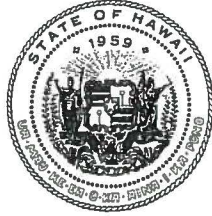


DAVID Y. IGE
GOVERNOR OF HAWAII



FILE COPY

DEC - 8 2016

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

KEKOA KALUHIWA
FIRST DEPUTY

JEFFREY T. PEARSON, P.E.
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

November 10, 2016

Mr. Scott Glenn, Director
Office of Environmental Quality Control
Department of Health, State of Hawai'i
235 S. Beretania Street, Room 702
Honolulu, Hawai'i 96813

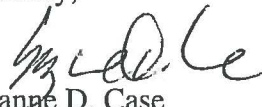
Dear Mr. Glenn:

With this letter, the Department of Land and Natural Resources hereby transmits a draft environmental assessment and anticipated finding of no significant impact (DEA-AFONSI) for "Draft Environmental Assessment for Waimanalo Community Farming" to be published in the next available edition of the Environmental Notice. The proposed project involves TMK (1) 4-1-008:008 in Waimanalo on the island of Oahu.

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

If there are any questions, please contact the applicant Ms. Toni Bissen at (808) 221-6656 or my staff Mr. Barry Cheung at (808) 587-0430.

Sincerely,


Suzanne D. Case
Chairperson

Enclosures

RECEIVED
16 NOV 14 P1:11
OFC. OF ENVIRONMENTAL
QUALITY CONTROL

#17-014

DEC - 8 2016

**APPLICANT
PUBLICATION FORM**

Project Name:	Waimanalo Community Farming
Project Short Name:	Waimanalo Community Farming
HRS §343-5 Trigger(s):	Use of State Land
Island(s):	Oahu
Judicial District(s):	Koolaupoko
TMK(s):	(1) 4-1-008:008
Permit(s)/Approval(s):	Implementation of the proposed improvements will require permits and approvals that may include the following: Conditional Use, Building, Grading and Grubbing Permits, construction de watering, noise for construction activities, trenching, construction within a flood hazard district, drainage connection, water and sewer connection, site development, traffic review branch approval, water availability approval, and National Pollutant Discharge Elimination System (NPDES) Permit.
Approving Agency:	Department of Land and Natural Resources
Contact Name, Email, Telephone, Address	Department of Land and Natural Resources, Land Division Barry Cheung; barry.w.cheung@hawaii.gov ; phone: 587-0430; 1151 Punchbowl St., Room 220, Honolulu, Hawaii 96813
Applicant:	Pū‘ā Foundation and Hui Mahi‘ai
Contact Name, Email, Telephone, Address	Pū‘ā Foundation - Toni Bissen; toni.bissen@puafoundation.net ; phone: 221-6656; P.O. Box 11025, Honolulu, Hawaii 96828 Hui Mahi‘ai - Blanche McMillian; anuhea00@gmail.com ; phone: 341-5548; 41-902 Oluolu St., Waimanalo, Hawaii 96795
Consultant:	None – contact Applicant
Contact Name, Email, Telephone, Address	Pū‘ā Foundation - Toni Bissen; toni.bissen@puafoundation.net ; phone: 221-6656; P.O. Box 11025, Honolulu, Hawaii 96828

Status (select one) DEA-AFNSI**Submittal Requirements**

Submit 1) the approving agency notice of determination/transmittal letter on agency letterhead, 2) this completed OEQC publication form as a Word file, 3) a hard copy of the DEA, and 4) a searchable PDF of the DEA; a 30-day comment period follows from the date of publication in the Notice.

 FEA-FONSI

Submit 1) the approving agency notice of determination/transmittal letter on agency letterhead, 2) this completed OEQC publication form as a Word file, 3) a hard copy of the FEA, and 4) a searchable PDF of the FEA; no comment period follows from publication in the Notice.

 FEA-EISPN

Submit 1) the approving agency notice of determination/transmittal letter on agency letterhead, 2) this completed OEQC publication form as a Word file, 3) a hard copy of the FEA, and 4) a searchable PDF of the FEA; a 30-day comment period follows from the date of publication in the Notice.

 Act 172-12 EISPN
("Direct to EIS")

Submit 1) the approving agency notice of determination letter on agency letterhead and 2) this completed OEQC publication form as a Word file; no EA is required and a 30-day comment period follows from the date of publication in the Notice.

 DEIS

Submit 1) a transmittal letter to the OEQC and to the approving agency, 2) this completed OEQC publication form as a Word file, 3) a hard copy of the DEIS, 4) a searchable PDF of the DEIS, and 5) a searchable PDF of the distribution list; a 45-day comment period follows from the date of publication in the Notice.

 FEIS

Submit 1) a transmittal letter to the OEQC and to the approving agency, 2) this completed OEQC publication form as a Word file, 3) a hard copy of the FEIS, 4) a searchable PDF of the FEIS, and 5) a searchable PDF of the distribution list; no comment period follows from publication in the Notice.

 FEIS Acceptance
Determination

The approving agency simultaneously transmits to both the OEQC and the applicant a letter of its determination of acceptance or nonacceptance (pursuant to Section 11-200-23, HAR) of the FEIS; no comment period ensues upon publication in the Notice.

 FEIS Statutory

The approving agency simultaneously transmits to both the OEQC and the applicant a notice that it

Acceptance did not make a timely determination on the acceptance or nonacceptance of the applicant's FEIS under Section 343-5(c), HRS, and therefore the applicant's FEIS is deemed accepted as a matter of law.

Supplemental EIS Determination The approving agency simultaneously transmits its notice to both the applicant and the OEQC that it has reviewed (pursuant to Section 11-200-27, HAR) the previously accepted FEIS and determines that a supplemental EIS is or is not required; no EA is required and no comment period ensues upon publication in the Notice.

Withdrawal Identify the specific document(s) to withdraw and explain in the project summary section.

Other Contact the OEQC if your action is not one of the above items.

Project Summary

Provide a description of the proposed action and purpose and need in 200 words or less.

Pū‘ā Foundation and Hui Mahi‘ai, both non-profit organizations, are in the process of applying for a lease of the property, pending the outcome of the Environmental Assessment. The use of State lands triggers HRS Section 343-5(a).

The applicants' proposed action for the DLNR property is for community gardening and subsistence farming utilizing ahupua'a land management approaches and incorporating Native Hawaiian traditional and cultural practices to support the development of our youngest community members, primarily to create a source of healthy, fresh, low cost nutritious foods for community consumption to support Waimanalo residents and the distribution to the needy through faith-based organization's food banks. Production of other crops, as appropriate are also planned.

The overall goal of the proposed action is to reinvigorate the land, be in service to the community within an educational and healing context, and for the promotion of wellness.

DRAFT ENVIRONMENTAL ASSESSMENT FOR WAIMANALO COMMUNITY FARMING

SUBMITTED BY:

PŪ‘Ā FOUNDATION AND HUI MAHI‘AI

APPROVING AGENCY

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

NOVEMBER 2016

(This page intentionally left blank)

Draft Environmental Assessment
for
WAIMANALO COMMUNITY FARMING

Waimanalo, Oahu, Hawaii

This environmental document has been prepared pursuant to
Chapter 343, Hawai'i Revised Statutes and
Chapter 25 of the Revised Ordinances of Honolulu

Submitted by Applicant:

Pū'ā Foundation
P.O. Box 11025
Honolulu, Hawaii 96828

Hui Mahi'ai
41-902 Oluolu Street
Waimanalo, Hawaii 96795

NOVEMBER 2016

Table of Contents

1	Introduction	6
2	Summary of Prepared Proposed Action	7
2.1	Project Location and Surrounding Land Uses.....	7
2.2	Proposed Action - Background, Need and Objectives	7
2.3	Program / Site Development and Concept Plan Characteristics.....	8
2.4	Project Schedule and Cost.....	10
2.5	Existing Land Use - Site Description.....	10
2.6	Socio-Economic Setting	10
3	Description of the Existing Environment, Project Impacts and Mitigation Measures.....	11
3.1	Climate	11
3.2	Geology, Topography and Soils	12
3.3	Water Resources	12
3.4	Flora and Fauna.....	13
3.5	Natural Hazards	13
3.6	Emergency Services	14
3.7	Air and Noise Quality	14
3.8	Hazardous Materials and Solid Waste	14
3.9	Historic, Archaeological and Cultural Resources	15
3.10	Visual Resources	15
3.11	Socio-Economic Characteristics	15
3.12	Infrastructure Systems and Services	16
3.12.1	Roadways	16
3.12.2	Water Resources	16
3.12.3	Power and Communications.....	17
3.12.4	Wastewater System	17
3.12.5	Drainage System	17
4	Relationship to Land Use Plans and Policies.....	18
4.1	State Land Use Districts	18
4.2	Hawaii State Plan	18
4.3	City and County of Honolulu General Plan	19
4.4	Development Plan.....	19
4.5	City & County Land Use Ordinance	20
4.6	State Coastal Zone Management Program.....	20
5	Alternatives to the Proposed Action	20
5.1	No Action Alternative	21
5.2	Deferred Action	21
5.3	Alternative Replacement Methods	21
6	Required Permits and Approvals.....	21
7	Anticipated Determination	21
8	Consultation.....	21
8.1	Pre-Assessment Consultation.....	21
9	Findings.....	22

10 References **23**
11 LIST OF FIGURES..... **23**

1. INTRODUCTION

Project Name:	Waimanalo Community Farming and Learning Center
Applicant:	Pū‘ā Foundation and Hui Mahi‘ai
Approving Agency:	Department of Land and Natural Resources
Location:	Waimanalo, O‘ahu, Hawai‘i
Tax Map Keys:	(1) 4-1-008: 008
Land Area:	14.252 Acres (620,817 SF), more or less.
Recorded Fee Owner:	State of Hawaii
Existing Use:	Fallow and Former Agricultural Uses
Proposed Use:	<p>Applicant is in the process of applying a direct lease from the Board of Land and Natural Resources for community farming and learning center purposes. Applicant proposes to develop food production garden plots to supplement the distribution of foods that is shared through social service programs in Waimanalo, and further support sustainable cultivation and supply of fresh foods. The agricultural use will require basic infrastructure and support facilities.</p> <p>To support the development of our youngest community members, a learning center focused on place-based education programs will utilize a portion of the location complementing food production practices and learning opportunities.</p> <p>Overtime, proposed improvements may include basic infrastructure, accessory agricultural improvements, greenhouse nursery, water storage tank for irrigation purposes, single-story agricultural washing and storage facility, equipment storage sheds, a Traditional Hawaiian <i>hale</i> for cultural practices, learning and office facilities, parking, and internal driveways.</p>
Development Plan Area:	Ko‘olau Poko
State Land Use:	Agriculture
County Zone:	Agriculture-1 (AG-1) and Agriculture-2 (AG-2)
Special Management Area:	Not located within the SMA
Action Requested:	Compliance with Chapter 343, HRS and compliance with Title 11, Chapter 200, HAR.
Anticipated Determination:	Finding of No Significant Impact (FONSI)

2. SUMMARY OF PROPOSED ACTION

2.1 Project Location and Surrounding Land Uses

Tax Map Key (TMK) 4-1-008: 008 (“Parcel 8”) is a U-shaped parcel in Waimanalo, O’ahu and according to the Honolulu Tax Map, approximately 14.252 acres (620,817 SF). The site was formerly used for agricultural and pastoral purposes.

