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01/29/26

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KAHOOLAWE ISLAND RESERVE COMMISSION  
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Ms. Mary Alice Evans, Director  
Office of Planning and Sustainable Development  
Department of Business, Economic Development and Tourism  
Environmental Review Program  
235 S. Beretania Street, Room 702  
Honolulu, HI 96813

Dear Ms. Evans:

Subject: Final Environmental Assessment and Finding of No Significant Impact (FEA-FONSI)  
Division of Conservation and Resources Enforcement Wahiawā Substation,  
Wahiawā, O'ahu, Hawai'i, Tax Map Key: (1) 7-4-001:025

With this letter, the Department of Land and Natural Resources (DLNR) transmits the Final Environmental Assessment and Finding of No Significant Impact (FEA-FONSI) for the Division of Conservation and Resources Enforcement Wahiawā Substation project. The FEA-FONSI has been prepared pursuant to Chapter 343, Hawai'i Revised Statutes, and Chapter 11-200.1, Hawai'i Administrative Rules. We respectfully request that the FEA-FONSI be published in the next available issue of The Environmental Notice. Materials required for the publication are being provided via the Environmental Review Program's online form.

The Draft Environmental Assessment was published in the December 8, 2025 edition of the Environmental Notice. Comments received during the 30-day comment period and DLNR's response are included in the FEA-FONSI. In accordance with the Board of Land and Natural Resources' approval on July 25, 2025, Item L-1, authority was delegated to the Chairperson to approve an EA and issue a FONSI. The FEA-FONSI determination was approved by the Chairperson on January 28, 2026.

Should you have any questions, please contact Mr. Brandon Kim, Project Planning Section Head at (808) 587-0248 or [brandon.j.kim@hawaii.gov](mailto:brandon.j.kim@hawaii.gov).

Sincerely,

A handwritten signature in black ink, appearing to read 'R.K.O.', written over a white background.

Ryan K.P. Kanaka'ole  
Acting Chairperson

**From:** [dbedt.opsd.erp@hawaii.gov](mailto:dbedt.opsd.erp@hawaii.gov)  
**To:** [DBEDT OPSD Environmental Review Program](#)  
**Subject:** New online submission for The Environmental Notice  
**Date:** Friday, January 30, 2026 2:45:24 PM

---

**Action Name**

Division of Conservation and Resources Enforcement Wahiawā Substation Project

**Type of Document/Determination**

Final environmental assessment and finding of no significant impact (FEA-FONSI)

**HRS §343-5(a) Trigger(s)**

- (1) Propose the use of state or county lands or the use of state or county funds

**Judicial district**

Wahiawā, O'ahu

**Tax Map Key(s) (TMK(s))**

(1) 7-4-001:025

**Action type**

Agency

**Other required permits and approvals**

Various - See Section 1.4

**Proposing/determining agency**

Department of Land and Natural Resources, Engineering Division / Board of Land and Natural Resources

**Agency jurisdiction**

State of Hawai'i

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Brandon Kim

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United States

[Map It](#)

**Is there a consultant for this action?**

Yes

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United States  
[Map It](#)

**Action summary**

The State of Hawai'i, Department of Land and Natural Resources, Engineering Division is planning to acquire an abandoned property identified by TMK (1) 7-4-001:025. Once acquired, a Division of Conservation and Resources Enforcement substation will be built for officers patrolling the Wahiawā and North Shore area. Currently, officers patrolling the Wahiawā and North Shore area report from the main station in Pearl City. To support enforcement, a smaller substation will be located in Wahiawā, providing officers with a nearby office space, a secure evidence storage room, and storage for larger equipment.

**Reasons supporting determination**

See Chapter 6

**Attached documents (signed agency letter & EA/EIS)**

- [DLNR-DOCARE-EA-2026-01-28\\_unlocked1.pdf](#)
- [A00A046A-DOCARE-Wahiawa-Substation\\_FEA-ERP-Ltr-part-1-UNLK1.pdf](#)

**ADA Compliance certification (HRS §368-1.5):**

The authorized individual listed below acknowledges that they retain the responsibility for ADA compliance and are knowingly submitting documents that are unlocked, searchable, and may not be in an ADA compliant format for publication. Audio files do not include transcripts, captions, or alternative descriptions. The project files will be published without further ADA compliance changes from ERP, with the following statement included below the project summary in The Environmental Notice: "If you are experiencing any ADA compliance issues with the above project, please contact (authorized individual submitting the project at email)."

**Shapefile**

- The location map for this Final EA is the same as the location map for the associated Draft EA.

**Action location map**

- [DOCARE\\_Wahiawa\\_Project\\_Location1.zip](#)

**Authorized individual**

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**Authorization**

- The above named authorized individual hereby certifies that he/she has the authority to make this submission.

# Division of Conservation and Resources Enforcement Wahiawā Substation

## FINAL ENVIRONMENTAL ASSESSMENT

WAHIAWĀ, ISLAND OF O'AHU, HAWAII



PETITIONER/APPLICANT:



PREPARED BY:

**G70**

111 S. King Street, Suite 170  
Honolulu, Hawaii 96813

**JANUARY 2026**



# **DIVISION OF CONSERVATION AND RESOURCES ENFORCEMENT WAHIAWĀ SUBSTATION**

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Wahiawā, Island of O‘ahu, Hawai‘i

**Tax Map Key: (1) 7-4-001:025**

## **Final Environmental Assessment**

### **Applicant:**



State of Hawai‘i, Department of Land and Natural Resources, Engineering Division  
1151 Punchbowl Street, Room 221  
Honolulu, HI 96813  
Contact: Brandon Kim, Project Planning Section Head  
Telephone: (808) 587-0248

### **Approving Agency:**



Board of Land and Natural Resources

### **Prepared By:**



111 S. King Street, Suite 170  
Honolulu, Hawai‘i 96813

This environmental document is prepared pursuant to 343, Hawai‘i Revised Statutes and Chapter 200.1 of Title 11, Administrative Rules, Department of Health, Environmental Impact Statement Rules.

**JANUARY 2026**





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- D. Species List
- E. Infrastructure Due Diligence Assessment
- F. Transportation Assessment
- G. Archaeological Literature Review and Field Inspection
- H. Cultural Impact Assessment
- I. Draft EA Comment Letters

## Abbreviations

ACM	Asbestos Containing Material
ADA	Americans with Disabilities Act
AFONSI	Anticipated Finding of No Significant Impact
AIS	Archaeological Inventory Survey
ALRFI	Archaeological Literature Review and Field Inspection
BFE	Base Flood Elevation
BLNR	Board of Land and Natural Resources
BMPs	Best Management Practices
BWS	Board of Water Supply
CAB	Clean Air Branch
CIA	Cultural Impact Assessment
CREC	Controlled Recognized Environmental Condition
CUP	Conditional Use Permit
CZM	Coastal Zone Management
CZMA	Coastal Zone Management Act
DAGS	Department of Accounting and General Services
DCAB	Disability and Communication Access Board
DLNR	Department of Land and Natural Resources
DOCARE	Division of Conservation and Resources Enforcement
DOFAW	Division of Forestry and Wildlife
DOE	Department of Education
DOH	Department of Health
DOT	Department of Transportation
DPP	Department of Planning and Permitting
DTS	Department of Transportation Services
EA	Environmental Assessment
EHA	Environmental Health Administration
EIS	Environmental Impact Statement
EMS	Emergency Medical Services
ERP	Environmental Review Program
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map

FONSI	Finding of No Significant Impact
GPD	Gallons per Day
GPM	Gallons per Minute
HAR	Hawai'i Administrative Rules
HDOT	State of Hawai'i Department of Transportation
HECO	Hawaiian Electrical Company
HFD	Honolulu Fire Department
HPD	Honolulu Police Department
HRI	Hawai'i Reserves Inc.
HREC	Historic Recognized Environmental Condition
HRS	Hawai'i Revised Statutes
HWMO	Hawai'i Wildfire Management Organization
IPaC	Information for Planning and Consultation
JDA	Joint Development Agreement
KSCP	Ko'olau Loa Sustainable Communities Plan
LOS	Level of Service
LUC	Land Use Commission
MGD	Million Gallons per Day
Mph	Miles Per Hour
NFPA	National Fire Protection Association
NOAA	National Oceanic and Atmospheric Administration
NOV	Notice of Violation
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NREM	Natural Resources and Environmental Management
NRHP	National Register of Historic Places
OHA	Officer of Hawaiian Affairs
OPSD	Office of Planning and Sustainable Development
OSHA	Occupational Safety and Health Administration
OSL	Official Species List
ORTP	Oahu Regional Transportation Plan
PCBs	Polychlorinated Biphenyls
PIFWO	Pacific Island Fish and Wildlife Office
PSI	Pounds per Square Inch

PV	Photovoltaic
REC	Recognized Environment Conditions
ROH	Revised Ordinances of Honolulu
SAAQS	State Ambient Air Quality Standards
SDC	Seismic Design Category
SFHA	Special Flood Hazard Area
SHPD	State Historic Preservation Division
SIHP	State Inventory of Historic Places
SLR	Sea Level Rise
SLR-XA	Sea Level Rise Exposure Area
SMA	Special Management Area
SWPB	Surface Water Protection Branch
TEN	The Environmental Notice
TMK	Tax Map Key
UH	University of Hawai'i
UHCDC	University of Hawai'i Community Design Center
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

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Chapter 1

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# Introduction



# Chapter 1

## Introduction

This Final Environmental Assessment (EA) has been prepared in accordance with the requirements of Hawai'i Revised Statutes (HRS), Chapter 343 and Hawai'i Administrative Rules (HAR), Title 11 Chapter 200.1. The State of Hawai'i, Department of Land and Natural Resources (DLNR), Engineering Division is initiating the acquisition process of the property identified as Tax Map Key (TMK) (1) 7-4-001:025. In support of the acquisition procedures, DLNR is required to complete environmental review procedures in accordance with HRS, Chapter 343.

### 1.1 Project Information Summary

<b>Type of Document:</b>	Final Environmental Assessment
<b>Project Name:</b>	Division of Conservation and Resources Enforcement Wahiawā Substation
<b>Applicant:</b>	State of Hawai'i, Department of Land and Natural Resources, Engineering Division 1151 Punchbowl Street, Room 221 Honolulu, HI 96813 Contact: Brandon Kim, Project Planning Section Head Telephone: (808) 587-0248
<b>Agent:</b>	G70 111 S. King St., Suite 170 Honolulu, HI 96813 Contact: Tracy Camuso, AICP, Principal Telephone: (808) 523-5866
<b>Approving Agency:</b>	Board of Land and Natural Resources
<b>EA Trigger:</b>	Use of State Lands & State Funds
<b>Project Location:</b>	525 Avocado St. Wahiawā, Hawai'i ( <i>Figure 1-1</i> )
<b>Tax Map Key (TMK):</b>	TMK(s): (1) 7-4-001:025 ( <i>Figure 1-1</i> )
<b>Project Area:</b>	Approximately 0.2 acres (9,288 square feet)
<b>State Land Use District:</b>	Urban District ( <i>Figure 1-2</i> )
<b>City &amp; County of Honolulu Zoning:</b>	Community Business (B-2) and Residential (R-5) ( <i>Figure 1-3</i> )

<b>Community Plan:</b>	Central O‘ahu Sustainable Communities Plan ( <i>Figure 1-4</i> )
<b>Special Management Area:</b>	Not within Special Management Area
<b>Flood Zone:</b>	Zone D (Unstudied areas when flood hazards are undetermined, but flooding is possible) ( <i>Figure 1-5</i> )
<b>Anticipated Determination:</b>	Finding of No Significant Impact (FONSI)

## **1.2 Overview of the Proposed Project**

The State of Hawai‘i, DLNR, Engineering Division is planning to acquire an abandoned property identified by TMK (1) 7-4-001:025. Once acquired, a Division of Conservation and Resources Enforcement (DOCARE) substation will be built for officers patrolling the Wahiawā and North Shore area. Currently, DOCARE officers patrolling the Wahiawā and North Shore area report from the main station in Pearl City. To support enforcement, a smaller substation will be located in Wahiawā, providing officers with a nearby office space, a secure evidence storage room, and storage for larger equipment

## **1.3 Purpose of the Environmental Assessment**

This EA has been prepared pursuant to the requirements of HRS, Chapter 343 and HAR, Chapter 11-200.1. The project will utilize State lands and funds and must first comply with environmental review procedures.

In accordance with Hawai‘i’s Environmental Review process, this EA identifies the potential environmental impacts of the project, provides mitigation measures, and seeks agency and public comments. This EA analyzes potential impacts under the significance criteria listed in HAR Chapter 11-200.1 to further determine whether an Environmental Impact Statement (EIS) should be prepared. The Draft EA was published in the Environmental Review Program’s (ERP’s) bi-monthly bulletin, *The Environmental Notice (TEN)* on December 8, 2025. Publication of the Draft EA initiated a 30-day public review period. Comments received during the 30-day public review period are in *Appendix I* and *Section 7.2*. The Draft EA anticipated the issuance of an Anticipated Finding of No Significant Impact (AFONSI).

Pursuant to the 13 significance criteria articulated in HAR §11-200.1-13, BLNR determined that preparation of an EIS is not required for the project and hereby issues a Finding of No Significant Impact (FONSI). *Chapter 6* provides details of the issuance of a FONSI.

## 1.4 Permits and Approvals Required

Anticipated permits and approvals for the project are identified in *Table 1-1*.

<b>Permit or Approval</b>	<b>Approving Authority</b>
Final Environmental Assessment/FONSI	Board of Land and Natural Resources (BLNR)
Chapter 6E-8 HRS Compliance Historic Resources	DLNR, State Historic Preservation Division (SHPD)
Building Permits (Demolition, Building, Electrical, Plumbing)	Department of Planning and Permitting (DPP)
Grading, Grubbing, Trenching and Stockpiling Permits	DPP

## 1.5 Agencies, Organizations and Individuals Contacted During the Pre-Consultation Process

To initiate the environmental review process, an early consultation letter with a description and location of the project was sent to Federal, State, and City agencies as well as community organizations and adjacent landowners in September 2025. A total of seven comments were provided during the early consultation period. The Draft EA was subsequently published in the December 8, 2025 issue of *TEN*. Publication of the Draft EA was followed by a 30-day public review period. A total of 10 comment letters were provided during the Draft EA public review period. Further discussion on agencies and organizations consulted, comments received, and responses is provided in *Chapter 7*.

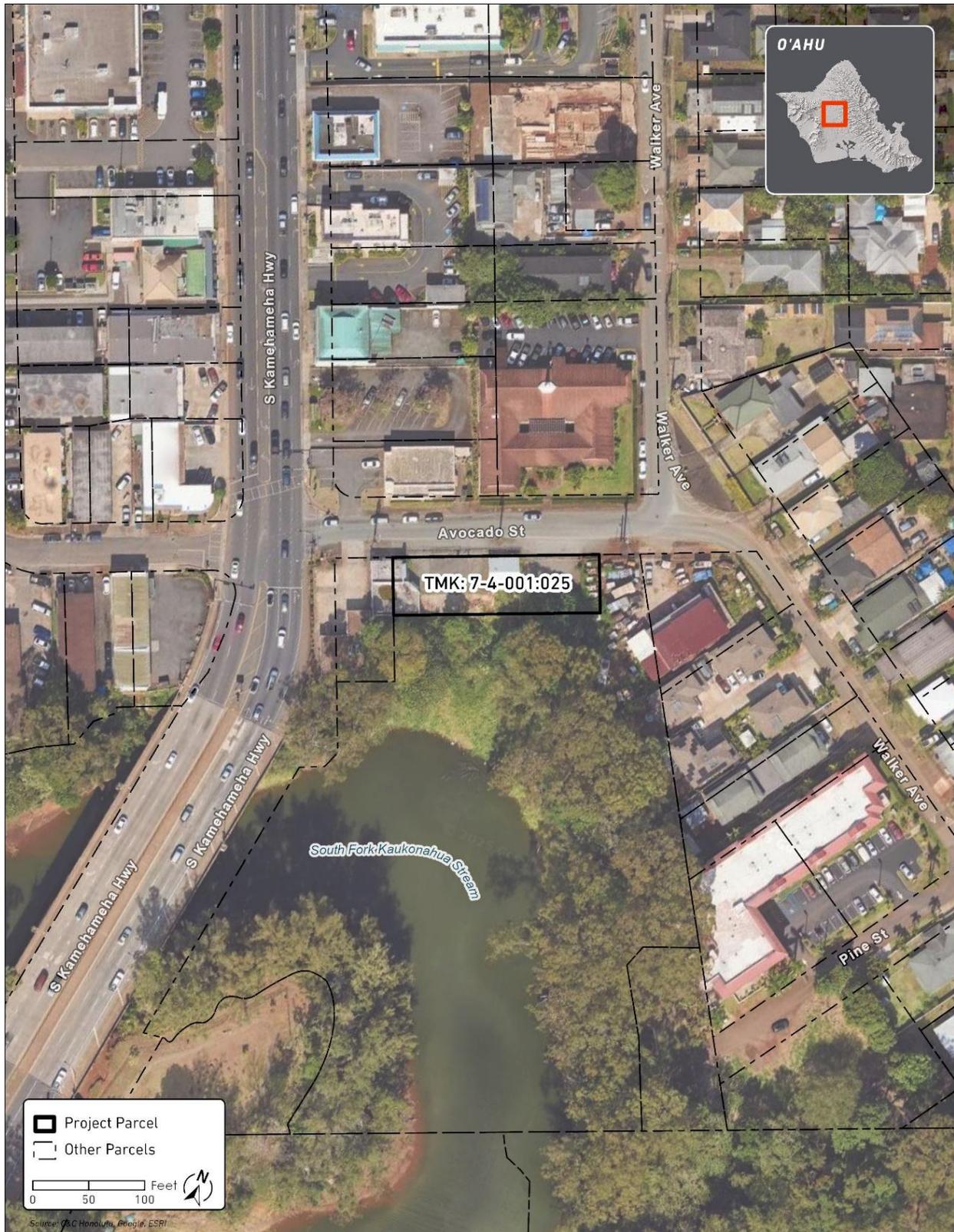


Figure 1-1

Project Location and Tax Map Key



Figure 1-2

State Land Use District Map

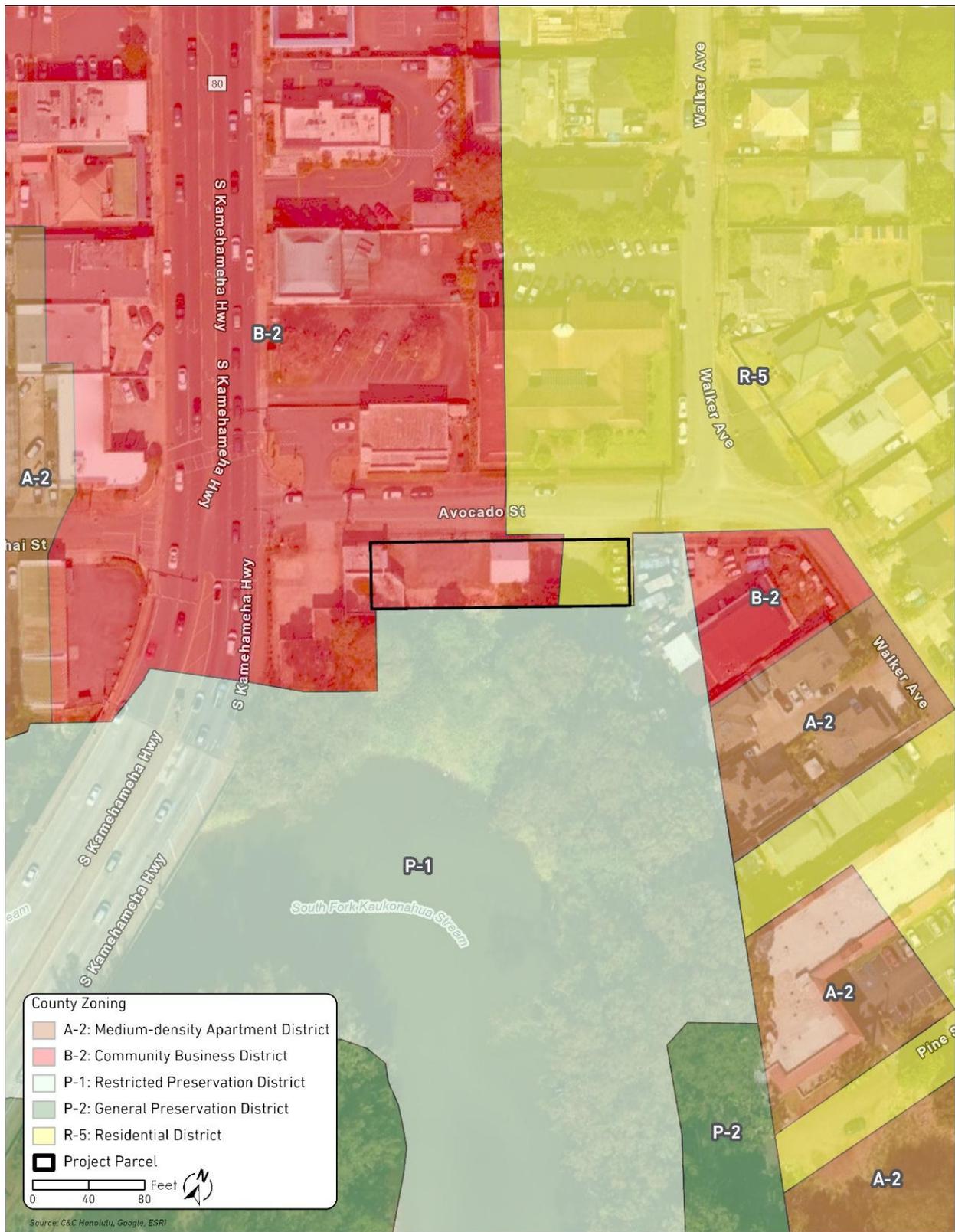


Figure 1-3

City and County of Honolulu Zoning

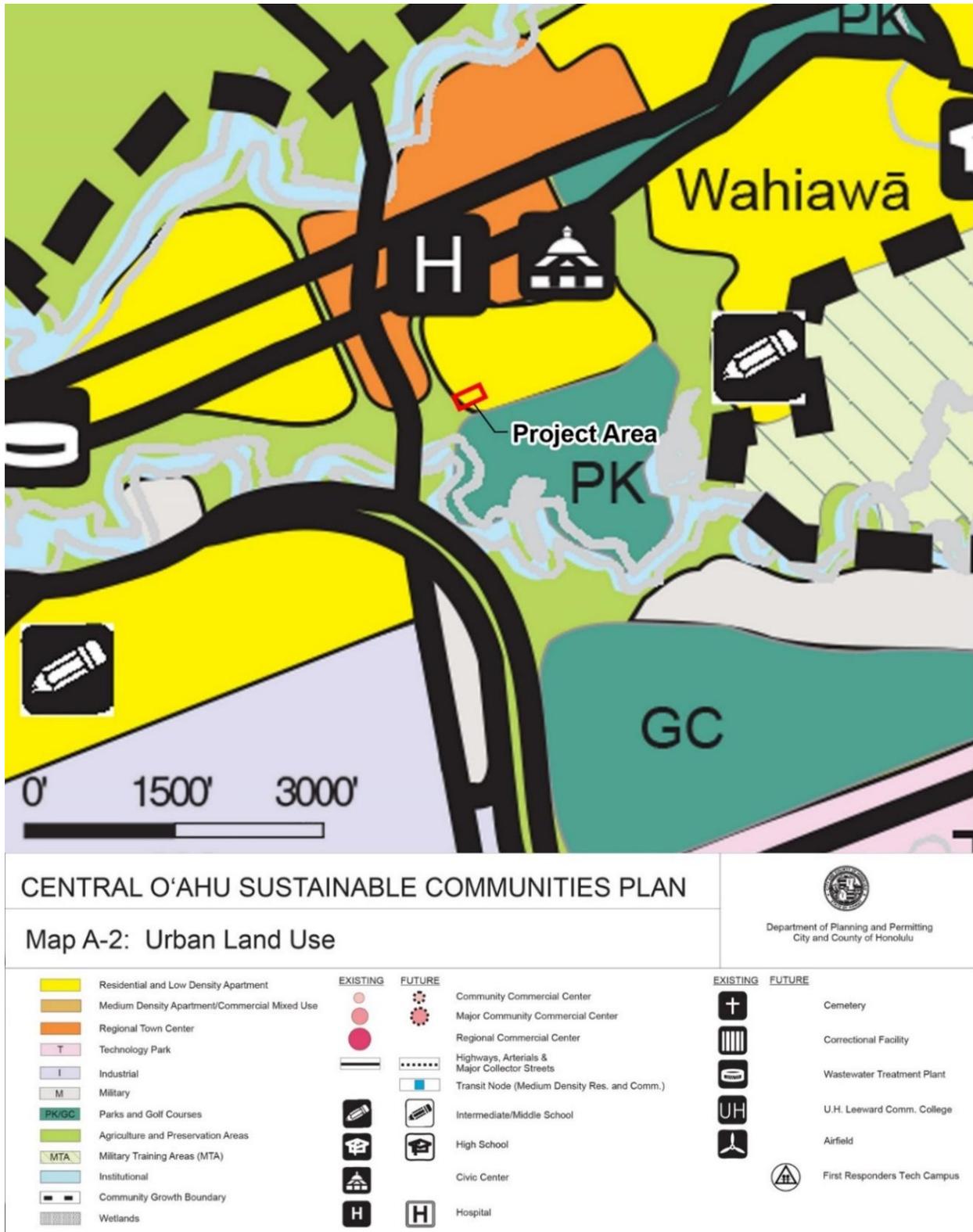


Figure 1-4

Central Oahu Sustainable Communities Plan



Figure 1-5

Flood Zone Map

# **Description of the Project**



## Chapter 2

# Description of the Project

## 2.1 Project Location

### *Location*

The project site is located in Wahiawā, O‘ahu, Hawai‘i, identified by TMK (1) 7-4-001:025 (*Figure 1-1*). Historically, Wahiawā functioned as both a plantation town and as a support center for U.S. Army Schofield Barracks installation. Its central location led to the development of a commercial regional civic and shopping area for people traversing the North Shore and Central O‘ahu area. However, since the growth of new towns and residential areas in Central O‘ahu, commercial areas in Wahiawā could not compete, and slowly declined. Today, Wahiawā contains remnants of former plantation towns, commercial businesses, and the Schofield Barracks installation.

Access to the project site is provided via Avocado Street (*Figure 2-1 and Figure 2-2*). The project site is primarily bordered by commercial operations. Adjacent to the site is a neighborhood mini mart and The Church of the Latter-day Saints to the north, Maverick Muay Thai Academy to the west, Island Power Hawaii to the east, and the Wahiawā Freshwater Recreation Area to the south (*Figure 2-3*).

## 2.2 Existing Conditions

The project site was previously utilized as a commercial auto shop business under the ownership of Angelo’s Auto Body & Detailing. The property remains under the ownership of Angelo’s Auto Body & Detailing; however, the commercial auto shop is no longer in operation, and the site has been abandoned. Remnants of the former commercial business remain, including structures that have fallen into a state of disrepair and waste from informal residents that currently occupy the abandoned structures (*Figure 2-4 and Figure 2-5*).

The abandoned structure on the eastern portion of the property is a one-story building that was constructed in 1943 (*Figure 2-4*). The building measuring approximately 945 square feet was previously utilized as an office space. The abandoned structure on the western portion of the property is a one-story building that was constructed in 1955 (*Figure 2-5*). The building measures approximately 1,980 square feet. Although the site was previously utilized as a commercial auto shop business, this structure was originally built for a martial arts studio.

Notably, in September 2025, the property owner obtained an emergency demolition permit for the removal of the structure on the western portion of the site. Demolition was completed, and the building on the eastern portion of the site is the last remaining structure associated with the former commercial auto shop business.

Since the closure of the commercial auto shop business and the abandonment of the site, the structures have fallen into a state of disrepair, and the site became a shelter by informal residents. Trash has accumulated throughout the property from neglect and occupation by informal residents

(Figure 2-5). Additionally, the owner has received multiple Notice of Violations (NOVs) from 2016 to 2018. NOVs were issued due to construction activity without applicable permits and abandonment and occupation by informal residents. A list of the NOVs issued and their status is shown in *Table 2-1* and *Appendix B*.

<b>Table 2-1: Notice of Violations</b>					
<b>Permit No.</b>	<b>Status</b>	<b>Description</b>	<b>Created</b>	<b>Issued</b>	<b>Completed</b>
2016/NOV-07-132	Closed	Prohibited Signs	07/20/2016	07/20/2016	08/02/2016
2018/NOV-04-131	Closed	Alterations done without building permit	04/20/2018	04/23/2018	08/09/2019
2023/NOV-12-131	Closed	Occupation by homeless	12/18/2023	12/21/2023	02/08/2024
2024/NOV-01-013	Draft NOV Reviewed	Occupation by homeless	01/03/2024	01/05/2024	
2024/NOV-05-085	Draft NOV Reviewed	Demolition and alterations without building permit	05/15/2024	05/17/2024	



**Figure 2-1**

**Site Access Facing East**



**Figure 2-2**

**Site Access Facing West**



Figure 2-3

Adjacent Land Uses



**Figure 2-4**

**Existing Structure on Eastern Portion of Property**



**Figure 2-5**

**Existing Structure on Western Portion of Property**

## 2.3 Purpose of the Project

Since the closure of the commercial auto shop business and abandonment of the site, the existing structures have fallen into a state of disrepair and have become shelter and dumping ground for informal residents. The community raised concerns over the abandonment and occupation by informal residents with no oversight by a State or County agency that has led to illegal drug activity, trash accumulation, vandalism, and fire hazards. Recognizing existing conditions at the site, the State is seeking to obtain ownership of the property and utilize the site to strengthen DOCARE enforcement in the Wahiawā and North Shore area. The purpose of the project is to address the current abandonment and neglect of the project site and strengthen DOCARE enforcement in the Wahiawā and North Shore area.

## 2.4 Description of Project

The State is seeking to obtain ownership of the property to address the neglect and use of the site as an unofficial shelter by informal residents. Once acquired, a DOCARE substation will be built for officers patrolling the Wahiawā and North Shore area. Currently, DOCARE officers patrolling the Wahiawā and North Shore area report from the main station in Pearl City. To strengthen enforcement, a smaller substation will be located in Wahiawā.

A preliminary plan for the DOCARE substation has been prepared by the University of Hawai'i Community Design Center (UHCDC) and includes parking for officer vehicles and equipment, office and meeting spaces, storage for evidence collected in the field and personnel, and locker rooms (*Figure 2-6* and *2-10*). The design of the substation prioritizes efficient emergency response with a vehicle bay and secured evidence storage room dedicated on the ground level and administrative and operational spaces located on the second floor.

The ground level of the substation features parking for officer vehicles and equipment. The centrally located vehicle bay is designed to provide parking space for the boat, smaller trailers and space for vehicles to pull through in the event of an emergency response. Additionally, five uncovered striped parking spaces on the western portion, and one uncovered ADA stall on the eastern portion of the site will be identified (*Figure 2-7*). To assist officer operations, a secured evidence storage room will be located on the ground level. This evidence storage room will be secured and allow officers to secure evidence upon immediate return to the substation.

Administrative and operations spaces, which are comprised of office and meeting spaces, the squad room, storage areas, and locker rooms will be constructed as a second story above the vehicle bay (*Figure 2-7*). Locating administrative and operational spaces as a second story will provide visibility of Avocado Street for security purposes and unobstructed traffic flow for deployment in the event of an emergency.

DOCARE officers will access the site via two new secure gated driveways located off Avocado Street. Access to the site will be restricted to DOCARE officers for security purposes. Fencing will be installed along the southern property boundary to secure the site from trespassers. The substation has been carefully designed to seamlessly integrate into the existing Wahiawā neighborhood. Landscaping will be implemented along the street frontage to improve greenery along Avocado Street and maintain security along the property frontage. Landscaping will be comprised of Native Hawaiian and Polynesian introduced species found in the Wahiawā area. Building material and colors will be carefully selected to seamlessly integrate with neighboring structures. The substation will provide officers patrolling the Wahiawā and North Shore area with a nearby facility to strengthen enforcement.

# Preferred Option: Central Tower

## Site Plan

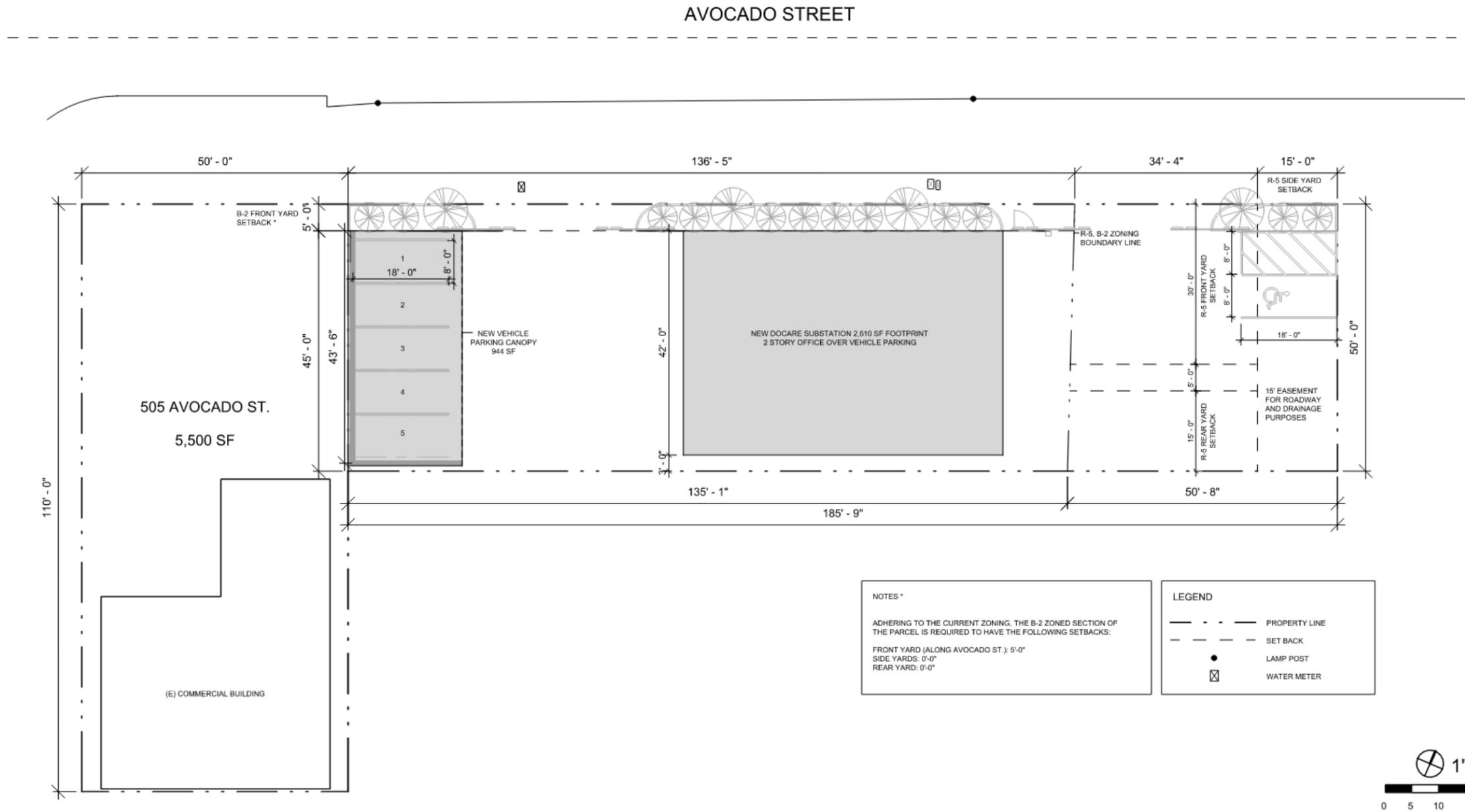
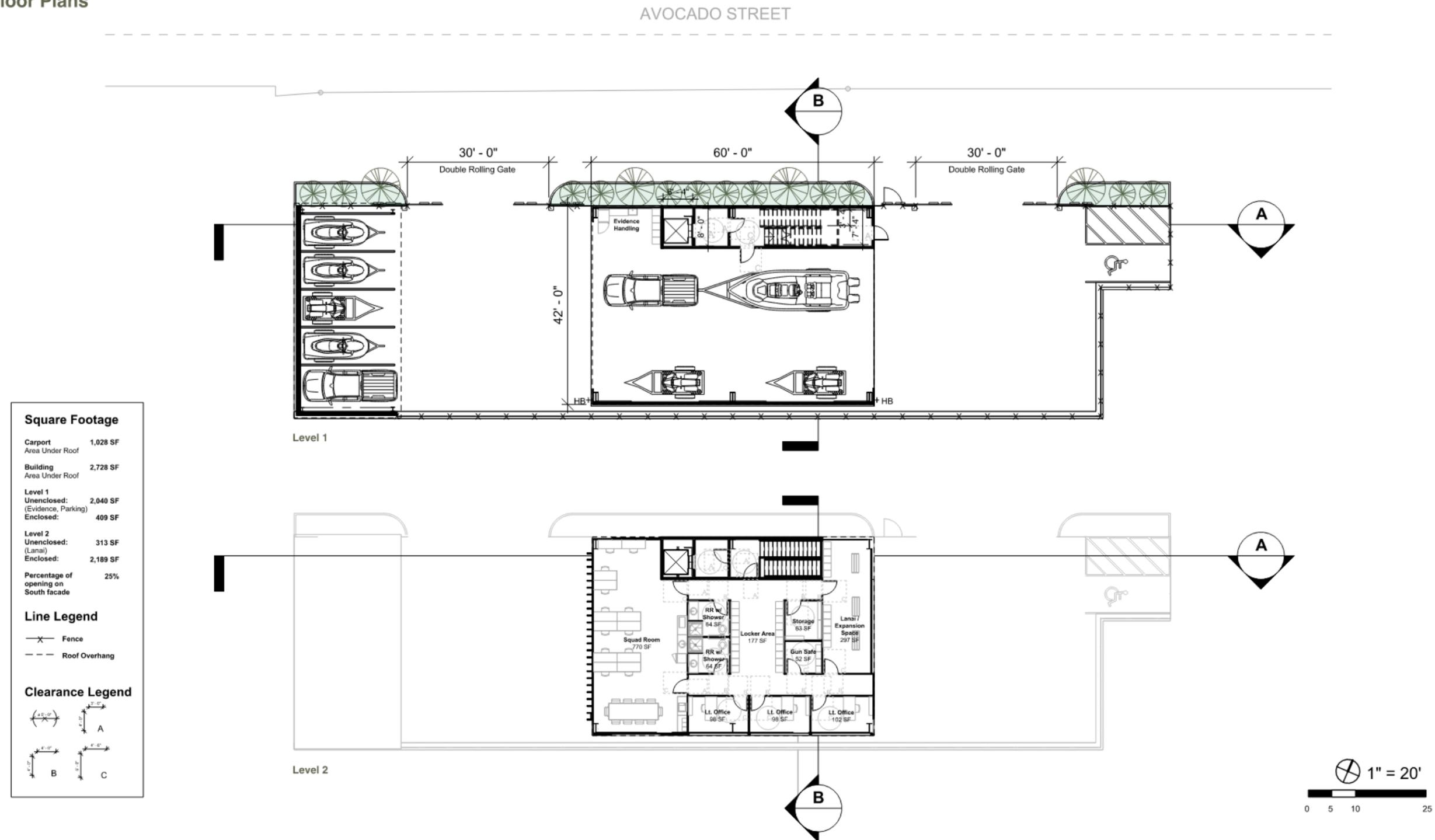


Figure 2-6

Conceptual Site Plan

# Preferred Option: Central Tower

## Floor Plans



Square Footage	
Carport Area Under Roof	1,028 SF
Building Area Under Roof	2,728 SF
<b>Level 1</b>	
Unenclosed: (Evidence, Parking)	2,040 SF
Enclosed:	409 SF
<b>Level 2</b>	
Unenclosed: (Lanai)	313 SF
Enclosed:	2,189 SF
Percentage of opening on South facade	25%
Line Legend	
	Fence
	Roof Overhang
Clearance Legend	
	A
	B
	C

Figure 2-7

Conceptual Floor Plan

# Preferred Option: Central Tower

## Elevations

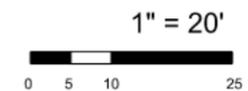
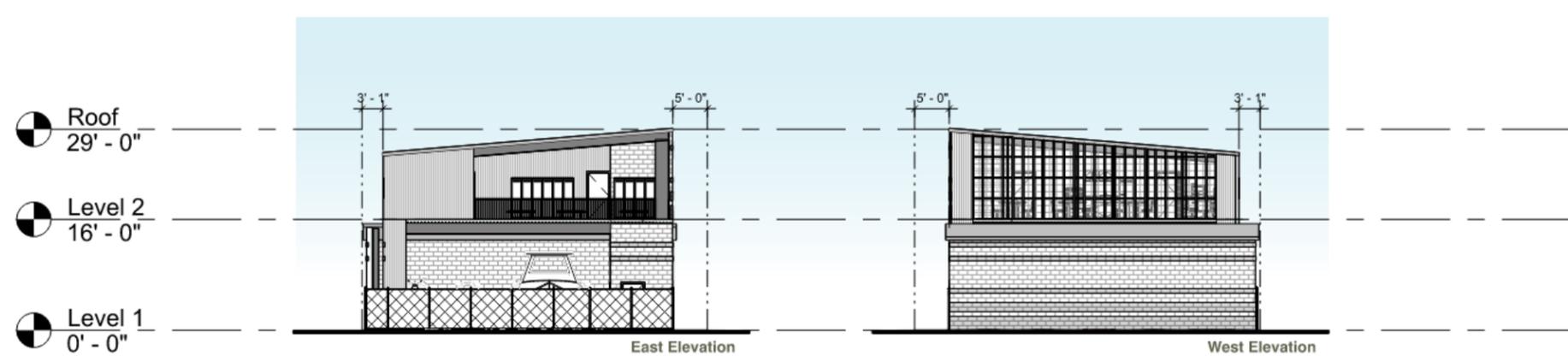
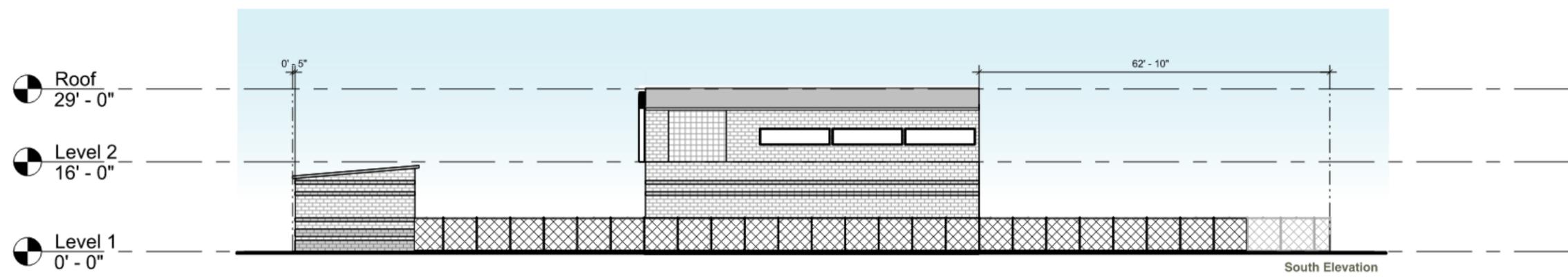
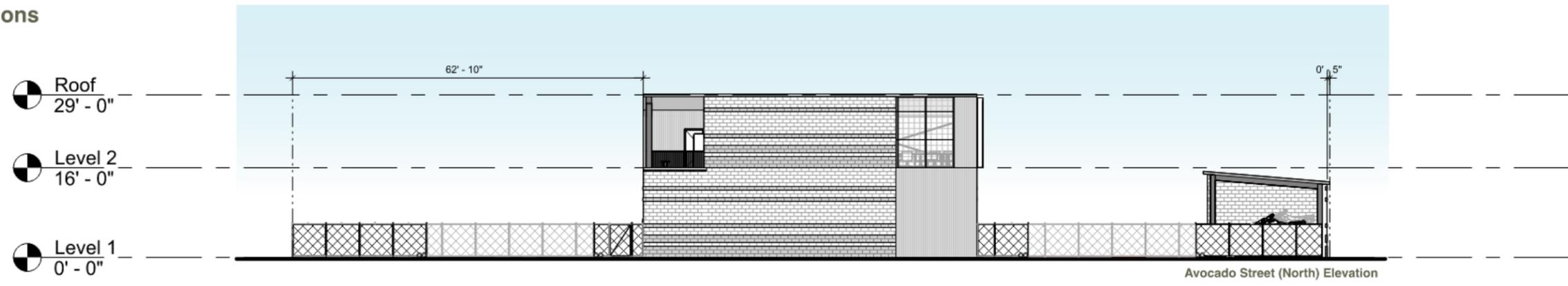


Figure 2-8

Elevations

# Preferred Option: Central Tower

## Sections

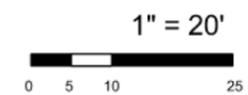
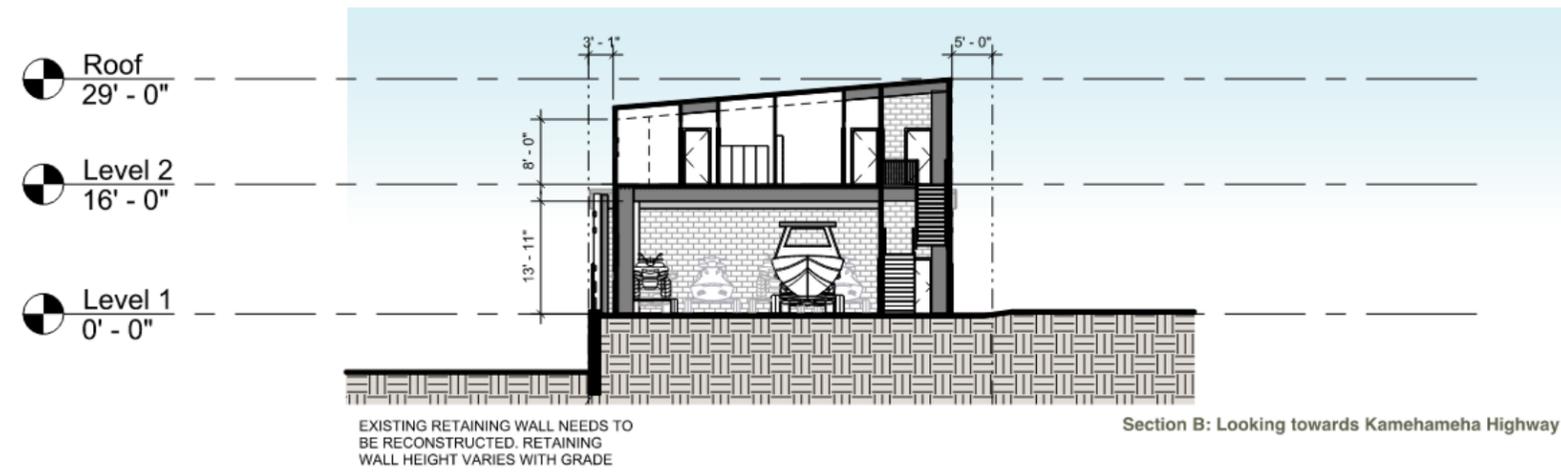
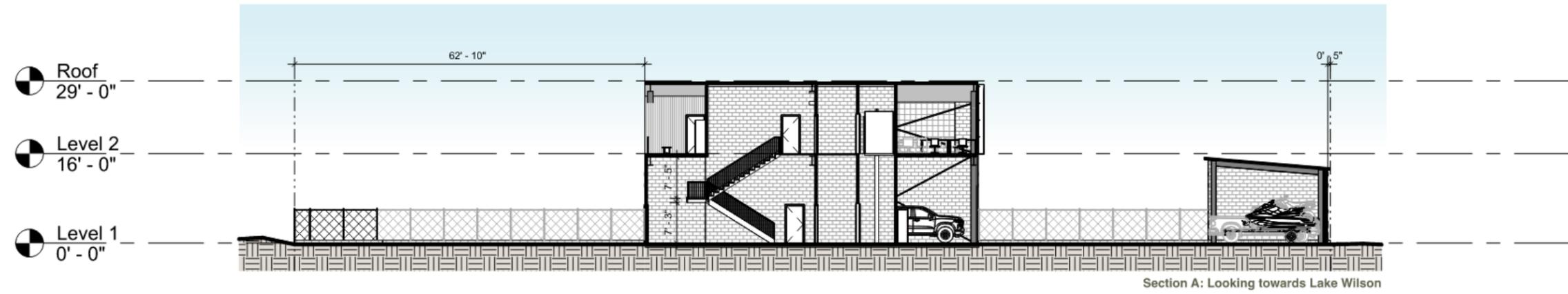


Figure 2-9

Section Drawings



Figure 2-10

Rendering Perspective

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## **2.5 Construction Characteristics**

The project site is generally level, and limited grading will be completed for the construction of the substation. Construction related materials and equipment will be stored on property and construction work will be performed in accordance with the Federal, State, and City code and design standards.

Construction will take place from 8:00 am to 5:00 pm, Monday through Friday. The construction of the project will not involve nighttime activity, therefore nighttime lighting (other than security lighting) will not be needed. Construction will adhere to applicable noise regulations pursuant to HAR Title 11, Chapter 46. Typical construction vehicles will be used and may include front-end loader, dump truck, and flatbed delivery trucks. Trucks delivering construction materials and disposing of waste will be scheduled Monday through Friday during off hours throughout the day to ensure traffic flow is not adversely affected. Traffic will be monitored to ensure the movement of construction vehicles, equipment, and deliveries do not adversely affect the current flow of traffic. Should construction activity require the temporary closure of any traffic land, sidewalk, bicycle lane, or pedestrian mall, a street usage permit will be obtained from the City Department of Transportation Services (DTS).

A Grading Permit will be obtained prior to the start of construction, and contractors will adhere to the City's Grading Ordinance (ROH Chapter 18A) and applicable provisions of the DOH Water Quality Standards (HAR Section 11-54) and Water Pollution Control Requirements (HAR Section 11-55). A National Pollutant Discharge Elimination System (NPDES) permit may be obtained, if required. Best Management Practices (BMPs) will be employed to minimize potential adverse effects from site preparation and construction activity. BMPs may include, but are not limited to, the phasing of construction activities, replacing ground cover of disturbed areas, providing adequate water sources at the site, and the use of temporary silt fencing and screens.

## **2.6 Summary of Projected Costs and Schedule**

The project will be funded by the State DLNR. Construction for the DOCARE substation is anticipated to commence in 2026.

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**Description of the  
Environmental Setting,  
Potential Impacts,  
and Mitigation Measures**



## Chapter 3

# Description of the Environmental Setting, Potential Impacts, and Mitigation Measures

This section describes the existing environmental setting and identifies possible impacts of the planned project. Strategies to mitigate potential effects are also identified.

### 3.1 Topography and Drainage

#### *Existing Conditions*

The project site is generally flat with a slight downward along the northern property boundary to the southern property boundary. Elevations at the project site range from 871 feet above mean sea level (msl) at the northern property along Avocado Street to 869 feet above msl at the southern property boundary (*Figure 3-1*).

The project site contains two on-site area drains that discharges stormwater through pipe outlets into the Wahiawā Freshwater State Recreation Area. Stormwater that is not collected via the two on-site area drains sheet flows toward the southern edge of the property and into the Wahiawā Freshwater State Recreation Area as overland flow or ponds in low scattered spots throughout the site. Stormwater runoff that flows into the Wahiawā Freshwater State Recreation Area continues to flow south towards the Kaukonahua Stream.

A portion of a City owned and maintained 42-inch stormwater drain line runs beneath the eastern edge of the site and is covered under an easement (*Figure 3-2*). The 42-inch stormwater drain collects stormwater runoff from Walker Avenue and discharges water into the Wahiawā Freshwater State Recreation Area.

#### *Anticipated Impacts and Mitigation Measures*

Construction for the project will involve limited grading to create building foundations and to improve driveways and parking areas. A grading permit will be obtained prior to the start of construction, and contractors will adhere to the City's grading ordinance (ROH Chapter 18A) and applicable provisions of the DOH Water Quality Standards (HAR Section 11-54) and Water Pollution Control Requirements (HAR Section 11-55). An NPDES permit may be obtained, should it be required. Construction-related BMPs will be implemented to minimize soil erosion and other pollutants from leaving the site. BMPs include, but are not limited to, phasing of construction activities, replacing ground cover of disturbed areas, providing adequate water sources at the site, and the use of temporary silt fencing and screens. Upon completion of construction, the site will follow the existing grade, with a gentle slope leaning toward the southern edge of the property boundary. Low Impact Design (LID) measures will be integrated into the design of the substation. LID measures may include but are not limited to the

implementation of trees and vegetation, minimizing impervious surface area and utilizing porous asphalt material. The project will improve existing site conditions and minimize stormwater runoff.

## **3.2 Soils**

### ***Existing Conditions***

Soil types within the project parcels are identified in the U.S. Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) Web Soil Survey. The USDA NRCS system classifies soils by type and permeability characteristics, including run-off and erosion. The project site is covered by one soil series identified as the Wahiawa silty clay, 0-3 percent slopes (WaA). (*Figure 3-3*). Wahiawa Silty Clay is a well-draining soil series with high to very high permeability and low runoff.

### ***Anticipated Impacts and Mitigation Measures***

Construction for the project will involve limited grading to create building foundations and to improve driveways and parking areas. A Grading Permit will be obtained prior to the start of construction, and contractors will adhere to the City's Grading Ordinance (ROH Chapter 18A) and applicable provisions of the DOH Water Quality Standards (HAR Section 11-54) and Water Pollution Control Requirements (HAR Section 11-55). An NPDES permit may be obtained, should it be required. Construction-related BMPs will be implemented to minimize potential effects from land disturbing activities. BMPs include, but are not limited to, phasing of construction activities, replacing ground cover of disturbed areas, providing adequate water sources at the site, and the use of temporary silt fencing and screens. The project is not anticipated to adversely affect soils covering the site.

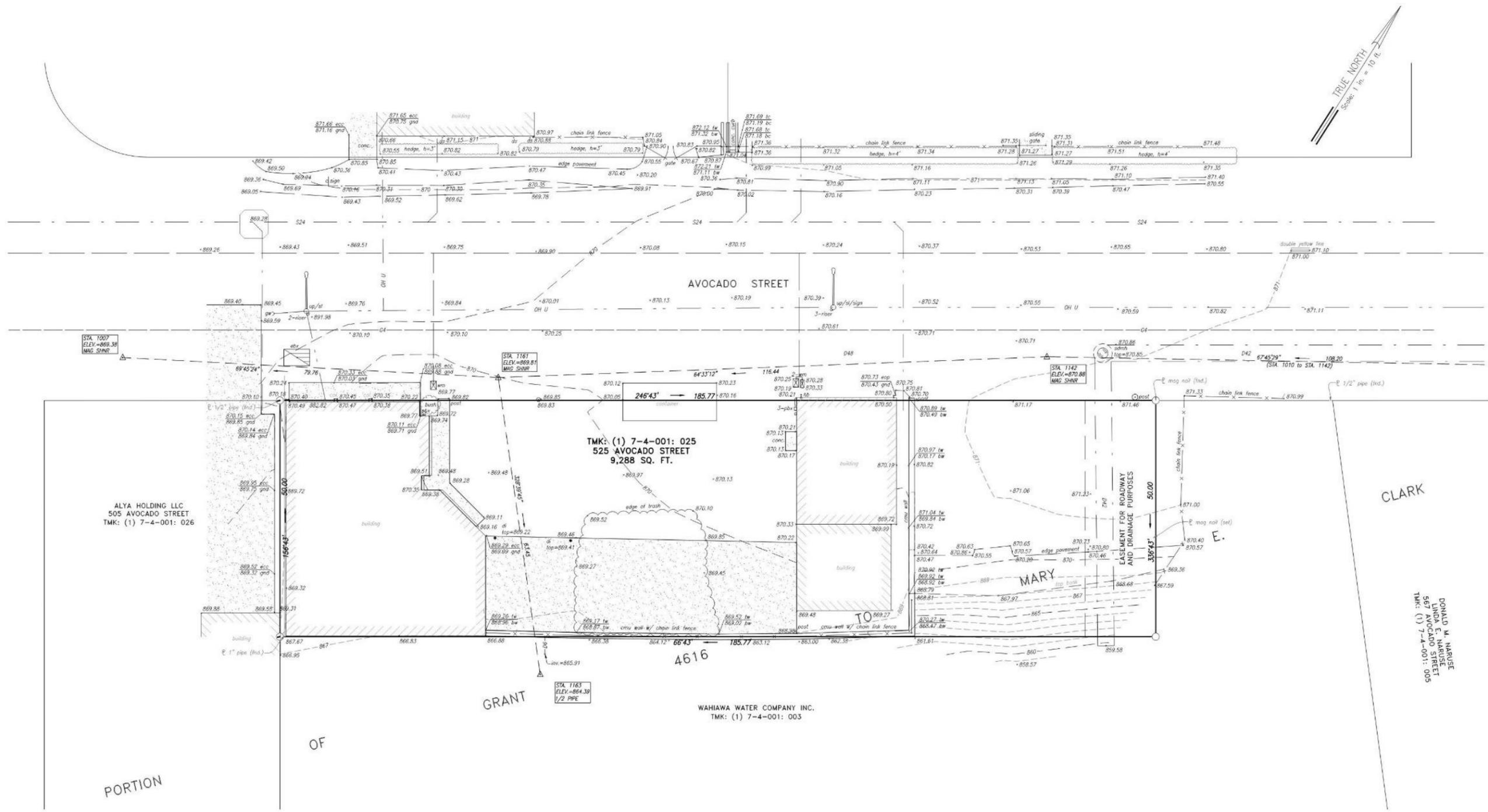


Figure 3-1

Topographic Map (Source: Austin Tsutsumi & Associates Inc)

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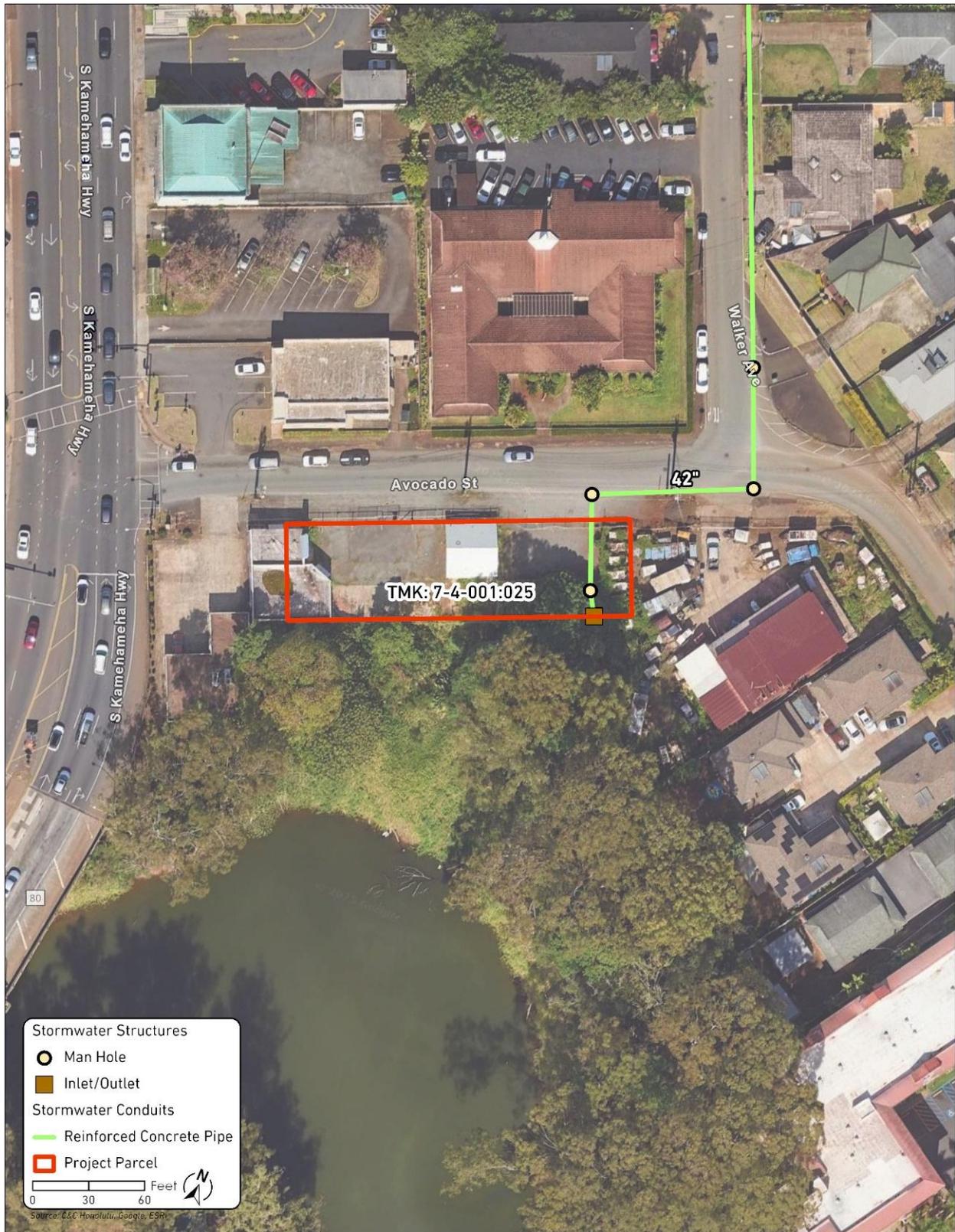


Figure 3-2

Existing Storm Drain Map

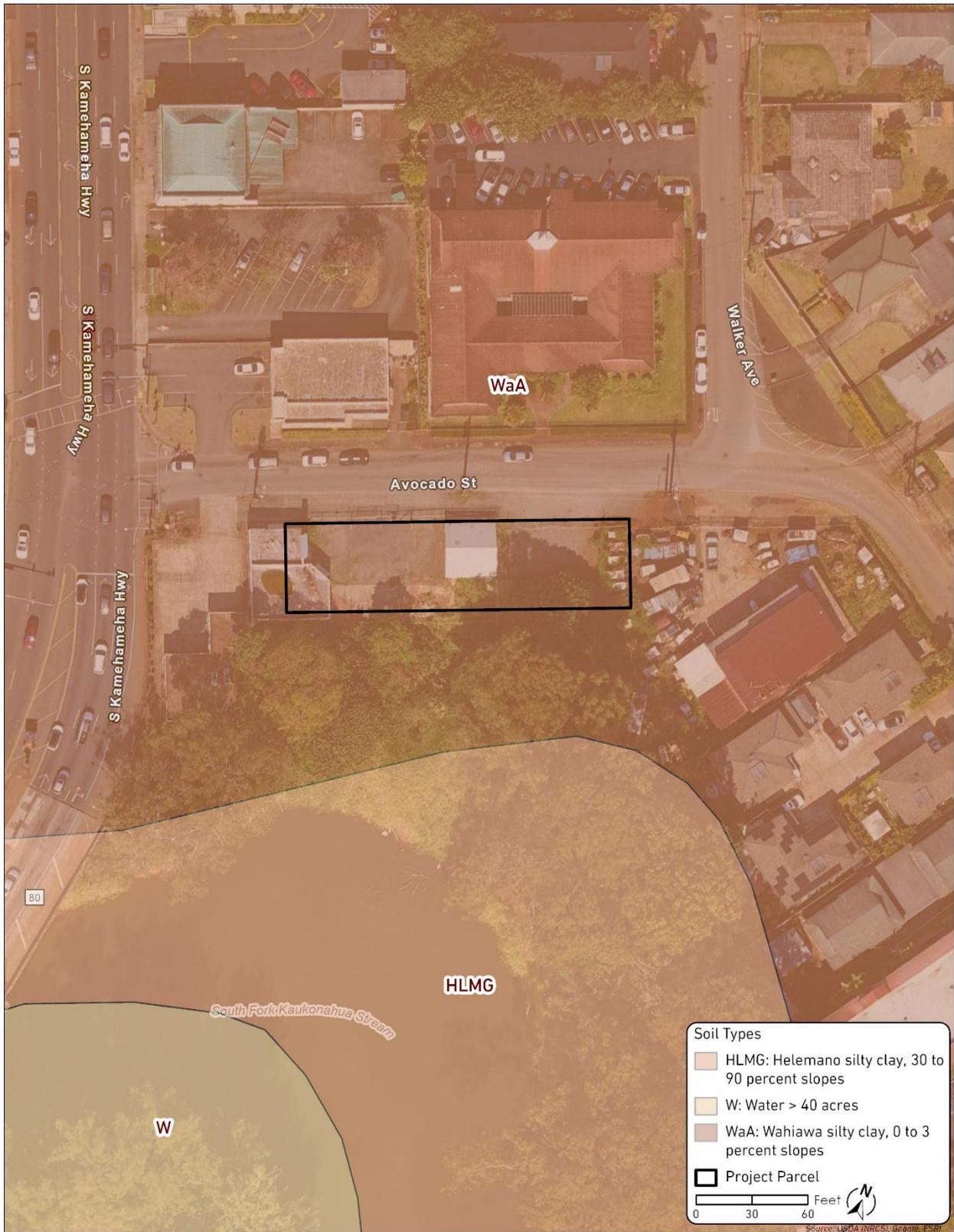


Figure 3-3

Soils Map

### **3.3 Hazardous Materials**

A Phase I Environmental Site Assessment (ESA) and Hazardous Materials Assessment was completed by Element Environmental in August 2025. The following presents a summary of the Phase I ESA and Hazardous Materials Assessment. The Phase I ESA and Hazardous Materials Assessment is provided in *Appendix C*.

#### ***Existing Conditions***

The Phase I ESA was completed to identify potential environmental conditions at the property. As part of the investigation, Recognized Environmental Condition (REC), Controlled Recognized Environmental Condition (CREC), and Historic Recognized Environmental Condition (HREC) were identified. A REC is defined as:

- (1) The presence of hazardous substances or petroleum products in, on, or at the subject property due to a release to the environment;*
- (2) The likely presence of hazardous substances or petroleum products in, on, or at the subject property due to a release or likely release to the environment; or*
- (3) The presence of hazardous substances or petroleum products in, on, or at the subject property under conditions that pose a material threat of a future release to the environment.*

A CREC is a recognized environmental condition affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls. A HREC is the previous release of hazardous substances or petroleum products affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities. To identify environmental conditions at and around the project site, regulatory records were reviewed, and a visual site inspection was conducted. Environmental conditions on the property and adjacent properties are listed in *Table 3-1*.

**Table 3-1: Environmental Conditions**

<b>Recognized Environmental Conditions</b>	<b>Categories</b>		
	<b>Release</b>	<b>Conditions Indicative of Release</b>	<b>Threat of Future Release</b>
Vagrant activities were observed on the subject property. Environmental risks linked with vagrancy encompass littering, unlawful disposal, and incineration of waste materials, including hazardous substances like chemicals, electronic waste, and construction debris. These activities have the potential to contaminate water sources and exacerbate soil pollution. Heavily stained soil was also noted during the VSI.		X	
The property's multiple outfalls and drainage systems pose a significant environmental risk by discharging runoff over solid waste, potentially contaminating nearby water bodies, including Kaukonahua Stream, which flows into the Wahiawa Reservoir. This runoff could introduce hazardous substances into the water, threatening both environmental health and community safety.		X	
The western portion of the property at 525 Avocado Street was previously used as an auto repair facility and used car lot, raising significant environmental concerns related to potential soil, surface water, and groundwater contamination. This is primarily due to the long-term use of petroleum products, hazardous materials, and heavy metals from automotive activities, which may have leached into the environment. Visual inspections and historical records suggest that there were large areas of spillage and improper material storage, posing risks to nearby receptors. While historic maps hint at a fueling station, there is no documented information regarding underground storage tanks, hydraulic lifts, or oil/water separators, which may still be present and pose further risks if they are compromised.		X	
The eastern portion of the property at 541 Avocado Street was previously a used car lot (c. 1991 to c. 2016), which raises several environmental concerns. The operations may have introduced hazardous substances, such as motor oil and heavy metals, leading to potential soil, surface water, and groundwater contamination. The property could pose risks to human health due to historical pollutants.		X	
Potential and reported releases of hazardous substances associated with Island Power's 23 year history of unauthorized use of 555 Avocado Street (adjacent to the east side of the site) for storage of generators and other equipment may be negatively impacting the soil and groundwater at the subject property.		X	
Stormwater runoff and soil from the Island Power site flows onto the adjacent (555 Avocado Street) site and the subject property. It is likely that the runoff and soil are negatively impacted by the long history of industrial use/activities at the Island Power property and the adjacent property they have encroached on for 23 years.		X	
<b>Controlled Recognized Environmental Conditions</b>	<b>Category</b>		
Schofield Barracks Military Reservation (SBMR) and Wheeler Air Force Base, TMK: (1) 7-7-001:001, is an active military site established in 1908, and encompasses over 17,725 acres of land. The Army uses several programs to address releases in cooperation with the United			

**Table 3-1: Environmental Conditions**

<p>States Environmental Protection Agency (EPA) and State of Hawaii Department of Health (HDOH): Installation Restoration Program (IRP), Military Munitions Response Program, and Compliance-Related Cleanup Program. It is likely that the subject property was directly adjacent or possibly within the former boundaries of the SBMR East Range.</p> <p>The SBMR is a Department of Defense IRP site that was delisted from the National Priorities List (NPL) in 2020, as the Record of Decisions (RODs) determined that remedies in place are expected to be protective of human health and the environment and in the interim, exposure pathways that could result in unacceptable risks are being controlled.</p>	<p>Releases/Violations on Nearby Properties</p>
<p>Opana (Operable Unit [OU]-00) is part of the NPL Site Naval Computer and Telecommunications Area Master Station Eastern Pacific (NCTAMS EASTPAC) (EPA Identification HI1170090053). The OU-00 refers to the sitewide portion of NPL. The No Decision Document was issued for OU-00 Sitewide; the Five-Year Review process started in 2015. The estimated Five-Year Review is estimated to occur between September and November 2025. It should be noted that OU-00 Sitewide includes the entirety of the NCTAMS EASTPAC facility located approximately 2 miles northeast of the subject property; the EDR Report identified Opana within the North Fork of Kaukonahua waterway.</p>	
<p>Formerly Used Defense Site (FUDS) Site Wahiawa School is located ¼ to ½ mile north northeast of the subject property and hydraulically upgradient. After the attack on Pearl Harbor during World War II, Wahiawa Elementary School was used as an emergency hospital.</p>	
<p>FUDS Site Hawaiian Medical Center is located ½ to 1 mile east of the subject property and hydraulically cross gradient. The site was originally acquired in 1989 and was developed into SBMR in the early 1900's. The Hawaiian Medical Depot was a portion of the 13<sup>th</sup> Replacement Depot which served as a training transfer depot for troops prior to deployment overseas. In 1960, the site was transferred to the State of Hawaii via quitclaim.</p>	
<p><b>Historic Recognized Environmental Conditions</b></p>	<p><b>Category</b></p>
<p>In 1989, HDOH Hazard Evaluation and Emergency Response (HEER) Office and Environmental Data Resources, Inc. reported a potential release of polychlorinated biphenyl-containing transformer oil from a transformer at 535 Avocado Street (east side of subject property). Specific details regarding the release date, quantity, and affected media were not provided. A State On-Scene Coordinator responded to the incident, and the spill ultimately received a No Further Action designation.</p>	<p>Releases/Violations on Subject Property</p>

In addition to the Phase I ESA, a Hazardous Materials Assessment was conducted to determine the presence of hazardous materials which include Asbestos Containing Materials (ACM), Canec, Lead Paint, and Fluorescent Light Fixtures for mercury and polychlorinated biphenyls (PCBs). A visual survey and building samples reveal that the existing structures were constructed using ACM, lead-based paint, and fluorescent lighting containing PCBs and Mercury. Canec, which contains arsenic material was not identified in survey samples. However, buildings that were constructed between the early 1930s and 1964 were built using arsenic-containing material. Due to the construction of the existing structures taking place between the early 1930s and 1964, it is presumed that the existing structures contain arsenic-containing material.

#### ***Anticipated Impacts and Mitigation Measures***

The Phase I ESA identified environmental conditions at and nearby the site that are indicative of release. As part of the project, a Phase II ESA will be conducted upon the State's acquisition of the property. The Phase II ESA will include geophysical and underground surveying to further identify and evaluate the presence of buried utilities or structures and identify measures to mitigate environmental conditions at the property.

Due to the likely presence of hazardous materials associated with the former commercial auto shop business, trained technicians will remove hazardous material in accordance with the Occupational Safety and Health Administration (OSHA) standards for Asbestos, Canec, Lead, and Fluorescent Lighting containing PCBs and Mercury. The Indoor and Radiological Health Branch will be consulted, as necessary for the handling of Asbestos and lead containing material.

### **3.4 Climate**

#### ***Existing Conditions***

According to the University of Hawai'i Geography Department Climate of Hawai'i interactive mapping tool, the annual average air temperature in Wahiawa is approximately 71°F. The average monthly low temperature is approximately 62°F in January and the average monthly high temperature is approximately 83°F in August.

On the island of O'ahu, the leeward and southern regions of the island are typically drier than the eastern and northern regions. The Wahiawā area receives an annual average of approximately 50 inches of rain. January is typically the wettest month of the year, with an average of approximately 2.8 inches of rainfall.

#### ***Anticipated Impacts and Mitigation Measures***

The project will be designed to standards appropriate to the climate of the region and is not anticipated to affect rainfall or climate of the greater project area or region. Therefore, no mitigation measures related to climate are proposed.

## **3.5 Natural Hazards**

### ***Flooding***

#### ***Existing Conditions***

Based on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) map number 15003C0210FH, effective September 29, 2004, the project site is located in Flood Zone D (*Figure 1-5*). Flood Zone D is defined as “unstudied areas when flood hazards are undetermined, but flooding is possible.” The project site is not located in FEMA’s Special Flood Hazard Area (SFHA).

Notably, FEMA is in the process of updating the FIRM map for the island of O’ahu. The updated FIRM map locates the project site in Flood Zone X (*Figure 3-4*). Flood Zone X is defined as “areas determined to be outside the 500-year flood zone.”

#### ***Anticipated Impacts and Mitigation Measures***

During the construction phase of the project, activity will cease if the project area is subject to a flood hazard. The project site is not located within a SFHA and is not subject to special design consideration outlined in ROH Chapter 21A. The DOCARE substation will conform to development standards for the applicable zoning district and building code standards identified in ROH Chapter 16. The project is not anticipated to increase the project area’s vulnerability to flooding, and no further mitigation is proposed.



Figure 3-4

Proposed Flood Zone Map

## **Hurricanes**

### ***Existing Conditions***

Tropical cyclones originate over warm ocean waters and are considered hurricane strength when they generate sustained wind speeds over 64 knots (74 miles per hour (mph)). Hurricanes that form near the equator and in the central North Pacific usually move toward the west or northwest. During the primary hurricane season of July to September, hurricanes generally form off the west coast of Mexico and move westward across the Central Pacific. These storms typically pass south of the Hawaiian Islands and sometimes have a northward curvature near the islands. Late season hurricanes follow a somewhat different track, forming south of Hawai'i and moving north toward the islands. Three hurricanes have passed through the Hawaiian Islands in the past 25 years: Hurricane 'Iwa in 1982, Hurricane Iniki in 1992, Hurricane Iselle in 2014. These storms caused high surf and wave damage on multiple shores of the islands.

### ***Anticipated Impacts and Mitigation Measures***

During the construction phase of the project, activity will cease if the island is under the threat of a hurricane. The DOCARE substation will be designed in accordance with building code standards identified in ROH Chapter 16 to minimize damage from a natural disaster. The project will not increase the project area's vulnerability to a hurricane, and no further mitigation is proposed.

## **Tsunami**

### ***Existing Conditions***

Most tsunamis in Hawai'i originate from the tectonically active areas located around the Pacific Rim (e.g., Alaska, Japan, and Chile). Waves created by earthquakes in these areas take hours to reach Hawai'i, and the network of sensors that is part of the Pacific Tsunami Warning System can provide Hawai'i with several hours advance warning prior to the arrival of tsunami waves generated from these locations. Less commonly, tsunamis originate from seismic activity within the Hawaiian Islands, providing less warning for locally generated events.

The City classifies tsunami evacuation zones into the following designations: Tsunami Evacuation Zone, where evacuation is required for any tsunami warning; Extreme Tsunami Evacuation Zone, where additional areas must be evacuated only during an extreme tsunami event generated from earthquakes of Magnitude 9 or higher on the Richter scale; and, safe zone that is anticipated to be outside the inundated area. The project site is located within the Safe Zone (*Figure 3-5*).

### ***Anticipated Impacts and Mitigation Measures***

During the construction phase of the project, activity will cease if the island is under threat of a tsunami. Should the State or the City be under the threat of a tsunami, Civil Defense emergency warning systems will be activated. The project is in a safe zone and will be designed in accordance with building code standards identified in ROH Chapter 16.



Figure 3-5

Tsunami Evacuation Zone Map

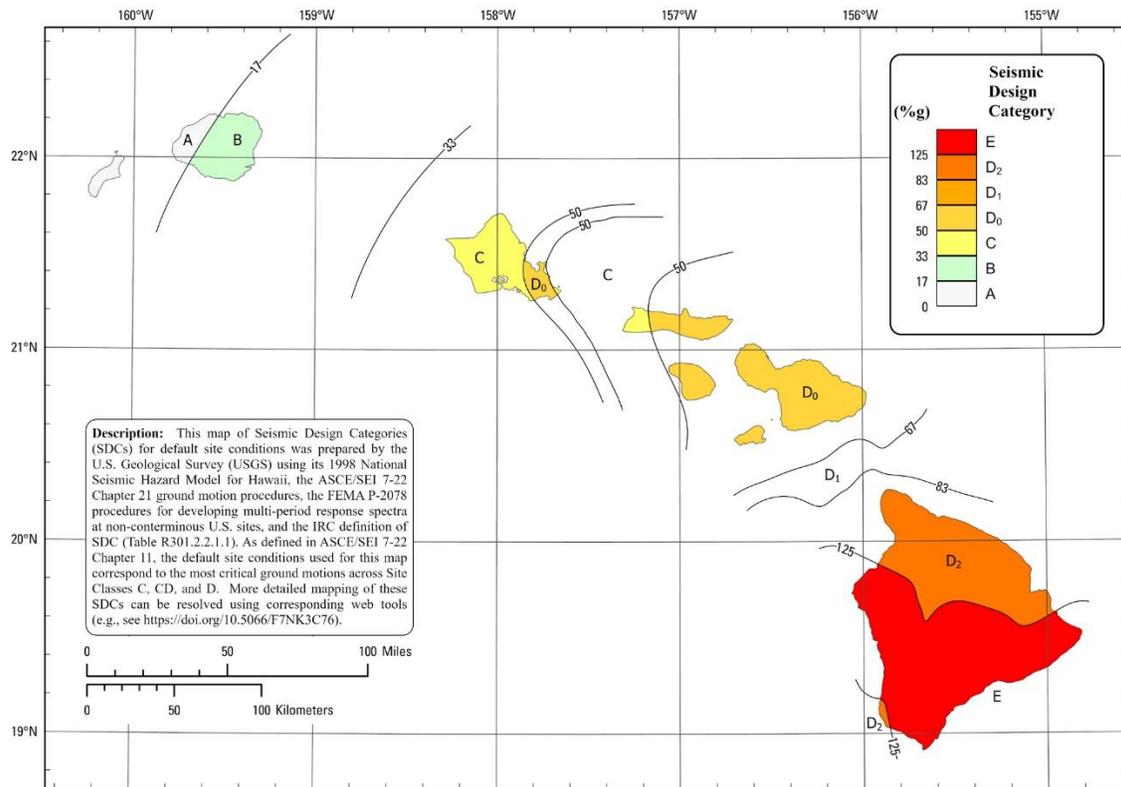
## Earthquakes

### Existing Conditions

The majority of earthquakes in Hawai'i are related to volcanic activity, particularly to the movement of magma beneath Kīlauea and Mauna Loa on Hawai'i island. Other earthquakes are the result of exerted pressures released by magma that never reaches the surface. According to the FEMA Earthquake Hazard Map, the project site is located in Seismic Design Category (SDC) Zone C (Figure 3-6). Zone C is categorized as an area that could experience strong shaking.

### Anticipated Impacts and Mitigation Measures

During the project construction phase, activity will cease if an earthquake occurs. The DOCARE substation will be built in accordance with building standards identified in ROH Chapter 16. Following proper design guidelines, damage from an earthquake will be minimized.



SEISMIC DESIGN CATEGORIES FOR DEFAULT SITE CONDITIONS FOR HAWAII

Figure 3-6

Seismic Design Categories

## **Wildfires**

### ***Existing Conditions***

In the State of Hawai'i, wildfires are most prominent in developed areas, alongside roadways, and near infrastructure that abuts undeveloped areas. Most wildfires are caused by human error or arson especially near developed areas, power line right of ways, roadsides, and sprawling dry nonnative grasslands surrounding communities. Once ignited, wildfires can spread rapidly through and around residential areas, threatening both property and life. Wildfires in lesser developed areas, fallow agricultural lands, and in areas of higher elevation can also spread and threaten natural areas and native and protected species. (Hawai'i Wildfire Management Organization, 2018).

The Hawai'i Wildfire Management Organization (HWMO) identified the risk of wildfire throughout the State. The project site is located in a medium risk area for wildfire spread (*Figure 3-7*).

### ***Anticipated Impacts and Mitigation Measures***

During the construction phase of the project, contractors will ensure construction-related equipment is properly utilized and stored to prevent the risk of a wildfire breakout. Should a fire break out during the construction period, the Honolulu Fire Department (HFD) will be contacted immediately.

The DOCARE substation will be built in accordance with building code standards identified in ROH Chapter 16 and ROH Chapter 20 which adopts design measures from the National Fire Protection Association (NFPA) 1. Building materials will be carefully selected to minimize potential wildfire damage. DOCARE officers will ensure that flammable equipment and materials are properly stored to minimize the risk of ignition. Moreover, DOCARE officers will maintain the substation and keep drainageways clear of debris and leaves to minimize the risk of wildfire spread. The project will address ongoing fire hazard concerns stemming from occupation from informal residents. With measures in place to minimize the risk of fire ignition and spread, the project is anticipated to minimize the risk of wildfire in the greater Wahiawā area.



Figure 3-7

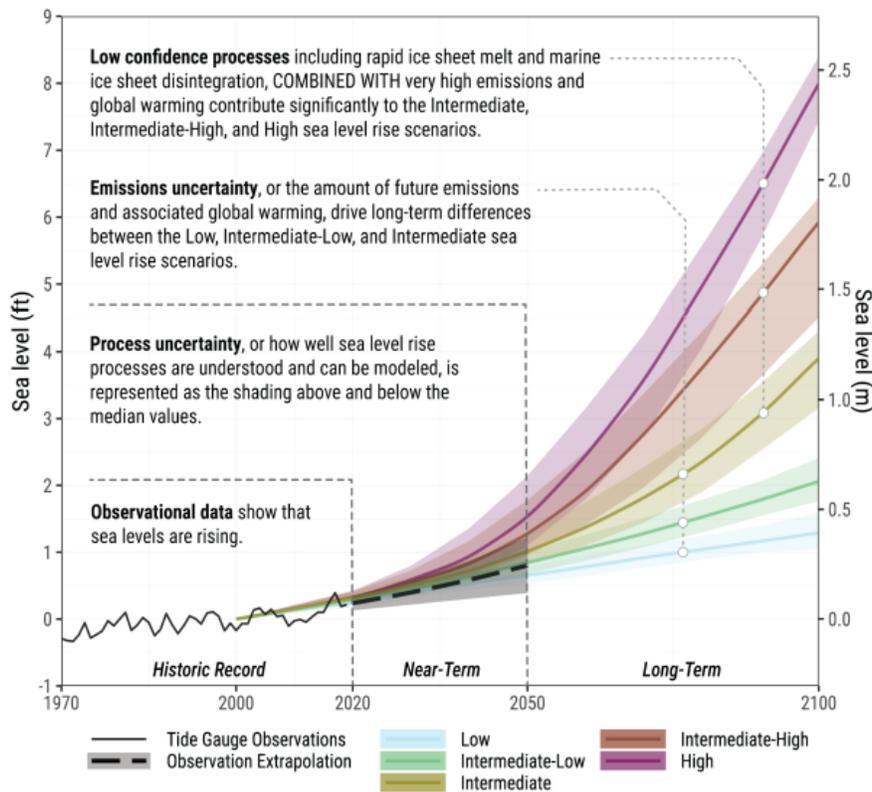
Wildfire Risk Area Map

**Climate Change and Sea Level Rise**

**Existing Conditions**

Rapid anthropogenic climate change is a well-established fact within the scientific community. As a result of climate change, ice sheets are melting, adding volumes of warm water to the ocean driving up levels of the ocean (Sweet et. al, 2022). Nearly 30% of the population in the U.S. lives in coastal areas where sea level rise plays an active role in flooding, storm hazards, and beach narrowing and beach loss due to erosion. The impacts from anomalous sea level events (e.g., king tides, mesoscale eddies, storm surge) are also likely to increase with climate change.

In 2022, the National Oceanic and Atmospheric Administration (NOAA) published the Global and Regional Sea Level Rise Scenarios for the United States to update sea level rise projections through 2100 based on the latest scientific research and measurements (Sweet et al. 2022). This report was an update to the 2017 Task Force report with projections of global mean sea level rise. In accordance with the NOAA report, the State of Hawai'i updated the Hawai'i Sea Level Rise Vulnerability and Adaptation Report in 2022 to incorporate new research and projections to address sea level rise in Hawai'i. The Hawai'i Sea Level Rise Vulnerability and Adaptation Report identifies a range of sea level rise scenarios based on differing GHG emission pathways in the near-term and long-term future (Figure 3-8).



**Figure 3-8 Sea Level Rise Projections (Hawai'i SLR Vulnerability and Adaptation Report, 2022)**

In July 2022, the City and County of Honolulu Climate Change Commission updated the Sea Level Rise II – Guidance Document to renew the City’s guidelines in planning for future climate change scenarios. The Guidance Document provided five scenarios of sea level rise by the year 2150: Low, Intermediate-Low, Intermediate, Intermediate-High, and High. Sea level rise projections specific to the City and County of Honolulu were projected to 2150 are shown in *Table 3-2*.

<b>Year</b>	<b>Low<sup>1</sup></b>	<b>Intermediate-Low<sup>1</sup></b>	<b>Intermediate</b>	<b>Intermediate-High</b>	<b>High</b>
<b>2050</b>	<b>0.59 feet</b>	<b>0.79 feet</b>	<b>0.95 foot</b>	<b>1.21 feet</b>	<b>1.48 feet</b>
<b>2100</b>	<b>1.18 feet</b>	<b>1.97 feet</b>	<b>3.81 feet</b>	<b>5.84 feet</b>	<b>7.91 feet</b>
<b>2150</b>	<b>1.70 feet</b>	<b>3.25 feet</b>	<b>7.25 feet</b>	<b>9.84 feet</b>	<b>14.11 feet</b>

<sup>1</sup> Projections from the Low and Intermediate-Low scenarios are already lower than the observed acceleration of global mean sea level rise which is on trajectory to reach 2.3 feet by the year 2100.

Following the updated Sea Level Rise II – Guidance Document, the City Council adopted the Climate Ready O’ahu strategy in February 2024. The Climate Ready O’ahu strategy details strategies, policies, and actions to prepare, protect, and safeguard community members, ‘āina, and infrastructure from climate hazards today and for generations to come. Following the updated Sea Level Rise II – Guidance Document, the Climate Ready O’ahu Strategy recognizes future sea level rise scenarios:

- By 2050, sea levels in Honolulu are projected to rise between 0.95 and 1.21 feet.
- By 2100, sea levels in Honolulu are projected to rise between 3.81 and 5.84 feet

In the City and County of Honolulu, it is recommended that the intermediate sea level rise scenario by the year 2100 (3.8 feet) be utilized for planning and design purposes, and that the City continue to utilize the 3.2-foot sea level rise exposure area (SLR-XA) until updated SLR-XA map data is available.

According to the Hawai’i Sea Level Rise Viewer, the Project area is located in an inland area and is not subject to potential threats associated with sea level rise.

***Anticipated Impacts and Mitigation Measures***

Construction activity will follow standard construction practices. Temporary construction work is anticipated to generate limited fossil fuel emissions from combustion and exhaust and will adhere to DOH air quality standards.

The project is not anticipated to substantially increase GHG emission that is associated with the consumption of electricity and vehicle activity, and the project is not anticipated to substantially contribute to climate change. DLNR may consider installation of solar photovoltaic (PV) panels and energy efficient utilities to minimize GHG emissions and promote the use of renewable energy features. The project site is not in the immediate threat of sea level rise, and the project is not anticipated to increase GHG emissions that contribute to climate change.

## 3.6 Biological Resources

### *Existing Conditions*

The project site is located in Wahiawā in the central region of O’ahu. The project site was previously utilized as a commercial auto shop business under the ownership of Angelo’s Auto Body & Detail. Remnants of the former commercial auto shop business remain, including two structures that have fallen into a state of disrepair and waste from informal residents that currently occupy the abandoned structures. Due to the former commercial use of the property, vegetation at the project site is limited. The site contains sparse pockets of overgrown weedy vegetation (*Figure 3-9* and *Figure 3-10*). Large canopy trees planted on the adjacent parcel along the Wahiawā State Recreation Area overhang the project site (*Figure 3-11*). These trees are a mix of non-native trees including the African Tulip Tree (*Spathodea campanulate*) and Portia Tree (*Thespesia populnea*).

Faunal species at the project site include dogs (*Canus lupus familiaris*) and cats (*Felis catus*) associated with informal residents occupying the site. The project site does not contain federally designated Critical Habitats.



**Figure 3-9**

**Weedy Vegetation at the Project Site**



**Figure 3-10**

**Weedy Vegetation at the Project Site**



**Figure 3-11**

**Trees Overhanging the Project Site**

### ***Anticipated Impacts and Mitigation Measures***

The project will involve clearing weedy vegetation for site preparation and construction of the DOCARE substation. Pursuant to a letter dated September 16, 2025, from the U.S. Fish and Wildlife Service (USFWS), the Pacific Island Fish and Wildlife Office (PIFWO) transitioned to the Information for Planning and Consultation (IPaC) tool for non-federal agencies to obtain Official Species Lists (OSL), including threatened and endangered species and designated critical habitat that may occur in the project area. The OSL for the project area was obtained and located in *Appendix D. Table 3-3* lists the threatened and endangered species identified in the OSL.

**Table 3-3: Official Species List – Threatened and Endangered Species**

Name	Scientific Name	Status
<b>Mammals</b>		
Hawaiian hoary bat	<i>Lasiurus cinereus semotus</i>	Endangered
<b>Birds</b>		
Band-rumped storm-petrel	<i>Hydrobates castro</i>	Endangered
Hawaiian common gallinule	<i>Gallinula galeata sandvicensis</i>	Endangered
Hawaiian coot (alae ke'oke'o)	<i>Fulica alai</i>	Endangered
Hawaiian duck	<i>Anas wyvilliana</i>	Endangered
Hawaiian petrel	<i>Pterodroma sandwichensis</i>	Endangered
Hawaiian stilt	<i>Himantopus mexicanus knudseni</i>	Endangered
Newell's shearwater	<i>Puffinus newelli</i>	Threatened
<b>Reptiles</b>		
Hawksbill sea turtle	<i>Eretmochelys imbricata</i>	Endangered
<b>Flowering Plants</b>		
'Aiea	<i>Nothocestrum latifolium</i>	Endangered
'Akoko	<i>Euphorbia celastroides</i> var. <i>kaenana</i>	Endangered
'Ena'ena	<i>Pseudognaphalium sandwicense</i> var. <i>molokaiense</i>	Endangered
Bonamia menziesii		Endangered
Haha	<i>Cyanea truncata</i>	Endangered
Hala pepe	<i>Dracaena forbesii</i>	Endangered
Kamanomano	<i>Cenchrus agrimonioides</i>	Endangered
Kaulu	<i>Ptealyxia macrocarpa</i>	Endangered
Nioi	<i>Eugenia koolauensis</i>	Endangered
Oha	<i>Delissea subcordata</i>	Endangered
Spermolepis hawaiiensis		Endangered
Uhiuhi	<i>Mezoneuron kavaiense</i>	Endangered
Vigna o-wahensis		Endangered
<b>Ferns and Allies</b>		
<i>Microlepia strigosa</i> var. <i>mauiensis</i>		Endangered
Pauoa	<i>Ctenitis squamigera</i>	Endangered

The Hawaiian Hoary bat (*Lasiurus cinereus semotus*), known as the 'ōpe'ape'a is an endangered species endemic to Hawai'i. The 'ōpe'ape'a is known to roost in native and non-native vegetation from one to nine meters (3 to 29 feet) above ground. The 'ōpe'ape'a is known to inhabit forested areas in the upland areas. Although it is not common for the 'ōpe'ape'a to roost near the project site, clearing of vegetation greater than 15 feet will be avoided during 'ōpe'ape'a birthing and pup rearing season,

June 1 through September 15. If vegetation over 15 feet needs to take place during this time, vegetation will be inspected to ensure 'ōpe'ape'a is not present. Additionally, barbed wire fencing will not be used in this project, to avoid entangling the 'ōpe'ape'a.

