archaeology, Kihei, HI.

Traditional Cultural Practices Study for Måkena State Park and Analysis of Potential Cultural Impacts for Two P a g e 93 Proposed Måkena State Park Comfort Stations and Related Improvements Final = -6/15/2021



#### Lever, Christopher

1994 Naturalized Animals: The Ecology of Successfully Introduced Species. T. & A. D. Poyser, London.

#### Lucas, Paul F. Nahoa

1995 A Dictionary of Hawaiian Legal Land-Terms. Native Hawaiian Legal Corp. : University of Hawai'i Committee for the Preservation and Study of Hawaiian Language, Art, and Culture, Honolulu, HI.

#### Lyons, Curtis J.

1903 A History of the Hawaiian Government Survey with Notes on Land Matters in Hawaii, Appendixes 3 and 4 of Surveyor's Report for 1902. The Hawaiian Gazette Co., Honolulu, HI.

MacKenzie, Melody Kapilialoha, Susan K. Serrano, D. Kapua ala Sproat, Ashley Kaiao Obrey, Avis Kuuipoleialoha Poai, Corporation Native Hawaiian Legal, Law Ka Huli Ao Center for Excellence in Native Hawaiian and Publishing Kamehameha

2015 Native Hawaiian Law : A Treatise. Kamehameha Publishing, Honolulu, HI.

#### Malo, David

1951 *Hawaiian Antiquities: Mo'olelo Hawai'i*. 2d ed. Translated by N. B. Emerson. Bernice P. Bishop Museum, Honolulu, Hl.

#### Maly, Kepa and Onaona Maly

2003 Ka Hana Lawai'a a me Nā Ko'a o na Kai 'Ewalu : A History of Fishing Practices and Marine Fisheries of the Hawaiian Islands. Prepared for The Nature Convervance, Honolulu, HI. Kumu Pono Associates, Hilo, HI.

#### Maly, Kepā and Onaona Maly

2005 He Mo'olelo 'Āina No Ka'eo Me Kāhi 'Āina E A'e Ma Honua'ula -- A Cultural-Historical Study of Ka'eo and Other Lands in Honua'ula, Island of Maui (TMK 2-1-07:67). Prepared for Sam Garcia, Jr. & Jon Garcia, Makena, HI. Kumu Pono Associates, Hilo, HI.

#### Matsuoka, Jon K., Davianna Pomaika'i McGregor, Luciano Minerbi, Pualani Kanahele, Marion Kelly and Noenoe Barney-Campbell

1996 Native Hawaiian Ethnographic Study for the Hawai'i Geothermal Project Proposed for Puna and Southeast Maui. Prepared for U.S. Department of Energy, Oak Ridge Operations Office, Oak Ridge, Tennessee.

#### Maui General Plan 2030

2006. Prepared for Maui County Long-Range Planning Division, Wailuku, Hawai'i Chris Hart & Partners, Inc., Wailuku, Hawai'i.

Traditional Cultural Practices Study for Mäkena State Park and Analysis of Potential Cultural Impacts for Two P a g e 94 Proposed Mäkena State Park Comfort Stations and Related Improvements Final = 6/15/2011



#### AA PROJECT NO. 1708

#### McClelland, C.K.

1916 Bulletin No. 36, Grasses and Forage Plants of Hawaii. Hawaii Agricultural Experiment Station Under the Supervision of Office of Experiment Stations, U.S. Department of Agriculture. Government Printing Office, Washington D.C.

#### Mueller-Dombois, Dieter

2007 The Hawaiian *Ahupua'a*Land Use System: Its Biological Resource Zones and the Challenge for Silvicultural Restoration. In *Biology of Hawaiian Streames and Estuararies*, edited by N. L. Evenuis and J. M. Fitzsimions, pp. 23-33. Bishop Museum Bulletin in Cultural and Environmental Studies 3.