The State of Hawaii, Department of Land and Natural Resources (DLNR) oversees the now vacant land. Pū‘ā Foundation, a 501c3 non-profit organization, and Hui Mahi‘ai, a domestic non-profit organization were granted a right-of-entry for due diligence purposes by the Board of Land and Natural Resources on May 22, 2015.

Parcel 8 is located two blocks mauka (towards mountain) of Kalanianaʻole Highway at the end of Alaihi Street and extends northwest to Hinalea Street (see Figure 1, Location Map).

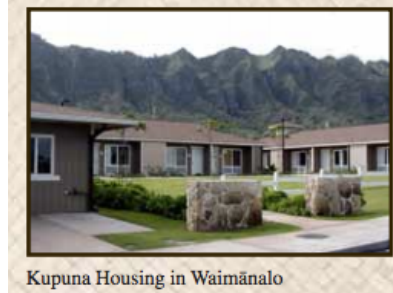
Parcel 8 is adjacent to a variety of uses. In addition, the Department of Hawaiian Home Lands (DHHL) owns all surrounding land except to the north, which is DLNR managed land. (see Figure 2, DHHL Lands). To the east (makai facing) are residential uses, to the south (Koko Head facing) are non-residential uses, north (Kailua-facing) is agricultural use, and to the west (mauka facing) is undeveloped land. Other uses to the south include the Kamehameha Schools - Waimanalo Preschool, Queen Liliuokalani Children’s Center, and Hawaiian Home Lands Kupuna housing - all accessed through Illauhole Street, pictured below.



Kamehameha Schools Preschool in Waimānalo



Queen Lili‘uokalani Children’s Center Office



Kupuna Housing in Waimānalo

2.2 Proposed Action - Background, Need and Objectives

Pū‘ā Foundation, a 501c3, non-profit organization, specializes in “Trauma to Transformation”, which refers to trauma, healing, and justice, and the journey to healing, recovery and well-being on an individual and community level. Pū‘ā Foundation works to develop community resources through connecting, organizing, capacity building and training. Using the *Pu‘uhonua Creating Places of Healing Model and Framework* (PCPHMF), which was collectively developed for community outreach to create common vision and common language to strengthen communities, the Proposed Project seeks an intergenerational approach to engagement and participation. Hui Mahi‘ai, a domestic non-profit that seeks to educate about, foster the study of, and practice the principles of ahupua‘a land management for subsistence farming in the community of Waimanalo, Oahu.

Food is a basic necessity. For a community to grow and thrive, the basic necessities (food, shelter, clothing) need to be met. The Proposed Project seeks to support food growth and learning opportunities to support human well-being.

Today, the Waimanalo community supports its hungry through food outreach programs led by community groups, specifically, faith-based organizations. Currently, St. George Church operates the largest food distribution network, offering food to the hungry two days a week, and one Saturday per month, year round. They serve on average over 4750 pounds of food to 700 adults, children or families per month.

Pū‘ā Foundation and Hui Mahi‘ai propose to create food production opportunities as a way to supplement the food outreach programs with fresh produce for the hungry in Waimanalo. This effort will be supported by facilities that allow for on-site cleaning, storage, and operation. With an intergenerational and community-minded approach, the site will include a hale that provides designed space for cultural practices, and operate a learning facility that focuses on place-based education practices to support the development of community members (“Proposed Project”). The learning center may also include a charter school utilizing a portion of Parcel 8 pursuant to a sublease to be executed with the Applicant.

The proposed uses represent the beginning of a collective commitment that models innovative and collaborative support for Waimanalo families and children. The proposed uses seek to achieve the following objectives:

- Foster health and wellness through sustainable food production, balanced diets, active living, and related place-based learning grounded in culture and the exploration of knowledge;
- Directly support the Waimanalo community through agricultural production that can provide job training, practical application, and examples of healthy living;
- Implement a sustainable program that cultivates food to supplement food outreach programs for in-need families in Waimanalo; and,
- Support our community by establishing an on-site learning center that has safe and adequate space for our families to grow, develop, and learn.

I maika‘i ke kalo i ka ‘ohā : The goodness of the taro is judged by the young plant it produces

The Proposed Project requires basic infrastructure and structures to support access and the Proposed Project activities. Although the specific nature of each improvement is not known at this time, the structures will be located on the northeast (makai) side of the property with the garden plots throughout the rest of the site (see Figure 3, Conceptual Plan).

Establishing the site will require the following actions and is further described below: Site infrastructure that is appropriate for agricultural areas; internal access; temporary facilities for land preparation; coordinating, preparing and developing the agricultural gardening plots; developing the garden plots; building out the crop washing and storage facility; and building out, as needed, the learning center and supporting facilities.

2.3 Program / Site Development and Concept Plan Characteristics

Anticipated program plan components that require improvements for the Proposed Project area include 6 community and faith-based organizations, with an average of 10 people per organization spending 20 hours per week respectively on project activities. The building spaces will be designed to ensure maximum flexibility as programs and activity needs are developed and refined. Clearing and land preparation, community farming activities – pre-crop, crop maintenance, and post crop production are the primary project activities that are planned. To support the work, the following improvements are projected:

- Storage for equipment
- Produce Work Stations
- Community Space, Meeting Area, and Office
- Traditional Hale; and or Learning Center

The following site goals for the Proposed Project include:

- Establish garden plots to include vegetable, fruit and a variety of plant production (debris and cuttings from grubbing and hand clearing will be put in several small compost piles);
- Construct up to four (4) storage sheds adjacent to gardens to protect gardening equipment and tools;
- Design and construct a single story structure to wash and store on-site garden produce;
- Build one traditional Hawaiian hale to support cultural learning and practices
- Installment of septic system alternatives - composting toilets; and,
- Build access road, parking, and turnaround areas using crushed gravel.

Agricultural Garden Plots and related facilities: Approximately 10.8 acres of parcel 8 is zoned Agriculture-1; this land will be designated for agricultural garden plots of various sizes. This will also include the Traditional Hawaiian Hale and the Washing and Storage Facility located on the northeast portion of the project site, closer to Hilu Street. The garden plots will be located throughout the remaining portion of the property. Equipment storage sheds will be located near the plots. The garden plots will be designed, managed and maintained by the same organization(s).

Washing and Storage Facility: The facility will support agricultural production, allowing for immediate washing and storage of fresh produce. While it is too premature to determine the exact design, the facility will be a one-story facility with electricity, water, and sewer infrastructure. A building size up to 3,200 square feet (SF) is estimated; a portion of the facility will be enclosed and secure, while another portion may be a 3-walled design, allowing for an open, yet covered facility. The facility may include space for an operations office. The washing and storage facility will be located on the northeast portion of the project site, closer to Hilu Street.

Equipment Storage Sheds: Basic covered equipment storage sheds will be built on site to protect and store tools and equipment from the elements. The exact locations will be determined once the agricultural plots are finalized. These sheds will provide safe storage and protect equipment from weather elements, located around the property near the garden plots.

Traditional Hawaiian Hale: A Traditional Hawaiian Hale will create greater opportunities for cultural practice and connections. While it is too premature to determine the exact design, the Hale will support intergenerational use, supporting more opportunities to connect with the land. The Traditional Hawaiian Hale will be located on the northeast portion of the project site, closer to Hilu Street or in the area marked as a Learning Center.

Learning Center Facilities: The Agriculture-2 zoned area will focus on activities that support our youngest members of the community with the proposed Learning facilities located on the southeast portion of the project site near Alaihi Street. While it is too premature to determine the exact program offered, the targeted age group is age four to eighteen, thereby creating an intergenerational program on a single parcel. The activities within the Learning Center will be land-based to support relevant learning and direct application to Waimanalo environment and the gardening program on site. As a public use, the physical space is to be designed to ensure flexible use of space to accommodate outdoor education, experiential learning opportunities, and place-based education lessons that model sustainable living practices. Recognizing that learning does not necessarily need to occur under a roof, a portion of the area will be open space to allow for outdoor learning opportunities and create strong connections to the garden production occurring on site. This could include ethno botanical gardens, recreational activities, indigenous gardens, and educational gardens that incorporate learning so youth can learn about endemic, Polynesian-introduced and other plants of cultural and sustenance value in Hawaii.

Access and Circulation: Access to Parcel 8 is from Alaihi Street with a possible second access through the adjacent DLNR leased property (TMK 4-1-008:046) off Hilu Street. Alaihi and Hilu Street are two blocks from Kalanianaʻole Highway. Both will serve as primary access points through all phases of the Project. Internal circulation will include internal access (gravel) and parking from the City streets to built structures, included the parking and turn-around areas required.

See Figure 4 and 4A: Illustrative Photos

2.4 Project Schedule and Cost

Pū‘ā Foundation and Hui Mahi‘ai through fundraising, grants, donations and in-kind support will secure the necessary resources to build out the project. Implementation of the project will be in phases. This will allow gradually planned growth, allowing for the time to build and grow resources. Project development costs for year one is estimated at \$60,000.00 to cover materials, supplies, equipment, utilities, professional services, insurance and labor.

Pū‘ā Foundation and Hui Mahi‘ai desires to begin the project in mid-2017, and to complete it incrementally with all phases of the project to be complete over a 5 year period.

2.5 Existing Land Use - Site Description

- Parcel 8 is 14.252 Acres (620,817 SF) of undeveloped and former pasture land;
- There are no structures on the site. A ground water well is present and previously used to support pasture use;
- Access is from Alaihi Street and Hilu Street, which are two blocks from Kalanianaʻole Highway;
- Existing utilities: Water, sewer, and electricity are within 100 feet of the parcel;
- Topography: Ranges from 0 to 40 feet based on map (see Figure 5, Topography map) ;
- Vegetation: Overgrown invasive plants such as California grass, koa haole
- Shoreline: No impact - the shoreline is 0.3 miles from the parcel.
- Historic site affected: There are no historic sites found after thorough inspection of the property and historic research.
- City and County of Honolulu zoning requirements for Agricultural land include a 15-foot front yard setback, 10-foot side/rear yard setback requirements, and a 15 to 25-foot building height limit, 15-feet for nonagricultural structures and dwellings, with 10% of the zoning lot maximum used for building area.