The following bird species may overfly or traverse the project site: the endangered 'ua'u (Hawaiian petrel, (*Pterodroma sandwichensis*), endangered 'akē'akē (band-rumped storm-petrel, *Hydrobates castro*), and threatened 'a'o (Newell's shearwater, *Puffinus newelli*). Such species are referred to as Hawaiian seabirds. The greatest threat to Hawaiian seabirds is outdoor lighting which can cause seabird disorientation, fallout, and injury or mortality. Downed seabirds are subject to increased mortality due to collision with automobiles, starvation, and predation. To avoid seabird disorientation, nighttime activity will not be scheduled to reduce the need for nighttime lighting. Should a Hawaiian seabird traverse or rest at the site, construction activity will cease until the species voluntarily fledges. The project is not anticipated to adversely affect Hawaiian seabirds that may overfly or traverse the project area.

The IPaC tool identified the following endangered waterbird species that may overfly or traverse the project site: Hawaiian common gallinule (*Gallinula galeata sandvicensis*), Hawaiian coot (*Fulica alai*), Hawaiian duck (*Anas wyvilliana*), and Hawaiian stilt (*Himantopus mexicanus knudseni*). The greatest threat to waterbirds is habitat degradation and loss. To minimize potential impacts to waterbirds, contractors will be made aware of the potential presence of waterbirds and will avoid creating standing bodies of water. Should a waterbird traverse or rest at the site, construction activity will cease until the species voluntarily fledges. The project is not anticipated to adversely affect habitats for endangered waterbirds.

The endangered Hawksbill sea turtle (*Eretmochelys imbricata*) may occur in water bodies near the project site. Should a Hawksbill sea turtle be found resting near the project site, NOAA will be notified immediately. The project is not anticipated to adversely affect nesting habitat grounds for the endangered Hawksbill sea turtle.

Due to the former use of the project site, it is not anticipated that the project will adversely affect endangered plant species that may be found in the greater project area. The project will improve existing site conditions with the implementation of landscaping that is comprised of Native Hawaiian and Polynesian introduced species found in the Wahiawā area.

## **3.7 Air Quality**

### ***Existing Conditions***

The DOH, Clean Air Branch (CAB) has established the State Ambient Air Quality Standards (SAAQS). The DOH-CAB regularly samples ambient air quality at monitoring stations throughout the State and annually publishes this information. On O'ahu, there are three active monitoring stations. The closest station to the project area is located in Kapolei (Station 17, approximately 12.3 miles southwest), which measures wind direction, NO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>.

According to the *Annual Summary 2022 Hawai'i Air Quality Data*, air quality in the State of Hawai'i continues to be one of the best in the nation, and criteria pollutant levels remain well below SAAQS. Present air quality in the project area is primarily affected by motor vehicles, with carbon monoxide being the most abundant of the pollutants emitted, however pollutant levels remain below SAAQS.

### ***Anticipated Impacts and Mitigation Measures***

Construction related activity is anticipated to generate dust from vehicle movement, soil excavation, and commuting construction workers. Although construction will generate dust, construction is temporary and will cease upon completion. Additionally, the State of Hawai'i Air Pollution Control regulations prohibit visible emissions of fugitive dust from construction. A dust control program will be implemented and may include watering active work areas, using wind screens, keeping adjacent paved roads clean, covering open-bodied trucks and limiting the area to be disturbed at any given time. The DOCARE substation is not anticipated to have a long-term effect on air quality. DLNR may consider installation of solar PV panels and energy efficient utilities to minimize GHG emissions and promote the use of renewable energy features.

## **3.8 Noise**

### ***Existing Conditions***

Noise in the project is characterized by natural noises due to wind in the surrounding foliage. Existing background ambient noise levels within the project area are largely attributed to motor vehicle traffic along Kamehameha Highway. Noise levels around the project area are consistent with noise levels found in residential areas.

### ***Anticipated Impacts and Mitigation Measures***

Noise will be generated during the construction phase of the project; however, noise levels are not expected to adversely affect neighboring property owners. Construction activities will comply with the provisions of the regulations for community noise control articulated in HAR Section 11-46. The contractor will obtain a noise permit if noise levels from construction activities are expected to exceed allowable levels. Heavy vehicles traveling to and from the project site will comply with the State's administrative rules for vehicular noise control. The project was not anticipated to affect ambient noise levels in the neighboring Wahiawā community.

## **3.9 Utilities and Infrastructure**

An Infrastructure Assessment was prepared by G70 in July 2025 (*Appendix E*). Findings from the study are summarized below.

### **3.9.1 Water**

#### ***Existing Conditions***

The project site is served by a City owned and maintained 12-inch cast iron water main that runs beneath Avocado Street (*Figure 3-12*). Three domestic water meters and water laterals convey water from the main to the two existing structures (*Figure 3-12*). The structure on the western portion of the site is served by a lateral assumed to be 1 inch in diameter connected to a 5/8-inch meter (M/N 98022653). The structure on the eastern portion of the site is served by two laterals assumed to be 1 ½ inches in diameter connected to two 5/8-inch meters (M/N 93023119 and 00201274).

The project site is served by a City fire hydrant (C00236) located on Walker Avenue (*Figure 3-12*). According to BWS data from April 29, 2025, the Static Pressure is 88 pounds per square inch (psi) and the residual pressure is 76 psi at 2000 gallons per minute (gpm).

### ***Anticipated Impacts and Mitigation Measures***

The project is not anticipated to affect water usage in the greater Wahiawā area. Furthermore, the Board of Water Supply (BWS) confirmed that the existing water system will adequately serve the DOCARE substation (*Appendix E*). Existing water laterals and water meters may be reused to support the DOCARE substation and will be confirmed during the final design. [Consistent with Act 170, 2016 \(H.B. 1749\), reclaimed water strategies and methods will be integrated into the final design and may include but not limited to stormwater capture, green infrastructure, and efficient irrigation systems.](#)

The existing City fire hydrant (C00236) located on Walker Avenue will adequately serve the DOCARE substation. The DOCARE substation will be designed to meet applicable building code standards identified in ROH Chapter 16 and ROH Chapter 20 which adopts design measures from NFPA 1.

### **3.9.2 Wastewater**

#### ***Existing Conditions***

Wastewater at the project site is discharged via two 6-inch sewer laterals that connect to a City owned and maintained 24-inch sewer main located beneath Avocado Street (*Figure 3-13*). The 24-inch sewer main beneath Avocado Street slopes to the west and connects to a 24-inch sewer main running beneath Kamehameha Highway that conveys wastewater to the Wahiawā Wastewater Treatment Plant.

#### ***Anticipated Impacts and Mitigation Measures***

The Wahiawā Wastewater Treatment Plant has the capacity to serve the DOCARE substation, and a sewer connection has been approved by the Wastewater Branch (*Appendix E*). Existing wastewater laterals may be reused to service the DOCARE substation and will be confirmed during the final design. The project is not anticipated to affect wastewater services in the greater Wahiawā area, and no further mitigation is proposed.

### **3.9.3 Electrical Services**

#### ***Existing Conditions***

The project site receives overhead power from Hawaiian Electric Company (HECO) via overhead utility lines located along Avocado Street.

#### ***Anticipated Impacts and Mitigation Measures***

The DOCARE substation will continue to receive electrical services via overhead utility lines. The project is not expected to impact existing utility services in the Wahiawā area, and no further mitigation is proposed.

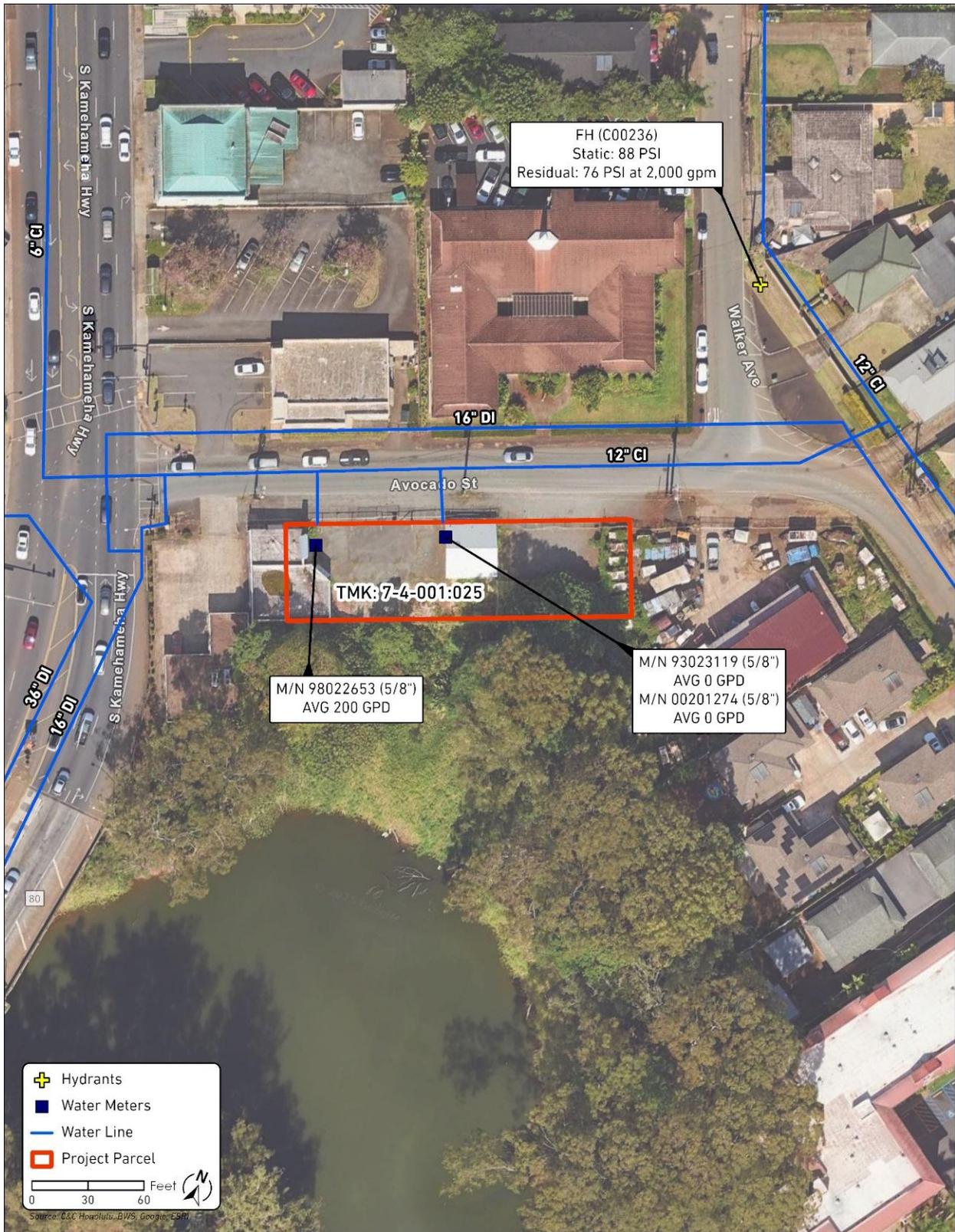


Figure 3-12

Existing Water System

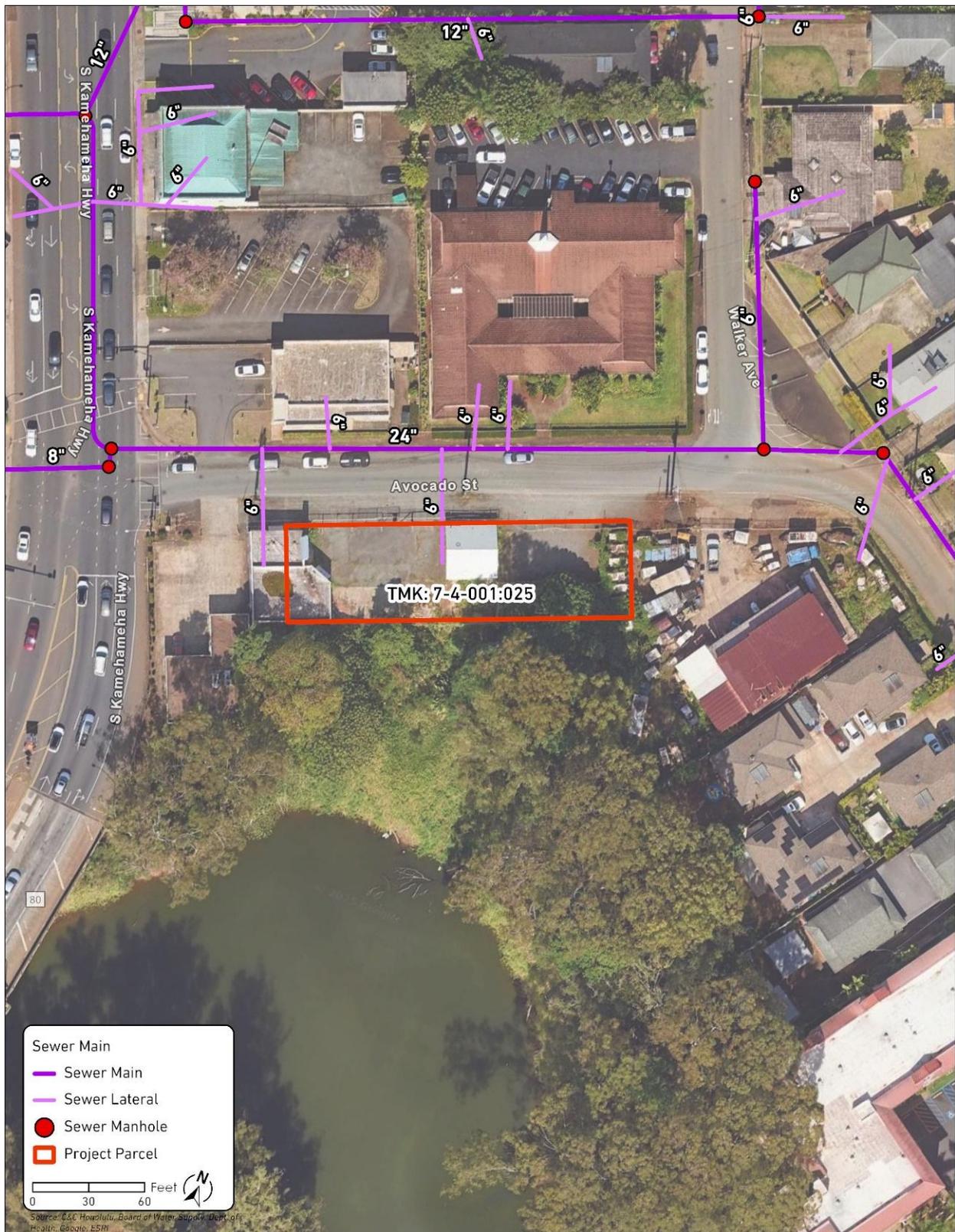


Figure 3-13

Existing Wastewater Services

### **3.10 Traffic, Roadways, and Parking**

A Transportation Assessment was completed by the Fehr & Peers in November 2025 (*Appendix F*). Findings from the traffic assessment are summarized in this section.

#### ***Existing Conditions***

Kamehameha Highway (Route 80) is the primary roadway serving the project area (*Figure 3-14*). Kamehameha Highway is a north-south, six-lane highway with three northbound lanes, two southbound lanes, and one two-way left turn lane. Kamehameha Highway provides key regional access through Wahiawā, linking Wahiawā residents and visitors to Route 99 and the H-2 Freeway. Notably, Kamehameha Highway is divided south of Avocado Street and undivided to the north. On-street parking is allowed on designated segments on the west side of the highway north of Avocado Street but prohibited elsewhere. Within the project area, the posted speed limit on Kamehameha Highway is 25 mph. Kamehameha Highway is owned and maintained by the State of Hawai'i Department of Transportation's (HDOT's) Highways Division.

Avocado Street provides direct access to the project site (*Figure 3-14*). Avocado Street is an east-west, two-lane (one lane in each direction), undivided roadway that extends from Kamehameha Highway to Walker Avenue. On-street parking generally does not occur on Avocado Street and is prohibited on the south side, as indicated by clear signage. While no speed limit is posted on Avocado Street, the speed limit is presumed to be 25 mph based on the street's design compared to other similar roadways. Avocado Street is owned and maintained by the City and a traffic signal controls the intersection at Kamehameha Highway.

Walker Avenue connects Avocado Street to California Avenue. Walker Avenue is a north-south, two-lane (one lane in each direction), undivided roadway that connects California Avenue to the Wahiawā Freshwater State Recreation Area. Walker Avenue intersects Avocado Street approximately 75 feet east of the site's eastern property boundary. On-street parking is generally prohibited on both sides of Walker Avenue south of Olive Avenue and occurs predominantly on the west side north of Olive Avenue. The posted speed limit on Walker Avenue is 25 mph. Walker Avenue is owned and maintained by the City.

Pedestrian facilities including sidewalks are provided along both sides of Kamehameha Highway north of Avocado Street, and along the west side of Kamehameha Highway south of Avocado Street. No sidewalks or formal paths are provided along either side of Avocado Street or Walker Avenue, with the exception of one 150-foot segment on the west side of Walker Avenue, extending south of Olive Avenue. High-visibility crosswalks are marked on three of the four legs of the signalized intersection of Avocado Street and Kamehameha Highway. The south leg does not contain a marked crosswalk. Notably, the project site is located along Avocado Street which is located within the Pedestrian Priority Network in the O'ahu Pedestrian Plan.

Bicycle facilities are not provided along either side of Avocado Street, Walker Avenue, or Kamehameha Highway, and bicyclists must share the roadway with vehicles or ride on the shoulder of the roadway (if one is present). Sharing the roadway is a common practice on local streets like Avocado Street and Walker Avenue given the lower traffic volumes and travel speeds compared to higher volume roadways such as Kamehameha Highway.

O'ahu's public bus system, TheBus, operates several bus routes within the vicinity of the project site. Routes 51, 52, 83, 99, 511, and PH3 have bidirectional bus stops within approximately 300 feet of

the project site. A comfortable walking distance to access bus transit is generally considered to be within a quarter mile, or 1,320 feet. Peak headways for these routes range from 15 to 60 minutes on weekdays and 30 to 70 minutes on weekends.

As part of the traffic assessment, traffic conditions were observed in May 2025 at the intersection of Avocado Street and Kamehameha Highway. Traffic conditions appeared to be operating at a less-than-desirable level of service during peak hours. Westbound queues were observed along Avocado Street during the morning (AM) and evening (PM) peak hours, and these queues frequently extended beyond the site onto Walker Avenue toward Olive Avenue. Similar northbound queues along Walker Avenue from Olive Avenue were also observed during peak hours. Pedestrian activity along Avocado Street was minimal during the field review with fewer than five (5) pedestrians observed during each of the AM and PM peak hours. Few bicyclists were observed along Avocado Street during field observations.

### ***Anticipated Impacts and Mitigation Measures***

Vehicle trips associated with the construction of the DOCARE substation is not anticipated to affect existing levels of traffic in the Wahiawā area. Traffic will be monitored to ensure the movement of construction vehicles, equipment, and deliveries does not adversely affect the current flow of traffic. Should construction activity require the temporary closure of any traffic lane, sidewalk, bicycle lane, or pedestrian mall, a street usage permit will be obtained from DTS.

The project is not anticipated to generate a significant amount of vehicle trips that would affect existing levels of traffic in the Wahiawā area. However, given existing westbound queuing observed on Avocado Street, it is possible that vehicles entering and exiting the site may experience temporary delays during certain times of the day. To mitigate temporary delays, the substation has been carefully designed to allow officers flexibility to access Kamehameha Highway via Avocado Street or Walker Avenue in the event of an emergency.

DLNR will consult with DTS on future pedestrian improvements, including the construction of a sidewalk along the property frontage of Avocado Street. The project site and the entire length of Avocado Street is identified as a Pedestrian Priority Network in the O'ahu Pedestrian Plan. Additionally, DLNR may conduct a sight distance assessment to minimize conflicts between vehicles and pedestrians at the project driveways. The project is not expected to adversely affect pedestrian, bicycle, or transit mobility in the Wahiawā area, and no further mitigation is proposed.



Figure 3-14

Traffic Study Intersections

### 3.11 Socio-Economic Characteristics

#### Existing Conditions

The project site is located in Census Tract 93.02. As shown in *Table 3-4*, Census Tract 93.02 has a total population of approximately 3,467 individuals, which is approximately 0.3% of O‘ahu’s total population (U.S. Census, 2023). The median age in the Census Tract 93.02 is 45.7 years old, which is older than the median age in the City and County of Honolulu recorded at 39.4 years old. The racial mix of the area is comprised of proportionately more Asian and individuals with two or more races, and a smaller percentage of White, a trend which differs from both the City and the State.

<b>Table 3-4: Socio-economic Characteristics</b>			
	<b>State of Hawai'i</b>	<b>City and County of Honolulu</b>	<b>Census Tract 93.02</b>
<b>Population</b>	1,445,635	1,003,666	3,467
<b>Median Age</b>	40.6	39.4	45.7
<b>Race and Ethnicity</b>			
<b>White</b>	22.5%	18.8%	4.2%
<b>Black or African American</b>	1.9%	2.4%	2.6%
<b>American Indian and Alaska Native</b>	0.3%	.2%	0.0%
<b>Asian</b>	37.3%	42.6%	55.6%
<b>Native Hawaiian and Other Pacific Islander</b>	10.3%	9.9%	13.8%
<b>Other Race</b>	1.7%	1.6%	1.3%
<b>Two or More Races</b>	26%	24.4%	22.5%
<b>Median Household Income</b>	\$98,317	\$104,264	\$108,661
<b>Total Housing Units</b>	564,905	372,329	1,155
<b>Total Employed Population (16 years and over)</b>	668,094	462,629	1,548
<b>Unemployment Rate</b>	5%	4.8%	4.2%

Census Tract 93.02 is comprised of approximately 1,155 housing units, approximately 0.3% of the total number of housing units in the City and County of Honolulu. The median household income in Census Tract 93.02 is approximately \$108,661, which is slightly higher than the median household income in the City and State.

Within Census Tract 93.02, approximately 1,548 individuals are employed. The unemployment rate in Census Tract 93.02 is reported at 4.2%, which is slightly lower than the unemployment rate in the City and the State.

### ***Anticipated Impacts and Mitigation Measures***

Economic benefits, including the generation of jobs and expenditures from the purchasing of construction materials will be generated during the construction phase of the project. The project is not anticipated to adversely affect population projections or household characteristics in the Wahiawā area or greater City and County of Honolulu. The project will strengthen DOCARE enforcement in the Wahiawā area and will have beneficial impacts throughout the community.

## **3.12 Public Facilities and Services**

This section discusses the potential impacts to public facilities and services in the Wahiawā area.

### **3.12.1 Educational Facilities**

#### ***Existing Conditions***

The project site is located within the State Department of Education's (DOE) Leilehua-Mililani-Waiialua Complex. The Leilehua-Mililani-Waiialua Complex is comprised of 15 elementary schools, four middle schools, and three high schools. Within the Leilehua-Mililani-Waiialua Complex, the following educational facilities serve the project site:

- Wahiawā Elementary School located at 1402 Glen Avenue
- Wahiawā Intermediate School located at 275 Rose Street
- Leilehua High School located at 1515 California Avenue

#### ***Anticipated Impacts and Mitigation Measures***

The project is not expected to substantially increase enrollment that may impact operations at educational facilities serving the Leilehua-Mililani-Waiialua Complex. No further mitigation is proposed.

### **3.12.2 Recreational Facilities**

#### ***Existing Conditions***

Recreational facilities in the vicinity of the project site include the Wahiawā Freshwater State Recreation Area, the Wahiawā District Park, and the Wahiawā Botanical Garden. The Wahiawā Freshwater State Recreation Area features trails, fishing areas, and green open space areas for picnicking. Notably, the State Parks Division is in the process of implementing facility improvements to revitalize the park for the community. The Wahiawā District Park features a skate park, basketball court, tennis court, and baseball and softball fields.

#### ***Anticipated Impacts and Mitigation Measures***

The project is not expected to negatively impact recreational facilities in the nearby vicinity. Locating the DOCARE substation in the nearby vicinity of the Wahiawā Freshwater State Recreation Area will strengthen enforcement and ensure parkgoers are safe. The DOCARE substation will have a positive impact within community, specifically with the projected uptick of parkgoers upon completion of the planned improvements at the Wahiawā Freshwater State Recreation Area.

### **3.12.3 Police**

#### ***Existing Conditions***

Police services for the island of O‘ahu are provided by the City and County of Honolulu Police Department (HPD). HPD patrols the 8 districts of O‘ahu and operate a total of 11 police stations. The project site is located within HPD District 2 which covers the area from Mililani to Waimea. District 2 is patrolled by the Wahiawā Police Station. The Wahiawā Police Station is located approximately .65 miles from the project site.

#### ***Anticipated Impacts and Mitigation Measures***

The project is not expected to impact HPD’s operations or ability to provide adequate services throughout the patrol district. The project will strengthen DOCARE enforcement in the greater Wahiawā community. The project is anticipated to have beneficial impacts throughout the community by maintaining order and ensuring the public is safe.

### **3.12.4 Fire**

#### ***Existing Conditions***

The HFD is an all-hazards response agency that protects and serves the island of O‘ahu. HFD responds to emergencies including fires, hazardous materials incidents, technical rescues, natural disasters, and emergency medical calls. On the island of O‘ahu, HFD operates a total of 45 fire stations. Within the nearby vicinity of the project site is the Wahiawā Fire Station (Fire Station 16) and the Mililani Mauka Fire Station (Fire Station 41). In the event of an emergency, HFD will dispatch the closest fire engine that is readily available.

#### ***Anticipated Impacts and Mitigation Measures***

The project is not anticipated to affect HFD’s ability to provide emergency services to the surrounding residential neighborhood or greater Wahiawā area. No further mitigation is proposed.

### **3.12.5 Emergency Medical Services**

#### ***Existing Conditions***

The nearest hospital to the project site is the Queen’s Medical Center – Wahiawā (formerly, Wahiawā General Hospital). The closest ambulance unit is stationed at the Wahiawā Fire Station, which transports patients to The Queen’s Medical Center - Wahiawā.

HFD works with Emergency Medical Services (EMS), who provide pre-hospital emergency medical care and services for emergency medical calls. A total of 21 EMS ambulance units are dispersed at fire stations and hospitals on the island of O‘ahu. The closest ambulance unit is located at the Wahiawā Fire Station. In the event of an emergency, EMS will dispatch the nearest available ambulance unit.

### ***Anticipated Impacts and Mitigation Measures***

The Queen's Medical Center - Wahiawā will be accessible should there be an accident or illness affecting workers during construction period. The project is not expected to impact services at Queen's Medical Center - Wahiawā or EMS' ability to provide emergency services in the project area. No additional mitigation measures are proposed.

#### **3.12.6 Solid Waste Management**

##### ***Existing Conditions***

The City and County of Honolulu, Department of Environmental Services provide solid waste collection services at the project site. The site is also served by drop-off centers including the Wahiawa Convenience Center and the Wahiawa Collection Yard.

##### ***Anticipated Impacts and Mitigation Measures***

The construction phase of the project will generate very limited amounts of construction waste. Waste material will be transported to either the Wahiawa Convenience Center or Wahiawa Collection Yard for proper disposal. The project is not expected to impact existing solid waste collection provided by the City and County of Honolulu.

## **3.13 Historic, Archaeological and Cultural Resources**

### **3.13.1 Historic and Archaeological Resources**

An Archaeological Literature Review and Field Inspection (ALRFI) report was completed by Honua Consulting in July 2025 (*Appendix G*). The study was completed to identify and evaluate the project's potential effect on historic properties. A summary of the ALRFI is below.

##### ***Existing Conditions***

The project site is located in the Wai'anae Uka ahupua'a which historically, was part of the lands in the central plateau that was cleared for sandalwood during the early historic period. Archival research revealed that other than a 2014 town-wide reconnaissance level survey, there have been few archaeological studies conducted in the Wahiawā area. Most of the studies that have been completed in the vicinity of the project area were in support of military construction and infrastructure projects. *Figures 3-15 and 3-16* identify previous archaeological studies and historic properties identified in the project area.

Based on previous archaeological studies, no traditional Hawaiian sites are known to exist within the boundaries of the Wahiawā area. The most well-known traditional archaeological site in the area is the Kūkaniloko Birthstones State Monument (State Inventory of Historic Places (SIHP) #-00218) which is located approximately 1.1 miles northwest of the project site. A majority of the historic sites and places of interest in the Wahiawā area are associated with the former OR&L Railroad, pineapple cultivation in the area, plantation camps, the growth and development of Wahiawā town.

A total of 15 historic properties have been documented in the vicinity of the project area (*Figure 3-16*). Traditional Hawaiian sites in the vicinity of the project site include two sites documented during McAllister's island-wide survey of O'ahu in the 1930s. These two sites are identified as the Kūkaniloko

Birthstones State Monument (SIHP #-00218) and its companion heiau Ho‘olonopahu (SIHP #-00219), which has been destroyed. Kūkaniloko was an important complex of birthing boulders located northwest of Wahiawā town. It is one of only two places in the island chain known for the birthing of chiefs. Kūkaniloko had a companion heiau, Ho‘olonopahu which heralded the arrival of new chiefs. Site #-00218 was added to the National Register of Historic Places (NRHP) as NRHP #73000674 in 1973. The site area was expanded to 5 acres in 1995 and relisted as NHRP #94001640. Recent efforts have been made with the Wahiawā community, Division of State Parks, DLNR, and the Office of Hawaiian Affairs (OHA) to pursue a community informed management plan.

In 2020, two historic properties were recorded during an archaeological inventory survey for the Wahiawā pedestrian crossing project. The two sites identified include a cut slope pathway (SIHP #-8875) and train trestle remnants (SIHP #-8876).

The remaining sites identified in the vicinity of the project site were documented during multiple surveys for the Wahiawā Freshwater Park Special Recreation Area. The ten sites documented within the park include a railroad trestle and railbed (SIHP #-10070), a historic drainage system (SIHP #-10071), historic foundation remnants (SIHP #-10072), a boat ramp (SIHP #-10073), WWII era concrete warehouse foundations (SIHP #-10074), a bridge crossing (SIHP #-10075), a concrete drainage ditch (SIHP #-10076), a concrete foundation (SIHP #-10077), a concrete wall and buried metal cylinder (SIHP #-10078), and a concrete culvert headwall and drainage ditch (SIHP #-10079).

As part of the ALRFI, a 100% pedestrian survey of the traversable portions of the project area was conducted on June 16, 2025. The project site is a completely developed commercial property and background research indicates that the abandoned structures were constructed in the 1950s. There were formerly three buildings on the property, however one appears to be recently demolished. The three buildings were included in the 2014 reconnaissance level survey of Wahiawā town recommended structures for NHRP eligibility. Two of the buildings on the site were not evaluated, while one building was determined to be ineligible for listing on the NHRP.

No historic properties were documented, and no significant artifacts or features were encountered on the project site. It is assumed that the lack of historic properties is due to development of the site which included excavation and installation of subsurface utilities for former commercial use, grading for asphalt and concrete paving, and construction of the retaining wall along the southern property boundary.

### ***Anticipated Impacts and Mitigation Measures***

Prior to the ALRFI, the project site was not subject to archeological surveying. However, the site was included in the town wide reconnaissance level survey that evaluated a total of 3,585 properties and provided NRHP eligibility recommendations for 3,283 properties. The three structures on the site were included in the survey, two buildings were not evaluated, and the one remaining structure was ineligible for listing on the NRHP.

The archaeological field inspection consisted of a 100% pedestrian survey of the traversable portions of the site. The site is completely developed and does not contain historic properties or significant artifacts or features. The lack of historic properties is likely due to the previous use of the site as a commercial auto shop business. The project is not anticipated to affect historic properties or significant artifacts or features. The ARFLI has been submitted to SHPD for review and concurrence pursuant to HRS 6E-8.

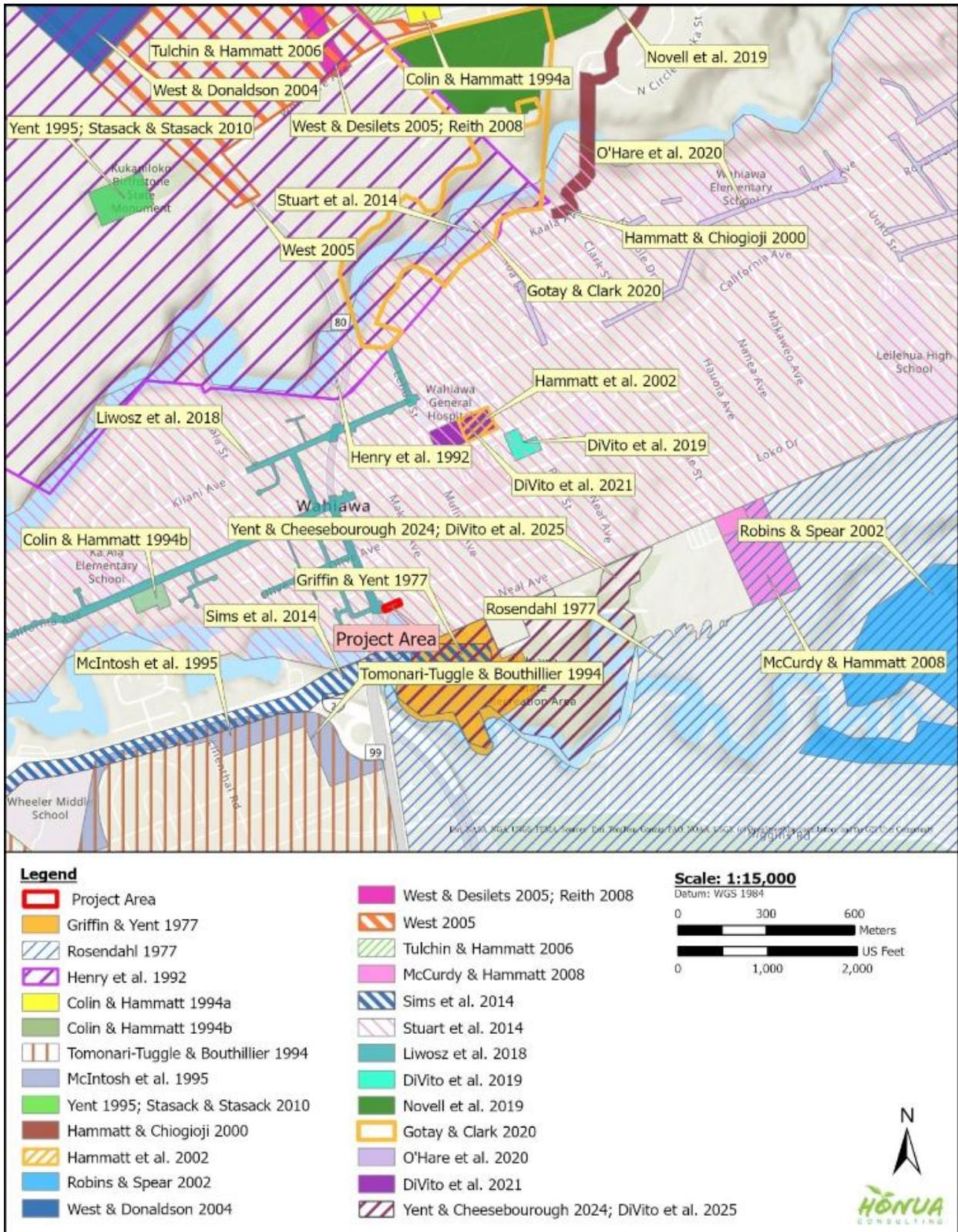


Figure 3-15

Previous Studies Conducted in the Wahiawā Area (Honua Consulting)

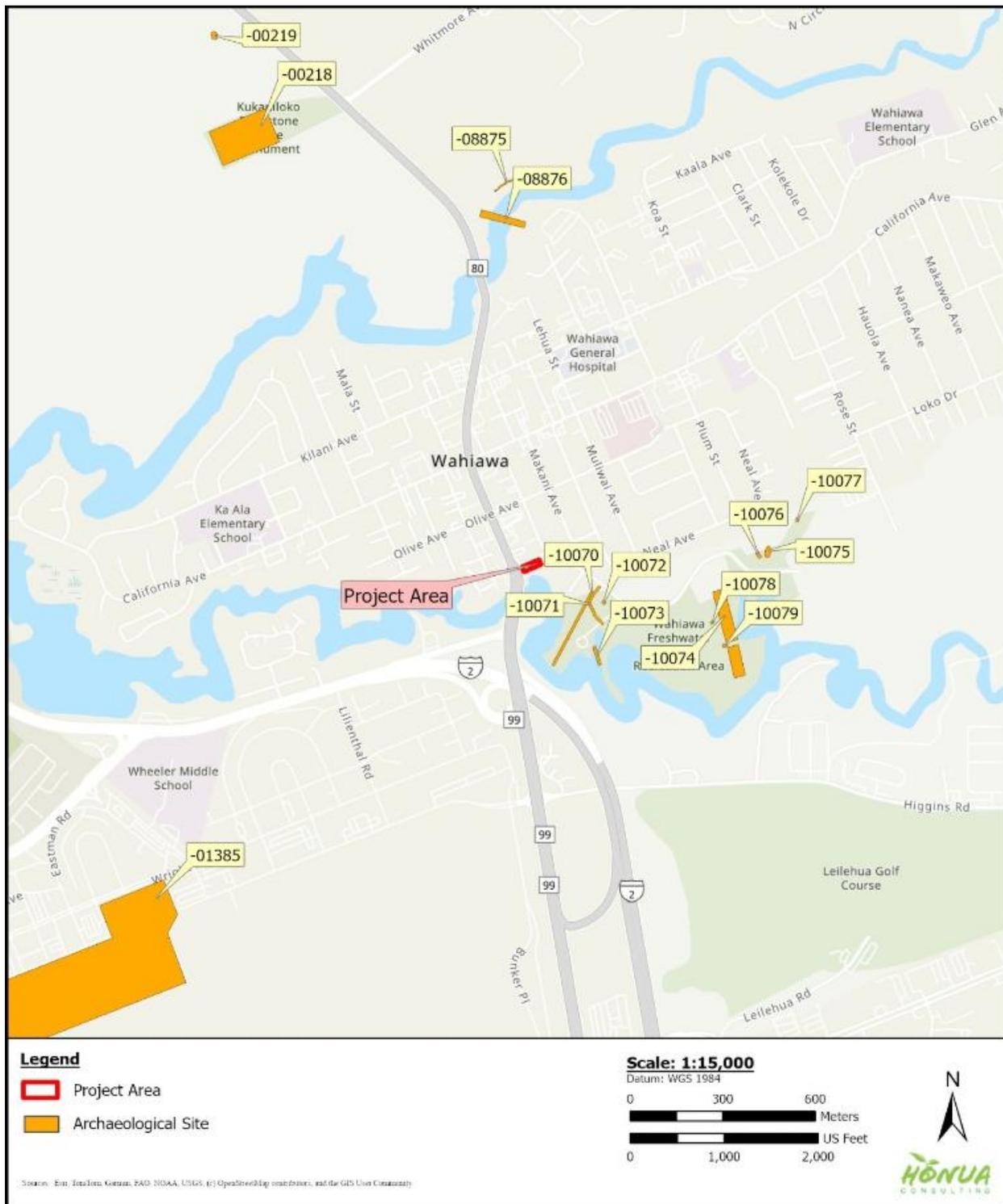


Figure 3-16 Previous Identified Archaeological Sites in the Wahiawā Area (Honua Consulting)

### 3.13.2 Cultural Resources

A Cultural Impact Assessment (CIA) was completed by Honua Consulting LLC in September 2025 and (*Appendix H*). The CIA includes background research of traditional and historic accounts in the Wahiawā area, and an ethnographic survey with cultural informant interviews to evaluate potential impacts on cultural resources, historical resources, and archaeological sites. A summary of the findings from the CIA is located below.

#### *Existing Conditions*

Wahiawā is a long-standing traditional name that has been retained into the present, while other place names in the region have been lost in the rapid development of mass agricultural plantations at the beginning of the 20th century when Hawai'i became a United States Territory. Wahiawā has a rich cultural history, and many mo'olelo and legends are associated with this region. Wahiawā is translated as “place of noise,” because the sound of ocean waves, particularly during rough (winter) surf, can be heard from the area.

Archival research revealed that an abundance of rain and fresh water supported a diverse ecosystem of native flora and fauna prior to the introduction of industrial agriculture and monocrops (such as pineapple). Evidence of such is recorded in place names, which are memorialized in mo'olelo, mele, and poetical sayings that are still part of the immense archive and native cultural practice, such as hula and song performance. Additionally, several mele tie these lands to the Kamehameha line, specifically mentioned in compositions for Kauikeaouli (Kamehameha III), Ka Haku o Hawai'i (Prince Albert, son of Kamehameha IV and Emma), and Kamehameha V.

#### *Traditional Land Use in Wahiawā*

Wahiawā, which is located on the western slopes of the Ko'olau Range was an area known to be the home of chiefs. The chiefs of the area are described by Kamakau (1968) as such:

The chiefs of Lihue, Wahiawa, and Halemano on Oahu were called Lo chiefs, po'e Lo Ali'i [“people from whom to obtain a chief”], because they preserved their chiefly kapus. They lived in the mountains (i kuahiwi); and if the kingdom was without a chief, there in the mountains could be found a high chief (ali'i nui) for the kingdom. Or if a chief was without a wife, there one could be found – one form chiefly ancestors.

One of the most notable figures to be raised in Wahiawā was Mā'ilikūkāhi, one of the great ali'i of O'ahu who reigned well before the time of Kamehameha. When he was 29 years old, Mā'ilikūkāhi was chosen by the chiefs, priests, and commoners to be high chief of the island.

During this period, the place names Līhu'e and Leilehua were still in use for the Wahiawā area. Leilehua (“Lehua blossom garland”) was well known as the site of a lua (Hawaiian martial arts) school and is where Schofield Barracks is now situated. Līhu'e now is only rarely used for the area, as the name is more commonly linked to the capital city of Kaua'i County. Leilehua is seldom used, although the name still appears in use by the U.S. Military at its nearby golf course and clubhouse, as the names of these facilities are derived from the traditional place name of the area.

#### *Early Historic Period in Wahiawā*

In the 1840s, private property was introduced into Hawaiian society through formation of the Board of Commissioners to Quiet Land Titles and the adoption of the Māhele 'Āina of 1848 (Māhele). In 1845,

King Kamehameha III waived his right to full authority over the land, portioning it out into: (1) 'Āina Lei Ali'i (crown lands) for the occupant of the throne; (2) 'Āina Konohiki (konohiki lands) for notable chiefs and those who provided service to the Kingdom; and (3) 'Āina Aupuni (government lands) to be used in support of public initiatives and as a means of providing land to those who did not acquire land in the Māhele. The result of these divisions were approximately as follows: 23.8% (984,000 acres) of land on the islands were allocated to the king and were dubbed the 'Āina Lei Ali'i, 39.2% (1,619,000 acres) were the 'Āina Konohiki to be divided among 245 chiefs, and 37% (1,523,000 acres) were declared as 'Āina Aupuni which were awarded to maka'āinana (commoners) who worked the land as active tenants. Land Commission Awards (LCAs) were awarded to commoners as kuleana lands for fee ownership. Kuleana land claims required proof of residency on the land and continued land improvements. LCAs therefore record who resided on the land and how the land was used.

In 1852, Kamananui, which includes the Wahiawā area, was designated Government Crown Land. In 1853, approximately 2,128 acres of land in upland Kamananui, encompassing the project, were purchased for \$1,942 and awarded to James Robinson, Robert Lawrence, and Robert W. Holt as Land Grant 973 (Figure 3-17). The land was purchased from the Board of Education, who had received it from the Hawaiian Government. Since the land was owned by the Hawaiian Government and later the Board of Education, no LCAs were awarded in the area now known as Wahiawā.

Following the death of James Robinson in 1876, the land was transferred to his son Mark Robinson who used the area for cattle ranching for much of the rest of the 19th century. Robinson was a Hawaiian business magnate and politician best known for being the Minister of Foreign Affairs during the reign of Lili'uokalani.

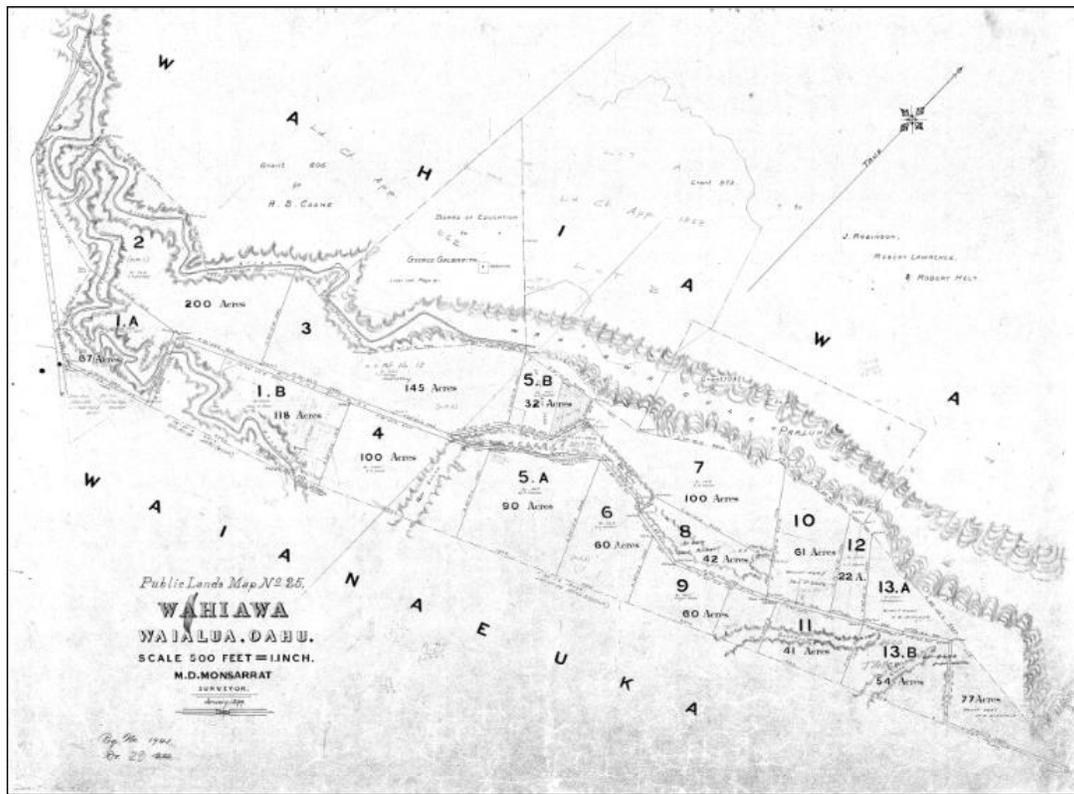


Figure 3-17

Public Lands Map (Honua Consulting)

### *Historic Period in Wahiawā*

The overthrow of the Kingdom of Hawai‘i was led by a group of white American European men, the “Annexation Club,” in reference to their strong advocacy for the annexation of Hawai‘i to the United States. Members included Henry E. Cooper, Theodore F. Lansing, Henry Waterhouse, Lorrin A. Thurston, Ed Suhr, F.W. McChesney, John Emmeluth, William R. Castle, William O. Smith, J.A. McCandless, C. Bolte, W.C. Wilder, and Andrew Brown. They named themselves the “Citizen’s Committee of Public Safety” and later changed their name to “The Committee of Safety.” After the overthrow, the individuals who orchestrated the coup d’état self-proclaimed themselves to oversee the government and established the “Republic of Hawai‘i.” They then “ceded” 1.8 million acres of land set aside as Crown and Government lands through the Māhele to themselves and quickly set out to sell these lands for their own gain.

The Republic of Hawai‘i, led by Committee of Safety member Sanford Ballard Dole as President, implemented a plan to sell off the Crown and Government Lands as agricultural homesteads. To achieve this, the Republic of Hawai‘i passed the Land Act of 1895, which resulted in the repeal of the 1865 Kingdom Law and allowed the Crown Lands to be sold. The law allowed only citizens to apply and excluded most Asian immigrants from citizenship, limiting the distribution of these homestead lots to only Hawaiian, haole (white) Americans, and western Europeans. Approximately 46,594 acres were removed from the ceded lands sold by the Republic between 1895 and 1898. This included the lands of Wahiawā, as the lands granted to Mark Robinson were reclaimed by the Republic and made available for agricultural homesteads.

Byron Orlando Clark, originally from Iowa, advocated for agriculture in the now-vacant 1,350 acres of land in Wahiawā starting from 1898. Clark lobbied for business associates from California to move to the homestead lands. By 1899, Clark had completed facilitating the issuance of government grants to the Californians and helped them settle in Wahiawā and obtain the citizenship needed for land acquisition. The area would become known as the Wahiawā Colony Tract, an area roughly bounded by the north and south forks of Kaukonahua Stream. Clark, along with Alfred W. Eames, began planting and harvesting pineapple in 1900. Eames quickly established the Hawaiian Island Packing Company, which later became pineapple and agricultural giant Del Monte Fresh Produce Inc. Also in 1900, James D. Dole (cousin to Sanford B. Dole), obtained approximately 60 acres of homestead lands in Wahiawā. He set to work building a pineapple plantation and cannery; both became operational by 1903. This significantly contributed to the initial success of the settler colony.

Within ten years, the homesteaders, including Clark, had grown a thriving pineapple industry with more than 250,000 cases being harvested seasonally. Thousands of acres were in production. Wahiawā became the center of the pineapple industry. Clark led Clark Farm Co., Ltd., Dole led the Hawaiian Pineapple Company (which would become Dole Food Company.), W.B. Thomas established and led the Thomas Pineapple Co. (which later became part of Libby, McNeill & Libby when the company expanded into canning fruit). The Thomas plantation consisted of approximately 600 acres in Wahiawā.

The plantations recruited many immigrant laborers to the area. While the 1895 Land Act still prohibited immigrants from applying for homestead lands themselves, they nonetheless moved into the area, often into plantation housing, and built their lives in Wahiawā. The project area was utilized for pineapple cultivation for many years prior to its current use.

While the pineapple industry took off in the Wahiawā area, the U.S. Military began construction of Schofield Barracks to the west of Wahiawā Town in 1909. Wheeler Field was developed in the 1920s

as a small, two-squadron operation, and was greatly expanded in the 1930s. Following World War II, the facility was expanded by the addition of 304 acres.

### *Ethnographic Survey*

Ethnographic interviews were conducted to understand the importance of, and potential impacts to, traditional Hawaiian and/or historic cultural resources and traditional cultural practices in the Wahiawā area. Interviewees were selected because they were identified as individuals from the area with knowledge about the area's history or cultural resources.

Two interviews were conducted as part of the CIA. The first interviewee provided valuable historical, environmental, and practical context for understanding the Wahiawā project area. Recollections highlighted the area's long-standing relationship with agriculture, freshwater management, and small-scale community recreation, as well as its transformation through mid- and late-twentieth-century infrastructure development. From a cultural perspective, the interview suggests that while no direct traditional Hawaiian practices or archaeological resources were identified, the freshwater landscape of Lake Wilson remains an enduring feature of community life in the region. The interview underscores that careful construction management and continued respect for the environmental character of Wahiawā will help ensure that new projects, such as the DOCARE substation, coexist harmoniously with the area's historical and natural setting.

The second interviewee stressed that culturally sensitive development in Wahiawā must respect both the tangible and intangible heritage of the place. While it is not anticipated that the DOCARE substation would directly affect Kūkaniloko or other known cultural sites, community continuity, landscape character, and design sensitivity are critical components of cultural preservation. The interview reflects the importance of acknowledging Wahiawā as a living cultural landscape—where history, genealogy, and daily life remain deeply intertwined—and calls for ongoing consultation, thoughtful design, and respect for the community's enduring cultural identity.

### ***Anticipated Impacts and Mitigation Measures***

Background research and ethnohistoric interviews indicate that the Wahiawā region is rich with both pre-contact and post-contact histories. It is recommended that construction BMPs are implemented to minimize potential effects from short-term construction activity. BMPs may include but are not limited to the phasing of construction activities, replacing ground cover of disturbed areas, providing adequate water sources at the site, and the use of temporary silt fencing and screens.

The project is located in the kalana of Wahiawā, a region of cultural and historical significance that includes the wahi pana of Kūkaniloko, one of the most sacred birthing sites in Hawai'i. While the parcel itself is fully paved and developed with two existing one-story commercial buildings, its geographic context cannot be separated from a larger landscape woven with streams, gulches, place names, and oral histories that reflect long-standing Native Hawaiian relationships with the land. The documents in detail the history of the area, reviewing Hawaiian language newspapers, land commission awards, maps, and ethnographic interviews. This research concluded that no traditional or customary practices are currently exercised on the parcel, and that the project is unlikely to have any adverse impact on historic properties or cultural resources. Oral histories supported this finding, and the report further noted that the proposed substation could yield secondary benefits to cultural practices by enhancing enforcement of conservation laws in the surrounding area.

The ARFLI has been submitted to SHPD for review and concurrence pursuant to HRS 6E-8.

### **3.13.3 Ka Pa‘akai Analysis**

#### ***Existing Conditions***

A Ka Pa‘akai analysis was completed by Honua Consulting LLC in September 2025 (*Appendix H*). The purpose of the Ka Pa‘akai analysis is to fulfill the State of Hawai‘i “obligation to protect the reasonable exercise of customary and traditionally exercised rights of Hawaiians to the extent feasible” Public Access Shoreline Hawai‘i v. Hawai‘i County Planning Commission (“PASH”) 79 Hawai‘i 425, 450 n. 43, 903 P.2d 1246, 1271 n. 43 (1995). In the Ka Pa‘akai decision of 2000, the Court established a framework “to help ensure the enforcement of traditional and customary Native Hawaiian rights while reasonably accommodating competition private development interests.” 94 Hawai‘i 31, 35, 7 P.3d 1068, 1972 (2000). This analysis is used here to fulfill the goal of this CIA and as guidance to state agencies in fulfilling their obligations under Ka Pa‘akai.

The framework to evaluate potential effects to traditional and customary Native Hawaiian rights includes:

- 1) *The identification of valued cultural, historical, or natural resources in the project area, including the extent to which traditional and customary Native Hawaiian rights are exercised in the project area.*
- 2) *The extent to which those resources—including traditional and customary Native Hawaiian rights—will be affected or impaired by the proposed action.*
- 3) *The feasible action, if any, to be taken to reasonably protect Native Hawaiian rights if they are found to exist.*

As part of the project, an ALRFI, CIA, and Ka Pa‘akai analysis were completed to identify resources that may exist in the project area or adjacent areas. Archival research reveals historic properties are present within the vicinity of the project area. Additionally, archaeological surveying at the project site has been conducted, and DLNR will proceed with consultation with SHPD under HRS §6E-8 to seek concurrence that the project will not affect historic properties. To further evaluate whether access may be affected by the project, ethnographic interviews revealed that access to the area has been limited due to the occupation of the site by informal residents, which has discouraged practitioners from accessing the area due to safety concerns.

Due to the negligible findings of historic resources at the project site, it is not anticipated that the project will affect cultural access. Notably, failure to address ongoing issues of abandonment and occupation by informal residents potentially affects resources that may be useful to practitioners. Although the project is not anticipated to affect traditional and customary practices, it is recommended that native and canoe plants are included in the landscape plan to improve the landscaping and native biota in the project area. Additionally, it is recommended that BMPs are implemented during the construction of the project to minimize potential effects from construction related activity.

#### ***Anticipated Impacts and Mitigation Measures***

The Wahiawā region is rich with both pre-contact and post-contact histories. While the project is unlikely to have any adverse impact on pre-contact historic properties or Hawaiian cultural practices, the project has an opportunity to enrich the area through interpretive botanical, cultural, and historical programs. It is recommended that native and canoe plants are included in the landscape plan to improve the landscaping and native biota in the project area. Additionally, it is recommended that

BMPs are implemented during the construction of the project to minimize potential effects from construction related activity.

Archival research and ethnographic interviews revealed that there are undoubtedly historic resources and cultural practices within the more considerable geographic extent of the kalana of Wahiawā, however there are none in the immediate project area or within the area that the project will impact. Therefore, per Act 50 and under the Ka Pa‘akai analysis, potential effects on cultural resources or practices are negligible due to the absence of ongoing traditional and customary practices in the immediate project area.

The project may indirectly protect broader resources in the Wahiawā area by deterring illegal dumping, poaching, or development. In this sense, the project is a proactive stewardship that ensures resources are preserved for future generations.

### **3.14 Visual Resources**

#### ***Existing Conditions***

The project site is located in Wahiawā in the Central District on the island of O‘ahu. Scenic view sheds in the project area are identified in both the Central O‘ahu Sustainable Communities Plan and the O‘ahu General Plan. The preservation and protection of the natural scenic character of Lake Wilson and adjoining forested areas is identified in the Central O‘ahu Sustainable Communities Plan. Lake Wilson and adjoining forested areas are located along the southern boundary of the project site. Existing views at the project site are shown in *Figure 3-18A through 3-18C*.

#### ***Anticipated Impacts and Mitigation Measures***

The substation will comply with development standards for the Community Business (B-2) and Residential (R-5) District identified in ROH Chapter 21. Public intermittent views of Lake Wilson and adjoined forested areas will be preserved and protected as recognized in the Central O‘ahu Sustainable Communities Plan and O‘ahu General Plan. The project will improve views of Lake Wilson and the adjoining forest areas by addressing ongoing issues of occupation by informal residents and trash that has accumulated on the property.



Figure 3-18

Site Photo Key



**Central view of the lot from Avocado Street Looking South**

**Figure 3-18A**



**View of Lake Wilson from Southern Property Boundary**

**Figure 3-18B**



View from Eastern Portion of Lot Looking South

Figure 3-18C

### 3.15 Potential Cumulative and Secondary Impacts

Cumulative effects are impacts which result from the incremental effects of an activity when added to other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertake such other actions. To evaluate potential cumulative impacts, publications available in *The Environmental Notice* and active projects on DPP’s Public Input Map within the spatial area of Wahiawā and within a five-year framework were utilized to evaluate potential cumulative impacts. *Table 3-5* identifies actions that are within the temporal and spatial parameter for the project to evaluate potential cumulative impacts.

Table 3-5: Cumulative Effects/Impacts Analysis			
Project Name	Spatial Scope – Wahiawā		
	Temporal Scope		
	Past	Present	Future
2020 Wahiawa Pedestrian Bridge	X		
2021 Irrigation System Improvements in Central Oahu, Waialua and Wahiawā Districts		X	
2022 Wahiawa Civic Center	X		
2023 Wahiawa Center for Workforce Excellence	X		
2024 Department of Education High Core / Storefront School	X		
2025 Wahiawā Freshwater State Recreation Area Improvements		X	

Past projects identified in the spatial scope of the project site include the State HDOT Wahiawa Pedestrian Bridge, the State Department of Accounting and General Services (DAGS) Wahiawa Civic Center, and the State DOE Wahiawa Center for Workforce Excellence and High Core / Storefront School. Past projects are efforts undertaken by the State to improve the Wahiawā area and strengthen Wahiawā's civic center by consolidating public services, and encouraging the location of more social and community service organizations in the town as recognized by the Central O'ahu Sustainable Communities Plan. The State HDOT Wahiawa Pedestrian Bridge and the State DOE Wahiawa Center for Workforce Excellence and High Core / Storefront School have been issued FONSI. The Wahiawa Civic Center Final EIS was accepted by the Office of the Governor and the identified mitigation measures will minimize potential impacts. The projects are anticipated to have beneficial impacts throughout the Wahiawā community by providing much needed civic services to improve the central Wahiawā district.

Current projects in the spatial scope of the project site include the State Department of Agriculture Irrigation System Improvements in Central Oahu, Waialua and Wahiawā Districts and the State DLNR Wahiawā Freshwater State Recreation Area Improvements. The Irrigation System Improvements project calls for the expansion of irrigation infrastructure to source irrigation water from the Wahiawā Reservoir (Lake Wilson) and the highest quality of reclaimed water from the Wahiawā Wastewater Treatment Plan. The project will allow non-potable water to be utilized for non-potable irrigation purposes and improve the irrigation system infrastructure in the Central O'ahu area. The Draft EA and Anticipated Finding of No Significant Impact (AFONSI) was published in June 2021.

DLNR Division of State Parks is in the process of completing improvements at the Wahiawā Freshwater Recreation Area. The project calls for the implementation of the conceptual master plan that was a community-based planning effort led by the Division of State Parks. The master plan captures facility improvements and improvements to activity areas to expand recreational activities and enhance safety experience at the park. The park improvements will enhance the user experience and provide a safe park environment in the Wahiawā area. It is anticipated that a FONSI will be issued for the project.

When combined with past, present, and reasonably foreseeable actions utilizing the temporal and spatial framework, it is not anticipated that the project will result in cumulative impacts. In combination with past and present projects, the project will have beneficial impacts by providing additional civic services in the Wahiawā area. Additionally, the project will address ongoing issues of abandonment and occupation by informal residents, improving the Wahiawā area for the existing community. Appropriate measures have been identified throughout this chapter to minimize potential adverse environmental effects. Additionally, the project has been carefully designed to seamlessly integrate into the existing neighborhood.

Secondary impacts are identified as an effect or impact caused by the action and are later in time or farther removed in the distance but are still reasonably foreseeable. The project is not a phase of a larger action. The project is intended to address ongoing issues of abandonment and occupation of the site by informal residents, to improve safety throughout the community. The project is not intended to increase the population in the Wahiawā area nor contribute to a larger set of actions that may induce secondary effects. No secondary effects are anticipated with the project.

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# **Alternatives to the Proposed Project**





## Chapter 4

# Alternatives to the Proposed Project

The following presents an analysis of the alternatives to the planned project. As stated in *Chapter 2*, the purpose of the project is to address the current abandonment and neglect of the property and strengthen DOCARE enforcement in the Wahiawā and North Shore area. This evaluation of alternatives addresses potential options that could satisfy the project objectives.

### 4.1 No-Action Alternative

The “No-Action Alternative” is the baseline against which all other alternatives are measured. “No-Action” refers to future site conditions that would result should the project not proceed.

Under the “No-Action Alternative” scenario, the State would not proceed with obtaining ownership of the property to strengthen DOCARE enforcement in the Wahiawā and North Shore area. Under this alternative, current issues of abandonment and occupation by informal residents would persist. This alternative would forgo an opportunity to address community concerns and strengthen DOCARE enforcement in the Wahiawā and North Shore area. Without the planned project, occupation by informal residents would continue.

Under the “No-Action Alternative” scenario, the State would not proceed with obtaining ownership of the property for the construction of a DOCARE substation. Without the planned substation, potential impacts from construction activity including dust, stormwater runoff, and soil erosion would be minimized.

The “No-Action Alternative” would fail to address the abandonment and neglect of the property. Ongoing occupation of the property by informal residents would continue, and the State would need to explore an alternative location for the DOCARE substation to strengthen enforcement in the Wahiawā and North Shore area. While the No-Action Alternative would minimize potential environmental effects from the construction, it would fail to meet the project objectives.

### 4.2 Alternative Location

An Alternative Location to construct a DOCARE substation in the Wahiawā area has been evaluated as part of the DLNR State Parks Wahiawā Freshwater State Recreation Area Improvements Project. DLNR State Parks is planning to improve the entire Wahiawā Freshwater State Recreation Area to expand recreational opportunities and enhance safety and comfort for park users. As part of these improvements, a multi-division complex facility is planned, and locating a DOCARE substation within the complex has been considered. Locating a DOCARE substation at the park would centrally locate the facility within the DLNR complex and strengthen enforcement. However, this alternative would not address the existing issues of abandonment and neglect of the project site, nor would it address the ongoing presence of informal residents occupying the area. Locating the DOCARE substation within the Wahiawā Freshwater State Recreation Area would centrally locate DLNR facilities within the park. However, the Wahiawā Freshwater State Recreation Area is located further away from the main arterial

Kamehameha Highway connecting the Wahiawā and North Shore area and would delay DOCARE officers' response time in the event of an emergency. The project site is located off Avocado Street, along the main arterial highway and provides critical access for DOCARE officers in the event of an emergency.

Under the "Alternative Location" scenario, the State would not proceed with obtaining ownership of the property. Without the construction of the substation at the abandoned site, potential impacts from construction activity including dust, stormwater runoff, and soil erosion would be minimized.

The "Alternative Location" scenario would fail to address the abandonment and neglect of the property, and the occupation by informal residents would continue. Locating the DOCARE substation within the Wahiawā Freshwater State Recreation Area would centrally locate DLNR facilities within the park, however, would delay response time for DOCARE officers in the event of an emergency. While the Alternative Location scenario would minimize environmental effects from construction of the DOCARE substation at the abandoned site, it would fail to meet the project objectives. For these reasons, the "Alternative Location" scenario was dismissed from further consideration.

### **4.3 Alternative Use**

Under the "Alternative Use" scenario, the State would proceed with the acquisition of the property, but the site would not be occupied by DOCARE. Under this scenario, the State could dedicate the site to a different State department or lease the site. While proceeding with an alternative use would address the abandonment and occupation by informal residents, DOCARE officers patrolling the Wahiawā and North Shore area would continue to operate out of the main station located in Pearl City, and enforcement in the area would not improve.

Without construction of a DOCARE substation at the abandoned site, construction related impacts including dust, stormwater runoff, and soil erosion would be minimized. However, depending on the alternative use, substantial infrastructure and driveway improvements may be required, and could have a greater impact on infrastructure, roadways, and public services in the greater Wahiawā area.

Under the "Alternative Use" scenario, the State would proceed with the acquisition of the property to address abandonment and occupation of the site by informal residents. While the alternative use scenario would address the abandonment and neglect of the site, it would not provide DOCARE officers with a facility in the Wahiawā and North Shore area to strengthen enforcement. Furthermore, an alternative use may result in greater occupancy or activity, which could increase demands on infrastructure, roadways, and public services. Compared to the preferred alternative, construction of the DOCARE substation would have minimal impacts on infrastructure, roadways, and public services in the project area. For this reason, the "Alternative Use" scenario was dismissed from further consideration.

## 4.4 Preferred Alternative

The Preferred Alternative is for the State to obtain ownership of the property to strengthen DOCARE enforcement in the Wahiawā and North Shore area. Obtaining ownership of the property will address current occupation by informal residents and will strengthen enforcement in the patrol area.

As analyzed in *Chapter 3*, the project has been evaluated for its effects on the natural and human environment and measures to mitigate potential impacts have been identified. BMPs will be implemented during construction to minimize dust, stormwater runoff, and erosion. The project is not anticipated to affect roadways, infrastructure, or public services in the greater Wahiawā area. Furthermore, a DOCARE substation at the site will not alter the character of the neighborhood, rather it is expected to have positive effects throughout the surrounding community by strengthening the presence of enforcement in the Wahiawā area.

The DOCARE substation has been carefully designed for officers to quickly and safely mobilize in the event of an emergency. The ground level prioritizes clear and unobstructed traffic flow with administrative and operational spaces located on a second story for clear visibility of Avocado Street. With careful design consideration, the site will be safely secured for DOCARE personnel and allow for quick response in the event of an emergency.

As carefully evaluated in this Chapter,

- The “No-Action Alternative” would not address the abandonment of the property and would fail to improve DOCARE enforcement in the Wahiawā and North Shore area.
- Re-locating the DOCARE substation to the Wahiawā Freshwater State Recreation Area would fail to address the abandonment of the property but would centrally locate the DOCARE substation within the DLNR complex at the park. However, the central location would not provide DOCARE officers with the ability to quickly mobilize in the event of an emergency.
- An alternative use of the property would address the abandonment and occupation by informal residents but would fail to provide DOCARE officers with a substation in the Wahiawā and North Shore area to improve enforcement.

The preferred alternative will address the abandonment and occupation by informal residents and provide DOCARE officers patrolling the Wahiawā and North Shore area with a nearby substation. The State recognizes that the abandonment of the site is an ongoing concern within the community and plans to obtain ownership of the property. Once constructed, the DOCARE substation will provide officers with a nearby facility, thereby strengthening enforcement in the area. The project will have positive beneficial impacts in the surrounding Wahiawā community.

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Chapter 5

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# Plans and Policies



## Chapter 5

# Plans and Policies

The project's consistency with applicable Federal, State, and City planning and land use objectives, policies, principles and guidelines are discussed below.

### 5.1 Americans with Disabilities Act of 1991

In 1991, the Federal government enacted the Americans with Disabilities Act (ADA) to provide equal accessibility for persons with disabilities. Part of this statute requires building designs to consider and incorporate the needs of persons with disabilities. Chapter 103-50 of the Hawai'i Revised Statutes (HRS) states, "...all plans and specifications for the construction of public buildings, facilities, and sites shall be prepared so that the buildings, facilities, and sites are accessible to and usable to persons with disabilities." The Disability and Communication Access Board (DCAB) shall adopt rules for the design of buildings, facilities, and site, by or on behalf of the State and Counties.

**Discussion:** The DOCARE substation will be designed and constructed to meet ADA standards and applicable building standards articulated in ROH Chapter 16.

### 5.2 Coastal Zone Management Act

In 1972, the Federal government enacted the Coastal Zone Management Act (CZMA) to effectively manage, use, protect, and develop coastal areas in the U.S. The CZMA was a government response to increasing and competing demands upon habitats and resources of coastal lands and waters. Such demands often resulted in a loss of living marine resources and wildlife; depleted nutrient-rich areas; shoreline erosion; diminished open space for public use; and permanent and adverse changes to ecological systems. Under the CZMA, states are authorized to work in a unified manner with Federal and local governments to develop programs, policies, evaluation criteria, and development standards that lend to the effective protection and prudent use of coastal lands and waters.

The enforcement authority for the Federal Coastal Management Program (Public Law 104-150, as amended in 1996), has been delegated to the State under HRS, Chapter 205A, Coastal Zone Management Program. The State defines the coastal zone management area as the following:

*"All lands of the State and the area extending seaward from the shoreline limit of the State's police power and management authority, including the United States territorial sea."*

**Discussion:** In Hawai'i, the coastal zone management area encompasses all lands of the State and therefore includes the project area. Further discussion on the compliance with the State's CZM objectives and policies is located in *Section 5.5*.

### 5.3 Hawai'i State Land Use District Boundaries

Under HRS Chapter 205, the State Land Use Commission (LUC) is responsible for classifying all lands of the State in one of four districts including Urban, Rural, Agricultural, and Conservation lands. The basic intent of the LUC is to regulate the classification and uses of lands to accommodate growth and development as needed, and to retain and protect important agricultural and natural resource areas. Additionally, the LUC is also responsible for administering all requests for district reclassifications and/or amendments to district boundaries.

**Discussion:** As classified by the LUC, the project parcels are located within the State Urban District. The project is consistent with permitted uses for the Urban District and will not require district reclassification or land use boundary amendment.

### 5.4 Hawai'i State Plan

The Hawai'i State Plan established a statewide planning system that provides goals, objectives, and policies that detail priority directions and concerns of the State of Hawai'i; and these will be discussed as they relate to the project.

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

- A strong, viable economy, characterized by stability, diversity, and growth, that enables the fulfillment of the needs and expectations of Hawai'i's present and future generations.
- A desired physical environment, characterized by beauty, cleanliness, quiet, stable natural systems, and uniqueness, that enhances the mental and physical well-being of the people.
- Physical, social, and economic well-being, for individuals and families in Hawai'i, that nourishes a sense of community responsibility, of caring, and of participation in community life (Chapter 226-4, HRS).

Objectives and policies of the State Plan that pertain to the project are as follows:

***Section 226-11 Objectives and policies for the physical environment—land-based, shoreline, and marine resources.***

- (b) *To achieve the land-based, shoreline, and marine resources objectives, it shall be the policy of this State to:*
- (1) *Exercise an overall conservation ethic in the use of Hawai'i'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.*

**Discussion:** The project supports the State's objectives and policies regarding land-based, shoreline, and marine resources. The project will improve an abandoned site that is currently occupied by informal residents. Improvements will manage stormwater runoff, environmental conditions, and

public safety in the greater Wahiawā neighborhood. The project is designed to be compatible with the surrounding Wahiawā neighborhood and is consistent with the existing land use character.

**Section 226-12 Objectives and policies for the physical environment—scenic, natural beauty, and historic resources.**

- (a) *Planning for the State's physical environment shall be directed towards achievement of the objective of enhancement of Hawai'i's scenic assets, natural beauty, and multi-cultural/historical resources.*
- (b) *To achieve the scenic, natural beauty, and historic resources objectives, it shall be the policy of this State to:*
  - (1) *Promote the preservation and restoration of significant natural and historic resources.*
  - (3) *Promote the preservation of views and vistas to enhance the landscapes, and other natural features.*

**Discussion:** The project supports the State's objectives regarding scenic, natural beauty, and historic resources. An ALRFI, CIA, and Ka Pa'akai analysis were completed to identify and evaluate potential impacts to historic and cultural resources. The site does not contain significant historic cultural or archaeological practices, and the project will improve the site and address occupation by informal residents. The project is designed to be compatible with the surrounding Wahiawā neighborhood and is consistent with the existing land use character.

**Section 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 Hawai'i's land, air, and water resources.*
  - (2) *Greater public awareness and appreciation of Hawai'i's environmental resources.*
- (b) *To achieve the land, air, and water quality objectives, it shall be the policy of this State to:*
  - (2) *Promote the proper management of Hawai'i's land and water resources.*
  - (6) *Encourage design and construction practices that enhance the physical qualities of Hawai'i's communities.*
  - (7) *Encourage urban developments in close proximity to existing services and facilities.*

**Discussion:** The project supports the State's objectives regarding the physical environment. The project will improve an abandoned site that is currently occupied by informal residents. Improvements will manage stormwater runoff, environmental conditions, and public safety in the greater Wahiawā neighborhood. The project is designed to be compatible with the surrounding Wahiawā neighborhood and is consistent with the existing land use character. The substation will strengthen enforcement in the Wahiawā area thereby improving public safety.

**Section 226-14 Objectives and policies for facility systems – in general.**

- (a) *Planning for the State's facility systems in general shall be directed towards achievement of the objective of water, transportation, sustainable development, climate change adaptation, sea level rise adaptation, waste disposal, and energy and telecommunication systems that support statewide social, economic, and physical objectives:*

- (b) *To achieve the general facility systems objective, it shall be the policy of this State to:*
- (1) *Accommodate the needs of Hawaii's people through coordination of facility systems and capital improvement priorities in consonance with state and county plans.*
  - (2) *Encourage flexibility in the design and development of facility systems to promote prudent use of resources and accommodate changing public demands and priorities.*

**Discussion:** The project supports the State's objectives and policies regarding facility systems. The project will provide DOCARE officers with a substation in the Wahiawā area to strengthen enforcement. The substation is designed to be compatible with the surrounding Wahiawā neighborhood and land use character. Further discussion on the project's consistency with existing state and county plans is discussed throughout this chapter.

**Section 226-20 Objectives and policies for socio-cultural advancement–health.**

- (a) *Planning for the State's socio-cultural advancement with regard to health shall be directed toward achievement of the following objectives:*
- (2) *Maintenance of sanitary and environmentally healthful conditions in Hawai'i's communities.*

**Discussion:** The project supports the objectives and the policies of the State regarding health. The project will improve an abandoned site that is currently occupied by informal residents. Improvements will manage stormwater runoff, environmental conditions, and public safety in the greater Wahiawā neighborhood. The substation will strengthen enforcement in the Wahiawā area thereby improving public safety.

**Section 226-24 Objectives and policies for socio-cultural advancement–individual rights and personal well-being.**

- (a) Planning for the State's socio-cultural advancement with regard to individual rights and personal well-being shall be directed towards the achievement of the following objectives of increased opportunities and protection of individuals rights to enable individuals to fulfill their socio-economic needs and aspirations:
- (b) *To achieve the individual rights and personal well-being objective, it shall be the policy of this State to:*
- (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.*

**Discussion:** The project supports the State's objectives and policies regarding individual rights and personal well-being. The project will address ongoing issues of neglect and use of the site by informal residents. Moreover, the site will be utilized by DOCARE to strengthen enforcement in the Wahiawā and North Shore patrol districts thereby improving public safety.

**Section 226-26 Objectives and policies for socio-cultural advancement–public safety.**

- (a) Planning for the State's socio-cultural advancement with regard to public safety shall be directed towards the achievement of the following objectives:
- (1) *Assurance of public safety and adequate protection of life and property for all people.*

- (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.*

**Discussion:** The project supports the State's objectives and policies for public safety. The project will address ongoing issues of neglect and use of the site by informal residents. Moreover, the site will be utilized by DOCARE to strengthen enforcement in the Wahiawā and North Shore patrol districts thereby improving public safety.

The substation is designed to maximize efficient emergency response. Operational and administrative spaces are located above ground on a second story to leave the ground level clear for efficient deployment in the event of an emergency. Details of the substation design are located in Section 2.4.

**Section 226-27 Objectives and policies for socio-cultural advancement–government.**

- (a) *Planning the State's socio-cultural advancement with regard to government shall be directed towards the achievement of the following objectives:*
- (1) *Efficient, effective, and responsive government services at all levels in the State.*
- (b) *To achieve the government objectives, it shall be the policy of this State to:*
- (1) *Provide for necessary public goods and services not assumed by the private sector.*
  - (5) *Assure that government attitudes, actions, and services are sensitive to community needs and concerns.*

**Discussion:** The project supports the State's objectives and policies for the government. The project will address ongoing community concerns of neglect and occupation of the site by informal residents. Moreover, the site will be utilized by DOCARE to strengthen enforcement in the Wahiawā and North Shore patrol districts thereby improving public safety.

**Section 226-103 Economic priority guidelines**

- (a) *Priority guidelines to stimulate economic growth and encourage business expansion and development to provide needed jobs for Hawai'i's people and achieve a stable and diversified economy:*
- (v) *Are sensitive to community needs and priorities.*
- (b) *Priority guidelines to promote the economic health and quality of the visitor industry::*
- (8) *Support law enforcement activities that provide a safer environment for both visitors and residents alike.*

**Discussion:** The project supports the State's objectives and policies for the economy. The project will provide DOCARE officers with a substation in the Wahiawā area to strengthen enforcement in the Wahiawā and North Shore patrol districts. Strengthening enforcement in the Wahiawā and North Shore patrol districts will improve public safety for residents and visitors.

**Section 226-105 Crime and Criminal Justice Priority Guidelines.**

- (a) *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.*

**Discussion:** The project supports the State’s objectives and policies for crime and criminal justice. The project will address ongoing issues of neglect and use of the site by informal residents. Moreover, the site will be utilized by DOCARE to strengthen enforcement in the Wahiawā and North Shore patrol districts thereby improving public safety.

## **5.5 Hawai’i Coastal Zone Management Program**

The Coastal Zone Management Program (CZMP) is a comprehensive nationwide program that establishes and enforces standards and policies to guide the development of public and private lands within the coastal areas. In the State of Hawai’i, the CZMP is implemented through the State Coastal Zone Management Law, codified in HRS Chapter 205A (State CZM Law). The State CZM Law’s objectives and policies address ten subject areas including: recreational resources, historic resources, scenic and open space resources, coastal ecosystems, economic uses, coastal hazards, managing development, public participation, beach protection, and marine resources. Virtually all relate to potential development impacts on the shoreline, near shore, and ocean area environments. The following subsections examine the applicability of the project with the objectives and policies of the Hawai’i CZMP.

### **RECREATIONAL RESOURCES**

*Objective: Provide Coastal Recreational Opportunities Accessible to the Public.*

- (A) *Improve coordination and funding of coastal recreation planning and management.*
- (B) *Provide adequate, accessible, and diverse recreational opportunities in the coastal zone management area by:*
- *Protecting coastal resources uniquely suited for recreational activities that cannot be provided in other areas;*
  - *Requiring replacement of coastal resources having significant recreational 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;*
  - *Providing and managing adequate public access, consistent with conservation of natural resources, to and along shorelines with recreational value;*
  - *Providing an adequate supply of shoreline parks and other recreational facilities suitable for public recreation;*
  - *Ensuring public recreational use of county, state, and federally-owned or controlled shoreline lands and waters having recreational value consistent with public safety standards and conservation of natural resources;*
  - *Adopting water quality standards and regulating point and nonpoint sources of pollution to protect and where feasible, restore the recreational value of coastal waters;*
  - *Developing new shoreline recreational opportunities, where appropriate, such as artificial lagoons, artificial beaches, artificial reefs for surfing and fishing; and*
  - *Encouraging reasonable dedication of shoreline areas with recreational value for public use as part of discretionary approvals or permits by the land use commission, board of land and natural resources, county authorities; and crediting such dedication against the requirements of Section 46-6.*

**Discussion:** The project supports the CZM's objectives and policies regarding recreational resources. The project will provide DOCARE officers patrolling the Wahiawā and North Shore patrol districts with a substation located in Wahiawā. This substation is located inland, away from coastal dependent areas, and will continue to preserve and maintain recreational coastal resources in the greater North Shore area.

The project will improve an abandoned site that is currently occupied by informal residents. Improvements will manage stormwater runoff, environmental conditions, and public safety in the greater Wahiawā neighborhood. Contractors will adhere to applicable provisions of the DOH Water Quality Standards (HAR Section 11-54) and Water Pollution Control Requirements (HAR Section 11-55) during the construction of the project.

### **HISTORIC RESOURCES**

*Objective: Protect, preserve and, where desirable, restore those natural and man-made historic and prehistoric resources in the coastal zone management area that are significant in Hawaiian and American history and culture.*

- (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.*

**Discussion:** The project supports the CZM's objectives and policies to protect historical resources. An ALRFI, CIA, and Ka Pa'akai analysis were completed to identify and evaluate potential impacts to historic and cultural resources. The site does not contain significant historic cultural or archaeological practices, and the project will improve the site and address occupation by informal residents. Consultation with SHPD is underway pursuant to HRS §6E-8.

### **SCENIC AND OPEN SPACE RESOURCES**

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

- (A) Identify valued scenic resources in the coastal zone management area;*
- (B) Ensure that new developments are compatible with their visual environment by designing and locating such developments to minimize the alteration of natural landforms and existing public views to and along the shoreline;*
- (C) Preserve, maintain, and, where desirable, improve and restore shoreline open space and scenic resources; and*
- (D) Encourage those developments which are not coastal dependent to locate in inland areas.*

**Discussion:** The project supports the CZM's objectives and policies to protect scenic and open space resources. The project site is located in Wahiawā and will not directly affect coastal views.

The substation is designed to be compatible with the surrounding Wahiawā neighborhood and is consistent with the existing land use character. Existing views surrounding and nearby the site including Lake Wilson will continue to be maintained as open space.

## **COASTAL ECOSYSTEMS**

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

- (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 which 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.*

**Discussion:** The project supports the CZM's objectives and policies regarding coastal ecosystems. The project will provide DOCARE officers patrolling the Wahiawā and North Shore patrol districts with a substation located in Wahiawā. This substation is located inland, away from coastal dependent areas, and will continue to preserve and maintain recreational coastal ecosystems in the greater North Shore area.

The project will improve an abandoned site that is currently occupied by informal residents. Improvements will manage stormwater runoff, environmental conditions, and public safety in the greater Wahiawā neighborhood. Contractors will adhere to applicable provisions of the DOH Water Quality Standards (HAR Section 11-54) and Water Pollution Control Requirements (HAR Section 11-55) during the construction of the project.

## **ECONOMIC USES**

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

- (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;*
- (C) Direct the location and expansion of coastal dependent developments to areas designated and used for that development and permit reasonable long-term growth at those areas, and permit coastal development outside the designated areas when:
  - (i) Use of presently designated locations is not feasible;*
  - (ii) Adverse environmental effects are minimized; and*
  - (iii) The development is important to the State's economy.**

**Discussion:** The project supports the CZM's objectives and policies with regards to economic uses. The project will build a new DOCARE substation for officers patrolling the Wahiawā and North Shore patrol districts in Wahiawā. The substation will be built outside coastal zone area and thereby minimizes new development in coastal dependent areas.

### **COASTAL HAZARDS**

*Objective: Reduce hazard to life and property from coastal hazards.*

- (A) *Develop and communicate adequate information about the risks of coastal hazards;*
- (B) *Control development, including planning and zoning control, in areas subject to coastal hazards;*
- (C) *Ensure that developments comply with requirements of the Federal Flood Insurance Program; and*
- (D) *Prevent coastal flooding from inland projects.*

**Discussion:** The project supports the CZM's objectives and policies to reduce threats from coastal hazards. The project site is located in Wahiawā and is not anticipated to be directly impacted by coastal flooding. The project site is located in Flood Zone D (unstudied areas when flood hazards are undetermined, but flooding is possible." The DOCARE substation will comply with applicable building code standards identified in ROH Chapter 16 to minimize threats from natural hazards, including flooding.

### **MANAGING DEVELOPMENT**

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

- (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.*

**Discussion:** This project supports the CZM's objectives and policies with regards to managing development in coastal areas. This EA has been prepared pursuant to HRS Chapter 343 and HAR Chapter 11-200.1 and complies with the requirements for assessing and communicating the potential short and long-term impacts of the project.

### **PUBLIC PARTICIPATION**

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

- (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.*

**Discussion:** This EA has been prepared to support the acquisition and use of the property by DLNR. In accordance with HAR Chapter 11-200.1, early consultation for the EA was carried out to consult with agencies and citizen groups and individuals that have jurisdiction or expertise on the project area.

The Draft EA was published in the ERP's bi-monthly bulletin on December 8, 2025 followed by a 30-day public review period. The public, including agencies and citizen groups and individuals, were notified of the Draft EA availability and provided an opportunity to comment on the analysis. Comments and responses to comments submitted through the public review process are included in Chapter 7 of this Final EA.

### **BEACH AND COASTAL DUNE PROTECTION**

*Objective: Protect beaches and coastal dunes for:*

- i. Public use and recreation;*
- ii. The benefit of coastal ecosystems; and*
- iii. Use as natural buffers against coastal hazards; and*

*Coordinate and fund beach management and protection.*

- (A) Locate new structures inland from the shoreline setback to conserve open space and to minimize loss of improvements due to erosion;*
- (B) Prohibit construction of private 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;*
- (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.*

**Discussion:** The project supports the policies and objectives regarding the protection of beaches and coastal dunes. The project will provide DOCARE officers patrolling the Wahiawā and North Shore patrol districts with a substation located in Wahiawā. This substation is located inland, away from coastal dependent areas, thereby minimizing the risk of new development in coastal dependent areas.

### **MARINE AND COASTAL RESOURCES**

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

- (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.*

**Discussion:** The project supports the CZM's objectives and policies with regards to marine and coastal resources. The project will provide DOCARE officers patrolling the Wahiawā and North Shore patrol districts with a substation located in Wahiawā. This substation is located inland, away from coastal dependent areas, thereby minimizing potential impacts from coastal development on marine and coastal resources.

## **5.6 Hawai'i 2050 Sustainability Plan**

The long-term strategy of the Hawai'i 2050 Sustainability Plan is supported by its goals and strategies that respect culture, character, beauty, and history of the State's island communities; balance among economic, community, and environmental priorities; and an effort to meet the needs of the present without compromising the ability of future generations to meet their own needs. In an effort to continue coordination and implementation of Hawai'i's sustainability and climate adaptation goals, principles, and policies, pursuant to HRS §226-65, the Hawai'i 2050 Sustainability Plan has been updated to align the state's goals, policies, and strategies in accordance with the United Nations Sustainability Development Goals and recommends sustainability and climate change actions for the 2020-2030 decade. The updated plan identified eight (8) focus areas with 38 strategies that will help Hawai'i become more equitable, climate resilient, and sustainable during this decade of action. The focus areas and strategies that are pertinent to the project are discussed below:

**Focus Area:** Advance Sustainable Communities

**Strategy 23:** *Integrate sustainable design principles into new and existing buildings.*

**Focus Area:** Government Capacity to Address Sustainability

**Strategy 28:** *Invest in staff and other resources to coordinate and advance sustainability goals across state agencies and local governments.*

**Focus Area:** Green Government Operations

**Strategy 30:** *Incorporate sustainability into government operations.*

**Focus Area:** Clean Water

**Strategy 31:** *Improve water quality through reduced pollution and dumping.*

**Discussion:** The project supports the Hawai'i 2050 Sustainability Plan's strategies geared to meet the needs of the present without compromising the ability of future generations to meet their own needs. The project will improve an abandoned site that is currently occupied by informal residents.

Improvements will manage stormwater runoff, environmental conditions, and public safety in the greater Wahiawā neighborhood. Contractors will adhere to applicable provisions of the DOH Water Quality Standards (HAR Section 11-54) and Water Pollution Control Requirements (HAR Section 11-55) during the construction of the project.

The site will be utilized as a DOCARE substation for officers patrolling the Wahiawā and North Shore districts. The design of the substation may include installation of solar PV panels and energy efficient utilities to minimize GHG emissions and promote the use of renewable energy features. The project will strengthen DOCARE enforcement in the Wahiawā area thereby improving public safety.

## 5.7 O‘ahu General Plan

The O‘ahu General Plan (2021) is a statement of long-range socio-economic, environmental, and design objectives and policies to be achieved for the general prosperity and welfare for the people of the city and the most desirable population distribution and regional development pattern. It is intended to serve as a guide for all levels of government, private enterprise, neighborhood and citizen groups, organizations, and individual citizens (City and County of Honolulu Revised Charter 2000, Sec. 6-1508). It is further intended to guide land use and development decisions and to influence actions in 11 key subject areas: population; balanced economy; natural environment and resource stewardship; housing and communities; transportation and utilities; energy systems; physical development and urban design; public safety and community resilience; health and education; culture and recreation; and government operations and fiscal management.

The O‘ahu General Plan provides objectives and policies intended to guide and coordinate City land use planning and regulation, and budgeting for operations and capital improvements. The project is consistent with the following applicable objectives and policies of the General Plan as described in the following:

### Natural Environment and Resource Stewardship

#### **Objective A: To protect and preserve the natural environment.**

- Policy 4: Require development projects to give due consideration to natural features such as slope, flood and erosion hazards, water-recharge areas, distinctive land forms, and existing vegetation as well as to plan for coastal hazards that threaten life and property.
- Policy 7: Protect the natural environment from damaging levels of air, water, and noise pollution.
- Policy 8: Protect plants, birds, and other animals that are unique to the State of Hawai‘i and the Island of O‘ahu.
- Policy 9: Increase tree canopy and ensure its integration into new developments, and protect significant trees on public and private lands.
- Policy 12: Plan, prepare for, and mitigate the impacts of climate change on the natural environment, including strategies of adaptation.

#### **Objective B: To preserve and enhance natural landmarks and scenic views of O‘ahu for the benefit of both residents and visitors as well as future generations.**

- Policy 3: Locate and design public facilities, infrastructure and utilities to minimize the obstruction of scenic views.

**Discussion:** The project supports the objectives and policies of the General Plan with regard to the natural environment and its resources. The project will improve an abandoned site that is currently occupied by informal residents. Improvements will manage stormwater runoff, environmental conditions, and public safety in the greater Wahiawā neighborhood.