#### Nakuina, Moses K.

1990 *The Wind Gourd of La'amaomao.* Translated by E. T. Mookini and S. Nākoa. Kalamaku Press, Honolulu, HI.

#### Nupepa Kuokoa.

1912 "Wahi Pana o Lanai." *Nupepa Kuokoa,* May 31, 1912. Vol. 48 No. 22 No.

#### Office of Hawaiian Affairs

2011 Papakilo Database: Kūkulu ka 'ike i ka 'õpua [Online Database].Māhele 'Äina Index, DL Consulting. https://papakilodatabase.com

2014 Kipuka Databse [Online GIS Database], BEI Consulting and 'Āina Arts Photography. kipukadatabase.com

#### Parker, Patricia L. and Thomas F. King

1998 National Register Bulletin: Guidelines for Evaluating and Documenting Traditional Cultural Properties. Revised ed. U.S. Department of the Interior, National Park Service.

#### Perry, Brian.

2016 "Makena Project Comes Under Fire." The Maui News, January 27, 2016.

#### Perzinski, David, Kepa Lyman, Colleen Medieros, Rachel Hodara and Michael Dega

2014 Arhcaeological Inventory Survey of a 670-acre Parcel in Honua'ula (Formerly Wailea 670), in Palauea and Keauhou Ahupua`a, Makawao District, Island of Maui, Hawai'i [TMK: (2) 2-1-008:71 and 56 por.] Volume I Report. Prepared for Honua'ula Partners, LLC,, Kihei, HI. Scientific Constultant Services, Inc., Honolulu, HI. On file at Hawai'i State Historic Preservation Division.

#### Pukui, Mary Kawena

1983 *'Ōlelo No'eau: Hawaiian Proverbs & Poetical Sayings*. Bernice P Bishop Museum special publication. Bishop Museum Press, Honolulu, HI.

Traditional Cultural Practices Study for Måkena State Park and Analysis of Potential Cultural Impacts for Two Proposed Måkena State Park Comfort Stations and Related Improvements Final = 6/11/2021



#### Pukui, Mary Kawena and Samuel H. Elbert

1986 Hawaiian Dictionary Hawaiian-English, English-Hawaiian. Rev. and enl. ed. University of Hawaii Press, Honolulu, HI.

#### Pukui, Mary Kawena, Samuel H. Elbert and Esther T. Mookini

1974 *Place Names of Hawaii.* Revised and expanded edition. ed. University Press of Hawaii, Honolulu, HI.

#### Rose, Mary D. Swartz

1912 The Nutritive Value of Seaweeds. *The Journal of Home Economics*.

#### Schmitt, Robert

1973 *The Missionary Census of Hawaii*. Prepared for Pacific Anthropological Records. Bishop Museum Press, Honolulu, Hawai'i.

#### Setchell, William Albert

1907 Limu. University of Californa Publications, Botany 2(3):91-113.

#### State of Hawaii Office of Environmental Quality Control

2012 Guide to the Implementation and Practice of the Hawaii Environmental Policy Act. 2012 Edition. Honolulu, HI.

#### Sterling, Elspeth P.

1998 Sites of Maui. Bishop Museum Press, Honolulu, HI.

#### Tanji, Melissa.

2018 "Makena Hotel Coming Down Piece by Piece." The Maui News, June 2, 2018.

#### Tau'a, Keli'i and Kimokeo Kapahulehua

2007 Mākena. Prepared for Mr. Don Fujimoto, Wailuku, Hl. Hana Pono, LLC., Kihei, Hl.

#### Taylor, Clarice.

1949a "Little Tales, All About Hawaii." *Honolulu Star-Bulletin,* 31 Mar 1949. Vol. LV, No.17665 No. Honolulu, HI.

1949b "Panini Gum." Honolulu Star-Bulletin, Vol. LV, No.17665 No. Honolulu, HI.

#### The Maui News.

1918 "School Notes." The Maui News, Vol. 18 No. 945 Wailuku, HI.