See Figure 6 for Site Photos.

2.6 Socio-Economic Setting

Information pertaining to the socio-economic setting has been excerpted from the Koolau Poko Watershed Management Plan (Townscape, Inc., 2012) and the Waimanalo Health Center Environmental Assessment (Limtiaco, 2014). The Koolau Poko Watershed Management Plan, which examined the watershed planning district on windward Oahu from Kualoa in the north to Makapuu Point in the south. Summarized information that pertains to Waimanalo is from this plan unless otherwise indicated. The earliest Hawaiians who settled on the windward coast of Oahu developed a food production system that utilized naturally occurring fresh water resources in the Koolau Poko area. The abundance of food contributed to the region’s importance as one of the major population centers where several ruling chiefs resided during the pre-contact era of Hawaii. Widespread epidemics and outbreaks that affected all of Hawaii caused severe population declines in Koolau Poko during

the 1800s. It is estimated that the population decreased by over 90 percent from 20,000 to 25,000 inhabitants in the late 18th century to slightly over 2,000 inhabitants in 1872.

The concepts of private land ownership led to vast changes in settlement patterns in Hawaii. Large tracts of land in the Koolau Poko area were sold or leased for mono-crop agricultural ventures (e.g., sugar, rice and pineapple) and livestock and ranching activities. The population of Koolau Poko began to grow again as immigrant laborers settled in the district. Waimanalo Sugar Plantation was one of nine sugar plantations in Koolau Poko. It operated for 70 years from 1878 to 1947 and encompassed roughly 3,000 acres of land extending six miles along the Waimanalo coast and four miles inland to the base of the Koolau Mountain Range. The plantation was founded in 1877 by John A. Cummins. In 1885, the plantation passed to W.G. Irwin who was instrumental in the construction of the ditch irrigation system that diverted water from streams and springs to plantation lands. The destructive effects of cattle and ranching activities on vegetation and forested areas in Koolau Poko eventually led to the establishment of forest reserve areas by the Territorial Government of Hawaii. Waimanalo Forest Reserve includes 7,395 acres in the mauka portions of Waimanalo, Kailua and southern Kaneohe. Residential population growth in Waimanalo followed the construction of the Kailua to Waimanalo Road in 1924. The first Hawaiian Homes development in Waimanalo began in 1925 and was followed by the Waimanalo beach lot homes in 1926. See Figure 7: Hawaii Territorial Survey, 1916.

Waimanalo has retained a rural character as compared to other urbanized areas of Koolau Poko, which experienced tremendous housing and population growth from the 1950s through the 1980s. Development in Waimanalo has occurred at a slower pace in part because much of the Waimanalo Sugar Plantation lands were passed to the Territorial and then the State government.

3 DESCRIPTION OF THE EXISTING ENVIRONMENT, PROJECT IMPACTS AND MITIGATION MEASURES

3.1 Climate

Parcel 8 is located on the windward portion of Oahu, which is characterized by mild temperatures and abundant rainfall, especially during the wetter months of November through February. Between 1969 and 2013, the recorded monthly average temperatures in Waimanalo ranged from 64 degrees to 85 degrees Fahrenheit and the average rainfall was 43 inches per year (Western Regional Climate Center, n.d.). Trade winds in the project vicinity are generally from the northeast. Strong winds are known to occur in connection with storm systems that disrupt climatic patterns.

Air quality in the State of Hawaii consistently meets National Ambient Air Quality Standards (NAAQS) established by the U.S. Environmental Protection Agency per requirements of the Clean Air Act and State Ambient Air Quality Standards (SAAQS) established by the DOH. The NAAQS and SAAQS are periodically exceeded due to volcanic activity and exceptional events such as New Year's fireworks celebrations.

The project site is located in a rural area that is positively influenced by northeast trade winds that disperse emissions and other air quality pollutants.

Potential Impacts and Mitigation Measures: The construction of the site will have no effect on climatic conditions such that no mitigation measures are necessary. The proposed project may generate short-term construction-related impacts on air quality such as fugitive dust and emissions from construction vehicles and equipment. The contractor will be responsible for complying with HAR Title 11, Chapter 60, "Air Pollution Control." The contractor will be responsible for the implementation of adequate dust control measures during all phases of development and construction activities. Construction equipment and vehicles shall be properly maintained in order to control vehicular emissions. Exhaust emissions from construction equipment and vehicles

are anticipated to have negligible impacts on air quality in the project vicinity since the carbon monoxide and nitrogen oxide emissions would be intermittent and readily dissipated.

Overall, air quality impacts during construction will be temporary in nature and will cease upon completion of the construction. No significant adverse air quality is anticipated upon completion and during operation of the proposed project.

3.2 Geology, Topography and Soils

Information pertaining to the general geology of the Waimanalo area has been excerpted from the geology discussion in the Final Supplemental Environmental Impact Statement for the Waimanalo Wastewater Facilities Plan, Ko'olau Poko, O'ahu, Hawaii (Hawaii Pacific Engineers, Inc., 1998). Basaltic bedrock, alluvium, and coralline deposits are the three main geological units found in the Waimanalo area.

The Project Site topography ranges from 5 feet above sea elevation on the eastern boundary/makai to 45 feet elevation on the western boundary/mauka-side. The built environment will be located on the makai portion of the property where elevations range from 5 to 10 feet.

According to the Soil Survey the Southeastern portion of the site is Kawaihapai Clay Loam (KIA) with 0-2% slopes, MLRA158; the Northeastern portion of the site is Haleiwa silty clay (HeA) with 0-2% slopes; the western portion of the site is coral outcrop (CR), and a small stripe on the eastern side is Jaucas Sand (JaC) with 0-15% slop, MLRA 163.

Impacts and Mitigation Measures: No adverse effects on the underlying geology and soils are anticipated from project actions and construction. Geotechnical investigations will be performed at specific locations targeted for structural improvements (e.g., the building footings) in support of the design phase. The findings will be utilized to ensure proper structural design of the new building and parking lot with respect to subsurface conditions within the footprint of new construction.

3.3 Water Resources

The Project Site is within the Kahawai Watershed within the Ko'olau Poko Watersheds, and is 2,956 acres in size. It has a medium size, steep in the upper watershed with little embayment (Watershed Management Plan, 2-5). The project area is within the Waimanalo Aquifer System Area (ASYA) that is part of the Windward Aquifer Sector Area.

The City and County of Honolulu Board of Water Supply (BWS) has issued Water Use Permits for ground water withdrawals totaling 1.956 million gallons per day (MGD) from the Waimanalo ASYA, which is well below the 10 MGD sustainable yield for this aquifer system (Townscape, Inc., 2012). Sustainable yield refers to "the quantity of water that can be extracted from an aquifer indefinitely without diminishing the quantity or quality of the water withdrawn" (State of Hawaii, Department of Land and Natural Resources, Commission on Water Resource Management, 2008).

There are no freshwater streams, rivers, ponds or other open water bodies located within or immediately adjacent to Parcel 8. Waimanalo Bay is 0.3 miles makai or seaward of Parcel 8. There are no wetlands (or marshes, swamps, bogs, etc.) located within or immediately surrounding Parcel 8.

Impacts and Mitigation Measures: Parcel 8 is located within an area served by existing municipal systems for potable water and wastewater disposal. The long-term use of Parcel 8 is not anticipated to negatively impact the underlying aquifer and groundwater sources in the Waimanalo ASYA.

Although the exact details of the garden plots are not defined. Parcel 8 is designated for agricultural use. Thus, the proposed garden plots will not require significantly more water than any other agricultural use. Project actions are not anticipated to have any impact on surface water resources. Erosion control Best Management Practices will be used to mitigate stormwater runoff from entering the State waters.

If applicable, a National Pollutant Discharge Elimination System (NPDES) Permit for discharges of storm water runoff associated with construction activity may be required pursuant to HAR Title 11, Chapter 55, "Water Pollution Control." effective December 6, 2013. If required, a Storm Water Pollution Prevention Plan must be submitted to the DOH Clean Water Branch in advance of a Notice of Intent (NOI) to be covered by the NPDES General Permit. The applicant is responsible for submitting the NOI at least 30 days before the commencement of construction activities.

The access road and parking area will be gravel. Naturally occurring drainage features such as swales will be designed into the site to accommodate the flood zone.

3.4 Flora and Fauna

The following excerpt is from the Final Watershed Plan and Environmental Impact Statement for the Waimānalo Watershed, City and County of Honolulu, Hawaii (U.S. Department of Agriculture Soil Conservation Service, 1981). "An interagency survey determined that the fish and wildlife habitat in the area is not unique, and the species observed, other than endangered birds, are common introduced species. There is no critical habitat for the endangered species within the watershed." Parcel 8 is within a larger geographic area that has experienced a long history of significant land-disturbing activities including large-scale agriculture, livestock and ranching activities that altered the natural environment. The U.S. Fish and Wildlife Service in its letter dated September 25, 2013 indicated that it reviewed pertinent information in its files (including data compiled by the Hawai'i Biodiversity and Mapping Program) and concluded that no federally designated or proposed critical habitat occurs within the proposed project footprint.

Impacts and Mitigation Measures: No species listed by the U.S. Fish and Wildlife Service or in the Endangered Species Act are expected to be affected by the Proposed Project and construction. Project actions include the necessary removal of overgrown vegetation consisting of introduced, non-native floral species. The Proposed Project includes garden plots and landscape that will include trees and plants, many of which will be native species.

3.5 Natural Hazards

Natural hazards that pose potential island wide effects are floods, tsunami inundation, tropical cyclones and earthquakes. Parcel 8 fall within Zone A according to the Flood Insurance Rate Map Panel No. 15003C0385G for Hawaii (effective date January 19, 2011) prepared by the Federal Emergency Management Agency (See Figure 8, Flood Map). The Zone A means that no base flood elevation has been determined for this area. Often, Zone A floodplains are located in sparsely populated areas, or in places with little previous floodplain work done. Base flood elevations will be established prior to detailed design work and reviewed by the City Department of Planning and Permitting. Related to tsunami hazards, Parcel 8 is in the "Extreme Tsunami Evacuation Zone", which means evacuate out of these areas for an extreme tsunami warning. (Hawaii State Civil Defense, n.d.) No apparent rock fall hazards in the vicinity of Parcel 8, which consist of relatively flat terrain that is far from steep cliffs and slopes. Threats from wildfires are unlikely but possible since there is abundant vegetation along the southern boundary.