The site will be utilized as a DOCARE substation for officers patrolling the Wahiawā and North Shore districts. The substation is designed to be compatible with the surrounding Wahiawā neighborhood and is consistent with the existing land use character. Existing views surrounding and nearby the site including Lake Wilson will continue to be maintained as open space. The substation may include installation of solar PV panels and energy efficient utilities to minimize GHG emissions and promote the use of renewable energy features. Landscaping will be comprised of Native Hawaiian and Polynesian introduced species found in the Wahiawā area. The substation will comply with building code standards articulated in ROH Chapter 16 to minimize damage from a natural hazard.

### **Physical Development and Urban Design**

**Objective A: To coordinate changes in the physical environment of O’ahu to ensure that all new developments are timely, well-designed, and appropriate for the areas in which they will be located.**

- Policy 2: Coordinate the location and timing of new development with the availability of adequate water supply, sewage treatment, drainage, transportation, and other public facilities and services.
- Policy 8: Locate new industries and new commercial areas so that they will be well-related to their markets and suppliers, and to residential areas and transportation facilities.
- Policy 11: Implement siting and design solutions that seek to reduce exposure to natural hazards, including those related to climate change, flooding, and sea level rise.
- Policy 13: Promote opportunities for the community to participate meaningfully in planning and development processes, including new forms of communication and social media.

**Objective B: To plan and prepare for the long-term physical impacts of climate change.**

- Policy 1: Integrate climate change adaptation into the planning, design, and construction of all significant improvements to and development of the built environment.

**Objective E: To maintain those development characteristics in the urban-fringe and rural areas which make them desirable places to live.**

- Policy 1: Develop and maintain urban-fringe areas as predominantly residential areas characterized by generally lower-rise, lower-density development which may include significant levels of retail and service commercial uses as well as satellite institutional and public uses geared to serving the needs of households.
- Policy 4: Maintain rural areas that reflect an open and scenic setting, dominated by small to moderate size agricultural pursuits, with small towns of low-density and low-rise character, and which allows modest growth opportunities tailored to address area residents’ future needs.

**Objective F: To create and maintain attractive, meaningful, and stimulating environments throughout O’ahu.**

- Policy 3: Require developments in stable, established communities and rural areas to be compatible with the existing communities and areas.

- Policy 5: Seek to protect residents' quality of life and to maintain the integrity of neighborhoods by strengthening regulatory and enforcement strategies that address the presence of inappropriate non-residential activities.
- Policy 6: Promote public and private programs to beautify the urban and rural environments.
- Policy 7: Design public structures to meet high aesthetic and functional standards and to complement the physical character of the communities they will serve.
- Policy 9: Recognize the importance of using Native Hawaiian plants in landscaping to further the traditional Hawaiian concept of *mālama 'āina* and to create a mores Hawaiian sense of place.

**Objective G: To promote and enhance the social and physical character of O'ahu's older towns and neighborhoods.**

- Policy 1: Encourage new construction in established areas to be compatible with the character and cultural values of the surrounding community.
- Policy 6: Support and encourage cohesive neighborhoods which foster interactions among neighbors, promote vibrant community life, and enhance livability.

**Discussion:** The project supports the objectives and policies of the General Plan with regard to physical development and urban design. The project will improve an abandoned site that is currently occupied by informal residents. Improvements will manage stormwater runoff, environmental conditions, and public safety in the greater Wahiawā neighborhood.

The project has been carefully planned and designed to seamlessly integrate into the surrounding Wahiawā neighborhood and the existing land use character. Existing utility services will be reused to service the substation and will not affect services in the greater Wahiawā area (*Section 3.9*). The substation will comply with building code standards articulated in ROH Chapter 16 to minimize damage from a natural hazard. Landscaping will be comprised of Native Hawaiian and Polynesian introduced species found in the Wahiawā area. Locating the substation at the site will provide DOCARE officers patrolling Wahiawā and North Shore districts with a nearby facility thereby improving public safety within the community and greater State.

**Public Safety and Community Resilience**

**Objective A: To prevent and control crime and maintain public order.**

- Policy 1: Provide a safe environment for residents and visitors on O'ahu.
- Policy 4: Emphasize improvements to police and prosecution operations which will result in a higher proportion of wrongdoers who are arrested, convicted, and punished for their crimes.
- Policy 8: Seek the help of State and federal law-enforcement agencies to curtail the activities of organized crime syndicates on O'ahu.

**Objective B: To protect residents and visitors and their property against natural disasters and other emergencies, traffic and fire hazards, and unsafe conditions.**

- Policy 2: Require all developments in areas subject to flood and tsunamis, and coastal erosion to be located and constructed in a manner that will not create any health or safety hazards or cause harm to natural and public resources.
- Policy 5: Cooperate with State and federal agencies to provide protection from war, civil disruptions, pandemics, and other major disturbances.

**Discussion:** The project supports the objectives and policies of the General Plan with regard to public safety and community resilience. The project will improve an abandoned site that is currently occupied by informal residents. The site will be maintained by the State and dedicated to DOCARE. A substation will be constructed at the site to provide officers patrolling the Wahiawā and North Shore districts with a nearby facility. Locating a substation at this site will strengthen DOCARE enforcement in the Wahiawā and North Shore area and improve public safety for the community.

The project site is located in Wahiawā and is not anticipated to be directly impacted by coastal flooding. The DOCARE substation will comply with applicable building code standards identified in ROH Chapter 16 to minimize threats from natural hazards, including flooding.

### **Health and Education**

**Objective A: To protect the health and well-being of residents and visitors.**

- Policy 2: Provide prompt and adequate ambulance and first-aid services in all areas of O‘ahu.
- Policy 3: Coordinate City health codes and other regulations with State and federal health codes to facilitate the enforcement of air-, water-, and noise-pollution controls.
- Policy 4: Integrate public health concerns such as air and water pollution as a consideration in land use planning decisions.

**Discussion:** The project supports the objectives and policies of the General Plan with regard to health and education. The project will provide DOCARE officers patrolling the Wahiawā and North Shore patrol districts with a substation located in Wahiawā. Locating a substation at this site will strengthen DOCARE enforcement in the Wahiawā and North Shore area and improve public safety for the community.

The project will improve an abandoned site that is currently occupied by informal residents. The substation has been carefully designed to seamlessly integrate into the surrounding Wahiawā neighborhood and the existing land use character. The project will address ongoing public health and safety concerns and maintain public safety within the community.

### **Culture and Recreation**

**Objective B: To foster the multiethnic culture of Hawai‘i and respect the host culture of the Native Hawaiian people.**

- Policy 2: Identify and, to the extent possible, preserve and restore buildings, sites, and areas of social, cultural, historic, architectural, and archaeological significance.

**Discussion:** The project supports the objectives and policies of the General Plan with regards to culture and recreation. With An ALRFI, CIA, and Ka Pa‘akai analysis were completed to identify and evaluate potential impacts to historic and cultural resources. The site does not contain significant historic cultural or archaeological practices, and the project will improve the site and address occupation by informal residents. The project is designed to be compatible with the surrounding Wahiawā neighborhood and is consistent with the existing land use character.

## 5.8 City and County of Honolulu Land Use Ordinance Guidelines

The purpose of the LUO is to regulate land use in a manner that will encourage orderly development in accordance with adopted land use policies, including the General Plan and development plans. The LUO is also intended to provide reasonable development and design standards. These standards are applicable to the location, height, bulk and size of structures, yard areas, off-street parking facilities, and open spaces, and the use of structures and land for agriculture, industry, business, residences or other purposes (Revised Ordinance for the City and County of Honolulu, Chapter 21).

The project site is located in the Community Business (B-2) and Residential (R-5) District (*Figure 1-3*). The intent of the Community Business (B-2) District is to provide areas for community-wide business establishments, serving several neighborhoods, and offering a wider range of uses than the Neighborhood Business (B-1) District. The intent of the Residential (R-5) District is to provide areas for urban residential development. Development Standards for the Community Business (B-2) and Residential (R-5) District are shown in *Table 5-1*. Furthermore, off-site parking and bicycle parking requirements are shown in *Table 5-2* and *5-3*.

<b>Table 5-1: Land Use Ordinance Development Standards</b>				
<b>Development Standard</b>		<b>Community Business (B-2)</b>	<b>Residential (R-5)</b>	<b>DOCARE Substation</b>
Minimum lot area (square feet)		5,000	5,000	9,288 Complies
Minimum lot width and depth (feet)		50	50	50 by 186 Complies
Yards	Front	5 <sup>4</sup>	30	5 <sup>1, 2</sup> Complies
	Side and rear	0 <sup>3</sup>	15	0 <sup>2</sup> Complies
Max building area (percent of zoning lot)		Not regulated	50%	Complies
Maximum density (FAR)		2.5	N/a	~ 0.28 Complies
Open space bonus	Available	Yes, see section 21-3.110-1(c)	N/a	
	Max FAR	3.5	N/a	
Maximum height (feet)		Per zoning map 60	25-30 <sup>2</sup>	29 <sup>1</sup> Complies
Height setbacks		Per 21-3.110-1(c)	Per 21-3.70-1	Complies <sup>1</sup>
<b>Notes:</b> Community Business (B-2): <sup>3</sup> Where the side or rear property line of a zoning lot adjoins the side or rear yard of a zoning lot in a residential, apartment, or apartment mixed-use zoning district, the side or rear yard must conform to the front yard requirements for dwelling use of the adjoining district. In addition, see 21-4.70-1 for landscaping and buffering requirements.				

<sup>4</sup> Where a zoning lot adjoins a residential, apartment, or apartment mixed-use zoning district, and forms a continuous front yard, the lot or the first 100 feet of the lot (whichever is less) must conform to the front yard requirements for the dwelling use of the adjoining zoning district (see Figure 21-3.6).

Residential (R-5);

<sup>2</sup> Heights above the minima of the given range may require height setbacks or may be subject to other requirements. See the appropriate section for the zoning district for additional development standards concerning height. DOCARE Substation:

<sup>1</sup> Plans for the DOCARE Substation locate the facility within the Community Business (B-2) Zoning District. The Substation is designed to meet applicable development standards for the Community Business (B-2) Zoning District.

<sup>2</sup> Pursuant to ROH §21-6.80(a)(2) Parking and loading are not permitted in any required yards, except as follows:

A. In the country, agricultural, and residential districts, parking and loading may encroach into the required yards;

B. For lots that are split zoned and have nonresidential parking, the parking and loading spaces may encroach entirely into the side yard created by the zoning boundary that splits the lot.

**Table 5-2: Off-street Parking Requirements**

Use Category	Standard
<b>Special Uses and Circumstances</b>	
Public, civic, and institutional Government – prison, consulate, public facility	Determined by Director

**Table 5-3: Bicycle Parking Requirements**

Use or Use Category	Short-Term Bicycle Parking	Long-Term Bicycle Parking
Commercial	1 space per 2,000 square feet of floor area or portion thereof, or 1 space for every 10 vehicles spaces or portion thereof, whichever is greater.	1 space per 12,000 square feet of floor area, or 1 space per 30 vehicles spaces, or portion thereof, whichever is greater.

**Discussion:** The DOCARE substation is considered a Government Public facility in the ROH Use Table (*Table 21-5.1*) which is a permitted use in the Community Business (B-2) and Residential (R-5) District. The DOCARE substation will be located in the Community Business (B-2) Zoning District and will comply with development standards for the respective zoning district, as shown in *Table 5-1*. The substation will be equipped with five striped parking spaces and one ADA stall. Pursuant to Article 6 of the LUO, the DOCARE substation, may be considered commercial use, and short-term and long-term bicycle parking is required on site (*Table 5-3*). The Applicant will continue to consult with DPP as the final design is developed to ensure the substation meets applicable development standards and off-street parking and bicycle parking requirements. The substation will provide DOCARE officers patrolling the Wahiawā and North Shore districts with a nearby facility. Locating a substation at this site will strengthen DOCARE enforcement in the Wahiawā and North Shore area and improve public safety for the community.

## 5.9 City and County of Honolulu Central O‘ahu Sustainable Communities Plan (2021)

The island of O‘ahu is divided into eight regional plan areas. Two areas are identified as “development plans” which provide guidance for future growth and development, while the other six areas (including Central O‘ahu) are addressed in “sustainable communities plans” in keeping with modest development patterns and rural characteristics. Each plan implements the objectives and policies of the General Plan and provides guidance on public policy, investment, and decision-making within each respective region. Together with the General Plan, they guide population and land use growth over a 20- to 25-year time span.

The project area is located in the region encompassed by the Central O‘ahu Sustainable Communities Plan (*Figure 1-4*). The Central O‘ahu Sustainable Communities Plan was adopted by Ordinance 21-6 on March 30, 2021. The Central O‘ahu Sustainable Communities Plan focuses on protecting agricultural lands, providing a variety of housing types in master planned communities to accommodate anticipated population growth, and promote new employment in existing commercial and industrial areas and new commercial areas to support residential communities.

The Central O‘ahu Sustainable Communities Plan recognizes the town of Wahiawā for its historic plantation town, support for Schofield Barracks, and as the boundary between the urban growth of Central O‘ahu and the broad vistas of the agricultural and rural areas of the North Shore. In 1998, the Council approved the Wahiawā Urban Design Plan. The plan was a community-based planning process comprised of various community businesses, organizations, and elected representatives. Its boundaries are shown in *Figure 5-1*. The project site is located in the Urban Design Plan’s Business District (*Figure 5-1*), applicable policies and guidelines in the Wahiawā Urban Design Plan and Business District are discussed below.

### Wahiawā Town:

#### Policies

##### *Maintain and Enhance Wahiawā’s Plantation Heritage and Rural, Small Town Atmosphere*

- Maintain the scale and feeling of Wahiawā as a small town. Wahiawā’s plantation heritage and “county town” atmosphere give it a character that is not found in newer master planned communities.
- Preserve commercial and civic buildings and residential neighborhoods which reflect the town’s plantation heritage and multi-cultural roots.

##### *Enhance the Town Core as a Setting for Social, Civic, and Commercial Interactions*

- Strengthen Wahiawā’s civic center by consolidating public services, and encouraging the location of more social and community service organizations in the town.
- Maintain and enhance the character and role of Wahiawā’s business area as a community shopping district and regional service center in order to encourage O‘ahu residents and visitors to discover what Wahiawā has to offer.
- Provide adequate shoreline setbacks that consider shoreline changes resulting from erosion hazards and rising sea levels, based on adopted projections of shoreline erosion rates and sea level rise.

Guidelines – Business District

- Provide open space and landscaping to reinforce the historic character of Wahiawā.
- Encourage new commercial uses to in-fill on vacant and underutilized parcels within Wahiawā’s existing business district. Avoid expansion of the district since it is not needed.
- Limit building heights in keeping with Wahiawā’s small town scale. However, give some flexibility for public buildings, such as government offices and churches, in order to allow for designs that create symbols of identity for the community.

Guidelines – Open Space and Views

- Preserve and protect the natural scenic character of Lake Wilson and adjoining forested areas from alteration or encroachment of urban uses because they are vital elements of Wahiawā’s “town in a forest” image.

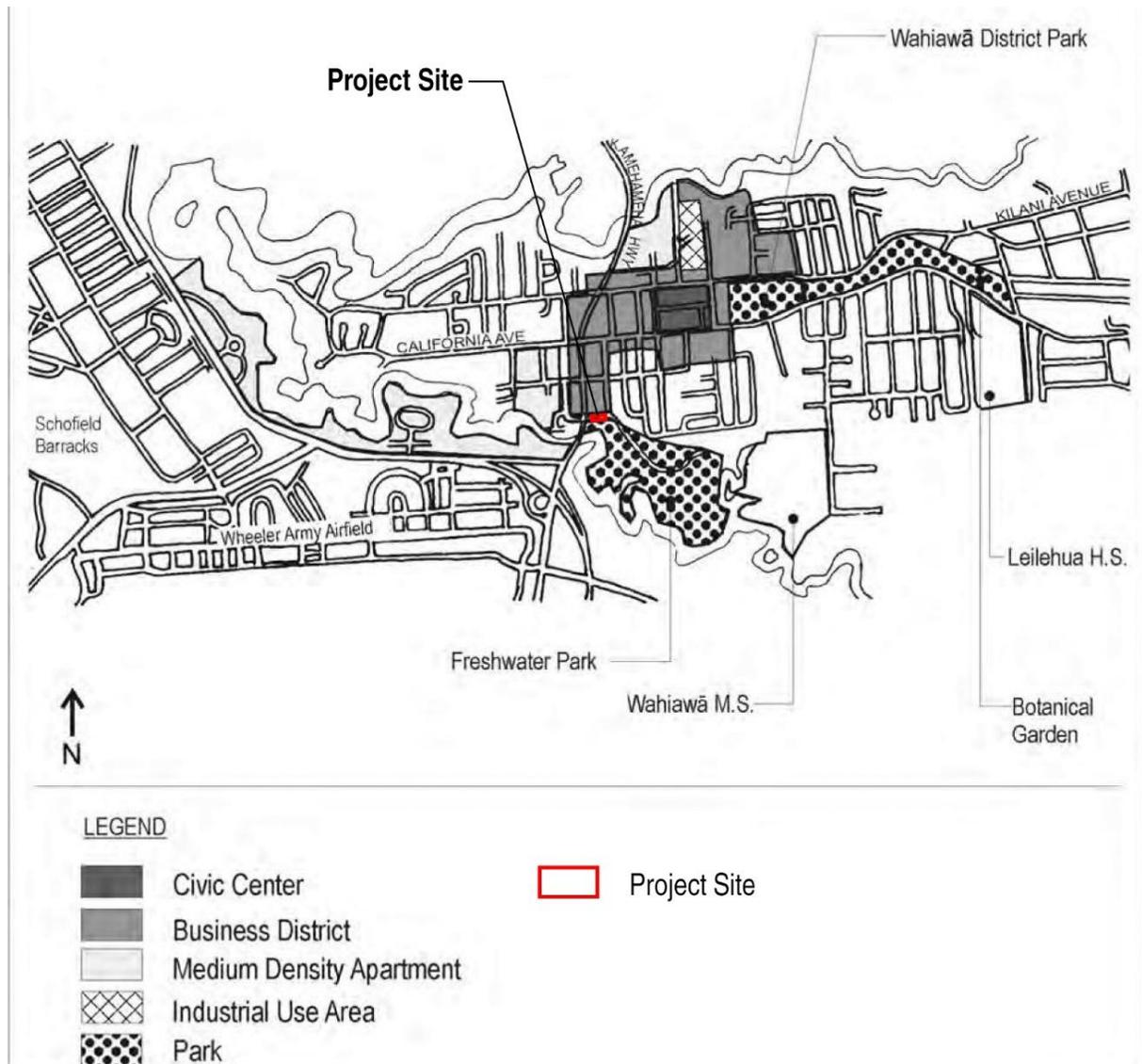


Figure 5-1

Wahiawa Urban Design Plan

**Discussion:** The project supports the policies and guidelines regarding related to the Wahiawā Urban Design Plan. The project will improve an abandoned site that is currently occupied by informal residents. The site will be maintained by the State for DOCARE as a substation for officers. The substation has been carefully designed to seamlessly integrate into the surrounding Wahiawā neighborhood and the existing land use character. The substation is designed in accordance with development standards for the Community Business (B-2) and Residential (R-5) District and will comply with development standards for the applicable district. Landscaping will be comprised of Native Hawaiian and Polynesian introduced species found in the Wahiawā area.

The project will improve views of Lake Wilson and adjoining forest areas by addressing ongoing issues of occupation by informal residents and trash that has accumulated on the property. The substation will provide DOCARE officers patrolling Wahiawā and North Shore districts with a nearby facility thereby improving public safety within the community and greater State.

Applicable policies and guidelines for Public Facilities and Infrastructure are further discussed below.

### **Public Safety Facilities**

#### **Policies:**

- Provide adequate staffing and facilities to ensure public safety.
- Approve new development only if staffing and facilities will be adequate to provide fire and police protection and emergency medical services when development is completed.

**Discussion:** The project supports the policies for Public Safety Facilities in the Central O'ahu Sustainable Communities Plan. The project will improve an abandoned site that is currently occupied by informal residents. The site will be maintained by the State for DOCARE as a substation for officers. The substation will provide DOCARE officers patrolling Wahiawā and North Shore districts with a nearby facility thereby improving public safety within the community and greater State.

# **Findings Supporting the Anticipated Determination**





## Chapter 6

# Findings Supporting the Anticipated Determination

## 6.1 Anticipated Determination

Based on a review of the significance criteria outlined in Chapter 343, HRS, and Chapter 11-200.1-13, HAR, the project has been determined to not result in significant adverse effects on the natural or human environment. Subsequently, a FONSI has been issued.

## 6.2 Reasons Supporting the Anticipated Determination

The potential impacts of the project have been fully examined and discussed in this EA. As discussed throughout this EA, no significant environmental impacts are expected to result from the project. This determination is based on the assessments presented below for criterion (1) to (13).

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

The archaeological and cultural landscapes have been documented in studies conducted for the project area. With the potential to encounter iwi kūpuna during construction, an ALRFI has been conducted to identify archaeological resources. Due to the previous use of the site, archaeological resources were not identified, and the project is not anticipated to affect historic properties or significant artifacts or features. The ARFLI has been submitted to SHPD for review and concurrence pursuant to HRS 6E-8.

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

The project will not curtail the range of beneficial uses of the environment. The project site is currently abandoned and occupied by informal residents. The project will address ongoing issues of abandonment and safety concerns with informal occupation. The project will strengthen DOCARE enforcement in the Wahiawā area, and have beneficial impacts throughout the existing community.

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

The project does not conflict with the State's long-term environmental policies or goals and guidelines as expressed in Chapter 344, HRS, and any revisions thereof and amendments thereto, court decisions, or executive orders.

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

The project will have beneficial impacts on the economic and social welfare of the community and the greater County and State. The project will generate economic benefits including employment opportunities and expenditures from the purchasing of goods and materials during the construction phase of the project. The project will address ongoing issues of abandonment and occupation of the site by informal residents. The project will strengthen DOCARE enforcement in the Wahiawā and North Shore districts, thereby improving safety throughout the community.

(5) *Substantially affects public health.*

The project is consistent with existing land uses and is not expected to affect public health. However, there will be temporary impacts to air quality from possible dust emissions and temporary degradation of the acoustic environment in the immediate vicinity resulting from construction equipment operations. The project will comply with State and County regulations during the construction period and BMPs will be implemented to minimize temporary impacts. The project will improve public health in the Wahiawā area by addressing ongoing issues of abandonment and occupation by informal residents at the project site.

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

The project will provide a substation for DOCARE officers patrolling the Wahiawā and North Shore district. The project will improve public facilities in the Wahiawā area for DOCARE officers and strengthen enforcement which will have positive impacts throughout the community. The project is not anticipated to generate additional growth, and as such, is not anticipated to result in secondary impacts such as population changes.

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

The project will not involve a substantial degradation of environmental quality. Long-term impacts to air and water quality, noise, and natural resources are not anticipated. The use of standard construction and erosion control BMPs will minimize the anticipated construction-related short-term impacts. LID measures will be integrated into the design of the substation. The project will improve existing site conditions and minimize stormwater runoff.

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

The project is not anticipated to result in cumulative impacts with past, present, and reasonably foreseeable projects in the greater Wahiawā area. The project will have beneficial impacts by addressing ongoing issues abandonment and occupation by informal residents. Moreover, the project will provide DOCARE officers patrolling the Wahiawā and North Shore district with a nearby facility to strengthen enforcement. The project has been carefully designed to seamlessly integrate into the existing neighborhood. The project is not part of a commitment for larger actions.

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

The project is not anticipated to affect rare, threatened, or endangered species or its habitat (Section 3.6). As noted by the USFWS, the endangered Hawaiian Hoary bat, endangered Hawaiian seabirds, endangered Hawaiian waterbirds, and endangered Hawksbill turtle may overfly or traverse near or on

the project site. As outlined in *Section 3.6*, nighttime construction activity is not planned to avoid the need for nighttime lighting which may disorient seabirds. With proper measures in place, the project is not anticipated to affect rare, threatened, or endangered species.

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

General temporary impacts associated with construction are identified in *Chapter 3* of this Draft EA. Mitigation measures outlined in this Draft EA will be implemented during the construction of the project. No detrimental long-term impacts to air, water, or acoustic quality are anticipated upon completion of construction.

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

The project site is located in Wahiawā and is not located in an environmentally sensitive area such as a flood plain, tsunami zone, or coastal area. A detailed analysis of natural hazards is located in *Section 3.5*. The DOCARE substation will be built in accordance with building code standards identified in ROH Chapter 16 and ROH Chapter 20 which adopts design measures from NFPA 1.

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

The project will improve an existing site that is abandoned and occupied by informal residents. View of Lake Wilson and the adjoining forest area will be improved with the project. The DOCARE substation will comply with development standards for the Community Business (B-2) and Residential (R-5) District articulated in ROH Chapter 21.

(13) *Require substantial energy consumption.*

Construction of the project will not require substantial energy consumption relative to other similar sized projects. DLNR may consider installation of solar PV panels and energy efficient utilities to minimize GHG emissions and promote the use of renewable energy features.

## **6.3 Summary**

Based on the above findings, further evaluation of the project's impacts through the preparation of an EIS is not warranted. The EA recommends mitigation measures to alleviate impacts when such impacts are identified.

The project is consistent with the Hawai'i State Land Use District Boundaries, the Hawai'i State Plan, the 2050 Sustainable Plan, the Hawai'i Coastal Zone Management Plan, the City's General Plan, the City's Zoning Ordinance, and Central O'ahu Sustainable Communities Plan. The project will have beneficial effects and address ongoing issues of abandonment and occupation of the site by informal residents. Furthermore, the project will strengthen DOCARE enforcement in the Wahiawā area, thereby improving public safety. A FONSI has been issued for this project.

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**List of Agencies,  
Organizations and Individuals  
Receiving Copies of the EA**



## Chapter 7

# List of Agencies, Organizations and Individuals Receiving Copies of the EA

### 7.1 Pre-Consultation

Early consultation for the project was carried out from September 9, 2025 to October 10, 2025. A list of the agencies, organizations, and individuals that were notified of the upcoming project and provided early consultation comments are shown in *Table 7-1*. Early consultation comments and responses are provided in *Table 7-2*.

**Table 7-1: Agencies, Organizations and Individuals Receiving Copies of the EA**

Respondents and Distribution	Received Early Consultation Letter	Comments Received	Received Draft EA Notification	Provided Comments on Draft EA	Receiving Final EA Notification
<b>Federal Agencies</b>					
U.S. Fish and Wildlife Service	X	X	X		X
<b>State of Hawai'i Agencies</b>					
Department of Business, Economic Development & Tourism (DBEDT), Office of Planning	X	X	X	X	X
Department of Health (DOH), Environmental Health Administration (EHA)	X	X	X	X	X
DOH, Hazard Evaluation and Emergency Response Office	X		X		X
DOH, Clean Air Branch	X		X	X	X
DOH, Clean Water Branch	X		X		X
DOH, Safe Drinking Water Branch	X		X		X
DOH, Solid and Hazardous Waste Branch	X		X		X
DOH, Surface Water Protection Branch	X		X	X	X
DOH, Wastewater Branch	X		X		X
Department of Land and Natural Resources (DLNR)	X		X		X
DLNR, Land Division	X		X		X
DLNR, Division of Forestry and Wildlife	X		X		X

**Table 7-1: Agencies, Organizations and Individuals Receiving Copies of the EA**

<b>Respondents and Distribution</b>	<b>Received Early Consultation Letter</b>	<b>Comments Received</b>	<b>Received Draft EA Notification</b>	<b>Provided Comments on Draft EA</b>	<b>Receiving Final EA Notification</b>
DLNR, Commission on Water Resources Management	X		X		X
DLNR, DOCARE	X		X		X
DLNR, Engineering Division	X		X		X
DLNR, Land Division – O’ahu District	X		X		X
DLNR, State Historic Preservation Division	X		X		X
DLNR, State Parks	X		X		X
DLNR, Office of Conservation and Coastal Lands	X		X		X
Department of Transportation, Highways Division	X		X	X	X
<b>City and County of Honolulu Agencies</b>					
Office of the Mayor	X		X		X
Board of Water Supply	X		X	X	X
Department of Planning and Permitting	X	X	X	X	X
Department of Transportation Services	X		X		X
Fire Department	X	X	X		X
Police Department	X	X	X		X
Wahiawā-Whitmore Neighborhood Board No. 26	X		X		X
<b>Elected Officials</b>					
Senator Donovan Dela Cruz – State Senate District 17	X		X		X
Representative Amy A. Perruso – State House District 46	X		X		X
Council Member Matt Weyer – Honolulu City Council District 2	X		X		X
<b>Organizations</b>					
Mālama Pūpūkea-Waimea				X	X
<b>Individuals</b>					
Adjacent Neighbors	X		X		X
Hui Sun and Min Ho Yang	X		X		X
The Church of Jesus Christ of Latter-day Saints	X		X		X

**Table 7-1: Agencies, Organizations and Individuals Receiving Copies of the EA**

<b>Respondents and Distribution</b>	<b>Received Early Consultation Letter</b>	<b>Comments Received</b>	<b>Received Draft EA Notification</b>	<b>Provided Comments on Draft EA</b>	<b>Receiving Final EA Notification</b>
Donal and Linda Naruse	X		X		X
Alya Holding Limited Liability Company	X		X		X
Dole Food Company	X		X		X
Keoni Ahlo		X	X		X
Carlton Saito				X	X

**Table 7-2: Draft EA Early Consultation Summary of Comments and Responses**

Comments	Commenter and Date of Comment Letter	Responses
<b>Project Description</b>		
<p><u>On-site Structures:</u> The DEA should describe all existing structures on the site. If any existing structures are proposed to remain in place, the DEA should describe their compliance with the LUO.</p> <p><u>Proposed Structures and Improvements:</u> The DEA should describe all proposed structures and improvements for the site, and describe their compliance with the LUO. The DEA should also identify any other permits that are required, such as Waivers or Conditional Use Permits, for the Project.</p>	<p>DPP, September 30, 2025</p>	<p>A description of the existing conditions at the site is located in <i>Section 2.2</i>. The property owner recently obtained an emergency demolition permit for the structure located on the western portion of the site and completed the demolition. The structure on the eastern portion of the site is the last remaining structure associated with the former commercial auto shop business.</p> <p>The project will address neglect and use of the site and provide DOCARE officers patrolling the Wahiawā and North Shore district with a nearby substation. A detailed description of the substation is provided in <i>Section 2.4</i>. The substation has been carefully designed to seamlessly integrate into the existing Wahiawā Neighborhood and comply with the applicable development standards for the B-2 Community Business and the R-5 Residential District. An analysis of compliance with development standards for the B-2 Community Business and the R-5 Residential District is provided in <i>Section 5.8</i></p> <p>A list of anticipated required permits and approvals is provided in <i>Table 1-1</i>.</p>
<b>Zoning</b>		
<p><u>Regulatory Boundaries:</u> The Project site is a portion of a 9,288 (-sq.) -foot (-ft.) lot and located in the B-2 Community Business and R-5 Residential Districts. It also appears to be in the State Land Use Urban District. The DEA should clearly show and delineate districts, structures, and access to the site. The DEA should provide discussion on the matter.</p>	<p>DPP; September 30, 2025</p>	<p>Maps depicting the State Land Use District Boundary and County Zoning designation of the project site are provided in <i>Chapter 1</i>. The site is located in the State Land Use Urban District and is split zoned as County B-2 Community Business and R-5 Residential District.</p> <p>A description of the existing conditions at the site is located in <i>Section 2.2</i>. The property owner recently obtained an emergency demolition permit for the structure located on the western portion of the site and completed the demolition. The structure on the eastern portion of the site is the last remaining structure associated with the former commercial auto shop business. Access to the site is provided via Avocado Street. Existing conditions depicting access to the site are shown in <i>Figures 2-1 and 2-2</i>.</p>

**Table 7-2: Draft EA Early Consultation Summary of Comments and Responses**

<p><b>Land Use Ordinance:</b> Based on a review of our records, the Project Site consists of a 9,288-sq.-ft. lot located in the B-2 Community Business and R-5 Residential Districts. The Project must comply with the development standards applicable to the B-2 Community Business and R-5 Residential Districts. Project compliance with these standards should be presented in the DEA, and will be confirmed during the review of future building permits. The LUO is available on our website at:  <a href="https://www4.honolulu.gov/docushared/dsweb/Get/Document-353043/2025%20CURRENT%20luo%20oRD%2025-2.pdf">https://www4.honolulu.gov/docushared/dsweb/Get/Document-353043/2025%20CURRENT%20luo%20oRD%2025-2.pdf</a></p>	<p>DPP; September 30, 2025</p>	<p>Thank you for providing guidance on the applicable development standards for the B-2 Community Business and R-5 Residential District. The project's compliance with development standards for the B-2 Community Business and R-5 Residential District is provided in <i>Section 5.8</i>.</p> <p>The Applicant notes that compliance with development standards will be confirmed upon review of building permits.</p>
<p><b>Traffic and Circulation</b></p>		
<p>The HPD would also like to ensure that the flow of traffic is adequately monitored and controlled during the construction phase of the project.</p>	<p>HPD, September 25, 2025</p>	<p>Construction will be carefully planned to minimize delays and congestion in the surrounding Wahiawā neighborhood. As noted in Section 2.5, trucks delivering construction materials and disposing of waste will be scheduled Monday through Friday during off-peak hours throughout the day to ensure traffic flow is not adversely affected. Traffic will be monitored to ensure the movement of construction vehicles, equipment, and deliveries do not adversely affect the current flow of traffic. Should construction activity require the temporary closure of any traffic land, sidewalk, bicycle lane, or pedestrian mall, a street usage permit will be obtained from DTS.</p>
<p>Avocado Street Sidewalk. The O'ahu Pedestrian Plan (2022) identifies section of Avocado Street fronting the Project property as part of the Pedestrian Priority Network and future Project work shall include construction of a sidewalk fronting the Project property.</p>	<p>DTS; October 24, 2025</p>	<p>The Applicant recognizes that the project site is located along Avocado Street which is located in the Pedestrian Priority Network in the O'ahu Pedestrian Plan. DLNR will consult with DTS on future pedestrian improvements along the property frontage of Avocado Street as the entire length of Avocado Street is located within the Pedestrian Priority Network. Section 3.10 provides a detailed analysis of traffic and accessibility.</p>

**Table 7-2: Draft EA Early Consultation Summary of Comments and Responses**

<p>Transportation Impact Assessment (TIA). The applicant should perform a TIA to examine the vehicle, pedestrian, bicycle, and public transit safety, stress, and comfort levels at the nearby intersections and driveways with corresponding improvements to mitigate these impacts by applying Complete Street principles. The applicant shall discuss the future year growth rate, trip distribution, mode split, and route assignment assumptions used in the TIA.</p> <p>The Applicant shall submit all native files (e.g., Synchro, Excel, etc.) for the raw multi-modal counts (in the format specified at <a href="https://geocounts.com/api/format/">https://geocounts.com/api/format/</a> and the example file at <a href="https://bit.ly/DTS-count-sample">https://bit.ly/DTS-count-sample</a>) and accompanying analyses to the Department of Transportation Services Regional Planning Branch (RPB) at <a href="mailto:dtsplanningdiv@honolulu.gov">dtsplanningdiv@honolulu.gov</a>. Please refer to the Department of Transportation Services (DTS) TIA Guide for multimodal assessment tools and recommended analyses. The TIA Guide can be found at <a href="http://www4.honolulu.gov/docushare/dsweb/view/collection-7723">http://www4.honolulu.gov/docushare/dsweb/view/collection-7723</a>.</p>	<p>DTS; October 24, 2025</p>	<p>As part of this EA, a Transportation Assessment was completed in November 2025 and is attached in Appendix F. The Transportation Assessment was prepared to identify existing conditions, and potential impacts the project may have on the existing transportation network in the Wahiawā area. The project is not anticipated to affect pedestrian, bicycle, or transit mobility in the Wahiawā area. Details of the Transportation Assessment are provided in Section 3.10.</p> <p>The Applicant will consult with the DTS Regional Planning Branch and coordinate data and information as required.</p>
<p>Street Usage Permit. A street usage permit from the DTS should be obtained for any construction-related work that may require the temporary closure of any traffic lane, sidewalk, bicycle lane, or pedestrian mall on a City street.</p>	<p>DTS; October 24, 2025</p>	<p>As noted in Section 2.5, traffic will be monitored to ensure the movement of construction vehicles, equipment, and deliveries do not adversely affect the current flow of traffic. Should construction activity require the temporary closure of any traffic land, sidewalk, bicycle lane, or pedestrian mall, a street usage permit will be obtained from DTS.</p>
<p>Neighborhood Impacts. The area representatives, neighborhood board, as well as the area guests, businesses, emergency personnel (fire, ambulance, and police), Oahu Transit Services, Inc. (TheBus and TheHandi-Van), etc., should be kept apprised of the details and status throughout the project and the impacts that the project may have on the adjoining local street area network.</p>	<p>DTS; October 24, 2025</p>	<p>As part of the EA process, the area representatives, neighborhood board, and public services and facilities will be kept apprised of the status of the project.</p>
<p>Disability and Communication Access Board (DCAB). Project plans (vehicular and pedestrian circulation, sidewalks, parking and pedestrian pathways, vehicular ingress/egress, etc.) should be reviewed and approved by DCAB to ensure full compliance with Americans with Disabilities Act requirements.</p>	<p>DTS; October 24, 2025</p>	<p>As noted in Section 5.1, the DOCARE substation will be designed and constructed to meet ADA standards and applicable building standards articulated in ROH Chapter 16. Project plans will be submitted to DCAB to ensure the substation meets ADA design standards.</p>
<p><b>Biological Resources</b></p>		
<p>The Pacific Island Fish and Wildlife Office has transitioned to the use of the Information for Planning and Consultation online portal, <a href="https://ipac.ecosphere.fws.gov/">https://ipac.ecosphere.fws.gov/</a>, for federal action agencies and non-federal</p>	<p>USFWS; September 16, 2025</p>	<p>Thank you for providing guidance to obtain an official species list using the IPaC online tool. As suggested, the official species list for the project area was obtained and is located in <i>Appendix B. Section</i></p>

**Table 7-2: Draft EA Early Consultation Summary of Comments and Responses**

<p>agencies or individuals to obtain official species lists, including threatened and endangered species and designated critical habitat in your project area. Using IPaC expedites the process for species list distribution and takes minimal time to complete.</p> <p>New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change the species list. Verification can be completed by visiting the IPaC website at regular intervals during project planning and implementation and refreshing your initial species list. We hope this process provides efficiencies to our partners in obtaining a species list.</p>		<p><i>3.6</i> identifies the threatened and endangered species that may be located on, overfly, or traverse through the project site.</p> <p>The project is not anticipated to negatively impact threatened or endangered species that may be located on, overfly, or traverse through the project site. Should endangered or threatened species be identified at the project site, appropriate measures described in <i>Section 3.6</i> will be adhered to.</p> <p>The Applicant will continue to consult with the USFWS as part of the HRS, Chapter 343 environmental review procedures to ensure the protection of threatened and endangered species.</p>
<p><b>Natural Hazards</b></p>		
<p><u>Flood and Hazard Zones:</u> The DEA should identify any natural hazards the site is subject to, and identify and discuss compliance with relevant regulations.</p>	<p>DPP; September 30, 2025</p>	<p>Potential impacts from Natural Hazards is discussed in <i>Section 3.5</i>. The project site is located in Flood Zone D which is not considered a SFHA (<i>Figure 1-5</i>). The DOCARE substation will be built in accordance with applicable building code standards identified in ROH Chapter 16.</p>
<p><b>Air Quality</b></p>		
<p>If the project has the potential to generate fugitive dust, you must reasonably control the generation of all airborne, visible fugitive dust. Note that construction activities that occur near existing residences, businesses, 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.</p> <p>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, it is strongly recommended that buffer zones be established, wherever possible, in order to alleviate potential dust concerns.</p> <p>You must 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:</p>	<p>DOH, CAB, September 17, 2025</p>	<p>Thank you for providing guidance to control fugitive dust. To minimize dust generation from construction related activity, a dust control program will be implemented. Fugitive dust emission will also be controlled through mitigation measures such as watering active work areas, using wind screens, keeping adjacent paved roads clean, covering open-bodied trucks and limiting the area to be disturbed at any given time. Details to minimize dust are discussed in Section 3.7.</p>

**Table 7-2: Draft EA Early Consultation Summary of Comments and Responses**

<ul style="list-style-type: none"> <li>• 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;</li> <li>• Providing an adequate water source at the site prior to the start-up of construction activities;</li> <li>• Landscaping and providing rapid covering of bare areas, including slopes, starting from the initial grading phase;</li> <li>• Minimizing airborne, visible fugitive dust from shoulders and access roads;</li> <li>• Providing reasonable dust control measures during weekends, after hours, and prior to daily start-up of construction activities; and</li> <li>• Controlling airborne, visible fugitive dust from debris being hauled away from the project site.</li> </ul>		
<p><b>Surface Waters &amp; Drainage</b></p>		
<p>You may be required to obtain a National Pollutant Discharge Elimination System (NPDES) permit coverage for point source 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.</p> <p>Some of the activities requiring NPDES permit coverage include, but, are not limited to:</p> <p>b. Discharges to State surface waters from construction activity hydrotesting or dewatering.</p>	<p>DOH, CWB, September 17, 2025</p>	<p>Thank you for providing guidance on the State Water Code and the NPDES permit guidance. BMPs will be implemented during the short-term construction period to minimize stormwater runoff to the Wahiawā State Recreational Park. BMPs may include but are not limited to, phasing construction activities, replacing ground cover of disturbed areas, providing adequate water sources at the site, and the use of temporary silt fencing and screens. An NPDES permit may be obtained during the building permit review process, if required.</p> <p>The project will address the existing occupation and use of the site by informal residents. Improvements to the site will reduce stormwater runoff and protect water quality at the nearby Wahiawā State Recreational Park.</p>
<p><b>Infrastructure &amp; Utilities</b></p>		
<p>As the project will be served by the City &amp; County of Honolulu/County/Private sewer system, we have no objections to the project.</p> <p>Per HAR, Ch. 11-62 section 11-62-05, all areas of the State are critical wastewater disposal areas. All wastewater systems must conform to applicable provisions of HAR, Ch. 11-62. We do reserve the right to review the detailed wastewater plans for conformance to applicable rules. Design plans should address any effect associated with the construction of and/or discharges from</p>	<p>DOH, WWB, September 17, 2025</p>	<p>As part of this EA, a sewer connection application was completed, and approved by the Wastewater Branch. The sewer application is located in Appendix C. Existing wastewater laterals may be reused to service the DOCARE substation and will be confirmed during the final design. The Applicant will continue to consult with the Wastewater Branch as the design progresses and building permits are filed.</p>

**Table 7-2: Draft EA Early Consultation Summary of Comments and Responses**

<p>the wastewater systems to any public trust, Native Hawaiian resources or the exercise of traditional practices.</p>		
<p><b>Hazardous Materials</b></p>		
<ol style="list-style-type: none"> <li>1. A Phase I Environmental Site Assessment and Phase II Site Investigations should be conducted for development or redevelopment projects wherever current or former activities on site may have resulted in releases of hazardous substances, including oil or chemicals. Areas of concern include current and former industrial areas, harbors, airports, and formerly and currently zoned agricultural lands used for growing sugar, pineapple, or other agricultural products.</li> <li>2. To identify HEER Office records related to the property, visit our online map-based iHEER site at <a href="https://health.hawaii.gov/heer">https://health.hawaii.gov/heer</a> to search by location and select sites of interest directly from the map or through search options. Most HEER Office public records are directly downloadable from iHEER, many Navy and other Department of Defense facilities are not displayed in iHEER at this time. To request records from sites that are not posted in iHEER, visit <a href="https://health.hawaii.gov/heer/submit-documents-to-heer/public-record-request/">https://health.hawaii.gov/heer/submit-documents-to-heer/public-record-request/</a>. Military records may also be requested directly from the Department of Defense at <a href="http://foiaonline.gov">foiaonline.gov</a>.</li> <li>3. If the site has a history of previous release of hazardous substances, which includes oil or chemicals, we recommend that the applicant contact the HEER Office for guidance and direction prior to the approval of the land use change or permit approval.</li> <li>4. If the investigation shows that a release of hazardous substance, which includes oil or chemicals, may have occurred, the site should be properly characterized through an approved HEER Sampling and Analysis Plan (SAP) as described in the HEER Office Technical Guidance Manual (TGM) / <a href="https://www.hawaiidoh.org/">https://www.hawaiidoh.org/</a></li> </ol>	<p>DOH; HEER, September 17, 2025</p>	<p>As part of this Draft EA, a Phase I ESA was conducted and is located in Appendix C. The Phase I ESA includes a review of records from the HEER Office to identify sites within or nearby the project site. Identified sites listed in the HEER Office records are listed in the Phase I ESA in Appendix C.</p> <p>Results from the Phase I ESA are summarized in Section 3.3. The Phase I ESA revealed that the site contains environmental conditions that are indicative of a release. Due to the potential for release, the Phase II ESA with site investigations will be conducted to further investigate identified findings and measures to mitigate environmental conditions at the property. Consultation with HEER will be conducted as appropriate.</p>
<p>The state regulations for hazardous waste and used oil are in Chapters 11-260.1 to 11-279.1, HAR [<a href="https://health.hawaii.gov/shwb/hazwaste/hwrules/">https://health.hawaii.gov/shwb/hazwaste/hwrules/</a>]. These rules apply to the identification, handling, transportation, storage and disposal of regulated hazardous waste and used oil. Generators, transporters and treatment, storage, and disposal facilities of hazardous waste and used oil must adhere to</p>	<p>DOH, SHWB, September 17, 2025</p>	<p>As part of this EA, a Hazardous Materials Assessment was conducted and is attached in Appendix C. The Hazardous Materials Assessment found that the existing structures were constructed using ACM, lead-based paint, and fluorescent lighting containing PCBs and Mercury. Canec was not identified, but was known to be utilized in building materials between the 1930s and 1960s, and is presumed to be present within existing structures. Due to the likely</p>

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these requirements. Violations are subject to penalties under chapter 342J, HRS.		presence of hazardous materials, trained technicians will remove hazardous material, as necessary, in accordance with the OSHA standards. Details relating to the handling of hazardous materials are provided in Section 3.3.
If your proposed project includes construction, demolition, or renovation activities that involve potential asbestos and lead containing materials, please contact the Indoor and Radiological Health Branch at (808) 586-4700 or visit: <a href="https://health.hawaii.gov/irhb/">https://health.hawaii.gov/irhb/</a>	DOH, CAB, September 17, 2025	As discussed above, a Hazardous Materials Assessment was conducted and found ACM and lead-based paint in existing structures on the site. Hazardous material will be treated in accordance with the OSHA standards. The Indoor and Radiological Health Branch will be consulted with, as necessary for the handling of ACM and lead containing material. Details relating to the handling of hazardous materials are provided in Section 3.3
<b>Public Facilities and Services</b>		
Generators of solid waste are required to ensure that their waste is properly delivered to permitted solid waste management facilities. Managers of construction and demolition projects should require their waste contractors to submit disposal receipts and invoices to ensure proper disposal of waste.	HPD; October 26, 2023	Thank you for providing guidance to treat solid waste and construction related waste. Limited construction waste will be generated over the short-term construction buildout and will be transported to the Wahiawa Convenience Center or Wahiawa Collection Yard for proper disposal. Upon completion of the DOCARE Substation, the project site will continue to receive solid waste collection services from the City and County of Honolulu. Details of solid waste management are discussed in Section 3.12.6.
<b>Plans and Policies</b>		
OPSD anticipates that the Draft EA will discuss the Proposed Action with respect to the policies and objectives in Hawaii Revised Statutes (HRS) Chapters 205A and 226, the Coastal Zone Management Act and Hawaii State Planning Act, respectively. As the 2050 Sustainability Plan was prepared to guide the attainment of sustainability and resilience goals and objectives for the State contained in HRS Chapter 226, OPSD recommends the Draft EA generally discuss the technologies and best practices and other mitigation measures for the Proposed Action that would advance implementation of the Recommended Actions in the 2021-2030 Focus Areas on pages 100-107 of the Hawaii 2050 Sustainability Plan.	OPSD; October 10, 2025	Details of the project's consistency with HRS Chapter 226, the Hawaii State Planning Act and Chapter 205A, the Coastal Zone Management Act is provided in Section 5.4 and Section 5.5  Consistency with the Hawaii 2050 Sustainability Plan, specifically related to implementation of the Recommended Actions in the 2021-2030 Focus Areas is provided in Section 5.6.
Long-term Planning Policies and Objectives: The DEA should address the proposed Project's consistency with the relevant policies of the Oahu General Plan and the Central O'ahu Sustainable Communities Plan.	DPP; September 30, 2025	Consistency with the relevant policies of the Oahu General Plan and Central O'ahu Sustainable Communities Plan is provided in Section 5.7 and Section 5.9.

**Table 7-2: Draft EA Early Consultation Summary of Comments and Responses**

<b>Other</b>		
<u>Violations:</u> The DEA should note any violations on the property and discuss the disposition of the violations.	DPP, September 30, 2025	A list of violations is located in <i>Appendix B</i> and noted in <i>Section 2.2</i> .
The Honolulu Fire Department reviewed the submitted information and has no comment at this time.	HFD, September 23, 2025	The Applicant acknowledges this comment from HFD and will continue to coordinate with HFD throughout the environmental review process.
The Honolulu Police Department (HPD) recommends working with the area Neighborhood Board to convey the state's intent to use the site to support DLNR's Division of Conservation and Resources Enforcement in the Wahiawā and North Shore areas to help pacify concerns within the community of unsheltered persons occupying the area.	HPD, September 25, 2025	The Applicant will continue to coordinate efforts with the Wahiawā Neighborhood Board to address ongoing community concerns with the abandonment and occupation of the site by informal residents.
<p>I am writing as a member of the Wahiawā community to express my full support for the State's acquisition of the abandoned property identified as TMK (1) 7-4-001:025.</p> <p>This property has been a longstanding issue in our community for more than a decade. Despite countless attempts by residents to reach the owner and seek resolution, the site has remained abandoned, poorly managed and increasingly unsafe. It has become a dumping ground and a location occupied by informal residents, raising ongoing concerns about health, safety, and the general well-being of Wahiawā.</p> <p>I strongly support the State's efforts to condemn and acquire this parcel so it can be repurposed for the benefit of the community. Transferring the property to DLNR DOCARE for the Wahiawā Substation will not only eliminate the current nuisance conditions but will also bring much-needed enforcement presence and the stability to the area. Properly managed facilities at this location would serve the community far better than the neglected state we have endured for too long.</p> <p>Please consider this letter as part of the early consultation record in support of the Draft Environmental Assessment for this project.</p> <p>Mahalo for your efforts to move this initiative forward for Wahiawā.</p>	Keoni and Nahoku Ahlo, September 22, 2025	<p>Mahalo for the support of this project. This comment letter has been included as part of the record of early consultation for the Draft EA and is attached in <i>Appendix A</i>.</p> <p>The Applicant will continue to provide notification of the Draft EA and Final EA/FONSI as part of the environmental review process.</p>

## **7.2 Draft EA Consultation**

The Draft EA was published in the December 8, 2025 issue of TEN. Publication of the Draft EA initiated a 30-day public review period. Agencies, organizations, and individuals notified of the Draft EA publication are identified in *Table 7-1*. Comments received during the Draft EA public review period are attached in *Appendix I*. Responses to comments are included in *Table 7-3*.

**Table 7-3: Draft EA Consultation Summary of Comments and Responses**

Comments	Commenter and Date of Comment Letter	Responses
<b>Alternatives</b>		
<p>If it does not pan out, then MPW strongly supports DLNR finding an alternative substation location in Central O‘ahu or on the North Shore.</p> <p>The time, energy, and cost spent by DOCARE supervisors and field officers commuting daily to the North Shore from Pearl City, and the hassle, wear and tear re equipment/boats in transport, is inefficient and ultimately reduces the prime hours spent on enforcement.</p> <p>The future North Shore First Responder Center to be built by the City for Ocean Safety and EMS across from Kapo‘o (Sharks Cove) could provide some support space/services for DOCARE, and DLNR should engage soon with the City in the planning and design process to explore potential collaboration. Hale‘iwa is another good central potential location for a DOCARE substation.</p> <p>Please count on MPW to advocate for capacity building of DOCARE and its enforcement programs.</p>	<p>Mālama Pūpūkea-Waimea; January 5, 2026</p>	<p>Mahalo for providing alternative locations to strengthen DOCARE enforcement in the Wahiawā and North Shore area. As evaluated in <i>Chapter 4</i>, an alternative location has been analyzed against the purpose of the project. Should DLNR seek an alternative location for the DOCARE substation, the Wahiawā Freshwater Area may serve as an alternative site and is within close proximity to the preferred location along Avocado Street. Alternatively, DLNR may consider locating the substation in the North Shore area, within the anticipated North Shore First Responder Center or another location in Hale‘iwa. With the completion of the DOCARE substation at the preferred location, DLNR may coordinate access for DOCARE personnel to the planned North Shore First Responder Center. Additional support space for DOCARE officers in the North Shore area will strengthen DOCARE enforcement. <i>Section 4.2</i> has been revised accordingly.</p>
<b>Traffic, Access &amp; Circulation</b>		
<p>Access should be a minimum 20-foot paved all weather surface and be able to accommodate two-way traffic.</p>	<p>DPP; January 2, 2026</p>	<p>Current plans provide 30-foot wide access points to the substation. Detailed designs locating access and construction materials will be confirmed during the final design of the project.</p> <p>Concept designs are included in <i>Chapter 2</i>.</p>

**Table 7-3: Draft EA Consultation Summary of Comments and Responses**

<p>All loading and trash pick-up areas should be designed such that vehicles enter and exit front first. All trash pickup-activities should be done on-site. Adequate on-site turn-around areas should be provided and ensured that the layout of parking spaces will not interfere with turning maneuvers for large vehicles.</p>	<p>DPP; January 2, 2026</p>	<p>The Department of Environmental Services provides solid waste collection services at the project site. The site is also served by drop-off centers including the Wahiawa Convenience Center and the Wahiawa Collection Yard. Should DLNR utilize the Department of Environmental Services trash pick-up services, trash designated pick-up areas will be designed to ensure adequate access and turnaround space is available to minimize traffic along Avocado Street. Details of trash designated pick-up areas, if preferred, and turnaround space will be provided in the final design of the project.</p>
<p>Driveway gates should be recessed as far into the driveway as necessary to avoid any queuing onto public streets.</p>	<p>DPP; January 2, 2026</p>	<p>The Applicant acknowledges the recommendation for the driveway gates. The location of the rolling gates will be confirmed during the final design of the project.</p>
<p>Construction plans for all work within or affecting the public streets should be submitted for review and approval. Traffic control plans during construction should also be submitted for review and approval, as required. Adequate vehicular sight distance shall be provided and maintained at all driveways to pedestrians and other vehicles. Driveway grades shall not exceed five percent (5%) for a minimum distance of 25-feet from the back of the designated pedestrian walkway.</p>	<p>DPP; January 2, 2026</p>	<p>As noted in <i>Section 2.5</i>, traffic will be monitored to ensure the movement of construction vehicles, equipment, and deliveries does not adversely affect the current flow of traffic. Should construction activity require the temporary closure of any traffic lane, sidewalk, bicycle lane, or pedestrian mall, a street usage permit will be obtained from DTS. Final design plans will be submitted to DPP for review and approval.</p>
<p>HDOT has no comments.</p>	<p>DOT Highways; December 15, 2025</p>	<p>Mahalo for providing comments on the Draft EA. The Applicant acknowledges HDOT Highway's comments on the Draft EA.</p>
<p><b>Air Quality</b></p>		
<p>Thank you for the opportunity to review the Division of Conservation and Resources Enforcement Wahiawa Substation Project, Draft environmental assessment (DEA-AFNSI) in the December 08, 2025 edition of The Environmental Notice. Please visit the Clean Air Branch (CAB) website to download and reference our Standard Comments for Land Use Reviews. The link is provided below:  CAB received the emailed subject letter: Notification for a Chapter 343, Hawai'i Revised Statutes Draft EA State of Hawai'i, Dept. of Land and Natural Resources, Engineering Division,</p>	<p>DOH, CAB, December 10, 2025 and January 7, 2026</p>	<p>Thank you for providing guidance to review standard comments from the Department of Health, CAB. Applicable comments have been considered in this Final EA and responses are located below.</p>

**Table 7-3: Draft EA Consultation Summary of Comments and Responses**

<p>Division of Conservation and Resources Enforcement Wahiawā, O’ahu Hawai’i, Tax Map Key (TMK): (1) 7-4-001:025. Thank you for sending this notification and reminder for the opportunity to review this project. Please visit the Clean Air Branch (CAB) website to download and reference our Standard Comments for Land Use Reviews. The link is provided below.  <a href="https://health.hawaii.gov/cab/clean-air-branch/standard-comments-for-land-use-reviews/">https://health.hawaii.gov/cab/clean-air-branch/standard-comments-for-land-use-reviews/</a></p>		
<p>If the project has the potential to generate fugitive dust, you must reasonably control the generation of all airborne, visible fugitive dust. Note that construction activities that occur near existing residences, businesses, 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.</p> <p>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, it is strongly recommended that buffer zones be established, wherever possible, in order to alleviate potential dust concerns.</p> <p>You must 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:</p> <ul style="list-style-type: none"> <li>• 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;</li> <li>• Providing an adequate water source at the site prior to the start-up of construction activities;</li> <li>• Landscaping and providing rapid covering of bare areas, including slopes, starting from the initial grading phase;</li> <li>• Minimizing airborne, visible fugitive dust from shoulders and access roads;</li> <li>• Providing reasonable dust control measures during weekends, after hours, and prior to daily start-up of construction activities; and</li> <li>• Controlling airborne, visible fugitive dust from debris being hauled away from the project site.</li> </ul>		<p>Thank you for providing guidance to control fugitive dust. To minimize dust generation from construction related activity, a dust control program will be implemented. Fugitive dust emission will also be controlled through mitigation measures such as watering active work areas, using wind screens, keeping adjacent paved roads clean, covering open-bodied trucks and limiting the area to be disturbed at any given time. Details to minimize dust are discussed in <i>Section 3.7</i>.</p>

**Table 7-3: Draft EA Consultation Summary of Comments and Responses**

<b>Surface Waters &amp; Drainage</b>		
<p>The Surface Water Protection Branch (<a href="https://health.hawaii.gov/cwb/supb/">https://health.hawaii.gov/cwb/supb/</a>) of the Department of Health’s Environmental Management Division does not have any records pertaining to the subject request dated December 8, 2025.</p>	<p>DOH, Surface Water Protection Branch (SWPB), December 24, 2025</p>	<p>Mahalo for providing comments on the Draft EA. The Applicant acknowledges that the SWPB does not have records pertaining to the subject request and will consult with the SWPB upon filing of the building permits.</p>
<p>The OPSD recommends that site-specific Best Management Practices shall be developed and implemented during demolition and construction to prevent any runoff, sediment, soil and debris from adversely impacting the surrounding area.</p> <p>The OPSD has developed guidance documents on stormwater runoff strategies, which offer techniques to prevent land-based pollutants and sediment from potentially affecting water resources. The OPSD recommends that the subject EA consider the following stormwater assessment guidance to mitigate stormwater runoff impacts: OPSD Low Impact Development Guidance.</p>	<p>OPSD; December 31, 2025</p>	<p>Thank you for providing guidance to minimize stormwater runoff. BMPs will be implemented during the short-term construction period to minimize stormwater runoff to the Wahiawā State Recreational Park. BMPs may include but are not limited to, phasing construction activities, replacing ground cover of disturbed areas, providing adequate water sources at the site, and the use of temporary silt fencing and screens. An NPDES permit may be obtained during the building permit review process, if required.</p> <p>LID measures will be integrated into the design of the substation. The project will improve existing site conditions and minimize stormwater runoff. <i>Section 3.1</i> has been updated to include LID measures as recommended by the OPSD.</p>
<b>Infrastructure &amp; Utilities</b>		
<p>The existing water system is adequate to accommodate the proposed substation. However, please be advised that this information is based upon current data, and therefore the Board of Water Supply (BWS) reserves the right to change any position or information stated herein up until the final approval of the building permit application. The final decision on the availability of water will be confirmed when the building permit application is submitted for approval.</p> <p>When water is made available, the applicant will be required to pay our Water System Facilities Charges for resource development, transmission and daily storage.</p> <p>Water conservation measures are required for all proposed developments. These measures will include utilization of on-site graywater reuse in accordance with Hawai’i State Department of Health guidelines, rain catchment for nonpotable uses, stormwater capture and the use of Water Sense labeled ultra-low flow water fixtures and toilets. Landscape elements should incorporate green infrastructure design, drought tolerant plants, xeriscaping, rain catchment,</p>	<p>Board of Water Supply; December 24, 2025</p>	<p>Thank you for confirming that the existing water system has capacity to serve the project. The Applicant acknowledges that the final decision on the availability of water will be confirmed upon filing of the building permit and that the substation is subject to BWS’ required Water System Facilities Charges.</p> <p>The Applicant acknowledges that consistent with Act 170, 2016 (H.B. 1749), the developer of State-owned and/or managed projects are required to utilize reclaimed water for uses other than drinking and potable water needs. Reclaimed water strategies will be integrated into the final design and may include but not limited to stormwater capture, green</p>

**Table 7-3: Draft EA Consultation Summary of Comments and Responses**

<p>efficient irrigation systems such as a drop system and moisture sensors, and other Water Sense labeled fixtures and devices.</p> <p>Consistent with Act 170, 2016 (H.B. 1749), the developer of State-owned and/or managed projects are required to utilize reclaimed water for uses other than drinking and potable water demands of the proposed project. The developer should investigate the feasibility of using reclaimed water and submit a report of the investigation to the BWS for our review.</p>		<p>infrastructure, and efficient irrigation systems. <i>Section 3.9.1</i> has been revised.</p>
<p>If your proposed project includes construction, demolition, or renovation activities that involve potential asbestos and lead containing materials, please contact the Indoor and Radiological Health Branch at (808) 586-4700 or visit: <a href="https://health.hawaii.gov/irhb/">https://health.hawaii.gov/irhb/</a></p>	<p>DOH, CAB, December 10, 2025</p>	<p>As discussed above, a Hazardous Materials Assessment was conducted and found ACM and lead-based paint in existing structures on the site. Hazardous material will be treated in accordance with the OSHA standards. The Indoor and Radiological Health Branch will be consulted with, as necessary for the handling of ACM and lead containing material. Details relating to the handling of hazardous materials are provided in <i>Section 3.3</i></p>
<p><b>Fire Protection</b></p>		
<p>The on-site fire protection requirements should be coordinated with the Fire Prevention Bureau of the Honolulu Fire Department.</p>	<p>BWS; December 24, 2025</p>	<p>As part of the environmental review process, the Honolulu Fire Department was notified of the planned project. The Applicant will continue to coordinate with the Fire Prevention Bureau of the Honolulu Fire Department throughout the design of the project to ensure the planned substation meets on-site fire protection requirements.</p>
<p><b>Plans and Policies</b></p>		
<p>The OPSD agrees that the project is consistent with the State Land Use District Boundaries, the Hawai'i State Plan, the 2050 Sustainable Plan, and the Hawai'i Coastal Zone Management Plan. The project will have beneficial effects on the community and improve public safety.</p>	<p>OPSD; December 31, 2025</p>	<p>Thank you for responding to the Applicant's request of reviewing and providing comments on the Draft EA. The applicant notes OPSD's comments on the project.</p>
<p><b>Development Standards</b></p>		
<p>Based on a review of our records, the Project site consists of a 9,288-sq. ft. lot located in the B-2 Community Business and R-5 Residential Districts. The Project must comply with the development standards applicable to the B-2 Community Business and R-5 Residential District, including bicycle parking requirements. Project compliance with these standards</p>	<p>DPP; January 2, 2026</p>	<p>Thank you for providing the current version of the LUO. <i>Section 5.8</i> has been revised to include development standards for the Community Business (B-2) and Residential (R-5) zoning districts. Additionally, off-site</p>

**Table 7-3: Draft EA Consultation Summary of Comments and Responses**

<p>should be presented in the FEA, and will be confirmed during the review of future building permits.</p> <p>The LUO is available on our website at:  <a href="https://www4.honolulu.gov/docushare/dsweb/Get/Document-353043/2025%20CURRENT%20LUO%20Ord%2025-2.pdf">https://www4.honolulu.gov/docushare/dsweb/Get/Document-353043/2025%20CURRENT%20LUO%20Ord%2025-2.pdf</a></p>		<p>parking and bicycle parking requirements, per Article 6 of the LUO are discussed in <i>Section 5.8</i>.</p> <p>The DOCARE substation will comply with applicable development standards for the Community Business (B-2) and Residential (R-5) zoning district. The substation will be equipped with five striped parking spaces and one ADA stall. Pursuant to Article 6 of the LUO, the DOCARE substation may be considered commercial use, and short-term and long-term bicycle parking is required on site. The Applicant will continue to consult with DPP as the final design is developed to ensure the substation meets applicable development standards and off-street parking and bicycle parking requirements.</p>
<p><b>Permits &amp; Approvals</b></p>		
<p>The proposed project is subject to BWS Cross-Connection Control and Backflow Prevention requirements prior to the issuance of the Building Permit Applications.</p> <p>The construction drawings should be submitted for our approval, and the construction schedule should be coordinated to minimize impact to the water system.</p>	<p>BWS; December 24, 2025</p>	<p>The Applicant acknowledges that the planned substation is subject to BWS Cross Connection Control and Backflow Prevention requirements. Construction drawings and plans will be submitted to BWS for review and approval.</p>
<p><b>Other</b></p>		
<p><u>Violations:</u> The FEA should discuss the disposition of the violations on the property.</p>	<p>DPP, January 2, 2026</p>	<p>A disposition of the violations for the subject property is located in <i>Appendix B</i> and listed in <i>Section 2.2</i>.</p>
<p>For Standard Comments and Records Requests, please see the EPO Land Use Planning Review webpage at <a href="https://health.hawaii.gov/epo/landuse/">https://health.hawaii.gov/epo/landuse/</a> and contact the appropriate Environmental Health Administration Branches directly.</p> <p>A comprehensive contact list is available at:  <a href="https://health.hawaii.gov/epo/files/2025/09/DOHEHALandUseContactList_20250917.pdf">https://health.hawaii.gov/epo/files/2025/09/DOHEHALandUseContactList_20250917.pdf</a></p>	<p>DOH, Environmental Management Division, December 22, 2025</p>	<p>Mahalo for providing guidance to contact DOH EHA branches and divisions. As part of the EA consultation process, <i>Table 7-1</i> identifies the DOH (EHA) branches and divisions that were notified and provided comments on the EA.</p>
<p><b>Project Support</b></p>		
<p>I am in full support of establishing a DOCARE substation on a parcel long occupied by two abandoned buildings on Avocado Street in Wahiawa.</p> <p>The DOCARE substation is much needed, and this is an appropriate location.</p>	<p>Carlton Saito, December 8, 2025</p>	<p>Mahalo for supporting this project. This comment letter has been included as part of the record of comments on the Draft EA located in <i>Appendix I</i>.</p>

**Table 7-3: Draft EA Consultation Summary of Comments and Responses**

<p>I am a former resident of Wahiawa and often drove by that parcel, which was an eyesore.</p>		<p>DLNR will provide notification of opportunities to provide public testimony in support of the acquisition of the site.</p>
<p>Mālama Pūpūkea-Waimea (MPW) is pleased to submit comments in support of the Draft Environmental Assessment (DEA) for the proposed Wahiawā Substation Project on Avocado Street.</p> <p>As stated in the Draft Environmental Assessment (DEA), “the substation will be built for officers patrolling the Wahiawā and North Shore area. Currently, officers patrolling the Wahiawā and North Shore area report from the main station in Pearl city. To support enforcement, a smaller substation will be located in Wahiawā, providing officers with a nearby office space, a secure evidence storage room, and storage for larger equipment.”</p> <p>As a long-time Makai Watch partner of DOCARE on the North Shore, MPW is in full support of any and all improved facilities, funding, staffing, and programs that help DOCARE achieve its critical mission.</p> <p>The DEA does a thorough job of disclosing the potential environmental and cultural impacts for this project, The information is clear and complete. Good job G70 and Engineering Div!</p> <p>If the Avocado Street substation comes to fruition, it will be a significant benefit to DOCARE, Wahiawā, DOCARE’s community partners, and the ‘āina.</p> <p><u>If it does not pan out, then MPW strongly supports DLNR finding an alterative substation location in Central O’ahu or on the North Shore.</u></p> <p><u>The time, energy, and cost spent by DOCARE supervisors and field officers commuting daily to the North Shore from Pearl City, and the hassle, wear and tear re equipment/boats in transport, is inefficient and ultimately reduces the prime hours spent on enforcement.</u></p> <p><u>The future North Shore First Responder Center to be built by the City for Ocean Safety and EMS across from Kapo’o (Sharks Cove) could provide some support space/services for DOCARE, and DLNR should engage soon with the City in the planning and design process to explore potential collaboration. Hale’iwa is another good central potential location for a DOCARE substation.</u></p> <p><u>Please count on MPW to advocate for capacity building of DOCARE and its enforcement programs.</u></p>	<p>Mālama Pūpūkea-Waimea; January 5, 2026</p>	<p>Mahalo for supporting this project. This comment letter has been included as part of the record of comments on the Draft EA located in <i>Appendix I</i>.</p> <p>DLNR will provide notification of opportunities to provide public testimony in support of the acquisition of the site.</p> <p>The Applicant acknowledges MPW’s support to seek an alternative location for the DOCARE substation in the Wahiawā or North Shore area. Should DLNR need to seek an alternative location, DLNR may evaluate locating the substation within the anticipated North Shore First Responder Center or the Hale’iwa area.</p>

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## Chapter 8

# List of References

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# **Appendices**



Appendix A

# **Early Consultation Comments**



## Kira Ramos

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**From:** Browning, Joy <joy\_browning@fws.gov>  
**Sent:** Tuesday, September 16, 2025 2:10 PM  
**To:** 224085-01 DOCARE Wahiawa Substation  
**Subject:** DEA DLNR DOCARE Wahiawa Substation

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Aloha Tracy,

The Pacific Island Fish and Wildlife Office (PIFWO) has transitioned to the use of the Information for Planning and Consultation (IPaC) online portal, <https://ipac.ecosphere.fws.gov/>, for federal action agencies and non-federal agencies or individuals to obtain official species lists, including threatened and endangered species and designated critical habitat in your project area. Using IPaC expedites the process for species list distribution and takes minimal time to complete.

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change the species list. Verification can be completed by visiting the IPaC website at regular intervals during project planning and implementation and refreshing your initial species list. We hope this process provides efficiencies to our partners in obtaining a species list.

Additional assistance may be requested at [pifwo\\_admin@fws.gov](mailto:pifwo_admin@fws.gov).

Sincerely,

***Joy Hiromasa Browning***

Fish and Wildlife Biologist

Pacific Islands Fish and Wildlife Office

U.S. Fish and Wildlife Service

300 Ala Moana Blvd., Rm 3-122

Honolulu, Hawaii 96850



## Kira Ramos

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**From:** Seto, Joanna <joanna.seto@doh.hawaii.gov>  
**Sent:** Wednesday, September 17, 2025 10:45 AM  
**To:** 224085-01 DOCARE Wahiawa Substation  
**Cc:** DOH.EMD  
**Subject:** Early Consultation DEA DLNR DOCARE Wahiawa Substation

**Follow Up Flag:** Follow up  
**Flag Status:** Completed

Aloha,

For Standard Comments and Records Requests, please see the [EPO Land Use Planning Review](https://health.hawaii.gov/epo/landuse/) webpage at <https://health.hawaii.gov/epo/landuse/> and contact the appropriate Environmental Health Administration branches and offices directly.

A comprehensive contact list is available at [https://health.hawaii.gov/epo/files/2024/08/DOHEHALandUseContactList\\_20240827.pdf](https://health.hawaii.gov/epo/files/2024/08/DOHEHALandUseContactList_20240827.pdf)

Mahalo!  
Environmental Management Division  
Hawai'i State Department of Health | Ka 'Oihana Olakino  
Hale Ola | 2827 Waimano Home Road, Room 234 | Pearl City, HI 96782-1487  
Office: (808) 586-4304

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

In reply, please refer to:  
File:

## Hazard Evaluation & Emergency Response (HEER) Office Standard Comments August 2, 2021

1. A Phase I Environmental Site Assessment (ESA) and Phase II Site Investigation should be conducted for development or redevelopment projects wherever current or former activities on site may have resulted in releases of hazardous substances, including oil or chemicals. Areas of concern include current and former industrial areas, harbors, airports, and formerly and currently zoned agricultural lands used for growing sugar, pineapple or other agricultural products.
2. To identify HEER Office records related to the property, visit our online map-based iHEER site at <https://health.hawaii.gov/heer/> to search by location and select sites of interest directly from the map or through search options. Most HEER Office public records are directly downloadable from iHEER, many Navy and other Department of Defense facilities are not displayed in iHEER at this time. To request records from sites that are not posted in iHEER, visit <https://health.hawaii.gov/heer/submit-documents-to-heer/public-record-request/>. Military records may also be requested directly from the Department of Defense at foiaonline.gov.
3. If the site has a history of previous releases of hazardous substances, which includes oil or chemicals, we recommend that the applicant contact the HEER Office for guidance and direction prior to the approval of the land use change or permit approval.
4. If the investigation shows that a release of hazardous substance, which includes oil or chemicals, may have occurred, the site should be properly characterized through an approved HEER Sampling and Analysis Plan (SAP) as described in the HEER Office Technical Guidance Manual (TGM) / <http://www.hawaiidoh.org/>.
5. If the site is found to be contaminated above HEER Office Environmental Action Levels (EALs) appropriate for current and anticipated land use (<https://health.hawaii.gov/heer/guidance/ehe-and-eals/>), then "removal" and/or "remedial" actions to address the contamination must be prepared and submitted for review in accordance with Hawaii Revised Statutes Chapter 128D - Environmental Response Law; Hawaii Administrative Rules (HAR) Title 11, Chapter 451 - State Contingency Plan; and the HEER Office TGM.
6. All lands formerly in the production of sugarcane or pineapple must be characterized in accordance with the HEER Office TGM. Refer to Section 9.1 for a list of default pesticides associated with past production of these crops. Note that former pesticide mixing and storage areas should be identified and tested separately. These areas also require testing for an extended list of pesticides and related contaminants. Refer also to Soil Arsenic Guidance and Information at <https://health.hawaii.gov/heer/guidance/specific-topics/arsenic>.

HEER Office Standard Comments

August 2, 2021

Page 2

6. If previously unreported contamination is detected during the course of the investigation above the HEER Office EALs, notify the HEER Office immediately as the administrative contact for the HSERC (808) 586-4249 (7:45am – 4:30pm Monday to Friday) or (808) 236-8200 (after hours which includes weekends, holidays and after 4:30 weekdays) and the Local Emergency Planning Committee for your County. and visit <https://health.hawaii.gov/heer/how-to-report-a-release-spill/>.
7. The facility may be subject to Tier II reporting. Visit <https://health.hawaii.gov/heer/about-heer/organization/hepcra/hepcra-right-to-know-compliance/> and <https://health.hawaii.gov/heer/submit-documents-to-heer/submit-a-hepcra-tier-ii-report/> for more information.



STATE OF HAWAII  
DEPARTMENT OF HEALTH  
KA 'ŌIHAŌA OLAKINO  
P. O. BOX 3378  
HONOLULU, HI 96801-0378

www.hawaii.gov/doh

07016CMHK.23

July 28, 2023

**MEMORANDUM**

**SUBJECT:** Clean Water Branch Standard Project Comments

**TO:** Agencies and Project Owners

**FROM:** DARRYL LUM, P.E., CHIEF *Darryl Lum*  
Clean Water Branch

**This memo is provided for your information and sharing. You are encouraged to share this memo with your project partners, team members, and appropriate personnel.**

The Department of Health (DOH), Clean Water Branch (CWB) will no longer be responding directly to requests for comments on the following documents (Pre-consultation, Early Consultation, Preparation Notice, Draft, Final, Addendums, and/or Supplements):

- Environmental Impact Statements (EIS)
- Environmental Assessments (EA)
- Stream Channel Alteration Permits (SCAP)
- Stream Diversion Works Permits (SDWP)
- Well Construction/Pump Installation Permits
- Conservation District Use Applications (CDUA)
- Special Management Area Permits (SMAP)
- Shoreline Setback Areas (SSA)

For agencies or project owners requiring DOH-CWB comments for one or more of these documents, please utilize the DOH-CWB Standard Comments below regarding your project's responsibilities to maintain water quality and any necessary permitting. DOH-CWB Standard Comments are also available on the DOH-CWB website located at: <http://health.hawaii.gov/cwb/>.

### 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 (HAR), Chapters 11-53, 11-54 and 11-55. You may be responsible for fulfilling additional requirements related to our program.

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: <https://eha-cloud.doh.hawaii.gov/epermit/>. You will be asked to do a one-time registration to obtain your login and password. After you register, click on the Application Finder tool and locate the appropriate form. Follow the instructions to complete and submit the form.

The DOH, Environmental Health Administration (EHA) e-Permitting Portal received Cross-Media Electronic Reporting Rule (CROMERR) certification by the Environmental Protection Agency (EPA) for electronic signature. Currently, Applicants and Permittees may now certify and submit EHA Electronic Signature Forms electronically through the EHA e-Permitting Portal without the need to physically send in an ink signature and CD/DVD/flash drive.

Beginning January 31, 2023, the DOH-CWB will only utilize electronic signature e-Permitting forms and discontinue the hard-copy signature forms. All hard-copy signature certification e-Permitting forms, including compliance forms, will be inactivated.

The electronic signature forms will require electronic signature approval to submit a form to the CWB. For details on how to obtain the electronic signature approval please visit CWB website located at:

<https://health.hawaii.gov/cwb/announcements/cwb-announces-new-requirement-for-electronic-signature-approval-for-all-submissions-beginning-january-31-2023/>

The NPDES NOI or application will be processed after the filing fees submitted and payable to the "State of Hawaii" in the form of a pre-printed check, cashier's check, money order, or as otherwise specified by the director is received by the CWB.

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

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) may be required if your project/activity:
  - a. Requires a federal license or permit; and
  - b. May result in a discharge into waters of the United States (WOTUS).

"License or permit" means any permit, certificate, approval, registration, charter, membership, statutory exemption, or other form of permission granted by an agency of the federal government to conduct any activity which may result in any discharge.

The term "discharge" is defined in Clean Water Act, Subsections 502(16), 502(12), and 502(6).

Examples of "discharge" include, but are not limited to, allowing the following pollutants to enter WOTUS 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 COE-POH regarding their DA permitting requirements.

To request an individual Section 401 WQC, you must complete and submit the Section 401 WQC application together with \$1,000 filing fee made payable to the "State of Hawaii" in the form of a check or other method specified by the department. This application is available on the e-Permitting Portal website located at: <https://eha-cloud.doh.hawaii.gov/epermit/>

The processing of a Section 401 WQC application will begin after the CWB has received filing fee. The processing of a Section 401 WQC application is also subject to the compliance with 40 CFR §121 requirements.

Beginning January 31, 2023, the DOH-CWB will only utilize electronic signature e-Permitting forms and discontinue the hard-copy signature forms. All hard-copy signature certification e-Permitting forms, including compliance forms, will be inactivated.

The electronic signature forms will require electronic signature approval to submit a form to the CWB. For details on how to obtain the electronic signature approval please visit CWB website located at: <https://health.hawaii.gov/cwb/announcements/cwb-announces-new-requirement-for-electronic-signature-approval-for-all-submissions-beginning-january-31-2023/>.

Please see HAR, Chapters 11-53 and 11-54 for the State's Water Quality Standards and for more information on the Section 401 WQC. HAR, Chapters 11-53 and 11-54 are available on the CWB website at: <http://health.hawaii.gov/cwb/>.

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, Chapters 11-53 and 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. Consideration should be given to areas prone to flooding, or where the infrastructure is aged and will need to be rehabilitated.

# Solid and Hazardous Waste Branch

## Standard Comments

October 11, 2024

The Solid and Hazardous Waste Branch administers programs in the areas of:

- 1) Management of hazardous waste;
- 2) Management of solid waste; and
- 3) Regulation of underground storage tanks.

Our general comments on projects are below. For further information about these programs, please contact the Solid and Hazardous Waste Branch at (808) 586-4226. All chapters of the Hawaii Revised Statutes (HRS) are at <https://www.capitol.hawaii.gov/hrscurrent/>.

### Hazardous Waste Program

- The state regulations for hazardous waste and used oil are in chapters 11-260.1 to 11-279.1, Hawaii Administrative Rules (HAR) [<https://health.hawaii.gov/shwb/hazwaste/hwrules/>]. These rules apply to the identification, handling, transportation, storage and disposal of regulated hazardous waste and used oil. Generators, transporters and treatment, storage, and disposal facilities of hazardous waste and used oil must adhere to these requirements. Violations are subject to penalties under chapter 342J, HRS.

### Solid Waste Section

- The Solid Waste Section (SWS) enforces laws and regulations contained in chapters 342H and 342I, HRS, and chapter 11-58.1, HAR, “Solid Waste Management Control” [<http://health.hawaii.gov/shwb/solid-waste/>].
- The purpose of the rules is to establish minimum standards governing the design, construction, installation, operation, and maintenance of solid waste disposal, recycling, reclamation and transfer systems.
- All facilities that accept solid wastes are required to obtain a solid waste management permit from the SWS. Examples of the types of facilities governed by these regulations include landfills, transfer stations and convenience centers, recycling facilities, composting facilities, and salvage facilities. Medical waste, infectious waste, and foreign waste treatment facilities are also included.
- Generators of solid waste are required to ensure that their wastes are properly delivered to permitted solid waste management facilities. Managers of construction and demolition projects should require their waste contractors to submit disposal receipts and invoices to ensure proper disposal of wastes.

## Solid and Hazardous Waste Branch Standard Comments

### Office of Solid Waste Management

- The Office of Solid Waste Management (OSWM) administers statewide integrated solid waste management planning activities, which apply to the counties, as well as various recycling programs, e.g. the Glass Advance Disposal Fee (ADF) and Deposit Beverage Container (DBC) Programs. Management of the DBC Program is conducted pursuant to chapter 342G, HRS, which contains compliance and enforcement provisions, and chapter 11-282, HAR, “Deposit Beverage Recycling” [<http://health.hawaii.gov/hi5/rules-regulations-additional-links/>]. OSWM is also responsible for limited enforcement and compliance of solid waste management facilities that operate primarily as certified DBC redemption centers pursuant to chapter 342H, HRS, and chapter 11-58.1, HAR, “Solid Waste Management Control” [<http://health.hawaii.gov/shwb/solid-waste/>]. Authority for the integrated solid waste management planning and ADF programs is contained in chapter 342G, HRS.
- Glass Advance Disposal Fee Program: Businesses that import glass containers into Hawaii are required to register with the Department of Health and pay a 1.5 cent per container fee. Fee revenue is distributed to the counties for the operation of glass recycling programs.
- Deposit Beverage Container Program: Business that manufacture or import deposit beverage containers into Hawaii are required to register with the Department of Health and pay the five cent deposit and one cent container fee on each deposit container. Deposits and fees are deposited into a special fund and are used to reimburse DBC redemption center refunds paid to consumers; and to pay handling fees to redemption/recycling companies to process and recycle collected deposit beverage containers; and to pay program administrative costs.
- The Department of Health reimburses and pays an associated handling fee for the redemption of deposit beverage containers (DBC). These transactions are conducted only with certified redemption centers. Certification requires obtaining a solid waste management permit from the SWS (which addresses environmental issues) and a certification from the DBC program (which standardizes the redemption process).
- Chapter 342G, HRS, encourages the reduction of waste generation, reuse of discarded materials, and the recycling of solid waste. Businesses, property managers and developers, and government entities are highly encouraged to develop solid waste management plans to ensure proper handling of wastes and divert recyclables from being landfilled.
- Solid waste management plans seek to maximize waste diversion and minimize disposal. Such plans should include designated areas to promote the collection of reusable and recyclable materials.

## Solid and Hazardous Waste Branch Standard Comments

### Underground Storage Tank Program

- The state's underground storage tank (UST) regulations, found in chapter 11-280.1, HAR [<http://health.hawaii.gov/shwb/underground-storage-tanks/>], include specific requirements that UST owners and operators must meet when installing, operating, and permanently closing their UST systems and addressing releases from USTs. Violations are subject to penalties under chapter 11-280.1, HAR, and chapter 342L, HRS.
- A permit is required prior to the installation and operation of a UST. Any new UST system that will be installed must have secondary containment with interstitial monitoring. Refer to subchapters 2, 3, 4, and 12 of chapter 11-280.1, HAR. The installation permit expires 1 year from the date of issuance. The operation permit expires 5 years from the date of issuance.
- §11-280.1-50, HAR, requires owners and operators of USTs or tank systems to notify DOH within twenty-four (24) hours and follow the procedures in §11-280.1-52, HAR, if any of the following occur, with specific exceptions found in the rules:
  - 1) The discovery by any person of evidence of regulated substances which may have been released at the UST site or in the surrounding area (such as the presence of free product or vapors in soils, basements, sewer and utility lines, or nearby surface water);
  - 2) Unusual UST system operating conditions observed or experienced (such as the erratic behavior of product dispensing equipment, the sudden loss of product from the UST, or an unexplained presence of water in the tank); or
  - 3) Monitoring results from a release detection method required under §§11-280.1-41 or 11-280.1-42 indicate a release may have occurred.
- For release response actions, responsible parties and their consultants and contractors should not only follow the applicable regulations, but also the Department of Health Hazard Evaluation Emergency (HEER) Office Technical Guidance Manual, HEER Environmental Action Level (EAL) guidance, and other guidance documents on the DOH HEER Office website [<https://health.hawaii.gov/heer/>], including those pertaining to Multi-Increment Sampling of soil, low flow groundwater sampling, soil vapor sampling, and Environmental Hazard Evaluations (EHE)/Environmental Hazard Management Plans (EHMP).

**Standard Comments for Land Use Reviews**  
**Clean Air Branch**  
**Hawaii State Department of Health**  
**July 3, 2024**

**All project activities shall comply with Hawaii Administrative Rules (HAR), Chapter 11-59 and 11-60.1.**

**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.
- Permit application forms can be found here: <https://health.hawaii.gov/cab/permit-application-forms/>

**Has the potential to generate fugitive dust**

- You must reasonably control the generation of all airborne, visible fugitive dust. Note that construction activities that occur near existing residences, businesses, 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, it is strongly recommended that buffer zones be established, wherever possible, in order to alleviate potential dust concerns.
- You must 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:
  - 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;
  - Providing an adequate water source at the site prior to start-up of construction activities;
  - Landscaping and providing rapid covering of bare areas, including slopes, starting from the initial grading phase;
  - Minimizing airborne, visible fugitive dust from shoulders and access roads;
  - Providing reasonable dust control measures during weekends, after hours, and prior to daily start-up of construction activities; and
  - 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. Please also see fugitive dust fact sheet at: <https://health.hawaii.gov/cab/files/2024/02/Hawaii-Fugitive-Dust-Fact-Sheet-February-2024.pdf>.

**Includes construction, demolition, or renovation activities that involve potential asbestos and lead containing materials**

- Please contact the Indoor and Radiological Health Branch at (808) 586-4700 or visit: <https://health.hawaii.gov/irhb/>

**Increases the population and potential number of vehicles in an area**

- The creation of apartment buildings, complexes, and residential communities may increase the overall population in an area. Increasing the population in an area may inadvertently lead to more air pollution via vehicle exhaust. Vehicle exhaust releases pollutants in the air that can negatively impact human health and air quality, including lung irritants, carcinogens, and greenhouse gases.
- Ensure that drivers keep vehicle idling times to three (3) minutes or less.
- Consider and incorporate support for alternative transportation options such as bike racks and/or electric vehicle charging stations where possible.

If you have any questions, please contact the Clean Air Branch at (808) 586-4200 or at [cab@doh.hawaii.gov](mailto:cab@doh.hawaii.gov).



STATE OF HAWAII  
DEPARTMENT OF HEALTH  
KA 'OIHANA OLAKINO  
P. O. BOX 3378  
HONOLULU, HI 96801-3378

In reply, please refer to  
File:

December 26, 2024

**MEMORANDUM**

SUBJECT: Wastewater Branch Standard Project Comments

TO: Agencies and Project Owners

FROM: JONATHAN NAGATO, P.E., CHIEF  
Wastewater Branch

**This memo is provided for your information and sharing. You are encouraged to share this memo with your project partners, team members, and appropriate personnel.**

The Department of Health (DOH), Wastewater Branch (WWB) will no longer be responding directly to requests for comments on the following documents (Pre-consultation, Early Consultation, Preparation Notice, Draft, Final, Addendums, and/or Supplements), including but not limited to:

- Environmental Impact Statements (EIS)
- Environmental Assessments (EA)
- Conservation District Use Applications (CDUA)
- Special Management Area Permits (SMAP)
- Special Use Permit
- Shoreline Setback Areas (SSA)

For agencies or project owners requiring DOH-WWB comments for one or more of these documents, please utilize the DOH-WWB Standard Comments below regarding your project's responsibilities to maintain proper treatment and disposal of wastewater and any necessary permitting. DOH-WWB Standard Comments are also available on the DOH-WWB website located at: <http://health.hawaii.gov/wastewater/>.

### **DOH-WWB 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 (HAR), Chapter 11-62. You may be responsible for fulfilling additional requirements related to our program such as Board of Water Supply's pass and no-pass zones, Safe Drinking Water Branch's underground injection control program, etc.

1. As the project will be served by the City & County of Honolulu/ County/ Private sewer system, we have no objections to the project.
2. Per HAR, Ch. 11-62 section 11-62-05, all areas of the State are critical wastewater disposal areas. All wastewater systems must conform to applicable provisions of HAR, Ch. 11-62. We do reserve the right to review the detailed wastewater plans for conformance to applicable rules. Design plans should address any effect associated with the construction of and/or discharges from the wastewater systems to any public trust, Native Hawaiian resources or the exercise of traditional cultural practices.
3. Large Capacity Cesspools (LCC):

In 1999, EPA promulgated regulations under the Safe Drinking Water Act's Underground Injection Control (UIC) Program required closure of all existing large capacity cesspools (LCC) by April 5, 2005. Under federal regulations, a large capacity cesspool is a cesspool which serves multiple residential units, serves a mixed use of a residential and non-residential activity, or for nonresidential facilities has the potential to serve 20 or more persons per day. Operation of a large capacity cesspool after this date is a violation of federal regulations and subject to enforcement and fines. If you have any questions about LCC, please contact the Region 9 LLC Coordinator at [r9\\_lcc\\_coordinator@epa.gov](mailto:r9_lcc_coordinator@epa.gov).



**STATE OF HAWAII  
OFFICE OF PLANNING  
& SUSTAINABLE DEVELOPMENT**

**JOSH GREEN, M.D.**  
GOVERNOR

**SYLVIA LUKE**  
LT. GOVERNOR

**MARY ALICE EVANS**  
DIRECTOR

235 South Beretania Street, 6th Floor, Honolulu, Hawai'i 96813  
Mailing Address: P.O. Box 2359, Honolulu, Hawai'i 96804

Telephone: (808) 587-2846  
Fax: (808) 587-2824  
Web: <https://planning.hawaii.gov/>

Coastal Zone  
Management  
Program

DTS 202509151618NA  
Transmitted via email

Environmental Review  
Program

October 1, 2025

Land Use Commission

Ms. Tracy Camuso  
Group 70 International, Inc.  
111 S. King St. Suite 170  
Honolulu, Hawaii 96813-4307

Land Use Division

Special Plans Branch

State Transit-Oriented  
Development

Dear Ms. Camuso:

Statewide Geographic  
Information System

Subject: Early Consult for a Draft Environmental Assessment  
Department of Land and Natural Resources Wahiawa  
Substation  
Wahiawa, Oahu, Hawaii  
TMK: (1) 7-4-001:025

Statewide  
Sustainability Branch

The Office of Planning and Sustainable Development (OPSD) received the Environmental Assessment Early Consultation letter requesting comments for the preparation of a Draft Environmental Assessment (EA) for the acquisition of an abandoned site by the Wahiawa Substation.