#### Thrum, Thomas G.

1922 Hawaiian Place Names. In *A Dictionary of the Hawaiian Language. Revised by Henry H. Parker*, Ch. 13, pp. 625-674. Board of Commissioners of Public Archives, Honolulu, T.H.

Traditional Cultural Practices Study for Mäkena State Park and Analysis of Potential Cultural Impacts for Two P a g e 96 Proposed Mäkena State Park Comfort Stations and Related Improvements Final = 6/15/2021



AA PROJECT NO. 1708

#### Thrum, Thomas G.

1909 Excursion to the Mountains of Maui, Extract from M.S.–"A Menzies' Journal in Vancourver's Voyage, 1790-1794.". In *Hawaiian Almanac and Annual for 1909, The Reference Book of Information and Statistics Relating to the Territory of Hawaii, of Value to Merchants, Tourists and Others*, edited by T. G. Thrum, pp. 92-97. Thomas G. Ghrum, Honolulu, HI.

#### Titcomb, Margaret and Mary Kawena Pukui

1977 Native Use of Fish in Hawaii. 2d ed. University Press of Hawaii, Honolulu, HI.

#### U.S. Army Corps of Engineers

1992 Makena Beach Acquisition Study Island of Maui, Hawaii. Prepared for Department of the Army, U.S. Army Engineer District, Honoululu, HI. Department of the Army, U.S. Army Engineer District, Honolulu, HI.

#### **United States Bureau of Fisheries**

1905 Bulletin of the United States Fish Commission Vol. XXIII for 1903 Part II. Vol. 23, No. 2, edited by G. M. B.-. Commissioner. Government Printing Office, Washington D.C.

#### United States Geological Survey

2019 USGS The National Map Topo Base Map [map]. GIS accessible. USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS Road Data; Natural Earth Data; U.S. Department of State Humanitarian Information Unit; and NOAA National Centers for Environmental Information, U.S. Coastal Relief Model.

#### Van Dyke, Jon M.

2008 Who Owns the Crown Lands of Hawai'i. University of Hawai'i Press, Honolulu, HI.

#### Walker, Winslow M

1931 Archaeology of Maui [manuscript]. Bernice P. Bishop Museum, Honolulu, HI. On file at Hawai'i State Historic Preservation Division.

#### Walker, Winslow M.

1931 Archaeology of Maui [manuscript]. Manuscript. Bernice P. Bishop Museum. Honolulu, HI.

Traditional Cultural Practices Study for Måkena State Park and Analysis of Potential Cultural Impacts for Two Proposed Måkena State Park Comfort Stations and Related Improvements Final – 6/15/2021



#### Wall, Walter E.

1894 *Map of Honuaula Maui* [map]. 1:12000. Surveyed by W.D. Alexander in 1866-1879, F.S. Dodge in 1881, E.D. Baldwin in 1883. Hawaiian Government Survey, Honolulu, HI. On file at State of Hawaii Department of Accounting and General Services Land Survey Division, Honolulu.

#### Westervelt, William Drake

1916 Hawaiian Legends of Volcanoes: (mythology) Collected and Translated from the Hawaiian. Ellis Press, Boston, MA.

1917 Hawaiian Burial Caves pp. 145-154. Thomas G. Thrum.

#### Wilkes, Charles

1844 Narrative of the United States Exploring Expedition During the Years 1838, 1839, 1840, 1841, 1842. Vol. 4, 5 Vols. C. Sherman, Philadelphia, PA.

#### Wood, John George

1878 The Uncivilized Races of Men in All Countries of the World: Being a Comprehensive Account of Their Manners and Customs, and of Their Physical, Social, Mental, Moral and Religious Characteristics. Vol. 2, 2 Vols. J. B. Burr Publishing Co., Hartford, CT.