Impacts and Mitigation Measures

As the Project progresses, the appropriate base flood elevation survey work will be completed to establish and inform design standards to mitigate any potential risks and comply with flood standards. The Tsunami Safe

Zone is located directly to the south on Ilauhole Street. The proposed project will not significantly increase the risks to human health or property.

FEMA's Flood Resistant Design and Construction standards will be considered during the design process.

3.6 Emergency Services

Emergency service providers include law enforcement, fire departments and critical care providers such as hospitals and clinics. Law enforcement is provided by the City and County of Honolulu, Honolulu Police Department. The nearest police station relative to the project area is the Kaneohe District Station and Kailua City Police Station. Fire protection services are provided by the Honolulu Fire Department. The Waimānalo Fire Station 27 is located approximately 1.5 miles away.

The nearest emergency care facility relative to the project area is Castle Medical Center in Kailua located 6 miles from Parcel 8. Pope Elementary located 0.5 miles from Parcel 8 is a designated hurricane evacuation shelter. It is noted that this shelter can accommodate persons with special health needs and caged household pets.

Impacts and Mitigation Measures: The project is not anticipated to increase demand on area emergency services, or need for emergency services. No significant adverse impacts to police, fire, medical, or emergency shelter services will occur from Proposed Project.

3.7 Air and Noise Quality

Air quality is considered good 99.61% of the time in Waimanalo and Honolulu (EPA AirNow, 2016). The Proposed project will not adversely impact existing air quality.

The project site is located in a rural community where the primary noise source is related to vehicular traffic along Kalanianaʻole Highway. There are low traffic volumes on this main arterial through Waimanalo except during peak travel periods.

Impacts and Mitigation Measures: Audible noise from construction activities is expected to be intermittent and unavoidable. Ambient noise levels in the vicinity of Parcel 8 may increase temporarily due to the movement of construction vehicles. Quieter construction activities, such as building erection and equipment installation, may not be audible. Construction noise is temporary in nature and will cease upon completion of the project. Project activities shall comply with the provisions of HAR Title 11, Chapter 46, "Community Noise Control." Potential noise impacts will also be mitigated by performing the majority of construction work during daytime hours.

Project implementation is not anticipated to result in substantive impacts to air and noise quality in the long-term.

3.8 Hazardous Materials and Solid Waste

Parcel 8 is not in the vicinity of any recognized environmental hazards or other hazardous substances. The site has historically been used as pasture and grazing land. Public access to the site is directly adjacent to residential areas and has been closed off by gate structures making illegal use of land nearly impossible.

Impacts and Mitigation Measures: Because of the project's site pasture and undeveloped use history, as well as a thorough site investigation, no mitigation or impact is anticipated.

3.9 Historic, Archaeological and Cultural Resources

This area was cleared of all native growth earlier in the century during pasture uses. Information provided from the adjacent long-time residents (50+ years) is that the land was active pasture land and then allowed to go fallow for nearly 20 years ago, resulting in the overgrowth of invasive plants. Today the area is choked with brush - walking is only possible by using machete to cut a path. However, the area closest to the residential site is relatively flat with grass, devoid of overgrowth.

Parcel 8 is not listed on the State or National Register of Historic Places. The land is part of the geographic area that has experienced a long history of significant land disturbance from large-scale agriculture, livestock and ranching activities.

According to the National register of Historic Places, historic significance is defined as “The importance of a property to the history, architecture, archeology, engineering, or culture of a community, State, or the nation”. No significant historic sites have been identified on Parcel 8. A total of 7 registered sites have been located for the Community of Waimanalo region (Table 7.1).

Site Number	Site Name	Hawai'i Register	National Register
80-15-382	Pohakunui Heiau	9/05/78	
80-15-489&490	Koa (Rabbit Island)	1/29/81	
80-15-511	Bellows Field Archaeological Area		8/14/73
80-15-516	Waimānalo Taro Terraces	6/17/87	
80-15-1031	Heiau	1/29/81	
80-15-1037	Pahonu Turtle Pond	9/2/78	
80-15-4042	Waimānalo Ditch System		9/18/81

Source: *Waimanalo Teen Project Site Analysis Report*

Impacts and Mitigation Measures: Based on historic land use maps and archaeological survey studies in the area, there are no known archaeological and cultural resources on Parcel 8. In the event any unanticipated sites or remains are encountered, work shall stop and the State Historic Preservation Division will be immediately contacted.

3.10 Visual Resources

Waimanalo is a rural community that is characterized by residential communities, small businesses and agricultural lots interspersed with green space. Vegetation on Parcel 8 and all of the land mauka provides the visual element of green space.

Impacts and Mitigation Measures: The proposed project will not significantly alter the visual character of the Waimanalo area. The new agricultural will continue as green space, and the learning facilities will not exceed the 25-foot building height limitations. Overgrown areas will be cleared to accommodate the proposed uses, but the proposed project's productive garden use as well as trees and other plants that are a necessary part of the site as shading, produce production, and as required by City code will continue to provide green spaces.

3.11 Socio-Economic Characteristics

The last population count for the rural community of Waimanalo was in 2010 indicating a resident population of 11,234 persons (2014 State of Hawaii Data Book). Of that population, the Waimanalo population includes 6,488

residents who are Native Hawaiian or part-Hawaiian (Office of Hawaiian Affairs, 2011), while the State of Hawaii Department of Hawaiian Home Lands (DHHL) owns approximately 2,000 acres in Waimanalo (Group 70, 2011). There are several DHHL developments surrounding Parcel 8. Waimanalo Central Designated Places 2014 data is as follows:

Population	5,807
Under 5 years	5.5%
5 to 19 years	29.4%
20 to 39 years	25.0%
40 to 64 years	29.0%
65 and over	11.1%
Median Age	31.6
Population 3 years and over enrolled in school	1,776
Median household income (dollars)	\$70,028
Total households	1,323
Average household Size	4.25

Impacts and Mitigation Measures: The proposed project will not affect population levels or housing needs. The Proposed Project activities and uses will directly serve and support the Waimanalo community as the proposed gardens and learning center is anticipated to have a positive impact on the existing population in the community. The project site is largely overgrown and has been vacant; thus, the Proposed Project will return the land to active agricultural use, support learning opportunities, and improve the appearance of the property.

3.12 Infrastructure Systems and Services

3.12.1 Roadways

The project site is located two blocks mauka of Kalanianaʻole Highway at the end of Alaihi Street and extends northwest to Hinalea Street. All streets are single lane, two-way streets with no sidewalks. The speed limit is 25 miles per hour. Primary access will be directly from Kalanianaʻole Highway, the main thoroughfare that runs through Waimanalo. The alternative route would be from the local street, Hihimanu to the northwest, which then links to Oluolu street to access either Alaihi or Hinalea Street. See Figure 9, Roadway Access.

Impacts and Mitigation Measures: As required, a Traffic Impact Assessment Report will be prepared to understand the road and traffic impact of operating garden plots and the learning center facilities. As determined, mitigation measures will be included in the final design plans.

3.12.2 Water Resources

Parcel 8 is within the Waimanalo Aquifer System Area (ASYA) that is part of the Windward Aquifer Sector Area. Parcel 8 is located mauka from two BWS potable water supply located on the adjacent local streets. The project area is served by the Windward 272-foot Water System, which is reportedly adequate to accommodate the domestic and off-site fire protection requirements for the new health care facility. Potable water service to Parcel 8 is available from an existing 8-inch water main on Alaihi Street and Hinalea Street. A final decision by BWS with regards to the availability of water will be confirmed when the building permit application is submitted for approval.

As former pasture land, there is an operating well located on the property. We anticipate use of this well for garden agricultural purposes.

The Project Site is also within the area that can access water from the Waimanalo Irrigation System operated by the Department of Agriculture's Agricultural Resource Management Division (ARMD) located at 41-645 Mokulama Street. The irrigation system is 15 miles in length, serves 1,174 acres and transports 150.0 million gallons per year. ARMD also manages the Waimanalo 60 MG Reservoir. Connecting to this water source is being explored.

Impacts and Mitigation Measures: The Proposed Project will require water service connection(s) to the existing 8-inch water main on Alaihi Street and Hinalea Street since it currently does not receive water service. The tie-in represents a negligible impact to the water system. The final decision on the availability of water will be confirmed when the building permit application is submitted for approval. The civil drawings will also be submitted to the Honolulu Fire Department for review and approval to ensure that on-site fire protection requirements are met.

3.12.3 Power and Communications

Electrical power in the project area is provided by Hawaiian Electric Company, Inc. (HECO). Other communication services are provided by Oceanic Time Warner Cable. The overhead communications lines are located on utility poles along Alaihi Street and Hinalea Street.

Impacts and Mitigation Measures: Proposed construction work has the potential to disrupt power and communication systems but these effects are expected to be temporary. The Proposed Project consume a negligible amount of energy since the primary use is garden plots. The establishment of communication services will be coordinated with the appropriate service provider.

3.12.4 Wastewater System

The Waimanalo Wastewater Treatment Plant (WWTP) currently services the windward coast of Oahu from Makapuu to Waimanalo. Wastewater flows within the vicinity of the project site are conveyed to the WWTP via a 15-inch diameter pipe along Kalaniana'ole Highway. The DPP has conditionally approved the sewer connection for Parcel 282.

Impacts and Mitigation Measures: The Proposed Project will require a wastewater connection to the existing lines on Alaihi Street and Hinalea Street. The tie-in represents a negligible impact to the sewer system. The new sewer connection is subject to review and approval by DPP. An Industrial Wastewater Discharge Permit (IWDP) may be required for the project. The contractor must notify the City's Department of Environmental Services, Collection System Maintenance one week prior to the start of construction.

3.12.5 Drainage System

There are currently no City, State or privately-owned drainage structures located within or adjacent to Parcel 8. Storm water runoff from Parcel 8 will generally sheet flow within the site and also move towards the front of the property towards the roadway - the lowest point of the property, continuing within the naturally occurring grass swales.

Impacts and Mitigation Measures: A short-term and temporary impact of the project would occur from the generation of additional surface runoff during construction work. Appropriate erosion control BMPs will be used to minimize the amount of soil transported in storm water runoff during construction activities. All construction activities will comply with applicable Federal, State and County regulations

and rules for erosion control as previously discussed in Section 3.4 Water Resources. Construction of the new buildings and parking areas will increase impervious areas, thereby increasing storm water runoff. The anticipated impact will be offset by the installation of drainage swale systems.

4 RELATIONSHIP TO LAND USE PLANS AND POLICIES

4.1 State Land Use Districts

The State Land Use Law (Chapter 205, HRS) is intended to preserve, protect, and encourage the development of lands in the State for uses which are best suited to the public health and welfare for Hawaii's people. All lands in the State are classified into four land use districts by the State of Hawaii, Land Use Commission: Urban, Agricultural, Conservation, and Rural. Agricultural district includes land for the cultivation of crops, aquaculture, raising livestock, etc.