OPSD anticipates that the Draft EA will discuss the Proposed Action with respect to the policies and objectives in Hawaii Revised Statutes (HRS) Chapters 205A and 226, the Coastal Zone Management and Hawaii State Planning Act, respectively. As the 2050 Sustainability Plan was prepared to guide the attainment of sustainability and resilience goals and objectives for the State contained in HRS Chapter 226, OPSD recommends the Draft EA generally discuss the technologies and best practices and other mitigation measures for the Proposed Action that would advance implementation of the Recommended Actions in the 2021-2030 Focus Areas on pages 100-107 of the [Hawai'i 2050 Sustainability Plan](#).

We look forward to reviewing the environmental assessment for the project. If you have any questions regarding this comment letter, please contact Seiji Ogawa, Land Use Division, [Seiji.ogawa@hawaii.gov](mailto:Seiji.ogawa@hawaii.gov) or (808) 587-2898.

Mahalo,

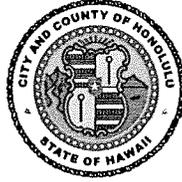
*Mary Alice Evans*

Mary Alice Evans  
Director

DEPARTMENT OF PLANNING AND PERMITTING  
KA 'OIHANA HO'OLĀLĀ A ME NĀ PALAPALA 'AE  
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 7TH FLOOR • HONOLULU, HAWAII 96813  
PHONE: (808) 768-8000 • FAX: (808) 768-6041 • WEBSITE: honolulu.gov/dpp

RICK BLANGIARDI  
MAYOR  
MEIA



DAWN TAKEUCHI APUNA  
DIRECTOR  
PO'O

BRYAN GALLAGHER, P.E.  
DEPUTY DIRECTOR  
HOPE PO'O

REGINA MALEPEAI  
2<sup>ND</sup> DEPUTY DIRECTOR  
HOPE PO'O KUALUA

September 30, 2025

GEN-2025-171 (GT)

Ms. Tracy Camuso  
G70  
111 South King Street, Suite 170  
Honolulu, Hawai'i 96813

Dear Ms. Camuso:

SUBJECT: Request for Early Consultation for Draft Environmental Assessment  
DOCARE Wahiawā Substation Project  
525 Avocado Street – Wahiawā  
Tax Map Key 7-4-001: 025

This is in response to your letter, received September 16, 2025, requesting early consultation for the preparation of a Draft Environmental Assessment (DEA), as required under Hawai'i Revised Statutes (HRS) Chapter 343 for the Division of Conservation and Resource Enforcement (DOCARE) Wahiawā Substation (Project). The following items should be addressed in the DEA:

1. Regulatory Boundaries: The Project site is a portion of a 9,288-square (-sq.) -foot (-ft.) lot and located in the B-2 Community Business and R-5 Residential Districts. It also appears to be in the State Land Use Urban District. The DEA should clearly show and delineate the districts, structures, and access to the site. The DEA should provide discussion on the matter.
2. Long-term Planning Policies and Objectives: The DEA should address the proposed Project's consistency with the relevant policies of the Oahu General Plan and the Central O'ahu Sustainable Communities Plan.
3. Land Use Ordinance (LUO): Based on a review of our records, the Project site consists of a 9,288-sq.-ft. lot located in the B-2 Community Business and R-5 Residential Districts. The Project must comply with the development standards applicable to the B-2 Community Business and R-5 Residential Districts. Project compliance with these standards should be presented in the DEA, and

will be confirmed during the review of future building permits. The LUO is available on our website at:

<https://www4.honolulu.gov/docushare/dsweb/Get/Document-353043/2025%20CURRENT%20LUO%20Ord%2025-2.pdf>

Violations: The DEA should note any violations on the property and discuss the disposition of the violations.

On-site Structures: The DEA should describe all existing structures on the site. If any existing structures are proposed to remain in place, the DEA should describe their compliance with the LUO.

Proposed Structures and Improvements: The DEA should describe all proposed structures and improvements for the site, and describe their compliance with the LUO. The DEA should also identify any other permits that are required, such a Waivers or Conditional Use Permits, for the Project.

4. Flood and Hazard Zones: The DEA should identify any natural hazards the site is subject to, and identify and discuss compliance with the relevant regulations.

Thank you for the opportunity to comment on this proposal. We look forward to reviewing and providing additional comments on the Draft EA. Should you have questions, please contact Gerald Toyomura, of our Urban Design Branch, at (808) 768-8056 or email at [gtoyomura@honolulu.gov](mailto:gtoyomura@honolulu.gov).

Very truly yours,

  
Dawn Takeuchi Apuna  
Director

**HONOLULU FIRE DEPARTMENT  
KA 'OIHANA KINAI AHI O HONOLULU  
CITY AND COUNTY OF HONOLULU**

636 SOUTH STREET • HONOLULU, HAWAII 96813  
PHONE: (808) 723-7139 • FAX: (808) 723-7111 • WEBSITE: honolulu.gov

RICK BLANGIARDI  
MAYOR  
MEIA



SHELDON K. HAO  
FIRE CHIEF  
LUNA NUI KINAI AHI

JASON SAMALA  
DEPUTY FIRE CHIEF  
HOPE LUNA NUI KINAI AHI

September 23, 2025

**RECEIVED**

SEP 25 2025

**G70**

Ms. Tracy Camuso, AICP, Principal  
Group 70 International, Inc.  
111 South King Street, Suite 170  
Honolulu, Hawai'i 96813-4307

Dear Ms. Camuso:

Subject: Early Consultation for Chapter 343, Hawai'i Revised Statutes  
Draft Environmental Assessment  
State of Hawai'i, Department of Land and Natural Resources  
Division of Conservation and Resource Enforcement  
Wahiawā Substation  
Tax Map Key: 7-4-001: 025

In response to your letter received on September 16, 2025, regarding the abovementioned subject, the Honolulu Fire Department reviewed the submitted information and has no comment at this time.

Should you have questions, please contact Battalion Chief Pao-Chi Hwang of our Fire Prevention Bureau at 808-723-7151 or hfdpb1@honolulu.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Reid Yoshida", followed by a horizontal line.

REID YOSHIDA  
Assistant Chief

RY/MD:sk

HONOLULU POLICE DEPARTMENT  
KA 'OIHANA MĀKA'I O HONOLULU  
**CITY AND COUNTY OF HONOLULU**

801 SOUTH BERETANIA STREET • HONOLULU, HAWAII 96813  
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RICK BLANGIARDI  
MAYOR  
MEIA



RADE K. VANIC  
INTERIM CHIEF  
KAHU MĀKA'I KOIKAWĀ

AARON TAKASAKI-YOUNG  
RYAN T. NISHIBUN  
INTERIM DEPUTY CHIEFS  
NĀ HOPE LUNA HUI MĀKA'I KOIKAWĀ

OUR REFERENCE **EO-SH**

September 25, 2025

SENT VIA EMAIL

Ms. Tracy Camuso  
docare\_wahiawa\_substation@g70.design

Dear Ms. Camuso:

This is in response to your correspondence dated September 10, 2025, requesting for comments on the Draft Environmental Assessment for the proposed State of Hawai'i, Department of Land and Natural Resources (DLNR), Wahiawā Substation project.

The Honolulu Police Department (HPD) recommends working with the area Neighborhood Board to convey the state's intent to use the site to support DLNR's Division of Conservation and Resource Enforcement in the Wahiawā and North Shore areas to help pacify concerns within the community of unsheltered persons occupying the area. The HPD would also like to ensure the flow of traffic is adequately monitored and controlled during the construction phase of the project.

If there are any questions, please call Major James Slayter of District 2 (Wahiawā) at (808) 723-8700.

Sincerely,

A handwritten signature in black ink that reads "Glenn Hayashi".

GLENN HAYASHI  
Assistant Chief of Police  
Support Services Bureau

## Kira Ramos

---

**From:** Keoni Ahlo <keoni@ahlo.com>  
**Sent:** Monday, September 22, 2025 3:31 PM  
**To:** 224085-01 DOCARE Wahiawa Substation  
**Cc:** d.osorio@capitol.hawaii.gov; Lyn Lurbe; Rene Mansho; Carolyn Hayashi; Marie Abatayo; Nahoku Ahlo; Matthew Weyer; Amy Perruso  
**Subject:** Support for State Acquisition of TMK (1) 7-4-001:025 – Wahiawā Substation Project

Aloha Ms. Camuso,

I am writing as a member of the Wahiawā community to express my full support for the State's acquisition of the abandoned property identified as TMK (1) 7-4-001:025.

This property has been a longstanding issue in our community for more than a decade. Despite countless attempts by residents to reach the owner and seek resolution, the site has remained abandoned, poorly managed, and increasingly unsafe. It has become a dumping ground and a location occupied by informal residents, raising ongoing concerns about health, safety, and the general well-being of Wahiawā.

I strongly support the State's efforts to condemn and acquire this parcel so it can be repurposed for the benefit of the community. Transferring the property to DLNR DOCARE for the Wahiawā Substation will not only eliminate the current nuisance conditions but will also bring much-needed enforcement presence and stability to the area. Properly managed facilities at this location would serve the community far better than the neglected state we have endured for too long.

Please consider this letter as part of the early consultation record in support of the Draft Environmental Assessment for this project.

Mahalo for your efforts to move this initiative forward for Wahiawā.

Respectfully,

Keoni & Nahoku Ahlo

Our Wahiawa Businesses:

- Teapresso Bar Wahiawa
- Mia Bella Gelato Bar
- Ahlo State Farm
- Biofit
- 834 Kilani Avenue LLC

Our Wahiawa club affiliations:

- Past President, Wahiawa Lions Club
- Past President, Rotary Club of Wahiawa-Waialua
- Past President, Wahiawa Community & Business Associations

Wahiawa community projects we help drive:

- Wahiawa Santa Parade
- Wahiawa Veterans Day Parade
- Wahiawa Pineapple Festival
- Wahiawa Day at the Lake



Appendix B

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# Notices of Violation



CITY AND COUNTY OF HONOLULU  
 Department of Planning and Permitting (DPP)

Aloha. We provide services and information on building permits, development projects, and planning activities for the City and County of Honolulu.

**- This website contains data up to July 28, 2025, 5:00 PM HST.**  
**- For new applications and more recent data, please visit [HNL Build](#).**  
**- DPP is migrating historical data from this site to HNL Build. Upon completion of the data conversion, all data will be accessible via HNL Build.**  
**- If you have any questions please contact [dpp@honolulu.gov](mailto:dpp@honolulu.gov).**

[Permitting](#) [Searching](#) [DPP Home](#)

Job Search

Permit Type	Permit No.	Status	Address	Description	Created	Issued	Completed
Land Permit Applications	68/SUB-314	Approved	525 AVOCADO ST Wahiawa 96786	CONS INTO LOT A OF 8,538 SF NET LESS 750 SF ROADWAY EASE *	Jul 18, 1968	Jul 18, 1968	Jul 18, 1968
Land Permit Applications	80/SP-14	CLOSED	187 S KAM HWY Wahiawa 96786	OFF SITE PARKING (7-3-01: 29; 7-4-01: 25)	Feb 13, 1980	Mar 17, 1983	Mar 17, 1983
Notice of Violation	2016/NOV-07-132	NOV File Closed	525 AVOCADO ST Wahiawa 96786	EX 525 Avocado Street 525 Avocado Street, TMK: 7-4-001: 025 Banners	Jul 20, 2016	Jul 20, 2016	Aug 2, 2016
Notice of Violation	2018/NOV-04-131	NOV File Closed	525 AVOCADO ST Wahiawa 96786	BV 535 Avocado Street 535 Avocado Street Fire at structure. Electrical wiring and service entrance equipment are not safe. Demo work being done without a permit.	Apr 20, 2018	Apr 23, 2018	Aug 9, 2019
Notice of Violation	2023/NOV-12-131	NOV File Closed	525 AVOCADO ST Wahiawa 96786	EX 525 and 535 Avocado Street EX 525 and 535 Avocado Street CAS-41263-COF6K5 Abandoned property occupied by homeless people	Dec 18, 2023	Dec 21, 2023	Feb 8, 2024
Notice of Violation	2024/NOV-01-013	Draft NOV Reviewed	525 AVOCADO ST Wahiawa 96786	EX 525 Avocado Street Unsafe buildings, littered property	Jan 3, 2024	Jan 5, 2024	mmm dd, yyyy
Notice of Violation	2024/NOV-05-085	Draft NOV Reviewed	525 AVOCADO ST Wahiawa 96786	BV	May 15, 2024	May 17, 2024	mmm dd, yyyy
Sewer Connection Application	2025/SCA-0432	Adequate determination mailed	525 AVOCADO ST Wahiawa 96786	2025/SCA-0432 DLNR DOCARE substation	Apr 24, 2025	Apr 28, 2025	mmm dd, yyyy

Submit Save as Excel Search Again Cancel

City and County of Honolulu, Department of Planning & Permitting  
 650 S. King Street, Honolulu, HI 96813  
 Email: [dpp@honolulu.gov](mailto:dpp@honolulu.gov) | [plans@honolulu.gov](mailto:plans@honolulu.gov)  
 Phone: (808) 768-8000 | Fax: (808) 768-6743  
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Screen ID: 750341



Appendix C

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**Phase I  
Environmental Site Assessment and  
Limited Hazardous Materials Survey**



# Final Report

## Hazardous Materials Survey

525 and 535 Avocado Street  
Wahiawa, Oahu, Hawaii



PREPARED FOR:  
G70  
111 S. King Street, Suite 170  
Honolulu, Hawaii 96813

PREPARED BY:  
Element Environmental, LLC  
98-030 Hekaha Street, Unit 9  
Aiea, Hawaii 96701



element environmental llc  
environmental · engineering · water resources



January 21, 2026

Ms. Tracy Camuso, Principal  
G70  
111 S. King Street, Suite 170  
Honolulu, Hawaii 96813

Subject: **Final Hazardous Materials Survey Report**  
**525 and 535 Avocado Street, Wahiawa, Oahu, Hawaii**  
**E2 Project Number 250018**

Dear Ms. Camuso:

Element Environmental, LLC (E2) is pleased to submit this Final Hazardous Materials Survey letter report describing the sampling completed at the buildings located at 525 and 535 Avocado Street, in Wahiawa, Oahu, Hawaii (hereinafter referred to as *the project site*). The contents of this report are based on E2's proposal dated August 23, 2024 and accepted by G70. E2 completed fieldwork on March 25, 2025. The Draft Report was dated and submitted to G70 on June 19, 2025, to which there were no comments. Data tables, sample location figures, sample photographs, and laboratory reports are provided in the appendices by building.

## 1.0 BACKGROUND

There are two commercial buildings occupying the site, with the following information provided in the City and County of Honolulu Real Property Assessment Division online Property Records Search. The first is a one-story former office building, originally constructed in 1943, with an area of 945 square feet (SF). It was originally built for Lone Star Auto. The second building is also a one-story former office building, constructed in 1955, with an area of 1,980 SF. It was originally built for Martial Arts.

Angelo's Auto Body & Detailing, LLC, a now-defunct used car dealer and auto repair shop, was recently located at the project site. A 2024 Phase I Environmental Site Assessment conducted on a nearby property revealed the presence of two floor drains within the project property, which discharge onto an adjacent property.

As of 2024, the site has been abandoned, and the buildings on the premises have been in a state of disrepair. Homeless people occupy the buildings, and the site is littered with a significant amount of solid waste, including small quantities of petroleum products and hazardous substances.

## 2.0 REVIEW OF AVAILABLE AS-BUILT DRAWINGS

E2 performed a review of available as-built drawings provided by G70. A summary of pertinent findings is provided below.

- *Angelo's Auto-Shop & Bodywork, 535 Avocado Street, Wahiawa, Hawaii (Structural Hawaii, Inc.; April 30, 2021; 17 pages)*. The plans were prepared for the conversion of the existing storage to a new auto-workshop and alterations to the existing bathroom. The plans note that the large building near the intersection of Kamehameha Highway has the address of 535 Avocado Street,

while the small building has the address of 525 Avocado Street. (However, during E2's field effort, these addresses were found to be reversed from what they actually are.) The plans show the 1-story building was constructed with 8" thick concrete masonry unit (CMU) block walls and 5/8" thick gypsum board walls with wall insulation, over a shared concrete slab. The fire door was rated at 2 hours. Ceramic tile was called out for the Shower (but was not observed during E2's field effort).

### 3.0 ASBESTOS SURVEY

The asbestos survey was conducted in general accordance with Environmental Protection Agency (EPA) 40 Code of Federal Regulations (CFR) 763 "Asbestos" and State of Hawaii Department of Health (HDOH), Hawaii Administrative Rules (HAR) 11-501 "Asbestos Requirements". The asbestos survey consisted of the collection of a total of 64 bulk samples from 20 observed accessible suspect building components.

Homogeneous Areas (HAs), which are suspect asbestos-containing materials (ACM) that appear uniform in color, texture, and function, were identified. The asbestos inspectors (Bernice Baleté HIASB-0449 and Brandon Dela Cruz HIASB-5430) are certified in accordance with the inspector training requirements of the Asbestos Hazard Emergency Response Act (AHERA) and the HDOH Asbestos Inspector Certification Program HAR 11-504. E2 is a HDOH-registered asbestos consultant (A-0120).

SGS Forensic Laboratories (SGS) located in Hayward, California, analyzed the bulk samples. SGS is a HDOH-registered asbestos laboratory (L-01-025). SGS is also accredited by the American Industrial Hygiene Association (AIHA) under the Industrial Hygiene Laboratory Accreditation Program (IHLAP) for asbestos/fiber microscopy core; and the National Voluntary Laboratory Accreditation Program (NVLAP) for bulk asbestos fiber analysis. Samples were analyzed by polarized light microscopy (PLM) with dispersion staining, in accordance with EPA Test Method 600/R-93/116 Method for the Determination of Asbestos in Bulk Building Materials. Results were compared to the standard presence/absence criteria for asbestos, i.e., materials containing over 1% asbestos are considered ACM.

The roofing for building at 525 Avocado Street had fallen in from a previous fire. Roofing was observed in a debris pile located outside the building. Only the metal roof frame for the building at 535 Avocado Street remained.

Asbestos was found in the following HAs surveyed at the project site during the field effort:

#### 525 Avocado Street:

- HA *H-25-525AS-F-03*: Black floor mastic remnants contain 5% to 10% Chrysotile asbestos (assumed only on the lower level, approximately 1,300 SF)
- HA *H-25-525AS-W-01*: Black Non-Fibrous Material in one of the CMU block wall samples (*H-25-525AS-W-01C*) contains 5% Chrysotile asbestos (extent unknown, assumed will be included with HA *H-25-525AS-W-02* below)
- HA *H-25-525AS-W-02*: Silver Paint on the textured wall surfacing contains 3% Chrysotile asbestos (approximately 2,500 SF)

#### 535 Avocado Street:

- HA *H-25-535AS-W-02*: Black felt in one of the textured wall surfacing samples (*H-25-535AS-W-02A*) contains 35% Chrysotile (unknown quantity, observed only around the window frames, but may conservatively cover the entire building)

- HA **H-25-535AS-W-05**: Black Semi-Fibrous Material in one of the samples (**H-25-535AS-W-05B**) contains 25% Chrysotile asbestos (approximately 75 SF, observed on wood plank makeshift walls; however, planks appear to have been from the adjacent building's roof that had fallen in from a previous fire)
- HA **H-25-535AS-AT-01**: Fire-rated door and door frame is assumed to contain asbestos (1 door/door frame unit was observed)

Inaccessible and/or hidden suspect materials not sampled during this field efforts or uncovered during the demolition work should be assumed ACM and managed as such until sampled and proven otherwise. ACM that will be encountered and/or generated during future demolition at the project site will require proper handling, removal, and disposal by trained workers in accordance with the Occupational Safety and Health Administration (OSHA) Asbestos Standard 29 CFR 1926.1101, EPA National Emission Standard for Asbestos 40 CFR 61-Subpart M, and 40 CFR 763 "Asbestos". At least ten (10) working days before demolition or disturbance of friable asbestos above reportable quantities, a "Notification of Demolition and Renovation" must be provided to the HDOH. The designated landfill should be consulted as to their requirements and procedures for the disposal of ACM at their facility.

#### 4.0 CANEC SURVEY

Canec is the common name for a fiberboard building material that was made from sugar cane bagasse, the residual fiber that remains after the juice has been extracted from the sugar cane. Canec usually contains arsenic in the range of 1,000 to 4,000 parts per million (ppm). Suspect canec was not readily observed in the buildings at the project site at the time of the field effort.

Inaccessible and/or hidden suspect materials not sampled during this field efforts should be presumed arsenic-containing until sampled and proven otherwise, if built between the early 1930s to 1964. Prior to demolition, arsenic-containing canec should be removed whole, segregated, wrapped in plastic or placed in plastic bags during transportation, and disposed of similarly to asbestos at a permitted landfill facility. Canec building materials are exempt from State laws requiring a hazardous waste determination to be made prior to disposal. As a result of this exemption, testing canec for arsenic content or leaching characteristics is not required by the State for disposal. The exemption applies whenever canec building materials are segregated from other building materials and disposed of separately. When canec is mixed with other building demolition waste, the combined waste could be subject to hazardous waste determination before disposal. The permitted landfill should be notified prior to disposal of canec materials so the canec can be appropriately segregated or handled in a manner to prevent landfill employees from being exposed during their operations.

#### 5.0 LEAD PAINT SURVEY

The paint survey was conducted in general accordance with U.S. Department of Housing and Urban Development (HUD) Guidelines for the Evaluation and Control of lead-based paint (LBP) Hazards in Housing and HAR Chapter 11-41. The lead paint survey consisted of the collection of a total of 23 paint samples of building components with paint in mostly intact condition with some areas in poor condition. The paint inspectors (Bernice Balete PB-0449 and Brandon Dela Cruz PB-1413) are certified by the HDOH Lead Activities Inspector Certification Program. E2 is a HDOH-registered LBP activities entity (PBF-0032).

SGS Hayward, California also analyzed the paint chip samples and is accredited by the AIHA under the Environmental Lead Laboratory Accreditation Program (ELLAP). Samples were analyzed for total lead by Inductively Coupled Plasma - Atomic Emission Spectrometry (ICP-AES), in accordance with EPA Methods 3050B/7000B.

Results were compared to standard presence/absence criteria for lead, i.e., paint containing 0.5% or more by weight or 5,000 ppm or more of lead are considered LBP. Paint with any detectable amount of lead is considered lead-containing paint (LCP). Both LBP and LCP are worker protection issues. (For comparison, the U.S. Consumer Product Safety Improvement Act 16 CFR 1303.101 allows no more than 90 ppm of total lead content in accessible parts of children's products. In addition, there may also be some background concentrations of lead in metal and concrete components.)

**525 Avocado Street:**

- One (1) of the paint samples contained a concentration of lead greater than 0.5% by weight (considered LBP) – sample **525AS-P02** collected from the white upper plaster exterior wall contained 0.6% lead by weight.
- Six (6) paint samples contained detectable concentrations of lead ranging from 0.008 to 0.11% lead by weight (considered LCP).
- The remaining eight (8) paint samples were non-detect (ND) for lead above the laboratory reporting limits (ranging from 0.006 to 0.007% weight).

**535 Avocado Street:**

- Four (4) of the paint samples contained concentrations of lead greater than 0.5% by weight (considered LBP) – samples **535AS-P02, -P03, -P04, and -P08** with concentrations ranging from 0.8 to 5.4% lead by weight.
- The four (4) remaining paint samples contained concentrations of lead ranging from 0.021 to 0.29% lead by weight (considered LCP).

Loose and flaky lead paint should be removed prior to demolition. Lead paint/debris that will be encountered and/or generated at the project site will require proper handling, removal, and/or disposal in accordance with OSHA Lead in Construction Standard 29 CFR 1926.62 and Hawaii Occupational Safety and Health (HIOSH) rules and regulations. Appropriate worker protection measures for lead should be taken during the demolition work to limit lead exposure to personnel and releases to the environment.

Metal debris (with intact paint) should be recycled when possible to decrease the amount of waste taken to the landfill and to possibly minimize the likelihood of the Toxicity Characteristic Leaching Procedure (TCLP) samples exceeding leaching criteria, 40 CFR 261 Identification and Listing of Hazardous Waste. A representative TCLP sample(s) of the remaining waste stream(s) may need to be collected and analyzed prior to landfill acceptance. The landfill should be consulted as to their requirements and procedures for the disposal of lead-contaminated waste and debris at their facility.

## **6.0 FLUORESCENT LIGHT FIXTURE VISUAL INVENTORY**

The Toxic Substances Control Act (TSCA) banned the production of polychlorinated biphenyls (PCBs) in the U.S in 1976. In fluorescent light fixtures, PCBs are usually found in ballasts either within small capacitors or in the form of a black tar-like compound. The following guidelines are used to determine if the ballasts contain PCBs:

- All ballasts manufactured before July 1, 1978 are assumed to contain PCBs;
- Ballasts manufactured after July 1, 1978 that do not contain PCBs should be labeled “No PCBs” by the manufacturer in accordance with the federal regulations; and
- If a ballast is not labeled “No PCBs”, it is best to assume that it contains PCBs.

E2 conducted a visual inventory for suspect PCBs in fluorescent light fixture ballasts and the accompanying mercury-containing fluorescent lamps or compact fluorescent light (CFL) bulbs. A total of five (5) fluorescent light fixtures, possibly with 5 ballasts and up to 10 lamps were observed in the buildings at the project site. E2 did not attempt to open any of the light fixtures due to inaccessibility and safety concerns.

The fluorescent light lamps containing mercury shall be removed before demolition and disposed as Universal Waste. If a ballast is not labeled "No PCBs", it is assumed to contain PCBs. PCB debris encountered and/or generated at the project site should be conducted using proper handling, removal, and/or disposal in accordance with OSHA PCB Standards 29 CFR 1910.1000 and 40 CFR 761. Appropriate worker protection measures should be taken during the demolition work to limit PCBs and mercury exposure to personnel and releases to the environment. In general, materials containing 50 ppm or greater PCBs are regulated under TSCA.

We appreciate the opportunity to have worked with you on this project. Should you have any questions or require additional information related to this report, please call me at (808) 864-3952.

Sincerely,



Ryan Yamauchi, P.E.

President

Hawaii Asbestos Inspector HIASB-2905

Hawaii LBP Inspector and Risk Assessor PB-0117

Appendix A 525 Avocado Street

Appendix B 535 Avocado Street

APPENDIX A  
525 Avocado Street



Laboratory Asbestos Results

525 Avocado Street  
Wahiawa, Oahu, Hawaii

Hazardous Materials Survey Report  
Survey Date: March 25, 2025

Homogeneous Area	Material Type	Material Description	Friability	Condition	Sample ID	Sample Location	Layer (% of Combined Sample)	Asbestos %	
H-25-525AS-C-01	Miscellaneous	Acoustic Ceiling Tile (1'x2' white-painted brown, pegholes) and Mastic (brown)	Friable	Significantly Damaged	H-25-525AS-C-01A	Interior	1 Brown Mastic (10%)	ND	
							2 Tan Fibrous Material (85%)	ND	
							3 Paint (5%)	ND	
					H-25-525AS-C-01B		1 Brown Mastic (10%)	ND	
							2 Tan Fibrous Material (85%)	ND	
							3 Paint (5%)	ND	
					H-25-525AS-C-01C		1 Brown Mastic (10%)	ND	
							2 Tan Fibrous Material (85%)	ND	
							3 Paint (5%)	ND	
H-25-525AS-C-02	Miscellaneous	Roof Coating (white) and Tar Paper (black)	NF	Significantly Damaged	H-25-525AS-C-02A	Interior	1 Stones (5%)	ND	
							2 Black Tar (5%)	ND	
							3 Green Non-Fibrous Material (40%)	ND	
							4 White Non-Fibrous Material (5%)	ND	
							5 Green Non-Fibrous Material (40%)	ND	
							6 Grey Non-Fibrous Coating (5%)	ND	
					H-25-525AS-C-02B	Interior	1 Black Felt (25%)	ND	
							2 Stones (25%)	ND	
							3 Black Tar (5%)	ND	
							4 Green Non-Fibrous Material (40%)	ND	
							5 Grey Non-Fibrous Coating (5%)	ND	
					H-25-525AS-C-02C	Exterior	1 Grey Non-Fibrous Material (5%)	ND	
							2 Green Non-Fibrous Material (5%)	ND	
							3 Black Tar (10%)	ND	
							4 Black Felt (20%)	ND	
							5 Black Tar (10%)	ND	
							6 Black Felt (20%)	ND	
							7 Black Tar (10%)	ND	
							8 Black Felt (20%)	ND	
					H-25-525AS-C-02D	Exterior	1 Stones (50%)	ND	
							2 Black Tar (5%)	ND	
3 Green Non-Fibrous Material (40%)	ND								
4 Grey Non-Fibrous Coating (5%)	ND								
H-25-525AS-C-02E	Exterior	1 Stones (50%)	ND						
		2 Black Tar (5%)	ND						
		3 Green Non-Fibrous Material (40%)	ND						
		4 Grey Non-Fibrous Coating (5%)	ND						
H-25-525AS-F-01	Miscellaneous	Concrete Floor/Foundation	NF	Intact	H-25-525AS-F-01A	Exterior	1 Grey Cementitious Material (84%)	ND	
							2 Grey Cementitious Material (15%)	ND	
							3 Paint (1%)	ND	
					H-25-525AS-F-01B		Exterior	1 Grey Cementitious Material (85%)	ND
								2 Grey Cementitious Material (15%)	ND
					H-25-525AS-F-01C		Interior	1 Grey Cementitious Material (85%)	ND
2 Grey Cementitious Material (15%)	ND								
H-25-525AS-F-02	Miscellaneous	Vinyl Floor Tile/Mastic (9"x9" blue/yellow)	NF	Significantly Damaged	H-25-525AS-F-02A	Interior	2 Yellow Mastic (2%)	ND	
							1 Blue Tile (98%)	ND	
					H-25-525AS-F-02B		1 Blue Tile (98%)	ND	
							2 Yellow Mastic (2%)	ND	
					H-25-525AS-F-02C		1 Blue Tile (98%)	ND	
							2 Yellow Mastic (2%)	ND	

Laboratory Asbestos Results

525 Avocado Street  
Wahiawa, Oahu, Hawaii

Hazardous Materials Survey Report  
Survey Date: March 25, 2025

Homogeneous Area	Material Type	Material Description	Friability	Condition	Sample ID	Sample Location	Layer (% of Combined Sample)	Asbestos %	
H-25-525AS-F-03	Miscellaneous	Floor Mastic remnants (black)	NF	Intact	H-25-525AS-F-03A	Interior	1 Black Mastic (100%)	10% Chrysotile	
					H-25-525AS-F-03B		1 Black Mastic (100%)	10% Chrysotile	
					H-25-525AS-F-03C		1 Black Mastic (100%)	5% Chrysotile	
H-25-525AS-W-01	Miscellaneous	CMU Block Wall/Grout	NF	Intact	H-25-525AS-W-01A	Exterior	1 Grey Cementitious Material (85%)	ND	
					H-25-525AS-W-01B		2 Beige Cementitious Material (15%)	ND	
					H-25-525AS-W-01C		1 Grey Cementitious Material (85%)	ND	
							2 Beige Cementitious Material (15%)	ND	
							1 Black Non-Fibrous Material (2%)	5% Chrysotile	
							2 Grey Cementitious Material (82%)	ND	
							3 Beige Cementitious Material (15%)	ND	
H-25-525AS-W-02A	Exterior	4 Paint (1%)	ND						
H-25-525AS-W-02B		1 Beige Non-Fibrous Material (35%)	ND						
		2 Silver Paint (10%)	3% Chrysotile						
		3 Beige Non-Fibrous Material (54%)	ND						
H-25-525AS-W-02C		4 Paint (1%)	ND						
		1 Beige Non-Fibrous Material (35%)	ND						
		2 Silver Paint (10%)	3% Chrysotile						
		3 Beige Non-Fibrous Material (54%)	ND						
H-25-525AS-W-02D		4 Paint (1%)	ND						
		1 Beige Non-Fibrous Material (35%)	ND						
		2 Silver Paint (10%)	3% Chrysotile						
		3 Beige Non-Fibrous Material (54%)	ND						
		4 Paint (1%)	ND						
H-25-525AS-W-02E		1 Beige Non-Fibrous Material (95%)	ND						
H-25-525AS-W-03		Miscellaneous	Brick Wall/Grout (9"x40" gray/gray)	NF	Intact	H-25-525AS-W-03A	Exterior	1 Grey Cementitious Material (84%)	ND
						H-25-525AS-W-03B		Exterior	2 Grey Cementitious Material (15%)
	H-25-525AS-W-03C					Interior			3 Paint (1%)
	H-25-525AS-W-04A						1 Beige Cementitious Material (75%)	ND	
							H-25-525AS-W-04B	2 Grey Cementitious Material (24%)	ND
						3 Paint (1%)		ND	
H-25-525AS-W-04	Miscellaneous	Fiberboard Wall (white-painted tan with pegholes)	Friable	Intact	H-25-525AS-W-04A	Interior	1 Tan Fibrous Material (95%)	ND	
							2 Paint (5%)	ND	
							1 Tan Fibrous Material (95%)	ND	
					H-25-525AS-W-04B		2 Paint (5%)	ND	
							H-25-525AS-W-04C	1 Tan Fibrous Material (95%)	ND
					2 Paint (5%)			ND	

Laboratory Asbestos Results

Homogeneous Area	Material Type	Material Description	Friability	Condition	Sample ID	Sample Location	Layer (% of Combined Sample)	Asbestos %
H-25-525AS-W-05	Miscellaneous	CMU Block Wall/Grout (Property Retaining Wall)	NF	Intact	H-25-525AS-W-05A	Exterior	1 Grey Cementitious Material (95%)	ND
							2 Paint (5%)	ND
					H-25-525AS-W-05B		1 Grey Cementitious Material (95%)	ND
							2 Paint (5%)	ND
					H-25-525AS-W-05C		1 Grey Cementitious Material (95%)	ND
							2 Paint (5%)	ND
H-25-525AS-M-01	Miscellaneous	Floor Mastic remnants (yellow)	NF	Intact	H-25-525AS-M-01A	Interior	1 Multicolored Non-Fibrous Material (95%)	ND
							2 Yellow Non-Fibrous Material (5%)	ND
					H-25-525AS-M-01B		1 Multicolored Non-Fibrous Material (95%)	ND
							2 Yellow Non-Fibrous Material (5%)	ND
					H-25-525AS-M-01C		1 Multicolored Non-Fibrous Material (95%)	ND
							2 Yellow Non-Fibrous Material (5%)	ND
H-25-525AS-M-02	Miscellaneous	Window Caulking (white)	NF	Significantly Damaged	H-25-525AS-M-02A	Exterior	1 Off-White Non-Fibrous Material (95%)	ND
							2 Paint (5%)	ND
					H-25-525AS-M-02B		1 Off-White Non-Fibrous Material (95%)	ND
							2 Paint (5%)	ND
					H-25-525AS-M-02C		1 Off-White Non-Fibrous Material (95%)	ND
							2 Paint (5%)	ND

## Laboratory Lead Results

525 Avocado Street  
Wahiawa, Oahu, Hawaii

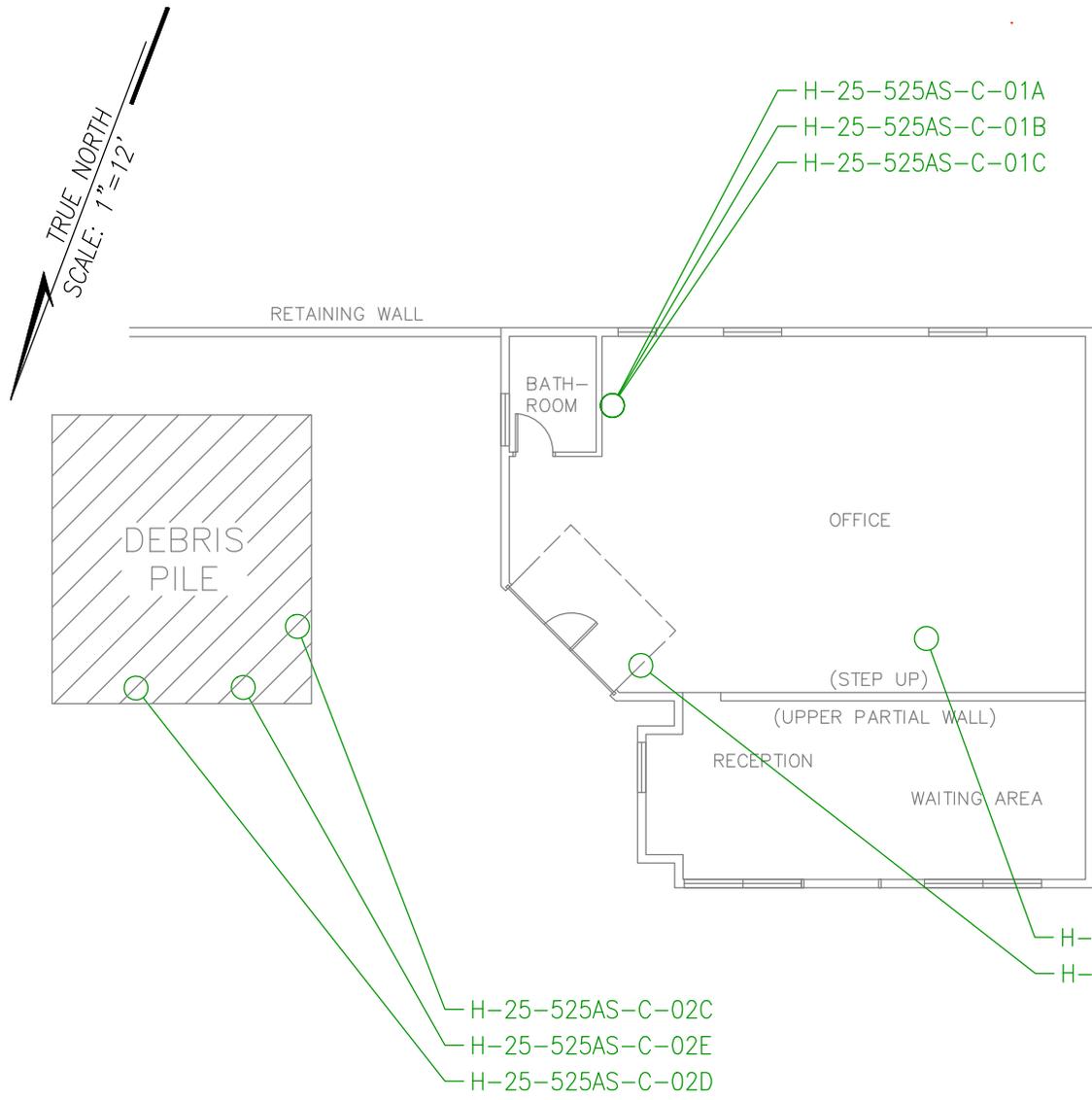
Hazardous Materials Survey Report  
Survey Date: March 25, 2025

Sample ID	Sample Description	Sample Location	Condition	Lead %
525AS-P01	Off-white Lower Plaster Wall	Exterior	Intact	ND (<0.007)
<b>525AS-P02</b>	<b>White Upper Plaster Wall</b>	<b>Exterior</b>	<b>Intact</b>	<b>0.6</b>
525AS-P03	Gray Brick Wall	Exterior	Intact	ND (<0.006)
<b>525AS-P04</b>	<b>Off-white Brick Wall</b>	<b>Exterior</b>	<b>Intact</b>	<b>0.011</b>
525AS-P05	White Brick Wall	Exterior	Intact	ND (<0.006)
525AS-P06	Gray Wood Wall	Exterior	Intact	ND (<0.006)
525AS-P07	Off-white Wood Wall	Exterior	Intact	ND (<0.006)
<b>525AS-P08</b>	<b>Gray Plaster Wall</b>	<b>Interior</b>	<b>Poor</b>	<b>0.086</b>
<b>525AS-P09</b>	<b>Beige Plaster Wall</b>	<b>Interior</b>	<b>Intact</b>	<b>0.008</b>
525AS-P10	Blue Plaster Wall	Interior	Poor	ND (<0.006)
<b>525AS-P11</b>	<b>Beige Plaster Wall</b>	<b>Interior</b>	<b>Poor</b>	<b>0.11</b>
525AS-P12	Beige Brick Wall	Interior	Intact	ND (<0.006)
525AS-P13	White Gypsum Wall (detached)	Interior	Poor	ND (<0.007)
<b>525AS-P14</b>	<b>Blue Plaster Wall</b>	<b>Interior</b>	<b>Poor</b>	<b>0.066</b>
<b>525AS-P15</b>	<b>Red Concrete Floor</b>	<b>Interior</b>	<b>Intact</b>	<b>0.012</b>

ND < RL = Lead not detected above Laboratory Reporting Limit (RL)

LCP = Lead-containing paint > Laboratory RL and < 0.5 wt% or 5,000 mg/kg

**LBP = Lead-based paint ≥ 0.5 wt% or 5,000 mg/kg**



CEILING HOMOGENEOUS AREAS

FOR HOMOGENEOUS AREAS WITH NO SYMBOL, SEE SAMPLE LOCATIONS.

N/A	C-01	ACOUSTIC CEILING TILE REMNANTS (1'x2' WHITE-PAINTED BROWN, PEGHOLES) AND MASTIC (DARK BROWN)
N/A	C-02	ROOF COATING REMNANTS (WHITE) AND TAR PAPER (BLACK)

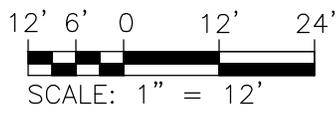
NOTES

ROOFING (C-02) WAS ALSO SAMPLED FROM A DEBRIS PILE LOCATED OUTSIDE OF THE BUILDING (APPROXIMATE SIZE AND LOCATION SHOWN).

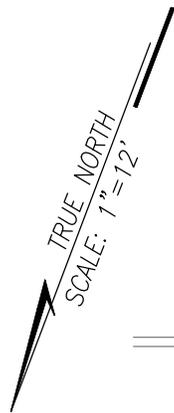
ROOM REFERENCES ARE FROM APRIL 30, 2021 DRAWINGS.

SAMPLE LOCATIONS

○ NEGATIVE ASBESTOS



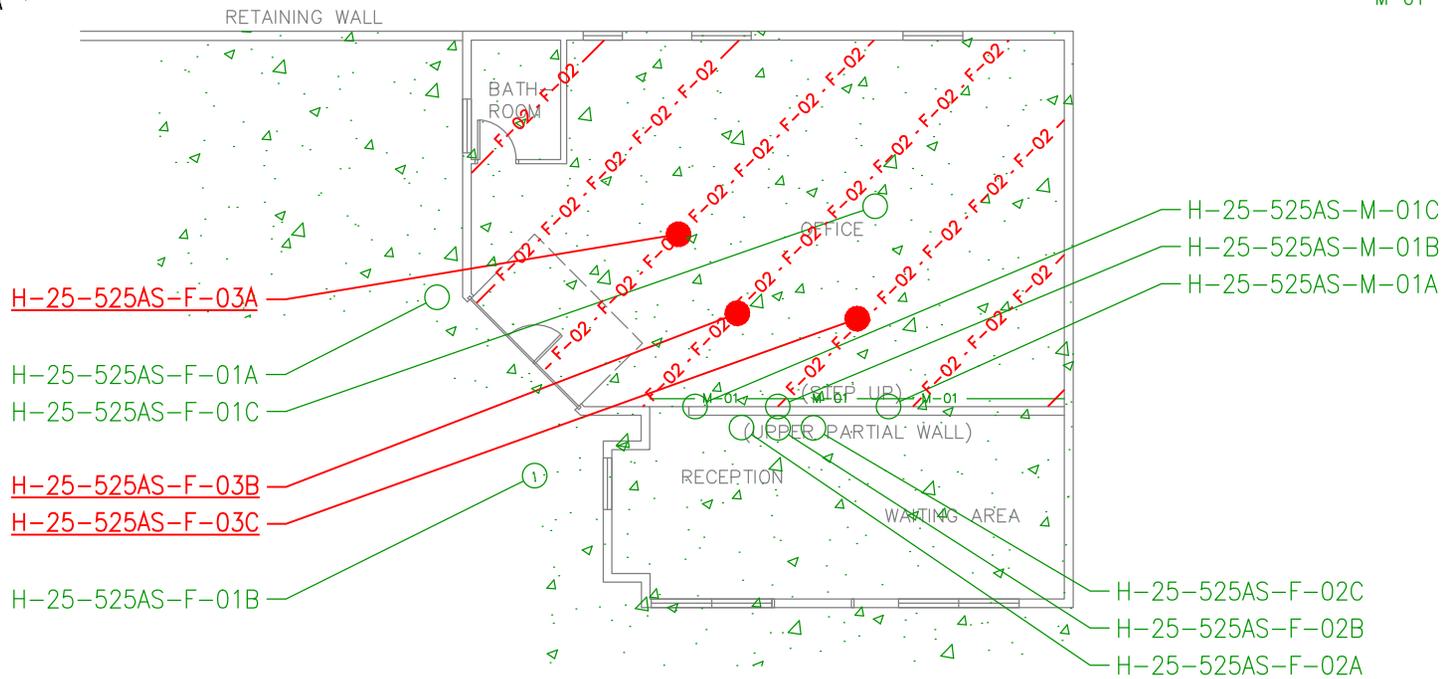
	SURVEY DATE: <b>MARCH 25, 2025</b>	PROJECT TITLE: DLNR DOCARE WAHIAWA SUBSTATION WAHIAWA, OAHU, HAWAII
	FIGURE TITLE: 525 AVOCADO STREET, ASBESTOS CEILING SAMPLE RESULTS AND APPROXIMATE LOCATIONS	
		FIGURE NO.: <b>A-1</b>



FLOOR HOMOGENEOUS AREAS

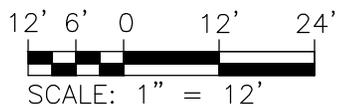
FOR HOMOGENEOUS AREAS WITH NO SYMBOL, SEE SAMPLE LOCATIONS.

	F-01	CONCRETE FLOOR/FOUNDATION
N/A	F-02	VINYL FLOOR TILE REMNANTS/MASTIC (9"x9" BLUE/YELLOW)
	F-03	FLOOR MASTIC REMNANTS (BLACK) (ASSUMED EXTENT SHOWN)
- M-01 -	M-01	FLOOR MASTIC REMNANTS (YELLOW)

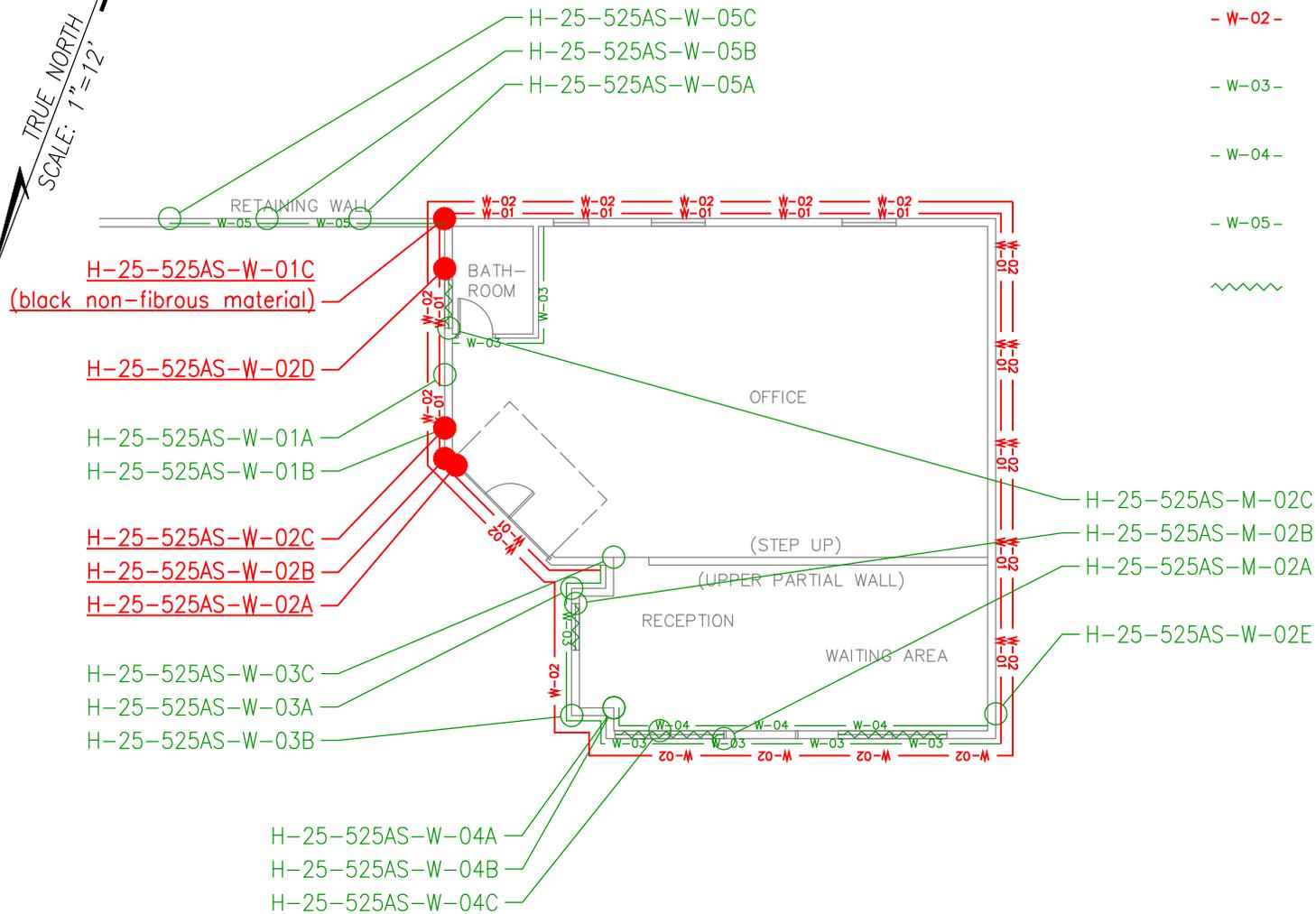
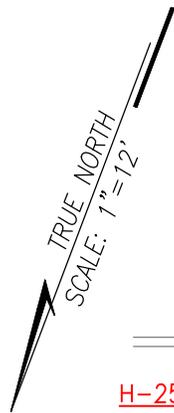


SAMPLE LOCATIONS

- NEGATIVE ASBESTOS
- POSITIVE ASBESTOS



	SURVEY DATE: <b>MARCH 25, 2025</b>	PROJECT TITLE: DLNR DOCARE WAHIAWA SUBSTATION WAHIAWA, OAHU, HAWAII
	FIGURE TITLE: 525 AVOCADO STREET, ASBESTOS FLOOR SAMPLE RESULTS AND APPROXIMATE LOCATIONS	
		FIGURE NO.: <b>A-2</b>