#### Yent, Martha

1993 Archaeological Monitoring and Site Inventory Survey: Makena State Park Mo'oiki and Mo'oloa Ahupua'a, Honua'ula (Makawao) District, Maui TMK 2-1-06:26, 27, 28, 30, 31, 32, 53, 80, and 81. Prepared for State of Hawaii Deaprtment of Land and Natural Resources Division of State Parks, Honolulu, HI. State of Hawai'i Department of Land and Natural Resources, Division of Land and Natural Resources, Division of State Parks, Honolulu, HI. On file at State of Hawai'i Department of Land and Natural Resources State Historic Preservation Division.

2021 Archaeological Inventory Survey Construction of New Comfort Stations and Parking Lot Improvements Mākena State Park Ahupua'a of Mo'oloa and Mo'oiki, Honua'ula District, Maui TMK: (2) 2-1-006: 027 and 030. Prepared for Department of Land and Natural Resources, Division of State Parks, Honolulu, HI. Department of Land and Natural Resources, Division of State Parks Archaeology Program, Honolulu, HI.



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# **APPENDIX**

# SUMMARY OF ONELOA COALITION MEETINGS

### SUMMARY OF ONELOA COALITION MEETINGS March 2018 to January 2020

DATE	ATTENDANTS	TOPICS
DATE 3/27/18	ATTENDANTS Hannah Bernard, Jens Currie, Sam Garcia, Kaimi Judd, Daniel Kanahele, Justin Kekiwi, Hattie King, Ekolu Lindsey, Puanani Lindsey, Deb Merrill, Mike Moran, Albert Perez, Elizabeth Speith, Larry Stevens, Linda Stiles, Kristie Wrigglesworth Guests: Tyson Au, Jeffery Cohn, Vernon Kalanikau, Meli King, Melanie Trox, Cody Tuivaiti,	TOPICS • Members of the Oneloa Coalition from 2009 shared the past history of the group; group of stakeholders formed in 2008 in conjunction with a County zoning permit issued to Mäkena Resort with goal of developing a park master plan; group became inactive after the 2013 park plan was prepared by PBR Hawaii and the Coalition • Wildemess or recreational park? Paving of the road in the 1970s brought the public into the area and changed the use and character of the area • SPAM (State Park at Mäkena) was also shared as the community movement that led to the State's warding the use and character of the area 's
	DLNK:Russell Kumabe, Larry Pacheco, Martha Yent	acquisition of the park area • State Parks reconvened the Coalition to seek community input on the proposed restrooms (\$2.5m appropriated by State Legislature) and the restoration of Paniaka Fishpond initiated by PWF • Pacific Whale Foundation (PWF) received \$20,000 HTA grant for restoration of Paniaka Pond; initially to restoration in the future; concern that this grant was applied for without Coalition input and participation
4/25/18	Jens Currie, Sam Garcia, Kaimi Judd, Daniel Kanahele, Justin Kekiwi, Hattie King, Ekolu Lindsey, Deb Merrill, Mike Moran, Albert Perez, Elizabeth Speith, Larry Stevens, Linda Stiles, Kristie Wrigglesworth DLNR: John Datiles, Russell Kumabe, Larry Pacheco, Martha Yent	Defining the vision of the Oneloa Coalition – referred to the creation of the Coalition in 2009 and the mission as stated in the 2013 Park Plan: "to ensure the preservation of historical and cultural sites and the restoration and management of the natural ecology of Oneloa State Park, while enhancing the stewardship of traditional and recreational uses for future generations", NOTE: reflects desire to change the name of the park from Mäkena to Oneloa • Establish membership based on the 2009 group of stakeholders and request participation by at least one member of each organization • DLNR provided background for project involving construction of new restrooms with EA and CIA • State Parks shared plans for archaeological work (AIS) in conjunction with the project • Formation of a committee to plan for the restoration of Paniaka Fishpond under a volunteer agreement between State Parks Park of the Paniaka Chale Paniaka Conduction tervene and the Pacific Whale Foundation
7/12/18	Hannah Bernard, Sam Garcia, Kaimi Judd, Justin Kekiwi, Ka'onohi Lee, Ekolu Lindsey, Kelly McHugh, Deb Merrill, Mike Moran, Albert Perez, Elizabeth Speith, Linda Stiles, Cody Tuivaiti, Kristie Wrigglesworth Guest: Jacob Adolpho, Hattie King, Maria Taylor, Lopaka White DI NR: Larry Pacheco, Martha Yent	<ul> <li>Discussion about what kind of planning is needed for Mäkena SP – master plan vs. management plan; State Parks shared the 1977 plan prepared for the park</li> <li>Discussion of the drum circle gatherings at Little Beach (Pu'u Õla'i) on Sundays, other illegal activities (drinking, nudity, fires), and problems with enforcement; suggestions included Sunday closures and more education about potential impact on turtles and cultural practitioners</li> </ul>
L	DLNR: Larry Pacheco, Martha Yent	