Discussion: Parcel 8 abutts the Urban District, but is entirely located within the Agricultural District. See Figure 10, State Land Designation Map. The uses are compatible with the Agricultural district and its permissible uses, including crop production, farm buildings, and public uses.

4.2 Hawaii State Plan

The Hawaii State Plan (Chapter 226, HRS) outlines broad goals, policies and objectives to serve as guidelines for the future growth and development of the State.

The excerpts below are Hawaii State Plan objectives, policies, and priority guidelines that pertain to the Proposed Project in Waimānalo. The garden plots and educational facility on Parcel 8 will be near other existing public use structures and facilities.

§226-13 Objectives and policies for the physical environment--land, air, and water quality. (a) Planning for the State's physical environment with regard to land, air, and water quality shall be directed towards achievement of the following objectives: (1) Maintenance and pursuit of improved quality in Hawaii's land, air, and water resources and (2) Greater public awareness and appreciation of Hawaii's environmental resources. Therefore, it is the policy of the State to: (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; (4) Encourage actions to maintain or improve aural and air quality levels to enhance the health and well-being of Hawaii's people; and (6) Encourage design and construction practices that enhance the physical qualities of Hawaii's communities.

HRS §226-21 Objectives and policies for socio-cultural advancement – Education. (a) Planning the State's socio-cultural advancement with regard to education opportunities to enable individuals to fulfill their needs, responsibilities, and aspirations. (1) Support educational programs and activities that enhance personal development, physical fitness, recreation, and cultural pursuits of all groups. (2) Ensure the provision of adequate and accessible educational services and facilities that are designed to meet individual and community needs; and (4) Promote educational programs which enhance understanding of Hawaii's cultural heritage.

HRS §226-22 Objectives and policies for socio-cultural advancement – social services. (a) Planning 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. (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 integration 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.

Discussion: The Proposed Project incorporates intergenerational learning and experiences through the development of community farming. From the development and oversight of productive garden plots to the land-based learning opportunities occurring on site and in the educational facilities, the Proposed Project supports learning that is grounded in exploration and practical application. Participants in the Proposed Project will gain experience directly in agricultural work that enhance opportunities for current and future employment, as well as experiences that highlight the value and importance of Hawaii's environmental and cultural resources.

4.3 City and County of Honolulu General Plan

The General Plan of the City and County of Honolulu sets forth broad statements of social, economic, environmental, and design objectives and policies which are desired over the long-term. The excerpts below are General Plan policies and objectives that pertain to the proposed project:

II. Economic Activity, Objective C: To Maintain the viability of agriculture on O'ahu. Policy 2: Support agricultural diversification in all agricultural areas on O'ahu.

IX. Health and Education, Objective B: To provide a wide range of educational opportunities for the people of O'ahu. Policy 1: Support education programs that encourage the development of employable skills. Policy 2: Encourage the provision of informal educational programs for people of all age groups. Policy 4: Encourage the construction of school facilities that are designed for flexibility and high levels of use. Policy 5: Facilitate the appropriate location of learning institutions from the preschool through the university levels.

Discussion: The Proposed Project seeks an intergenerational approach to land management and use. Parcel 8 allows for the development of food production garden plots to supplement the distribution of food that is shared through social service programs in Waimānalo, and further supports sustainable cultivation and supply of fresh foods. The complementary learning center facility will focus on the younger members in the community - the next generation and their families, offering place-based educational opportunities to enhance personal development, healthy living, and ability to meet growing aspirations.

4.4 Development Plan

The Island of Oahu is divided into eight Development Plan areas as required by a 1973 City Charter; the plans for six of these areas have been designated as "Sustainable Communities Plans" to highlight the intent that these areas are not to be heavily developed, and that existing communities and special qualities of each region should be sustained and improved. Each Development Plan and Sustainable Communities Plan implements the objectives and policies of the General Plan and serves as a guide for public policy, investment, and decision making within each respective region. Together with the General Plan, these documents guide population and land use growth over a 20- to 25-year time span.

Parcel 8 is located within the region encompassed by the Koolau Poko Sustainable Communities Plan, which establishes policies to shape the growth and development of the Koolau Poko region. The plan was adopted in August 2000 and seeks to preserve Koolau Poko's natural, scenic, cultural, historical and agricultural resources, and to protect the residential environment of its neighborhoods. The Plan calls for adaptation of the traditional ahupuaa concept as a basis for land use and natural resources management. The following excerpts are the vision, policies, principles and guidelines that are applicable to the proposed project.

VISION: Protect the community's natural, scenic, cultural, historic and agricultural resources.

Chapter 3.1.3.5 Agricultural Areas: Design and locate buildings and other facilities that are accessory to an agricultural operation in a way that minimizes visual impacts within the view corridors.

Chapter 3.5.2 Agricultural Use Policies: Encourage agricultural use of small lots to prevent incremental conversion of agricultural lands to exclusive residential or other non-agricultural uses; adopt development and public works standards that are appropriate and cost-effective for rural, agricultural areas; and, provide support infrastructure, services, and facilities to foster and sustain agricultural operations. Associated planning principles include: Appropriate development standards, infrastructure requirements, appropriate use standards;

Discussion: The Proposed Project seeks an intergenerational, multi-use approach to land management and use with a goal of long-term sustainable approach to protecting environmental, cultural, and community resources. Parcel 8 allows for the development of food production garden plots to supplement the distribution of food that is shared through social service programs in Waimānalo, and further supports sustainable cultivation and supply of fresh foods. The complementary learning center facility will focus on the younger members in the community - the next generation and their families, offering place-based educational opportunities to enhance personal development, healthy living, and ability to meet growing aspirations. All built facilities will be one-story, blending with the surrounding built-environment, and all uses will comply with City codes. The Proposed Project will preserve the agricultural character of the site.

4.5 City & County Land Use Ordinance

The City and County of Honolulu Land Use Ordinance regulates land use in accordance with adopted land use policies, including the City and County of Honolulu General Plan and the Development/Sustainable Community Plans. The zoning for Parcel 8 is Ag-1 and Ag-2 Agricultural District, and permits crop production and agricultural products processing - minor essential to agricultural production as well as public uses and structures. See Figure 11, City and County of Honolulu Zoning Map.

Discussion: The Proposed Project seeks an intergenerational, multi-use approach to land management and use. Parcel 8 allows for the development of food production garden plots to supplement the distribution of food that is shared through social service programs in Waimānalo, and further supports sustainable cultivation and supply of fresh foods. The complementary learning center facility will focus on the younger members in the community - the next generation and their families, offering place-based educational opportunities to enhance personal development, healthy living, and ability to meet growing aspirations. All built facilities will be one-story, blending with the surrounding built-environment, and all uses will comply with City codes.

4.6 State Coastal Zone Management Program

Hawaii's Coastal Zone Management (CZM) program, established pursuant to Chapter 205A, HRS, as amended, is administered by the State of Hawaii, Office of Planning and provides for the beneficial use, protection, and development of the State's coastal zone.

Discussion: Parcel 8 is not in the Special Management Area and impacted by the CZM Program.

5 ALTERNATIVES TO THE PROPOSED ACTION

5.1 No Action Alternative

The “No action” alternative would preclude implementation of a successful intergenerational Project that directly serves the Waimānalo community including supplementing food outreach programs. The land will continue to remain vacant.

5.2 Deferred Action

The “Deferred Action” Alternative would put on hold all activities previously discussed. Food distribution support and land-based learning opportunities would also be deferred indefinitely.

5.3 Alternative Replacement Methods

Applicant would be required to look for alternative sites within Waimānalo that would meet criteria related to land size and access. The Alternative Project may require amendments to State Land Use District classification, City and County Zoning, and may require approval of another Environmental Assessment.

6 REQUIRED PERMITS AND APPROVALS

Agricultural activities and accessory uses are permitted in the City and Country Agricultural-1 District, and Learning Center Facilities that are not vocational, language or business are permitted within Agricultural-2 District. Implementation of the proposed improvements will require permits and approvals that may include the following: Conditional Use, Building, Grading and Grubbing Permits, construction de watering, noise for construction activities, trenching, construction within a flood hazard district, drainage connection, water and sewer connection, site development, traffic review branch approval, water availability approval, and National Pollutant Discharge Elimination System (NPDES) Permit.

7 ANTICIPATED DETERMINATION

Based on the findings of this Environmental Assessment, it is anticipated that the approving agency, the State of Hawaii Department of Land and Natural Resources, will determine that the proposed project described above will not have a significant environmental impact, and an Environmental Impact Statement will not be required. Therefore, a Finding of Non Significant Impact is anticipated.

8 CONSULTATION

8.1 Pre-Assessment Consultation

The Proposed Project has worked directly with DLNR and one-on-one interviews and discussion with specific Waimanalo residents and community members. Contacts include: Waimanalo Residents - Father Scott Bush, Blanche McMillan, Joe and Joanne Kaakua, and Ted and Margee Ralston. State Department of Land and Natural Resources, City and County of Honolulu Department of Planning and Permitting, Subdivision Branch, Board of Water Supply.

When making the determination, the following agencies will be formally contacted:

State Agencies:	City Agencies:
<ul style="list-style-type: none">▪ Department of Land and Natural Resources▪ DOH▪ DOH, Clean Water Branch▪ DOH, Env Planning Office▪ DOT▪ DHHL▪ DBEDT	<ul style="list-style-type: none">▪ Department of Planning and Permitting▪ Board of Water Supply▪ Dept. of Design & Construction▪ Dept. of Environmental Services▪ Wastewater▪ Dept. of Transportation Services▪ Fire Department

<ul style="list-style-type: none"> ▪ Office of State Planning ▪ DLNR, SHPD ▪ OHA 	<ul style="list-style-type: none"> ▪ Police Department ▪ HECO
---	---

9 FINDINGS

The “significance criteria”, HAR 11-200-10, were reviewed and analyzed to determine whether the Proposed Project will have significant impacts to the environment. The following analysis is provided.