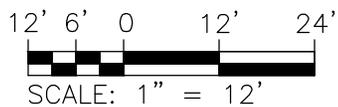


WALL HOMOGENEOUS AREAS

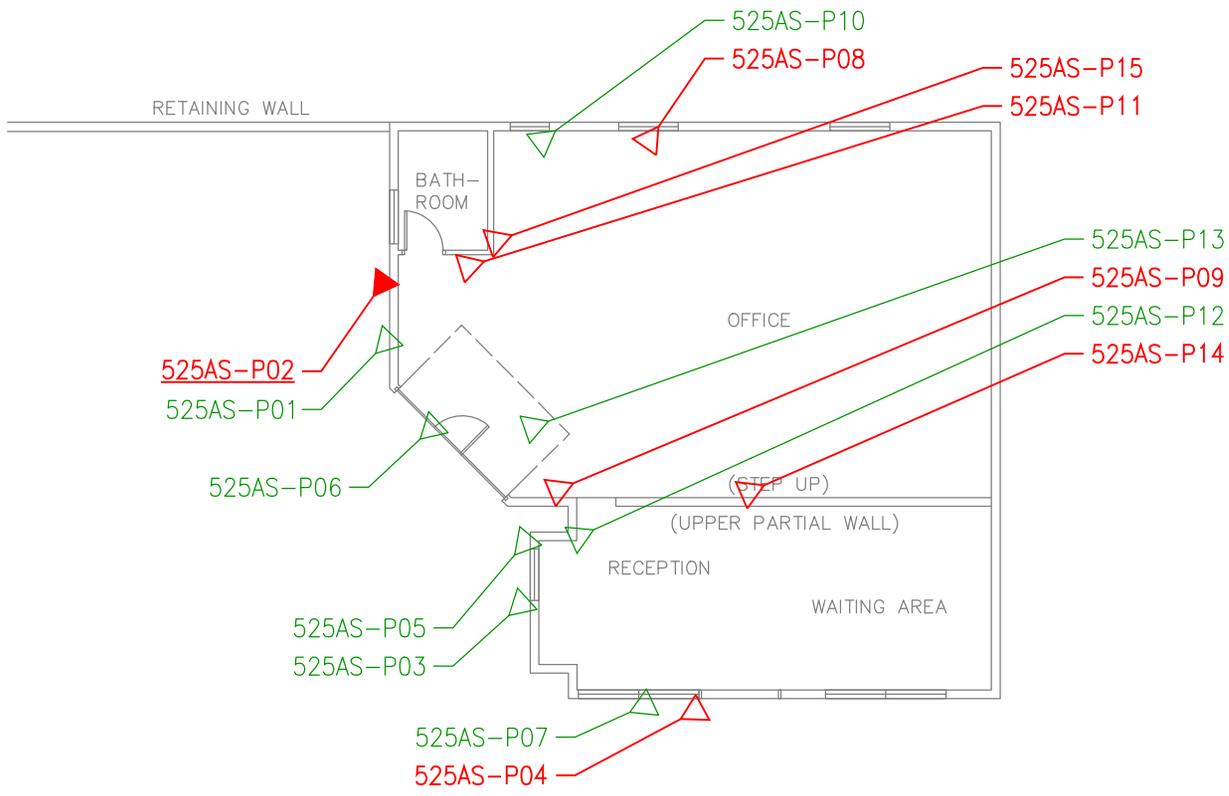
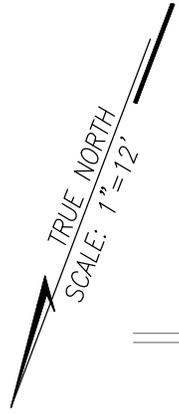
- W-01 -	<u>W-01</u>	<u>CMU BLOCK WALL/GROUT</u>
- W-02 -	<u>W-02</u>	<u>TEXTURED WALL SURFACING (OFF-WHITE, SMOOTH)</u>
- W-03 -	W-03	BRICK WALL/GROUT (9"x40" GRAY/GRAY)
- W-04 -	W-04	FIBERBOARD WALLS (WHITE-PAINTED TAN, PEGHOLES)
- W-05 -	W-05	CMU BLOCK WALL/GROUT (PROPERTY RETAINING WALL)
~~~~~	M-02	WINDOW CAULKING (WHITE)

SAMPLE LOCATIONS

- NEGATIVE ASBESTOS
- POSITIVE ASBESTOS



	SURVEY DATE: <b>MARCH 25, 2025</b>	PROJECT TITLE: DLNR DOCARE WAHIAWA SUBSTATION WAHIAWA, OAHU, HAWAII
	FIGURE TITLE: 525 AVOCADO STREET, ASBESTOS WALL SAMPLE RESULTS AND APPROXIMATE LOCATIONS	
		FIGURE NO.: <b>A-3</b>

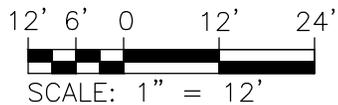


PAINT SAMPLES

- P01 OFF-WHITE LOWER PLASTER WALL
- P02 WHITE UPPER PLASTER WALL
- P03 GRAY BRICK WALL
- P04 OFF-WHITE BRICK WALL
- P05 WHITE BRICK WALL
- P06 GRAY WOOD WALL
- P07 OFF-WHITE WOOD WALL
- P08 GRAY PLASTER WALL
- P09 BEIGE PLASTER WALL
- P10 BLUE PLASTER WALL
- P11 BEIGE PLASTER WALL
- P12 BEIGE BRICK WALL
- P13 GRAY & WHITE GYPSUM WALL
- P14 BLUE PLASTER WALL
- P15 RED CONCRETE FLOOR

SAMPLE LOCATIONS

- △ NEGATIVE LEAD
- △ LEAD-CONTAINING PAINT
- ▲ LEAD-BASED PAINT



	SURVEY DATE: <b>MARCH 25, 2025</b>	PROJECT TITLE: DLNR DOCARE WAHIAWA SUBSTATION WAHIAWA, OAHU, HAWAII
	FIGURE TITLE: 525 AVOCADO STREET, LEAD PAINT CHIP SAMPLE RESULTS AND APPROXIMATE LOCATIONS	
		FIGURE NO.: <b>A-4</b>

525 AVOCADO STREET, WAHIAWA  
(March 25, 2025)



Photo 1 - H-25-525AS-C-01ABC (Close-Up)  
[BDC\BDC01722.JPG]



Photo 2 - H-25-525AS-C-01ABC (Panoramic)  
[BDC\BDC01724.JPG]

525 AVOCADO STREET, WAHIAWA  
(March 25, 2025)



Photo 3 - H-25-525AS-C-02A (Close-Up)  
[BB\DSCN4668.JPG]



Photo 4 - H-25-525AS-C-02A (Panoramic)  
[BB\DSCN4669.JPG]



Photo 5 - H-25-525AS-C-02B (Close-Up)  
[BB\DSCN4670.JPG]



Photo 6 - H-25-525AS-C-02B (Panoramic)  
[BB\DSCN4671.JPG]



Photo 7 - H-25-525AS-C-02C (Close-Up)  
[BB\DSCN4672.JPG]



Photo 8 - H-25-525AS-C-02C (Panoramic)  
[BB\DSCN4673.JPG]

525 AVOCADO STREET, WAHIAWA  
(March 25, 2025)



Photo 9 - H-25-525AS-C-02D (Close-Up)  
[BB\DSCN4674.JPG]



Photo 10 - H-25-525AS-C-02D (Panoramic)  
[BB\DSCN4675.JPG]



Photo 11 - H-25-525AS-C-02E (Close-Up)  
[BB\DSCN4676.JPG]



Photo 12 - H-25-525AS-C-02E (Panoramic)  
[BB\DSCN4677.JPG]

525 AVOCADO STREET, WAHIAWA  
(March 25, 2025)



Photo 13 - H-25-525AS-F-01A (Close-Up)  
[BDC\BDC01697.JPG]



Photo 14 - H-25-525AS-F-01A (Panoramic)  
[BDC\BDC01698.JPG]



Photo 15 - H-25-525AS-F-01B (Close-Up)  
[BDC\BDC01699.JPG]



Photo 16 - H-25-525AS-F-01B (Panoramic)  
[BDC\BDC01700.JPG]



Photo 17 - H-25-525AS-F-01C (Close-Up)  
[BDC\BDC01701.JPG]



Photo 18 - H-25-525AS-F-01C (Panoramic)  
[BDC\BDC01702.JPG]

525 AVOCADO STREET, WAHIAWA  
(March 25, 2025)



Photo 19 - H-25-525AS-F-02A (Close-Up)  
[BDC\BDC01709.JPG]



Photo 20 - H-25-525AS-F-02A (Panoramic)  
[BDC\BDC01710.JPG]



Photo 21 - H-25-525AS-F-02B (Close-Up)  
[BDC\BDC01711.JPG]



Photo 22 - H-25-525AS-F-02B (Panoramic)  
[BDC\BDC01712.JPG]



Photo 23 - H-25-525AS-F-02C (Close-Up)  
[BDC\BDC01713.JPG]



Photo 24 - H-25-525AS-F-02C (Panoramic)  
[BDC\BDC01714.JPG]

525 AVOCADO STREET, WAHIAWA  
(March 25, 2025)



Photo 25 - H-25-525AS-F-03A (Close-Up)  
[BDC\BDC01703.JPG]



Photo 26 - H-25-525AS-F-03A (Panoramic)  
[BDC\BDC01704.JPG]



Photo 27 - H-25-525AS-F-03B (Close-Up)  
[BDC\BDC01705.JPG]



Photo 28 - H-25-525AS-F-03B (Panoramic)  
[BDC\BDC01706.JPG]



Photo 29 - H-25-525AS-F-03C (Close-Up)  
[BDC\BDC01707.JPG]



Photo 30 - H-25-525AS-F-03C (Panoramic)  
[BDC\BDC01708.JPG]

525 AVOCADO STREET, WAHIAWA  
(March 25, 2025)



Photo 31 - H-25-525AS-W-01A (Close-Up)  
[BDC\BDC01725.JPG]



Photo 32 - H-25-525AS-W-01A (Panoramic)  
[BDC\BDC01726.JPG]

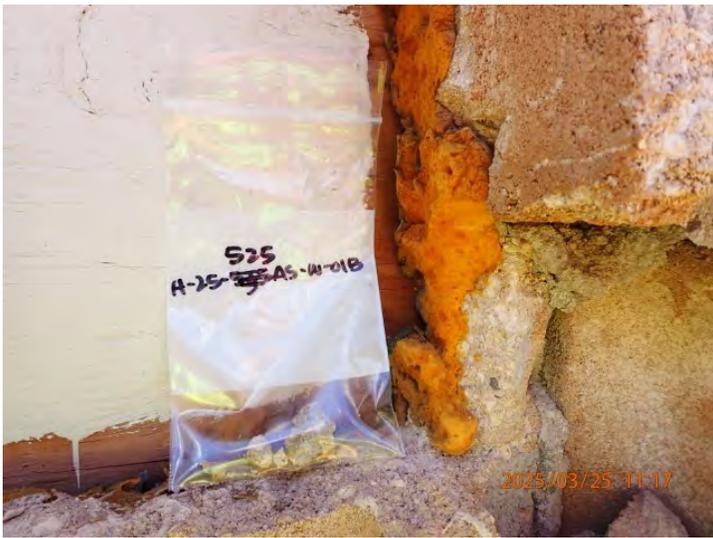


Photo 33 - H-25-525AS-W-01B (Close-Up)  
[BDC\BDC01727.JPG]



Photo 34 - H-25-525AS-W-01B (Panoramic)  
[BDC\BDC01728.JPG]



Photo 35 - H-25-525AS-W-01C (Close-Up)  
[BDC\BDC01729.JPG]



Photo 36 - H-25-525AS-W-01C (Panoramic)  
[BDC\BDC01730.JPG]

525 AVOCADO STREET, WAHIAWA  
(March 25, 2025)



Photo 37 - H-25-525AS-W-02A (Close-Up)  
[BDC\BDC01737.JPG]



Photo 38 - H-25-525AS-W-02A (Panoramic)  
[BDC\BDC01738.JPG]



Photo 39 - H-25-525AS-W-02B (Close-Up)  
[BDC\BDC01739.JPG]



Photo 40 - H-25-525AS-W-02B (Panoramic)  
[BDC\BDC01740.JPG]



Photo 41 - H-25-525AS-W-02C (Close-Up)  
[BDC\BDC01741.JPG]



Photo 42 - H-25-525AS-W-02C (Panoramic)  
[BDC\BDC01742.JPG]

525 AVOCADO STREET, WAHIAWA  
(March 25, 2025)



Photo 43 - H-25-525AS-W-02D (Close-Up)  
[BDC\BDC01743.JPG]



Photo 44 - H-25-525AS-W-02D (Panoramic)  
[BDC\BDC01744.JPG]



Photo 45 - H-25-525AS-W-02E (Close-Up)  
[BDC\BDC01745.JPG]



Photo 46 - H-25-525AS-W-02E (Panoramic)  
[BDC\BDC01746.JPG]

525 AVOCADO STREET, WAHIAWA  
(March 25, 2025)



Photo 47 - H-25-525AS-W-03A (Close-Up)  
[BDC\BDC01731.JPG]



Photo 48 - H-25-525AS-W-03A (Panoramic)  
[BDC\BDC01732.JPG]

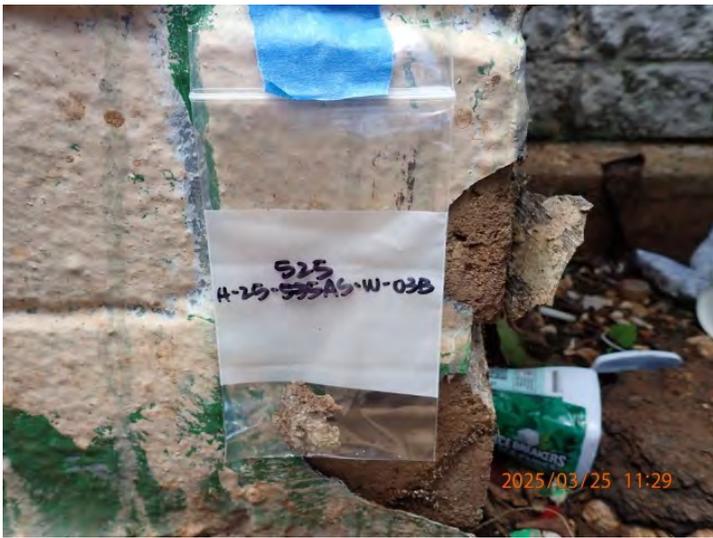


Photo 49 - H-25-525AS-W-03B (Close-Up)  
[BDC\BDC01733.JPG]



Photo 50 - H-25-525AS-W-03B (Panoramic)  
[BDC\BDC01734.JPG]

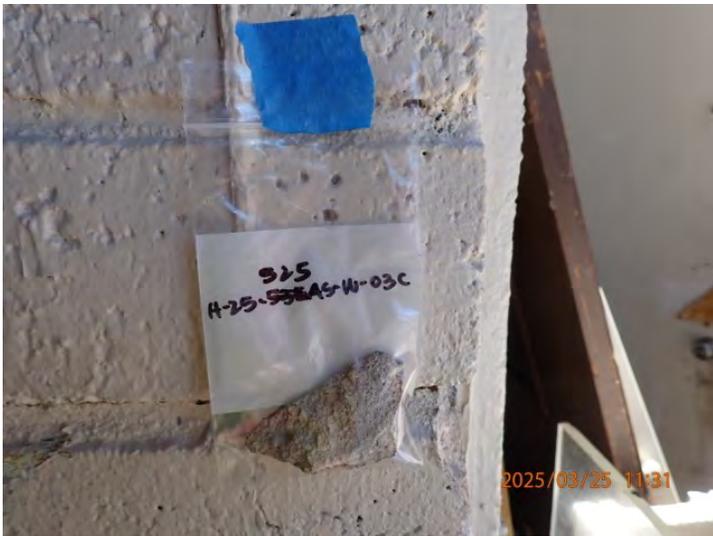


Photo 51 - H-25-525AS-W-03C (Close-Up)  
[BDC\BDC01735.JPG]



Photo 52 - H-25-525AS-W-03C (Panoramic)  
[BDC\BDC01736.JPG]

525 AVOCADO STREET, WAHIAWA  
(March 25, 2025)



Photo 53 - H-25-525AS-W-04A (Close-Up)  
[BB\DSCN4657.JPG]



Photo 54 - H-25-525AS-W-04AB (Panoramic)  
[BB\DSCN4659.JPG]



Photo 55 - H-25-525AS-W-04B (Close-Up)  
[BB\DSCN4658.JPG]



Photo 56 - H-25-525AS-W-04C (Close-Up)  
[BB\DSCN4660.JPG]



Photo 57 - H-25-525AS-W-04C (Panoramic)  
[BB\DSCN4661.JPG]

525 AVOCADO STREET, WAHIAWA  
(March 25, 2025)



Photo 58 - H-25-525AS-W-05A (Close-Up)  
[BDC\BDC01747.JPG]



Photo 59 - H-25-525AS-W-05A (Panoramic)  
[BDC\BDC01748.JPG]

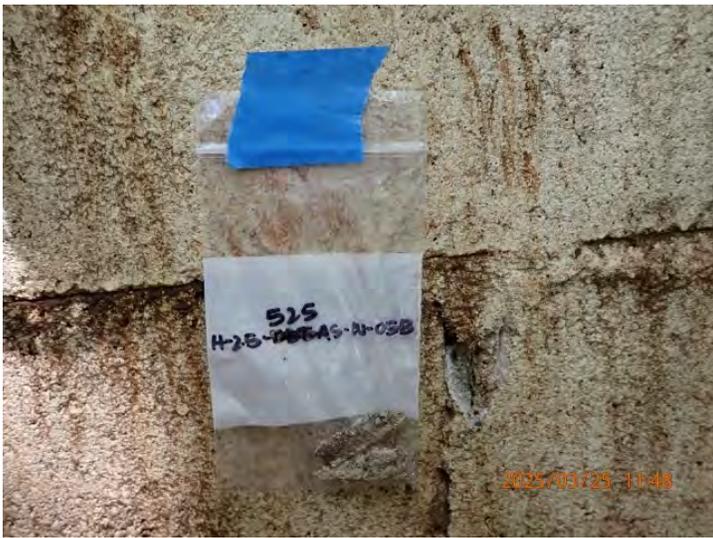


Photo 60 - H-25-525AS-W-05B (Close-Up)  
[BDC\BDC01749.JPG]



Photo 61 - H-25-525AS-W-05B (Panoramic)  
[BDC\BDC01750.JPG]



Photo 62 - H-25-525AS-W-05C (Close-Up)  
[BDC\BDC01751.JPG]



Photo 63 - H-25-525AS-W-05C (Panoramic)  
[BDC\BDC01752.JPG]

525 AVOCADO STREET, WAHIAWA  
(March 25, 2025)



Photo 64 - H-25-525AS-M-01A (Close-Up)  
[BDC\BDC01715.JPG]



Photo 65 - H-25-525AS-M-01A (Panoramic)  
[BDC\BDC01716.JPG]



Photo 66 - H-25-525AS-M-01B (Close-Up)  
[BDC\BDC01717.JPG]



Photo 67 - H-25-525AS-M-01B (Panoramic)  
[BDC\BDC01718.JPG]



Photo 68 - H-25-525AS-M-01C (Close-Up)  
[BDC\BDC01720.JPG]



Photo 69 - H-25-525AS-M-01C (Panoramic)  
[BDC\BDC01721.JPG]

525 AVOCADO STREET, WAHIAWA  
(March 25, 2025)



Photo 70 - H-25-525AS-M-02A (Close-Up)  
[BB\DSCN4662.JPG]



Photo 71 - H-25-525AS-M-02A (Panoramic)  
[BB\DSCN4663.JPG]



Photo 72 - H-25-525AS-M-02B (Close-Up)  
[BB\DSCN4664.JPG]



Photo 73 - H-25-525AS-M-02B (Panoramic)  
[BB\DSCN4665.JPG]



Photo 74 - H-25-525AS-M-02C (Close-Up)  
[BB\DSCN4666.JPG]



Photo 75 - H-25-525AS-M-02C (Panoramic)  
[BB\DSCN4667.JPG]

525 AVOCADO STREET, WAHIAWA  
(March 25, 2025)



Photo 76 - 525AS-P01 (Close-Up)  
[BB\DSCN4615.JPG]



Photo 77 - 25AS-P01 (Panoramic)  
[BB\DSCN4616.JPG]



Photo 78 - 525AS-P02 (Close-Up)  
[BB\DSCN4617.JPG]



Photo 79 - 525AS-P02 (Panoramic)  
[BB\DSCN4618.JPG]



Photo 80 - 525AS-P03 (Close-Up)  
[BB\DSCN4619.JPG]

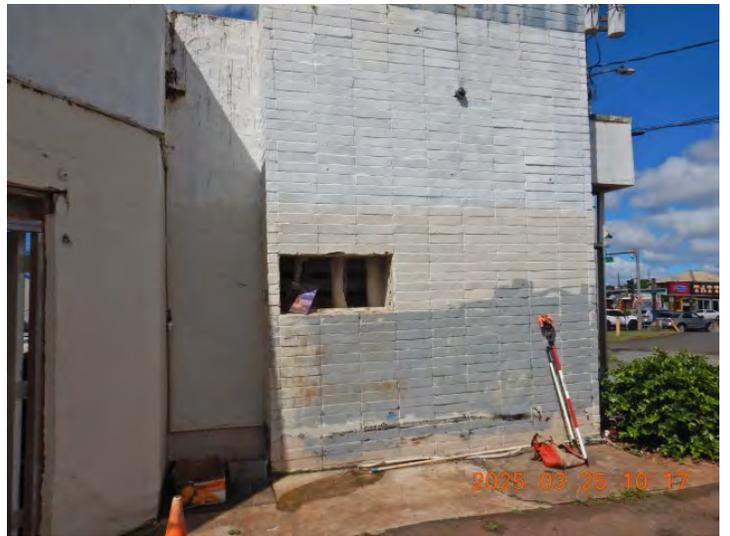


Photo 81 - 525AS-P03 (Panoramic)  
[BB\DSCN4620.JPG]

525 AVOCADO STREET, WAHIAWA  
(March 25, 2025)



Photo 82 - 525AS-P04 (Close-Up)  
[BB\DSCN4621.JPG]



Photo 83 - 525AS-P04 (Panoramic)  
[BB\DSCN4622.JPG]



Photo 84 - 525AS-P05 (Close-Up)  
[BB\DSCN4623.JPG]



Photo 85 - 525AS-P05 (Panoramic)  
[BB\DSCN4624.JPG]



Photo 86 - 525AS-P06 (Close-Up)  
[BB\DSCN4626.JPG]



Photo 87 - 525AS-P06 (Panoramic)  
[BB\DSCN4627.JPG]

525 AVOCADO STREET, WAHIAWA  
(March 25, 2025)



Photo 88 - 525AS-P07 (Close-Up)  
[BB\DSCN4628.JPG]



Photo 89 - 525AS-P07 (Panoramic)  
[BB\DSCN4629.JPG]

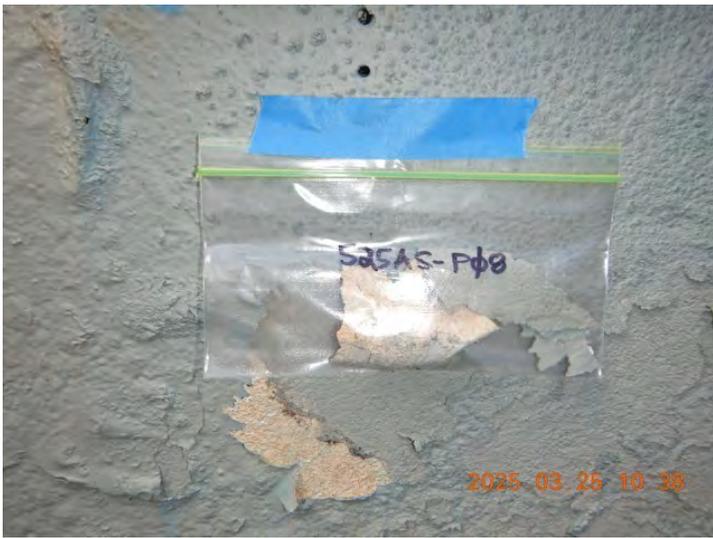


Photo 90 - 525AS-P08 (Close-Up)  
[BB\DSCN4632.JPG]



Photo 91 - 525AS-P08 (Panoramic)  
[BB\DSCN4633.JPG]



Photo 92 - 525AS-P09 (Close-Up)  
[BB\DSCN4634.JPG]



Photo 93 - 525AS-P09 (Panoramic)  
[BB\DSCN4635.JPG]

525 AVOCADO STREET, WAHIAWA  
(March 25, 2025)



Photo 94 - 525AS-P10 (Close-Up)  
[BB\DSCN4638.JPG]



Photo 95 - 525AS-P10 (Panoramic)  
[BB\DSCN4639.JPG]



Photo 96 - 525AS-P11 (Close-Up)  
[BB\DSCN4640.JPG]



Photo 97 - 525AS-P11 (Panoramic)  
[BB\DSCN4641.JPG]



Photo 98 - 525AS-P12 (Close-Up)  
[BB\DSCN4636.JPG]



Photo 99 - 525AS-P12 (Panoramic)  
[BB\DSCN4637.JPG]

525 AVOCADO STREET, WAHIAWA  
(March 25, 2025)



Photo 100 - 525AS-P13 (Close-Up)  
[BB\DSCN4630.JPG]



Photo 101 - 525AS-P13 (Panoramic)  
[BB\DSCN4631.JPG]



Photo 102 - 525AS-P14 (Close-Up)  
[BB\DSCN4655.JPG]



Photo 103 - 525AS-P14 (Panoramic)  
[BB\DSCN4656.JPG]



Photo 104 - 525AS-P15 (Close-Up)  
[BB\DSCN4642.JPG]



Photo 105 - 525AS-P15 (Panoramic)  
[BB\DSCN4643.JPG]





Final Report

Bulk Asbestos Analysis

(EPA Method 40CFR, Part 763, Appendix E to Subpart E and EPA 600/R-93-116, Visual Area Estimation)
NVLAP Lab Code: 101459-0

Element Environmental, LLC
Bernice Balete
98-030 Hekaha Street
Unit 9
Aiea, HI 96701

Client ID: L1617
Report Number: B371180
Date Received: 04/22/25
Date Analyzed: 05/13/25
Date Printed: 05/13/25
First Reported: 05/13/25

Job ID/Site: 250018; 525 Avocado Street; Wahiawa, Oahu, Hawaii

SGSFL Job ID: L1617
Total Samples Submitted: 40
Total Samples Analyzed: 40

Date(s) Collected: 03/25/2025

Table with 8 columns: Sample ID, Lab Number, Asbestos Type, Percent in Layer, Asbestos Type, Percent in Layer, Asbestos Type, Percent in Layer. Rows include samples H-25-525AS-C-01A through H-25-525AS-C-02A with layer descriptions and composite values.

Client Name: Element Environmental, LLC
Report Number: B371180
Date Printed: 05/13/25

Table with 8 columns: Sample ID, Lab Number, Asbestos Type, Percent in Layer, Asbestos Type, Percent in Layer, Asbestos Type, Percent in Layer. Rows include samples H-25-525AS-C-02B through H-25-525AS-F-01A with layer descriptions and composite values.

Client Name: Element Environmental, LLC				Report Number: B371180 Date Printed: 05/13/25			
Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
<b>H-25-525AS-F-01B</b>	51853267						
Layer: Grey Cementitious Material			ND				
Layer: Grey Cementitious Material			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (Trace)							
<b>H-25-525AS-F-01C</b>	51853268						
Layer: Grey Cementitious Material			ND				
Layer: Grey Cementitious Material			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (Trace)							
<b>H-25-525AS-F-02A</b>	51853269						
Layer: Blue Tile			ND				
Layer: Yellow Mastic			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (Trace)							
<b>H-25-525AS-F-02B</b>	51853270						
Layer: Blue Tile			ND				
Layer: Yellow Mastic			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (Trace)							
<b>H-25-525AS-F-02C</b>	51853271						
Layer: Blue Tile			ND				
Layer: Yellow Mastic			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (Trace)							
<b>H-25-525AS-F-03A</b>	51853272						
Layer: Black Mastic		Chrysotile	10 %				
Total Composite Values of Fibrous Components:		<b>Asbestos (10%)</b>					
Cellulose (Trace)							
<b>H-25-525AS-F-03B</b>	51853273						
Layer: Black Mastic		Chrysotile	10 %				
Total Composite Values of Fibrous Components:		<b>Asbestos (10%)</b>					
Cellulose (Trace)							
<b>H-25-525AS-F-03C</b>	51853274						
Layer: Black Mastic		Chrysotile	5 %				
Total Composite Values of Fibrous Components:		<b>Asbestos (5%)</b>					
Cellulose (Trace)							
<b>H-25-525AS-M-01A</b>	51853275						
Layer: Multicolored Non-Fibrous Material			ND				
Layer: Yellow Non-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (Trace)							

Client Name: Element Environmental, LLC				Report Number: B371180 Date Printed: 05/13/25			
Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
<b>H-25-525AS-M-01B</b>	51853276						
Layer: Multicolored Non-Fibrous Material			ND				
Layer: Yellow Non-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (Trace)							
<b>H-25-525AS-M-01C</b>	51853277						
Layer: Multicolored Non-Fibrous Material			ND				
Layer: Yellow Non-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (Trace)							
<b>H-25-525AS-M-02A</b>	51853278						
Layer: Off-White Non-Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (Trace)							
<b>H-25-525AS-M-02B</b>	51853279						
Layer: Off-White Non-Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (Trace)							
<b>H-25-525AS-M-02C</b>	51853280						
Layer: Off-White Non-Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (Trace)							
<b>H-25-525AS-W-01A</b>	51853281						
Layer: Grey Cementitious Material			ND				
Layer: Beige Cementitious Material			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (Trace)							
<b>H-25-525AS-W-01B</b>	51853282						
Layer: Grey Cementitious Material			ND				
Layer: Beige Cementitious Material			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (Trace)							
<b>H-25-525AS-W-01C</b>	51853283						
Layer: Black Non-Fibrous Material		Chrysotile	5 %				
Layer: Grey Cementitious Material			ND				
Layer: Beige Cementitious Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (Trace)</b>					
Cellulose (Trace)							
Comment: This comment applies to the Black Non-Fibrous Material only - Insufficient material for additional analyses.							

Client Name: Element Environmental, LLC  
 Report Number: B371180  
 Date Printed: 05/13/25

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
<b>H-25-525AS-W-02A</b>	51853284						
Layer: Beige Non-Fibrous Material			ND				
Layer: Silver Paint		Chrysotile	3 %				
Layer: Beige Non-Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (Trace)</b>					
Cellulose (Trace)							
Comment: This comment applies to the Silver Paint only - Insufficient material for additional analyses.							
<b>H-25-525AS-W-02B</b>	51853285						
Layer: Beige Non-Fibrous Material			ND				
Layer: Silver Paint		Chrysotile	3 %				
Layer: Beige Non-Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (Trace)</b>					
Cellulose (Trace)							
Comment: This comment applies to the Silver Paint only - Insufficient material for additional analyses.							
<b>H-25-525AS-W-02C</b>	51853286						
Layer: Beige Non-Fibrous Material			ND				
Layer: Silver Paint		Chrysotile	3 %				
Layer: Beige Non-Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (Trace)</b>					
Cellulose (Trace)							
Comment: This comment applies to the Silver Paint only - Insufficient material for additional analyses.							
<b>H-25-525AS-W-02D</b>	51853287						
Layer: Beige Non-Fibrous Material			ND				
Layer: Silver Paint		Chrysotile	3 %				
Layer: Beige Non-Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (Trace)</b>					
Cellulose (Trace)							
Comment: This comment applies to the Silver Paint only - Insufficient material for additional analyses.							
<b>H-25-525AS-W-02E</b>	51853288						
Layer: Beige Non-Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (Trace)							
<b>H-25-525AS-W-03A</b>	51853289						
Layer: Grey Cementitious Material			ND				
Layer: Grey Cementitious Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (Trace)							

Client Name: Element Environmental, LLC  
 Report Number: B371180  
 Date Printed: 05/13/25

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
<b>H-25-525AS-W-03B</b>	51853290						
Layer: Beige Cementitious Material			ND				
Layer: Grey Cementitious Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (Trace)							
<b>H-25-525AS-W-03C</b>	51853291						
Layer: Beige Cementitious Material			ND				
Layer: Grey Cementitious Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (Trace)							
<b>H-25-525AS-W-04A</b>	51853292						
Layer: Tan Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (95 %)							
<b>H-25-525AS-W-04B</b>	51853293						
Layer: Tan Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (95 %)							
<b>H-25-525AS-W-04C</b>	51853294						
Layer: Tan Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (95 %)							
<b>H-25-525AS-W-05A</b>	51853295						
Layer: Grey Cementitious Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (Trace)							
<b>H-25-525AS-W-05B</b>	51853296						
Layer: Grey Cementitious Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (Trace)							
<b>H-25-525AS-W-05C</b>	51853297						
Layer: Grey Cementitious Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (Trace)							





Sample ID	Sample Date	Sample Location	Sample Description
H-25-525AS-C-01A	3/25/2025	Interior	Acoustic Ceiling Tile (1'x2' white-painted brown with pegholes) & Mastic (brown)
H-25-525AS-C-01B	3/25/2025	Interior	Acoustic Ceiling Tile (1'x2' white-painted brown with pegholes) & Mastic (brown)
H-25-525AS-C-01C	3/25/2025	Interior	Acoustic Ceiling Tile (1'x2' white-painted brown with pegholes) & Mastic (brown)
H-25-525AS-C-02A	3/25/2025	Interior	Roof Coating (white) & Tar Paper (black)
H-25-525AS-C-02B	3/25/2025	Interior	Roof Coating (white) & Tar Paper (black)
H-25-525AS-C-02C	3/25/2025	Exterior	Roof Coating (white) & Tar Paper (black) (debris pile)
H-25-525AS-C-02D	3/25/2025	Exterior	Roof Coating (white) & Tar Paper (black) (debris pile)
H-25-525AS-C-02E	3/25/2025	Exterior	Roof Coating (white) & Tar Paper (black) (debris pile)
H-25-525AS-F-01A	3/25/2025	Exterior	Concrete Floor/Foundation
H-25-525AS-F-01B	3/25/2025	Exterior	Concrete Floor/Foundation
H-25-525AS-F-01C	3/25/2025	Interior	Concrete Floor/Foundation
H-25-525AS-F-02A	3/25/2025	Interior	Vinyl Floor Tile/Mastic (blue/yellow)
H-25-525AS-F-02B	3/25/2025	Interior	Vinyl Floor Tile/Mastic (blue/yellow)
H-25-525AS-F-02C	3/25/2025	Interior	Vinyl Floor Tile/Mastic (blue/yellow)
H-25-525AS-F-03A	3/25/2025	Interior	Floor Mastic remnants (black)
H-25-525AS-F-03B	3/25/2025	Interior	Floor Mastic remnants (black)
H-25-525AS-F-03C	3/25/2025	Interior	Floor Mastic remnants (black)
H-25-525AS-M-01A	3/25/2025	Interior	Floor Mastic remnants (yellow)
H-25-525AS-M-01B	3/25/2025	Interior	Floor Mastic remnants (yellow)
H-25-525AS-M-01C	3/25/2025	Interior	Floor Mastic remnants (yellow)
H-25-525AS-M-02A	3/25/2025	Exterior	Window Caulking (white)
H-25-525AS-M-02B	3/25/2025	Exterior	Window Caulking (white)
H-25-525AS-M-02C	3/25/2025	Exterior	Window Caulking (white)
H-25-525AS-W-01A	3/25/2025	Exterior	CMU Block Wall/Grout
H-25-525AS-W-01B	3/25/2025	Exterior	CMU Block Wall/Grout
H-25-525AS-W-01C	3/25/2025	Exterior	CMU Block Wall/Grout
H-25-525AS-W-02A	3/25/2025	Exterior	Textured Wall Surfacing (off-white, smooth)
H-25-525AS-W-02B	3/25/2025	Exterior	Textured Wall Surfacing (off-white, smooth)
H-25-525AS-W-02C	3/25/2025	Exterior	Textured Wall Surfacing (off-white, smooth)
H-25-525AS-W-02D	3/25/2025	Exterior	Textured Wall Surfacing (off-white, smooth)
H-25-525AS-W-02E	3/25/2025	Exterior	Textured Wall Surfacing (off-white, smooth)
H-25-525AS-W-03A	3/25/2025	Exterior	Brick Wall/Grout (9"X40" gray/gray)
H-25-525AS-W-03B	3/25/2025	Exterior	Brick Wall/Grout (9"X40" gray/gray)
H-25-525AS-W-03C	3/25/2025	Interior	Brick Wall/Grout (9"X40" gray/gray)
H-25-525AS-W-04A	3/25/2025	Interior	Fiberboard Wall (white-painted tan with pegholes)
H-25-525AS-W-04B	3/25/2025	Interior	Fiberboard Wall (white-painted tan with pegholes)
H-25-525AS-W-04C	3/25/2025	Interior	Fiberboard Wall (white-painted tan with pegholes)
H-25-525AS-W-05A	3/25/2025	Exterior	CMU Block Wall/Grout (Property Retaining Wall)
H-25-525AS-W-05B	3/25/2025	Exterior	CMU Block Wall/Grout (Property Retaining Wall)
H-25-525AS-W-05C	3/25/2025	Exterior	CMU Block Wall/Grout (Property Retaining Wall)

# Metals Analysis of Paints

(AIHA-LAP, LLC Accreditation, Lab ID #101762)

Element Environmental, LLC  
Bernice Baleté  
98-030 Hekaha Street  
Unit 9  
Aiea, HI 96701

Client ID: L1617  
Report Number: M268206  
Date Received: 04/22/25  
Date Analyzed: 05/01/25  
Date Printed: 05/06/25  
First Reported: 05/06/25

Job ID / Site: 250018; 525 Avocado Street; Wahiawa, Oahu, Hawaii  
Date(s) Collected: 03/25/2025

SGSFL Job ID: L1617  
Total Samples Submitted: 15  
Total Samples Analyzed: 15

Sample Number	Lab Number	Analyte	Result	Result Units	Reporting Limit*	Method Reference
525AS-P01	LM286888	Pb	< 0.007	wt%	0.007	EPA 3050B/7000B
525AS-P02	LM286889	Pb	0.6	wt%	0.2	EPA 3050B/7000B
525AS-P03	LM286890	Pb	< 0.006	wt%	0.006	EPA 3050B/7000B
525AS-P04	LM286891	Pb	0.011	wt%	0.006	EPA 3050B/7000B
525AS-P05	LM286892	Pb	< 0.006	wt%	0.006	EPA 3050B/7000B
525AS-P06	LM286893	Pb	< 0.006	wt%	0.006	EPA 3050B/7000B
525AS-P07	LM286894	Pb	< 0.006	wt%	0.006	EPA 3050B/7000B
525AS-P08	LM286895	Pb	0.086	wt%	0.006	EPA 3050B/7000B
525AS-P09	LM286896	Pb	0.008	wt%	0.006	EPA 3050B/7000B
525AS-P10	LM286897	Pb	< 0.006	wt%	0.006	EPA 3050B/7000B
525AS-P11	LM286898	Pb	0.11	wt%	0.006	EPA 3050B/7000B
525AS-P12	LM286899	Pb	< 0.006	wt%	0.006	EPA 3050B/7000B
525AS-P13	LM286900	Pb	< 0.007	wt%	0.007	EPA 3050B/7000B
525AS-P14	LM286901	Pb	0.066	wt%	0.006	EPA 3050B/7000B
525AS-P15	LM286902	Pb	0.012	wt%	0.007	EPA 3050B/7000B

\* The Reporting Limit represents the lowest amount of analyte that the laboratory can confidently detect in the sample, and is not a regulatory level. The Units for the Reporting Limit are the same as the Units for the Final Results.

Kevin Poon, Laboratory Supervisor, Hayward Laboratory

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Note\* Sampling data used in this report was provided by the client as noted on the associated chain of custody form.



Sample ID	Sample Date	Sample Location	Sample Description
525AS-P01	3/25/2025	Exterior	Off-white Lower Plaster Wall
525AS-P02	3/25/2025	Exterior	White Upper Plaster Wall
525AS-P03	3/25/2025	Exterior	Gray Brick Wall
525AS-P04	3/25/2025	Exterior	Off-white Brick Wall
525AS-P05	3/25/2025	Exterior	White Brick Wall
525AS-P06	3/25/2025	Exterior	Gray Wood Wall
525AS-P07	3/25/2025	Exterior	Off-white Wood Wall
525AS-P08	3/25/2025	Interior	Gray Plaster Wall
525AS-P09	3/25/2025	Interior	Beige Plaster Wall
525AS-P10	3/25/2025	Interior	Blue Plaster Wall
525AS-P11	3/25/2025	Interior	Beige Plaster Wall
525AS-P12	3/25/2025	Interior	Beige Brick Wall
525AS-P13	3/25/2025	Interior	White Gypsum Wall (detached)
525AS-P14	3/25/2025	Interior	Blue Plaster Wall
525AS-P15	3/25/2025	Interior	Red Concrete Floor

RECEIVED  
APR 22 2025  
BY: *[Signature]*

*Req' mjesdy  
04/12/25 10:00 PM*

RECEIVED  
APR 23 2025  
BY: *[Signature]* 9:30  
#08526

APPENDIX B  
535 Avocado Street



## Laboratory Asbestos Results

535 Avocado Street  
Wahiawa, Oahu, Hawaii

Hazardous Materials Survey Report  
Survey Date: March 25, 2025

Homogeneous Area	Material Type	Material Description	Friable	Condition	Sample ID	Sample Location	Layer (% of Combined Sample)	Asbestos %	
H-25-535AS-C-01	Surfacing	Plaster Ceiling (tan)	NF	Intact	H-25-535AS-C-01A	Exterior	1 Grey Plaster (85%)	ND	
							2 White Plaster (10%)	ND	
							3 Paint (5%)	ND	
					H-25-535AS-C-01B		1 Grey Plaster (95%)	ND	
							2 Paint (5%)	ND	
					H-25-535AS-C-01C		1 Grey Plaster (100%)	ND	
H-25-535AS-F-01	Miscellaneous	Concrete Floor/Foundation	NF	Intact	H-25-535AS-F-01A	Exterior	1 Grey Cementitious Material (100%)	ND	
							1 Grey Cementitious Material (100%)	ND	
						Interior	1 Grey Cementitious Material (95%)	ND	
					H-25-535AS-F-01C		2 Grey Cementitious Material (5%)	ND	
H-25-535AS-W-01	Miscellaneous	CMU Block Wall/Grout	NF	Intact	H-25-535AS-W-01A	Exterior	1 Grey Cementitious Material (100%)	ND	
							1 Grey Cementitious Material (84%)	ND	
						Interior	2 Grey Cementitious Material (15%)	ND	
					H-25-535AS-W-01B		3 Paint (1%)	ND	
					H-25-535AS-W-01C	Exterior	1 Grey Cementitious Material (85%)	ND	
							2 Grey Cementitious Material (15%)	ND	
H-25-535AS-W-02	Surfacing	Textured Wall Surfacing (gray, medium) and Sealant Paper (black, observed around windows)	NF	Intact	H-25-535AS-W-02A	Exterior	1 Grey Cementitious Material (70%)	ND	
								2 Grey Cementitious Material (15%)	ND
								3 Black Felt (15%)	35% Chrysotile
								1 Grey Cementitious Material (70%)	ND
								2 Grey Cementitious Material (15%)	ND
								3 Black Felt (15%)	ND
					H-25-535AS-W-02B		1 Grey Cementitious Material (70%)	ND	
					H-25-535AS-W-02C		2 Grey Cementitious Material (15%)	ND	
							3 Black Felt (15%)	ND	
H-25-535AS-W-03	Surfacing	Plaster Walls (tan)	NF	Intact	H-25-535AS-W-03A	Exterior	1 Grey Cementitious Material (95%)	ND	
							2 Paint (5%)	ND	
						Exterior	1 Grey Cementitious Material (100%)	ND	
					H-25-535AS-W-03B		1 White Cementitious Material (95%)	ND	
					H-25-535AS-W-03C	Interior	2 Paint (5%)	ND	
H-25-535AS-W-04	Surfacing	Textured Wall Surfacing (green, fine) and Mastic (brown)	NF	Significantly Damaged	H-25-535AS-W-04A	Exterior	1 Brown Mastic (70%)	ND	
								2 Green Non-Fibrous Material (10%)	ND
								3 Beige Non-Fibrous Material (15%)	ND
								4 Paint (5%)	ND
					H-25-535AS-W-04B			1 Brown Mastic (70%)	ND
								2 Green Non-Fibrous Material (10%)	ND
								3 Beige Non-Fibrous Material (15%)	ND
								4 Paint (5%)	ND
					H-25-535AS-W-04C			1 Brown Mastic (70%)	ND
	2 Green Non-Fibrous Material (10%)	ND							
	3 Beige Non-Fibrous Material (15%)	ND							
		4 Paint (5%)	ND						
H-25-535AS-W-05	Miscellaneous	Roofing & Tar Paper (black) on Makeshift Wood Plank Walls	Friable	Significantly Damaged	H-25-535AS-W-05A	Exterior	1 Black Semi-Fibrous Material (100%)	ND	
								1 Black Semi-Fibrous Material (100%)	25% Chrysotile
								1 Black Semi-Fibrous Material (100%)	ND

## Laboratory Asbestos Results

535 Avocado Street  
Wahiawa, Oahu, Hawaii

Hazardous Materials Survey Report  
Survey Date: March 25, 2025

Homogeneous Area	Material Type	Material Description	Friable	Condition	Sample ID	Sample Location	Layer (% of Combined Sample)	Asbestos %
H-25-535AS-M-01	Miscellaneous	Window Caulking (white)	NF	Significantly Damaged	H-25-535AS-M-01A	Exterior	1 Grey Cementitious Material (95%)	ND
					H-25-535AS-M-01B		2 Grey Non-Fibrous Material (5%)	ND
							1 Grey Non-Fibrous Material (93%)	ND
							2 Paint (5%)	ND
					H-25-535AS-M-01C		3 Grey Non-Fibrous Material (2%)	ND
							1 Grey Non-Fibrous Material (95%)	ND
H-25-535AS-AT-01	Miscellaneous	Fire-rated Door/Door Frame	NF	Intact	H-25-535AS-AT-01	Main Entrance	2 Paint (5%)	ND
							N/A	>1% Assumed

## Laboratory Lead Results

535 Avocado Street  
Wahiawa, Oahu, Hawaii

Hazardous Materials Survey Report  
Survey Date: March 25, 2025

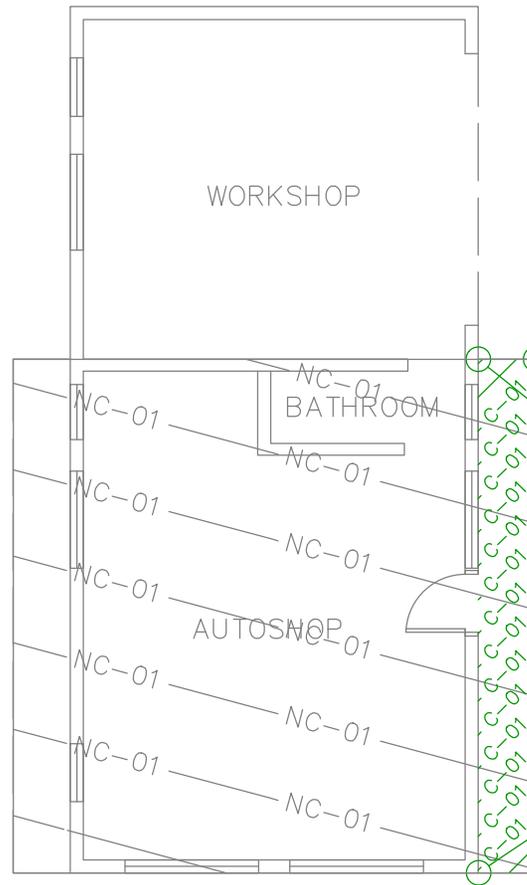
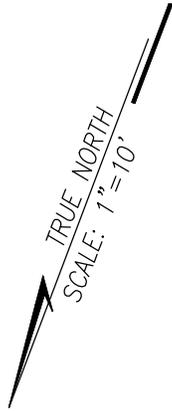
Sample ID	Sample Description	Sample Location	Condition	Lead %
535AS-P01	Gray CMU Block Wall	Exterior	Intact	0.28
535AS-P02	Beige CMU Block Wall	Exterior	Intact	1.9
535AS-P03	White Metal Ceiling Beam	Exterior	Fair	0.8
535AS-P04	White CMU Block Wall	Exterior	Intact (rust)	5.4
535AS-P05	Gray CMU Block Wall	Interior	Intact	0.043
535AS-P06	Gray Lower Wall Surfacing	Interior	Intact	0.021
535AS-P07	White CMU Block Wall	Interior	Intact	0.29
535AS-P08	Green Wall Surfacing (possible old roof plank)	Exterior	Intact	1.0

ND < RL = Lead not detected above Laboratory Reporting Limit (RL)

LCP = Lead-containing paint > Laboratory RL and < 0.5 wt% or 5,000 mg/kg

LBP = Lead-based paint  $\geq$  0.5 wt% or 5,000 mg/kg





CEILING HOMOGENEOUS AREAS

	C-01	PLASTER CEILING (TAN)
	NC-01	METAL ROOF FRAME

NOTES

NO CEILING/ROOFING EXISTED ON THE METAL ROOF FRAME (NC-01); RENOVATIONS POSSIBLY STOPPED BEFORE THE ROOF COULD BE INSTALLED.

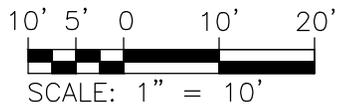
PLASTER CEILING (C-01) OBSERVED ONLY ALONG WESTERN AWNING.

ROOM REFERENCES ARE FROM APRIL 30, 2021 DRAWINGS.

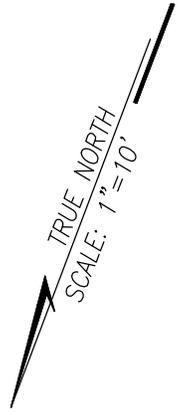
- H-25-535AS-C-01B
- H-25-535AS-C-01C
- H-25-535AS-C-01A

SAMPLE LOCATIONS

NEGATIVE ASBESTOS

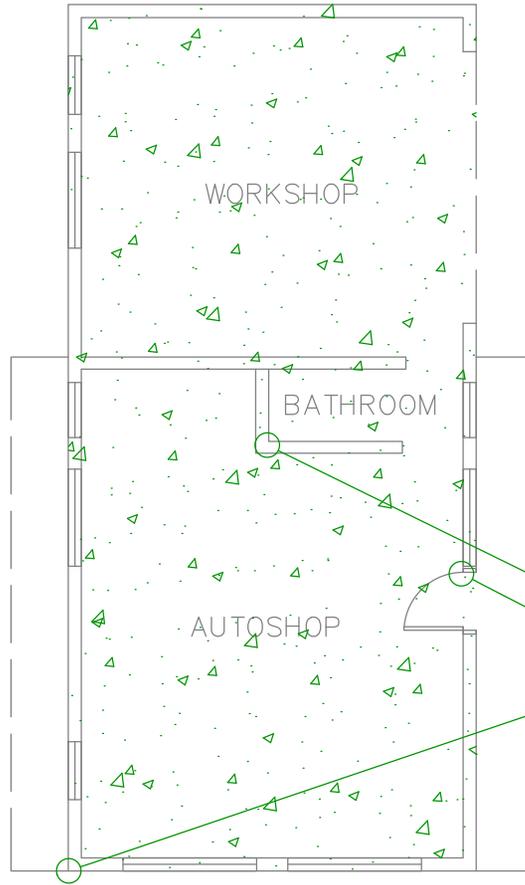


	SURVEY DATE: <b>MARCH 25, 2025</b>	PROJECT TITLE: DLNR DOCARE WAHIAWA SUBSTATION WAHIAWA, OAHU, HAWAII
	FIGURE TITLE: 535 AVOCADO STREET, ASBESTOS CEILING SAMPLE RESULTS AND APPROXIMATE LOCATIONS	
		FIGURE NO.: <b>B-1</b>



FLOOR HOMOGENEOUS AREA

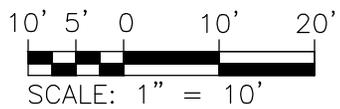
 F-01 CONCRETE FLOOR/FOUNDATION



H-25-535AS-F-01C  
H-25-535AS-F-01B  
H-25-535AS-F-01A

SAMPLE LOCATIONS

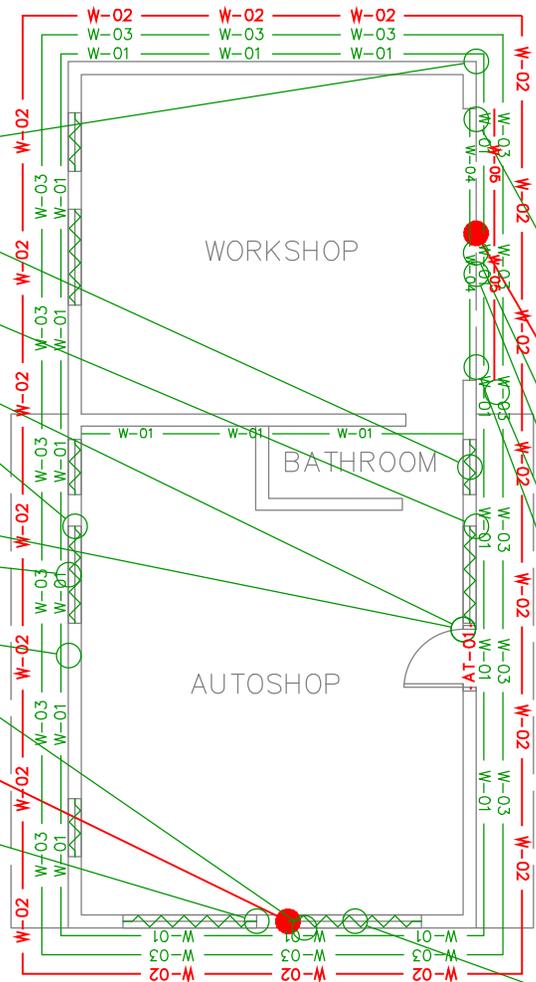
 NEGATIVE ASBESTOS



	SURVEY DATE: <b>MARCH 25, 2025</b>	PROJECT TITLE: DLNR DOCARE WAHIAWA SUBSTATION WAHIAWA, OAHU, HAWAII
	FIGURE TITLE: 535 AVOCADO STREET, ASBESTOS FLOOR SAMPLE RESULTS AND APPROXIMATE LOCATIONS	
		FIGURE NO.: <b>B-2</b>



- H-25-535AS-W-01C
- H-25-535AS-M-01B
- H-25-535AS-W-02C
- H-25-535AS-W-01B
- H-25-535AS-W-01A
- H-25-535AS-W-03C
- H-25-535AS-W-03A
- H-25-535AS-W-02B
- H-25-535AS-W-03B
- H-25-535AS-W-02A  
(black felt)
- H-25-535AS-M-01A



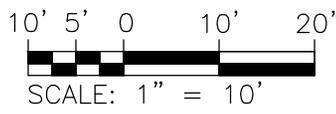
WALL HOMOGENEOUS AREAS

- W-01 -	W-01	CMU BLOCK WALL/GROUT
- W-02 -	<u>W-02</u>	TEXTURED WALL SURFACING (GRAY, MEDIUM) AND SEALANT PAPER (BLACK, OBSERVED AROUND WINDOWS. MAY COVER ENTIRE BUILDING)
- W-03 -	W-03	PLASTER WALL (TAN)
- W-04 -	W-04	TEXTURED WALL SURFACING (GREEN, FINE) AND MASTIC (BROWN)
- W-05 -	<u>W-05</u>	<u>ROOFING &amp; TAR PAPER (BLACK, FINE)</u>
~ ~ ~	M-01	WINDOW CAULKING (WHITE)
- AT-01 -	AT-01	FIRE-RATED DOOR/DOOR FRAME

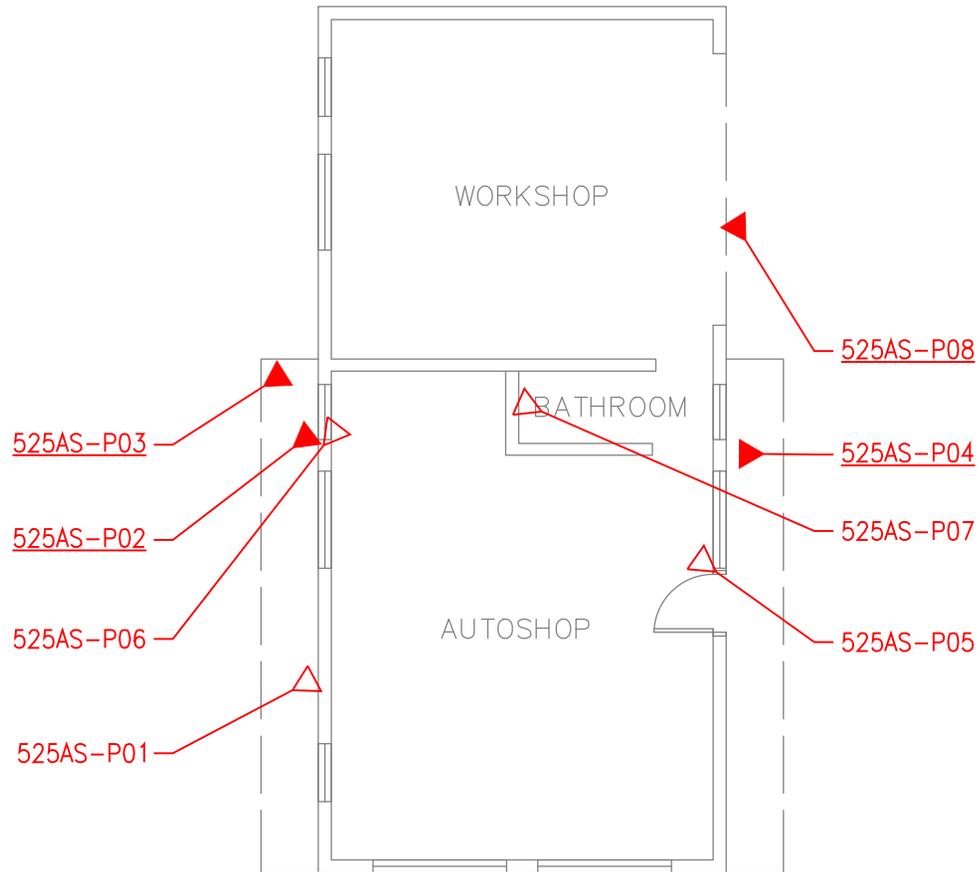
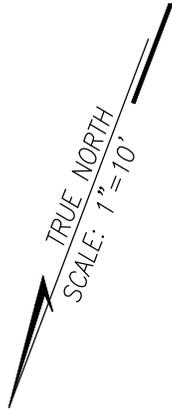
- H-25-535AS-W-04C
- H-25-535AS-W-05B  
(black semi-fibrous material)
- H-25-535AS-W-04A
- H-25-535AS-W-05A
- H-25-535AS-W-05C
- H-25-535AS-W-04B
- H-25-535AS-M-01C

SAMPLE LOCATIONS

- NEGATIVE ASBESTOS
- ASSUMED ASBESTOS
- POSITIVE ASBESTOS



	SURVEY DATE: <b>MARCH 25, 2025</b>	PROJECT TITLE: DLNR DOCARE WAHIAWA SUBSTATION WAHIAWA, OAHU, HAWAII
	FIGURE TITLE: 535 AVOCADO STREET, ASBESTOS WALL SAMPLE RESULTS AND APPROXIMATE LOCATIONS	
		FIGURE NO.: <b>B-3</b>

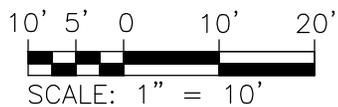


PAINT SAMPLES

- P01 GRAY CMU BLOCK WALL
- P02 BEIGE CMU BLOCK WALL
- P03 WHITE METAL CEILING BEAM
- P04 WHITE CMU BLOCK WALL
- P05 GRAY CMU BLOCK WALL
- P06 GRAY LOWER WALL SURFACING
- P07 WHITE CMU BLOCK WALL
- P08 GREEN WALL SURFACING

SAMPLE LOCATIONS

- △ LEAD-CONTAINING PAINT
- ▲ LEAD-BASED PAINT



	SURVEY DATE: <b>MARCH 25, 2025</b>	PROJECT TITLE: DLNR DOCARE WAHIAWA SUBSTATION WAHIAWA, OAHU, HAWAII
	FIGURE TITLE: 535 AVOCADO STREET, LEAD PAINT CHIP SAMPLE RESULTS AND APPROXIMATE LOCATIONS	
		FIGURE NO.: <b>B-4</b>

535 AVOCADO STREET, WAHIAWA  
(March 25, 2025)



Photo 1 - H-25-535AS-C-01A (Close-Up)  
[BDC\BDC01674.JPG]



Photo 2 - H-25-535AS-C-01A (Panoramic)  
[BDC\BDC01675.JPG]



Photo 3 - H-25-535AS-C-01B (Close-Up)  
[BDC\BDC01676.JPG]



Photo 4 - H-25-535AS-C-01B (Panoramic)  
[BDC\BDC01677.JPG]



Photo 5 - H-25-535AS-C-01C (Close-Up)  
[BDC\BDC01678.JPG]



Photo 6 - H-25-535AS-C-01C (Panoramic)  
[BDC\BDC01679.JPG]

535 AVOCADO STREET, WAHIAWA  
(March 25, 2025)



Photo 7 - H-25-535AS-F-01A (Close-Up)  
[BDC\BDC01659.JPG]



Photo 8 - H-25-535AS-F-01A (Panoramic)  
[BDC\BDC01660.JPG]



Photo 9 - H-25-535AS-F-01B (Close-Up)  
[BDC\BDC01661.JPG]



Photo 10 - H-25-535AS-F-01B (Panoramic)  
[BDC\BDC01662.JPG]



Photo 11 - H-25-535AS-F-01C (Close-Up)  
[BDC\BDC01663.JPG]



Photo 12 - H-25-535AS-F-01C (Panoramic)  
[BDC\BDC01665.JPG]

535 AVOCADO STREET, WAHIAWA  
(March 25, 2025)



Photo 13 - H-25-535AS-W-01A (Close-Up)  
[BDC\BDC01652.JPG]



Photo 14 - H-25-535AS-W-01A (Panoramic)  
[BDC\BDC01653.JPG]



Photo 15 - H-25-535AS-W-01B (Close-Up)  
[BDC\BDC01654.JPG]



Photo 16 - H-25-535AS-W-01B (Panoramic)  
[BDC\BDC01656.JPG]



Photo 17 - H-25-535AS-W-01C (Close-Up)  
[BDC\BDC01657.JPG]



Photo 18 - H-25-535AS-W-01C (Panoramic)  
[BDC\BDC01658.JPG]

535 AVOCADO STREET, WAHIAWA  
(March 25, 2025)



Photo 19 - H-25-535AS-W-02A (Close-Up)  
[BB\DSCN4611.JPG]



Photo 20 - H-25-535AS-W-02A (Panoramic)  
[BB\DSCN4612.JPG]



Photo 21 - H-25-535AS-W-02B (Close-Up)  
[BDC\BDC01689.JPG]



Photo 22 - H-25-535AS-W-02B (Panoramic)  
[BDC\BDC01690.JPG]



Photo 23 - H-25-535AS-W-02C (Close-Up)  
[BB\DSCN4599.JPG]



Photo 24 - H-25-535AS-W-02C (Panoramic)  
[BB\DSCN4600.JPG]

535 AVOCADO STREET, WAHIAWA  
(March 25, 2025)



Photo 25 - H-25-535AS-W-03A (Close-Up)  
[BDC\BDC01666.JPG]



Photo 26 - H-25-535AS-W-03A (Panoramic)  
[BDC\BDC01667.JPG]



Photo 27 - H-25-535AS-W-03B (Close-Up)  
[BDC\BDC01669.JPG]



Photo 28 - H-25-535AS-W-03B (Panoramic)  
[BDC\BDC01670.JPG]



Photo 29 - H-25-535AS-W-03C (Close-Up)  
[BDC\BDC01671.JPG]



Photo 30 - H-25-535AS-W-03C (Panoramic)  
[BDC\BDC01672.JPG]

535 AVOCADO STREET, WAHIAWA  
(March 25, 2025)



Photo 31 - H-25-535AS-W-04A (Close-Up)  
[BB\DSCN4585.JPG]



Photo 32 - H-25-535AS-W-04ABC (Panoramic)  
[BB\DSCN4587.JPG]



Photo 33 - H-25-535AS-W-04B (Close-Up)  
[BB\DSCN4588.JPG]



Photo 34 - H-25-535AS-W-04C (Close-Up)  
[BB\DSCN4589.JPG]

535 AVOCADO STREET, WAHIAWA  
(March 25, 2025)



Photo 35 - H-25-535AS-W-05A (Close-Up)  
[BB\DSCN4590.JPG]



Photo 36 - H-25-535AS-W-05ABC (Panoramic)  
[BB\DSCN4593.JPG]



Photo 37 - H-25-535AS-W-05B (Close-Up)  
[BB\DSCN4591.JPG]



Photo 38 - H-25-535AS-W-05C (Close-Up)  
[BB\DSCN4592.JPG]

535 AVOCADO STREET, WAHIAWA  
(March 25, 2025)



Photo 39 - H-25-535AS-M-01A (Close-Up)  
[BB\DSCN4601.JPG]



Photo 40 - H-25-535AS-M-01A (Panoramic)  
[BB\DSCN4602.JPG]



Photo 41 - H-25-535AS-M-01B (Close-Up)  
[BB\DSCN4603.JPG]



Photo 42 - H-25-535AS-M-01B (Panoramic)  
[BB\DSCN4604.JPG]



Photo 43 - H-25-535AS-M-01C (Close-Up)  
[BB\DSCN4605.JPG]



Photo 44 - H-25-535AS-M-01C (Panoramic)  
[BB\DSCN4606.JPG]

535 AVOCADO STREET, WAHIAWA  
(March 25, 2025)



Photo 45 - H-25-535AS-AT-01 (Close-Up)  
[BDC\BDC01680.JPG]



Photo 46 - H-25-535AS-AT-01 (Panoramic)  
[BDC\BDC01681.JPG]

535 AVOCADO STREET, WAHIAWA  
(March 25, 2025)



Photo 47 - 535AS-P01 (Close-Up)  
[BB\DSCN4569.JPG]



Photo 48 - 535AS-P01 (Panoramic)  
[BB\DSCN4570.JPG]

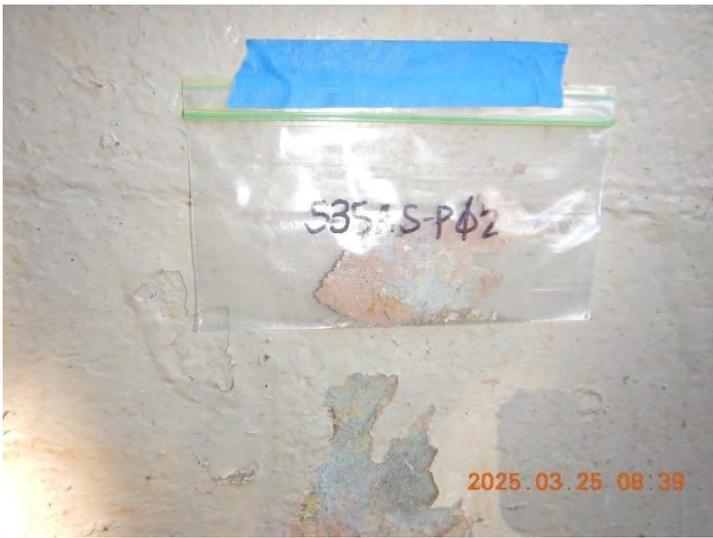


Photo 49 - 535AS-P02 (Close-Up)  
[BB\DSCN4571.JPG]



Photo 50 - 535AS-P02 (Panoramic)  
[BB\DSCN4572.JPG]



Photo 51 - 535AS-P03 (Close-Up)  
[BB\DSCN4573.JPG]



Photo 52 - 535AS-P03 (Panoramic)  
[BB\DSCN4574.JPG]

535 AVOCADO STREET, WAHIAWA  
(March 25, 2025)



Photo 53 - 535AS-P04 (Close-Up)  
[BB\DSCN4575.JPG]



Photo 54 - 535AS-P04 (Panoramic)  
[BB\DSCN4576.JPG]



Photo 55 - 535AS-P05 (Close-Up)  
[BB\DSCN4579.JPG]



Photo 56 - 535AS-P05 (Panoramic)  
[BB\DSCN4580.JPG]



Photo 57 - 535AS-P06 (Close-Up)  
[BB\DSCN4581.JPG]



Photo 58 - 535AS-P06 (Panoramic)  
[BB\DSCN4582.JPG]

535 AVOCADO STREET, WAHIAWA  
(March 25, 2025)

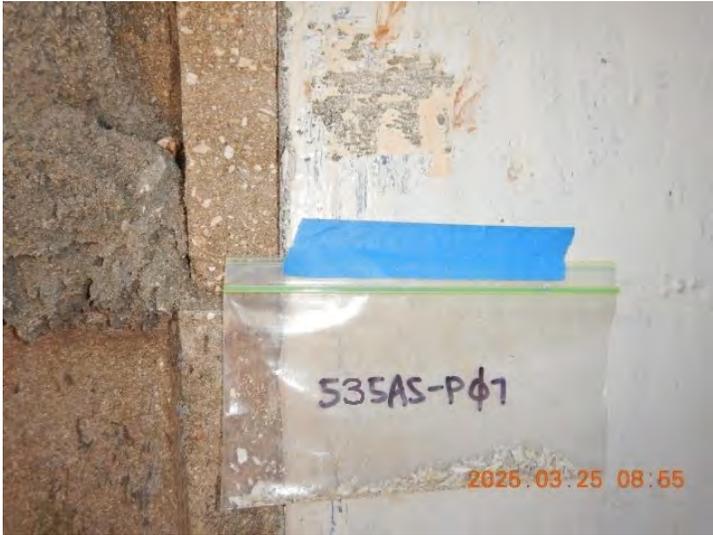


Photo 59 - 535AS-P07 (Close-Up)  
[BB\DSCN4583.JPG]



Photo 60 - 535AS-P07 (Panoramic)  
[BB\DSCN4584.JPG]



Photo 61 - 535AS-P08 (Close-Up)  
[BB\DSCN4577.JPG]



Photo 62 - 535AS-P08 (Panoramic)  
[BB\DSCN4578.JPG]



Final Report

Bulk Asbestos Analysis

(EPA Method 40CFR, Part 763, Appendix E to Subpart E and EPA 600/R-93-116, Visual Area Estimation)
NVLAP Lab Code: 101459-0

Element Environmental, LLC
Bernice Baleté
98-030 Hekaha Street
Unit 9
Aiea, HI 96701

Client ID: L1617
Report Number: B371178
Date Received: 04/22/25
Date Analyzed: 05/12/25
Date Printed: 05/12/25
First Reported: 05/12/25

Job ID/Site: 250018; 535 Avocado Street; Wahiawa, Oahu, Hawaii

SGSFL Job ID: L1617
Total Samples Submitted: 24
Total Samples Analyzed: 24

Date(s) Collected: 03/25/2025

Table with 8 columns: Sample ID, Lab Number, Asbestos Type, Percent in Layer, Asbestos Type, Percent in Layer, Asbestos Type, Percent in Layer. Rows include samples H-25-535AS-C-01A through H-25-535AS-M-01A with their respective analysis results.

Report Number: B371178
Date Printed: 05/12/25

Client Name: Element Environmental, LLC

Table with 8 columns: Sample ID, Lab Number, Asbestos Type, Percent in Layer, Asbestos Type, Percent in Layer, Asbestos Type, Percent in Layer. Rows include samples H-25-535AS-M-01B through H-25-535AS-W-02C with their respective analysis results.

Client Name: Element Environmental, LLC				Report Number: B371178 Date Printed: 05/12/25			
Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
<b>H-25-535AS-W-03A</b>	51853249						
Layer: Grey Cementitious Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
<b>H-25-535AS-W-03B</b>	51853250						
Layer: Grey Cementitious Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
<b>H-25-535AS-W-03C</b>	51853251						
Layer: White Cementitious Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
<b>H-25-535AS-W-04A</b>	51853252						
Layer: Brown Mastic			ND				
Layer: Green Non-Fibrous Material			ND				
Layer: Beige Non-Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
<b>H-25-535AS-W-04B</b>	51853253						
Layer: Brown Mastic			ND				
Layer: Green Non-Fibrous Material			ND				
Layer: Beige Non-Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
<b>H-25-535AS-W-04C</b>	51853254						
Layer: Brown Mastic			ND				
Layer: Green Non-Fibrous Material			ND				
Layer: Beige Non-Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
<b>H-25-535AS-W-05A</b>	51853255						
Layer: Black Semi-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (15 %)							
<b>H-25-535AS-W-05B</b>	51853256						
Layer: Black Semi-Fibrous Material		Chrysotile	25 %				
Total Composite Values of Fibrous Components:		Asbestos (25%)					
Cellulose (5 %)							

Client Name: Element Environmental, LLC				Report Number: B371178 Date Printed: 05/12/25			
Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
<b>H-25-535AS-W-05C</b>	51853257						
Layer: Black Semi-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (15 %)							

*Maria E. Casper*

Maria Casper, Laboratory Supervisor, Hayward Laboratory

Note: Limit of Quantification ('LOQ') = 1%. 'Trace' denotes the presence of asbestos below the LOQ. 'ND' = 'None Detected'. Analytical results and reports are generated by SGS Forensic Laboratories (SGSFL) at the request of and for the exclusive use of the person or entity (client) named on such report. Results, reports or copies of same will not be released by SGSFL to any third party without prior written request from client. This report applies only to the sample(s) tested. Supporting laboratory documentation is available upon request. This report must not be reproduced except in full, unless approved by SGSFL. The client is solely responsible for the use and interpretation of test results and reports requested from SGSFL. This report must not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government. SGSFL is not able to assess the degree of hazard resulting from materials analyzed. SGS Forensic Laboratories reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified. All samples were received in acceptable condition unless otherwise noted.

Client Name & Address: Element Environmental, LLC 98-030 Hekaha Street, Unit 9 Aiea, Hawaii 96701		Client No.: L1617	PO / Job#: 250018	Date: 3/26/2025			
Contact: Bernice Balete Phone: (808) 389-4792 E-mail: bbalete@e2hi.com		Turn Around Time: Same Day / 1Day / 2Day / 3Day / 4Day / 5Day <input checked="" type="checkbox"/>					
Site Name: 535 Avocado Street		<input type="checkbox"/> PCM: <input type="checkbox"/> NIOSH 7400A / <input type="checkbox"/> NIOSH 7400B <input type="checkbox"/> Rotometer <input checked="" type="checkbox"/> PLM: <input checked="" type="checkbox"/> Standard / <input type="checkbox"/> Paint Count (400-1000) / <input type="checkbox"/> CARB 435 <input type="checkbox"/> TEM Air: <input type="checkbox"/> AHERA / <input type="checkbox"/> Yamate2 / <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> TEM Bulk: <input type="checkbox"/> Quantitative / <input type="checkbox"/> Qualitative / <input type="checkbox"/> Chaffield <input type="checkbox"/> TEM Water: <input type="checkbox"/> Potable / <input type="checkbox"/> Non-Potable / <input type="checkbox"/> Weight % <input type="checkbox"/> TEM Dust: <input type="checkbox"/> D5755 (microvac) / <input type="checkbox"/> D6480 (wipe)					
Site Location: Wahiawa, Oahu, Hawaii		<input type="checkbox"/> IAQ Particle Identification (PLM LAB) <input type="checkbox"/> PLM Opaques/Soot <input type="checkbox"/> Particle Identification (TEM LAB) <input type="checkbox"/> Special Project <input type="checkbox"/> Metals Analysis Matrix: Method: Analytes:					
Comments: See attached asbestos table for sample information. <input type="checkbox"/> Silica in Air <input type="checkbox"/> w/Gravimetry <input type="checkbox"/> Quartz Only							
Sample ID	Date / Time	Sample Location / Description	FOR AIR SAMPLES ONLY				Sample Area / Air Volume
			Type	Time On/Off	Avg LPM	Total Time	
			A P C				
			A P C				
			A P C				
			A P C				
			A P C				
			A P C				
			A P C				
			A P C				
			A P C				
Sampled By: BDC, BB Date/Time: 3/25/2025 Shipped Via: <input checked="" type="checkbox"/> Fed Ex <input type="checkbox"/> UPS <input type="checkbox"/> US Mail <input type="checkbox"/> Courier <input type="checkbox"/> Drop Off <input type="checkbox"/> Other:							
Relinquished By: Bernice Balete Date / Time: 4/21/2025 @ 1000		Relinquished By: Nicole Adams Date / Time: 5/18/25		Relinquished By:			
Received By: Cluete Lagan Date / Time: 5/18/25 10:00 AM		Received By: [Signature] Date / Time: 5/18/25 10:00 AM		Received By:			
Condition Acceptable? <input type="checkbox"/> Yes <input type="checkbox"/> No		Condition Acceptable? <input type="checkbox"/> Yes <input type="checkbox"/> No		Condition Acceptable? <input type="checkbox"/> Yes <input type="checkbox"/> No			

Sample ID	Sample Date	Sample Location	Sample Description
H-25-535AS-C-01A	3/25/2025	Exterior	Plaster Ceiling (tan)
H-25-535AS-C-01B	3/25/2025	Exterior	Plaster Ceiling (tan)
H-25-535AS-C-01C	3/25/2025	Exterior	Plaster Ceiling (tan)
H-25-535AS-F-01A	3/25/2025	Exterior	Concrete Floor/Foundation
H-25-535AS-F-01B	3/25/2025	Interior	Concrete Floor/Foundation
H-25-535AS-F-01C	3/25/2025	Interior	Concrete Floor/Foundation
H-25-535AS-M-01A	3/25/2025	Exterior	Window Caulking (white)
H-25-535AS-M-01B	3/25/2025	Exterior	Window Caulking (white)
H-25-535AS-M-01C	3/25/2025	Exterior	Window Caulking (white)
H-25-535AS-W-01A	3/25/2025	Exterior	CMU Block Wall/Grout
H-25-535AS-W-01B	3/25/2025	Interior	CMU Block Wall/Grout
H-25-535AS-W-01C	3/25/2025	Exterior	CMU Block Wall/Grout
H-25-535AS-W-02A	3/25/2025	Exterior	Textured Wall Surfacing (gray, medium) and Sealant Paper (black) observed around windows
H-25-535AS-W-02B	3/25/2025	Exterior	Textured Wall Surfacing (gray, medium) and Sealant Paper (black) observed around windows
H-25-535AS-W-02C	3/25/2025	Exterior	Textured Wall Surfacing (gray, medium) and Sealant Paper (black) observed around windows
H-25-535AS-W-03A	3/25/2025	Exterior	Plaster Wall (tan)
H-25-535AS-W-03B	3/25/2025	Exterior	Plaster Wall (tan)
H-25-535AS-W-03C	3/25/2025	Interior	Plaster Wall (tan)
H-25-535AS-W-04A	3/25/2025	Exterior	Textured Wall Surfacing (green, fine) and Mastic (brown) (old ceiling plank)
H-25-535AS-W-04B	3/25/2025	Exterior	Textured Wall Surfacing (green, fine) and Mastic (brown) (old ceiling plank)
H-25-535AS-W-04C	3/25/2025	Exterior	Textured Wall Surfacing (green, fine) and Mastic (brown) (old ceiling plank)
H-25-535AS-W-05A	3/25/2025	Exterior	Roofing & Tar Paper (black) on old Wood Roof Plank
H-25-535AS-W-05B	3/25/2025	Exterior	Roofing & Tar Paper (black) on old Wood Roof Plank
H-25-535AS-W-05C	3/25/2025	Exterior	Roofing & Tar Paper (black) on old Wood Roof Plank

**RECEIVED**  
APR 22 2025  
BY: [Signature]

**RECEIVED**  
MAY 08 2025  
EX 10:00 AM

SGS Forensic Laboratories may subcontract client samples to other SGSFL locations to meet client requests.  
 San Francisco Office: 3777 Depot Road, Suite 409, Hayward, CA 94545-2761 • Phone: 510/887-8828 • 800/827-3274  
 Los Angeles Office: 20535 South Belshaw Ave., Carson, CA 90746 • Phone: 310/763-2374 • 888/813-9417  
 Las Vegas Office: 6765 S. Eastern Avenue, Suite 3, Las Vegas, NV 89119 • Phone: 702/784-0040  
 Chicago Office: 3020 Woodcreek Drive, Suite C, Downers Grove, IL 60515 • Phone: 341/465-2464



Final Report

Metals Analysis of Paints

(AIHA-LAP, LLC Accreditation, Lab ID #101762)

Element Environmental, LLC
Bernice Balete
98-030 Hekaha Street
Unit 9
Aiea, HI 96701

Client ID: L1617
Report Number: M268207
Date Received: 04/22/25
Date Analyzed: 05/01/25
Date Printed: 05/06/25
First Reported: 05/06/25

SGSFL Job ID: L1617
Total Samples Submitted: 8
Total Samples Analyzed: 8

Job ID / Site: 250018; 535 Avocado Street; Wahiawa, Oahu, Hawaii
Date(s) Collected: 03/25/2025

Table with 7 columns: Sample Number, Lab Number, Analyte, Result, Result Units, Reporting Limit\*, Method Reference. Contains 8 rows of lead (Pb) analysis results.

\* The Reporting Limit represents the lowest amount of analyte that the laboratory can confidently detect in the sample, and is not a regulatory level. The Units for the Reporting Limit are the same as the Units for the Final Results.

Handwritten signature of Kevin Poon

Kevin Poon, Laboratory Supervisor, Hayward Laboratory

Analytical results and reports are generated by SGS at the request of and for the exclusive use of the person or entity (client) named on such report. Results, reports or copies of same will not be released by SGS to any third party without prior written request from client.

Note\* Sampling data used in this report was provided by the client as noted on the associated chain of custody form.



Analysis Request Form (COC)

Analysis Request Form (COC) containing client information, site details, sample analysis table, and signature blocks for Bernice Balete and Cesar Lazaro.

SGS Forensic Laboratories may subcontract client samples to other SGSFL locations to meet client requests.
San Francisco Office: 3777 Depot Road, Suite 409, Hayward, CA 94545-2761
Los Angeles Office: 20536 South Belshaw Ave., Carson, CA 90746
Las Vegas Office: 6765 S. Eastern Avenue, Suite 3, Las Vegas, NV 89119
Chicago Office: 3020 Woodcreek Drive, Suite C, Downers Grove, IL 60515

Appendix D

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# Species List





## 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:

09/29/2025 19:12:50 UTC

Project Code: 2025-0156061

Project Name: DLNR DOCARE Wahiawa Substation

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: <https://www.fws.gov/office/pacific-islands-fish-and-wildlife/library>.

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: <http://www.fws.gov/endangered/esa-library/index>.

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 <https://www.fws.gov/sites/default/files/documents/habitat-conservation-planning-handbook-entire.pdf>.

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>

Fish and Wildlife Coordination Act: Any modification to freshwater or marine waters of the U.S. including impounding, diverting, deepening, controlling, or modification for any other purpose requires a Fish and Wildlife Coordination Act (FWCA) consultation with the U.S Fish and Wildlife Service, State/ Territorial wildlife agency (State of Hawaii Division of Aquatic

Resources, American Samoa's Department of Marine and Wildlife Resources, Guam's Division of Aquatic and Wildlife Resources, or the Northern Mariana Island's Division of Fish and Wildlife) and the National Marine Fisheries Service. The Pacific Islands Fish and Wildlife Office in Honolulu should be notified of a FWCA consultation request with a project description and any relevant biological information in order to expedite the appropriate level of coordination and consultation needs.

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: 2025-0156061

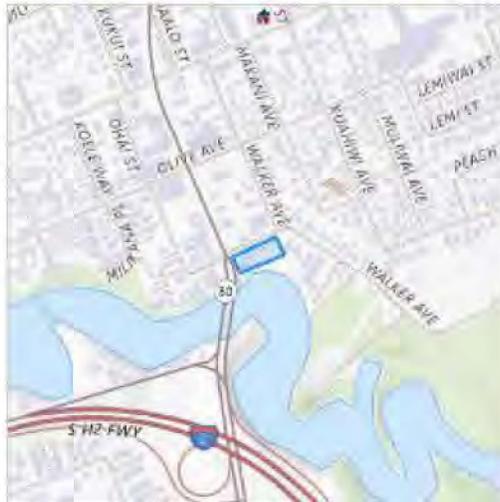
Project Name: DLNR DOCARE Wahiawa Substation

Project Type: Acquisition of Lands

Project Description: The State is planning to acquire the property to address the neglect and use as an unofficial shelter by informal residents. Once acquired, the site will operate a substation for DOCARE officers patrolling the Wahiawā and North Shore districts. Currently, DOCARE officers patrolling the Wahiawā and North Shore districts operate out of the main station in Pearl City. To strengthen enforcement, DOCARE plans on operating a smaller substation in Wahiawā.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@21.493039500000002,-158.02791579126227,14z>



Counties: Honolulu County, Hawaii

## ENDANGERED SPECIES ACT SPECIES

There is a total of 24 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. [NOAA Fisheries](#), 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 <i>Lasiurus cinereus semotus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/770">https://ecos.fws.gov/ecp/species/770</a> General project design guidelines: <a href="https://ipac.ecosphere.fws.gov/project/B6SJE5XOKNFUXMF5CUQIPF5OVA/documents/generated/6477.pdf">https://ipac.ecosphere.fws.gov/project/B6SJE5XOKNFUXMF5CUQIPF5OVA/documents/generated/6477.pdf</a>	Endangered

**BIRDS**

NAME	STATUS
Band-rumped Storm-petrel <i>Hydrobates castro</i> Population: USA (HI) No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/1226">https://ecos.fws.gov/ecp/species/1226</a> General project design guidelines: <a href="https://ipac.ecosphere.fws.gov/project/B6SJE5XOKNFUXMF5CUQIPF5OVA/documents/generated/6939.pdf">https://ipac.ecosphere.fws.gov/project/B6SJE5XOKNFUXMF5CUQIPF5OVA/documents/generated/6939.pdf</a>	Endangered
Hawaiian Common Gallinule <i>Gallinula galeata sandvicensis</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/6612">https://ecos.fws.gov/ecp/species/6612</a> General project design guidelines: <a href="https://ipac.ecosphere.fws.gov/project/B6SJE5XOKNFUXMF5CUQIPF5OVA/documents/generated/6934.pdf">https://ipac.ecosphere.fws.gov/project/B6SJE5XOKNFUXMF5CUQIPF5OVA/documents/generated/6934.pdf</a>	Endangered
Hawaiian Coot (alae Ke`oke`o) <i>Fulica alai</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/7233">https://ecos.fws.gov/ecp/species/7233</a> General project design guidelines: <a href="https://ipac.ecosphere.fws.gov/project/B6SJE5XOKNFUXMF5CUQIPF5OVA/documents/generated/6934.pdf">https://ipac.ecosphere.fws.gov/project/B6SJE5XOKNFUXMF5CUQIPF5OVA/documents/generated/6934.pdf</a>	Endangered
Hawaiian Duck <i>Anas wyvilliana</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/7712">https://ecos.fws.gov/ecp/species/7712</a> General project design guidelines: <a href="https://ipac.ecosphere.fws.gov/project/B6SJE5XOKNFUXMF5CUQIPF5OVA/documents/generated/6934.pdf">https://ipac.ecosphere.fws.gov/project/B6SJE5XOKNFUXMF5CUQIPF5OVA/documents/generated/6934.pdf</a>	Endangered
Hawaiian Petrel <i>Pterodroma sandwichensis</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/6746">https://ecos.fws.gov/ecp/species/6746</a> General project design guidelines: <a href="https://ipac.ecosphere.fws.gov/project/B6SJE5XOKNFUXMF5CUQIPF5OVA/documents/generated/6939.pdf">https://ipac.ecosphere.fws.gov/project/B6SJE5XOKNFUXMF5CUQIPF5OVA/documents/generated/6939.pdf</a>	Endangered
Hawaiian Stilt <i>Himantopus mexicanus knudseni</i> No critical habitat has been designated for this species.	Endangered

NAME	STATUS
Species profile: <a href="https://ecos.fws.gov/ecp/species/2082">https://ecos.fws.gov/ecp/species/2082</a> General project design guidelines: <a href="https://ipac.ecosphere.fws.gov/project/B6SJE5XOKNFUXMF5CUQIPF5OVA/documents/generated/6934.pdf">https://ipac.ecosphere.fws.gov/project/B6SJE5XOKNFUXMF5CUQIPF5OVA/documents/generated/6934.pdf</a>	
<b>Newell's Shearwater <i>Puffinus newelli</i></b> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/2048">https://ecos.fws.gov/ecp/species/2048</a> General project design guidelines: <a href="https://ipac.ecosphere.fws.gov/project/B6SJE5XOKNFUXMF5CUQIPF5OVA/documents/generated/6939.pdf">https://ipac.ecosphere.fws.gov/project/B6SJE5XOKNFUXMF5CUQIPF5OVA/documents/generated/6939.pdf</a>	Threatened

## REPTILES

NAME	STATUS
<b>Hawksbill Sea Turtle <i>Eretmochelys imbricata</i></b> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/3656">https://ecos.fws.gov/ecp/species/3656</a>	Endangered

## FLOWERING PLANTS

NAME	STATUS
<b>ʻāiea <i>Nothocestrum latifolium</i></b> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/1061">https://ecos.fws.gov/ecp/species/1061</a>	Endangered
<b>ʻakoko <i>Euphorbia celastroides</i> var. <i>kaenana</i></b> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/3842">https://ecos.fws.gov/ecp/species/3842</a>	Endangered
<b>ʻenaʻena <i>Pseudognaphalium sandwicense</i> var. <i>molokaiense</i></b> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/5993">https://ecos.fws.gov/ecp/species/5993</a>	Endangered
<b>Bonamia <i>menziesii</i></b> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/2503">https://ecos.fws.gov/ecp/species/2503</a>	Endangered
<b>Haha <i>Cyanea truncata</i></b> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/876">https://ecos.fws.gov/ecp/species/876</a>	Endangered
<b>Hala Pepe <i>Dracaena forbesii</i></b> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/5965">https://ecos.fws.gov/ecp/species/5965</a>	Endangered
<b>Kamanomano <i>Cenchrus agrimonioides</i></b> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/2928">https://ecos.fws.gov/ecp/species/2928</a>	Endangered
<b>Kaulu <i>Pteralyxia macrocarpa</i></b>	Endangered

## **IPAC USER CONTACT INFORMATION**

Agency: Private Entity  
Name: Ethan Santiago  
Address: 111 S. King Steet, Suite 170  
City: Honolulu  
State: HI  
Zip: 96813  
Email: ethans@g70.design  
Phone: 8084414636

Appendix E

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# **Infrastructure Due Diligence Assessment**



# **INFRASTRUCTURE DUE DILIGENCE ASSESSMENT**

## **Department of Land and Natural Resources (DLNR)**

### **DOCARE Wahiawa Substation**

Wahiawa, O'ahu

TMK: (1) 7-4-001:025

## **Existing Conditions**

### **Existing Topography and Site**

The Project Site is located in Wahiawā, O'ahu, Hawai'i and identified by TMK (1) 7-4-001:025 (Figure 1). The site measures approximately 0.2 acres (9,288 square feet).

The site is bound by commercial properties to the east and west and the city owned and maintained Avocado Street to the north. The Wahiawā Freshwater State Recreation Area borders the site to the south. There is a 15-ft wide drainage easement in favor of the City and County of Honolulu over and across the Project Site along the eastern property line.

There is existing asphalt pavement and a concrete pad between the two existing structures on site. There is existing asphalt pavement and unpaved area that slopes towards the Wahiawa Freshwater State Recreation Area to the east of the building in the center of the property.

The Project Site is generally flat, gradually sloping from northeast to southwest, with elevations between 869 and 871 feet above Mean Sea Level (MSL). There is an unpaved area located at the southeast corner of the Site that slopes south towards the Wahiawā Freshwater State Recreation Area at a relatively steep slope.

Based on the NRCS Web Soil Survey, the soils at the Project site are classified as Helemano silty clay and Wahiawa silty clay. Helemano clay has slopes of 30% to 90%. Wahiawa silty clay has slopes of 8% to 15%.

### **Existing Drainage**

Stormwater runoff from the Project Site generally sheet flows south into the Wahiawā Freshwater State Recreation Area. There are two area drains in between the two existing buildings that discharge through pipe outlets under the existing retaining wall on the adjacent property to the south of the site.

There is existing City-owned storm drain infrastructure located in the drainage easement. Runoff from Walker Ave. is diverted to a City-owned storm drain manhole located to the north of the drainage easement on the Project Site. From there, a City-owned 42-inch reinforced concrete pipe (RCP) conveys stormwater through the drainage easement, and discharges near the Kaukonahua Stream to the south. Within the Wahiawā Freshwater State Recreation Area, runoff continues to flow south toward the Kaukonahua Stream.

There is no gutter and curb along Avocado Street fronting the property. There is an asphalt curb on the opposite side of Avocado Street. Street runoff in front the property is diverted to the asphalt curb on the north side of the street and continues to the west where it is captured by an existing

catch basin at the intersection of Avocado Street and Kamehameha Highway. The site also appears to have low spots with localized ponding near the northern boundary along Avocado Street.

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM), the project site including the existing structures is located within Zone X described as “Areas determined to be outside the 0.2% annual chance floodplain.”

Since the Project Site is less than 100 acres, the Rational Method is used to estimate the Project Site’s pre-development runoff peak flow rate, in accordance with the City and County of Honolulu Storm Drainage Standards. Using the Rational Method, the Project Site’s pre-development peak runoff flow rate is estimated to be 1.7 cfs.

Refer to Exhibit 1 – Existing Storm Drain Map for the existing storm drain system.

### **Existing Water**

The property is served by a 12-inch cast iron water main in Avocado Street. There are three 5/8-inch domestic meters on the site. The building on the western side is served by a 5/8-inch meter (M/N 98022653). Additionally, there is one double service lateral with two 5/8-inch meters (M/N 93023119 and 00201274) serving the building on the eastern side.

There is a BWS fire hydrant (C00236) located in Walker Avenue across the street from the project site. BWS provided the following flow and pressure data for this hydrant on April 29, 2025: Static pressure is 88 psi and residual pressure is 76 psi at 2000 gpm based on BWS flow models.

Refer to Exhibit 2 – Existing Water Map for the existing water system.

### **Existing Sewer**

The existing buildings on the property discharge wastewater to a 24-inch sewer main in Avocado Street through a 6-inch sewer lateral that connects via a sewer manhole. The 24-inch sewer main slopes west and connects to a 24-inch sewer main along Kamehameha Highway, ultimately conveying wastewater to the City’s Wahiawā Wastewater Treatment Plant. Sewer lateral sizes were obtained from the City’s GIS database.

Refer to Exhibit 3 – Existing Sewer Map for the existing sewer system.

## **Proposed Conditions**

### **Proposed Grading and Drainage**

The proposed Project consists of redeveloping the existing site to construct a new DLNR DOCARE substation. In the preferred site and building scheme prepared by UH CDC, there would be one two-story building located in the center of the site. Level 1 of the building consists of evidence storage, boat parking, and temporary officer parking. Level 2 of the building consists of a break area, equipment storage, lockers, showers, and office space. The preferred scheme also includes covered ATV/jet ski parking located to the west of the building, and uncovered officer parking to the east of the building. Access over and across the drainage easement should be maintained.

Due to the proximity to the existing slope, a retaining wall will be required along the southern edge of the property. The retaining wall is anticipated to have approximate retained heights ranging from

2 feet at the western corner to 10 feet at the eastern corner. Depending on the final site plan, the building structure may also need to retain soil.

Proposed drainage improvements will be installed on the Project Site to limit runoff to pre-development conditions, in accordance with the C&CH Storm Drainage Standards. Runoff shall be limited to pre-development conditions or as specified in the General Conditions. As required by the Standards, the 10-year recurrence interval shall be used to size drainage facilities for the project. As the existing site is mostly impervious, the post-development runoff rates are not expected to be significantly higher than the pre-development runoff rates.

The existing 42-inch RCP in the drainage easement will be protected-in-place. The drainage easement will be maintained including the existing drainage pattern. The proposed retaining wall must not block access to and across the drainage easement.

According to the Rules Relating to Water Quality, the Project is not expected to meet the criteria to be defined as a Priority A or B Project due to the small size and type of project. Therefore, the Low Impact Development (LID) and stormwater quality treatment measures are not anticipated to be required for the Project.

### **Proposed Water**

The proposed Project will connect to the existing Board of Water Supply-owned 12-inch water main in Avocado St. The Project is expected to only need one water meter and lateral. The Project will reuse or relocate one of the existing water meters and laterals, or construct a new water meter and lateral, depending on the proposed plumbing design.

The Board of Water Supply issued a letter dated April 10<sup>th</sup>, 2025, confirming that the existing water system is adequate to accommodate the proposed substation, **attached**.

### **Proposed Sewer**

The proposed Project will connect to the existing City-owned 24-inch sewer main in Avocado St. The Project will reuse or relocate the existing 6-inch sewer lateral, or construct a new sewer lateral, depending on the proposed plumbing design.

A Sewer Connection Application (SCA) was approved on April 28<sup>th</sup>, 2025 by the Wastewater Branch (WWB), **attached**. The WWB approval will expire on April 28<sup>th</sup>, 2027 if a connection is not made.

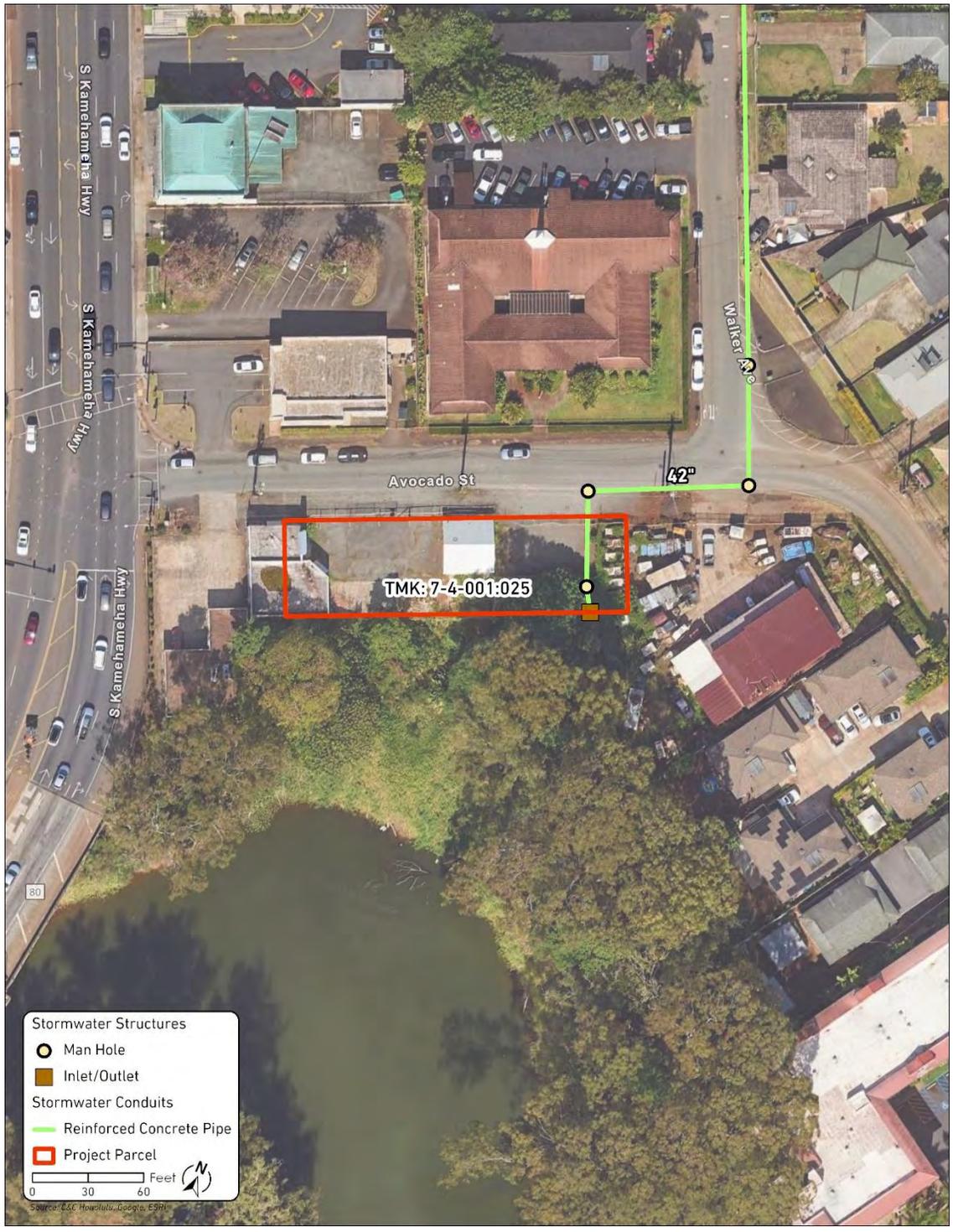


Figure 1. Existing Storm Drain Map

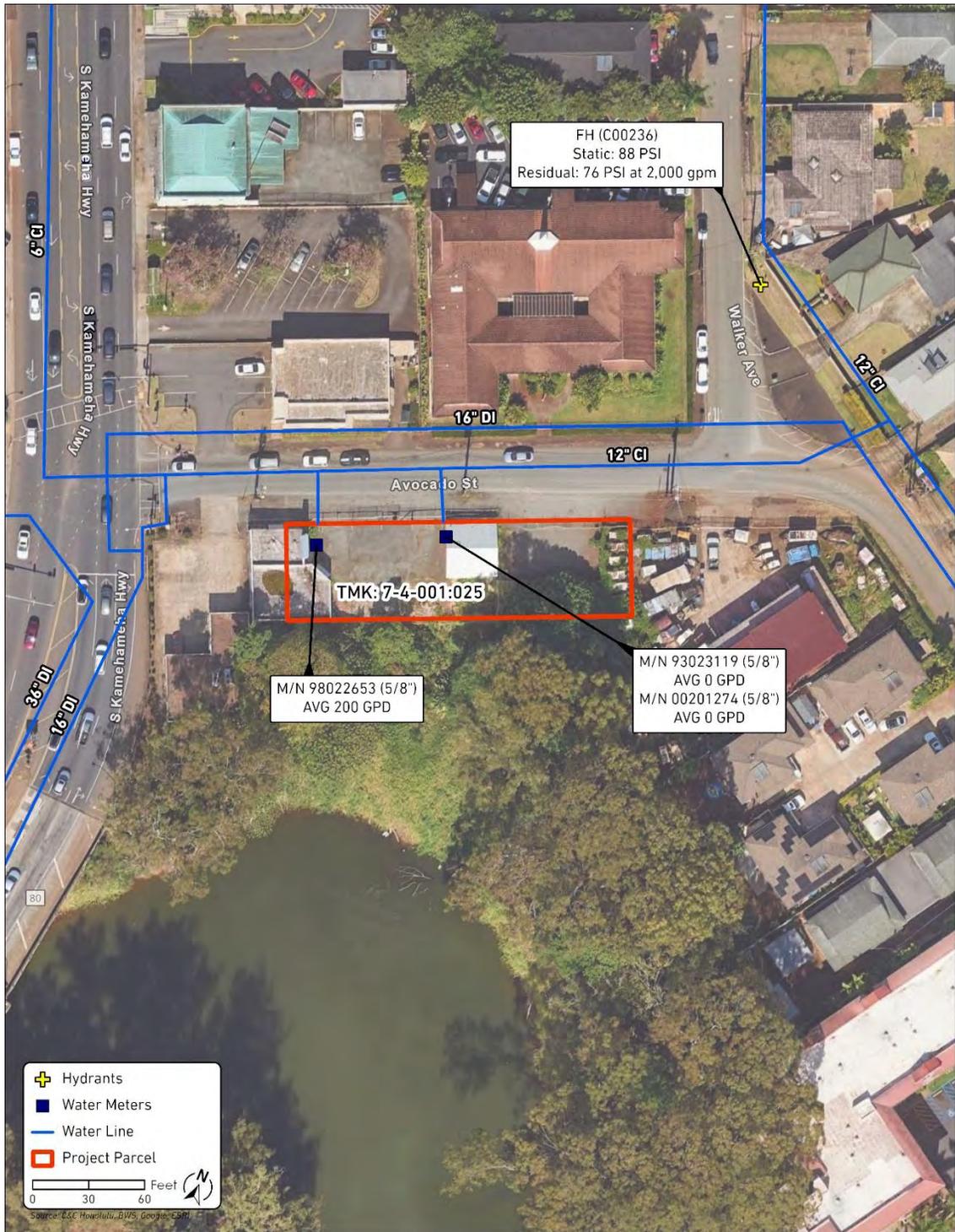


Figure 2. Existing Water Map

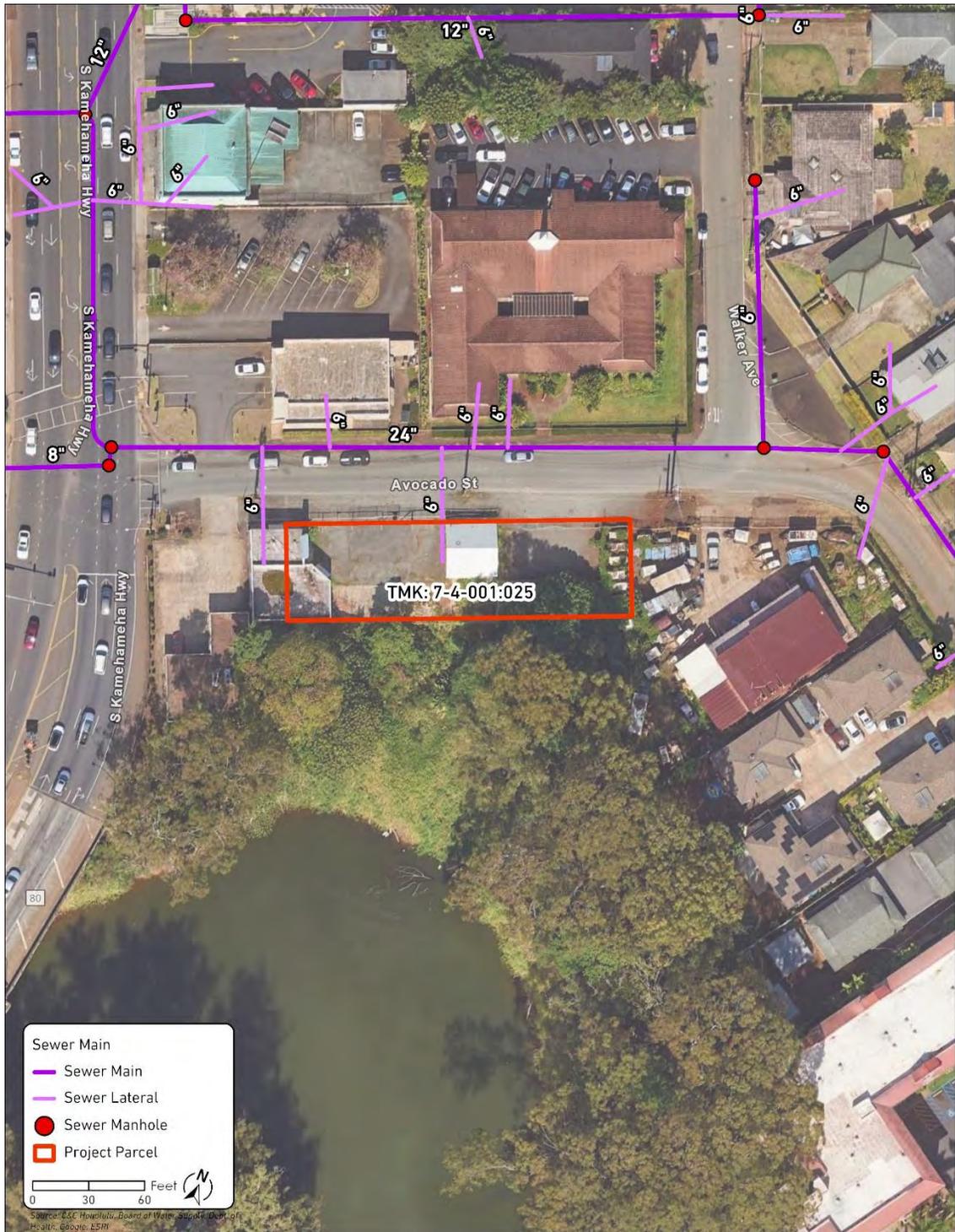


Figure 3. Existing Sewer Map

Appendix F

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# Transportation Assessment



# Memorandum

Date: January 19, 2026

To: Tracy Camuso and Kira Ramos, G70

From: Emily Turner and Sohrab Rashid

**Subject: DOCARE Wahiawā Substation: Transportation Assessment**

SD25-0575

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## Project Description

The State of Hawai'i Department of Land and Natural Resources (DLNR) proposes to build and operate a Division of Conservation and Resources Enforcement (DOCARE) Wahiawā Substation (hereafter referred to as the "Project") located at 525 Avocado Street in the community of Wahiawā on the island of O'ahu. The Project site is currently vacant and not generating vehicle trips.

The proposed project is the construction of a substation for DOCARE officers patrolling the Wahiawā/North Shore area. The proposed facility is expected to include office space, a squad room, a locker area, an evidence-handling area, a lanai/expansion space, restrooms, storage, and parking. The 0.21-acre Project site (TMK 1-7-4-001-025) is bounded by Avocado Street to the north, commercial uses to the west and east, and a nature preserve to the south. **Attachment A** shows the location of the Project site and the surrounding study area. **Attachment B** shows the proposed site plan.

This memorandum describes our assessment of vehicle trip generation, site access, parking, and on-site circulation for the Project, as well as our recommendations for transportation improvements identified through evaluation of the site plan provided by G70. This assessment is consistent with similar studies previously prepared for review by the City and County of Honolulu (C&CH) Department of Planning and Permitting (DPP) Traffic Review Branch (TRB).

## Existing Conditions

This section provides an overview of the existing transportation network in the Project area, including roadway, pedestrian, bicycle, and transit facilities. Overall, the assessment of existing conditions relevant to this study establishes the site's transportation context.

### Roadway System

The following roadways provide access to the Project site and serve as key components of the surrounding transportation network:

**Avocado Street** is an east–west, two–lane (one lane in each direction), undivided roadway that extends from Kamehameha Highway to Walker Avenue. Avocado Street provides primary access to and from the Project site. On–street parking generally does not occur on Avocado Street and is prohibited on the south side, as indicated by clear signage. While no speed limit is posted on Avocado Street, the speed limit is presumed to be 25 miles per hour (mph) based on the street’s design compared to other similar nearby roadways. Avocado Street is owned and maintained by the C&CH and a traffic signal controls the intersection at Kamehameha Highway.

**Walker Avenue** is a north–south, two–lane (one lane in each direction), undivided roadway that connects California Avenue to the Wahiawā Freshwater State Recreation Area. Walker Avenue intersects Avocado Street approximately 75 feet east of the Project’s eastern site boundary. On–street parking is generally prohibited on both sides of Walker Avenue south of Olive Avenue, and occurs predominantly on the west side north of Olive Avenue. The posted speed limit on Walker Avenue is 25 mph. Walker Avenue is owned and maintained by the C&CH.

**Kamehameha Highway (Route 80)**, is a north–south, six–lane highway with three northbound lanes, two southbound lanes, and one two–way left turn lane within the Project vicinity. Kamehameha Highway provides key regional access through Wahiawā, linking Wahiawā residents and visitors to Route 99 and H–2. Kamehameha Highway is divided south of Avocado Street and undivided to the north. On–street parking is allowed on designated segments on the west side of the highway north of Avocado Street, but prohibited elsewhere. The posted speed limit on Kamehameha Highway within the Project vicinity is 25 mph. Kamehameha Highway is owned and maintained by the State of Hawai‘i Department of Transportation’s (HDOT’s) Highways Division.

## Traffic Conditions

During field observations conducted in May 2025, the intersection of Avocado Street and Kamehameha Highway appeared to be operating at a less–than–desirable level of service during peak hours. Westbound queues were observed along Avocado Street during the morning (AM) and evening (PM) peak hours, and these queues did frequently extend beyond the site onto Walker Avenue toward Olive Avenue. When the westbound approach had a green light, the queue would often not completely clear during the cycle. Similar northbound queues along Walker Avenue from Olive Avenue were also observed during peak hours.

## Pedestrian Facilities and Activity

Pedestrian facilities consist of crosswalks, curb ramps, and pedestrian signals at signalized intersections, as well as sidewalks and paths on street segments between intersections. Sidewalks are provided along both sides of Kamehameha Highway north of Avocado Street, and along the west side of Kamehameha Highway south of Avocado Street. No sidewalks or formal paths are provided along either side of Avocado Street or Walker Avenue, with the exception of one 150–foot segment on the west side of Walker Avenue, extending south of Olive Avenue. High–visibility crosswalks are marked on three of the four legs of the signalized intersection of Avocado Street and Kamehameha Highway. The south leg is the only leg currently lacking a marked crosswalk.

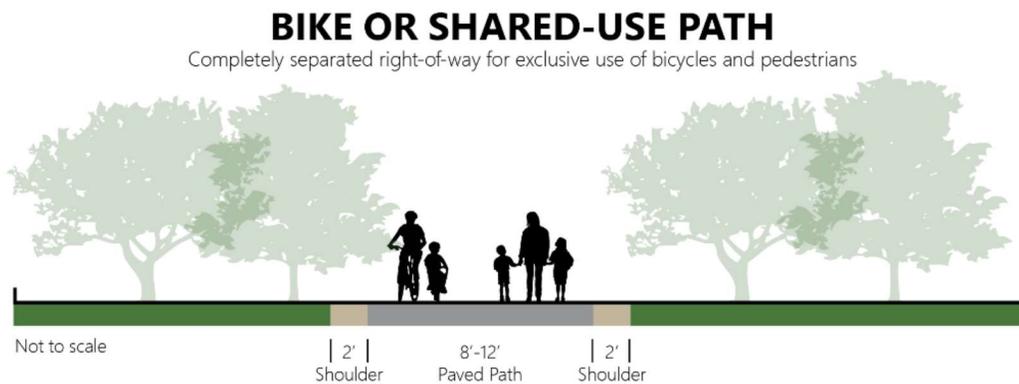
Pedestrians must walk in the roadway or along the shoulder on these local streets, posing a potential safety issue. Pedestrian activity along Avocado Street was minimal during the field review with fewer than five (5) pedestrians observed during each of the AM and PM peak hours. Avocado Street is part

of the Pedestrian Priority Network, per the O‘ahu Pedestrian Plan (2022), and is therefore a focal point for future pedestrian infrastructure improvements.

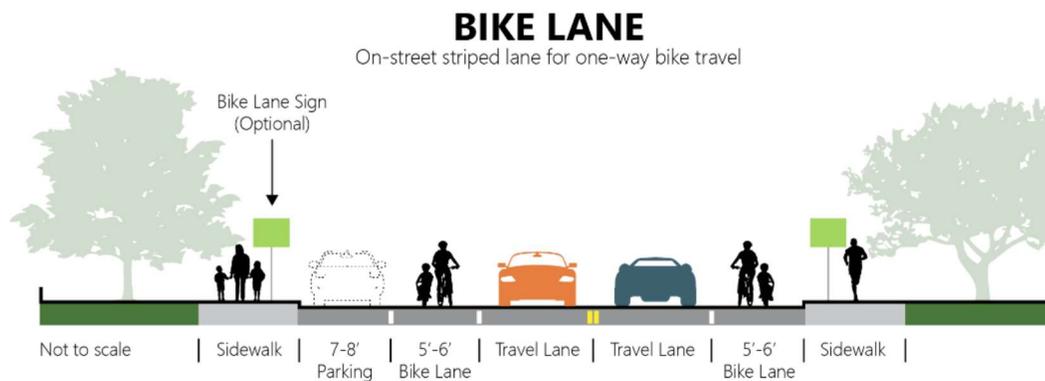
## Bicycle Facilities

Bicycle facilities generally consist of four types of facilities, which are outlined below:

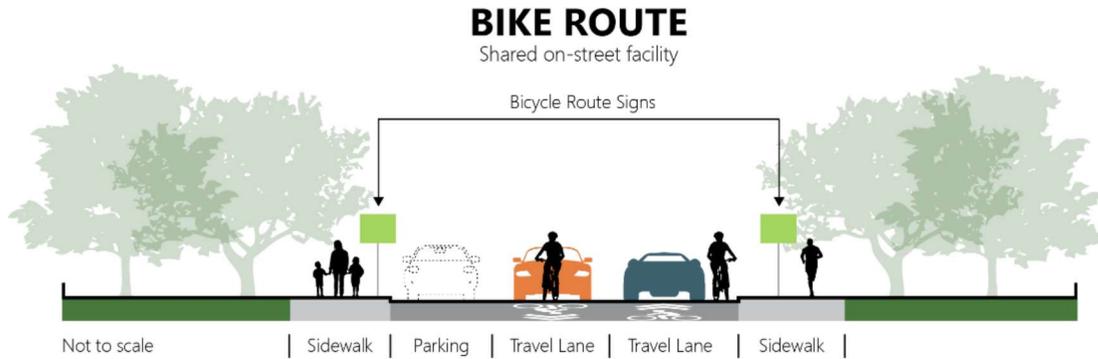
- *Bicycle or Shared-Use Paths* provide a separate right-of-way and are designated for the exclusive use of bicycles and pedestrians (or exclusively bicycles) with minimal vehicle-pedestrian crossflow. Generally, the recommended pavement width for a bidirectional bicycle or multiuse path is ten (10) feet.



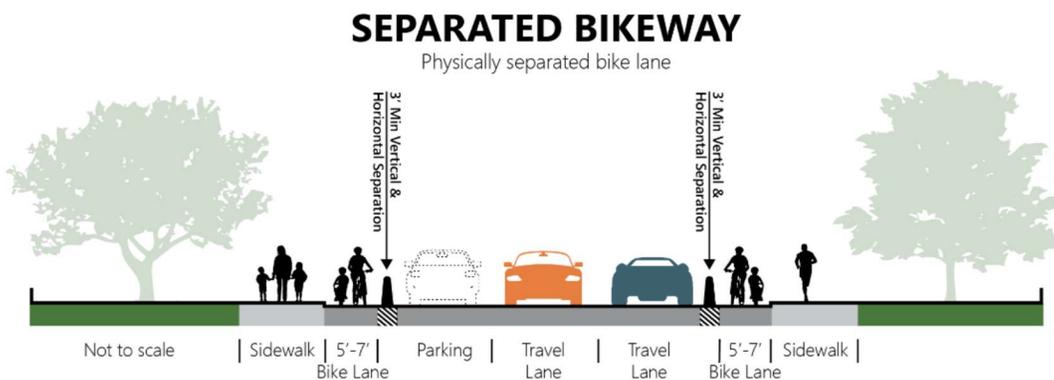
- *Bicycle Lanes* provide a restricted right-of-way and are designated for the use of bicycles with a striped lane on a street or highway. Bicycle lanes are generally a minimum of five (5) feet wide, however, six (6) feet is preferred for lanes that include a concrete gutter. Adjacent vehicle parking and vehicle-pedestrian crossflow are permitted.



- *Bicycle Routes or Signed Shared Roadways* provide for a right-of-way designated by signs and/or shared lane pavement markings (“sharrows”) for shared use between bicyclists and motor vehicles.



- Separated Bikeways or Cycle Tracks* provide a restricted right-of-way with physical separation and are designated for the use of bicycles with a raised barrier such as curbs or bollards. Separated bikeways are generally a minimum of five (5) feet wide with a three (3)-foot horizontal and vertical separation area desired. Narrower separations can be provided if adjacent vehicle parking is not provided. When adjacent vehicle parking is permitted next to the cycle track, vehicle-pedestrian crossflow is restricted to select locations (e.g., driveways) indicated by breaks in the barrier and buffer.



No bicycle facilities are provided along either side of Avocado Street, Walker Avenue, or Kamehameha Highway, meaning bicyclists must share the roadway with vehicles or ride on the shoulder of the roadway (if one is present). Sharing the roadway is a common practice on local streets like Avocado Street and Walker Avenue given the lower traffic volumes and travel speeds compared to higher volume roadways like Kamehameha Highway.

During field observations, few bicyclists were observed on Avocado Street in front of the Project site.

## Transit Facilities

O‘ahu’s public bus system, TheBus, operates several bus routes within the Project vicinity. Routes 51, 52, 83, 99, 511, and PH3 have bidirectional bus stops within approximately 300 feet of the Project site. A comfortable walking distance to access bus transit is generally considered to be within a quarter mile, or 1,320 feet. Peak headways for these routes range from 15 to 60 minutes on weekdays and 30

to 70 minutes on weekends. **Table 1** shows the hours of operation and headways for weekday and weekend bus service on these routes.

**Table 1. Bus Routes Near Project Site**

Route	Weekday		Weekend	
	Hours of Operation	Peak Headway (mins)	Hours of Operation	Peak Headway (mins)
<b>51</b> Honolulu – Wahiawā	3:55 AM – 12:25 AM	15	4:25 AM – 2:19 AM	30
<b>52</b> Honolulu – Mililani – Haleiwa	4:36 AM – 2:18 AM	30	4:56 AM – 1:09 AM	35
<b>83</b> Wahiawā Town Express	4:52 AM – 6:50 PM	20	No service	No service
<b>99</b> Wahiawā – Mililani – Waipahu – Kapolei Express	5:10 AM – 6:05 PM	60	No service	No service
<b>511</b> Wahiawā – Schofield	5:45 AM – 12:41 AM	10	7:50 AM – 12:43 AM	70
<b>PH3</b> Wahiawā Heights – Pearl Harbor Express	5:08 AM – 4:27 PM	N/A (one AM bus and one PM bus)	No service	No service

## Planned Multimodal Improvements

Based on our review of multiple planning documents, no specific mobility or circulation improvements are planned for Avocado Street fronting the Project site. However, as noted under **Existing Conditions – Pedestrian Facilities and Activity**, Avocado Street is part of O’ahu’s Pedestrian Priority Network. Additional documents included in our review were the O’ahu Bike Plan (2019) and various State of Hawai’i and O’ahu Metropolitan Planning Organization (O’ahuMPO) transportation improvement plans. As such, the existing transportation facilities and services are expected to be in place when Project operations commence.

## Project Vehicle Traffic Assessment

The following Project-specific assumptions—based on information received from G70 and the Project team—were used to inform the trip generation evaluation:

- The site will be utilized by three (3) to four (4) officers on a daily basis and about six (6) officers on a weekly basis.
- The officers will be accessing the site throughout the day during typical working hours.
- Public access to the site will not be allowed.

Based on these planned operations, the Project is expected to generate fewer than five (5) trips during each of the AM and PM peak hours. While new vehicle trips would be added to Avocado Street, the impact of the additional vehicles (on average, less than one vehicle every 12 minutes during the peak hour) would be indiscernible to existing drivers. Therefore, any Project-related traffic is expected to have a less-than-significant impact on the operations of the adjacent street segment and intersections.

# Site Plan Evaluation

The following site plan evaluation was conducted based on our review of the G70 site plan for the Preferred Option – Central Tower, dated August 2025.

The Project site is proposed to include vehicular access from Avocado Street. Vehicular access will be provided via two (2), two-way, 30-foot-wide driveways with double rolling gates. This two-way access allows for optional turning movements during peak congestion and maximum flexibility for circulation. The site includes designated parking areas to accommodate one (1) 25-foot Whaler boat, three (3) jet skis, three (3) all-terrain vehicles (ATVs), one (1) boat truck, and one (1) ADA stall. Officers are expected to park along the edges of the open lot within the site. Similar to the trip generation assessment, the volumes entering and exiting each driveway will be negligible and are not expected to impact traffic flow on Avocado Street.

The pedestrian and bicycle infrastructure within the study area generally does not support safe access to surrounding land uses or to the bus stops on Kamehameha Highway. The proposed site plan does not show a sidewalk along the site frontage on the south side of Avocado Street. To address this and for consistency with the O‘ahu Pedestrian Plan, we recommend that a sidewalk be installed along the entire length of the site frontage. Doing so will help to enhance pedestrian safety and accessibility by limiting interactions between vehicles and pedestrians. If a sidewalk is installed, its location/alignment will need to be coordinated with DPP TRB/Department of Transportation Services (DTS) staff, and a subsequent detailed evaluation of sight distance will need to be conducted to ensure that adequate sight distance of people walking on the sidewalk is provided for drivers of vehicles leaving the Project site.

## Recommendations

The number of vehicle trips the Project is expected to generate is low enough that existing drivers will not be able to discern a difference in operations at the site driveways or at the adjacent intersections. However, given existing westbound queuing observed on Avocado Street, it is possible that vehicles entering and exiting the Project site may experience temporary delays during certain times of the day. The site design will allow Project-generated vehicles flexibility in terms of traveling on Avocado Street to access Kamehameha Highway or using Walker Avenue to travel to and from the site. The Project is not expected to have an adverse impact on pedestrian, bicycle, or transit mobility in the study area.

While mitigation of Project-related traffic impacts is not necessary from an operations perspective, the following recommendations should be considered:

- Coordinate with DPP TRB/DTS to install a sidewalk along the site frontage to enhance pedestrian and transit access and improve safety for individuals walking to and from the area or nearby bus stops.
- Conduct a detailed sight distance assessment to minimize conflicts between vehicles and pedestrians at and near site driveways once the design of all on-site elements (e.g., building walls, fences, signage, etc.) is finalized.

# Attachment A



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

 Project Site

ATTACHMENT A

# Project Vicinity Map

# Attachment B

# Preferred Option: Central Tower *Floor Plans*

AVOCADO STREET

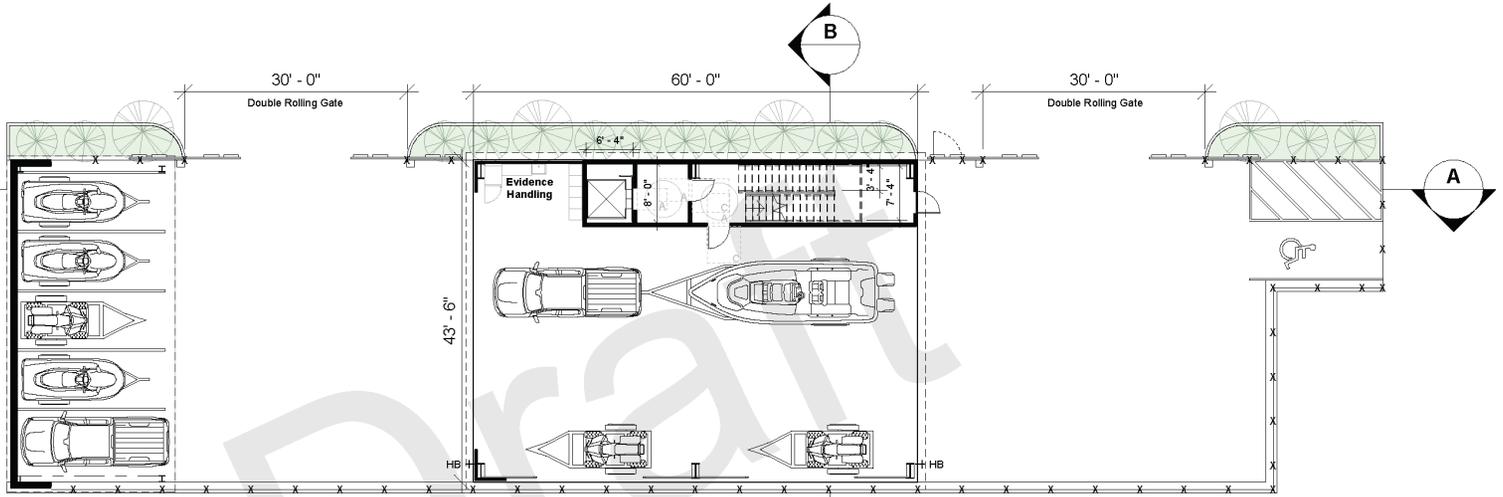
**Square Footage**

Enclosed 928 SF  
 Covered 4,992 SF

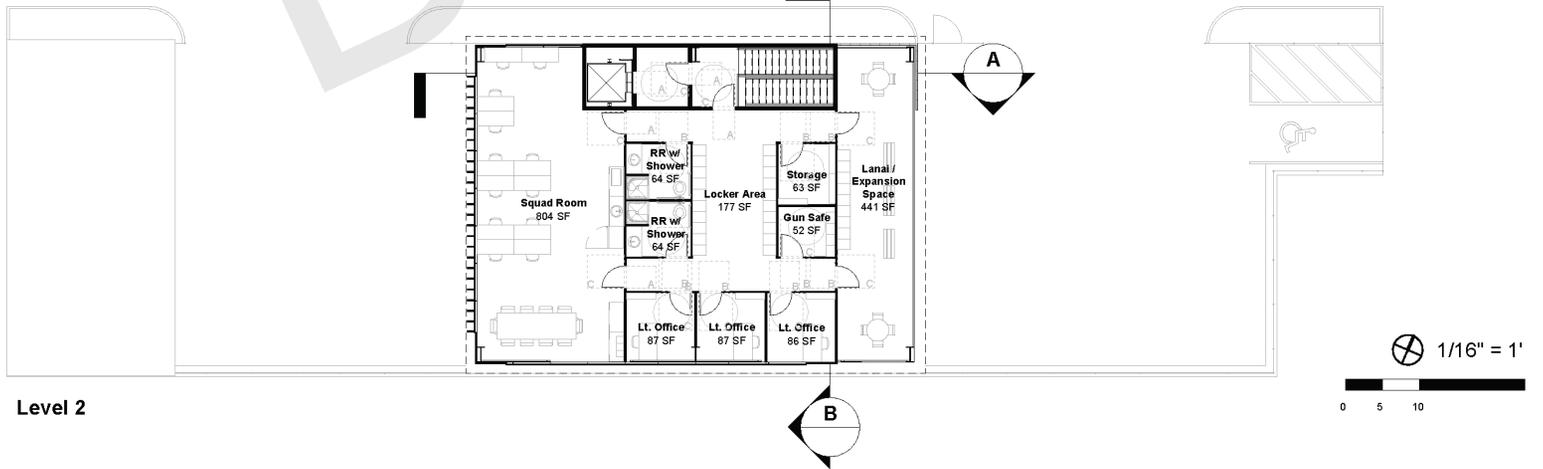
**Line Legend**

— X — Fence  
 - - - - - Roof Overhang

**Clearance Legend**



Level 1



Source: G70 and University of Hawai'i Community Design Center, August 2025

ATTACHMENT B

## Proposed Site Plan

Appendix G

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# **Archaeological Literature Review and Field Inspection**



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**Draft**

**Archaeological Literature Review and Field Inspection  
for the Department of Conservation and  
Resources Enforcement (DOCARE) Wahiaiwā Substation,  
Wai‘anae Uka Ahupua‘a, Wahiaiwā District, O‘ahu Island  
TMK: (1) 7-4-001:025**



**Prepared for:**



**Prepared by:  
Nathan J. DiVito, M.A. and  
Trisha Kehaulani Watson, J.D., Ph.D.**



**Honolulu, Hawai‘i  
July 2025**

## Management Summary

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At the request of Group 70 International Inc., an Archaeological Literature Review and Field Inspection (ALRFI) was conducted for the Department of Conservation and Resources Enforcement (DOCARE) Wahiawā Substation located in Wai‘anae Uka Ahupua‘a, Wahiawā District, O‘ahu Island, TMK: (1) 7-4-001:025. The project area is situated in Wahiawā town and consists of a commercial property with two buildings located at 525 and 535 Avocado Street. The property measures 0.2132 acres (9,288 square feet [sq. ft] or 863 square meters [sq. m]) in size and was formerly owned by Angelo’s Auto Body & Detailing LLC.

This study was conducted for an Environmental Assessment (EA) Chapter 343 review to identify cultural resources in support of the proposed DOCARE Wahiawā Substation. The objectives of the ALRFI were to determine the project area’s land-use history, to relocate and identify any historic properties or component features in the project area, and to evaluate the proposed project’s potential effect on historic properties. This study is not an archaeological inventory survey (AIS); however, it has been conducted according to standards outlined in Hawai‘i Administrative Rules (HAR) §13-276 for AIS studies and is intended to assist with the project’s compliance with Hawai‘i Revised Statutes (HRS) 6E-8 and HAR §13-275 in consultation with the State Historic Preservation Division (SHPD).

Wahiawā is most widely known as the birthplace of Hawaiian high chiefs due to the presence of Kūkaniloko, an important complex of birthing boulders located northwest of Wahiawā town. It is one of only two places in the island chain known for the birthing of chiefs. Kūkaniloko had a companion heiau, Ho‘olonopahu which heralded the arrival of the new chiefs. Based on this, it is likely that the area had a substantial traditional Hawaiian population. The riparian lands along the forks of Kaukonahua Stream and Poamoho Stream would have been cultivated with extensive lo‘i terraces and other agricultural features with nearby kula (pasture) lands used for native gardens and habitation.

No mo‘oleo or any other historical information was found regarding traditional use of the project area. It is located within Wai‘anae Uka and was generally part of the lands of the central plateau cleared for sandalwood during the early historic period. During the Māhele, the surrounding lands including the project area were retained by the Hawaiian Government as Crown Land. Later, the land was transferred to the Board of Education who leased it to W.C. Jones in 1875. The area that would become Wahiawā ahupua‘a was annexed by the Hawaiian Territorial Government in 1898, and was divided into thirteen lots known as the Wahiawa Colony Tract. The project area was located within Lot 1B, sold as a portion of Land Grant 4616 to Mary E. Clark in 1902. The Clark Tract residential neighborhood including Avocado Street was constructed in 1916 and included a total of 86 lots, with the project area located within Lot 46. Aerial photographs and maps indicate the property remained undeveloped until the early 1950s when three commercial buildings and their associated parking lots and infrastructure were constructed on the property. The lot was subdivided to its current square footage in 1968 and the property and surrounding area has stayed relatively the same until the last 10 -15 years. Recent changes include demolishing the two story building on the property, construction of a CMU block addition to one of the buildings, and other alterations associated with fires on the property. As of now the buildings on the property are vacant and abandoned with squatters living and dumping garbage in the vicinity.