9/4/18	Hannah Bernard, Sam Garcia, Kaimi	• Discussion of 2013 park plan that called for
<i>J</i> / 1/10	Judd Ka'onohi Lee, Ekolu Lindsey	restrooms camping picnicking and trails is there a
	Kelly McHugh, Deb Merrill, Mike	bigger vision for the park? State Parks notes some
	Moran, Albert Perez, Elizabeth Speith.	changes since 2013 including lifeguards & food
	Linda Stiles, Cody Tuivaiti, Kristie	concession with parking concession being planned
	Wrigglesworth	• Management plan would address the situation now –
		how to manage people and protect resources
	Guest: Hattie King, Jim Mothersbaugh,	• HI Wildlife Fund raised questions about leaching
	Kirk Tanaka, Maria Tavlor	into wetlands and nearshore waters as well as lighting
		as impacts on turtle nesting sites
	DLNR: Russell Kumabe, Larry	Location of restrooms not raised as an issue and
	Pacheco Martha Yent	concerns centered around the wastewater system
	r deneeo, mardia r ene	options – pros and cons of composting toilets
10/3/18	Jens Currie, Sam Garcia, Kaimi Judd	Presentation by Jim Mothershaugh of Watertectonics
10/5/10	Justin Kekiwi Hattie King Ka'onohi	on composting systems – no discharge no soil
	Lee Ekolu Lindsey Deb Merrill Mike	disturbance, no water, no electricity; would need 8
	Moran Albert Parez, Elizabeth Speith	units for level of use at Makene: costs for pumping
	Linda Stilas, Cody Tuivaiti, Kristia	with alean out every 2.4 months
	Wright and Stries, Cody Turvalu, Kristie	• Need for outdoor showers religed to address immed
	wiiggiesworui	on community by people looking for showers:
	Guest: Anthony DelleFave Tim Lare	concerns about showers bringing more people and
	Duest. Anthony Denerave, Thin Lara,	homeless, concern shout leaching into the group d
	Mathamhauah	downall montioned as an antion
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	DIND L1 D (1 L D 1	• State Parks shared plans to prepare an EA and CIA
	DLNR: John Datiles, Larry Pacheco,	to address cultural and environmental impact/concerns
	Martha Yent	• Formation of fund development and outreach
11/15/10		committee
11/15/18	Sam Garcia, Hattie King, Ka'onohi Lee,	Restroom/wastewater system options under
	Kelly McHugh, Deb Merrill, Mike	consideration: composting toilets (Clivus Level 6)
	Moran, Albert Perez, Elizabeth Speith,	State Parks recommends looking at a vault system
	Linda Stiles, Cody Tuivaiti, Kelly	<ul> <li>Concerns about leaching into the ground and</li> </ul>
	Wilkinson, Kristie Wrigglesworth	potential impact on the fishing
		Restrooms needed for health and safety
	Guests: Paul Higashino (KIRC), Lopaka	Concerns with vandalism of park facilities
	White	Formation of a planning committee (Sam Garcia
		lead) – develop action plan as State estimates
	DLNR: John Datiles, Russell Kumabe,	\$400,000 to \$1m for a master plan & EIS; use the plan
	Martha Yent	developed for Hā'ena, Kaua' as a good example
1/3/19	Sam Garcia, Kaimi Judd, Justin Kekiwi,	<ul> <li>State Parks provided an update on the Clivus</li> </ul>
	Hattie King, Ka'onohi Lee, Kelly	composting toilet; concern that it is not the right
	McHugh, Deb Merrill, Mike Moran,	choice for the level of use and costs involved
	Albert Perez, Linda Stiles, Cody	<ul> <li>Coalition proposes update to 2013 park plan that</li> </ul>
	Tuivaiti, Kelly Wilkinson, Kristie	would address park facilities, carrying capacity, ocean
	Wrigglesworth	safety, cultural traditions, dune restoration, sea level
		rise and climate change
	DLNR: John Datiles, Renee Kamisugi,	· Continued discussion of various wastewater system
	Russell Kumabe, Larry Pacheco,	options and concerns
	Martha Yent	· More outreach to the community recommended
2/13/19	Minutes not available	· State Parks was informed of future option to connect
		to a sewer line that would run to a treatment plant on
		the ATC/Makena Resort property
		· Discussion of restrooms - moving away from idea o
		composting toilets towards holding tanks with future
		sewer hook-up to Mākena Resort
		sewer hook-up to Mākena Resort • Concern of ocean safety & spinal injuries and need