- **No Irrevocable Commitment to Loss or Destruction of Any Natural or Cultural Resources Would Occur as a Result of the Proposed Project.**
The proposed project will revive agricultural uses on the vacant property and utilize an intergenerational opportunities approach to support land-based education. There are no known archaeological and cultural resources on site.
- **The Proposed Action Would Not Curtail the Range of Beneficial Uses of the Environment.**
The subject property was previously used for pasture, a common use of this area at the start of the 1900s and has since been vacant. There would be no consequent curtailment of uses of the environment.
- **The Economic or Social Welfare of the Community or State Would Not Be Substantially Affected.**
The state’s Environmental Policy and Guidelines are set forth in Chapter 344, Hawaii Revised Statutes (HRS). The proposed action is in compliance with the policies and guidelines of Chapter 344, HRS.
- **The Proposed Action Does Not Affect Public Health.**
No impacts to public health are anticipated to result from the proposed project.
- **No Substantial Secondary Impacts, Such as Population Changes or Effects on Public Facilities are Anticipated.**
No secondary impacts to population or effects upon public services, such as police, fire, medical, educational, or waste collection services are anticipated.
- **No Substantial Degradation of Environmental Quality is Anticipated.**
The proposed action will have no substantial impact to environmental quality.
- **The Proposed Project Does Not Involve a Commitment to Larger Actions, Nor Would Cumulative Impacts Result in Considerable Effects on the Environment.**
The proposed action involves the construction of garden plots and a learning center facility, and will not involve a commitment to larger actions. This project will not have cumulative impacts resulting in considerable effects on the environment.
- **No Rare, Threatened, or Endangered Species or Their Habitats Would Be Adversely Affected by the Proposed Action.**
There are no rare, endangered, or threatened species within the project vicinity. No anticipated impact.
- **Air Quality, Water Quality, or Ambient Noise Levels Would Not Be Detrimentially Affected by the Proposed Project.**
During the construction of the built area, there may be short-term impacts to air and noise quality. Best Management Practices (BMP’s) can reduce these short term impacts, which will not extend into the long term.

- **The Proposed Project Would Not Affect Environmentally Sensitive Areas.**
The subject property is located approximately 0.3 miles from the shoreline. The Proposed project will not impact coastal waters, wetlands, or waterways. A baseflood elevation survey will be completed to inform property design.
- **The Proposed Action Would Not Substantially Affect Scenic Vistas and Viewplanes.**
The proposed action has no impact on vistas or viewplane
- **The Proposed Action Would Not Require Substantial Energy Consumption.**
The proposed project will not require a substantial commitment of energy.

Based on the foregoing findings, the conclusion reached is that the proposed action will not result in any significant impacts.

10 REFERENCES

City and County of Honolulu, Department of Planning and Permitting. *Development Plans and Sustainable Communities Plans*. July 2015.

City and County of Honolulu. General Plan Objectives and Policies. Amended October 3, 2002.

Department of Hawaiian Home Lands. O'ahu Island Plan. July 2014.

Office of Hawaiian Affairs. Native Hawaiian Data Book 2015. May 2016.

PBR Hawaii & Associates, Inc. Waimanalo Bay Beach Park Master Plan. August 2011.

The Limtiaco Consulting Group, Final EA for the Waimanalo Health Center - Expanded Care Facility. February 2014.

Townscape, Inc. Prepared for Honolulu Board of Water Supply. Ko'olau Poko Watershed Management Plan. September 2012.

11 LIST OF FIGURES

- Figure 1 Location Map at page 6
- Figure 2 DHHL Lands at page 6
- Figure 3 Conceptual Plan at page 7
- Figure 4 Illustrative Photos at page 9
- Figure 4A Illustrative Photos at page 9
- Figure 5 Topography Map at page 9
- Figure 6 Site Photos at page 9
- Figure 7 Hawaii Territorial Survey, 1916 at page 10
- Figure 8 Flood Hazard Assessment Report at page 12
- Figure 9 Roadway Access at page 15
- Figure 10 State Land Designation Map at page 17
- Figure 11 City and County of Honolulu Zoning Map at page 19



Figure 1: Location Map

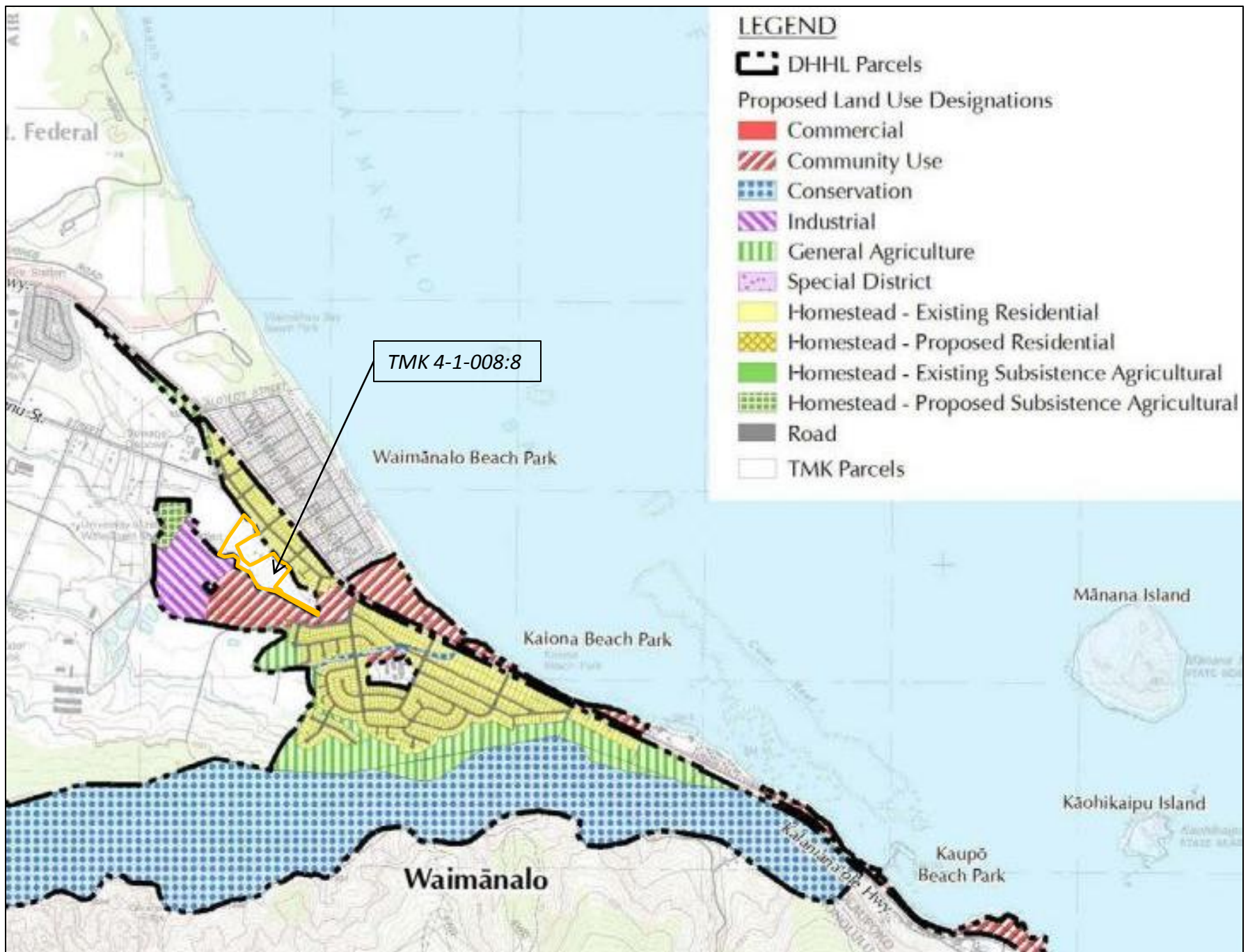


Figure 2: DHHL Lands

Source: DHHL Ohau Island Plan, Figure 7.3, Waimanalo Ahupuaa Land Use Designation



Figure 3: Conceptual Plan



Figure 4: Illustrative Photos

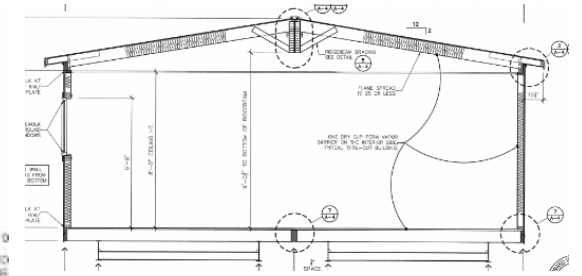
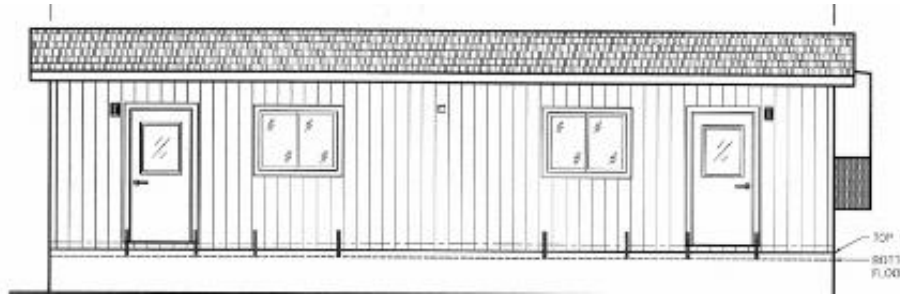
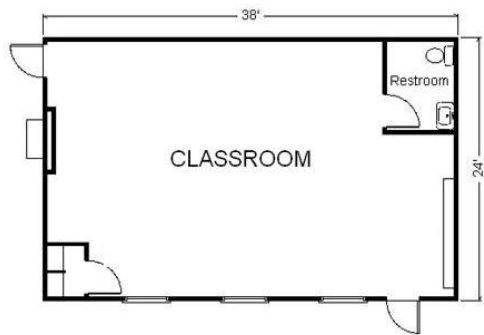