No previous archaeological studies have been conducted for the project area. However, it was included in a reconnaissance level survey for Wahiawā town that evaluated a total of 3,585 properties and provided National Register of Historic Places (NRHP) eligibility recommendations for 3,283 properties. The three structures within the project area were included in the survey with two of the buildings not evaluated for significance and the third assessed as ineligible for listing on the NRHP.

The archaeological field inspection consisted of a 100% pedestrian survey of the traversable portions of the project area. The project area was completely developed, and no historic properties were documented, and no significant artifacts or features were encountered during the field inspection. The lack of historic properties is due to development of the parcel which included excavation and subsurface utilities for the three (now two) commercial buildings, grading for asphalt and concrete paving of the remainder of the property, and construction of a retaining wall along the southern boundary of the property.

Since no plans have been finalized for the subject property in association with the DOCARE Wahiawā Substation project, recommendations include consultation with SHPD and an evaluation of historic buildings by a qualified architectural historian prior to development.

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## Introduction

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### Project Background

This Archaeological Literature Review and Field Inspection (ALRFI) was conducted for the Department of Conservation and Resources Enforcement (DOCARE) Wahiawā Substation located in Wai‘anae Uka Ahupua‘a, Wahiawā District, O‘ahu Island, TMK: (1) 7-4-001:025. The project area is situated in Wahiawā town and consists of a commercial property located at 525 Avocado Street. The property measures 0.2132 acres (9,288 square feet [sq. ft] or 863 square meters [sq. m]) in size and is owned by Angelo’s Auto Body & Detailing LLC. The project area is shown on a USGS topographic map (Figure 1), an aerial photo (Figure 2), and a TMK parcel map (Figure 3).

This study was conducted for an Environmental Assessment (EA) Chapter 343 review to identify cultural resources in support of the proposed DOCARE Wahiawā Substation. No plans have been finalized for the project but possible ground disturbances could include grubbing, grading, and excavations associated with land contouring, concrete foundations and walkways, and utility trenching.

The objectives of the ALRFI were to determine the project area’s land-use history, to relocate and identify any historic properties or component features in the project area, and to evaluate the proposed project’s potential effect on historic properties. This study is not an Archaeological Inventory Survey (AIS); however, it has been conducted according to standards outlined in Hawai‘i Administrative Rules (HAR) §13-276 for AIS studies; it is intended to assist with the project’s compliance with Hawai‘i Revised Statutes (HRS) 6E-8 and HAR §13-275 in consultation with the State Historic Preservation Division (SHPD). Fieldwork was performed under archaeological permit number 26-28 issued to Honua Consulting by the SHPD in accordance with Hawai‘i Administrative Rules (HAR) Chapter 13-282.

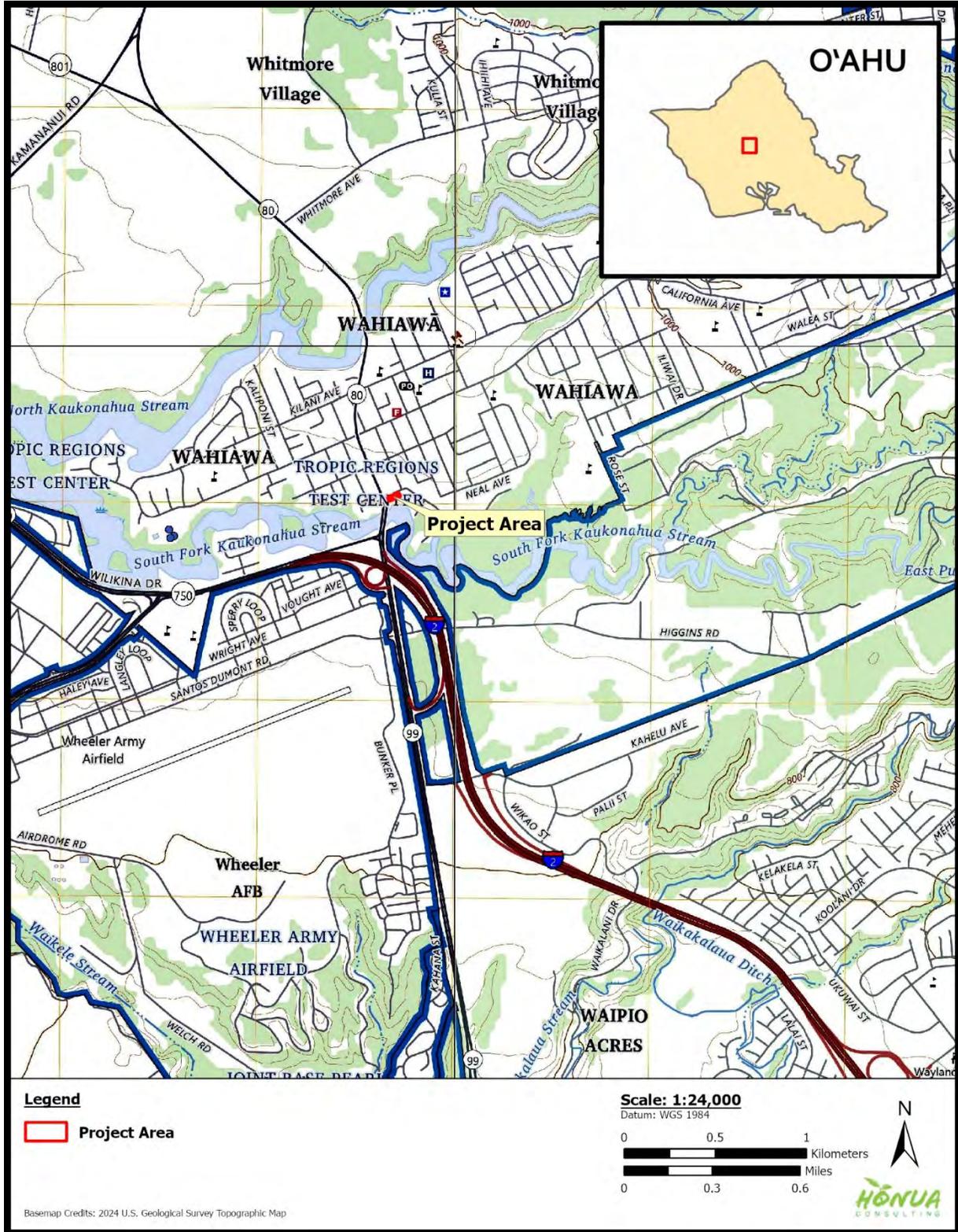


Figure 1. Portion of a 2024 U.S. Geological Survey (USGS) topographic map showing the project area (red)

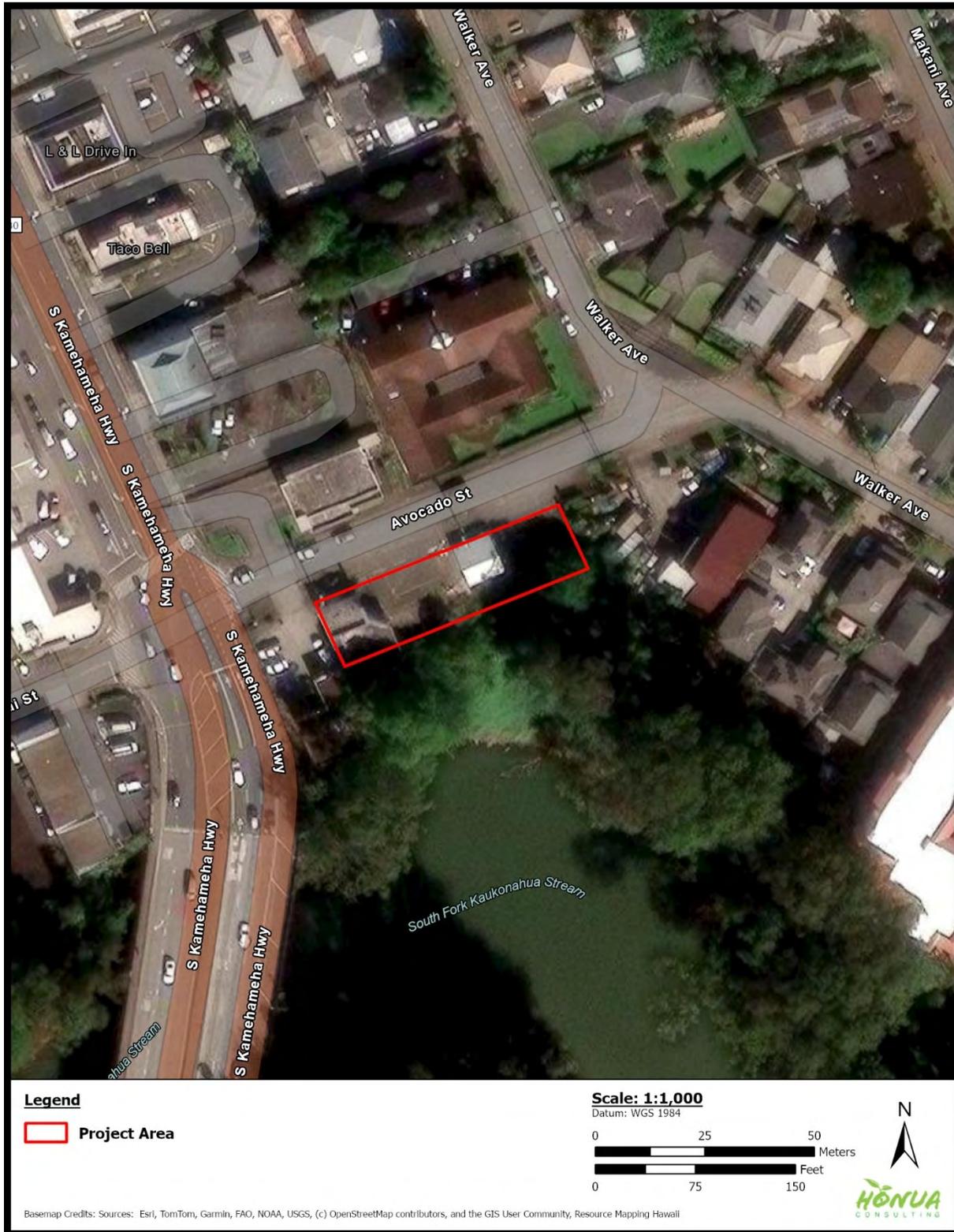


Figure 2. Aerial imagery showing the location of the project area (red)



Figure 3. Portion of Tax Map Key (TMK): [1] 7-4-001 showing the location of the project area (red)

## Environmental Setting

### Natural Environment

The project area is located on the central O‘ahu plateau which was formed by lava from the Ko‘olau Volcano banking against the eroded slope of the Wai‘anae Volcano (Macdonald et al. 1983:420). It is located within the traditional district (moku) of Wahiawā and the traditional land division (ahupua‘a) of Wai‘anae. At this location Wai‘anae Uka Ahupua‘a is bordered by Kamananui Ahupua‘a to the north and Waikele Ahupua‘a to the south.

The elevation of the project area is approximately 267 meters (875 ft) above mean sea level and is located approximately 10 miles (16.1 km) from the nearest coastline. It receives annual rainfall ranging between 1,144 and 1,197 mm (45 and 47 in), with wetter months in the period of November through March (Giambelluca et al. 2013). This portion of the plateau is dissected by many small streams and tributaries that flow from the Ko‘olau Mountain range west to the ocean. The closest water source to the project area is a portion of the south fork of Kaukonahua Stream located approximately 30 m (98 ft) to the south.

A single soil type is present within the project area and consists of Wahiawa silty clay on slopes ranging from 0 to 3 percent (WaA) (Figure 4). The Wahiawa soil series consists of well-drained soils on uplands on the island of O‘ahu. This soil type developed in residuum and old alluvium derived from basic igneous rock (Foote et al. 1972:124). They are nearly level to moderately steep and elevations range from 500 to 1,200 ft (152.4 to 365.7 m). These soils are generally used for sugarcane, pineapple, pasture, and homesites. The natural vegetation consists of bermudagrass (*Cynodon dactylon*), guava (*Psidium guajava*), honohono (*Commelina diffusa*), koa haole (*Leucaena leucocephala*), and lantana (*Lantana camara*).

### Built Environment

The project area lot is completely developed and contains two one-story commercial buildings with the remainder paved over with asphalt and concrete. The buildings have been constructed of Concrete Masonry Unit (CMU) block and a CMU block retaining wall runs along a portion of the southern boundary of the property. Subsurface utilities are present throughout the property with utility boxes located along Avocado Street.

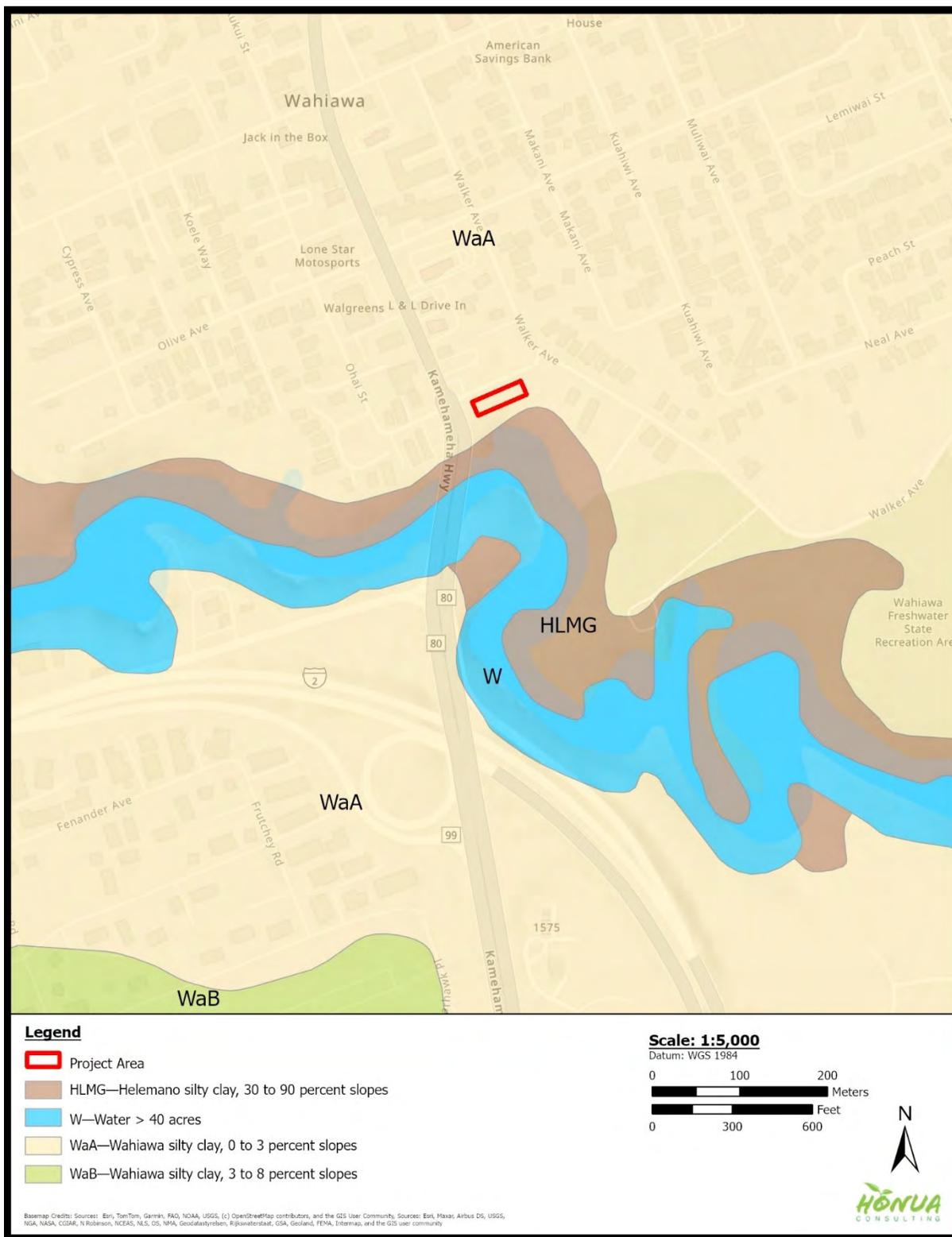


Figure 4. Portion of a 2013 USGS topographic map with soil series overlay showing anticipated soils within the project area (Foote et al. 1972)

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## Traditional and Historical Background

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Background research was conducted using materials obtained from the State Historic Preservation Division (SHPD) library in Kapolei and the Honua Consulting database. On-line materials consulted included the Ulukau Electronic Hawaiian Database ([www.ulukau.com](http://www.ulukau.com), Soehren 2002-2019), Papakilo Database ([www.papakilodatabase.com](http://www.papakilodatabase.com)), the State Library on-line (<http://www.librarieshawaii.org/Serials/databases.html>), and Waihona ‘Aina Mahele database (<http://www.waihona.com>). Hawaiian terms and place names were translated using the on-line Hawaiian Dictionary (Nā Puke Wehewehe ‘Ōlelo Hawai‘i, [www.wehewehe.com](http://www.wehewehe.com)) and *Place Names of Hawaii* (Pukui et al. 1974). Historic maps were obtained from the State Archives, State of Hawai‘i Land Survey Division website (<http://ags.hawaii.gov/survey/map-search/>), and UH-Mānoa Maps, Aerial Photographs, and GIS (MAGIS) website (<http://guides.library.manoa.hawaii.edu/magis>).

Maps were geo-referenced for this report using ArcGIS Pro desktop. GIS is not 100% precise and historic maps were created with inherent flaws; therefore, geo-referenced maps should be understood to have some built-in inaccuracy.

### Traditional Background

The history of Hawai‘i is recorded through mo‘olelo (oral-historical accounts) and early historical (i.e., written) records, historic maps, and land documents. The following provides a brief summary of mo‘olelo and inoa ‘āina (place names) of the area, and describes how the land has been utilized over time. Relevant place names in the vicinity of Wahiawā are presented in Table 1.

The project area is located within the district of Wahiawā. Traditionally, Wahiawā was considered part of the Waialua moku, although the boundaries in the area underwent a number of geopolitical changes in the 19<sup>th</sup> and 20<sup>th</sup> centuries. Wahiawā is a traditional name, although there were other place names in the area that have largely been lost. Nonetheless, Wahiawā has a rich and interesting cultural history, and many mo‘olelo and legends are associated with it. Wahiawā is translated as “place of noise” as it was said that the sound of the waves could be heard from the area (Pukui et al. 1974:218). During this period, the place names Līhu‘e and Leilehua were still used as the names of the area. Līhu‘e (“cold chill”) is only now rarely used in reference to the area, as the name is more commonly associated with the capital city of Kaua‘i County (Pukui et al. 1974:132). Leilehua (“lehua lei”) is only rarely used, although the name remains in use by the U.S. Military for its nearby golf course and club house (Pukui et al. 1974:131).

Wahiawā covers an area from the crest of the Ko‘olau Mountains to the center of the plateau just west of the junction of the north and south forks of Kaukonahua Stream and is the name of the general area of the central plateau and the inland portion of Kamananui Ahupua‘a. The Kaukonahua Stream begins in the mountains and flows northward to the ocean at Waialua. It is comprised of a north fork and a south fork with a total length of 33 miles, making it the longest waterway in the islands (Pukui et al. 1974:92). Wahiawā town is located between the north and south forks of Kaukonahua Stream. An explanation of the name Kaukonahua by Pukui et al. (1974:92-93) states that “according to one explanation the name means ‘place his testicles’ (a man’s testicles were cut off here so that he could leap). A more likely explanation is Kau-kōnāhua (place fatness)”. Poamoho Stream is another major waterway in the area and forms the northern

Table 1. List of Inoa ‘Āina (Place Names) in Wahiawā Ahupua‘a Referenced in This Report

Inoa ‘Āina	Description
‘Ewa	Land division and district, plantation town, elementary school meaning “one-sided, crooked, out of shape, imperfect, to cause not to fit, ill fitting, incorrect, or unjust”, also used as a directional term (Pukui et al. 1974:28, Pukui and Elbert 1986:42)
Helemano / Halemano	A stream, an elementary school, a ditch, a reservoir, and camps meaning “many snared or many going” (Pukui et al. 1974:44)
Kamananui	Land section and ditch, Schofield Barracks, a forest grove here was called Pō-loa (long night), meaning “the large branch” (Pukui et al. 1974:80)
Kaukonahua	Gulch and stream, meaning “place his testicles (a man’s testicles were cut off here so that he could leap)”, or more likely Kau-kōnāhua (place fatness)” (Pukui et al. 1974:93)
Kua‘ikua	Located in Halemano, a sacred spring only those related to the supernatural ones who made and hid it are allowed to bathe in it” (Ke Au Hou 1910, quoted in Sterling and Summers 1978:112)
Kūkaniloko	Name for stones near Wahiawā where royalty gave birth, also the name of an ancient chief (Pukui et al. 1974:121)
Leilehua	Plains, village, high school, and golf course, Wahiawā area, famous for training in lua fighting, site of present Schofield Barracks, meaning “lehua [‘ōhi‘a lehua, <i>Metrosideros polymorpha</i> ] lei” (Pukui et al. 1974:131)
Līhu‘e	Former land division near Schofield Barracks meaning “cold chill” (Pukui et al. 1974:132)
Poamoho	A stream, trail, and camp (Pukui et al. 1974:185)
Wahiawā	Land section, district, city forest reserve, fishing area, homesteads, ditch, reservoir, schools, botanical gardens, and recreation center meaning “place of noise” (Pukui et al. 1974:218)
Waialua	Land division, peak, village, valley, mill, town, railroad, bay, beach park, recreation center, district, golf course, reservoir, and elementary and high schools possibly meaning “two waters” (Pukui et al. 1974:220)
Wai‘anae	Land division, town, valley, school, district, and homesteads and district meaning “mullet water” (Pukui et al. 1974:220)
Wai‘anae Uka	Ahupua‘a meaning inland Wai‘anae

boundary of Wahiawā. Kua'ikua is the name of a place and a stream in upper Helemano; and located outside of the Wahiawā area. The stream is fed by a “sacred spring and only those related to the supernatural ones who made and hid it, are allowed to bathe in it” (Ke Au Hou 1910, quoted in Sterling and Summers 1978:112). Two of the ancient chiefs of O'ahu, Haho and Lana-ka-wai, were born at the kawa<sup>1</sup> of Kua'ikua. Of the birth of Lana-ka-wai, Kamakau (1867 [1991:101]) writes:

Lana-ka-wai ... was born at the kawa of Kua'ikua in Wahiawā, O'ahu. There is a flat rock there where his mother, Mahuia, squatted and gave birth to him; he floated on the water and so was given the name of Lana-ka-wai.

Like many other areas of O'ahu, the flat riparian lands along the streams were modified and terraced for lo'i (pond fields) and other crops. In *The Hawaiian Planter Vol. 1* E.S. Craighill Handy makes note of the extent of the former terraces in the Wahiawā area as follows:

According to Oscar Cox there were terraces at Kanaku and at Kuaikua, both of which are somewhere in the vicinity of Kukaniloko. According to old Mahoe there were numerous terraces on the level uplands in the vicinity of Wahiawa town, irrigated by a ditch bringing water from Helemano Stream. However, this is impossible, since Poamoho Stream intervenes. The chiefess, Lanikaha built terraces inland in Helemano. There were small terraces in all the inner valleys.

Wahiawa Stream irrigated extensive terraces on the flats both immediately above and below the town and also about 2 miles inland. Some of these terraces are planted in truck now, but most are neglected. It is said that there were numerous small terrace areas from 3 to 4 miles upstream in Wahiawa and its tributaries, Waimano and Manana.

At Kaniula, where the waterworks are now, Hawaiians had a dam from which ditches led to Wahiawa terraces, some of which were near the site of the present radio station (Handy 1940 quoted in Sterling and Summers 1978:138)

Along with Līhu'e in 'Ewa in the eastern foothills of the Wai'anae Range, Wahiawā on the western slopes of the Ko'olau Range was an area known as the home of chiefs. The chiefs of the area are described by Samuel M. Kamakau in *Ka Pō'e Kahiko: The People of Old* as such:

The chiefs of Lihue, Wahiawa, and Halemano on Oahu were called *Lo* chiefs, *po'e Lo Ali'i* [“people from whom to obtain a chief”], because they preserved their chiefly kapus. They lived in the mountains (*i kuahiwi*); and if the kingdom was without a chief, there in the mountains could be found a high chief (*ali'i nui*) for the kingdom. Or if a chief was without a wife, there one could be found – one form chiefly ancestors (Kamakau 1964:5)

The birth of chiefs took place at Kūkaniloko, an important complex of stone boulders located northwest of Wahiawā town. It is one of only two places in the island chain known for the birthing of chiefs. Kūkaniloko had a companion heiau, Ho'olonopahu which heralded the arrival of the new

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<sup>1</sup> Pukui and Elbert (1986:139) define kawa as “leaping place, as a precipice from which a swimmer leaps into a pool.”

chief. It has since been destroyed and was planted in pineapple through much of the 20<sup>th</sup> century. Several historic accounts describe the founding and traditions associated with Kūkaniloko. The first narrative description of the location and founding of Kūkaniloko was written by Abraham Fornander in *An Account of The Polynesian Race Its Origin and Migrations and the Ancient History of the Hawaiian People to the Times of Kamehameha I Vol. II* and is included below:

I am led to assume, therefore, that *Nanamaoa* was the first of his family who arrived from one or the other of the southern groups and established himself on the Hawaiian group. His son, *Nanakaoko*, was a chief of considerable note on the island of Oahu. He and his wife, *Kahihiokalani*, are by the oldest, and by all legends, acknowledged as having built the famous and in all subsequent ages hallowed place called *Kukaniloko*, the remains of which are still pointed out about three-fourths of a mile inland from the bridge now crossing the Kaukonahua stream in Ewa district, island of Oahu. Chiefs that were born there were “born in the purple” and enjoyed the distinction, privileges, and tabus which that fact conferred. So highly were those dignities and privileges prized, even in latest times, when the ancient structure and surroundings had fallen in decay, that Kamehameha I., in 1797, previous to the birth of his son and successor, Liholiho K. II., made every arrangement to have the accouchement take place at Kukaniloko; but the illness of Queen Keopuolani frustrated the design. (Fornander 1880:20-21)

Thomas Thrum also provides a narrative description of the founding of Kūkaniloko in the 1912 *Hawaiian Annual* as follows:

While this origin may be lost to us, the tradition of its recognized eminent virtue has come down by various native authorities which traces it back to about the opening of the twelfth century.

One early writer (Kuokoa Vol. IV, No. 31) gives the following descriptive account of its origin and purpose:

There were two famous places for the birth of children of tabu chiefs, viz., Holoholoku at Wailua, Kauai, and Kukaniloko at Waialua, Oahu. These birth places were thought to add some special divine gift to the sacred place already occupied by a tabu chief.

Kukaniloko was made or established by Nanakaoko and his wife Kahihiokalani as the place for the birth of their son Kapawa. A row of stones was laid down on the right hand and another on the left hand, and the face was to the right side. There stood thirty-six chiefs, eighteen on each side. A hill or mound was made for the back. Kukaniloko was the stone to be trusted. If any one came in confident trust and lay properly upon the supports the child would be born with honor. It would be called a chief divine; a burning fire.

When the child was born, it was quickly taken inside the Waihou of Hoolonopahu. There were forty-eight chiefs to whom belonged the duty of the birth ceremonies of cutting the naval cord.

The south side of Kukaniloko was a furlong and a half, and on the western side two furlongs. There the tabu drum of Hawea was sounded, signifying that a chief

was born. On such occasions the common people assembled on the east side of the stream – a thousand of them (a mano), on that side of Kuaikua. On the south side were the servants. (Thrum 1911:102-103)

Due to its prestige, several notable figures in Hawaiian history were born at Kūkaniloko. They are described by Thrum (1911) below:

“Mailikukahi, one of Oahu’s most beneficent rulers, son of Kukahaililani and Kokalola, is said to have been born at Kukaniloko, and thus enjoyed the prestige and tabu attached to all who were born at that hallowed place.” (Fornander 1880) He is credited with marking definite boundaries between the neighboring chiefs and landholders; with enacting a code of laws in which theft and rapine were punishable with death; also that all first-born male children should be handed over to the Moi to be brought up by him and educated. While peacefully disposed, he proved a brave defender of his envied realm in thoroughly defeating an invading force of Hawaii and Maui raiders in a sanguinary battle which began at Waikakalaua and continued from there to Kipapa gulch, where the invaders were vanquished, and the gulch is said to have been literally paved with the corpses of the slain., from which circumstance the name “Kipapa” applies.

Kukaniloko, one of the daughters of Piliwale (a grandson of Mailikukahi) and Paakanilea, his wife, succeeded him in a successful reign of peace and prosperity. Her birth-place is not stated, but she is referred to as a powerful chiefess, her husband being Luaia, a Maui chief, grandson of Kukaalaneo.

Kalaimanuia followed her mother, Kukaniloko, as Moi of Oahu. She was born at Kukaniloko, the famous birth-place of Hawaiian royalty.

Kakuihewa, who became one of the great kings of Oahu, was also born at Kukaniloko, the account of which is more specific than the others. He is said to have been born “in the sleeping place consecrated by the tabu of Lilo. From thence he was taken to Hoolanopahu by his grandfather Kanehoalani. Forty-eight chiefs of the highest rank were present at the ceremony of cutting the naval-string of the newborn chief, and the two sacred drums named Opuku and Hawea announced the important event to the multitude. (Thrum 1911:104-105, portions quoted from Fornander 1880)

The significance of Kūkaniloko was recognized in the late 1800s and early 1900s and efforts were made to preserve and protect the stones. A narrative description by Thrum (1911) of the location and layout of the stones and the condition of the site at that time is included below:

Instead, the searcher will find a scattered lot of large stones, most of which are deeply embedded in the earth, and several of which are flat surfaced, even with the ground. These are in an area of about one hundred square feet and within the past few years have been protected by a wire-fenced enclosure perhaps twice the size, for preservation as the historic landmark that it is. Credit for this action is said to belong to Mr. W. W. Goodale, manager of the Waialua Agricultural Company.

Amid a group of three or four of the more prominent of these stones is one standing, tongue-shaped, measuring a little over five feet in height by two and one-third feet in width, that has been supposed by many was the famous stone in question from its weather-worn condition, but an aged native familiar with the locality and its traditions, says, it was brought from elsewhere a number of years ago by the late George Galbraith and set up there. It is clearly a different quality of lava rock than predominates the vicinity. Facing this stone, westward, is one of the largest, deeply imbedded in the ground, the upper surface of which has rudely-shaped depressions fitting the human form... (Thrum 1911:102)

Kūkaniloko, State Inventory of Historic Places (SIHP) #50-80-04-218, was added to the National Register of Historic Places (NRHP), as NRHP #73000674 in 1973. The site area was expanded to 5 acres in 1995 and relisted on the NRHP as #94001640. Recently efforts have been made with the Wahiawā community, the DSP, the DLNR, and the Office of Hawaiian Affairs (OHA) to pursue community informed management plans for Kūkaniloko and the surrounding land. The site currently operates as the Kūkaniloko Birthstones State Monument (Yent 1999).

Like Kūkaniloko, Helemano (alternatively Halemano) is located outside of the Wahiawā area (to the north) but its significance as a traditional locale warrants mention. The traditions of Helemano relate to cannibalism. This was “a beautiful and retired rural spot ... [lying] between two deep ravines ... its area embraces several hundred acres, verdant and picturesque, but now regarded with superstitious dread, from once having been the rendezvous of a clan of cannibals” (Jarves 1844:72) under the rule of the chief ‘Ai-kanaka (man-eater). A 19th century account (Ka Hae Hawaii 1861) recounts:

There is a tale of a certain people who lived long ago up at Halemano in Waialua. They were known to roast and eat any person who went there as a stranger. The house site of their chief, whose name was Kalo, is pointed out and a flat, smooth stone called Kalo’s meat dish that lies there to this day. It is away up in the mountain of Halemano. The land is on a high place surrounded by deep valleys and the trail leading to it is steep. There Kalo lived with his people. There also is a heiau site ten fathoms long and seven fathoms wide. Between the heiau and house site is the imu pit where people were roasted. Below that, about 13 or 14 chains away, lies Kalo’s meat dish.

Beckwith (1940 [1970:340-342]) summarizes other versions of this story, including some that incorporate the place and person of O‘ahunui.

O‘ahunui is a place located to the south of present Wahiawā town. It was once the residence of the kings of O‘ahu, but was abandoned during the reign of the sovereign chief, O‘ahunui, who was turned to stone when he became a cannibal and ate the two sons of his brother-in-law, Lehuanui (Nakuina 1897:90). O‘ahunui is also described as a village in the story of a woman who travels the island in search of her lost tapa-beater (Ke Aloha Aina 1919).

In 1783, in battles for the control of the island, the Maui chief Kahekili defeated the forces of O‘ahu. The O‘ahu chief Kahahana and his wife and a friend escaped and hid in the mountains for over two years (Kamakau 1867 [1961:136-137]). “They ... thought it better to go up to Oahunui at Wahiawa and so they went to the forest of Halemano” (Ke Au Hou 1910).

## Historical Background

### Wahiawā in the Early Post-Contact Period

There is little known about the central O‘ahu plateau in the early years following contact and the beginning of the 19<sup>th</sup> century. The sandalwood trade boomed in the 1820s when chiefs were allowed to participate in the market. The fragrant sandalwood, a major export for the Chinese market, was a common forest tree in the central plateau. Kamakau (1870 [1964:207]) writes “at the completion of the fort [at Honolulu in 1816] Ka-lani-moku and all the chiefs went to work cutting sandalwood at Wahiawā, Halemano, Pu‘ukapu, Kanewai, and the two Ko‘olaus. The largest trees were at Wahiawā, and it was hard work dragging them to the beach.” As the wood became increasingly scarce, one method of collection was to set fire to the forest and trace the sandalwood by its fragrant odor (Bishop 1916:45).

The earliest historic account of Wahiawā was written by Sereno Bishop (1916), who in the 1830s was a young man living at ‘Ewa with his missionary family. The family would often travel across the island to visit the Waialua Mission Station:

There was then no road save a foot path across the generally smooth upland. We forded the streams. Beyond Kipapa gulch the upland was dotted with occasional groves of Koa trees. On the high plains ti plant abounded often so high as to intercept the view. No cattle then existed to destroy its succulent foliage. According to the statements of the natives a forest formerly covered the whole of the then nearly naked plains. (Bishop 1916:45)

The “nearly naked plains” could have resulted from one or a combination of several possibilities. Ti was a Polynesian introduction, traditionally useful for its leaves and roots. Cuddihy and Stone (1990:32) note that “many of the forests in which these early introductions [including ti] predominate are probably successional after Hawaiian cultivation.” If so, the extent of ti plant on the central plateau could represent the after-effect of Hawaiian agriculture in the uplands. It is also very likely that the “nearly naked plains” were a direct result of sandalwood collection years earlier.

### The Māhele (1847-1855)

In the years between 1847 and 1855, the lands of Hawai‘i were divided under the Māhele. Prior to Western contact, all land in the Hawaiian Islands was held by the chiefs as descendants of the gods—no one owned the land. After Western contact, some foreigners were granted gifts of land for services to Kamehameha I and/or his heirs. With a growing number of foreigners arriving and establishing business interests or in service of the mission stations, many petitioned for fee-simple title to land upon which they lived or worked. In 1848, Kauikeaouli-Kamehameha III agreed to the Māhele ‘Āina, which defined the land interests of the King, some two hundred and fifty-two high-ranking Ali‘i and Konohiki (including several foreigners who had been befriended by members of the Kamehameha line), and the Government.

As a result of the Māhele, all lands in the Kingdom of Hawai‘i and associated fisheries came to be placed in one of three categories: (1) Crown Lands (for the occupant of the throne); (2) Government Lands; and (3) Konohiki Lands. The “Enabling” or “Kuleana Act” of the Māhele (December 21, 1849) further defined the framework by which *hoa‘āina* (native tenants) could

apply for and be granted fee-simple interest in “Kuleana” lands (cf. Kamakau, 1961:403). The Kuleana Act reconfirmed the rights of *hoā‘āina* to: access, subsistence and collection of resources from mountains to the shore, which were necessary to sustain life within their given *ahupua‘a*. Though not specifically stated in this Act, the rights of piscary (to fisheries and fishing) had already been granted and were protected by earlier Kingdom laws. Land Commission Awards (LCAs) were awarded to natives who actively lived on and worked their lands and generally contained information on how the land was utilized and its contents.

During the *Māhele*, the land now known as Wahiawa town was retained by the Hawaiian Government as Crown Land. Due to this, no LCAs were awarded in the area during the *Māhele*. Later, Wahiawa including the project area was transferred to the Board of Education.

## Boundary Commission

Land ownership was a new concept to Hawaiians and legal proceedings for delinquent rent and foreclosure were common in the decades following the *Māhele ‘Āina*. These types of legal actions coupled with the effects of introduced diseases displaced native Hawaiians and helped fuel the decline of the native population of O‘ahu. At the same time there was a growing movement to fence off land areas and control access to resources which native tenants had traditionally been allowed to use. By the 1860s, foreign landowners and business interests petitioned the Crown to have the boundaries of their respective lands—which were the foundation of plantation and ranching interests—settled. In 1862, the king appointed a Commission of Boundaries, a.k.a. the Boundary Commission, whose task was to collect traditional knowledge of place, pertaining to land boundaries and customary practices, and determine the most equitable boundaries of each *ahupua‘a* that had been awarded to *ali‘i*, *konohiki*, and foreigners during the *Māhele*. The commission proceedings were conducted under the courts and as formal actions under the law<sup>2</sup> (Thrum 1890:117-118).

As the commissioners on the various islands undertook their work, the kingdom hired or contracted surveyors in the early and mid-1870s to begin the surveys. Following the boundary surveys, the Commissioners of Boundaries certified the boundaries for the lands brought before them. This resulted in an 1876 Hawaiian Government Survey Map of central O‘ahu by W.D. Alexander showing Wahiawa and the vicinity. The map indicates that the project area is within a 1,487 acre area leased to W.C. Jones by the Board of Education in 1875 and shows the W.C. Jones homestead nearby (Figure 5).

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<sup>2</sup> W. D. Alexander in Thrum’s Hawaiian Annual, 1891:117–118.

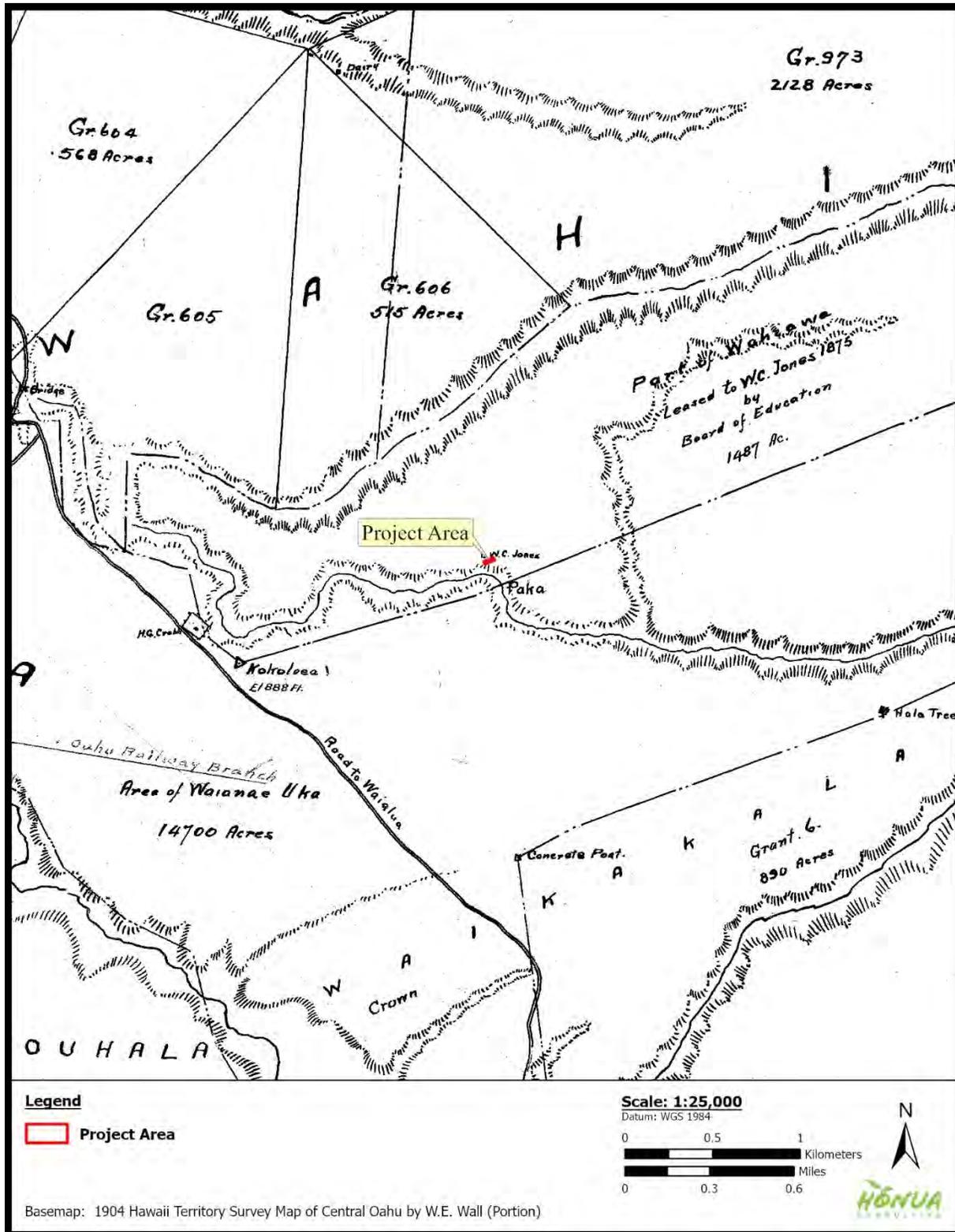


Figure 5. Portion of a 1904 Tracing by W.E. Wall of a 1876 Hawaiian Government Survey Map of Central O‘ahu by W.D. Alexander showing the project area (red) within the lands of Wai‘anae Uka (Registered Map 399, Alexander 1876)

## Mid to Late 19<sup>th</sup> Century Development of Wahiawā

It is well established that the U.S. military and other officials coordinated with Kingdom residents and foreigners in 1893 to “overthrow” the sovereign Kingdom of Hawai‘i. Many Hawaiians continue to consider this overthrow an “illegal” action and a violation of the many treaties held by the sovereign Kingdom at the time. This position is supported by the passage of the 1993 Apology Resolution passed by the U.S. Congress in 1993 on the 100-year anniversary of the overthrow.

The overthrow was led by a group who named themselves the “Citizen’s Committee of Public Safety”. They would later change their name to “The Committee of Safety.” This group was also known as the “Annexation Club” in reference to their strong advocacy for the annexation of Hawai‘i to the United States. The members of this group included Henry E. Cooper, Theodore F. Lansing, Henry Waterhouse, Lorrin A. Thurston, Ed Suhr, F.W. McChesney, John Emmeluth, Wm. R. Castle, Wm. O. Smith, J.A. McCandless, C. Bolte, W.C. Wilder, and Andrew Brown.

After the overthrow, the individuals who orchestrated the coup d’état self-proclaimed themselves to be in charge of the government and established the “Republic of Hawai‘i.” They then “ceded” 1.8 million acres of land set aside as Crown<sup>3</sup> and Government Lands<sup>4</sup> through the Māhele to themselves and quickly set out to sell these lands for their own gain.

The Republic of Hawai‘i, led by Committee of Safety member Sanford Ballard Dole, implemented a plan to sell off the Crown and Government Lands as agricultural homesteads. To achieve this, the Republic of Hawai‘i passed the Land Act of 1895, which resulted in the repealing of the 1865 Kingdom Law and allowed the Crown Lands to be sold. The law allowed only citizens to apply and excluded most “Orientals” from citizenship, limiting the distribution of these homestead lots to only Hawaiians and Westerners. (Act of August 14, 1895, Act 26, 1895: 49-83). Approximately 46,594 acres were removed from the ceded lands sold by the Republic between 1895 and 1898. The annexed lands included Wahiawā, which later became agricultural homesteads and Wahiawā town and the crown lands of Wai‘anae Uka.

Byron Orlando Clark, originally from Iowa, was an official with the Republic. He advocated for agriculture in the now-vacant 1,350 acres of land in Wahiawā starting from 1898. It was Clark who lobbied for business associates from California to move to the homestead lands. By 1899, Clark had completed facilitating the issuance of government grants to the Californians and helped them settle in Wahiawā and obtain the citizenship needed for land acquisition. It is for these early colonialists that California Avenue is named. The area was divided into 13 lots and would become known as the Wahiawa Colony Tract, an area roughly bounded by the north and south forks of Kaukonahua Stream (Nedbalek 1984:19).

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<sup>3</sup> These were lands Kamehameha III awarded to himself in the Māhele.

<sup>4</sup> These were lands issued to the Kingdom in the Māhele.

## 20<sup>th</sup> Century Development of Wahiawā

At the turn of the century several sugar plantations and mills were established in the vicinity of Wahiawā and Waialua. The first was the Waialua Agricultural Company, Ltd. formed by Castle and Cooke in 1898 and centered in Waialua. A mill was constructed that same year and the first crop was harvested in 1899. Byron Clark, along with Alfred W. Eames, began planting and harvesting pineapple in the homestead lands in 1900. Eames would quickly establish the Hawaiian Island Packing Company, which would later become pineapple and agricultural giant Del Monte Fresh Produce (Hawaii), Inc. They constructed a cannery at Wahiawa in 1902.

Also, in 1900, James D. Dole (cousin to Sanford B. Dole), obtained approximately 60 acres of homestead lands in Wahiawā. He would quickly set to work building a plantation that included a cannery. Both would become operational by 1903. This significantly contributed to the initial success of the colony (Nedbalek 1984:25). Mr. Dole himself wrote an account of those early days of the pineapple business in Wahiawā for *The Honolulu Star Advertiser* in 1939 (Dole 1939: 17):

In 1901 the Hawaiian Pineapple Co. had no cannery, no pineapple machinery, no tractors, automobiles or trucks. For a plantation it had very few acres at Wahiawa, a few plants and a promised lease of 300 acres.

We had a plow, harrow and three horses. We had a name, but almost no money, and for two years the manager got no salary.

Readers will be surprised to know that at Christmas time in 1901 the company employed only four people. I was manager, Fred Tracy was teamster and two Chinese men worked in the fields.

Our first pineapples went to Honolulu in a wagon, and Tracy and I peddled them to the Honolulu fruit stores. Our first canning was done in 1903, and that year we packed 1,893 cases. How many minutes are required to pack 1,893 cases now [in 1939]?

There was no railroad in Wahiawa. The road was direct, dust, or mud. Three hours to Wahiawa; five, if we went by buggy or horseback.

One thing we had – an idea; to grow a good pineapple, to can it well and to sell it to every grocery store in the United States, every day in the year.

Now [1939], people everywhere want our pineapple. The money people pay for our pineapple pays for cans, sugar, boxes. More important, it gives the company money to pay the people who do the plantation and cannery work.

The Wahiawa Dam was constructed by the Waialua Agricultural Company in 1906 and created a seven-mile-long reservoir now known as Lake Wilson which was instrumental to the growth of the plantations and Wahiawa town (Wilcox 1996). Another important 1906 milestone was the completion of the OR&L line from Waipahu to Wahiawā which further transformed and provided access to the plateau. The growers were desperate. It was a railroad or close the doors. Mr. James D. Dole, backed by the Wahiawā colonists, was overly aggressive in the struggle to bring the railroad into Wahiawā. Finally in 1905 it was decided to put the railroad through. The actual construction was finished in July 1906 to the gate of Wheeler field; the bridge to Wahiawā was put in the next year.

The OR&L railway was pioneered by Benjamin Franklin Dillingham and was constructed in 1889 from Honolulu to the ‘Ewa Plains and beyond. The railroad reached the Ewa Sugar Plantation in 1892, the Waianae Plantation in 1895, the Waiialua Mill in 1898, and Kahuku by 1899. A portion of the OR&L railroad from Waipahu to Wahiawā mentioned above runs through the western portion of the current project area and includes trestle foundations for the former rail bridge crossing the south fork of Kaukonahua Stream.

A total of 175 miles of track was laid for the railroad, with a tremendous effect on the economic development of O‘ahu and Hawai‘i as a whole (Cummins 1974; Knaus 1983). This ensured reliable transport of pineapple from the Wahiawā fields to the Honolulu canneries. Eventually, railspur lines were extended to outlying fields and workers’ camps. The *Honolulu Advertiser* (1939) wrote of the importance of the railway to the pineapple industry:

“The Oahu Railway was the savior of the Wahiawa pineapple industry in its early days,” declared Harry N. Denison, kamaaina railroad man and now assistant general manager of the Oahu railway. Mr. Denison came here in 1897 and has been with the railroad more than forty years, working up from car repair man.

The cannery, established in 1903, was successfully preserving the fruit, but during the long trip to Honolulu the penetration by the red dust made much of it worthless.

Within ten years, the homesteaders, including Clark, had grown a thriving pineapple industry with more than 250,000 cases being harvested seasonally (Pan-Pacific Union 1911:139). Thousands of acres were in production and Wahiawā had become the center of a fast growing industry (Nedbalek 1984:25). Clark would lead Clark Farm Co., Ltd. Dole would lead the Hawaiian Pineapple Company, which would become Dole Food Company. W.B. Thomas, a colleague of Clark’s, would establish and lead the Thomas Pineapple Co., which would later become part of Libby, McNeill & Libby when the company expanded into canning fruit. The Thomas plantation consisted of approximately 600 acres in Wahiawā. The plantations would bring many immigrant laborers to the area. While many were still prohibited under the 1895 Land Act from applying for homestead lands themselves, they nonetheless moved into the area, often in plantation housing, and built their lives in Wahiawā.

It was written: “The best pines [pineapples] come from Wahiawa. The Consolidated Pineapple Co., a branch of the Hawaiian Development Co., maintains its canning factory in the midst of the biggest pineapple field in the world, at Wahiawa, and here the fresh fruit may be picked early every morning and canned in its own juice before night. This is the only company at Wahiawa that cans in the field.” (Pan-Pacific Union 1911:139).

Historical accounts identify Wahiawā as its own stand-alone district beginning in 1913, when both Wahiawā and Wai‘anae Uka would be merged and made its own district, independent of the other island moku. An account by Coulter (1935) from *A Gazetteer of the Territory of Hawaii* explains:

No changes were made (after 1909) until 1913 and then only with respect to Oahu when a new district was created, that of Wahiawa, in which the ahupua‘as of Wahiawa and Wai‘anae Uka were taken from Waiialua to form this new and seventh district of Oahu. In 1899, a tract of some 1320 acres of Wahiawa, formerly in pasture, was subdivided into agricultural homestead lots and by 1913 quite a

community had developed in this section whose aspirations for independence from Waialua district was met by the creation of a new district.

In 1925, the third edition of the Revised Laws, containing all laws up to that date, was enacted. In the session laws of that year, the district of Wahiawa on Oahu was expanded on its north and south sides by taking respectively from Waialua and Ewa, large irregular tracts of land, but as very little attention was paid to the new boundaries in the operation of the law, it is unnecessary to recite the revisions description. It can be found in Act 13, Session Laws of 1925.

In the special sessions of 1932... The incongruous boundaries of Wahiawa on Oahu created in 1925 were abrogated and the district restored to its boundaries of 1913, to which were added small tracts of land in Ewa and Waialua acquired by the United States and included within the Military Reservation of Schofield Barracks. (Coulter quoted in Sterling and Summers 1978:134).

The growth of the plantations and military installations in the area facilitated rapid residential and commercial growth in Wahiawā during the first half of the 20<sup>th</sup> century. Due to its location near the rail depot, Cane Street became the business center of Wahiawā.

In the 1920s, much of the area now included in military lands in Wahiawā was under pineapple cultivation and the Galbraith Spur connected the OR&L line to the fields, passing close by the Kaukonahua Camp. Wahiawā also became known for its “healing stones” in the 1920s and it was written that people would come from all over the island to visit them (Figure 6). The origin and significance of the stones is described by William Galbraith in the December 6<sup>th</sup>, 1927 edition of *Honolulu Star-Bulletin* as quoted by Sterling and Summers (1978) in *Sites of Oahu*:

The main “healing” stone at Wahiawa which has been attracting thousands of pilgrims daily because of the purported recent discovery of its miracle-working powers, has no magic strength, according to William Galbraith of Kalihi, who has identified the rock as the headstone marking the burial plot of one of Hawaii’s oldest and most powerful chieftains.

Galbraith says that the stone was moved from the Galbraith estate, where it stood for 45 years, as a sacred landmark on a spot approximately one mile from the present shrine. ... [George Galbraith] one of the earliest ranchers and taro planters of the territory, a true friend of the Hawaiians, who moved the Wahiawa stone from the river bed and placed it as a marking spot in honor of Hawaii’s chieftains. [Near the Kukaniloko stones. E. S.] ... Galbraith said the last words spoken by his great-uncle, George Galbraith, were a warning never to move the stone and never to touch or plow the land around it.

“I was a little boy on the ranch when my grand-uncle told me about the stone,” William Galbraith said today. “I used to pass the headstone every day during my work. It stood on the flats in a plot which was thought to be the burial ground for an old Hawaiian ruler. The plot was frequently fenced in, but was broken down several times by wild steers. I do not remember the name of the chief. “I remember of my grand-uncle telling me how he had come across the rock in the river bed in a spot below the present government bridge on the lower side of Wahiawa dam. He told me how he and my father hauled it up to the Kukaniloko flats with a team of

oxen and placed it in the vicinity where the Hawaiian ruler was thought to be buried,” Galbraith said.

Once or twice the headstone was whitewashed, Galbraith said, so that the Hawaiians, who respected it as a tribute to an old and honorable ruler, could see the rock for great distances, and so that it would shine in the moonlight.

“Not for a moment suspecting that the old Galbraith stone had been moved I took a trip the other day to see the so-called “healing stone” at Wahiawa. I recognized it at once.” (*Honolulu Star Bulletin*, December 6<sup>th</sup>, 1927, as quoted in Sterling and Summers 1978:141)

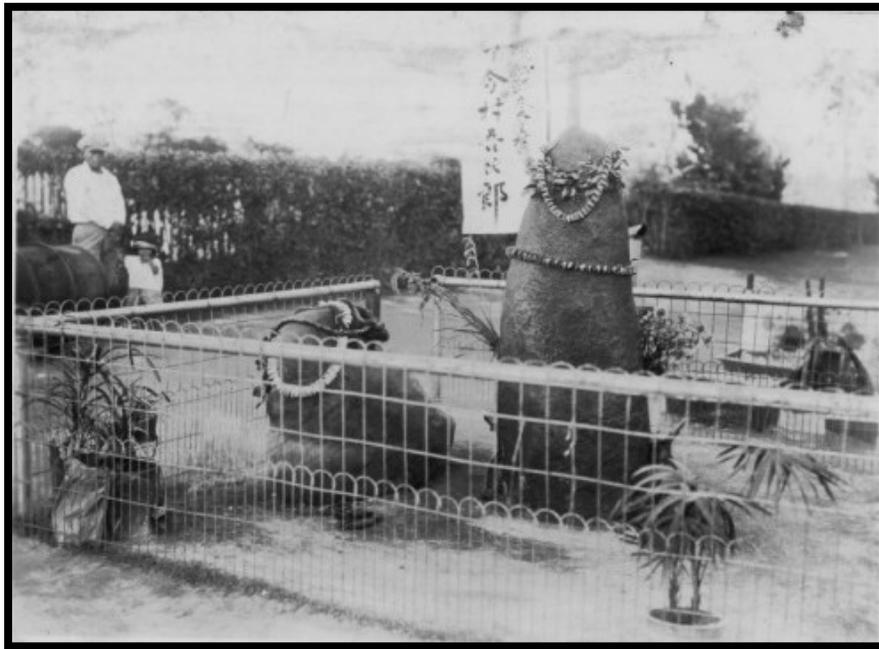


Figure 6. Photograph of the Wahiawa healing stones in the 1920s (Digital Archives of Hawai‘i Photograph Collection, Call Number PP-37-10-016)

Interest in the stones gradually died out in the 1930s and they are still located in the Wahiawā cemetery today. Passenger rail service into Wahiawā ended in 1930 and the train depot operated as a café until it burned down in 1934. Rail service to Wahiawā ceased completely in 1939. The Wahiawa General Hospital was constructed in 1944 at the site of the old elementary school to serve the military community during World War II. Other important historic places in Wahiawā town included the former locations of the Victory Theater, the Wahiawa Hotel, and the Malu Kukui Hotel (all destroyed), as well as the Wahiawā Botanical Garden.

Following World War II, the population of Wahiawā decreased significantly due to the exodus of military personnel and downsizing of the nearby military installations. The town experienced another period of rapid development during the early years of the Cold War in the 1950s and 1960s. That was the general time period that many of the current buildings of the town were constructed (**Error! Reference source not found.**). Little change has occurred since that time, and Wahiawā still retains its rural historic character and charm. Today, the town serves as a tourist destination for visitors heading to the north shore. The attractions of the area include the Dole Plantation, the

Kūkaniloko Birthstones Monument, the Wahiawa Botanical Garden, and a host of eateries, bakeries, and farms.

### **Brief History of Military Development in the Vicinity of Wahiawā**

The passage of the Land Act of 1895 by the Republic and the subsequent annexation of the Wai‘anae Uka crown lands in 1898 led to military development in central O‘ahu. The land for the Waianae Uka Military Reservation was appropriated in 1899 via Presidential Executive Order 1137. It wasn’t until 1909 when the U.S. military began construction of the 17,730 acre Schofield Barracks to the west of Wahiawā town. Additionally, the 1,389 acre Wheeler Army Airfield was developed to the southwest of Wahiawā in the 1920s as a small, two-squadron operation and was greatly expanded in the 1930s. The east range training area of Schofield, located to the east of Wahiawā, includes air assault, land navigation, and various other training areas. Cultivation north of Wahiawā continued until 1940, when the U.S. Navy acquired a little over 389 acres for the establishment of a radio transmitter facility (Woodbury 1946:172-173):

Almost at the center of the island, the Contractors were ordered to build a huge new radio station. A mile or so back of the village of Wahiawa the land swelled to a level hilltop – the highest ground for several miles. Wahiawa was to be the main receiving unit for the Pacific fleet – capable of picking up messages from the farthest corner of the ocean.

The radio station ... was to be as large as any in the world. A forest of wooden poles ranging in a complicated pattern over half a square mile of ground would support a grid of copper strands that could intercept signals no matter how weak from every direction. At the center all wires would be gathered together into cables and led to a vault deep underground, where the receiving instruments would be protected from any possible bombing raid.

Following the war, the facility was expanded by the addition of 304 acres to create the existing Naval Computer and Telecommunications Area Master Station, Pacific (NCTAMS PAC). In 2007, construction began on the Hawai‘i Regional Security Operations Center (HRSOC) at NCTAMS PAC which replaced the Kunia Regional Security Operations Center (KRSOC). Over the years, the other installations have grown, and numerous infrastructure and improvements projects have been carried out in support of Schofield Barracks and Wheeler Army Airfield.

## Land History and Development of the Project Area

No mo‘oleo or any other historical information was found regarding traditional use of the project area. No archaeological evidence has been found, and is likely that any traditional sites present were destroyed during modification of the area for commercial pineapple production. The project area is located within Wahiawā and was generally part of the lands of the central plateau cleared for sandalwood during the early historic period. During the Māhele, the land that would become Wahiawa town was retained by the Hawaiian Government as Crown Land. Later, the land was transferred to the Board of Education who leased it to W.C. Jones in 1875.

Due to passage of the the Land Act of 1895, Wahiawā including the project area was annexed by the Hawaiian Territorial Government in 1898. The area was divided into 13 lots and would become known as the Wahiawa Colony Tract, an area roughly bounded by the north and south forks of Kaukonahua Stream. The Wahiawa Colony Tract and its associated lots are shown in relation to the project area on an 1899 M.D. Monsarrat map of the public lands of Wahiawa and indicate the project area was located within Lot 1B (Figure 7**Error! Reference source not found.**). Later annotations on the map indicate Lots 1A and 1B of the Wahiawa Colony Tract were sold to Mary E. Clark by the Hawaiian Territorial Government as Land Grant 4616. Land Grant 4616 was sold to Mary E. Clark on September 2nd, 1902 for 925 dollars and consisted of approximately 195 acres of land.

A 1913 U.S. Army war map of the Wahiawa area shows the surrounding area under sugar cane cultivation by that time (Figure 8). The Clark Tract residential neighborhood including Avocado Street was constructed in 1916 and included a total of 86 lots. The project area was located within Lot 46, which measured 13,832 square feet (Figure 9). A 1927 U.S. Army Air Corps aerial photograph of the area shows the property undeveloped and forested at that time (Figure 10). The 1942 Sanborn Fire Insurance Co. maps of Wahiawa show no buildings within the project area at that time. Public records indicate that the project area was first developed between 1953 and 1955 with the construction of three commercial buildings on the property consisting of two one-story buildings and one two-story building. The lot was subdivided to its current square footage in 1968 and the property and surrounding area stayed relatively the same through the 1960s and 70s. (Figure 11 and Figure 12). The lot and buildings remained unchanged through the 1980s and 90s, and it has only been in the last 10 -15 years that changes to the property were made. This included demolishing the two story building on the property, construction of a CMU block addition to one of the buildings, and other alterations associated with fires on the property. As of now the buildings on the property are vacant and abandoned with squatters living and dumping garbage at the property.

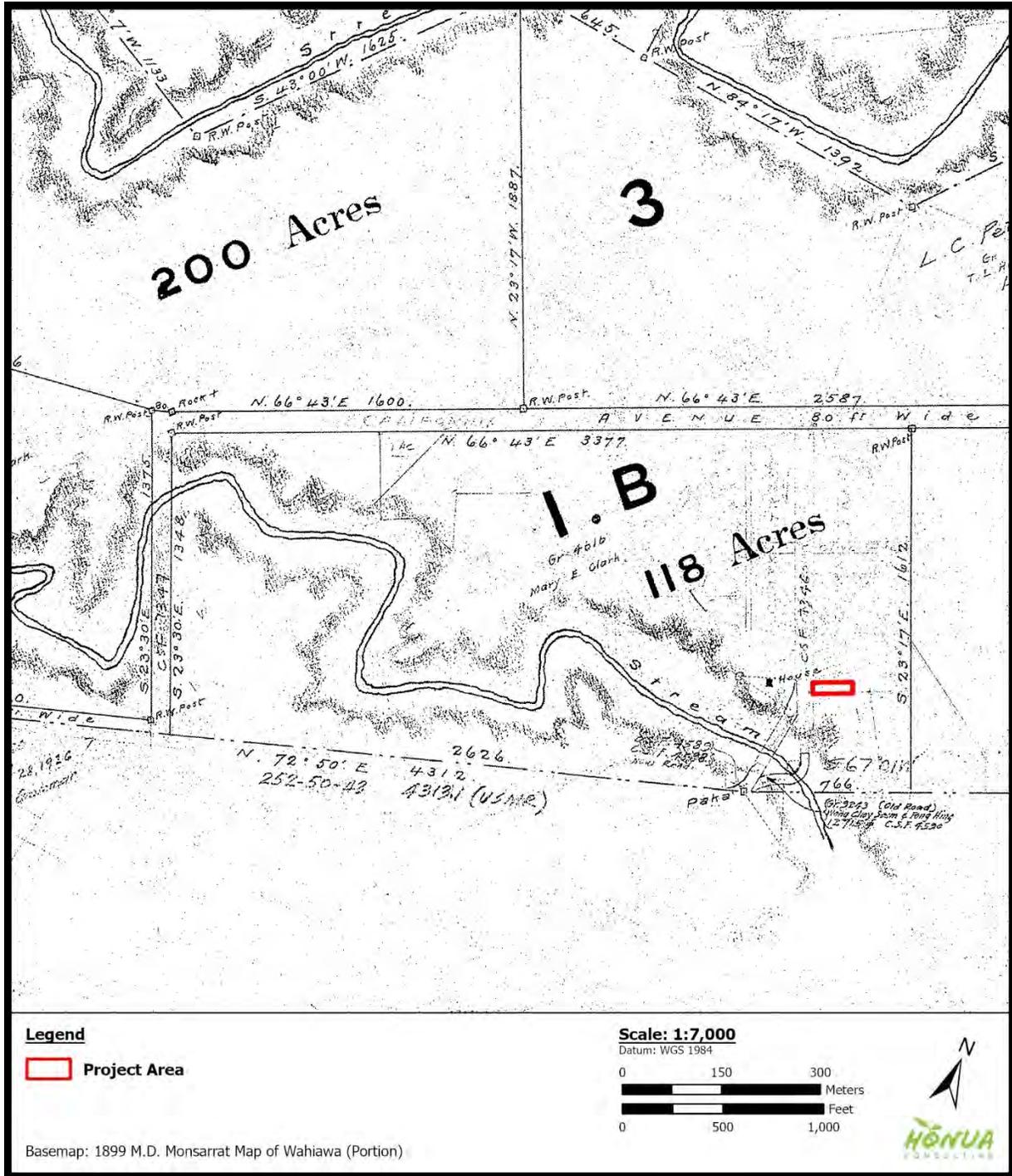


Figure 7. An 1899 public lands map by M.D. Monsarrat showing homestead lots in Wahiawā in relation to the project area (red) (Registered Map [RM] 1941)

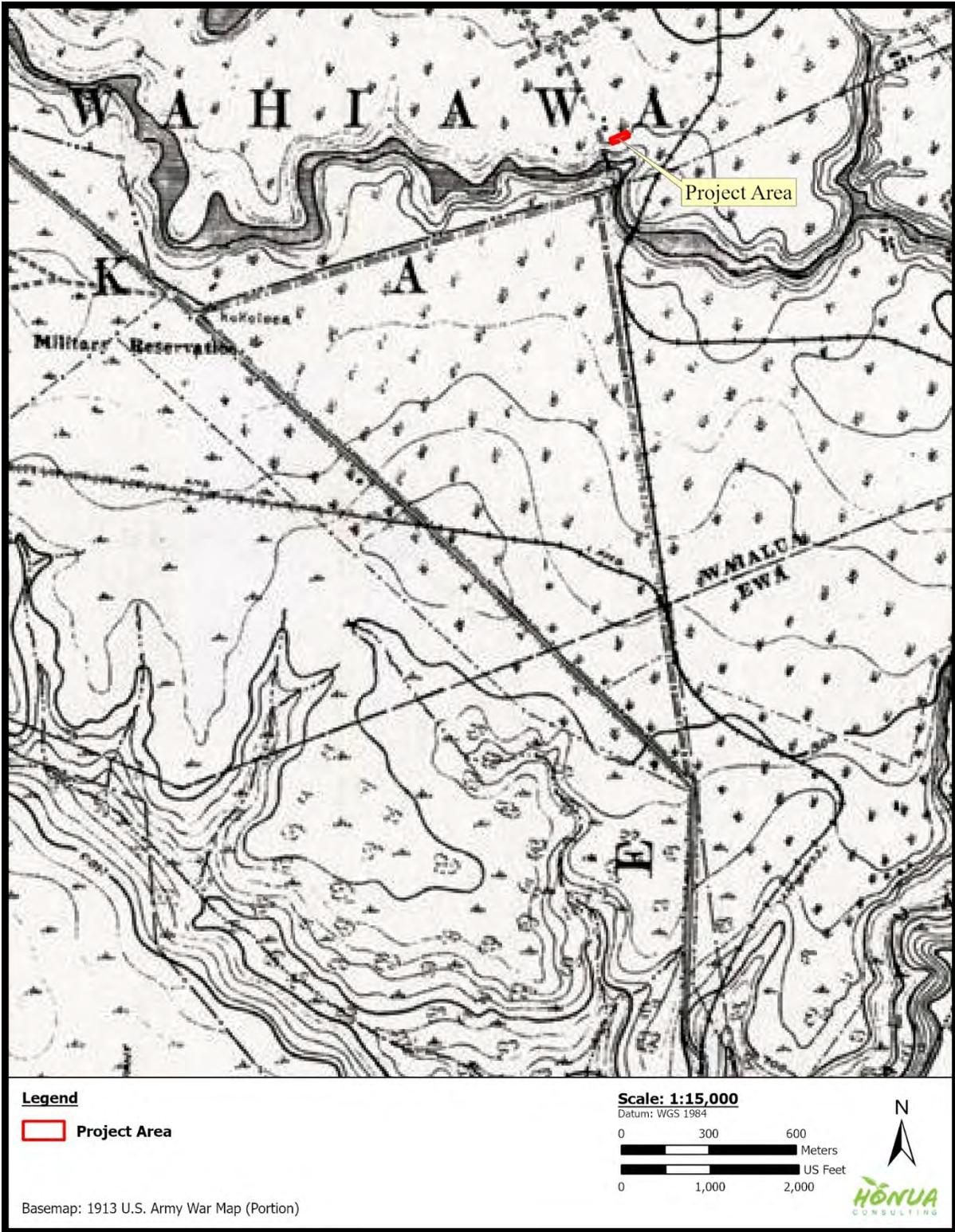


Figure 8. Portion of a 1913 U.S. Army war map showing the location of the project area (red) (U.S. Army 1913)

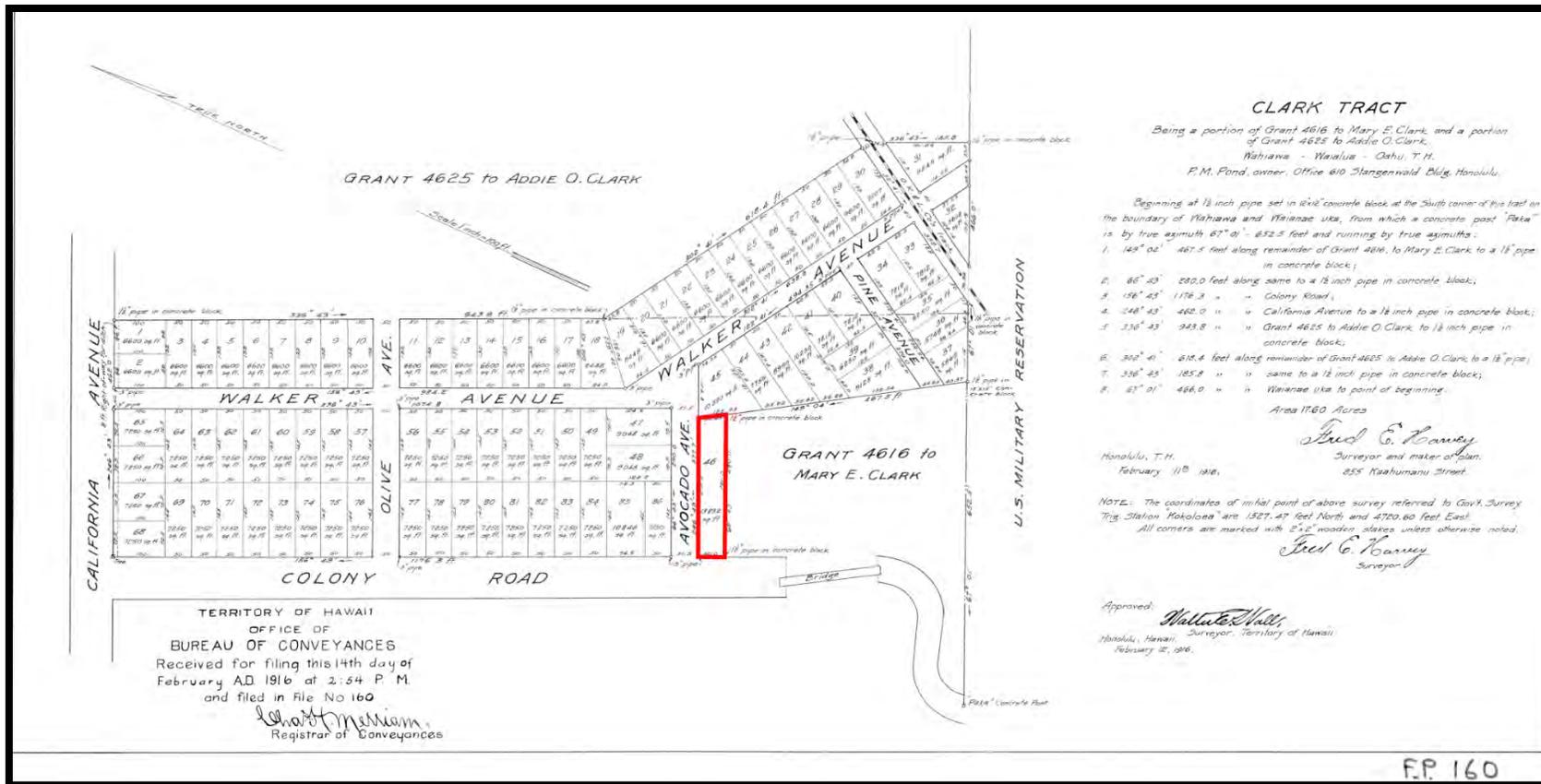


Figure 9. Map of the Clark Tract residential neighborhood showing the project area (red) within Lot 46 (File Plan 160, Harvey 1916)



Figure 10. Portion of a 1927 U.S. Army aerial photograph showing the project area (red) under pineapple cultivation (U.S. Army 1927)



Figure 11. Portion of a 1962 USGS aerial photograph showing the project area (red) (USGS 1962)



Figure 12. Portion of a 1977 USGS aerial photograph showing the project area (red) (USGS 1977)

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## Previous Archaeology

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Other than a town-wide reconnaissance level survey in 2014 that identified several potential historic districts, no historic properties have been identified in the few archaeological studies that have been conducted in Wahiawā town. The majority of the studies have been in the area surrounding the town, mostly in support of military construction and infrastructure projects. Figure 13, Figure 14, and Table 2 list previous studies and archaeological sites in the vicinity of the project area.

No traditional Hawaiian sites are known to exist within the boundaries of Wahiawā town. The most well-known traditional archaeological site of the area is the Kūkaniloko Birthstones State Monument, SIHP # 50-80-04-00218 located approximately 1.75 km (1.1 miles) to the northwest. The other traditional sites, including two recorded by McAllister (1933), that once existed in the Wahiawā area are likely to have been expunged from the landscape by use of the area for commercial agriculture, U.S. military activities and construction, and subsequent urban development.

The historic sites and places of interest in Wahiawā town and the surrounding area are associated with the OR&L Railroad, pineapple cultivation in the area, plantation camps, the growth and development of Wahiawā town, and facilities and infrastructure built by the United States military. In the case of Wahiawā town, these are mostly places of general historic interest which are yet to have SIHP numbers assigned. The general lack of archaeological studies and sites in the vicinity of the project area is due in part to much of Wahiawā town being developed before historic preservation review became commonplace prior to construction activities.

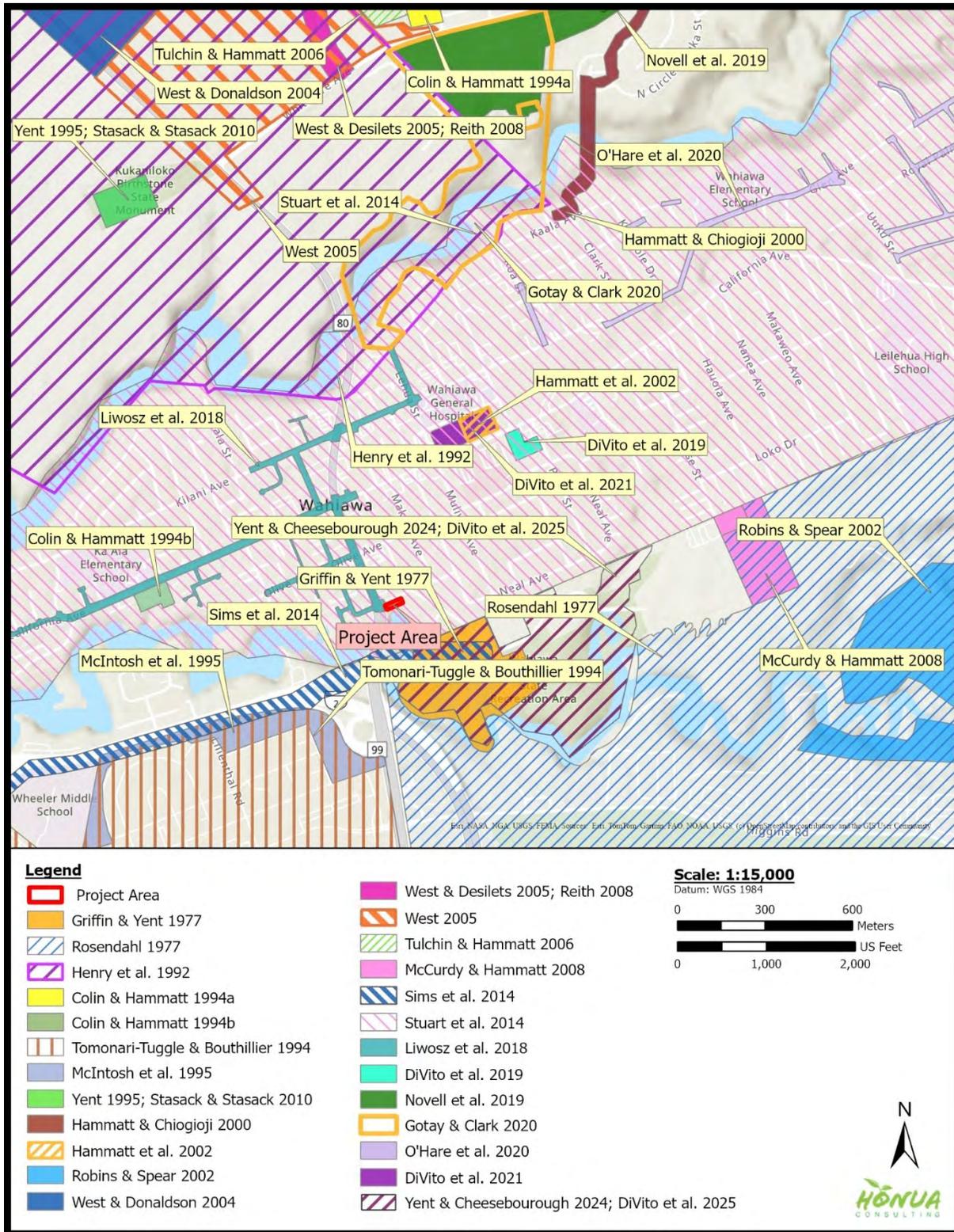


Figure 13. Esri imagery showing previous archaeological studies in the vicinity of the project area

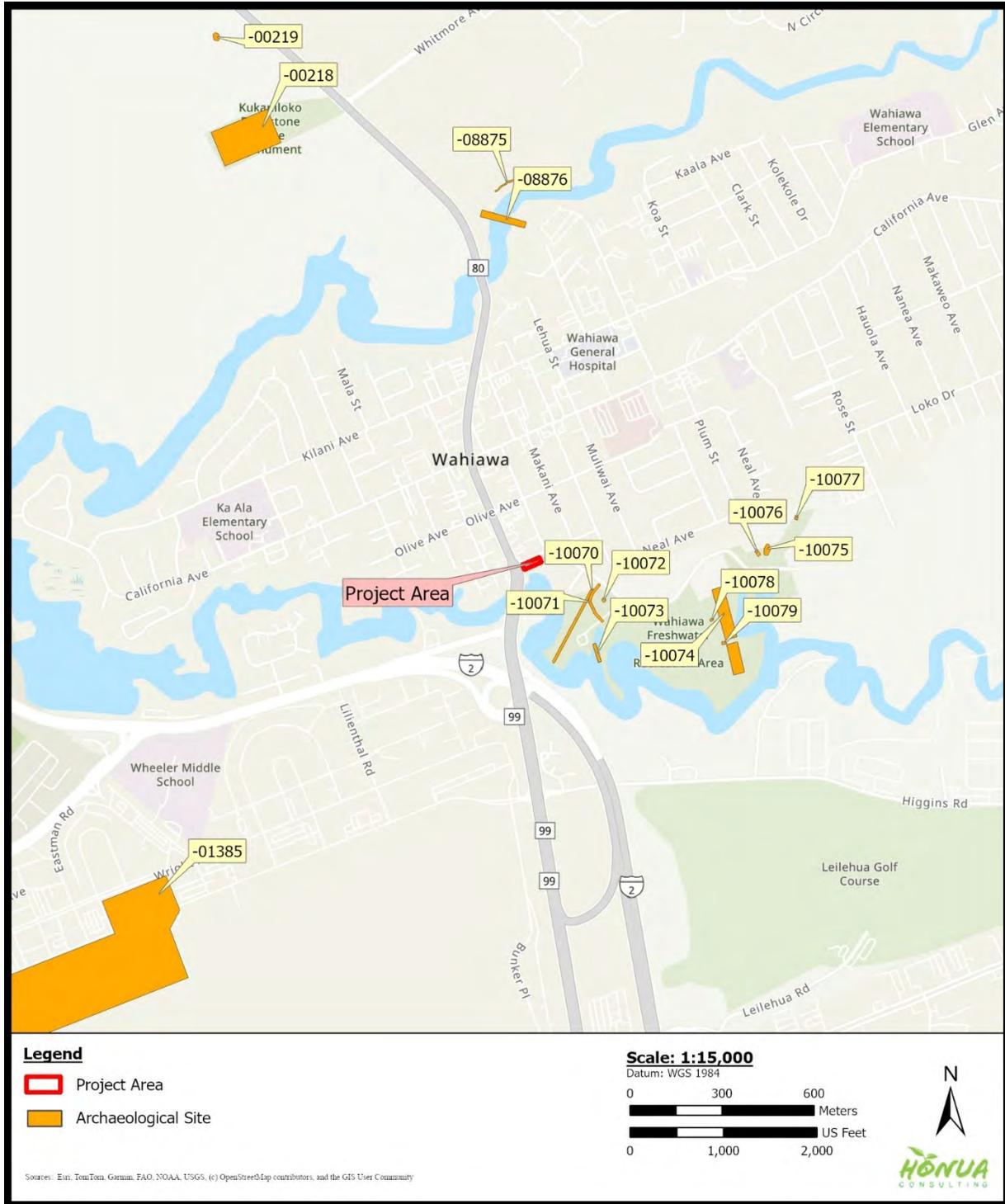


Figure 14. Esri imagery showing historic properties in the vicinity of the project area (red)

Table 2. Table listing previous archaeological studies in the vicinity of the project area

<b>Author(s)</b>	<b>Type of Study</b>	<b>Location</b>	<b>Findings (SIHP #50-80-04)</b>
McAllister 1933 (not shown in Figure 13)	Island-Wide Survey	O‘ahu	Identified 3 sites in the vicinity of the project area, SIHP -00204 (Oahunui Stone), SIHP -00218 (Kūkaniloko), and SIHP -00219 (Ho‘olonopahu Heiau)
Griffin and Yent 1977	Archaeological Survey	Wahiawā Freshwater Park	Documented two potential historic properties, a railway trestle with associated coral railbed designated TS-1, and a historic/historically modified terrace complex designated TS-2, No SIHP numbers assigned
Rosendahl 1977	Archaeological Survey	U.S. Army Facilities, Wheeler Army Airfield	No sites recorded
Henry et al. 1992	Archaeological Inventory Survey	Galbraith Trust Lands	Relocated the Kūkaniloko birthstones, SIHP -00218, and recorded a stacked stone agricultural wall, SIHP # -04571
Colin and Hammatt 1994a	Archaeological Inventory Survey (AA Report)	Whitmore Village; TMK: (1) 7-1-009:064	No sites recorded
Colin and Hammatt 1994b	Archaeological Literature Review and Field Inspection	California Avenue, Wahiawā; TMK: (1) 7-3-007:009	No sites recorded
Tomonari-Tuggle and Bouthillier 1994	Historical Resources Study	Wheeler Army Airfield	Archaeological and architectural survey, identified portions of the OR&L railroad and four sites associated with the U.S military, No SIHP number assigned
McIntosh et al. 1995	Archaeological Inventory Survey	Wheeler Army Airfield and Schofield Barracks Military Reservation	Documented a single historic building constructed in 1941 and designated SIHP # -05082
Yent 1995	Site Inspection	Kūkaniloko Birthstones	Recorded damage from vandalism and fire at the Kūkaniloko birthstones, SIHP # -00218
Hammatt and Chiogioji 2000	Archaeological Inventory Survey (AA Report)	Whitmore Village and Wahiawā, Water Line, TMK: (1) 7-1-002	No sites recorded

Author(s)	Type of Study	Location	Findings (SIHP #50-80-04)
Hammatt et al. 2002	Archaeological and Cultural Impact Evaluation	Wahiawā Community Transit Center, TMK: (1) 7-4-006:002 por. & 012 por.	No sites recorded
Robins and Spear 2002	Archaeological Inventory Survey	Schofield Barracks Training Area	Recorded a total of 73 historic properties, with 50 recommended for data recovery and 19 recommended for preservation, only one historic property was documented in the vicinity of the project area, a pecked boulder recorded as SIHP # -05411
West and Donaldson 2004	Archaeological Inventory Survey	NCTAMS PAC, TMK: (1) 7-1-002:007 por.	No sites recorded
West 2005	Archaeological Survey Addendum	NCTAMS PAC Project, TMK: (1) 7-1-002:007 por.	No sites recorded
West and Desilets 2005	Archaeological Survey Addendum	NCTAMS PAC, TMK: (1) 7-1-002:007 por.	No sites recorded
Tulchin and Hammatt 2006	Archaeological Literature Review and Field Inspection	Whitmore Village Development, TMK: (1) 7-1-002:004 por., 030 por., 031, 032 por., and 033	Documented a series of historic railroad trestle foundations identified as a former railspur of the OR&L Helemano Extension, no SIHP number assigned
McCurdy and Hammatt 2008	Archaeological Literature Review and Field Inspection	Leilehua High School Ball Park, TMK: (1) 7-6-001:001	Documented a brick lined incinerator possibly associated with a pre-1954 building, no SIHP number assigned
Stasack and Stasack 2010	Rock Art Report	Kūkaniloko Birthstones State Monument	Recorded petroglyphs at Kūkaniloko Birthstones State Monument, SIHP # -00218
Sims et al. 2014	Archaeological Inventory Survey	Schofield (Barracks) Generating Station project	No sites recorded; 8 trenches were excavated in 8.1-acre portion of project area at Schofield Barracks, and 13 test pits were excavated along a 3.7-kilometer-long transmission corridor

Author(s)	Type of Study	Location	Findings (SIHP #50-80-04)
Stuart et al. 2014	Reconnaissance Level Survey Report	All of Wahiawā Town, Multiple TMKs	Provides NRHP eligibility recommendations for 3,283 properties, 55 properties including 9 potential historic districts were determined to be significant, Inventory Level Survey recommended for those properties
Liwosz et al. 2018	Archaeological Literature Review and Field Inspection	Wahiawā Water System Improvements Part IA and IB, TMK: (1) 7-3-001:005, 007, 014, 017, 019 and 7-6-001 (multiple parcels)	No sites recorded
O’Hare et al. 2017, O’Hare et al. 2020	Archaeological Literature Review and Field Inspection, Archaeological Monitoring Plan	Wahiawā Water System Improvements Part IV, TMKs: (1) 7-3, (1) 7-4, and (1) 7-5	No sites recorded
DiVito et al. 2019	Archaeological Literature Review and Field Inspection	Wahiawa Value-Added Product Development Center, TMK: (1) 7-4-012:016	No sites recorded
Novell et al. 2019, ASM 2019	Historic Properties Inventory Survey, CIA	Whitmore Village Agricultural Project, TMK: (1) 7-1-002:009 and 004 por.	Recorded 20 historic structures that were recommended to be a historic district
Gotay and Clark 2020	Archaeological Inventory Survey	Wahiawa Pedestrian Crossing, TMKs: (1) 7-1-001:013, -015, -017 (Pors.); (1) 7-1-002:004 and -009 (Pors.); and (1) 7-1-007:006 and -007 (Pors.)	Recorded two historic properties, a historic period cut slope pathway designated SIHP #-8875 and train trestle remnants designated SIHP #-8876.
DiVito et al. 2021	Archaeological Literature Review and Field Inspection	Wahiawā Civic Center, TMKs: (1) 7-4-004:001, 070, and 071, (1) 7-4-006:002 and 012	No sites recorded, architectural assessment of historic buildings and archaeological monitoring recommended

Author(s)	Type of Study	Location	Findings (SIHP #50-80-04)
Yent and Cheesebrough 2024	Archaeological Literature Review and Field Inspection (Archaeological Assessment)	Wahiawā Freshwater State Recreation Area Parking Lot Expansion, TMK: (1) 7-6-001:006 por.	Relocated previously documented TS-1 (railroad trestle and railbed) but could not relocate TS-2 (terrace complex), documented three potential historic properties, a historic boat ramp designated TS-3, two historic concrete foundations designated TS-4, and a collapsed bridge crossing designated TS-5, incorporated findings from DiVito and Watson (2025) and assigned SIHP #s -10070 through -10079
DiVito and Watson 2025	Archaeological Literature Review and Field Inspection	Wahiawā Freshwater State Recreation Area, TMK: (1) 7-6-001:006	<p>Recorded 10 historic properties, relocated previously documented Sites TS-1 through TS-5, Site TS-1, a railroad trestle and railbed was recorded as SIHP # -10070, Site TS-2, historic foundation remnants were recorded as SIHP #-10072, TS-3, a boat ramp was recorded as SIHP # -10073, Site TS-4, WWII era concrete warehouse foundations were recorded as SIHP # -10074, Site TS-5, a bridge crossing was designated SIHP #-10075</p> <p>Newly documented sites included a historic drainage system recorded as SIHP # -10071, a concrete drainage ditch recorded as SIHP # 10076, a concrete foundation recorded as SIHP # -10077, a concrete wall and buried metal cylinder recorded as SIHP # -10078, and a concrete culvert headwall and drainage ditch recorded as SIHP # -10079</p>

## Nearby Archaeological Studies

### McAllister 1933

In the early 1930s, the Bishop Museum conducted the first systematic island-wide archaeological survey of the island of O‘ahu (McAllister 1933). Two sites were documented in the vicinity of the project area, and included McAllister Site 218, Kūkaniloko, and Site 219, Ho‘olonopahu Heiau. They are described in detail by McAllister (1933) below:

**Site 218.** Kukaniloko, located near Wahiawa, on the Waialua side of Kaukonahua Gulch, one of the two famous places in the Hawaiian islands for the birth of children of tapu chiefs. The other is at Holoholoku, Wailua, Kauai. Due to the efforts of the late W. W. Goodale of the Waialua Plantation and the Daughters of Hawaii, this site is assured permanent protection. It is the only ancient site on Oahu that is being officially preserved.

Kukaniloko is said to have been established by Nanakaoko and his wife, Kahihiokalani, whose son, Kapawa, heads the list of the important alii born here. “This must have happened close upon the twelfth century,” according to Fornander (37, vol. 6, p. 247). Kamakau, as translated by Thrum (79, 7, p. 101), gives an account of the place:

A row of stones was laid down on the right hand and another on the left hand, and the face was to the right side. There stood thirty-six chiefs, eighteen on each side. A hill or mound was made for the back. Kukaniloko was the stone to be trusted. If anyone came in confident trust and lay properly upon the supports the child would be born with honor. It would be called a chief divine, a burning fire. When the child was born, it was quickly taken inside the Waihou of Hoolonopahu. There were forty-eight chiefs to whom belonged the duty of birth ceremonies of cutting the naval cord.

The common people stood at a great distance from the place of birth and the two sacred drums, Opuku and Hawea, announced the important event. Birth here added some special divine gift to the sacred place already occupied by a tapu high-chief. According to Fornander (38, Vol. 2. Pp. 20,21):

So highly were those dignities and privileges prized, even in later times, when the ancient structure and surroundings had fallen in decay, that Kamehameha I, in 1797, previous to the birth of his son and successor, Liholiho, Kamehameha II, made every arrangement to have the accouchement take place at Kukaniloko; but the illness of Queen Keopuolani frustrated the design.

Kamakau (49) gives a slightly different interpretation:

Kukaniloko was established by Nanakaoko and Kahihiokalani his wife as a place of birth for their child Kapawa. A line of stones was placed along the right side and on the left side the face turning to the right, where sat 36 chiefs, and a hunchback on the upper side. Kukaniloko is the stone to lean against. If in entering, with confidence, and leaning against the supports place the

thighs in Liloekapu he child will be born in front. That child will be termed a chief, a god, a fire, a flame.

On the birth of the child it is taken immediately to the temple of Hoolonopahu, where there are 48 chiefs, who will attend to the child, and cut the naval, it is on the left side of Kukaniloko, a segetia and a half. From Kukaniloko to the west is two segatia, there the sacred drum of Hawea is sounded, a signal from the chief.

The common people are on the east of the stream on the Kuaikua side, they are numerous, and three segatia away are the servants. But the chiefs born outside of the hunchback, they are chiefs, and those born in the road are chiefs outside.

Aside from Kapawa, other alii born at Kukaniloko were: Mailikukahi, whose mother was Nononui, and father was Puaa of Kahuoi, called a tapu chief of the land (49; 38, vol. 2, p. 89); Kalaimanua, the only woman whose birth “at Kukaniloko in the year 1100, at Puahuawa,” (49) is recorded. “At Hoolonopahu was the place where the navel was cut,” (38, vol. 2, p. 269). Kakuhihewa, one of Oahu’s greatest chiefs, was also born at Kukaniloko (38, vol. 2. P. 272). Laielohelohe immediately after her birth was taken to Kukaniloko and concealed there by her foster father, while Laieikawai, her twin sister, was concealed at Waiapuka (Site 275) (9, p. 55).

There is now little to see at Kukaniloko. It is an inclosed area about one-half acre in size, with many large stones, some just visible, others protruding to a height of 3 to 4 feet, scattered about on a well-kept lawn. Tall trees border the site. To the old Hawaiians these stones were all named and represented alii, but now the name remembered is Kahamaluihi, a flat stone near the center of the group. The old Hawaiians of today remember that in their childhood they were never allowed by their parents to approach even near the sacred birthplace, an indication of the great respect in which Kukaniloko was held, even a century after contact with Europeans and more than a half century after the coming of the missionaries.

In connection with Kukaniloko, “Wahiawa healing stone” may be mentioned. About fifty years ago there was in the bed of Kaukonahua Gulch a large stone, almost 6 feet long, 2 feet wide and less than 1 foot thick. It is said to have been Keanini-ula-o-ka-lani, considered as a milestone at the side of the old Hawaiian pathway. Thrum (79, 15) is not of this opinion. This stone was noticed by Mr. George Galbraith and moved to Kukaniloko, where it remained for many years. Galbraith had placed the stone in an upright position, which made it one of the most prominent of the group. Because of its unusual shape and position, the stone became noticed and was the recipient of much attention. Offerings of all sorts were placed before the stone, and it was soon discovered that it had unusual healing power. Large crowds of people were attracted to the site and soon the other more sacred stones of Kukaniloko were covered with the tallow from candles burnt as offering to this prominent stone; decayed food and flowers lay about the once tapu ground; and the Daughters of Hawaii, who had taken over the care of Kukaniloko, decided that this stone, which had no connection with Kukaniloko, should be moved. It was therefore moved to Wahiawa, where it became a Mecca for people from other

islands as well as Oahu. Thousands gathered each day, either to witness the healing powers of this strange stone or to partake of its benefits. Chinese, Japanese, Filipinos, Koreans, Portuguese, and Hawaiians all were among the daily pilgrims to this shrine, worshipping in their own way. The importance of the stone has now dwindled, and only a few persons visit the place to leave flowers or other offerings.

**Site 219.** Hoolonopahu was a heiau which functioned in connection with Kukaniloko (see Site 218). Here were kept the sacred drums of Opuku and Hawea which announced the birth of an alii. Nothing now remains of the temple. The land is planted in pineapples.

### **Griffin and Yent 1977**

In 1977, DSP archaeologists Agnes Griffin and Martha Yent conducted a pedestrian survey for Phase 1 of the Wahiawa Freshwater Park which included the western half of the current project area (Griffin and Yent 1977). The survey documented two potential historic properties, TS-1, a railroad trestle with an associated railbed, and TS-2, a historic and/or historically modified terrace complex consisting of four terraces and a rock alignment. No SIHP numbers were assigned to the temporary sites identified during the project. Following the survey, it was recommended that the Hawaiian Railway Society determine the significance of the railroad trestle.

### **Rosendahl 1977**

In 1977, the Bishop Museum conducted an archaeological inventory and evaluation for an environmental impact statement for U.S. Army facilities in Hawai'i which included nearby Wheeler Army Airfield (Rosendahl 1977). A field check was conducted for a 67-acre portion of the facility. The entire installation area was eliminated from the survey based on airfield development and no sites were located during the project.

### **Henry et al. 1992**

In 1992, Paul H. Rosendahl PhD. Inc. conducted an archaeological inventory survey of the Galbraith Trust Lands (Henry et al. 1992). The survey consisted of aerial reconnaissance by helicopter, a pedestrian survey of the area, and subsurface testing consisting of 12 shovel test probes. The survey relocated the Kūkaniloko Birthstones, SIHP #50-80-04-00218, an important traditional Hawaiian site added to the National Register of Historic Places in 1973 and designated NRHP #73000674 (Newman 1973). Later, during the statewide inventory of historic sites in the late 1970s, the site was assigned SIHP #-00218.

The study also recorded a stacked stone agricultural wall designated SIHP #50-80-04-04571. A previously identified heiau, SIHP #50-80-04-01605, located along Poamoho Gulch years earlier by Saifuku (1987) was not relocated during the project. No artifacts or cultural deposits were encountered in the shovel test probes excavated during the project. Following the survey, it was recommended that further effort be taken to relocate SIHP #-01605 prior to any ground disturbance within Poamoho Gulch.

### **Colin and Hammatt 1994a**

In 1994, Cultural Surveys Hawai'i (CSH) conducted an archaeological inventory survey for an exploratory well site in Whitmore Village north of Wahiawā (Colin and Hammatt 1994a). Due to the negative results of the survey, it was termed an archaeological assessment. The assessment

consisted of a pedestrian survey of the property which documented no archaeological sites or deposits.

### **Colin and Hammatt 1994b**

In 1994, CSH conducted an archaeological inventory survey for an exploratory well site in the Board of Water Supply yard at the west end of California Avenue (Colin and Hammatt 1994b). Due to the negative results of the survey, it was termed an archaeological assessment. The assessment consisted of a pedestrian survey of the property which documented no archaeological sites or deposits.

### **Tomonari-Tuggle and Bouthillier 1994**

In 1994, International Archaeological Research Institute Inc. (IARII) conducted a historical resources study for the Wheeler Army Airfield (Tomonari-Tuggle and Bouthillier 1994). The study consisted of a brief archaeological survey and an architectural survey of structures on the property dating between 1920 and 1952 for potential National Register of Historic Places (NRHP) eligibility. The archaeological survey consisted of a pedestrian survey of selected areas of the facility that identified remnants of the OR&L railroad and four sites associated with military development. However, none of the potential historic properties identified were assigned SIHP numbers.

### **McIntosh et al. 1995**

In 1995, Biosystems Analysis, Inc. conducted an archaeological inventory survey for a family housing project on portions of the Wheeler Army Airfield and the Schofield Barracks Military Reservation (McIntosh et al. 1995). The study consisted of a pedestrian survey that documented a single historic property. It consisted of a historic building constructed in 1941 and designated SIHP #50-80-08-05082. The study also identified a boulder with possible facets, but it was assessed as not significant.

### **Yent 1995**

In 1995, Martha Yent of the DSP compiled a report following an archaeological field inspection of the Kūkaniloko Birthstones, SIHP #-00218 (Yent 1995). The field inspection was conducted following acquisition of the land surrounding the site for a state park and amendment of the NRHP nomination to include it, and was assigned NRHP #94001640 (McEldowney 1994). The pedestrian survey of the proposed park lands identified approximately 180 stones as part of the site, some of which had been damaged by fire and vandalism since the original documentation of the site in 1992 (Henry et al. 1992). The study concluded with recommendations for future site improvements.

### **Hammatt and Chiogioji 2000**

In 2000, CSH conducted an archaeological assessment of a 10-meter-wide water line route from Wahiawā Reservoir (Hammatt and Chiogioji 2000). The assessment consisted of a pedestrian survey of the route. Steep slopes and modern trash were observed, and no sites of any kind were recorded. The lack of sites was attributed to the rising waters of the reservoir which would have destroyed any features associated with that portion of Kaukonahua Stream.

### **Hammatt et al. 2002**

In 2002, CSH conducted an archaeological and cultural impact evaluation for the Wahiawā Community Transit Center (Hammatt et al. 2002). The study consisted of a literature review and

pedestrian survey of the property. No sites of any kind were recorded during the pedestrian survey of the property. The lack of sites was attributed to a long history of modern development in the parcel and surrounding area.

### **Robins and Spear 2002**

In 1996, Scientific Consulting Services Inc. (SCS) conducted a cultural resources inventory survey with subsurface testing for the Schofield Barracks Training Area (Robins and Spear 2002). The study identified a total 73 historic properties consisting of traditional Hawaiian, historic and plantation era sites, and sites associated with use of the area by the U.S. military. Attempts were made during the survey to relocate an important stone documented by Gilbert McAllister in the 1930s known as the Oahunui Stone, SIHP #-00204, but the site was not be relocated. A single site was documented in the vicinity of the project area and included a pecked boulder recorded as SIHP #50-80-09-05411. Following the survey, data recovery was recommended for 50 sites and preservation was recommended for 19 sites.

### **West and Donaldson 2004**

In 2004, the Department of the Navy, Naval Facilities Engineering Command, Pacific (NAVFAC PACIFIC) conducted an archaeological survey for the Hawai'i Regional Security Operations Center (HRSOC) and an associated access road located at the Naval Computer Telecommunications Area Master Station Pacific (NCTAMS PAC) (West and Donaldson 2004). The study consisted of a pedestrian survey of the area and the excavation of two 50 x 50 cm test units. No sites were recorded during the project and no archaeological resources were encountered in the subsurface excavations. Modern rubbish and abandoned cars were observed during the survey, and it was determined that much of the area had been impacted by agricultural and landscaping activities.

### **West 2005**

In 2005, NAVFAC PACIFIC conducted an addendum archaeological survey to the previous survey (West and Donaldson 2004) of NCTAMS PAC (West 2005). The survey consisted of a pedestrian survey for access road alternatives, the proposed relocation of Building 294, several utility corridors, and several detention basin alternatives. No sites were recorded during the survey. Once again, the lack of sites was attributed to alterations made to the landscape for agricultural and construction activities.

### **West and Desilets 2005**

Later in 2005, NAVFAC PACIFIC conducted a second addendum archaeological survey to the previous surveys of NCTAMS PAC (West and Desilets 2005). The survey consisted of a pedestrian survey for a road realignment alternative. Modern refuse and push piles were observed on the southern edge and on the bottom of Poamoho Gulch. No sites of any kind were recorded during the survey.

### **Tulchin and Hammatt 2006**

In 2006, CSH conducted an archaeological literature review and field inspection for the 324-acre Whitmore Village Development project (Tulchin and Hammatt 2006). A single potential historic property was documented during the pedestrian survey of the property. It included a portion of a historic railroad trestle foundation which was identified as a railspur of the Helemano

Extension of the OR&L Railroad and constructed in 1906. No SIHP number was assigned, and no further work was recommended.

### **McCurdy and Hammatt 2008**

In 2008, CSH conducted an archaeological literature review and field inspection for the Leilehua High School Ball Park (McCurdy and Hammatt 2008). The inspection documented a single potential historic property consisting of a basalt block and brick lined incinerator possibly associated with a building pre-dating 1954. No SIHP number was assigned, and no further work was recommended.

### **Stasack and Stasack 2010**

In 2010, the Stasacks, who are experts at recording and characterizing Hawaiian rock art, documented petroglyphs present at the Kūkaniloko Birthstones Monument, SIHP #-00218 (Stasack and Stasack 2010). The rock art was documented for Nana I Ka Piko organization with support from the Office of Hawaiian Affairs.

### **Sims et al. 2014**

In 2014, Garcia and Associates conducted an AIS in support of a joint Federal/State Environmental Impact Statement (EIS) for the Schofield Generating Station Project in the western portion of O‘ahu’s central plateau. The AIS included excavation of eight test trenches in a 8.1-acre generating station parcel and 13 test pits along a 3.7-kilometer transmission corridor. Test trenches and test pits produced no evidence of traditional Hawaiian or early historic cultural deposition.

AIS data indicate that the Schofield Generating Station Project is very unlikely to affect archaeological sites. Test excavation results confirmed that the Area of Potential Effect (APE) had a very low probability for containing archaeological deposits. It was determined that extensive land modifications associated with a century of commercial cultivation, ranching, U.S. military activity, and urbanization had likely destroyed most of the tangible evidence of the traditional Hawaiian and early historic past in the area.

### **Stuart et al. 2014**

In 2014, URS conducted a reconnaissance level survey for Wahiawā town (Stuart et al. 2014). The study evaluated a total of 3,585 properties with NRHP eligibility recommendations for 3,283 properties. Three structures within the project area were included in the survey. Two of the buildings were not evaluated for significance and the third was assessed as ineligible for listing on the NRHP (Figure 15). A total of 55 properties, including 9 potential historic districts, were determined to be significant and it was recommended that an inventory level survey be conducted for those properties.



Figure 15. Map showing NRHP eligibility of structures within and in the vicinity of the project area (red), two structures within the project area were not evaluated (gray) and the other structure was assessed as ineligible (green) (Stuart et al. 2014:84)