3/14/19	Sam Garcia, Hattie King, Ekolu Lindsey, Deb Merrill, Mike Moran, Albert Perez, Linda Stiles, Cody Tuivaiti, Kristie Wrigglesworth, Kelly Wilkinson Guests: Peter Kafka, Robin Knox, Kai Nishiki	Peter Kafka who maintained vault toilets at Haleakala NP shared his knowledge of system; did not recommend composting toilets due to maintenance Discussion of outdoor showers including drainage, drywell option, and rain garden to absorb run-off • Consider pervious surface for parking, not asphalt • Hawaii Wildlife Fund provided written comments against showers, flush toilets, and water fountains
	DLNR: Martha Yent	Lighting must consider wildlife (do not face ocean)     Concerns of crowding and carrying capacity; need space for locals; restroom will attract more people     Cody visited pu'u on a Sunday for cultural practices and overwhelmed by the out-of-control situation; suggested formation of cultural advisory committee to make decisions based on cultural knowledge/traditions     Potential impact of park activities on fishermen     Community interest in seeing camping at the park     Recommendation for dune restoration project
4/30/19	Sam Garcia, Kaimi Judd, Daniel Kanahele, Justin Kekiwi, Ka'onohi Lee, Ekolu Lindsey, Deb Merrill, Linda Stiles, Cody Tuivaiti, Kristie Wrigglesworth Guest: Meli King, Tanya Lee-Greig, Kris Wilhelm DLNR: Holly McEldowney, Tracy Tam Sing, Martha Yent	<ul> <li>Discussion of the vault toilet – depth of excavation, need for pumping (costs and maintenance)</li> <li>Changes in restroom design to accommodate holding tanks will affect archaeology &amp; CIA</li> <li>Discussion of outdoor showers and concern with drainage; further consideration of a drywell or rain garden; ask people not to use soap or shampoo</li> <li>Discussion of occan safety – Mäkena is #1 site for spinal injuries; signs recommended</li> <li>Review of draft interpretive &amp; spinal injury signs</li> </ul>
6/25/19	Sam Garcia, Kaimi Judd, Justin Kekiwi, Ka'onohi Lee, Deb Merrill, Mike Moran, Albert Perez, Cody Tuivaiti, Kristie Wrigglesworth Guest: Ashford DeLima DLNR: Larry Pacheco, Martha Yent	Concern with outdoor showers     Soaps, shampoos entering ground & ocean     Will attract more people & homeless     Lack of showers impacting the Mäkena community     Idea of rain gardens to absorb water     Local people bring bottles of water to rinse     Concern with restrooms for potential sewage leaks     Concern with additional parking and more people;     need carrying capacity     Concern with suscreen and impact on ocean and     marine resources(mo'i)     Close Pu'u Öla'i Beach during turtle nesting season     Promote proper place names on road signs     Update on archaeological testing provided
8/6/19	Sam Garcia, Justin Kekiwi, Deb Merrill, Mike Moran, Albert Perez, Linda Stiles, Cody Tuivaiti Guests: Ashford DeLima, Leinoa Kong, Meli King DLNR: Randy DeCambra (DOCARE), Larry Pacheco, Martha Yent	Update on dune restoration project – need for plants, signs, and symbolic fencing     Discussion of enforcement issues, esp. as related to the Sunday gatherings at Pu'u Ola'i     Idea of a 60-day park closure     Do more towing and stop off-road parking     Allowing fishing at night     Ongoing discussion about restrooms and showers – some objections still exist amongst members     Review of draft interpretive signs developed by State Parks (park history, resources, rules, ocean safety, and respect messages)