Figure 4A: Illustrative Photos

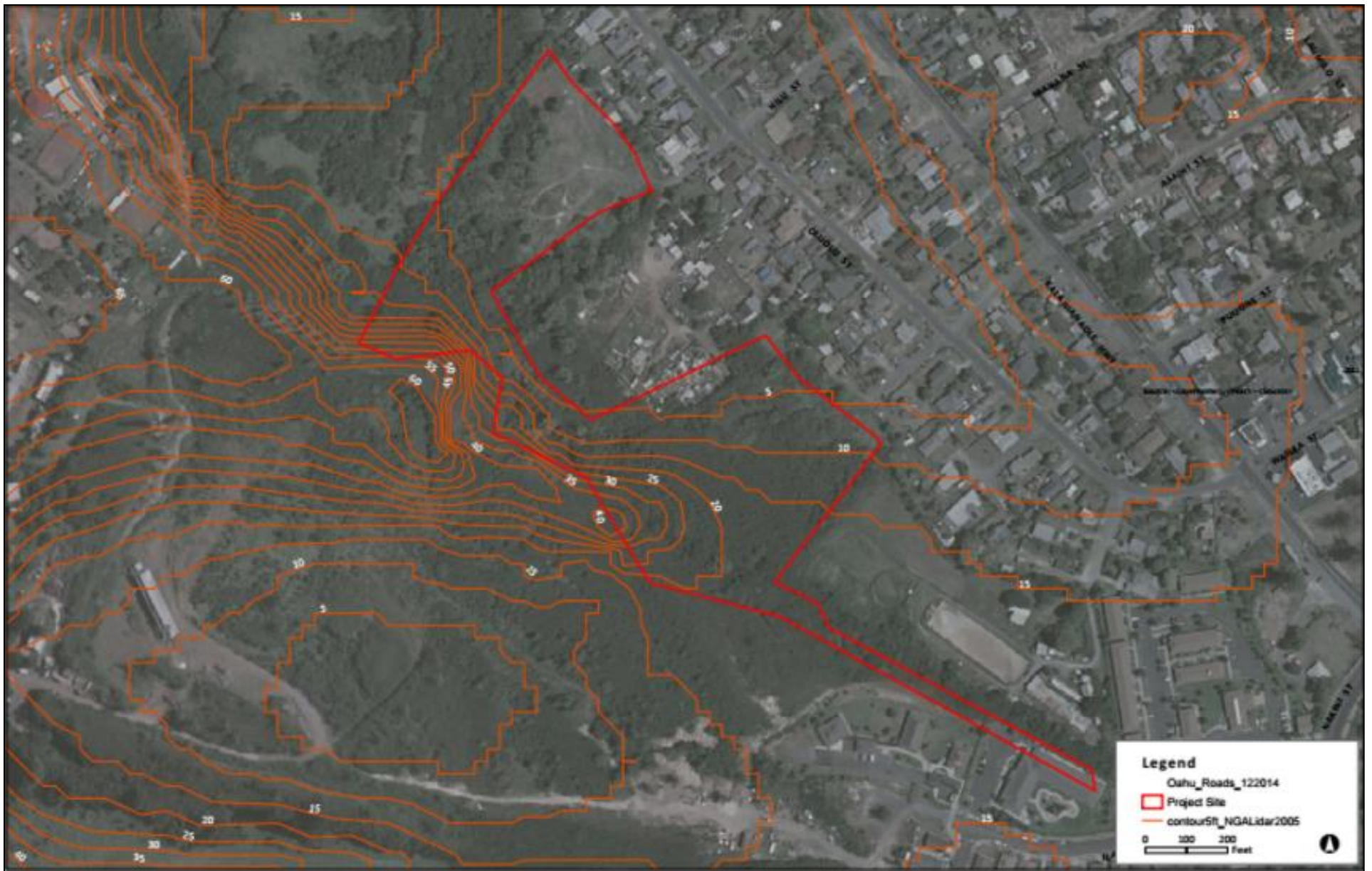


Figure 5: Topography Map, 5-foot contours



Figure 6: Site Photos

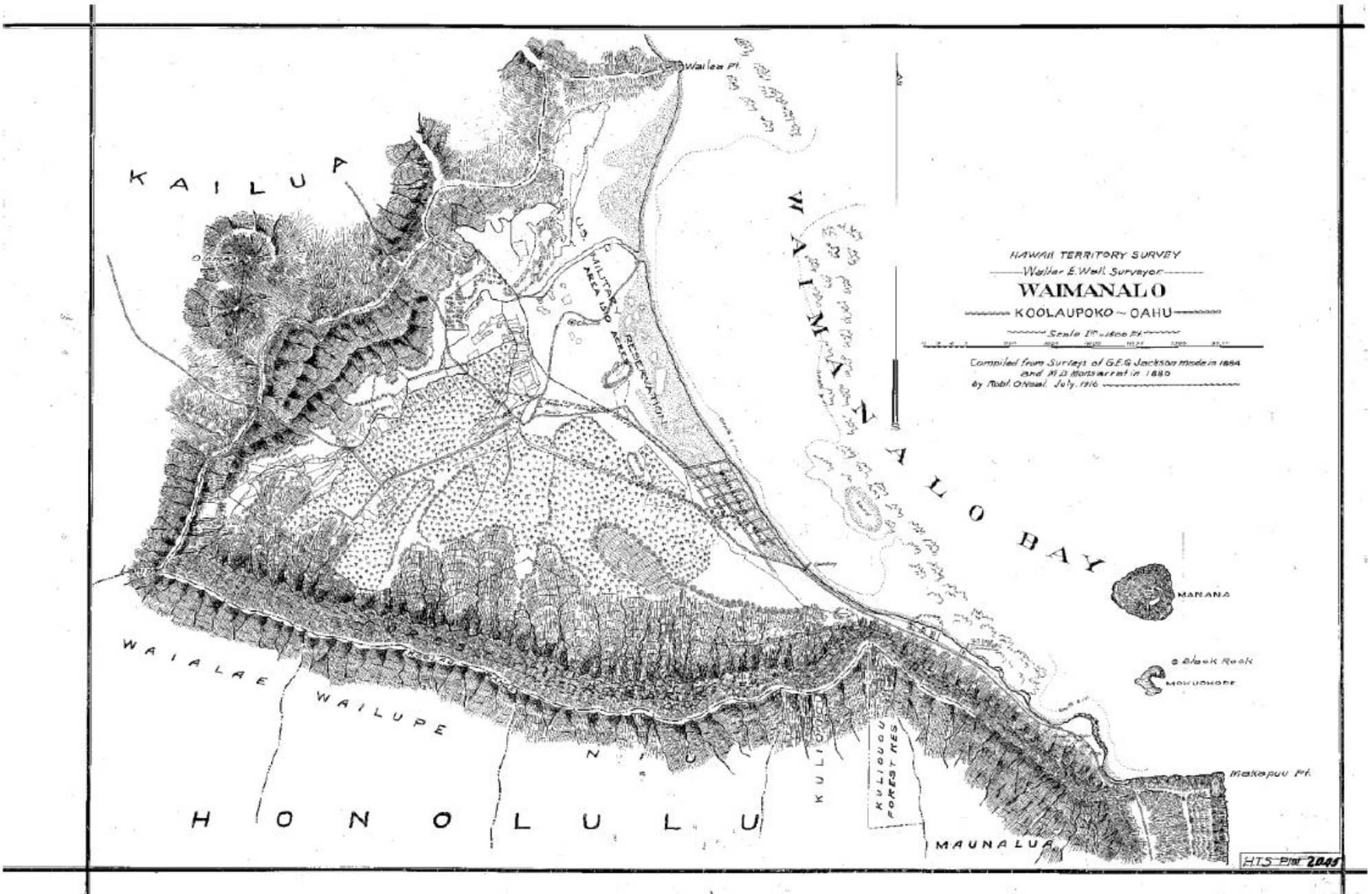


Figure 7: Hawaii Territorial Survey, 1916

Source: Waimanalo Bay Beach Park Master Plan

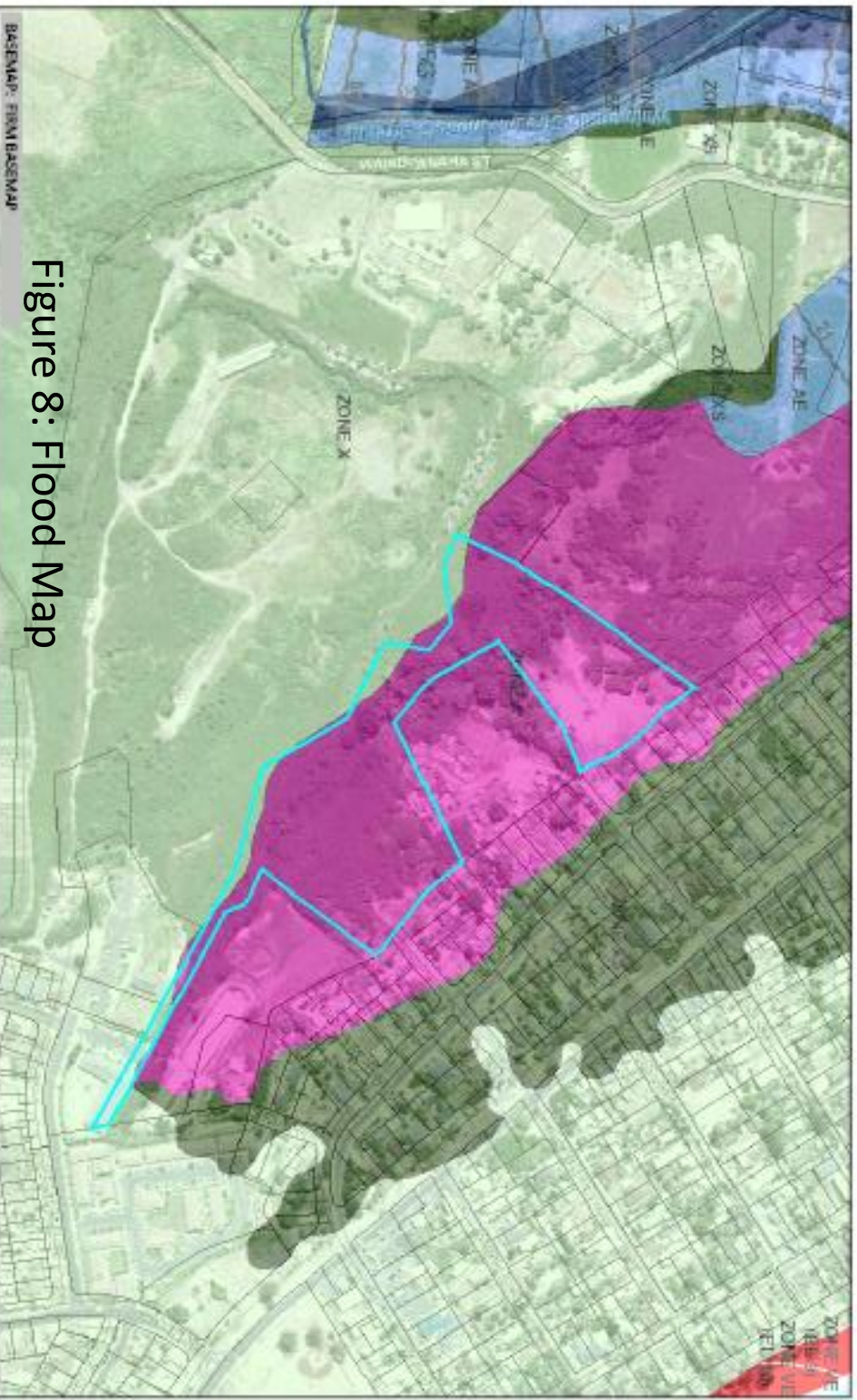


Figure 8: Flood Map



Flood Hazard Assessment Report

www.hawaiiinfo.org

BASEMAP - FIRM BASEMAP

Property Information

COUNTY: HONOLULU
TRAK NO.: (1) 4-1-008:008
WATERSHED: KAHAWAI
PARCEL ADDRESS: UNKNOWN ADDRESS
 WAIMANALO, HI 96795

Notes:

FIRM INDEX DATE: NOVEMBER 05, 2014
LETTER OF MAP CHANGES: NONE
FEMA FIRM PANEL: 15001C0385G
PANEL EFFECTIVE DATE: JANUARY 19, 2011

Flood Hazard Information

FIRM INDEX DATE: NOVEMBER 05, 2014
LETTER OF MAP CHANGES: NONE
FEMA FIRM PANEL: 15001C0385G
PANEL EFFECTIVE DATE: JANUARY 19, 2011

THIS PROPERTY IS WITHIN A TSUNAMI EVACUATION ZONE: NO
FOR MORE INFO, VISIT: <http://www.zcd.hawaii.gov/>

THIS PROPERTY IS WITHIN A DAM EVACUATION ZONE: NO
FOR MORE INFO, VISIT: <http://diren.hawaii.gov/dam/>



Disclaimer: The Hawaii Department of Land and Natural Resources (DLNR) assumes no responsibility arising from the use, accuracy, completeness, and timeliness of any information contained in this report. Viewers/Users are responsible for verifying the accuracy of the information and agree to indemnify the DLNR, its officers, and employees from any liability which may arise from its use of its data or information.

If this map has been identified as "POTENTIALLY", please note that it is being provided for informational purposes and is not to be used for flood insurance rating. Contact your county floodplain manager for flood zone determinations to be used for compliance with local floodplain management regulations.

FLOOD HAZARD ASSESSMENT TOOL LAYER LEGEND

(Note: Legend does not correspond with FIRM.)

SPECIAL FLOOD HAZARD AREAS (SFHA) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD - The 1% annual chance flood (100-year) also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. SFHAs include Zone A, AE, AH, AO, V, and VE. The Base Flood Elevation (BFE) is the water surface elevation of the 1% annual chance flood. Mandatory flood insurance purchase applies in these zones:

	Zone A: No BFE determined.
	Zone AE: BFE determined.
	Zone AH: Flood depths of 1 to 3 feet (usually areas of ponding); BFE determined.
	Zone AO: Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined.
	Zone V: Coastal flood zone with velocity hazard (wave action); no BFE determined.
	Zone VE: Coastal flood zone with velocity hazard (wave action); BFE determined.
	Zone AEI: Floodway areas in Zone AE. The floodway is the channel of stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without increasing the BFE.
	NON-SPECIAL FLOOD HAZARD AREA - An area in a low-to-moderate risk flood zone. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities.
	Zone X5 (X shaded): Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.
	Zone X: Areas determined to be outside the 0.2% annual chance floodplain.
OTHER FLOOD AREAS	
	Zone D: Unstudied areas where flood hazards are undetermined, but flooding is possible. No mandatory flood insurance purchase apply, but coverage is available in participating communities.



Left: Aerial View of Project Area



Left: View looking into property from Alaihi Street



Left: View looking into property from Hilu Street

Figure 9: Roadway Access

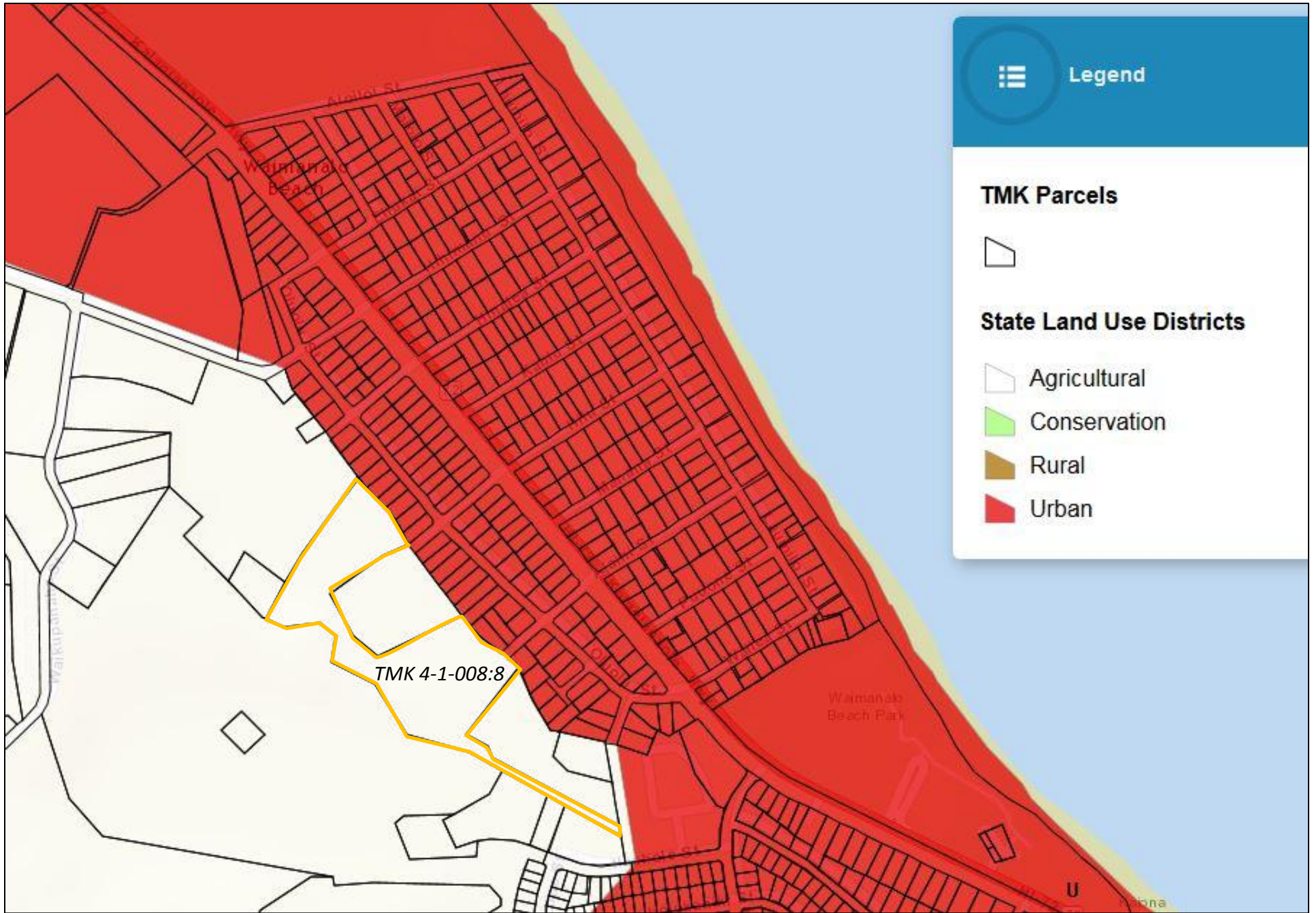


Figure 10: State Land Designation Map

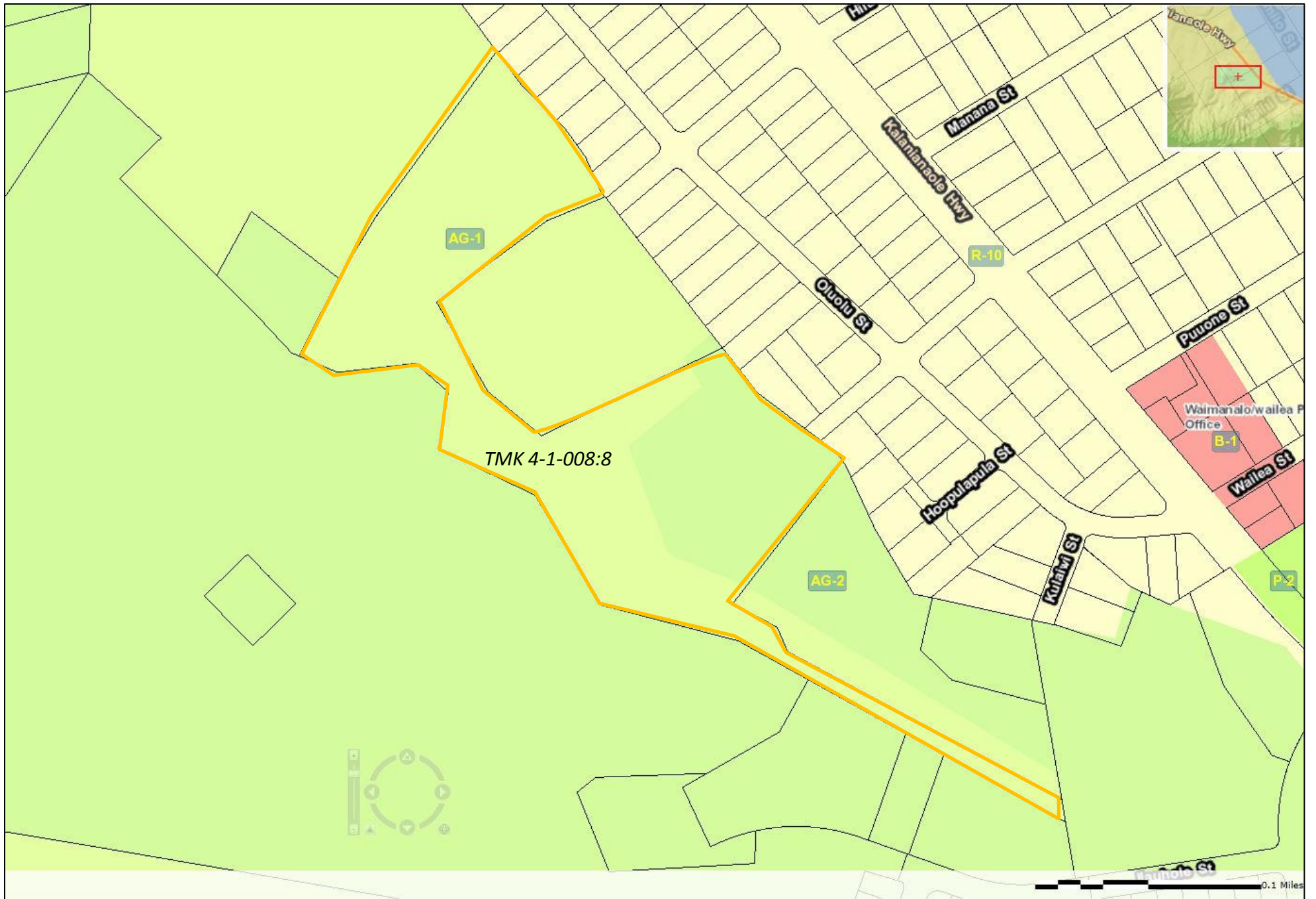


Figure 11: City and County of Honolulu Zoning Map