0/17/10	Sam Caraia Justin Kalvirvi Dah	• State Deulre should along for the neutring new stations
9/1//19	Sam Garcia, Jusun Kekiwi, Deb	• State Farks shared plans for the parking pay stations
	Merrill, Albert Perez, Linda Stiles,	• Idea of shuttle between Makena Resort and the park
	Cody Tuivaiti, Kristie Wrigglesworth	<ul> <li>Promote use of proper place names</li> </ul>
		<ul> <li>Close Pu'u Ola'i on Sundays for management and to</li> </ul>
	DLNR: Sang Kim & Korinne Gowin	control illegal activity; promote respect for the pu'u
	(Parks Property Management), Larry	· Summary of Action Plan with some objections being
	Pacheco, Martha Yent	raised about the restrooms and showers
1/23/2020	Hannah Bernard, Sam Garcia, Deb	· Update on the need for archaeological testing in
	Merrill, Albert Perez, Linda Stiles,	conjunction with design changes for the tanks
	Cody Tuivaiti, Kristie Wrigglesworth	· Restrooms will be designed for future sewer hook-up
		Question about use of incinerator toilets; probably
	DLNR: Larry Pacheco	wouldn't work for the level of use at Makena
	5	· Concern about the level of water use for toilets and
		showers: State Parks considering the use of sanitizer.
		non-water urinals: Coalition not in agreement about
		the need for showers
		Cody Tuivaiti said he uses the area for cultural
		reasons and the problem with restrooms is increased
		people: it is not a family heach: safety concerns
		• Impact of water run-off and people on the turtles
		State Parks shared plans for paid parking for out-of-
		state visiters, concern about on street perking for out-or-
		state visitors, concern about on-street parking

### Members and Guest of Oneloa Coalition

Hannah Bernard	Hawai'i Wildlife Fund
Sam Garcia	Mākena Homeowners Association
Kaimi Judd	ATC / Mākena Resort
Daniel Kanahele	Sierra Club
Justin Kekiwi	Mākena Park Caretaker
Hattie King	Resident
Ka'onohi Lee	Aha Moku o Maui
Ekolu and Puanani Lindsey	Maui Cultural Lands
Deb Merrill	PWF (recorded minutes of meetings)
Mike Moran	Kihei Community Association
Albert Perez	Maui Tomorrow
Larry Stevens	Maui Nui
Linda Stiles	Resident
Cody (Koko) Tuivaiti	Cultural Practitioner
Kristie Wrigglesworth	PWF

### Paniaka Restoration Project (PWF staff)

Jens Currie Kelly McHugh Elizabeth Speith Kelly Wilkinson Project Manager PWF Consultant PWF