**O’Hare et al. 2017 / O’Hare et al. 2020**

In 2017, CSH conducted a literature and field inspection for the Wahiawā Water System Improvements Project Part IV (O’Hare et al. 2017). No surface remains or artifacts were encountered in the project area. The only potential historic property included early to mid-20<sup>th</sup> century curbing along Lehua Street, Koa Street, Glenview Place, Hakuone Place, Hakuone Street, Eames Street, and Kinikohu Street. Following the survey, the project effect determination was “effect, with proposed mitigation commitments” consisting of archaeological monitoring guided by an archaeological monitoring plan. The archaeological monitoring plan called for weekly spot-checks and detailed documentation of the identified historic curb segments (O’Hare et al. 2020).

**Liwosz et al. 2018**

In 2018, CSH conducted an archaeological literature review and field inspection for the Wahiawā Water System Improvements Project Part 1A and 1B (Liwosz et al. 2018). No archaeological resources of any kind were encountered during the inspection. The lack of sites was attributed to major alterations to the project area for sugarcane cultivation and the construction of Wahiawā town. A former cemetery location in what is now a residential area was identified along the waterline route. Archaeological monitoring was recommended for that area and on-call monitoring was recommended for the remainder of the project area.

## **DiVito et al. 2019**

In 2019, Honua Consulting conducted a literature review and field inspection for the Wahiawa Value-Added Product Development Center (DiVito et al. 2019). The majority of the project area consisted of a paved parking lot and warehouse. Due to development within the project area, no artifacts or deposits were encountered and no sites were recorded.

## **Novell et al. 2019 and ASM Affiliates 2019**

In 2019, ASM Affiliates conducted a historic properties inventory survey and a cultural impact assessment for the Whitmore Agricultural Project (Novell et al. 2019 and ASM Affiliates 2019). No archaeological resources were identified during the survey of the area. However, 27 buildings were documented in the project area, 20 of which were considered historic. They were collectively recorded as a historic district. The site number is unknown as the survey report was a draft and the SIHP information for the historic district was not included.

## **Gotay and Clark 2020**

In 2020, ASM Affiliates conducted an archaeological inventory survey for the Wahiawa pedestrian crossing project (Gotay and Clark 2020). The study consisted of a pedestrian survey that documented two historic properties, a historic period cut slope pathway designated SIHP #50-80-04-8875 and train trestle remnants designated SIHP #50-80-04-8876. Following the survey, avoidance was recommended for the two sites.

## **DiVito et al. 2021**

In 2021, Honua Consulting conducted an archaeological literature review and field inspection for the Wahiawā Civic Center project (DiVito et al. 2021). The study consisted of a pedestrian survey that documented a single potential historic property documented as Honua 1. The site consisted of early 20<sup>th</sup> century utility infrastructure, likely associated with the former Wahiawa Hotel. It was comprised of three component features (Features A-C) including a cast iron waterline, a patch of basalt aggregate concrete, and a faced basalt block. Due to its condition and disassociation from its original surroundings, Honua 1 was assessed as not significant. However, based on historic use of the area archaeological monitoring was recommended in association with the project. Additionally, it was recommended that the historic buildings within the project area be assessed in coordination with the SHPD Architectural Branch.

## **Yent and Cheeseborough 2024**

In 2022, State Parks conducted an archaeological inventory survey for the Wahiawā Freshwater Park SRA parking lot expansion project (Yent and Cheeseborough 2024). Due to the negative results of the survey, it was termed an archaeological assessment. The pedestrian survey made an attempt to relocate two sites previously documented during the 1977 survey of the park (Griffin and Yent 1977). Site TS-1, a railroad trestle and raised coral rock railbed running through the west side of the park was relocated, however, a terrace complex documented as Site TS-2 was not relocated due to heavy vegetation. The study documented three additional potential historic properties, a historic boat ramp designated TS-3, two historic concrete foundations designated TS-4, and a collapsed bridge crossing designated TS-5. None of the sites documented were within the project area and no SIHP numbers were assigned at that time.

In 2024, the archaeological assessment of the Wahiawā Freshwater Park SRA parking lot expansion project was finalized and incorporated the results of Honua’s 2023 survey, obtaining SIHP numbers for ten historic properties identified during the larger survey of the park. They included SIHP #s 50-80-04-10070 through 50-80-04-10079. Following the assessment, spot monitoring was recommended for the project.

## **DiVito et al. 2025**

In 2023, Honua Consulting conducted an archaeological literature review and field inspection for the Wahiawā Freshwater Park SRA (DiVito et al. 2025). The study consisted of a pedestrian survey that relocated all five (5) previously documented sites, TS-1 through TS-5, and documented ten (10) potential historic properties, Honua 1 through Honua 10, all of which were historic in age. The newly documented sites included the former raised coral rock railbed of the OR&L railroad designated Honua 1, a truncated concrete wall designated Honua 2, a cobble and mortar ditch designated Honua 3, a drain culvert headwall and ditch segment designated Honua 4, a box culvert crossing and truncated wing walls designated Honua 5, truncated wing walls designated Honua 6, a concrete drainage ditch designated Honua 7, a recessed cement foundation designated Honua 8, a concrete wall and embedded metal cylinder in the ground designated Honua 9, and a drain culvert headwall and ditch segment designated Honua 10.

Site TS-1 was designated SIHP # 50-80-04-10070 and consisted of rail trestle bridge foundations (Features A through G), a raised coral railbed right-of-way (ROW) (Honua 1, Feature H), and a concrete wall (Honua 2, Feature I). Site TS-2 was designated SIHP #50-80-04-10072 and consisted of historic foundation remnants including upper and lower retaining walls, a rock alignment, and a set of concrete steps. Site TS-3 was designated SIHP #50-80-04-10073 and consisted of the concrete park boat ramp constructed in 1968. Site TS-4 was designated SIHP #50-80-04-10074 two WWII era rectangular concrete warehouse foundations associated with the United States military. Site TS-5 was designated SIHP #50-80-04-10075 and consisted of cobble and mortar walls associated with a former historic bridge crossing.

The newly documented sites included SIHP # 50-80-04-10071, -10076, -10077, -10078, and -10079. SIHP # 50-80-04-10071 and consisted of historic drainage system composed of nine feature components including Honua 2 through Honua 6. SIHP # 50-80-04-10076 consisted of a concrete drainage ditch running along the road leading to SIHP # -10075. SIHP# 50-80-04-10077 consisted of a square concrete foundation with a water spigot near the east boundary of the park. SIHP # 50-80-04-10078 consisted of a concrete wall and buried metal cylinder located in the vicinity of SIHP # -10074. Lastly, SIHP # 50-80-04-10079 consisted of a concrete culvert headwall and associated concrete drainage ditch in the vicinity of SIHP # -10074. Following the survey, recommendations included consultation with SHPD and evaluation of documented historic infrastructure by an architectural historian prior to park improvements.

## **Nearby Historic Properties**

A total of fifteen (15) historic properties have been documented in the vicinity of the project area (see Figure 14). The traditional Hawaiian sites in the vicinity include two sites documented during McAllister’s island-wide survey of O’ahu in the 1930s and include SIHP # -00218, the Kūkaniloko Birthstones and its companion heiau SIHP # 00-219, Ho‘olonopahu Heiau (destroyed) (McAllister 1933). Kūkaniloko was an important complex of birthing boulders located northwest

of Wahiawā town. It is one of only two places in the island chain known for the birthing of chiefs. Kūkaniloko had a companion heiau, Ho‘olonopahu which heralded the arrival of the new chiefs.

Kūkaniloko, State Inventory of Historic Places (SIHP) #50-80-04-00218, was added to the National Register of Historic Places (NRHP), as NRHP #73000674 in 1973. The site area was expanded to 5 acres in 1995 and relisted on the NRHP as #94001640. Recently efforts have been made with the Wahiawā community, the DSP, the DLNR, and the Office of Hawaiian Affairs (OHA) to pursue community informed management plans for Kūkaniloko and the surrounding land. The site currently operates as the Kūkaniloko Birthstones State Monument (Yent 1999).

Wheeler Field, SIHP # 50-80-04-01385, was nominated for listing on the NRHP in 1986. It was added to the NRHP for its association with the events of the bombing of Pearl Harbor on December 7<sup>th</sup>, 1941, and its military significance for the United States Air Force.

In 2020, two historic properties were recorded during an archaeological inventory survey for the Wahiawa pedestrian crossing project (Gotay and Clark 2020). The study documented two historic properties, a historic period cut slope pathway designated SIHP #50-80-04-8875 and train trestle remnants designated SIHP #50-80-04-8876.

The remaining sites were documented during multiple surveys of the Wahiawā Freshwater Park SRA (Griffin and Yent 1977, Yent and Cheeseborough 2024, DiVito and Watson 2025). The ten sites documented within the park include a railroad trestle and railbed recorded as SIHP # 50-80-04-10070, a historic drainage system recorded as SIHP # 50-80-04-10071, historic foundation remnants recorded as SIHP #50-80-04-10072, a boat ramp recorded as SIHP # 50-80-04-10073, WWII era concrete warehouse foundations recorded as SIHP # 50-80-04-10074, a bridge crossing recorded as SIHP #50-80-04-10075, a concrete drainage ditch recorded as SIHP # 50-80-04-10076, a concrete foundation recorded as SIHP # 50-80-04-10077, a concrete wall and buried metal cylinder recorded as SIHP # 50-80-04-10078, and a concrete culvert headwall and drainage ditch recorded as SIHP # 50-80-04-10079.

Table 3. Historic properties documented in the vicinity of the project area

Reference	SIHP # 50-80- 04	Site Type	Site Significance (National/ State / Local)	Recommendation	Notes
McCallister 1933, Henry et al. 1992, Yent 1995, Stasack and Stasack 2010	-00218	Kūkaniloko Birthstones	Criteria d and e	Preservation	Currently preserved with interpretive signage
McCallister 1933	-00219	Ho‘olonopahu	—	—	Possible location, documented as destroyed by McAllister (1933)
Thompson 1986	-01385	Wheeler Field	—	—	NRHP #87001297
Gotay and Clark 2020	-08875	Cut Slope Pathway	Criterion d	Avoidance	—

Reference	SIHP # 50-80- 04	Site Type	Site Significance (National/ State / Local)	Recommendation	Notes
Gotay and Clark 2020	-08876	Historic Trestle Bridge Foundations	Criterion d	Avoidance	—
Yent and Cheesebrough 2024	-10070	Historic Trestle Bridge Foundations and Railway Infrastructure	Criteria a and c	—	Nine feature components, Features A through I
Yent and Cheesebrough 2024	-10071	Historic Drainage System	Criterion d	—	Multiple feature components
Yent and Cheesebrough 2024	-10072	Foundation	Criterion d	—	Retaining walls, a rock alignment and a set of concrete stairs
Yent and Cheesebrough 2024	-10073	Historic Boat Ramp	Criteria a and c	—	Constructed in 1968
Yent and Cheesebrough 2024	-10074	Warehouse Foundations	Criteria a and d	—	Two rectangular concrete military warehouse foundations
Yent and Cheesebrough 2024	-10075	Bridge Crossing	Criteria a, c, and d	—	Deck destroyed, foundations on both sides
Yent and Cheesebrough 2024	-10076	Drainage Ditch	Criterion d	—	Concrete lined
Yent and Cheesebrough 2024	-10077	Cement Foundation	Criterion d	—	—
Yent and Cheesebrough 2024	-10078	Wall	Criterion d	—	Concrete wall and buried metal cylinder
Yent and Cheesebrough 2024	-10079	Drainage Ditch	Criterion d	—	Culvert headwall and concrete lined ditch

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## Field Results

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Fieldwork for this project was conducted on June 16<sup>th</sup>, 2025, by Honua Consulting archaeologist Nathan J. DiVito, M.A., who also served as the principal investigator. The fieldwork required approximately 1 person-hour to complete. The site investigation was performed under the archaeological permit number 25-28 issued to Honua Consulting by the SHPD/DLNR in accordance with HAR Chapter 13-282.

### Methodology

The archaeological field inspection consisted of a 100% pedestrian survey of the traversable portions of the project area. It included a visual inspection for any constructed surface architecture and observation of the ground surface and soil exposures for artifacts and/or exposed cultural deposits. Digital photographs were taken throughout the project area to record the vegetation, topography, and condition of the project area as well as any previously documented and newly documented historic properties, historic buildings, and any other points of interest. An associated photo log was maintained, which recorded the subject of the photograph, the direction the camera was pointing, and other information as appropriate. Trimble® Terraflex™ software and an external R2 unit was used to geolocate photos and record transect paths and other points of interest on the property. The R2 GPS unit maintained an accuracy ranging between 1-2 m (3-6 ft.) and all recorded GIS data was later post-processed for sub-meter accuracy. GIS data and maps for this project were created by Frederick LaChance IV, B.A.

### Survey Results

The project area is situated in central O‘ahu and consisted of a completely developed commercial property located in the southeastern portion of Wahiawā town. The subject parcel is bounded on the north by Avocado Street, on the east by a residential property of the Clark Tract housing, on the west by a small commercial property with parking lot, and on the south by the north bank of the south fork of Kaukonahua Stream.

Background research indicates the abandoned commercial buildings on the property were constructed in the 1950s. There were formerly three buildings on the property, one of which was recently demolished. The building on the east side of the property, street address 535 Avocado Street, consists of a single story building constructed in 1953 and composed mainly of ceramic masonry unit (CMU) block (Figure 16). A recent partially constructed addition to the building was present to the south and also employed CMU block construction. A patch is present on the asphalt where the footprint of the demolished building, street address 530 Avocado Street, used to be. Records indicate it was a two-story building demolished sometime after 2014. A shipping container and large rubbish pile were present on the asphalt in that area (Figure 17). The building on the west side of the property, street address 525 Avocado Street, consists of a single story building constructed in 1955 and composed mainly of textured concrete block and CMU block (Figure 18).

All three buildings were included in a reconnaissance level survey of Wahiawa in 2014 that determined National Register of Historic Places (NRHP) eligibility for structures throughout the town. The buildings at 535 and 530 Avocado Street were not assessed and the building at 525 Avocado Street was assessed as not eligible for listing on the NRHP.

The remainder of the property is paved with asphalt or concrete including an asphalt paved parking lot on the eastern most side (Figure 19). The southern edge of the parking lot transitions to the natural soil and slope down to the river which was covered in modern rubbish and debris. Several utility boxes along the street indicate subsurface utilities are present throughout the property. A 28.5 meter (93.5 ft) long, 30 cm wide, CMU block retaining wall runs along a portion of the southern boundary of the property (Figure 20). The west end of the retaining wall consisted of three courses of CMU block measuring 60 cm in height and expands to ten courses and 2 meters in height on the east end (Figure 21). Exposed natural soil and two drainpipes were observed amidst the rubbish at the base of the wall. The rubbish and debris extends down the slope leading to the river below (Figure 22).

No historic properties were documented and no significant artifacts or features were encountered during the field inspection. The lack of historic properties is due to development of the parcel which included excavation and subsurface utilities for the three (now two) commercial buildings, grading for asphalt and concrete paving of the remainder of the property, and construction of a retaining wall along the southern boundary of the property.



Figure 16. Photo of the front (*top*) and back (*bottom*) of one of the two commercial buildings on the property, street address 535 Avocado Street



Figure 17. Overview photo of the former location of a commercial building on the property, street address 530 Avocado Street



Figure 18. Photo of the front (*top*) and back (*bottom*) of one of the two commercial buildings on the property, street address 525 Avocado Street



Figure 19. Overview of an asphalt parking lot on the eastern side of the property, looking southeast



Figure 20. Overview photo of a CMU retaining wall comprising a portion of the southern boundary of the property, looking northeast



Figure 21. Close-up of the CMU block construction of the retaining wall comprising a portion of the southern boundary of the property, looking north



Figure 22. Overview of rubbish and debris below the southern property boundary, looking south

## Summary and Recommendations

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At the request of Group 70 International Inc., Honua Consulting LLC has completed an Archaeological Literature Review and Field Inspection (ALRFI) for the Department of Conservation and Resources Enforcement (DOCARE) Wahiawā Substation located in Wai‘anae Uka Ahupua‘a, Wahiawā District, O‘ahu Island, TMK: (1) 7-4-001:025. The project area is situated in Wahiawā town and consists of a commercial property with two buildings located at 525 and 535 Avocado Street. The property measures 0.2132 acres (9,288 square feet [sq. ft] or 863 square meters [sq. m]) in size and was formerly owned by Angelo’s Auto Body & Detailing LLC.

This study was conducted for an Environmental Assessment (EA) Chapter 343 review to identify cultural resources in support of the proposed DOCARE Wahiawā Substation. The objectives of the ALRFI were to determine the project area’s land-use history, to relocate and identify any historic properties or component features in the project area, and to evaluate the proposed project’s potential effect on historic properties. This study is not an archaeological inventory survey (AIS); however, it has been conducted according to standards outlined in Hawai‘i Administrative Rules (HAR) §13-276 for AIS studies and is intended to assist with the project’s compliance with Hawai‘i Revised Statutes (HRS) 6E-8 and HAR §13-275 in consultation with the State Historic Preservation Division (SHPD).

Wahiawā is most widely known as the birthplace of Hawaiian high chiefs due to the presence of Kūkaniloko, an important complex of birthing boulders located northwest of Wahiawā town. It is one of only two places in the island chain known for the birthing of chiefs. Kūkaniloko had a companion heiau, Ho‘olonopahu which heralded the arrival of the new chiefs. Based on this, it is likely that the area had a substantial traditional Hawaiian population. The riparian lands along the forks of Kaukonahua Stream and Poamoho Stream would have been cultivated with extensive lo‘i terraces and other agricultural features with nearby kula (pasture) lands used for native gardens and habitation.

No mo‘oleo or any other historical information was found regarding traditional use of the project area. It is located within Wai‘anae Uka and was generally part of the lands of the central plateau cleared for sandalwood during the early historic period. During the Māhele, the surrounding lands including the project area were retained by the Hawaiian Government as Crown Land. Later, the land was transferred to the Board of Education who leased it to W.C. Jones in 1875. The area that would become Wahiawā ahupua‘a was annexed by the Hawaiian Territorial Government in 1898, and was divided into thirteen lots known as the Wahiawa Colony Tract. The project area was located within Lot 1B, sold as a portion of Land Grant 4616 to Mary E. Clark in 1902. The Clark Tract residential neighborhood including Avocado Street was constructed in 1916 and included a total of 86 lots, with the project area located within Lot 46. Aerial photographs and maps indicate the property remained undeveloped until the early 1950s when three commercial buildings and their associated parking lots and infrastructure were constructed on the property. The lot was subdivided to its current square footage in 1968 and the property and surrounding area has stayed relatively the same until the last 10 -15 years. Recent changes include demolishing the two story building on the property, construction of a CMU block addition to one of the buildings, and other alterations associated with fires on the property. As of now the buildings on the property are vacant and abandoned with squatters living and dumping garbage in the vicinity.

No previous archaeological studies have been conducted for the project area. However, it was included in a reconnaissance level survey for Wahiawā town that evaluated a total of 3,585 properties and provided National Register of Historic Places (NRHP) eligibility recommendations for 3,283 properties. The three structures within the project area were included in the survey with two of the buildings not evaluated for significance and the third assessed as ineligible for listing on the NRHP.

The archaeological field inspection consisted of a 100% pedestrian survey of the traversable portions of the project area. The project area was completely developed, and no historic properties were documented, and no significant artifacts or features were encountered during the field inspection. The lack of historic properties is due to development of the parcel which included excavation and subsurface utilities for the three (now two) commercial buildings, grading for asphalt and concrete paving of the remainder of the property, and construction of a retaining wall along the southern boundary of the property.

Since no plans have been finalized for the subject property in association with the DOCARE Wahiawā Substation project, recommendations include consultation with SHPD and an evaluation of historic buildings by a qualified architectural historian prior to development.

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Appendix H

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# Cultural Impact Assessment





**Draft Cultural Impact Assessment Report for the Proposed  
Department of Conservation and  
Resources Enforcement (DOCARE) Wahiawā Substation,  
Wai‘anae Uka Ahupua‘a, Wahiawā District, O‘ahu Island  
TMK: (1) 7-4-001:025**

Prepared for  
G70 and the State of Hawaii Department of Land and Natural Resources

Prepared by



September 2025

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## **Note on Hawaiian language usage**

In keeping with other Hawaiian scholars, we do not italicize Hawaiian words. Hawaiian is both the native language of the pae ‘āina (archipelago) of Hawai‘i and an official language of the State of Hawai‘i. Some authors will leave Hawaiian words italicized if part of a quote; we do not. In the narrative, we use diacritical markings to assist our readers, except in direct quotes, in which we keep the markings used in the original text. We provide translations contextually when appropriate.

## **Front Cover Credit**

Honua Consulting (2025) Photo of Project Area

## Executive Summary

At the request of G70, on behalf of the client, the State of Hawai'i Department of Land and Natural Resources, Division of Conservation and Resources Enforcement (DOCARE), Honua Consulting, LLC prepared a Cultural Impact Assessment for the proposed DOCARE Wahiawā Substation located in Wai'anae Uka Ahupua'a, Wahiawā District, O'ahu Island, TMK: (1) 7-4-001:025. The project area is situated in Wahiawā town and consists of a commercial property with two buildings located at 525 and 535 Avocado Street. The property measures 0.2132 acres (9,288 square feet [sq. ft] or 863 square meters [sq. m]) in size and was formerly owned by Angelo's Auto Body & Detailing LLC.

Wahiawā has a distinctive history regarding its borders and designation. Historically, Wahiawā was part of Wai'anae moku – specifically Wai'anae Uka – before being reclassified as part of Waialua moku. In 1913, Wahiawā was established with lands taken from Waialua and Wai'anae Uka; although technically called an ahupua'a in modern terms, residents, cultural practitioners, and civic groups from the area identify Wahiawā as a kalana, a land division smaller than a moku and most similar to a county. The whole area is also known as Kūkaniloko by these individuals, which has been mentioned in the passages and entries examined in this assessment. To ensure consistency and honor the local community's expertise, Wahiawā will be referred to as a “kalana” throughout this report.

Research for this report involved a comprehensive search of Hawaiian language documents, including but not limited to the Bishop Museum Mele Index and Bishop Museum archival records, including the Hawaiian language archival cache. All Hawaiian language documents were reviewed by experts in the language to find relevant information for the report. Relevant documents are included here, and translations are provided when appropriate for the discussion. Summaries of interviews and information on other oral testimonies are also included.

The Wahiawā region is rich with both pre-contact and post-contact histories. The project is unlikely to have any adverse impact on pre-contact historic properties or Hawaiian cultural practices. This study looked comprehensively at all historical records for the region and did not identify any current cultural practices or customs that the project activity would potentially impact. The oral histories from the area supported this conclusion. The parcel is adjacent to an encampment of houseless persons. The project would result in a net benefit to the management and care of the region's natural resources by having more resource officers available, with a secondary benefit to cultural practices that occur in the area, resulting from greater protection of natural resources that can be utilized for cultural practices.

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## Abbreviations and Acronyms

BMPs: Best Management Practices  
CIA: Cultural Impact Assessment  
DLNR: Department of Land and Natural Resources  
DOCARE: Division of Conservation and Resource Enforcement  
EA: Environmental Assessment  
HAR: Hawai'i Administrative Rules  
HLMG: Helemano Silty Clay, 30-90% slopes  
HRS: Hawai'i Revised Statutes  
HSL: Hawai'i State Legislature  
Huapala: Huapala Hawaiian Hula Archives  
ICH: Intangible Cultural Heritage  
Ka Pa'akai:  
L.C.A.: Land Commission Awards  
LG: Land Grants  
LOTUS: Lord of the Universe Society  
LRFI: Literature Review and Field Investigation  
Māhele: The Māhele 'Āina of 1848  
OR&L: O'ahu Railway & Land Company  
SHPD: State Historic Preservation Division  
SLH: Session Laws of Hawai'i  
SRA: State Recreation Area  
TMK: Tax Map Key  
USGS: United States Geological Survey  
WaA: Wahiawa Silty Clay, 0-3% slopes  
WaB: Wahiawa Silty Clay, 3-8% slopes

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## 1.0 Project Description and Compliance

At the request of G70, on behalf of the client, the State of Hawai'i Department of Land and Natural Resources, Division of Conservation and Resources Enforcement (DOCARE), Honua Consulting, LLC prepared a Cultural Impact Assessment for the proposed DOCARE Wahiawā Substation located in Wai'anae Uka Ahupua'a, Wahiawā District, O'ahu Island, TMK: (1) 7-4-001:025. The project area is situated in Wahiawā town and consists of a commercial property with two buildings located at 525 and 535 Avocado Street. The property measures 0.2132 acres (9,288 square feet [sq. ft] or 863 square meters [sq. m]) in size and was formerly owned by Angelo's Auto Body & Detailing LLC.

Wahiawā has a unique history in terms of its borders and designation. Traditionally, Wahiawā was a part of Wai'anae moku (district) – specifically Wai'anae Uka – before being reclassified as part of Waialua moku. In 1913, Wahiawā was created with lands taken from Waialua and Wai'anae Uka; although technically referred to as an ahupua'a (traditional land division) in a modern context, residents, cultural practitioners, and civic clubs from the area classify Wahiawā as a kalana, which is a land division smaller than a moku and most closely resembling a county. The entire area is also referred to as Kūkaniloko by these individuals, which has been referenced in the passages and entries explored in this CIA. For the sake of consistency and to respect the expertise of the native community, Wahiawā will be labeled as a “kalana” throughout this report.

### 1.1 Description of the Project Area

The State of Hawai'i, Department of Land and Natural Resources (DLNR) is in the process of acquiring Tax Map Key (TMK) parcel (1) 7-4-001:025 located in Wahiawā, O'ahu. Once acquired, the site will serve as a Division of Conservation and Resources Enforcement (DOCARE) substation. Currently, officers patrolling the Wahiawa and North Shore area are serviced by the main station in Pearl City. To support enforcement operations, DOCARE plans on operating a smaller substation in Wahiawā, providing officers patrolling the area with nearby office space, a secure evidence storage room, and storage for larger equipment. Access to the substation will be restricted to DOCARE officers and administrators.

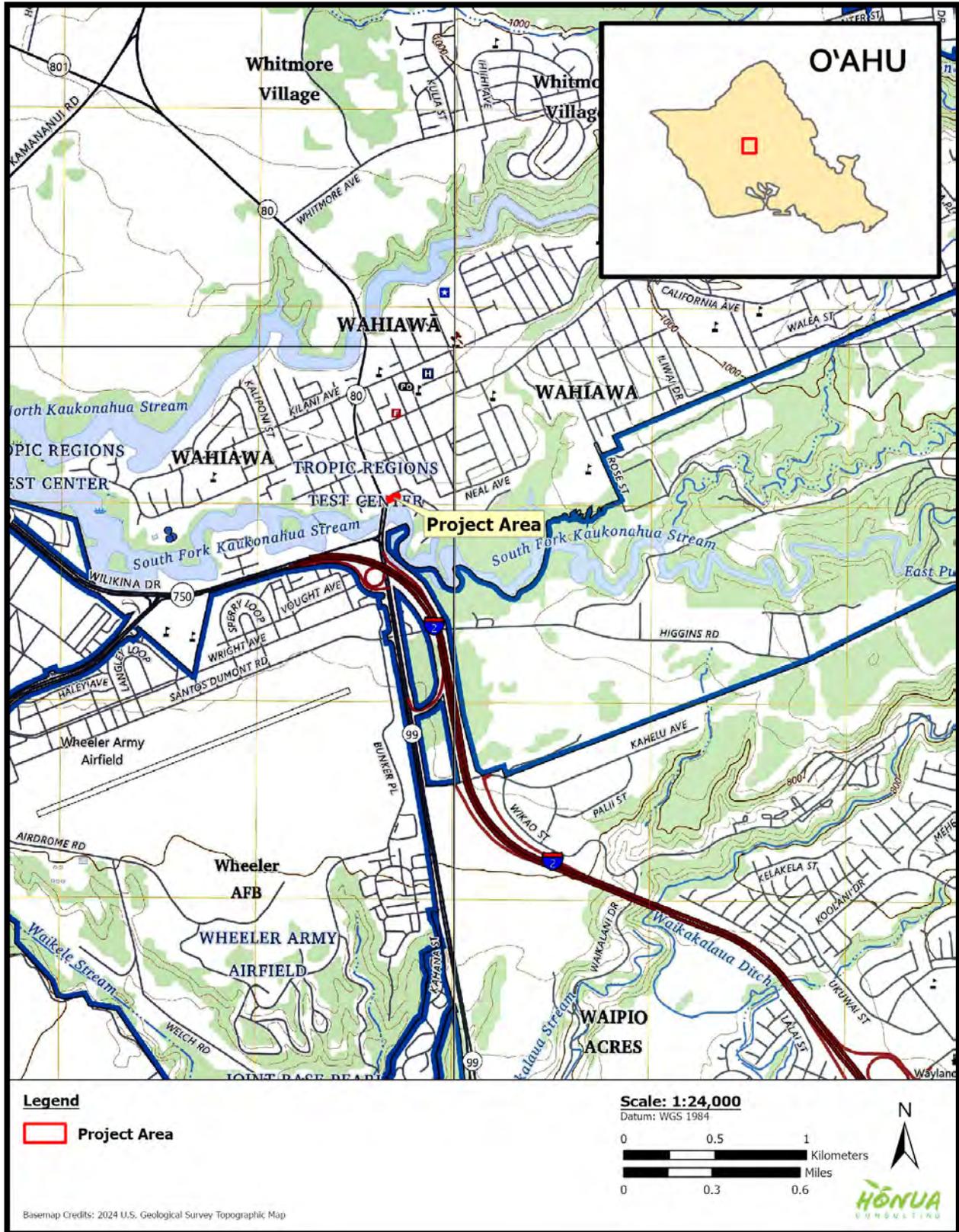


Figure 1. Topography Map of Project Area (U.S. Geological Survey (USGS), 2013)

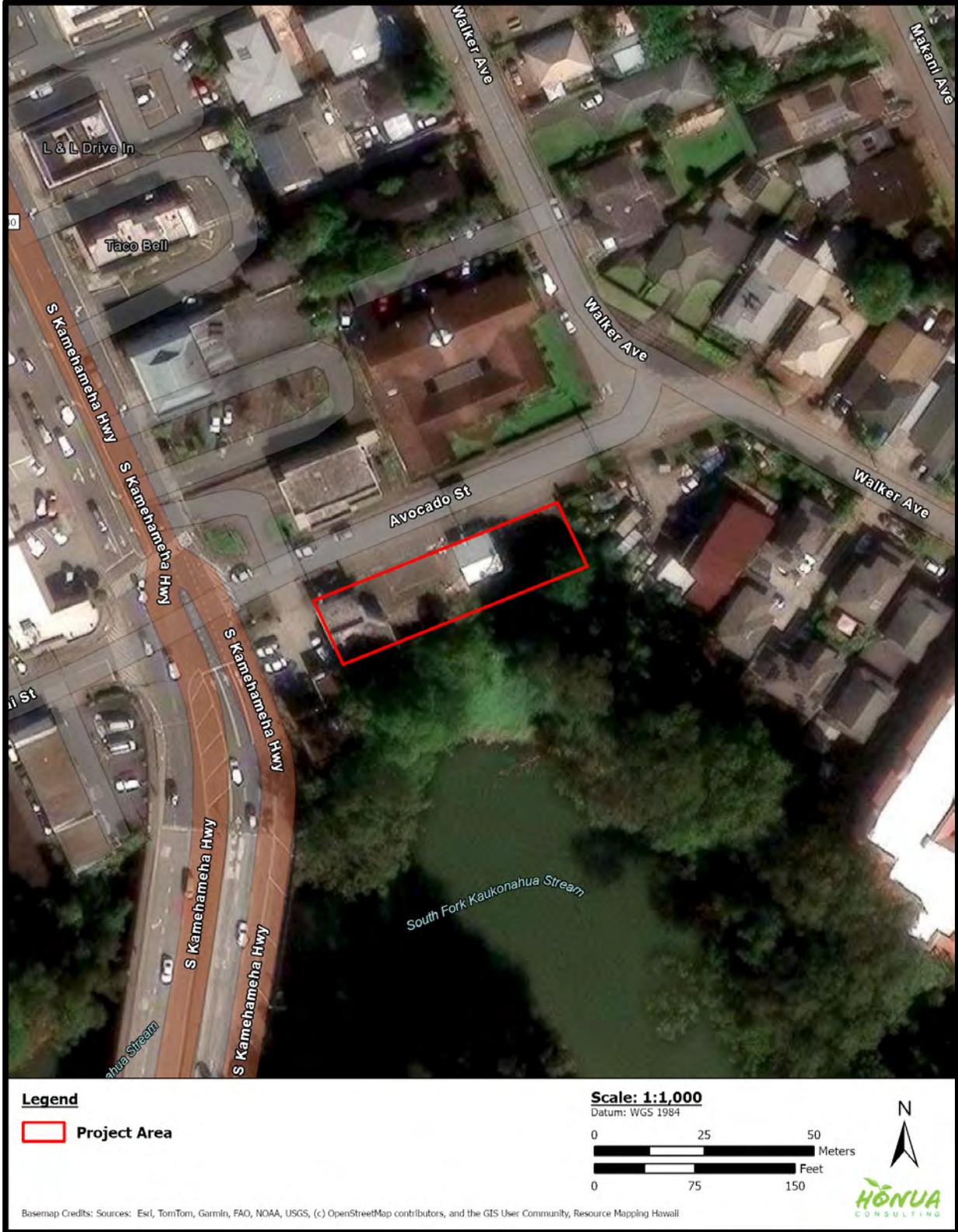


Figure 2. Aerial View Map of Project Area

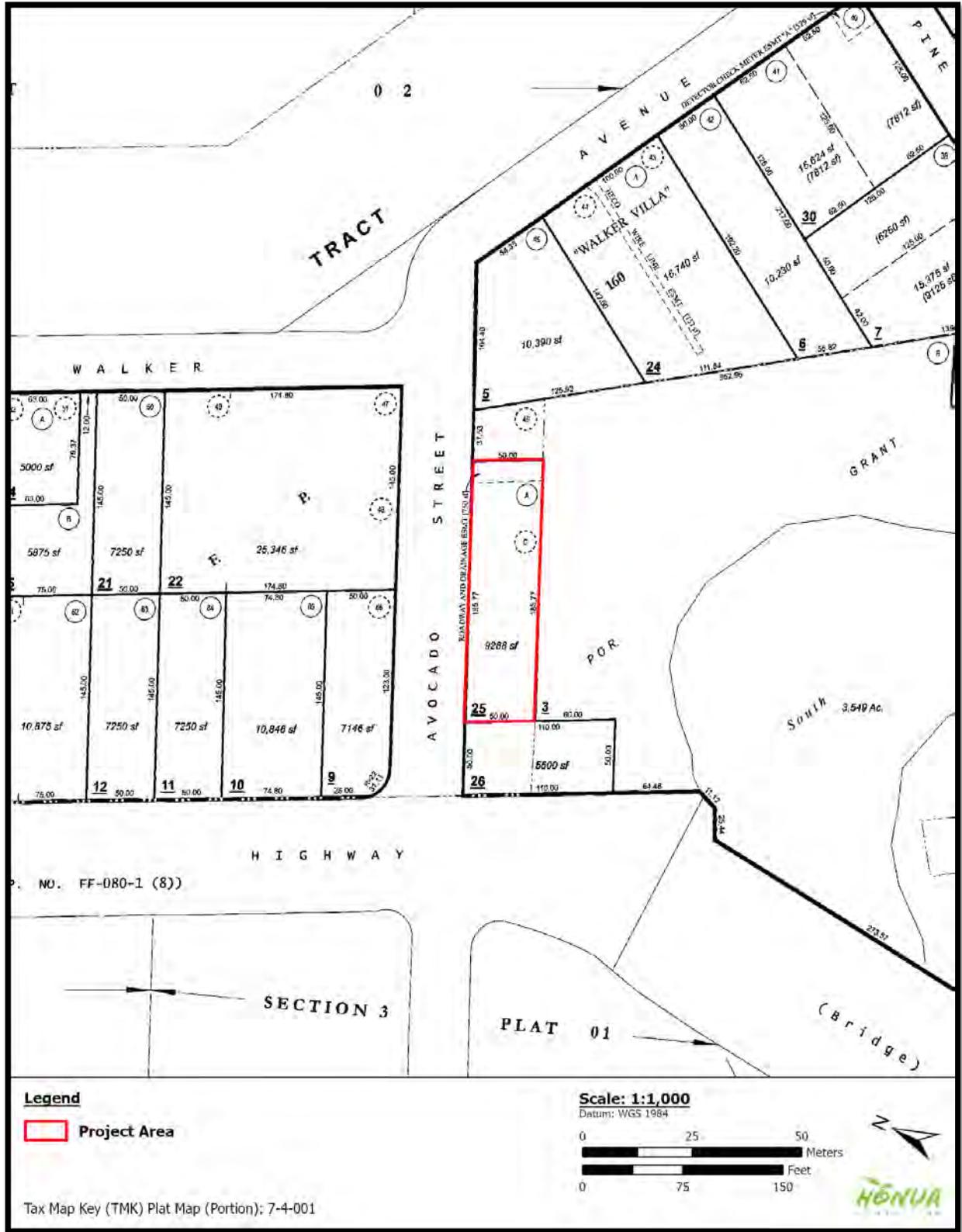


Figure 3. Project Area on TMK Map Portion (1) 7-6-001

## Project Description and Compliance

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The project area is located on the central O‘ahu plateau which was formed by lava from the Ko‘olau Volcano banking against the eroded slope of the Wai‘anae Volcano (Macdonald et al. 1983:420). It is located within the traditional district (moku) of Wahiawā and the traditional land division (ahupua‘a) of Wai‘anae. At this location Wai‘anae Uka Ahupua‘a is bordered by Kamananui Ahupua‘a to the north and Waikele Ahupua‘a to the south.

The elevation of the project area is approximately 267 meters (875 ft) above mean sea level and is located approximately 10 miles (16.1 km) from the nearest coastline. It receives annual rainfall ranging between 1,144 and 1,197 mm (45 and 47 in), with wetter months in the period of November through March (Giambelluca et al. 2013). This portion of the plateau is dissected by many small streams and tributaries that flow from the Ko‘olau Mountain range west to the ocean. The closest water source to the project area is a portion of the south fork of Kaukonahua Stream located approximately 30 m (98 ft) to the south.

A single soil type is present within the project area and consists of Wahiawa silty clay on slopes ranging from 0 to 3 percent (WaA) (**Error! Reference source not found.**). The Wahiawa soil series consists of well-drained soils on uplands on the island of O‘ahu. This soil type developed in residuum and old alluvium derived from basic igneous rock (Foote et al. 1972:124). They are nearly level to moderately steep and elevations range from 500 to 1,200 ft (152.4 to 365.7 m). These soils are generally used for sugarcane, pineapple, pasture, and homesites. The natural vegetation consists of bermudagrass (*Cynodon dactylon*), guava (*Psidium guajava*), honohono (*Commelina diffusa*), koa haole (*Leucaena leucocephala*), and lantana (*Lantana camara*). None of these species are present on the project.

The project area lot is completely developed and contains two one-story commercial buildings with the remainder paved over with asphalt and concrete. The buildings have been constructed of Concrete Masonry Unit (CMU) block and a CMU block retaining wall runs along a portion of the southern boundary of the property. Subsurface utilities are present throughout the property with utility boxes located along Avocado Street.

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## 1.2 Compliance

The State and its agencies have an affirmative obligation to preserve and protect the Native Hawaiians' customarily and traditionally exercised rights to the extent feasible.<sup>1</sup> State law further recognizes that the cultural landscapes provide living and valuable cultural resources where Native Hawaiians have and continue to exercise traditional and customary practices, including hunting, fishing, gathering, and religious practices. In *Ka Pa'akai*, the Hawai'i Supreme Court provided government agencies with an analytical framework to ensure the protection and preservation of traditional and customary Native Hawaiian rights while reasonably accommodating competing private development interests. This is accomplished through:

- 1) The identification of valued cultural, historical, or natural resources in the project area, including the extent to which traditional and customary Native Hawaiian rights are exercised in the project 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 to reasonably protect Native Hawaiian rights if they are found to exist.

Articles IX and XII of the State Constitution, other state laws, and the courts of the state require government agencies to protect and preserve cultural beliefs, practices, and resources of Native Hawaiians and other ethnic groups. To assist decision makers in the protection of cultural resources, Chapter 343, Hawai'i Revised Statutes (HRS) and Hawai'i Administrative Rules (HAR) § 11-200 rules for the environmental impact assessment process require project proponents to assess proposed actions for their potential impacts to cultural properties, practices, and beliefs.

This process was clarified by the Act 50, Session Laws of Hawai'i (SLH) 2000. Act 50 recognized the importance of protecting Native Hawaiian cultural resources and required some environmental review documents include the disclosure of the effects of a proposed action on the cultural practices of the community and state, and the Native Hawaiian community. Specifically, the Environmental Council suggested the CIAs should include information relating to practices and beliefs of a particular cultural or ethnic group or groups. Such information may be obtained through public scoping, community meetings, ethnographic interviews, and oral histories.

It is important to note that while similar in their areas of studies, archaeological surveys and CIAs are concerned with distinct and different foci. Archaeological studies are primarily

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<sup>1</sup> Article XII, Section 7 of the Hawai'i State Constitution, *Ka Pa'akai O Ka 'Āina v. Land Use Commission*, 94 Haw. 31 [2000] (*Ka Pa'akai*), Act 50 SLH 2000.

concerned with historic properties and tangible heritage, whereas CIAs look at cultural practices and beliefs, which can be associated with a specific location, but also often intangible in nature.

This CIA is being prepared under HRS Chapter 343 and Act 50 SLH 2000. The appropriate information concerning the kalana of Wahiawā has been collected, focusing on areas near or adjacent to the project area. A thorough analysis of this project and potential impacts on cultural resources, historical resources, and archaeological sites is included in this assessment.

This CIA provides an overview of cultural and historic resources in the project area using thorough literature review, community and cultural practitioner consultation, and high-level, project-specific surveys. This CIA focuses on identifying areas in which disturbance should be avoided or minimized to reduce impacts to historic properties or culturally important features. The paramount goal is to prevent impacts through avoidance of sensitive areas and mitigating for impacts only if avoidance is not possible.

### **1.3 Geographic Extent**

The geographic extent for impacts to cultural resources and historic properties includes the project area and localized surroundings. This CIA also reviews some of the resources primarily covered by the regulatory review. It primarily researches and reviews the range of biocultural resources identified through historical documents, traditional knowledge, information found in the Hawaiian language historical cache, and oral histories and knowledge collected from cultural practitioners and experts.

The best practice for ethnographic surveys is to define a geographic extent beyond the identified or typical boundaries of the geographic project area. The recommended area is typically the size of the ahupua'a or moku/kalana, but this can be larger or smaller depending on what best helps to identify the resources appropriately.

The geographic extent of the survey is based on the position that the "Project Area" is part of a cultural landscape or cultural landscapes that therefore it is most appropriate to set and study the proposed alternatives within that cultural context.

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## 2.0 Methodology

The approach to developing the CIA is as follows:

- 1) Gather Best Information Available
  - a) Gather historic cultural information from stories and other oral histories about the affected area to provide cultural foundation for the report;
  - b) Inventory as much information as can be identified about as many known cultural, historic, and natural resources, including previous archaeological inventory surveys, CIAs, etc. that may have been completed for the possible range of areas; and
  - c) Update the information with interviews with cultural or lineal descendants or other knowledgeable cultural practitioners.
- 2) Identify Potential Impacts to Cultural Resources
- 3) Develop Reasonable Mitigation Measures to Reduce Potential Impacts
  - a) Involve the community and cultural experts in developing culturally appropriate mitigation measures; and
  - b) Develop specific Best Management Practices (BMPs), if any are required, for conducting the project in a culturally appropriate and/or sensitive manner as to mitigation and/or reduce any impacts to cultural practices and/or resources.

While numerous studies have been conducted on this area, few have effectively utilized Hawaiian language resources and Hawaiian knowledge. This appears to have impacted the modern understanding of this location, as many relevant documents are testimonies given by Kānaka 'Ōiwi<sup>2</sup> (Native Hawaiians) who lived on this land and have been excluded from past studies. Therefore, efforts to identify and include historical accounts, including those from Hawaiian language resources, were included in this methodology.

While hundreds of place names and primary source historical accounts (from both Hawaiian and English language narratives) are cited on the following pages, it is impossible to glean the whole story of these lands in any given manuscript. These primary source historical accounts cover a range of history spanning generations. Importantly, the resources herein are a means of connecting people with the history of their communities and validating that they are part of that history. Knowledge of place will, in turn, promote appreciation for place and encourage acts of stewardship for the valued resources that are passed on to the future.

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<sup>2</sup> Interchangeable synonyms include Kānaka Hawai'i, Kānaka Maoli, Hawaiian, and Native Hawaiian. While "Native Hawaiian" is defined by federal and state law as having fifty percent or higher blood quantum tracing back to the aboriginal inhabitants of the Hawaiian Islands at the point of initial western contact (1778), within a cultural context, Native Hawaiian and all related synonyms refer to the descendants of the aboriginal people of the Hawaiian Islands and their culture, beliefs, and practices "mai ka pō mai" (from the ancient past) to the present.

Background research was conducted using materials obtained from the State Historic Preservation Division (SHPD) library in Kapolei and the Honua Consulting LLC report library. On-line materials consulted included the Ulukau Electronic Hawaiian Database ([www.ulukau.com](http://www.ulukau.com)), Papakilo Database ([www.papakilodatabase.com](http://www.papakilodatabase.com)), the State Library on-line (<http://www.librarieshawaii.org/Serials/databases.html>), and Waihona 'Āina Māhele database (<http://www.waihona.com>). Hawaiian terms and place names were translated using the on-line Hawaiian dictionaries (Nā Puke Wehewehe 'Ōlelo Hawai'i) ([www.wehewehe.com](http://www.wehewehe.com)), *Place Names of Hawai'i* (Pukui et al., 1974), and *Hawai'i Place Names* (Clark, 2002). Historic maps were obtained from the State Archives, State of Hawai'i Land Survey Division website (<http://ags.hawaii.gov/survey/map-search/>), UH-Mānoa Maps, Aerial Photographs, and MAGIS website (<http://guides.library.manoa.hawaii.edu/magis>). Maps were geo-referenced for this report using ArcGIS 10.3. GIS is not perfectly precise and historic maps were created with inherent flaws; therefore, geo-referenced maps should be understood to have some built-in inaccuracy.

While conducting the research, primary references included, but were not limited to: land use records, including the Hawaiian Land Commission Awards (L.C.A.) records from the Māhele 'Āina (Land Division) of 1848; the Boundary Commission Testimonies and Survey records of the Kingdom and Territory of Hawai'i; and historical texts authored or compiled by numerous native and foreign writers. The study also includes several native accounts from Hawaiian language newspapers (primarily compiled and translated from Hawaiian to English by Kepā Maly), and historical records authored by nineteenth century visitors, and residents of the region.

M. P. Nogelmeier (2010) discusses the adverse impacts of methodology that fails to properly research and consider Hawaiian language resources. He strongly cautions against a mono-rhetorical approach that marginalizes important native voices and evidence from consideration, specifically in the field of archaeology. For this reason, Honua Consulting consciously employs a poly-rhetorical approach, whereby all data, regardless of language, is researched and considered. To fail to access these millions of pages of information within the Hawaiian language cache could arguably be a violation of Act 50, as such an approach would fundamentally fail to gather the best information available, especially considering the voluminous amounts of historical accounts available for native tenants in the Hawaiian language.

Hawaiian culture views natural and cultural resources as largely inextricable: without the resources provided by nature, cultural resources could and would not be procured. From a Hawaiian perspective, all natural and cultural resources are interrelated, and all natural and cultural resources are culturally significant. Kepā Maly (2001), ethnographer and Hawaiian language scholar, points out, "In any culturally sensitive discussion on land use in Hawai'i, one must understand that Hawaiian culture evolved in close partnership with its natural

environment. Thus, Hawaiian culture does not have a clear dividing line of where culture ends and nature begins” (p. 1). As leading researchers and scholars on Hawaiian culture, Maly, along with his wife, Onaona, have conducted numerous ground-breaking studies on cultural histories throughout Hawai‘i. A substantial part of the archival research utilized in this study was previously compiled and published by Kepā and Onaona Maly, who have granted their permission to use this important work and are identified properly as associated authors and researchers to this study.

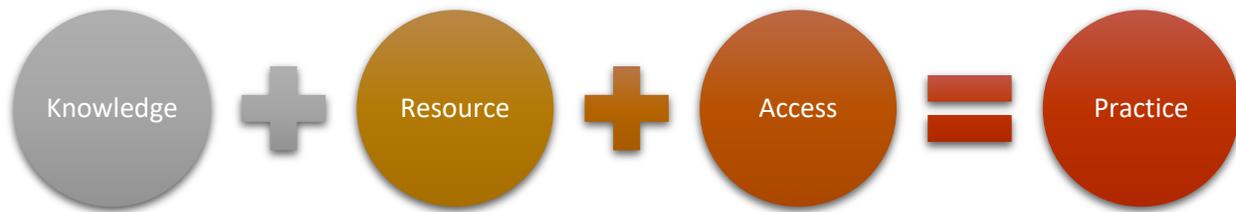
This study also specifically looks to identify intangible resources. Tangible and intangible heritage are inextricably linked (Bouchenaki, 2003). Intangible cultural resources, also identified as intangible cultural heritage (ICH), are critical to the perpetuation of cultures globally. International and human rights law professor Federico Lenzerini (2011) notes that, “At present, we are aware on a daily basis of the definitive loss—throughout the world—of language, knowledge, knowhow, customs, and ideas, leading to the progressive impoverishment of human society” (p. 12). Lenzerini (2011) goes on to warn that:

The rich cultural variety of humanity is progressively and dangerously tending towards uniformity. In cultural terms, uniformity means not only loss of cultural heritage—conceived as the totality of perceptible manifestations of the different human groups and communities that are exteriorized and put at the others’ disposal—but also standardization of the different peoples of the world and of their social and cultural identity into a few stereotyped ways of life, of thinking, and of perceiving the world. Diversity of cultures reflects diversity of peoples; this is particularly linked to ICH, because such a heritage represents the living expression of the idiosyncratic traits of the different communities. Preservation of cultural diversity, as emphasized by Article 1 of the UNESCO Universal Declaration on Cultural Diversity, ‘is embodied in the uniqueness and plurality of the identities of the groups and societies making up humankind’. Being a ‘source of exchange, innovation and creativity’, cultural diversity is vital to humanity and is inextricably linked to the safeguarding of ICH. Mutual recognition and respect for cultural diversity—and, *a fortiori*, appropriate safeguarding of the ICH of the diverse peoples making up the world—is essential for promoting harmony in intercultural relations, through fostering better appreciation and understanding of the differences between human communities. (p. 103)

Therefore, tradition and practice, as elements of Hawaiian ICH, are essential to the protection of Hawaiian rights and the perpetuation of the Hawaiian culture.

## 2.1 Identifying Traditional and Customary Practices

Through this contextual lens of tradition and practice serving as elements of Hawaiian ICH, Honua Consulting developed a framework to define traditional or customary practices:



**Figure 5.** Diagram of Elements that Contribute to Traditional or Customary Practices (Honua Consulting)

The first element, knowledge, has been referred to as traditional ecological knowledge, Indigenous local knowledge, or ethnoscience. In the context of this study, knowledge is the information, data, or expertise Native Hawaiians or local communities possessed or possess about an area’s environment. In a traditional context, this would have included information Hawaiians possessed to have the skills to utilize the area’s resources for a range of purposes, including, but not limited to, travel, food, worship, or habitation. This element is largely intangible.

The second element is the resources themselves. These are primarily tangible resources, either archaeological resources (e.g., habitation structures, walls, etc.) or natural resources (e.g., plants, animals, etc.). Resources can also be places or geographic features, such as a wahi pana (legendary places) or sacred/culturally important sites. While wahi pana may sometimes be construed as general locations, their importance and value need not be diminished. It is important to recognize that potential eligibility as a “historic site” on the National Register of Historic Places would require identifiable boundaries of a site.

The third element is access. Access serves as the important catalyst through which the first two elements, knowledge and resource, can be operationalized for traditional and customary practices to take place. In this way, practitioners must have access to the resource to practice their traditional customs. Importantly, access as defined here expands beyond mere physical access but also includes the ability to access resources. For example, if a particular plant species is used for medicinal purposes, a sufficient population of that plant species must be accessible to practitioners for use. In this example, an action that would adversely impact the population of the culturally important plant species would impact practitioners’ ability to access that plant. By extension, the action would also adversely impact the traditional or customary practice.

Traditional or customary practices are, therefore, the combination of knowledge, resource(s) and access. Each of these individual elements should be researched and identified in assessing any potential practices or impacts to said practices.

## 2.2 Traditional Knowledge, or Ethnoscience, and the Identification of Cultural Resources

The concept of ethnoscience was first established in the 1960s and has been defined “the field of inquiry concerned with the identification of the conceptual schemata that indigenous peoples use to organize their experience of the environment” (Roth, 2019). Ethnoscience includes a wide range of subfields, such as ethnoecology, ethnobotany, ethnozoology, ethnoclimatology, ethnomedicine and ethnopedology; all these fields are important to properly identify traditional knowledge within a certain area.

Traditional Native Hawaiian practitioners were scientists and expert natural resource managers by necessity. Without modern technological conveniences to rely upon, Hawaiians developed and maintained prosperous and symbiotic relationships with their natural environment for thousands of years. Their environments were their families, their homes, and their laboratories. They knew the names of every wind and every rain. The elements taught and inspired. The ability of Indigenous people to combine spirituality and science led to the formation of unique land-based methodologies that spurred innovation. Therefore, identifying significant places requires a baseline understanding of what made places significant for Hawaiians.

Hawaiians were both settlers and explorers. Krauss (1993) explains: “Exploration of the forests revealed trees, the timber of which was valuable for building houses and making canoes. The forests also yielded plants that could be used for making and dyeing tapa, for medicine, and for a variety of other artifacts” (p. 1). Analysis of native plants and resource management practices reveals the depth to which Hawaiians excelled in their environmental science practices:

[Hawaiians] demonstrated great ability in systematic differentiation, identification, and naming of the plants they cultivated and gathered for use. Their knowledge of the gross morphology of plants, their habits of growth, and the requirements for greatest yields is not excelled by expert agriculturists of more complicated cultures. They worked out the procedures of cultivation for every locality, for all altitudes, for different weather conditions and exposures, and for soils of all types. In their close observations of the plants they grew, they noted and selected mutants (spores) and natural hybrids, and so created varieties of the plants they already had. Thus over the years after their arrival in the Islands, the Hawaiians added hundreds of named varieties of taro, sweet potatoes, sugarcane, and other cultivated plants to those they had brought with them from the central Pacific. (Krauss, 1993, p. 3)

Thus, Native Hawaiians reinforced the biodiversity that continues to exist in Hawai‘i today through their customary traditional natural resource management practices.

The present analyses of archival documents, oral traditions (oli [chants], mele [songs], and/or hula dances and ha'i mo'olelo [storytelling performances]), and Hawaiian language sources including books, manuscripts, and newspaper articles, are focused on identifying recorded cultural resources present on the landscape, including: Hawaiian and non-Hawaiian place names; landscape features (ridges, gulches, cinder cones); archaeological features (kuleana parcel walls, house platforms, shrines, heiau [places of worship], etc.); culturally significant areas (viewsheds, unmodified areas where gathering practices and/or rituals were performed); and significant biological, physiological, or natural resources. This research also looks to document the wide range of Hawaiian science that existed within the geographic extent.

### **2.3 Mo'olelo 'Āina: Native Traditions of the Land**

Among the most significant sources of native mo'olelo (history, narrative, story) are the Hawaiian language newspapers which were printed between 1838 and 1948, and the early writings of foreign visitors and residents. Most of the accounts that were submitted to the papers were penned by native residents of areas being described and noted native historians. Over the last 30 years, Kepā Maly has reviewed and compiled an extensive index of articles published in the Hawaiian language newspapers, with particular emphasis on those narratives pertaining to lands, customs, and traditions. Many traditions naming places around Hawai'i are found in these early writings. Many of these accounts describe native practices, the nature of land use at specific locations, and native mo'olelo. Thus, we are given a means of understanding how people related to their environment and sustained themselves on the land.

### **2.4 Historic Maps**

There are also numerous, informative historic maps for the region. Surveyors of the eighteenth and nineteenth centuries were skilled in traversing land areas and capturing important features and resources throughout Hawai'i's rich islands. Historic maps were carefully studied, and the features detailed therein were aggregated and categorized to help identify specific places, names, features, and resources throughout the study area. From these, among other documents, new maps were created that more thoroughly capture the range of resources in the area.

### **2.5 Archaeological and Biological Studies**

An archaeological literature review and field investigation (LRFI) was conducted by Honua Consulting. Previous archaeological studies and other findings are further discussed in this report. The parcel is fully built out. There is a single non-native tree on the backside of the parcel. The rest of the parcel is covered in concrete.

## 2.6 Ethnographic Methodology

Information from lineal and cultural descendants is instrumental in procuring information about the project area's transformation over time and its changing uses. The information gathered through research helped to focus interview questions on specific features and elements within the project area. Descendants and cultural practitioners from the area were contacted and interviewed for this CIA; these interview summaries are included in **Section 4.0 (Ethnographic Data)**.

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### 3.0 Description and Traditional History of the Project Area

The state is the fee owner of the project area located in Central O‘ahu within the kalana<sup>3</sup> of Wahiawā, which also largely includes the traditional wahi pana of Kūkaniloko; Wahiawā’s broader boundaries stretch into the upland areas of the ahupua‘a of Kamananui (north), Wai‘anae (Uka), and Waikele and Waipi‘o (south). According to area practitioner Tom Lencanko, the kalana of Wahiawā is surrounded by Helemano to the north and Līhu‘e to the south. The project area is situated within the historical moku of Wai‘anae. The Wahiawā Dam, which is commonly known or referred to as Lake Wilson, surrounds Wahiawā to the north, south, and west. Constructed in 1889, the dam has since created a reservoir of water, which now comprises Lake Wilson, that originates from flows at the northern and southern forks of Kaukonahua Stream.

#### 3.1 Inoa ‘Āina (Place Names)

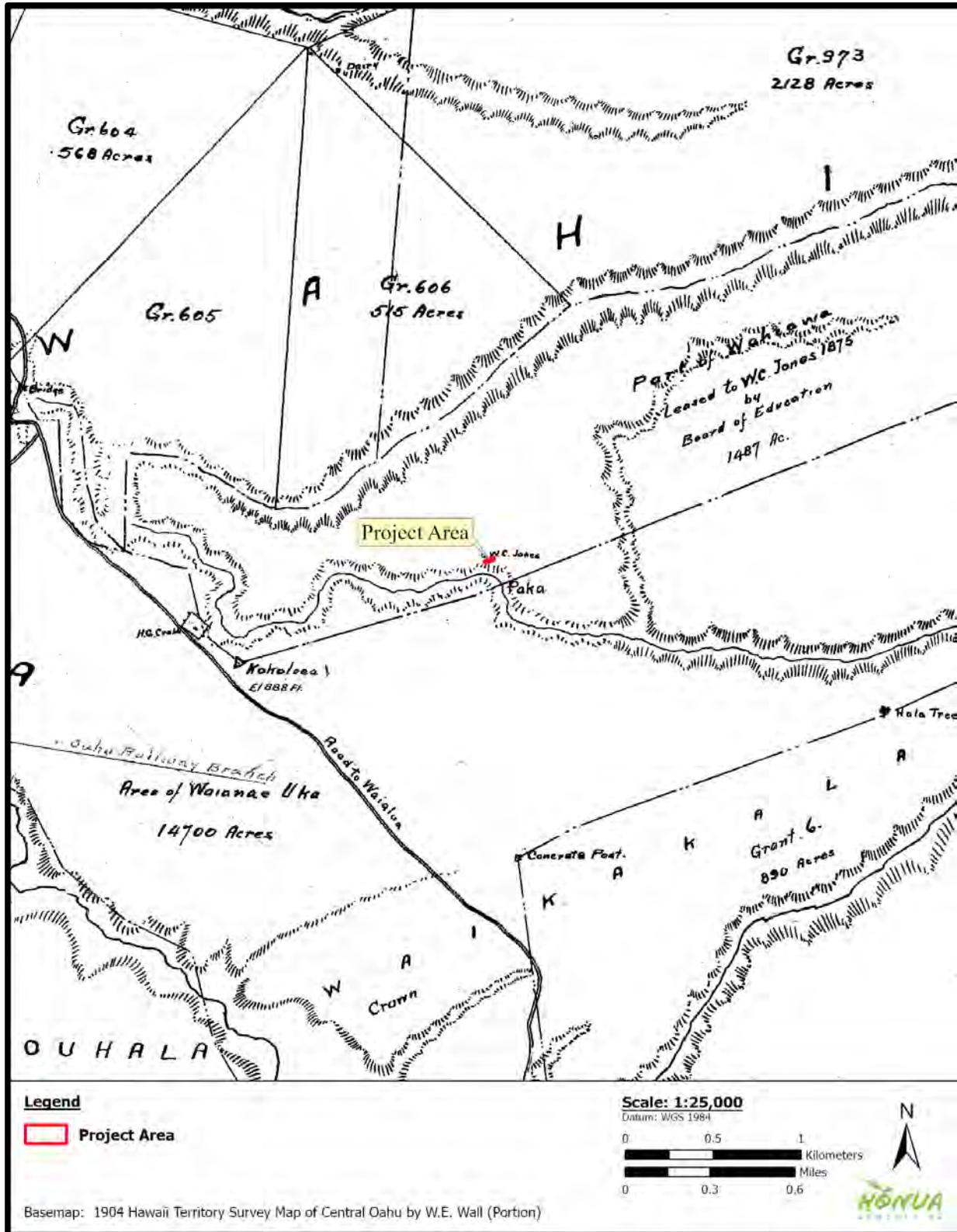
Several traditional inoa ‘āina are known for features of the Wahiawā region and environment. Table 1 lists inoa ‘āina in the vicinity of the project area, a description of the locations, their English translations, and sources of information. Selected names are also discussed below.

**Table 1.** List of Inoa ‘Āina of Wahiawā

Inoa ‘Āina	Description
‘Ewa	Land division and district, plantation town, elementary school meaning “one-sided, crooked, out of shape, imperfect, to cause not to fit, ill fitting, incorrect, or unjust”, also used as a directional term (Pukui et al. 1974, p. 28; Pukui & Elbert 1986, p. 42).
Hale‘au‘au	Land area, stream, gulch, and heiau meaning “bathing house” (Pukui et al., 1974, p. 36).
Helemano / Halemano	A stream, an elementary school, a ditch, a reservoir, and camps meaning “many snared or many going” (Pukui et al., 1974, p. 44).
Ho‘olonopahu	Heiau meaning “to hear [the] drum” (Soehren, 2008).
Kalakoa	Boundary point possibly meaning “the warrior day” (Soehren, 2008).
Kalena	Land section and peak near Schofield Barracks meaning “the lazy one or yellowish in nature as ‘ōlena” (Pukui et al., 1974, p. 76).
Kamananui	Land section and ditch, Schofield Barracks, a forest grove here was called Pō-loa (long night), meaning “the large branch” (Pukui et al., 1974, p. 80).

<sup>3</sup> The authors acknowledge that other reports, including CIAs prepared by other firms, refer to Wahiawā as an ahupua‘a. In discussion with Tom Lencanko and the members of the Hawaiian Civic Club of Wahiawā, the authors have decided to use the term “kalana” here and throughout this report, which is how the practitioners of the area refer to Wahiawā.

Inoa 'Āina	Description
Kamo'okapu	Boundary point meaning "the sacred lizard" (Soehren, 2008).
Kanuwai	Boundary point meaning "the hereditary waters" (Soehren, 2008).
Kaukonahua	Gulch and stream, meaning "place his testicles (a man's testicles were cut off here so that he could leap)", or more likely Kau-kōnāhua (place fatness)" (Pukui et al., 1974, p. 93).
Kawaimano	Boundary point meaning "the many [sources of] fresh water" (Soehren, 2008).
Kemo'o	Land division meaning "the lizard or 'the fragment,' as a piece of land" (Pukui et al., 1974, p. 107).
Kolekole	Pass and possible sacrificial stone meaning "raw, scarred" (Sterling & Summers, 1978; Pukui et al, 1974, p. 116).
Kua'ikua	Located in Halemano, a sacred spring only those related to the supernatural ones who made and hid it are allowed to bathe in it" (Ke Au Hou, 1910, quoted in Sterling & Summers, 1978, p. 112).
Kūkaniloko	Name for stones near Wahiawā where royalty gave birth, also the name of an ancient chief (Pukui et al., 1974, p. 121).
Leilehua	Plains, village, high school, and golf course, Wahiawā area, famous for training in lua fighting, site of present Schofield Barracks, meaning "lehua ['ōhi'a lehua, <i>Metrosideros polymorpha</i> ] lei" (Pukui et al., 1974, p. 131).
Līhu'e	Former land division near Schofield Barracks meaning "cold chill" (Pukui et al., 1974, p. 132).
O'ahunui	Stone meaning "large O'ahu" (Sterling & Summers, 1978).
Pa'ala'a	Land section meaning "sacred firmness" (Pukui et al., 1974, p. 173).
Pe'ahināi'a	Hill meaning "beckon [to] the fish" (Pukui et al., 1974, p. 182).
Poamoho	A stream, trail, and camp (Pukui et al., 1974, p. 185).
Pouhala	Fishpond and land division meaning "pandanus post" (Pukui et al., 1974, p. 190).
Wahiawā	Land section, district, city forest reserve, fishing area, homesteads, ditch, reservoir, schools, botanical gardens, and recreation center meaning "place of noise" (Pukui et al., 1974, p. 218).
Wai'alu	Land division, peak, village, valley, mill, town, railroad, bay, beach park, recreation center, district, golf course, reservoir, and elementary and high schools possibly meaning "two waters" (Pukui et al., 1974, p. 220).
Wai'anae	Land division, town, valley, school, district, and homesteads and district meaning "mullet water" (Pukui et al., 1974, p. 220).
Wai'anae Uka	Ahupua'a meaning "inland Wai'anae"
Waikakalaua	Land section and stream meaning "water rough [in] rain" (Pukui et al., 1974, p. 222).



**Figure 6.** The Project Area on a Portion of a 1904 Hawaii Territory Survey Map of Central O’ahu by W.E. Wall (Registered Map 399)

### 3.1.1 Wahiawā

Wahiawā is a long-standing traditional name that has been retained into the present, while other place names in the region have largely been lost in the rapid development of mass agricultural plantations at the beginning of the 20<sup>th</sup> century when Hawai'i became a United States Territory. Wahiawā has a rich and interesting cultural history, and many mo'olelo and legends are associated with this region. Wahiawā is translated as “place of noise,” because the sound of ocean waves, particularly during rough (winter) surf, can be heard from the area (Pukui et al., 1974, p. 218).

Wahiawā covers an area from the crest of the Ko'olau Mountains (east) to the center of the plateau just west of the junction of the north and south forks of Kaukonahua Stream; it is the name of the general area of the central plateau and the inland portion of Kamananui ahupua'a in the moku of Waialua, as well as in the mountainous, inland section of the moku of Wai'anae which was previously divided into Wai'anae Uka (mountain Wai'anae, the upland plains located between the east side of Ka'ala mountains and the west side of the Ko'olau mountain range), and Wai'anae Kai (oceanside Wai'anae, extending from the western side of the Ka'ala mountains to the ocean). However, the boundaries underwent several geopolitical changes in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries.

Historical accounts identify Wahiawā as its own stand-alone district beginnings in 1913 when the upper part of the Kamananui ahupua'a (also called the ahupua'a of Wahiawā) was merged with the ahupua'a of Wai'anae Uka; part of the 'ili<sup>4</sup> of Waikakalaua, located in the ahupua'a of Waikele in the moku of 'Ewa, was added in 1925 (Soehren, 2008). The district was enlarged again in 1932, “by adding lands from Ewa and Waialua which had been included in the Military Reservation of Schofield Barracks” (Soehren, 2008). J.W. Coulter (1935) explained:

No changes were made until 1913, and then only with respect to Oahu when a new district was created, that of Wahiawa, in which the *ahupuaas* of Wahiawa and Waianae Uka were taken from Waialua to form this new and seventh district of Oahu. In 1899, a tract of some 1320 acres of Wahiawa, formerly in pasture, was subdivided into agricultural homestead lots and by 1913 quite a community had developed in this section whose aspirations for independence from Waialua district was met by the creation of a new district...

In 1925, the third edition of the *Revised Laws*, containing all laws up to that date, was enacted. In the session laws of that year, the district of Wahiawa on Oahu was expanded on its north and south sides by taking respectively from Waialua and Ewa, large irregular tracts of land, but as very little attention was paid to the new boundaries

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<sup>4</sup> An 'ili is a land section next in importance to ahupua'a and usually a subdivision of ahupua'a.

in the operation of the law, it is unnecessary to recite the revisions description. It can be found in Act 13, *Session Laws of 1925*.

In the special sessions of 1932... The incongruous boundaries of Wahiawa on Oahu created in 1925 were abrogated and the district restored to its boundaries of 1913, to which were added small tracts of land in Ewa and Waialua acquired by the United States and included within the Military Reservation of Schofield Barracks. (pp. 221-222)

Currently, the Department of Accounting and General Services classifies Wahiawā as its own district. An 1876 Kingdom of Hawai‘i government survey map identifies Wahiawā as an ahupua‘a located between the ahupua‘a of Pa‘ala‘a Uka (north) and Wai‘anae Uka (south). SHPD identifies this ahupua‘a as Wai‘anae, formerly Wai‘anae Uka (upland Wai‘anae) ([https://dlnr.hawaii.gov/shpd/files/2015/06/Ahupuaa\\_Oahu.pdf](https://dlnr.hawaii.gov/shpd/files/2015/06/Ahupuaa_Oahu.pdf)).

There are at least two rain names associated with Wahiawā that nourish and sustain the ‘āina (land). The first, Kuahine (“Sister”) is mentioned in a mele found in a mo‘olelo of Hi‘iakaikapoliopole, as cited in Akana & Gonzales (2015, p. 119):

He nui nā ‘oihana a ka Wai‘ōpua	The Wai‘ōpua wind has many tasks
He ‘oihana nō ia na ke Kuahine	An undertaking by the Kuahine rain
Ho‘omaika‘i pa‘a pono iholā i ke kula	Bringing long-lasting pleasure to the plains
None, pa‘ani i ka Waikōloa	Teasing, playing on the Waikōloa wind
Pa‘ani le‘ale‘a i Wahiawā	Pleasurable fun at Wahiawā

The reference to the winds named Wai‘ōpua and Waikōloa also provide the relational context between these named elements (rain and wind) and specific locations in Wahiawā. Wai‘ōpua is a wind name more commonly associated with Wailua, Kaua‘i; it means “water of cloud banks” (Pukui & Elbert 1986, p. 380). They are literally the fresh water (wai) or rain-bearing clouds (‘ōpua) that nourish the area. Waikōloa is a “cold northwest wind associated with... Ka‘ala, O‘ahu, and [a] nearby place of the same name,” (Pukui & Elbert 1986, p. 379; Pukui et al., 1974, p. 223). It is also a “gulch near Schofield Barracks” (Pukui et al., 1974, p. 223). Pukui et al. (1974) translate Waikōloa as “water pulling far” (p. 223), although other translations are also possible.

In *The Wind Gourd of La‘amaomao*, Moses Nakuina (1901, p. 57) describes Waikōloa as the wind name of Līhu‘e, and Wai‘ōpua a place name associated with the Kēhau (“dew”)—

He Kehau ko Waiopua	Kēhau is the wind that belongs to Wai‘ōpua,
He Waikōloa ko Lihue	Waikōloa is the wind that belongs to Līhu‘e

The second rain name, ‘Ula (red) is recorded in a mele “composed for Liholiho and inherited by Kalākaua” (Akana & Gonzales, 2015, p. 262):

‘O māua kai ka ua ‘Ula o Wahiwā	We two in the ‘Ula rain of Wahiwā
He ho‘olu‘u moelua na ke Ki‘oao	Striped dye of the Ki‘oao rain
Ke ho‘olu‘u maila i uka o Kahui	Immersing the uplands of Kahui
I ‘ale‘ale a pihi a hanini	Which is filled and full and overflowing

While Wahiwā is generally contained within the ahupua‘a of Kamananui and Wai‘anae Uka, the inland boundaries of the ahupua‘a of Honouliuli, Hō‘ae‘ae, Waikele and Waipi‘o in the ‘Ewa moku comprise the southern border of Wai‘anae Uka, while the ahupua‘a of Pa‘ala‘a in the moku of Waialua comprises the eastern border of Kamananui. Thus, mentions of these inoa ‘āina because of their proximity is expected.

### 3.1.2 Kalena (Kamaoha, etc.)

Kalena is a place name associated with Wahiwā that Pukui et al. (1974) translate to mean “the lazy one” (p. 76). However, lena also means yellow or yellowish in color, and refers to ‘ōlena or tumeric (*Curcuma domestica*), used by Hawaiians as medicine and dye. The color yellow is symbolic of ali‘i (chiefs), and also of mo‘o (lizards, including deities). Handy et al. (1972, p. 125) wrote that mo‘o was fond of the color yellow, and Brown (2022) associates it with their freshwater abodes, noting “Their fondness of and association with the color yellow are why ‘Ōiwi used kapa ‘ōlena (turmeric-colored bark cloth) in mo‘o-related rituals” (forthcoming).

Lena also means “to stretch out, as to dry; to draw tight, as a belt; to sight or aim; to bend, as a bow”; Lena is one of the names for the star Sirius (Pukui & Elbert, 1986, p. 203). Thus, there are many possibilities in interpreting the meaning of Kalena, including associations with ali‘i, kilo hōkū (astronomy), and mo‘o (possibly as ‘aumakua (family gods) of specific mo‘okū‘auhau (genealogy)). An insert map in *Sites of Oahu* identified Pu‘u Kalena (“Kalena peak”) as the “second highest peak” on the Wai‘anae mountain range (Huapala), and Kalena to the northeast below Pu‘u Kalena (Sterling & Summers, 1978, pp. 136-137). Kalena is also mentioned as a mountainous pass between the uplands of Wahiwā and Wai‘anae Kai in the mo‘olelo of O‘ahunui (Nakuina, 1897).

Kalena is an inoa ‘āina also preserved in mele such as “Kalena Kai” (seaside Kalena). “Kalena Kai” is a chant originally composed by Liholiho in the early 19th century; in the early 20th century, composer Charles E. King created a melody that transformed it into a modern song often performed in ‘auana (modern hula). The mele lists additional inoa ‘āina that are no longer widely or commonly known, including Hale‘au‘au and Mālamaniui, as well as Līhu‘e. The following text is from *He Mele Aloha, A Hawaiian Songbook* (Wilcox et al., 2001):

**Kalena Kai**

‘O Kalena kai Hale‘au‘au  
A‘o Līhu‘e i Mālamānui

‘O ka ‘ehu‘ehu o ke kai  
Ka moena pāwehe o Mokulē‘ia

‘O ka lae ‘o Ka‘ena ka‘a ma mua  
Kū ana Pu‘ukoa me Pu‘uhulu

O ke kula loa ia o Mailehuna  
‘O ka wai pa‘ihi i ka pu‘uwai

‘O ka wai iho ia pono kāua  
‘O Ka‘ala kau mai i luna

Hao ka makani lūlū ka lehua  
‘O Halemano me Pu‘ukoa  
Hā‘ina ‘ia mai ana ka puana  
Ka lua o nā lani eō mai

**Kalena Kai**

Kalena kai, [at] Hale‘au‘au  
And (the plain of) Līhu‘e to Mālamānui

The misty spray of the sea  
Mokulē‘ia, spread like a patterned mat

The point of Ka‘ena rolls on ahead  
And there’s Pu‘ukoa and Pu‘uhulu

The great plains spread before Mailehuna  
The water dear to the heart

That is the water that comforts us  
And Ka‘ala stands proudly above

The wind blows, scattering the lehua  
There stand Halemano and Pu‘ukoa  
Tell the story in the refrain  
For the second of the royal ones, here is your  
name song

All of these wahi pana can be viewed from the summit of Ka‘ala looking east. Wilcox et al. (2001) describe Kalena Kai as a “mountainous area on O‘ahu above Mokulē‘ia”, and Līhu‘e and Mālamānui as “land areas in the Wahiawā plain” (p. 103). Soehren (2008) includes Mālamānui as a mo‘o ‘āina (strip or fragment of land smaller than an ‘ili) in the ahupua‘a of Wai‘anae Kai and also with the ‘ili of Waipahu in the ahupua‘a of Waikele.

A kanikau (lament) for Alexander Liholiho (Kamehameha IV) references the plains of Mālamānui (“He Kanikau no ka Moi Iolani Kamehameha IV,” 1864, p. 4, cited in Akana & Gonzalez, 2015, p. 319):

Ku‘u kaikunāne ho‘i	My beloved brother
Mai ke kai leo nui o Pua‘ena	From the loud voiced sea of Pua‘ena
Ke nū maila i Kemo‘o,	Rumbling forth up to Kemo‘o,
Pulu i ka wai kēhau a ka mau‘u	Drenched in the dew of the grass
Hohola akula i ke kula o Mālamānui e—	Unfurled on the plains of Mālamānui —

It is likely the Mālamānui referenced in the mele in another wahi pana located higher in the central Wahiawā plain is based on descriptions in mo‘olelo and mele. For example, there are

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at least four rain names associated with Mālamānuī, as located in the ahupua‘a of Wai‘ānae Uka that comprises the moku of Wahiawā. These are the Kēhau, Koloawao, Līhau and Nāulu rains (Akana & Gonzales, 2015, p. 319).

In the two 1905-1906 mo‘olelo of Kamehameha I and Hi‘iakaikapoliopole, writer Ho‘oulumāhiehie includes a mele that references the Kēhau rain of Mālamānuī (Ho‘oulumāhiehie, as cited in Akana & Gonzales, 2015, p. 75; English translation by Akana and Gonzales):

‘O ku‘u wai [hālokoloko] wai lehua	My pool of lehua nectar
Ke ho‘oma‘ū ‘ia lā e ke Kēhau	Is being moistened by the [misty] Kēhau [rain]
Ua pulu i Mālamānuī	It is saturated at Mālamānuī

The Koloawao (also Koloawao), or rain “creeping in the mountains” (or forest) is “associated with Ka‘ala,” and is memorialized in a mele inoa (name chant) for Albert Ka Haku o Hawai‘i, son of Alexander Liholiho (Kamehameha IV) and Queen Emma (Kapookolu, as cited in Akana & Gonzalez, 2015, p. 112; English translation by Akana and Gonzales):

‘O lākou nō kai luna o Ka‘ala—kāua	They are indeed the ones atop Ka‘ala—the two of us
Ua pulu paha i ka ua Koloawao—kāua	Probably drenched by the Koloawao rain—the two of us
Kilikili hau anu i Mālamānuī—kāua	A cold, icy drizzle at Mālamānuī—the two of us

The Līhau rain is associated with Mālamānuī and Līhu‘e, possibly indicating their proximity to each other. This rain is described in further detail in the following section on Līhu‘e.

Nāulu is a rain name associated with many locations across the Hawaiian Islands, including Mālamānuī and Kemo‘o. Nāulu is a “sudden shower; showery”; it also means “vexed, angry” or “irritated by being teased or nagged” (Pukui & Elbert, 1986, p. 263). The name suggests a sudden, stormy rain accompanied by wind gusts, as Nāulu is also a wind name (Pukui & Elbert, 1986, p. 263). The mele “Li‘a i ka Wai Māpuna” (tranquility in the fresh spring waters) describes the Nāulu rain of Mālamānuī (Kekaokalani & Bright, 1888, as cited in Akana & Gonzales, 2015, p. 196):

Ua la‘i luna o Mālamānuī	It is tranquil in the uplands of Mālamānuī
Ua ‘olu i ka wai a ka Nāulu	Pleasant in the water of the Nāulu rain
I ka wai ua lana mālie	In the calm, floating water

An oli for Keaopolohiwa describes the Nāulu rain of Kemo‘o, and links it to nearby place names Kamaoha, Ka‘ōpua, and Halemano (Akana & Gonzales, 2015, p. 196):

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Ana 'ole ka ua o Kamaoha ē	The rain of Kamaoha is immeasurable
I ka hone a'e a Ka'ōpua lā	Murmuring sweetly at Ka'ōpua
A ka ua Nāulu i ke kula ē	The Nāulu shower on the plains
I ke kula aku o Kemo'ō lā	The plains of Kemo'ō
Kohu 'ole ka ua o Halemano ē	The rain of Halemano resembles no other

Soehren (2008) identifies Kamaoha(nui) as a place in the moku of Wai'anae Kai, possibly near the boundary with the moku of Waialua. However, Kamaoha is also the name of a mo'ō wahine (lizard goddess) of Luakini loko i'a (traditional fishpond), located on the summit of Ka'ala. Soehren (2008) writes, "According to Hookala, his father often obtained fish from this fresh-water pond. In it were... found many shore fish, hinalea, wuwoa [*sic.* Uouoa?], [and] a kind of mullet." The uouoa (*neomyxus chaptalii*) or false mullet caused sleeplessness and nightmares if the head was consumed, which might also be related to the mo'ō wahine (Pukui & Elbert, 1986, p. 372). The mele, along with the mo'olelo of Luakini fishpond, amply demonstrate the rainfall of the region and the abundance of resources it provided, from fresh fish, to feathers from forest birds to forestry.

There is at least one more variant of the mele "Kalena Kai" published on Huapala Hawaiian Hula Archives (Huapala), with a different ordering of several verses. The Huapala version was provided by Thomas T. Shirai, Jr of the Kawaihāpai 'ohana (family), a cousin of kumu hula (hula master) Antone Ka'o'o of Mokulē'ia, O'ahu. Huapala (n.d.) notes that the mele "honors places in Waialua Moku," written, "in remembrance of a visit to Waialua in the 1820's when [Liholiho] & Ka'ahumanu stopped there on the way to Kaua'i... In ancient times, certain areas of the sea were kapu [forbidden] or designated places to bathe. This ceremonial bathing as for remission of sin." As kama'āina (native born) of the area, Shirai's 'ohana "provided supplies and probably entertained the royal retinue." This version of the mele includes slightly different verses than the Wilcox et al. (2001) version, with some possible additional otherwise lost inoa 'āina:

Ka lae o Ka'ena oni ma mua	The cape of Ka'ena appears ahead
'O Lauhulu no me Pu'ukapu	With Lauhulu and Pu'ukapu
'O Halemano lūlū i ka lehua	Halemano is verdant with lehua
'O Waimalu no noho i ka malu	Waimalu is there in peace

Huapala (n.d.) notes that "Lauhulu and Pu'ukapu are the guardians of Mount Ka'ala," and that "Halemano was famous for its ohī'a lehua and Waimalu, a place of purification, was kapu." Lauhulu is both "dry banana leaf; to wrap, as a bundle, with ti leaves inside and banana leaves outside. *Fig.*, outsider, one from another locality (sometimes said disparagingly)" and "fast, swift, as of destruction; to seize, as an 'ahi seizes a hook" (Pukui & Elbert, 1986, p. 195). Pu'ukapu, "sacred hill," is a peak in the Kawailoa ahupua'a of Waialua. Waimalu,

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sheltered, shaded, or protected/protective fresh water, is described by Huapala (n.d.) as a kapu place of purification (for ceremonial bathing ritual).

Hale‘au‘au (“bathing house”) is a gulch that begins mauka (upland, toward the mountain) at Ka‘ala and runs east to Kaukonohua stream, and north of Mohiākea Gulch. In a 1925 newspaper article describing foods gathered for a birthday party, Kalena is described as being located “i Haleauau” (in or at Hale‘au‘au), “Kela puaa holonahēle o ka Lena [Kalena] i Haleauau, i ka piina o Kemoo i Waialua laweia mai ka hee, ula inamona, i‘o pipi, oio, weke, kulolo, halakahiki ko Laie... (That mountain pig of Kalena at Hale‘au‘au, climbing up Kemo‘o in Waialua, bringing octopus, red inamona relish, beef, ‘ō‘io fish, weke fish, kulolo, pineapple of Lā‘ie...) (Apuakehau, 1923, p. 8).

Sterling & Summers (1978) also describe it as a heiau site (identified as site 215) located at Pulae, Pūmai‘alau Gulch; they cite J.G. McAllister’s 1933 description as a paved heiau utilizing stone from the area (p. 136).

Malama is “light, moon, month” (month based on the moons), while Mālama is “to take care of, tend, attend, care for, preserve;” Mālama is also the name of a star (Pukui & Elbert, 1986, p. 232). Thus, Malamanui can refer to an important month, and Mālamamanui to great attention, care, and protection, with religious undertones in observing kapu, conducting ritual to honor akua (deity or deities), or, as a star name like Kalena, to kilo hōkū.

Wilcox et al. (2001) remark that their order of the verses “makes geographic sense as one journeys around the Wai‘anae mountains” (p. 103).

Kemo‘o (“The lizard”) is described as “a land section near Schofield Barracks” (Pukui et al., 1974, p. 107). It is a large enough area to have its own named rain and is also a noted location memorialized in mele such as the oli for Keaopolohiwa provided above, which describes it as kula<sup>5</sup> (plain, open field), as do a number of other 19<sup>th</sup> century mele published in Hawaiian language newspaper. An 1867 mele for Kamehameha V by Kapoli (1867, p. 1) includes a stanza for this region that names “ke kula o Kemoo” (the plains of Kemo‘o) and connects the surrounding place names together:

Mana‘o au iā uka o Helemano	I desire to be in the uplands of Helemano
I ka uka ‘ai kanaka o Kūkaniloko	The cannibalistic uplands of Kūkaniloko
He loko iā Līhu‘e na ke Kēhau	The interior of Līhu‘e of the Kēhau
Ke ho‘oholo lā i ke kula o Kemo‘o	Travelling along the plain of Kemo‘o
Ua nui akula ho‘i ka Waikōloa	The torrential rains indeed of Waikōloa

<sup>5</sup> Pukui & Elbert (1986) note that “An act of 1884 distinguished dry or kula land from wet or taro land” (p. 178).

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Hō‘ā Mālamānui ka uka o Kānehōa	Light up Mālamānui, the uplands of Kānehōa
Ko‘u hoa i ka makani anu kēhau	My companion in the cold, misty Kēhau breeze

Similarly, in a letter to the Hawaiian language newspaper *Ka Nupepa Kuokoa*, Solomon Kalua (1875, p. 1) describes arriving at “ke kula o Kemo‘o,” which he emphasizes “nona keia mau wahi lalani mele kanaenae aloha” (for whom is composed these lines of loving song of praise):

Ho‘i pū a‘e kāua	The two of us return together
I ke kula o Kemo‘o	To the plains of Kemo‘o
Moe aku i Waialua	Sleeping at Waialua
I ke ‘ehukai o lalo.	In the sea spray below.

Kemo‘o is used poetically in a kanikau by J.W. ‘Ōku‘u (1878, p. 4) for his wife, as the highest uplands in direct contrast with the shores of Waialua:

Kanikau lā he aloha	A loving lament
Nou nō e Kaho‘opu‘ipu‘i	For you indeed, Kaho‘opu‘ipu‘i
Ku‘u wahine mai ke kai leo nui lā o Waialua	My beloved wife from the loud-voice sea of Waialua
Ke ‘ūhā maila i ke kula o Kemo‘o lā ē	The breeze from the plains of Kemo‘o

The deliberate contrast of the lowest point of the ocean to the highest point of the uplands metaphorically represents the entirety of the district, and the breadth of ‘Ōku‘u’s love for his wife.

Nēnē is a native grass that is also associated with the plains of Kemo‘o, as indicated in a kanikau from Kaniau (1864, p. 1) for Alexander Liholiho (Kamehameha IV):

Aia ku‘u kāne i ke kula o Kemo‘o,	There is my beloved husband on the plains of Kemo‘o,
Mai ka makani anu lā he Waikōloa	From the cold wind there, the Waikōloa
E lawe ana i ke ‘ala o ka nēnē	Carrying the scent of the nēnē grass

A brief announcement on a trip King Kalākaua took to the windward side of O‘ahu in 1876 concludes with a poetic reference to the nēnē grass of Kemo‘o, “He oia mau ke ohaoha o kona ola me he ‘mauu nene la i ke kula o Kemo‘o” (The delight of his reign continues with “the nēnē grass there on the plains of Kemo‘o”) (“Nu Hou Kuloko,” 1876, p. 2), which figuratively refers to “success in secret; licentious practices in the open or out of doors.”

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In the mo'olelo of Kaumaili'ulā, he and his huaka'i ali'i (royal entourage) travel the island of O'ahu from Ko'olauloa to Waialua, ascend the heights of Wahiawā to the plains of Kemo'o, in order to descend into the district of 'Ewa ("Ka Moolelo Kaa no Kaumailiula," 1892, p. 4). The chiefess Lu'ukia sails to Tahiti and marries Olopana; Olopana's daughter Kaupe'a is so taken by Lu'ukia's description of her handsome brother Kaumaili'ulā that she sails to Hawai'i to find him. In an account by Kamakau (1867), they wed and Kaupe'a becomes pregnant, but returns to Tahiti to have their child, and Kaumaili'ulā follows.

Soehren (2008) describes Kemo'o as a large 'ili 'āina in the ahupua'a of Kamananui located "between Poamoho Gulch and Kaukonahua Gulch containing many Royal Patent Grants." It became a rainfall precipitation site during the early territorial years, which also speaks to its noted rainfall (Territorial Planning Board, 1939, p. 121). There is no documentation as to how the area acquired this name. However, an account of *Keaomelemele* by Manu (1885) lists Kemo'o as one of the mo'o po'e (people) of this region, along with Alamuki and Kamo'oloa as followers of Laniwahine, a well known mo'o goddess of Waialua (p. 1).

In 1887, an 'ili of 52 ½ acres at Kemo'o was listed as government land for sale with the initial asking price at \$130 ("Kuai o Na Aina," 1887, p. 3). In 1920, a notice was published announcing the sale of "leftover" government lands (now Territorial and not Kingdom government lands) at Kemo'o, identified as "Mahele A," comprised of 9 ½ acres, and "Mahele B," a 41.3-acre parcel. The starting price for each parcel was twenty dollars an acre (Bailey, 1920, p. 8).

There are fewer poetic references to Kaukonahua, it is commonly paired with Kemo'o when it is mentioned in mele, often in kanikau for loved ones. In a kanikau by Luisa Keohokalole (1871, p. 3) for M. Holi, she describes the quality of the icy cold waters of Kaukonahua in relation to Kemo'o:

Kanikau lā he aloha	A loving lament
Nou nō lā e Mareta,	For you, Mareta
Ku'u aikāne mai ka lepo 'ula o 'Ewa	My beloved companion from the red dirt of 'Ewa
...	...
Mai ka pi'ina wela lā e Kīpapa,	From the hot climb of Kīpapa
Mai ka wai huihui o Kaukonahua	From the icy cold waters of Kaukonahua
Mai ka holo a ka lio i ka uka o Kemo'o	From the riding of the horse in the uplands of Kemo'o

Another kanikau by Konaaihele (1862, p. 4) for his wife Aupuni also provides a contextual relationship between the places named, and significant features of each, starting with the hot,

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dry, 'Ewa plains, and reference to the practice of gathering oysters in silence (i'a hāmau leo, a well-known epithet for Pu'uloa):

Ku'u wahine mai ke kula lā o 'Ewa	My beloved wife from the plains of 'Ewa
Mai ka i'a hāmau leo i ka makani	From the fish that silences the voice in the wind
Ku'u wahine mai ke kula lā o Kemo'o	My beloved wife from the upland plains of Kemo'o
Mai ka wai aku o Kaukonahua	From the fresh waters of Kaukonahua beyond (Kemo'o)

The cool, lush upland plains and fresh water sources of Kemo'o and Kaukonahua directly contrast with the arid 'Ewa shoreline to the south, providing a sense of the entirety of the area that reflects the composers deep love and grief for his deceased companion.

Another mele that references the waters of Kaukonahua was published by N.H. Lulea (1878, p. 4):

Aloha ka wai o Kaukonahua,	Greetings/love to the fresh waters of Kaukonahua,
O ia wai a kāua i luakaha ai,	The fresh waters where the two of us relaxed
Aloha Halahape i ke kula o Kemo'o	Greetings/love to Halahape on the plains of Kemo'o

The following mele "He Inoa no Kauikeaouli" (1862, p. 4) also references Halahape, which appears to be a wind name of Kemo'o. It is also referenced in an earlier mele for Kauikeaouli (Kamehameha III):

E kipa i Kuaikua, he 'olu nō ia wai	Visiting Kuaikua, these waters are very pleasant
I ka nu'a o ka palai, nahenahe mai ke 'ala	In the thick mats of palai fern, the pleasing fragrances wafts forth
Lūpali'iwa i ka uka, i ka uka 'iu i ka la'i	Lūpali'iwa in the uplands, in the distant uplands in the calm
I laila nō ho'i au me li'a i ka waokele	There indeed I am with chills/a strong desire in the forest
Me ke kupa i Halemano, he wela o Kokoloea,	With the natives of Halemano, the heat of Kokoloea,
I ahona i ke Kuahine, kanaho i Halahape,	It is better in the Kuahine, relief is found in Halahape,

‘Olu ai ‘o Mālamānui, kai nō lā paha ‘oe	That cools Mālamānui, perhaps you are the one
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There are two important aspects of the Wahiawā region, and the related inoa ‘āina and elements of the ‘āina (such as wind names and rain names) that should be noted. First, the abundance of rain and fresh water supported a diverse ecosystem of native flora and fauna prior to the introduction of industrial agriculture and monocrops (such as pineapple). Evidence of such is recorded in place names, which are memorialized in mo’olelo, mele, and poetical sayings that are still part of the immense archive and native cultural practice, such as hula and song performance.

Second, several mele tie these lands to the Kamehameha line, specifically mentioned in compositions for Kauikeaouli (Kamehameha III), Ka Haku o Hawai’i (Prince Albert, son of Kamehameha IV and Emma), and Kamehameha V.

### 3.1.3 Līhu‘e

In 1956, newspaper columnist Clarice B. Taylor (1956) wrote, “Lihue as a place name [in Wahiawā] has been lost. Maps showing its existence are not available, yet Lihue on Oahu was famed in mele and chant long before the enterprising city on the island of Kauai was named for it” (as cited in Sterling & Summers, 1978, p. 136). Sterling & Summer (1978) reference Līhu‘e from mele, mo’olelo, and an 1876 Hawaiian Government Survey map, which locates it below the Wai‘anae mountain peaks of Kānehōa and Maunauna (p. 136).

Līhu‘e is a traditional inoa ‘āina and upland plains located in the moku of Wai‘anae Uka, in the area where Schofield Barracks is now located. Līhu‘e means “cold chill” (Pukui et al., 1974, p. 132). At least two places in the larger Wahiawā region carry the name Līhu‘e. Soehren (2008) identifies Līhu‘e as: 1. A mo‘o ‘āina in the ahupua‘a of Pa‘ala‘a, and 2. An ‘ili ‘āina in the ahupua‘a of Waikele.

Līhu‘e is referenced poetically in many mele, as in this kanikau for Mrs. Mereala Kamaka‘ōpiopio by Lili‘i (1873, p. 1):

E maka nonoho walewale Līhu‘e i ke Kēhau E kuhi ana ua pono ka Waikōloa	Līhu‘e is a very pleasant place to live because of the cool Kēhau breeze Pointing to the refreshing Waikōloa wind
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According to one mo’olelo recorded by Beckwith (1970), Kūali‘i, a prominent O‘ahu ali‘i in the 1700s, engaged in battle at Līhu‘e, where he and two of his warriors met a large army. These three men defeated 12,000 enemies in three battles at Mālamānui, Pule‘e and Paupawela.

The shape-shifting kupua (demigod) Kaupē, who could take the form of a human male or a dog, lived at Līhu‘e (Westervelt, 1915b, pp. 90-96; Beckwith, 1970, p. 345). According to Kamakau (1865a), he was a grandchild of Kemo‘o (p. 1). Kaupē was noted for overthrowing the chief Kahānaiakeakua, and subsequently ruled the region of O‘ahu from Nu‘uanu to the shores of Honolulu. Kaupē was a human-devouring kupua, who did not attack high chiefs, but consumed people on O‘ahu and Maui. At one point, he travelled to Hawai‘i island and returned to O‘ahu with the son of a chief to sacrifice at the heiau at Līhu‘e. The boy’s father followed Kaupē to O‘ahu and consulted with the kahuna Kahilona at the heiau of Kaheiki, located at Kupanihi (now called Pacific Heights). Kaheiki heiau was built by Menehune (a legendary race of small people who worked at night) and under Kahilona’s leadership because “the center for the mo‘o-kahuna class of priests... for kilokilo who read the signs of earth and sky and sea” (Beckwith, 1970, p. 345). Kahilona taught the boy’s father a powerful prayer to the gods Kū, Lono, and Kanaloa, and the boy and his father were able to escape. Later, the father defeated Kaupē on Hawai‘i island.

Kaupē’s spirit or ghost form inhabits the clouds stretched across the Ko‘olau mountain range, possibly all the way to Wahiawā. This form of Kaupē is “in some way connected with those signs in the sky called oila,” as Hawaiians believed “animal shapes in such clouds could be used to foretell the movements of chiefs descended from their kupua ancestors... denoting the presence of their aumakua protectors in the heavens” (Westervelt, 1915a, pp. 1-13; Beckwith, 1970, pp. 346-347).

Līhu‘e and surrounding areas, including Kalena, Mālamānuī, and Hale‘au‘au and the elements associated with them, such as wind names and rain names are often found intertwined and preserved through mele and mo‘olelo.

#### **3.1.4 Wai‘anae Uka**

Wai‘anae Uka (upland Wai‘anae) is an ahupua‘a just south of the kalana of Wahiawā. Because of its inland, mountainous location, Wai‘anae Uka provided an important water source to Wai‘anae Kai (oceanside Wai‘anae). It is unclear exactly why the boundary changed, but according to historical accounts, it occurred in the late 19<sup>th</sup> century. Coulter (1935) notes that:

In reviewing the changes made in 1909 and comparing the districts with those in 1859, we find only one change in the island of Hawaii...

On Oahu, the boundaries of Honolulu district remain the same; Ewa and Waianae are separated and formed into two districts, excluding the *ahupuaa* of Waianae uka which is added to Waialua district... (pp. 220-221)

One historical account by Handy (1940) describes Wai‘anae Uka as follows:

The *ahupua'a* ran from the crest of the Waianae Mountains south of Mount Kaala, across the plateau area on which Schofield Barracks stands, and up to the crest of the Koolau Range. On the Waialua side, I am told, there were terrace areas watered by Kioea and Waikoloa Streams. Kalena Gulch has some terraces; I have no information about Mohiaka. On the Koolau side three large streams join to form Kalakoa Stream. The configuration of the land suggests that there must have been some terraces here. (p. 86)

### 3.1.5 Poamoho

Poamoho is the name of a gulch and stream that forms the northern boundary of Wahiawā. There are no traditions related to this place name. However, moho is a now extinct flightless native rail (*Pennula sandwichensis*); it also is a “candidate, as in politics,” a “representative selected to participate in a race, wrestling,” or a “betting contest” or “championship”; it also means “to unfold, of leaves, especially [the] upper leaf of a plant, as sugar cane or taro” (Pukui & Elbert, 1986, p. 251). Po'a refers to one castrated but also to “a sudden sound, as of flapping wings of a rooster, or of the thumping sound of the palms of the hands pressed together with fingers locked, or of hands striking the surface of the water; to make such sounds,” as well as “to dig under” or “undermine” (Pukui & Elbert, 1986, p. 333). L. Andrews (1865) writes that po'a also refers to “throw[ing] water over one's self; to dive, paddle or play in the water;” “to cast up or spatter water” and “to wallow and roll in the water like a hog” (p. 469). Thus, Po'amoho can possibly reference the moho bird playing in the stream water, or perhaps a chosen candidate or representative of the ali'i or akua for sport, religious activity, or a skilled profession.

Several sources render the name as Po'oamoho (head of the candidate or moho bird). Hawaiian historian S.M. Kamakau (1865c, p. 1) wrote about famous things of the past, and included a mele “hai aku i na kupuna” (according to the ancestors) for the chiefs of the area:

Akepa ka ua i ka laau	The rain is nimble in the forest
I Kalakoa i Pooamoho	At Kalakoa, at Po'oamoho
I Halemano la i Kawaihoa	At Halemano there at Kawaihoa

'Ākepa is both a “group of small scarlet or yellow-green Hawaiian honey creepers (*Loxops coccinea*),” and to be “quick, nimble, sprightly, active” (Pukui & Elbert, 1986, p. 14). It suggests the movement of the rain is like the quick, nimble movement of the 'ākepa honeycreeper native to the upland forest area. It is not surprising that such a lush, rainforest mountain area would contain so many references to fresh water (rain, streams), the resulting rainforest, and native bird species that would reside there. Birds are often symbolic references for people, including ali'i who adorned themselves with native bird feathers, particularly red and yellow, which the place name Kalena also references.

### 3.1.6 Kaukonahua

Kaukonahua is the stream that marks the southeastern boundary of Wahiawā. The main stream flows 33 miles to the north shore, making it the longest waterway in the islands (Pukui et al., 1974, p. 92). As they note, “one explanation the name means ‘place his testicles’ (a man’s testicles were cut off here so that he could leap). A more likely explanation is Kaukōnāhua (place fatness)” (Pukui et al., 1974, p. 93). Another interpretation is kau, to set (down) or a time of year (season) of konāhua, fat or fleshy as an animal or human (Andrews, 1865, p. 293). This possibly references the abundance (fat) of the land in harvest (to gather and “place” or set down/store the abundance of food produced in the region) or in season(s) of harvest.

No traditions related to this place name were identified during the research conducted for this project. However, the initial translation of this inoa ‘āina is similar to the first definition of po‘a as “eunuch,” and perhaps one interpretation of Po‘amoho (chosen eunuch) is related to Kaukonahua. The waters of Kaukonahua were famous and well documented in poetry, often paired to complement and contrast the plains of Kemo‘o (ke kula o Kemo‘o). In 1902, stream diversions began from the north branch of Kaukonahua Stream, which is fed by the Ko‘olau mountains east of Wahiawā, to the Wahiawā Water Company ditch.

### 3.1.7 Kūkaniloko

Kūkaniloko is “one of the two famous places in the Hawaiian Islands for the birth of children of tapu chiefs” (McAllister, 1933, p. 134). Practitioner Tom Lechanko refers to it as a place of “exact and concise energy” (pers. comm.). Although it is located to the northwest of the modern boundaries of Wahiawā town, the birth site is mentioned because of its renown and significance for the central O‘ahu plateau. Nakuina (1897) notes that:

It was incumbent on all women of the royal line to retire to this place when about to give birth to a child, on pain of forfeiting the rank, chiefly privileges and prerogatives for her expected offspring should that event happen in a less sacred place. (p. 90)

Kamakau (1991) described Kūkaniloko as being established by the ali‘i Nanakāoko and his wife, Kahihiokalani, who gave birth to Kapawa, the first of the important ali‘i born here (p. 38). When recounting the origins of the Hawaiian people, Malo (1987) also notes this birth:

<p style="padding-left: 40px;">A mahope mai o keia mau hanauna eono, he umikumamaiwa ia mau hanauna ma ia hope mai, ua manao wale ia o kekahi poe o keia mau hanauna kai hele mai a noho ma Hawaii nei, no ka mea, o ka iwakalua paa o keia</p>	<p style="padding-left: 40px;">After these six generations, there followed nineteen generations. It has been thought that some of the people of those generations were the ones who voyaged and settled in the Hawaiian Islands, because by the twentieth generation, there</p>
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hanauna o Kapawa kona inoa oia kai hai ia mai ma Kukaniloko no Waialua i Oahu ko Kapawa wahi i hanau ia ai.

was a person whose name was Kapawa. He was the one, it is said, who was born at Kūkaniloko, in Waialua on the island of O‘ahu.

A mai a Kapawa a hiki mai i keia wa, ua ike pono ia ka hanau ana o kanaka ma Hawaii nei, aole nae i hai ia, mai Ololoimehani mai lakou i hele mai ai aole nae i hai ia mai ke kanaka a hiki mua mai a noho ma Hawaii nei, aole i hai ia mai, mai ka waa mai lakou, aole no i hai ia wa i hiki mai ai lakou ma Hawaii nei.

And from Kapawa until today, people have been known to have been born in the Hawaiian Islands. It, however, has not been told if they came from ‘Ololoimehani. It has not been told who the first was to arrived and settle in the Hawaiian Islands. It has not been told if they came on canoes, and it has not been told what time their voyage to the Hawaiian islands took place. [M. Chun, translator]

McAllister (1933) writes that, “birth here added some special divine gift to the sacred place already occupied by a tapu high-chief” (p. 135). The significance of this practice was recognized even into the early historic period when Kamehameha made efforts to have his sacred wife, Keōpūolani, deliver their child at Kūkaniloko (Kamakau, 1991, p. 38).

The sacred drums of Opuku and Hāwea announced the birth of an ali‘i and were stored in the nearby heiau Ho‘olonopahu (McAllister, 1933, p. 37).

Hawaiian historian Kamakau (1865b, p. 1) detailed Kūkaniloko and the birthing practices that took place there, also documenting some of the births and history described above.

### No Kukaniloko

### Regarding Kūkaniloko

Ua hanaia o Kukaniloko e Nanakaoko me Kahihiokalani kana wahine i wahi e hanau ai ka laua keiki o Kapawa.

Kūkaniloko was established by Nanakaoko and Kahihiokalani, his wife, as a place that their child Kapawa might be born.

Ua hoonohoia he lalani pohaku ma ka lima akau, a ma ka lima hema, e huli ana ke alo i ka aoao akau, a malaila e noho ai na’lii he 36, a he kuapuu ma uka mai. O Kukaniloko ka pohaku i ka hilinai. Ina e komo, a hilinai, a ka lele i na paepae, la houka na uha i na Liloekapu, a hanau

A line of stones was set at the right hand and the left hand, as one is facing south, and that is where 36 chiefs sat in two rows from the mountainside. Kukaniloko was the foundation of belief. If one who truly believed entered the space and lay upon the platform, placing the thighs in a raised

ke keiki i ke alo. Ua kapaia kela he Alii, he akua, he ahi he wela.

position, a child would be born. That child would be called a chief, a godly one, the heat of the fire.

I ka hemo ana o ke keiki, e lawe koke ia iloko o ka waihau o Hoolonopahu; malaila na’lii he 48, ia lakou ka hooonopono. O ke keiki, a moku ka piko, aia ma ka aoao hema o Kukaniloko he segatia me hapa. Mai Kukaniloko aku ma ke komohana elua segatia, aia malaila ka pahu kapu o Hawea e kani ai. He hoailona no ke Alii.

When the child was born, he would be quickly taken into the waihau heiau of Ho’olonopahu; there resided 48 chiefs whose responsibility it was to carry out birthing ceremonies of cutting the umbilical cord. [This was located] on the south side of Kūkaniloko, a furlough and a half in size. From Kūkaniloko towards the west two furloughs, there the sacred drum Hāwea sounded. This sound was the signal of the birth of a chief.

O na makaainana, aia ma kahikina o ke kahawai o kela aoao o Kuaikua, he mano lakou; ma ka aoao ma ka hema, he ekolu segatia, malaila na kauwa.

The working class people, four thousand in number, waited at the east of the stream on that side of Kuaikua; on the south side at a distance of three furloughs, there sat the servants.

Aka, o na’lii e hanau mai i waho, a i ke kuapuu. He mau Alii no lakou, a i hanau i ke alanui, he Alii no; no waho.

However, the ali’i who were born outside, and to the kuapu’u—they were chiefs, and those born in the road, were indeed chiefs; belonging elsewhere.

Ua manao nui no o Kamehameha e hanau o Keopuolani iloko o Kukaniloko. Aka ua pii no, aole i hiki, ua hoihoi e ia no.

Kamehameha had hoped that Keōpūolani would give birth within the stones of Kūkaniloko. This effort was attempted, but not accomplished.

Hookahi Alii o Maui i komo i loko o Kaulahea ke kane, o Kapohanaupuni ka wahine.

One Maui chief who entered was Kaulahea, the husband, and Kapōhānaupuni his wife.

Kūkaniloko is mentioned in the mele “Kahuaiki,” described as a freshwater spring of Waipi’o, O’ahu. The third stanza of the mele in “Na Wahi Pana o Ewa” (1899) states:

**Kahuaiki**

**Kahuaiki (the small fruit)**

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E aha ana o Kūkaniloko	What of Kūkaniloko
Kela uka lipo noho i ke anu	That distant upland immersed in the chill
Maewa luhiehu i ka laukupukupu	Fluttering attractively because of the lush kupukupu ferns
I ka nani weo ula o ka lehua	In the beautiful blushing red of the lehua blossom

Kūkaniloko was also the name of an O‘ahu ali‘i wahine (chiefess), the daughter of Piliwale, who was the ali‘i kāne (chief) of ‘Ewa (Kamakau, 1991, p. 50). Thus, Kūkaniloko is another example of the intertwined relationship between Kanaka ‘Ōiwi and ‘āina, one often being named for the other, because of the person’s birth or other intimate or significant association with that location.

Ali‘i nui (high chiefs) were born at Kūkaniloko, including Kalaimanua, the daughter of Kūkaniloko and granddaughter of Piliwale, who followed her mother as a ruler of O‘ahu. Kākuhihewa, the noted ali‘i kāne of O‘ahu, was also born at this place; his birth followed the ceremonies as described in the newspaper publication above (Sterling & Ladd, 2008, p. 139).

A mele dedicated to Kākuhihewa, often performed as a hula ‘āla‘apapa (an ancient dramatic hula), names Kūkaniloko and the ‘āina it sits upon. The mele references the komela (no data) blossoms planted there. Aside from being one of only two sacred royal birth sites in the pae ‘āina (the other located at Wailua, Puna, Kaua‘i), Kūkaniloko is also likely a burial site of the many umbilical cords of the generations of ali‘i born there. The text of the mele “Kākuhihewa” is presented here:

Aia i Honolulu ku‘u pōhaku	There at Honolulu is my foundation
No Kākuhihewa ko‘u haku ia	For Kākuhihewa is my lord
Malia o loa‘a pono aku ‘oe	Perhaps you will be found
Ma ka lihilihi a‘o pua komela	Amongst the fringes of the komela blossom
‘Ohu‘ohu Halemano me ka lau lehua	Halemano is adorned in the leaves of lehua
Ua kanu nā pua Kūkaniloko	The flowers planted at Kūkaniloko
Ma loko mai ‘oe me Li‘awahine	There with Li‘awahine
I ke kui ‘ōhelo ‘ai a ka manu	Stringing ‘ōhele berries, the favorite of the birds
I luna nō wau me lei lehua	I am up above with garlands of lehua
Ka maile lauli‘i a‘o Ka‘ala	The small-leaved maile of Ka‘ala
He ‘ala ka maile lauli‘ili‘i	Fragrant indeed is the maile li‘ili‘i

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<p>Ka maile lauli'i a'o Ko'iahi</p> <p>Ua ahi ua wela mai nei loko Ka hano ho'oheno a'o Kūwili Hea aku mākou eō mai 'oe No Kākuhihewa ko'u haku ia</p>	<p>The small leaf maile of Ko'iahi</p> <p>Heat and fire rises within The beloved sound of the Kūwili flute We call out, you respond For Kākuhihewa is my chief</p>
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The line, “Ohu'ohu Halemano me ka lau lehua” was collected as an 'ōlelo no'eau (proverb) by Pukui (1983). She translates it as “bedecked is Halemano with lehua leaves,” which she says is “an expression of admiration for a good-looking person” (Pukui, 1983, p. 260). This 'ōlelo no'eau is found throughout various Hawaiian language newspaper items. For example, a short notice in the Hawaiian language newspaper *Ka Nupepa Kuokoa* (“Liliuokalani,” 1898, p. 3) of Queen Lili'uokalani's trip to Washington D.C. to meet with Congress describes the festive crowd of supporters who went to see her off:

<p>Ma ka wa a ke “alii” e kau ana iluna o ka mokuahi, ua lehulehu loa na haole ame na kanaka Hawaii, i hele aku e ike iaia me ke aloha. He maikai kona ola, a ua hele nohoi a “Ohuohu Halemano i ka lau lehua, ua kanu no na pua i Kukaniloko.</p>	<p>At the time the “Queen” was aboard the steamship, there was a crowd of haole and Hawaiian people who went to see her off with much aloha. Her spirits were good, and indeed became like “Halemano adorned with lehua leaves, the blossoms planted at Kūkaniloko.</p>
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A *Kuokoa Home Rula* article (“Ka Lau Hanau,” 1911, p. 1) describing Mayor Joseph J. Fern's birthday celebration uses a slight variation of the 'ōlelo no'eau:

<p>Ua hoomanao ae ka mea Hanohano Meia Joseph J. Fern, i kona la hanau ma kona home ma Kapiolani Paka i kakahiaka Poakahi nei ma ka haawi ana he paina kakahiaka hoonau puu moni ai, ua hele no hoi ka papaaina a “Ohuohu Halemano i ka lau lo ka lehua,” e lawe pono ai no hoi no umi kumamaono poe o ka papaaina.</p>	<p>Mayor Joseph J. Fern was the distinguished guest of honor celebrated on his birthday at his home at Kapi'olani Park this past Monday morning, a scrumptious breakfast feast provided that would make anyone salivate; the table transformed like “Halemano adorned with leaves of lehua,” a lavish feast indeed fit for the sixteen guests at the table.</p>
<p>Malaila i paina ai ke keiki alii J. K. Kalaniana'ole a me kekahi poe maka hanohano e iho no hoi i konoia.</p>	<p>There Prince J. K. Kalani'ana'ole dined with some of the other distinguished guests who were also invited.</p>
<p>Na ka Bana Hawaii no hoi i houhene ae na mea kani i ka ia poe e “ai ono ana.”</p>	<p>The Royal Hawaiian band truly entertained the guests with pleasant music to feast on.</p>

A similar ‘ōlelo no‘eau – not collected by Pukui – found within the Hawaiian language newspapers is “Ehuehu Halemano i ka ua Lūlehua” (Halemano is animated by the stormy lehua-scattering rain) (1893, p. 2). The article describes the fear, uncertainty, and frustration of this time period months after the illegal overthrow of the Hawaiian government, utilizing Native Hawaiian poetics and kaona (hidden meanings) to connect the feeling of the Kanaka ‘Ōiwi to nature symbols of their ‘āina. The article (“Ehuehue Halemano,” 1893, p. 2) concludes:

I nui ke aho o na hoa makaainana, a na ka la e hiki mai ana, e hoike mai i ka puana a ka moae. A oia ka makou e kanaenae ae nei i keia mau lalani mele penei:	The patience of the common people has been great [waiting to restore Hawaiian sovereignty after the overthrow], and the day of revelation is coming. And this is why we lift up these poetic lines here:
Ehuehu Halemano i ka ua lulehua	Halemano is animated by the stormy lehua- scattering rain
Kanu no o na pua i Kukaniloko.	The flowers at Kūkaniloko are planted.

The writer references the lines as kānaenae, a “chanted supplication prayer” also used in sacrifice or dedication, as the people to their Queen (Pukui & Elbert, 1986, p. 126). The second line, “Kanu nō ‘o nā pua i Kūkaniloko” is also found in the mele for Kakuhihewa. Moreover, the reference to the pua (flowers) planted at Kūkaniloko has a figurative meaning of heredity or inheritance. Thus, the descendants of the O‘ahu chiefs born at Kūkaniloko are dedicated to aloha ‘āina (love of the land) and regaining their government.

Another variation of the above ‘ōlelo no‘eau found in the Hawaiian language newspapers is “Ouhuhu makou i ka leilehua o Halemano, kanu na pua lei ahihi” (“Nuhou Kulokou,” 1907, p. 3). This can be translated as “we are adorned with the lehua lei of Halemano, the ‘āhihi blossoms are cultivated.”

It is recorded that there was once a heiau within the boundaries of Kūkaniloko, but by 1933, the heiau located at the site had been obliterated due to the establishment of pineapple plantations (McAllister, 1933 p. 137).

Recent interpretations of the traditions suggest that the name Kūkaniloko applied to an area that stretched as far south as Waikakalaua and Līhu‘e, west to Kalena, and north to Helemano.

### 3.1.8 Keanianileihuaokalani

Keanianileihuaokalani is more commonly known as the “healing stones of Wahiawā.” The name can be interpreted as “the reflective or refreshing seed lei of the chief.” Their origin is

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unknown. Some accounts say that the stones were originally found in the Kaukonahua Gulch on the property later occupied by the Waialua Sugar Co. The stones were removed from that site, upon which the large stone broke into three pieces. When healing properties were attributed to those stones, they were moved again, this time to Kūkaniloko, since the sacred site was nearby.

According to a *Honolulu Advertiser* article, these “healing stones” were located at Wahiawā Cemetery at the end of California Avenue, and people came from all over the island to visit them. They were thought to have come from an unidentified river bottom (“Sacred Stones,” 1939, p. 10).

In 1918, the Daughters of Hawai‘i took on the responsibility of the Kūkaniloko site and the stones were subsequently moved in 1927 to the edge of a cemetery on California Avenue in Wahiawā. At this point, the healing properties of the stones became widely known to the public, who traveled in masses to visit the stones.

Newspaper articles at that time documented the pilgrimages of those visitors who held high hopes that their maladies would be alleviated. Stories abounded that miracles occurred—the blind could once again see, malformities and injuries healed. However, the newfound reputation of the stones and the area itself led to the commercialization of such miracles as self-proclaimed healers and peddlers of wares took up residence nearby, selling odds and ends to those making the trek to visit the sacred stones. Nearby residents, likely cynics who did not believe in the healing properties of the stones, began to complain about the crowds attracted to the area.

Eventually, the popularity of the stones abated, and in 1947, a private group built a cement structure to house the stones and protect it from the elements, while visitors were still welcome to leave offerings and spend time with the stones. In 1988, the care of the stones was taken over by a local Hindu group, Lord of the Universe Society (LOTUS), who were struck by the stones’ resemblance to their god Shiva. LOTUS then invested money to upgrade the old, dilapidated shed and build a marble shrine for the stones.

Newspaper articles in 2005 in the *Honolulu Advertiser* and the *Honolulu Star Bulletin* outline the developing relationship between Kanaka ‘Ōiwi who honor the history of the stones and the self-appointed Hindu caretakers. While that relationship was rocky at the outset due to differing religious practices regarding the stones, the groups agreed that the sacred nature of the stones was of utmost importance. Elithe Khan shared that “Neglected sites are being taken care of as part of the resurgence of Hawaiian awareness [...] Kupunas [grandparents, ancestors] have taken up the cause. It’s important that we introduce young children to the history” (Adamski, 2005, p. D6).

Awareness of these sacred stones grew within the Hawaiian community, and in 2010, the stones disappeared from their enshrined residence at California Avenue. In a *Star Advertiser* article, Tom Lenchanko, the kahu (caretaker) of Kūkaniloko, said “those involved in the moving of the stone were simply adhering to the instructions of their ancestors.” He continues, “It is our duty to malama the things that are sacred and put them where they belong. Our kupuna told us that it was time to take them home, and we did” (Tsai, 2010, p. B1).

Lenchanko also refuted the stone’s healing properties in his statement, saying instead that it was likely a kapu marker for travelers between ahupua’a. And yet, the move by Native Hawaiians to restore the stone to its natural habitat reinforces Hawaiian perspective of the sacred quality of natural elements, as well as Kanaka ‘Ōiwi responsibility to those elements and wahi pana of Hawai‘i.

### 3.1.9 Helemano

Like Kūkaniloko, Helemano (alternatively Halemano) is located outside of the Wahiawā area (to the north), but its significance as a traditional locale warrants mention. Helemano means “traveling together” (many traveling as a group), while Halemano means “many houses.” Līhau is the name of the rain of Helemano and Mālamānuī; it is a “gentle cool rain” that also means “moist and fresh, as plants in the dew or rain; cool, fresh, as dew-laden air” (Pukui & Elbert, 1986, p. 205). The name is recorded in two separate mele collected and translated by Akana & Gonzales (2015). The first, mentioning Halemano, is a kanikau for Daniel Manuhoa Woodward composed by his wife Hellen Umiokalani Woodward (1904, p. 6):

O ka noe mai a ka ua līhau i uka o Halemano ē	The mist of the līhau rain in the uplands of Halemano
Me he kui ala e houhou mai ana i ka ‘ili i ke anu ē	Like a needle pricking the skin in the cold

The second is found in the mele “Lilii Mokihana” composed by the ali‘i Leleiōhoku (1855-1877) and cited in Akana & Gonzales (2015, p. 154):

Ku‘u ipo i ke kai ‘uwalu ‘ili	My sweetheart in the sea that claws the skin
Ua lupea i ka ua līhau	Attractive in the līhau rain
A luhe la‘i i Mālamānuī	And limp with contentment at Mālamānuī
I ka wili‘ōka‘i a ka ua	In the whirl of the rain

Some legends associated with Helemano relate to cannibalism. J. Jarves (1844) described Helemano as “a beautiful and retired rural spot ... [lying] between two deep ravines ... its area embraces several hundred acres, verdant and picturesque, but now regarded with

superstitious dread, from once having been the rendezvous of a clan of cannibals” under the rule of the chief ‘Aikanaka (man-eater) (p. 72). The 19<sup>th</sup> century Hawaiian newspaper *Ka Hae Hawaii* (“Some Cannibals,” 1861) recounts:

There is a tale of a certain people who lived long ago up at Halemano in Waialua. They were known to roast and eat any person who went there as a stranger. The house site of their chief, whose name was Kalo, is pointed out and a flat, smooth stone called Kalo’s meat dish that lies there to this day. It is away up in the mountain of Halemano. The land is on a high place surrounded by deep valleys and the trail leading to it is steep. There Kalo lived with his people. There also is a heiau site ten fathoms long and seven fathoms wide. Between the heiau and house site is the imu pit where people were roasted. Below that, about 13 or 14 chains away, lies Kalo’s meat dish.

Emma Nakuina (1897) provides the fullest account of O’ahunui (large or great O’ahu), a ruling chief of O’ahu who discovers a taste for human flesh after consuming it when dining with the Lo-‘Aikanaka cannibal chiefs from the south Pacific, who settled in the Halemano area after being driven to the uplands by the residents of the Mokulē‘ia-Waialua communities. Her account is summarized by McAllister (1933, p. 138) and Beckwith (1970). O’ahunui was located to the south of Wahiawā town when the O’ahu chiefs lived. It was abandoned during the reign of O’ahunui, who was turned to stone after consuming the flesh of his two nephews by his older sister Kilikiliua and brother-in-law of a non-related priestly line, Lehuanui (Nakuina, 1897, p. 90). It was also a village in the story of a woman who traveled the island searching for a lost kapa-beater.

In battles for the control of the island in 1783, the Maui chief, Kahekili, defeated the forces of O’ahu. The O’ahu ali‘i, Kahahana, his wife, and a friend escaped and hid in the mountains for over two years. In this battle, “they... thought it better to go up to Oahunui at Wahiawa and so they went to the forest of Halemano” (Kamakau, 1992, pp. 136-137).

### 3.1.10 Kua‘ikua

Kua‘ikua is the name of a place and stream in upper Helemano; it is also outside of the Wahiawā area. The stream is fed by a “sacred spring and only those related to the supernatural ones who made and hid it, are allowed to bathe in it” (Sterling & Summers, 1978, p. 112). Two of the ancient chiefs of O’ahu, Haho and Lanakawai, were born at the kawa<sup>6</sup> of Kua‘ikua. Of the birth of Lanakawai, Kamakau (1991) wrote:

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<sup>6</sup> Pukui & Elbert (1986) define kawa as “leaping place, as a precipice from which a swimmer leaps into a pool” (p. 139).

Lana-ka-wai... was born at the *kawa* of Kua'ikua in Wahiawā, O'ahu. There is a flat rock there where his mother, Mahuia, squatted and gave birth to him; he floated on the water and so was given the name of Lana-ka-wai. (p. 101)

### 3.2 Pre-Western Contact Period

Along with Līhu'e in 'Ewa in the eastern foothills of the Wai'anae Range, Wahiawā on the western slopes of the Ko'olau Range was an area known as the home of chiefs. The chiefs of the area are described by Kamakau (1968) as such:

The chiefs of Lihue, Wahiawa, and Halemano on Oahu were called *Lo* chiefs, *po'e Lo Ali'i* ["people from whom to obtain a chief"], because they preserved their chiefly kapus. They lived in the mountains (*i kuahiwi*); and if the kingdom was without a chief, there in the mountains could be found a high chief (*ali'i nui*) for the kingdom. Or if a chief was without a wife, there one could be found – one from chiefly ancestors. (p. 5)

One of the most notable figures to be raised in Wahiawā was Mā'ilikūkāhi, one of the great ali'i of O'ahu who reigned well before the time of Kamehameha. When he was 29 years old, Mā'ilikūkāhi was chosen by the chiefs, priests, and commoners to be high chief of the island, and was consecrated in a ritual that, "pertained to high chiefs from remote times... It was not performed for rebellious chiefs, however, nor for warrior chiefs who took the kingdom by force, but for 'chiefs of Pōkano' [chiefs of unblemished bloodlines from remote times. —M.K.P.]" (Kamakau, 1991, p. 54).<sup>7</sup>

During this period, the place names Līhu'e and Leilehua were still in use for the area. Leilehua ("Lehua blossom garland") was well known as the site of a lua (Hawaiian martial arts) school and is where Schofield Barracks is now situated (Pukui et al., 1974, p. 131). As previously mentioned, Līhu'e now is only rarely used for the area, as the name is more commonly linked to the capital city of Kaua'i County. Leilehua is seldom used, although the name still appears in use by the U.S. Military at its nearby golf course and clubhouse, as the names of these facilities are derived from the traditional place name of the area.

### 3.3 Early Historic Period to Mid-1800s

There is little known about the central O'ahu plateau in the beginning of the 19th century. The earliest account was written by Serano Bishop, who, in the 1830s was a young man living at 'Ewa with his missionary family. The family often traveled across the island to visit the Waialua Mission Station:

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<sup>7</sup> Brackets in original text; MKP is Mary Kawena Pukui.

There was then no road save a foot path across the generally smooth upland. We forded the streams. Beyond Kipapa gulch the upland was dotted with occasional groves of Koa trees. On the high plains ti plant abounded often so high as to intercept the view. No cattle then existed to destroy its succulent foliage. According to the statements of the natives a forest formerly covered the whole of the then nearly naked plains. (Bishop, 1916, p. 45)

The “nearly naked plains” could have resulted from one or a combination of several possibilities. Kī (ti plant, *Cordyline fruticosa*) was a Polynesian introduction, traditionally useful for its leaves and roots. Cuddihy & Stone (1990) noted that “many of the forests in which these early introductions [including kī] predominate are probably successional after Hawaiian cultivation” (p. 32). If so, the extent of kī plant on the central plateau could represent the after-effect of Hawaiian agriculture in the uplands. It is also possible that “nearly naked plains” were the result of sandalwood trade between Hawai‘i and Asia, which began in the 1790s.

The sandalwood trade boomed in the 1820s when ali‘i were encouraged by foreign traders to participate in the market. The fragrant Hawaiian sandalwood (‘iliahi or ‘aoa; *Santalum spp*), a major export to the Chinese market between the 1790s-1830s, was a common forest tree in the central plateau of Wahiawā. Kamakau (1991) wrote that “at the completion of the fort [at Honolulu in 1816] the chief Kalanimoku and all the ali‘i went to work cutting sandalwood at Wahiawā, Halemano, Pu‘ukapu, Kānewai, and the two Ko‘olau [Loa and Poko]. The largest trees were at Wahiawā, and it was hard work dragging them to the beach” (p. 207). As the wood became increasingly scarce from overcutting, one method of collection was to set fire to the forest and trace the sandalwood by its fragrant odor (Bishop, 1916, p. 45).

In the 1840s, private property was introduced into Hawaiian society through formation of the Board of Commissioners to Quiet Land Titles and the adoption of the Māhele ‘Āina of 1848 (Māhele). In 1845, King Kamehameha III waived his right to full authority over the land, portioning it out into: (1) ‘Āina Lei Ali‘i (crown lands) for the occupant of the throne; (2) ‘Āina Konohiki (konohiki lands) for notable chiefs and those who provided service to the Kingdom; and (3) ‘Āina Aupuni (government lands) to be used in support of public initiatives and as a means of providing land to those who did not acquire land in the Māhele. The result of these divisions were approximately as follows: 23.8% (984,000 acres) of land in the islands were allocated to the king and were dubbed the ‘Āina Lei Ali‘i, 39.2% (1,619,000 acres) were the ‘Āina Konohiki to be divided among 245 chiefs, and 37% (1,523,000 acres) were declared as ‘Āina Aupuni which were awarded to maka‘āinana (commoners) who worked the land as active tenants (Van Dyke, 2008, p. 42).

Land Commission Awards (L.C.A.s) were awarded to commoners as kuleana lands for fee ownership. Kuleana land claims required proof of residency on the land and continued land improvements. L.C.A.s, therefore, record who resided on the land and how the land was used.

Royal Patents were often granted on L.C.A.s awarded from 1847-1853, which finalized the sale and legal title of the lands. Royal Patents were used until the overthrow of the Hawaiian government in 1892 and thereafter are referred to as Land Patents. Starting around 1846, Land Grants (LG) were established, which made it possible to purchase property outright rather than going through the land commission process. As a result of this process, LG documentation does not commonly specify how the land had been utilized prior to its purchase. The land was also granted under two different types of 'ili, 'ili 'āina (land inheritance), and 'ili kūpono (or the shortened term, 'ili kū). 'Ili kūpono was “nearly independent land held by [the] chief where the transfer of the ahupuaa to a new chief did not carry with it the transfer of the ili kūpono contained within its limits” (Lyons, 1903, p. 28).

In 1913, the Territorial government formed the district of Wahiawā by combining this upper portion of Kamananui ahupua'a with Wai'anae Uka ahupua'a (Coulter, 1935, p. 222). Since then, Wahiawā has also been referred to as an ahupua'a (e.g., Handy et al., 1972), although there is no record of such a land area in the *Indices of Awards Made by the Board of Commissioners to Quiet Land Titles* (1929). A 1904 map of grants in central O'ahu identifies areas of Kamananui ahupua'a as “Wahiawa,” “Kemoo,” and “Kaheeka,” suggesting that these may be sub-units of the traditional ahupua'a. This is also the name of the town that grew out of agricultural homesteads established in 1899. Handy et al. (1972) refer to the north fork of the Kaukonahua Stream as the Wahiawa Stream (p. 465).

### 3.3.1 Land Grant 973

In 1852, Kamananui, which includes the Wahiawā area, was designated Government Land. In 1853, approximately 2,128 acres of land in upland Kamananui, encompassing the project area and called Wahiawā, were purchased for \$1,942 and awarded to James Robinson, Robert Lawrence, and Robert W. Holt as LG 973 (Figures 8 and 9). The land was purchased from the Board of Education, who had received it from the Hawaiian Government. Since the land was owned by the Hawaiian Government and later the Board of Education, no L.C.A.s were awarded in the area now known as Wahiawā.

Following the death of James Robinson in 1876, the land was transferred to his son Mark Robinson who used the area for cattle ranching for much of the rest of the 19<sup>th</sup> century. Robinson was a Hawaiian business magnate and politician best known for being the Minister of Foreign Affairs during the reign of Lili'uokalani.

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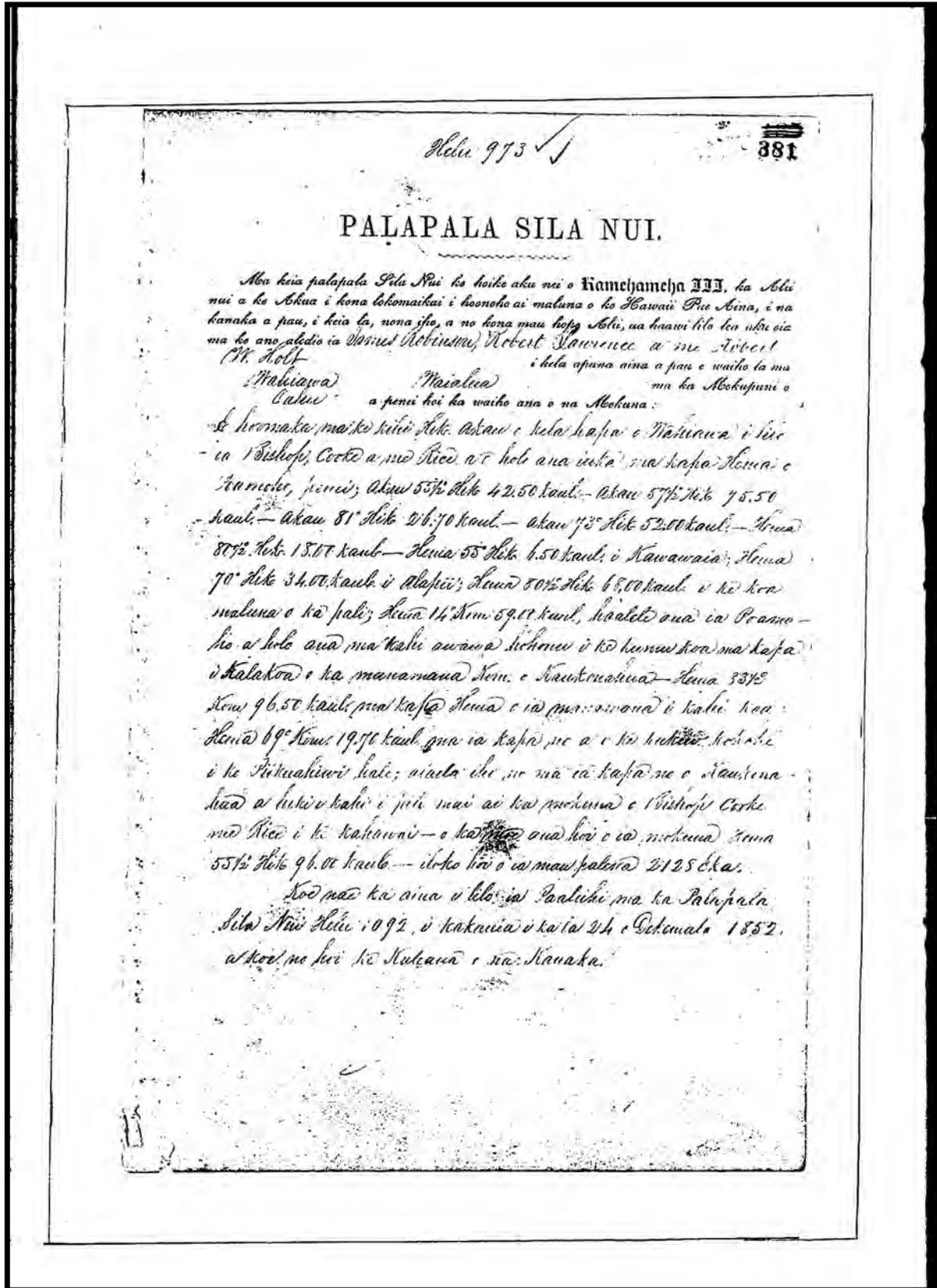


Figure 7. First Page of Palapala Sila Nui No. 973 for Area including Wahiawā



### 3.4 1890s to Present Day

It is well established that the U.S. Military and other officials coordinated with Kingdom residents and foreigners in 1893 to overthrow the sovereign Kingdom of Hawai'i. Many Hawaiians and others continue to consider this overthrow and “illegal” action as a violation of the many treaties held by the sovereign Kingdom at the time. This position is supported by the passage of the 1993 Apology Resolution, passed by the U.S. Congress in 1993 on the 100-year anniversary of the overthrow.

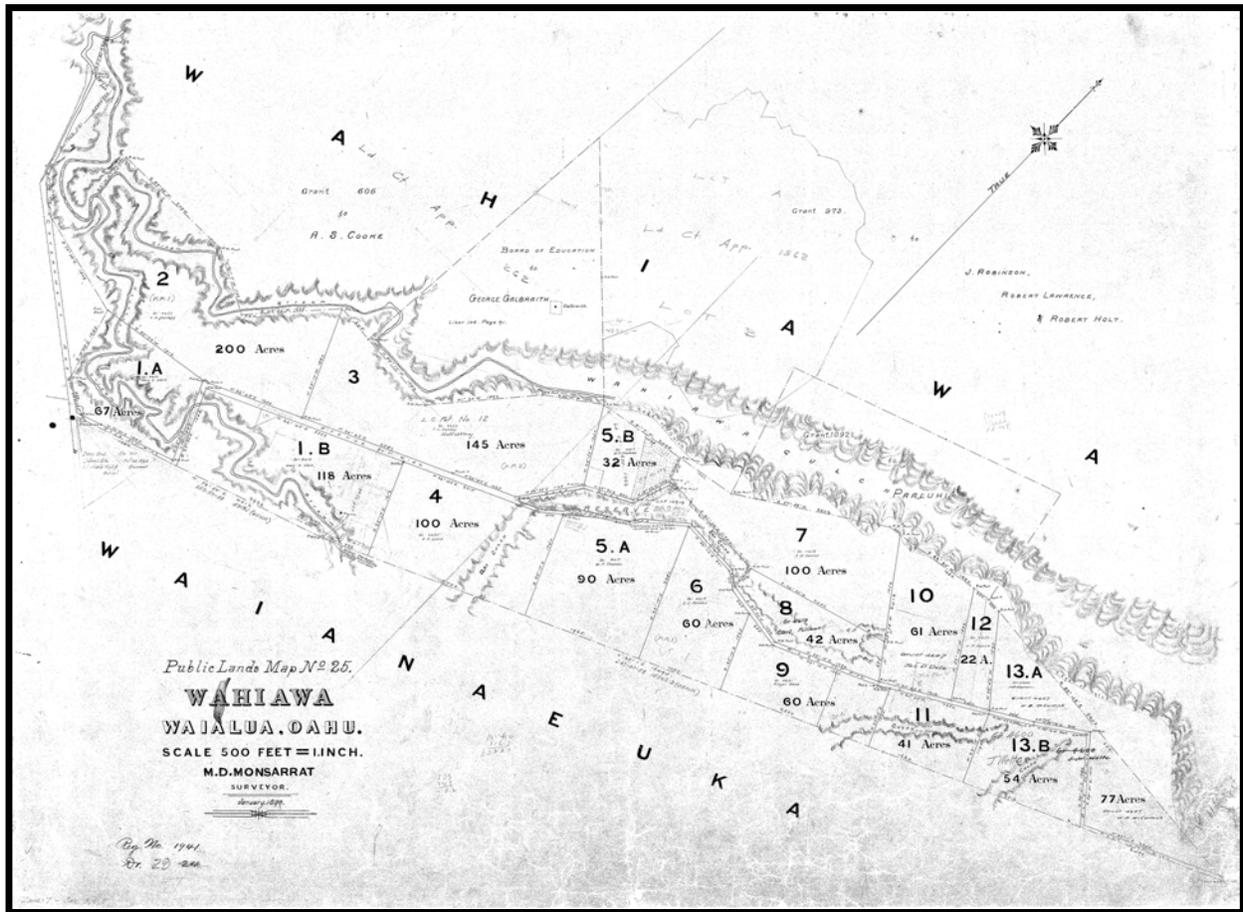
The overthrow was led by a group of white American European men, the “Annexation Club,” in reference to their strong advocacy for the annexation of Hawai'i to the United States. Members included Henry E. Cooper, Theodore F. Lansing, Henry Waterhouse, Lorrin A. Thurston, Ed Suhr, F.W. McChesney, John Emmeluth, William R. Castle, William O. Smith, J.A. McCandless, C. Bolte, W.C. Wilder, and Andrew Brown. They named themselves the “Citizen’s Committee of Public Safety” and later changed their name to “The Committee of Safety.” After the overthrow, the individuals who orchestrated the coup d’état self-proclaimed themselves to oversee the government and established the “Republic of Hawai'i.” They then “ceded” 1.8 million acres of land set aside as Crown and Government lands through the Māhele to themselves and quickly set out to sell these lands for their own gain.

The Republic of Hawai'i, led by Committee of Safety member Sanford Ballard Dole as President, implemented a plan to sell off the Crown and Government Lands as agricultural homesteads. To achieve this, the Republic of Hawai'i passed the Land Act of 1895, which resulted in the repeal of the 1865 Kingdom Law and allowed the Crown Lands to be sold. The law allowed only citizens to apply and excluded most Asian immigrants from citizenship, limiting the distribution of these homestead lots to only Hawaiian, haole (white) Americans, and western Europeans (Act 26, August 14, 1895, pp. 49-83). 46,594 acres were removed from the ceded lands sold by the Republic between 1895 and 1898. This included the lands of Wahiawā, as the lands granted to Mark Robinson were reclaimed by the Republic and made available for agricultural homesteads.

Peter Young (2017) describes the “dramatically altered... landscape of Kamananui Ahupua'a during the last two decades of the nineteenth century” due to “rice cultivation, extension of the railroad system toward Waialua and the development of commercial sugar cane cultivation with the rise of the Waialua Agricultural Company (later named the Waialua Sugar Company).” He continues:

These lands were further modified during the early twentieth century through the development of a military post (Schofield Barracks,) sugar cane cultivation (Kemo'o Land Company,) a piggery and dairy operation (Kemo'o Farm) and the pineapple

industry with its plantation settlements (Kemo’o Camp) further re-shaped the landscape surrounding the project area (Cultural Surveys). (Young, 2017)



**Figure 9.** An 1899 Public Lands Map Showing How the Land was Divided into Plots for Colonists and Agricultural Use (Monsarrat, 1899; Registered Map 1941)

In 1910, Ed Tenney, Charles H. Atherton, W.W. Goodale, T.H. Petrie, and J.R. Gait founded the Kemo’o Land Company, Ltd. “to carry on the business of agriculture, manufacturing and mercantile pursuits (generally, operation of mills, sugar works, irrigation systems and railroads)” (“Kemoo Land Company,” 1907, p. 4). The company was intended to be incorporated for a period of fifty years but folded in 1921.

### 3.4.1 Pineapple

The introduction of the pineapple occurred in the early 1800s, but this crop did not begin cultivation at commercial levels until the 1890s and early 1900s (Harper, 1972).

Byron Orlando Clark, originally from Iowa, was an official with the Republic. He advocated for agriculture in the now-vacant 1,350 acres of land in Wahiawā starting from 1898. Clark

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lobbied for business associates from California to move to the homestead lands. By 1899, Clark had completed facilitating the issuance of government grants to the Californians and helped them settle in Wahiawā and obtain the citizenship needed for land acquisition. The area would become known as the Wahiawā Colony Tract, an area roughly bounded by the north and south forks of Kaukonahua Stream (Nedbalek, 1984, p. 19). California Avenue is named for these early plantation colonialists.

Clark, along with Alfred W. Eames, began planting and harvesting pineapple in 1900. Eames quickly established the Hawaiian Island Packing Company, which later became pineapple and agricultural giant Del Monte Fresh Produce (Hawai'i), Inc.

Also in 1900, James D. Dole (cousin to Sanford B. Dole), obtained approximately 60 acres of homestead lands in Wahiawā. He set to work building a pineapple plantation and cannery; both became operational by 1903. This significantly contributed to the initial success of the settler colony (Nedbalek, 1984, p. 25).

Dole (1939) wrote an account of those early days of the pineapple business in Wahiawā for the *Honolulu Advertiser*:

In 1901 the Hawaiian Pineapple Co. had no cannery, no pineapple machinery, no tractors, automobiles or trucks. For a plantation it had very few acres at Wahiawa, a few plants and a promised lease of 300 acres.

We had a plow, harrow and three horses. We had a name, but almost no money, and for two years the manager got no salary.

Readers will be surprised to know that at Christmas time in 1901 the company employed only four people. I was manager, Fred Tracy was teamster and two Chinese men worked in the fields.

Our first pineapples went to Honolulu in a wagon, and Tracy and I peddled them to the Honolulu fruit stores. Our first canning was done in 1903, and that year we packed 1,893 cases. How many minutes are required to pack 1,893 cases now [in 1939]?

There was no railroad in Wahiawa. The road was direct, dust, or mud. Three hours to Wahiawa; five, if we went by buggy or horseback.

One thing we had—an idea; to grow a good pineapple, to can it well and to sell it to every grocery store in the United States, every day in the year.

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Now [1939], people everywhere want our pineapple. The money people pay for our pineapple pays for cans, sugar, boxes. More important, it gives the company money to pay the people who do the plantation and cannery work. (p. 17)

Another important milestone in the evolution of the central plateau was the completion in 1906 of the O'ahu Rail & Land Company (OR&L) line from Waipahu to Wahiawā. This ensured reliable transport of pineapple from the Wahiawā fields to Honolulu canneries. Eventually, spur lines were extended to outlying fields and workers' camps.

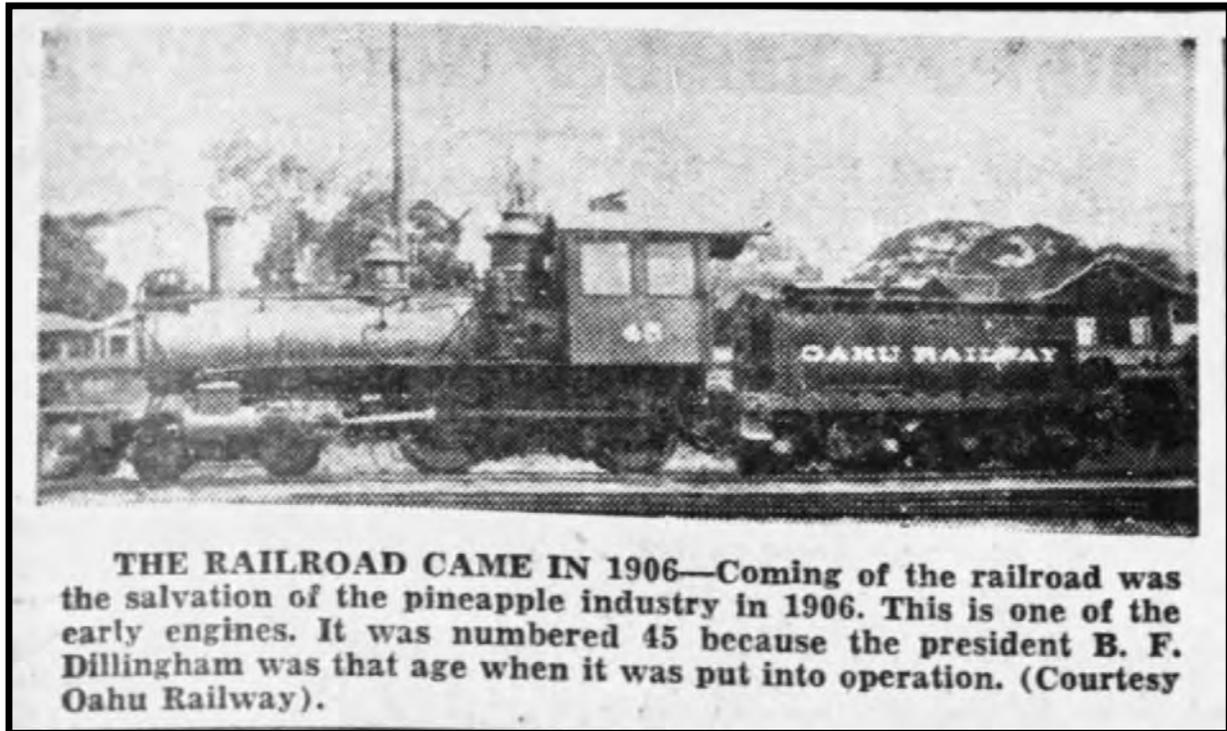
The *Honolulu Advertiser* also wrote about the importance of the railway to the pineapple industry:

"The Oahu Railway was the savior of the Wahiawa pineapple industry in its early days," declared Harry N. Denison, kamaaina railroad man and now assistant general manager of the Oahu railway. Mr. Denison came here in 1897 and has been with the railroad more than forty years, working up from car repair man.

The cannery, established in 1903, was successfully preserving the fruit, but during the long trip to Honolulu the penetration by the red dust made much of it worthless.

The growers were desperate. It was a railroad or close the doors. Mr. James D. Dole, backed by the Wahiawa colonists, was very aggressive in the struggle to bring the railroad into Wahiawa. Finally in 1905 it was decided to put the railroad through. The actual construction was finished in July 1906 to the gate of Wheeler field; the bridge to Wahiawa was put in the next year. ("Oahu Railway," 1939, p. 15)

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**Figure 10.** Engine “45,” One of the Early Engines to Begin Service to Wahiawā (“Oahu Railway,” 1939, p. 15).

Within ten years, the homesteaders, including Clark, had grown a thriving pineapple industry with more than 250,000 cases being harvested seasonally. Thousands of acres were in production (Nedbalek, 1984, p. 25). Wahiawā became the center of the pineapple industry. Clark led Clark Farm Co., Ltd., Dole led the Hawaiian Pineapple Company (which would become Dole Food Company.), W.B. Thomas established and led the Thomas Pineapple Co. (which later became part of Libby, McNeill & Libby when the company expanded into canning fruit). The Thomas plantation consisted of approximately 600 acres in Wahiawā.

*Mid-Pacific Magazine* touted that: “The best pines [pineapples] come from Wahiawa. The Consolidated Pineapple Co., a branch of the Hawaiian Development Co., maintains its canning factory in the midst of the biggest pineapple field in the world, at Wahiawa, and here the fresh fruit may be picked early every morning and canned in its own juice before night. This is the only company at Wahiawa that cans in the field” (“The Romance,” 1911, p. 139).

The plantations recruited many immigrant laborers to the area. While the 1895 Land Act still prohibited immigrants from applying for homestead lands themselves, they nonetheless moved into the area, often into plantation housing, and built their lives in Wahiawā. The project area was utilized for pineapple cultivation for many years prior to its current use (Figure 12).



**Figure 11.** Portion of a 1927 Army Aerial Photograph showing the Project Area (U.S. Army, 1927)

### 3.4.2 Military

In 1909, the U.S. Military began construction of Schofield Barracks to the west of Wahiawā town. Wheeler Field was developed in the 1920s as a small, two-squadron operation, and was greatly expanded in the 1930s.

Pineapple cultivation remained the dominant activity on the east side of the plateau in the early 20<sup>th</sup> century. In the 1920s, much of the area now included in military lands in Wahiawā was under pineapple cultivation; Galbraith Spur connected the OR&L line to the fields, passing close to Kaukonahua Camp which lay just southeast of the installation area (USGS, 1927-30). Cultivation continued until 1940, when the U.S. Navy acquired a little over 389 acres for the establishment of a radio transmitter facility:

Almost at the center of the island, the Contractors were ordered to build a huge new radio station. A mile or so back of the village of Wahiawa the land swelled to a level hilltop—the highest ground for several miles. Wahiawa was to be the main receiving unit for the Pacific fleet—capable of picking up messages from the farthest corner of the ocean.

The radio station... was to be as large as any in the world. A forest of wooden poles ranging in a complicated pattern over half a square mile of ground would support a grid of copper strands that could intercept signals no matter how weak from every direction. At the center all wires would be gathered together into cables and led to a vault deep underground, where the receiving instruments would be protected from any possible bombing raid. (Woodbury, 1946, pp. 172-173)

Following World War II, the facility was expanded by the addition of 304 acres.

### 3.4.3 20<sup>th</sup> Century History

Throughout the 20<sup>th</sup> century, Wahiawā went through several critical changes, but residents have tried to hold on to its plantation-era aura. A historical map and historical walking trail were developed to allow visitors and residents to learn about enjoy the history of Wahiawā.<sup>8</sup> Sites located closest to the project area are described below. None are in the immediate vicinity of the project with exception to California Avenue, which runs along the northern boundary of the property area. The full interactive Wahiawā Historic Trail Map is available through ArcGIS Online at <https://arcg.is/OTWaKT>.

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<sup>8</sup> Out of respect for the community who developed these materials, we have included them as originally presented and made available to the public.



**Figure 12.** Interpretive map by the Wahiawa Historical Society (n.d.) of Historic Sites located in Wahiawā town

California Avenue (Site 2 on Historical Trail Map)

“The main road in Wahiawa town is named after the original thirteen settlers from California who founded the Wahiawa Settlement Association. Byron Clark led this group to Wahiawa because it was the only large tract of land that was available to purchase. In fact, Wahiawa is so old that it predates the county ordinance passed during the 1970s which required street names to be in Hawaiian.” (Wahiawa Historical Society, n.d.)

Marigold Acres (Site 11 on Historic Trail Map)

“Real estate developer and founder of Kemo‘o Farms, Percy M. Pond, built the Marigold Acres when he realized that housing in Wahiawa would become inevitable. Specifically meant for the wealthy, the subdivision was designed as a restricted area for white residents only.” (Wahiawa Historical Society, n.d.)

Leilehua Cherry Blossoms (Site 12 on Historical Trail Map)

“Three cherry blossom trees were planted in commemoration of the first 943 Kanyaku Imin, a government-sponsored Japanese laborer. Governor George and First Lady Jean Ariyoshi invited Prince Masahito and Princess Hanako Hitachi and the Governor of Okinawa Junji Nishime as part of the Kanyaku Imin project which planted one million trees to represent each resident of Hawai‘i.” (Wahiawa Historical Society, n.d.)

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### Wahiawā Botanical Gardens (Site 13 on Historical Trail Map)

“Considered to be the ‘Tropical Jewel’ of O‘ahu’s botanical gardens, the Wahiawa Botanical Garden also has a past that is rooted in plantation history. The 27-acre property was originally leased by the Hawaiian Sugar Planters Association for crop experimentation and forest preservation. In 1950, the parcel was returned to the territory of Hawaii and opened as a public botanical garden in 1957.” (Wahiawa Historical Society, n.d.)

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## 4.0 Ethnographic Data

The following section provides ethnographic data in the form of interviews conducted by Honua Consulting. Ethnographic data is utilized to supplement the other research methods. It is one in a range of research tools employed to gather information about the project area.

Interviews were requested with individuals from the area with knowledge about the area's history or cultural resources.

### 4.1 Previous Interviews from Nearby Projects

The ethnographic interviews conducted for the Wahiawā Freshwater Park project (2024) reveal a landscape deeply intertwined with culture, ecology, and community well-being. Voices such as Kumu Hula Noelani DeVincent, Dodge Paikuli Watson, and Dole supervisors Dan Nellis and Jon Ching provide a multifaceted understanding of the park—not merely as a recreational site, but as a living space where history, environment, and stewardship converge.

For Kumu Hula Noelani DeVincent, Wahiawā is not just a place but a living lineage. A fourth-generation resident and president of the Hawaiian Civic Club of Wahiawā, she described the area as part of a vast sacred geography centered on Kūkaniloko, the birthing stones of Hawaiian chiefs. Once encompassing over 36,000 acres—including the area now known as Lake Wilson—Kūkaniloko was historically a political and spiritual center of Hawaiian life. DeVincent cautioned against reducing sacred sites to fenced parcels, urging that planning processes recognize the larger cultural and ecological systems that define them. She framed ecological restoration as an act of cultural renewal, citing projects like “Trees for Kūkaniloko,” which have reintroduced native species such as koa and ‘iliahi. Restoring native flora, she emphasized, is inseparable from restoring Native Hawaiian identity, as land, species, and culture are interdependent.

Yet DeVincent also acknowledged the park's present challenges. Once a thriving community gathering place, Wahiawā Freshwater Park has been compromised by safety concerns and houseless encampments. She expressed compassion but also called for improved management, clearing invasive vegetation to open sightlines, and ensuring security so that families once again feel safe. Her vision for revitalization integrates ecology, culture, and safety: building a traditional hale for education and gatherings, hosting events like *Day at the Lake*, and reviving practices such as fishing and makahiki games.

Where DeVincent's testimony emphasized cultural continuity, Dodge Paikuli Watson offered a perspective shaped by technical experience and lived connection to the landscape. A retired construction inspector and diver, he recalled working on the 1980–1981 Airplane Bridge replacement, where storms and dam mismanagement flooded the site, forcing underwater

construction in zero visibility. His story illustrated the unpredictability of Wahiawā’s hydrology—a reminder that natural forces continually challenge human designs. Watson’s observations as a fisherman added another layer: tilapia, peacock bass, catfish, and even a rare freshwater fish he called a pūnui reflected the hybrid ecology of the reservoir, where native and introduced species coexist. He also noted traces of past human activity, such as plantation-era glass bottles along the riverbanks, and urged archaeological monitoring and water quality oversight to ensure the park’s future use remains responsible and sustainable.

Dan Nellis and Jon Ching of Dole brought an agricultural and hydrological viewpoint, framing the reservoir as a key part of a regional water system connecting the North and South Forks of the Kaukonahua Stream to Kaiaka Bay. They emphasized sediment control, erosion management, and continuous water monitoring to protect both agricultural and ecological systems. Like the others, they cited safety concerns related to houseless encampments and supported improvements to encourage responsible recreation and community use.

Across all accounts, common themes emerge: safety as the foundation for revitalization, ecological responsibility as cultural duty, and community engagement as essential to stewardship. Together, these voices portray Wahiawā Freshwater Park as a landscape of memory and renewal—a place where cultural heritage, environmental care, and community resilience must work in harmony to restore the spirit of Wahiawā.

## 4.2 Interview with Dodge Paikuli Watson

**Interviewer:** Matthew Sproat

**Interviewee:** Dodge Paikuli Watson – Fisherman, Former Area Resident and Retired Construction Inspector

The interview with Mr. Dodge Paikuli Watson, a retired construction inspector formerly with the State of Hawai‘i Department of Transportation (DOT), was conducted on October 8, 2025, as part of the Cultural Impact Assessment (CIA) for the proposed Department of Land and Natural Resources Division of Conservation and Resources Enforcement (DOCARE) substation in Wahiawā. Born and raised in Honolulu, he lived in the area with his family for approximately 20 years, before returning to his family’s property in Honolulu, where he still resides. Watson’s familiarity with the project area stems from his work on major infrastructure projects in Wahiawā during the 1980s, particularly the replacement of the bridge that crosses the stream entering the town, a location adjacent to the proposed DOCARE site. His first-hand experience with the landscape prior to and during construction offers valuable historical insight into the environmental and cultural setting of the area.

Watson explained that the bridge project in Wahiawā, undertaken around 1980–1981, involved replacing an aging metal bridge with the current concrete structure that remains in use today. Initially intended as a two-year project, the work extended over three years due to

flooding and logistical delays. The Wahiawā Stream and reservoir system—known as Lake Wilson—rose to an elevation of approximately 847 feet, inundating construction sites and submerging the newly installed bridge foundations. This extreme flooding event, likely associated with a major storm or hurricane of that period, profoundly shaped his memories of the site and the hydrology of the surrounding area.

In describing the project’s environmental setting, Watson noted that Lake Wilson served multiple purposes, including recreation (fishing and boating) and as a water collection and irrigation source for the extensive pineapple plantations that once dominated the region. The freshwater system, he emphasized, was integral to agricultural production during that period, supplying water for nearby fields through irrigation channels. While no specific traditional practices were documented in his professional experience, the reservoir clearly functioned as an important local resource that sustained both industry and community use.

Watson also shared anecdotal evidence of local collectors searching for old Hawaiian bottles along the banks of the reservoir and river during construction. Workers would find signs that people had trespassed onto the site over weekends to dig along the shoreline for antique glass bottles—artifacts he associated with earlier plantation or pre-statehood eras. Although he did not personally witness any major archaeological finds, the recurring interest of bottle collectors indicates that cultural materials or historic artifacts may still be present in the area’s soil deposits.

When asked about native flora and fauna, Watson did not recall any distinctly Hawaiian plant species in the immediate vicinity. Vegetation at the time largely consisted of introduced or naturalized species, such as eucalyptus, which continues to dominate the area today. He noted that, during the early 1980s, environmental review processes were minimal—predating the modern era of environmental and cultural compliance—and that neither the project team nor contractors paid special attention to native species, burials, or archaeological monitoring. However, from his experience, no bones, burials, or structural remains were encountered during excavation or construction, and no culturally significant flora were observed.

Watson’s firsthand observations also included unique environmental insights gained while volunteering to dive in the Wahiawā River during a flood event to inspect the submerged bridge foundations. As a skilled spearfisher and scuba diver, he described entering the water under hazardous conditions: visibility dropped to zero beyond five feet below the surface, with the water turning completely opaque and black due to suspended silt. The riverbed, he recalled, consisted entirely of deep mud, with no rock formations, cultural features, or structural remnants encountered during his dives. His description underscores the heavily silted, low-visibility nature of the freshwater system, suggesting that potential archaeological deposits—if present—would likely be deeply buried or difficult to identify without extensive sediment removal.

Regarding customary or cultural practices, Watson confirmed that fishing was, and continues to be, a common activity within the area. However, he did not believe the proposed DOCARE substation would significantly affect these practices or the broader freshwater ecosystem. He observed that any environmental impact from the small substation would be minimal compared to larger infrastructure projects such as the bridge replacement, which involved substantial excavation in the riverbed. In his view, the natural turbidity and siltation of the reservoir are ongoing characteristics of the system rather than results of localized construction.

When asked about potential cultural or archaeological concerns, Watson reiterated that no bones, burials, or traditional sites were identified during his tenure on the project, and he considered it unlikely that such materials would be discovered within the project footprint. However, his recollections of bottle hunting suggest that there may be historic-era deposits near the riverbanks worth documenting.

In discussing best management practices (BMPs), Watson drew from his professional experience in construction inspection and stormwater management. He recommended standard BMP measures to prevent sediment and debris from entering the freshwater system during construction, such as installing silt fencing, stormwater filters, and perimeter controls. At the same time, he contextualized these practices by noting that the Wahiawā Stream and Lake Wilson naturally function as stormwater catchments for the surrounding uplands, receiving runoff from roads, houses, and agricultural lands. He stated that, while protective measures should still be implemented, the waterway's inherent purpose as a drainage basin reduces the likelihood of long-term harm from small-scale development like the proposed DOCARE facility.

Overall, Watson's interview provides valuable historical, environmental, and practical context for understanding the Wahiawā project area. His recollections highlight the area's long-standing relationship with agriculture, freshwater management, and small-scale community recreation, as well as its transformation through mid- and late-twentieth-century infrastructure development. From a cultural perspective, the interview suggests that while no direct traditional Hawaiian practices or archaeological resources were identified, the freshwater landscape of Lake Wilson remains an enduring feature of community life in the region. His testimony underscores that careful construction management and continued respect for the environmental character of Wahiawā will help ensure that new projects, such as the DOCARE substation, coexist harmoniously with the area's historical and natural setting.

### 4.3 Interview with Kumu Hula Noelani DeVincet

**Interviewer:** Matthew Sproat

**Interviewees:** Kumu Hula Noelani DeVincet – Founder of Hālau Hula o Noelani and current President of the Hawaiian Civic Club of Wahiawā

Kumu Hula Noelani DeVincent, founder of Hālau Hula o Noelani and current President of the Hawaiian Civic Club of Wahiawā, participated in a cultural impact assessment interview on October 7, 2025, regarding the proposed Department of Land and Natural Resources Division of Conservation and Resources Enforcement (DOCARE) substation in Wahiawā. Born at Wahiawā General Hospital and raised in the community, DeVincent represents the fourth generation of her family to live in Wahiawā, with her children and grandchildren marking the fifth and sixth generations. Her deep genealogical and personal connections to the area, coupled with her role as a cultural practitioner and community leader, provide a significant lens through which to understand the project’s potential cultural impacts. She described the project site as lying along the main entry and exit route to Wahiawā, a highly visible and well-known area near Lake Wilson (Wahiawā Reservoir). The land, she explained, is part of the greater cultural landscape of Kūkaniloko, the sacred birthing site of ali’i, which extends far beyond the five-acre parcel currently recognized by the State to encompass approximately 36,000 acres from the Wai’anae to the Ko’olau mountain ranges. The project, therefore, technically falls within the broader boundaries of this culturally significant region, though she did not believe that the construction of a small DOCARE building would directly impact Kūkaniloko itself.

DeVincent identified several other culturally meaningful features near the project area. She recalled stories from her father’s generation of swimming in Lake Wilson and described it as a site of shared community memory, even though it has become polluted in recent decades. She also mentioned remnants of plantation-era railroad tracks in the vicinity, where local children once jumped into the lake, suggesting potential historic resources linked to Wahiawā’s industrial and plantation past. In addition, she noted that the area was once covered in abundant woodrose vines (*Ipomoea tuberosa*), a plant traditionally used by Native Hawaiians for lei and haku making. These recollections reflect an intimate relationship between residents and the local landscape—one that ties the community’s identity to both natural and cultural resources.

While she was not aware of any specific customary practices currently being conducted in the immediate project area, DeVincent acknowledged the presence of mele, oli, and mo’olelo that reference Wahiawā and contribute to its cultural identity. She emphasized that Wahiawā remains a distinct “mom and pop” town characterized by long-standing family lineages and close-knit community relationships. Many residents, including her own family, continue to live on ancestral lands, maintaining generational continuity that she considers one of Wahiawā’s most important cultural resources. In her view, the community itself—its people, relationships, and shared memories—embodies a living cultural landscape that warrants protection alongside archaeological or historic sites. She expressed concern that state development could threaten this delicate sense of place if not designed in harmony with the town’s rural character. Specifically, she cautioned that new facilities should not be large or visually

intrusive and should instead blend with the existing environment to preserve Wahiawā's aesthetic and cultural integrity.

DeVincent also raised questions about community benefit and participation, asking whether the proposed DOCARE facility would create job opportunities for local residents or simply serve as an office for existing state employees. Her comments underscored a broader theme in cultural impact assessments: that cultural stewardship and social equity are deeply intertwined. She recommended that, following development of the project's master plan, the state return to consult with key community leaders, including the Hawaiian Civic Club of Wahiawā and local kūpuna, to ensure that the project reflects community values and priorities. She expressed willingness to participate in future consultations and suggested that other long-term residents and elders—especially those with generational knowledge of Wahiawā—be engaged in the planning process.

In closing, DeVincent reiterated her appreciation for being included in the consultation and stressed that culturally sensitive development in Wahiawā must respect both the tangible and intangible heritage of the place. While she does not anticipate that the DOCARE substation would directly affect Kūkaniloko or other known cultural sites, she views community continuity, landscape character, and design sensitivity as critical components of cultural preservation. Her testimony reflects the importance of acknowledging Wahiawā as a living cultural landscape—where history, genealogy, and daily life remain deeply intertwined—and calls for ongoing consultation, thoughtful design, and respect for the community's enduring cultural identity.

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## **5.0 Impact Assessment**

Impact assessments for CIAs are conducted to identify, evaluate, and mitigate potential effects on cultural resources, practices, and traditions. These assessments ensure that projects respect and protect sites, landscapes, and practices of cultural significance, particularly for indigenous and local communities. By documenting traditional knowledge, historical context, and community concerns, CIAs help inform decision-making, ensuring compliance with laws such as HRS Chapter 343 and, potentially, HRS 6E in Hawai'i. The following looks at the potential categories of resources that may be impacted by the project and assesses the potential impact on each of these categories.

### **5.1 Impacts to Flora**

There is a single non-native tree on the property. No impacts to flora are anticipated.

### **5.2 Impacts to Fauna**

There are no wildlife species on the property and no species with cultural significance use the area. No impacts to fauna are anticipated.

### **5.3 Impacts to Historic Sites**

Honua Consulting, LLC conducted an archaeological LRFI of the project area, which assessed previous archaeology and included a 100% pedestrian survey of the project area. Based on this assessment, it is unlikely the project will impact historic sites.

### **5.4 Impacts on Intangible Cultural Resources**

Intangible cultural resources refer to those resources without physical form. The project area has been largely disturbed due to previous industrial use. Therefore, the project activities are unlikely to impact intangible cultural resources in the area. Previous interviews identified that the area faces ongoing impacts from houseless persons who frequent the area. The project will likely improve that situation.

### **5.5 Impacts to Cultural Practices**

This project is unlikely to have any potential impact to the traditional and customary practices that take place in the surrounding region. If historic resources or iwi (bones) are inadvertently discovered during project work, area cultural descendants should be engaged to care for the iwi.

### **5.6 Cumulative and Indirect Impacts**

Adverse cumulative and indirect impacts to cultural resources are often overlooked in CIAs, as they are difficult to assess. Cumulative impacts are cultural impacts that result from the incremental effects of an activity when combined with past, present, and reasonably foreseeable future actions and activities. Indirect impacts are impacts on cultural resources which are not a direct result of the project, but a secondary or tertiary result of the project. It is currently not anticipated that the project will have any cumulative or indirect impacts.

## **5.7 Mitigation and Best Management Practices**

Due to the negligible impacts on cultural resources, there are no mitigation measures recommended beyond standard construction BMPs at this time. Standard archaeology best practices should be implemented. Compliance with HRS Chapter 6E will require consultation with SHPD. Any additional identification measures, if deemed appropriate, should be implemented based on consultation with SHPD. In the event of the inadvertent discovery of cultural resources, cultural practitioners should be consulted as appropriate to ensure the proper treatment of any cultural resources and the allowance of appropriate cultural practices. The relationship and consultation with the Hawaiian Civic Club of Wahiawā are urged to be maintained and continued throughout the project.

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## 6.0 Ka Pa‘akai Analysis

It has long been the law of the land that the State of Hawai‘i and the Counties have an “obligation to protect the reasonable exercise of customary and traditionally exercised rights of Hawaiians to the extent feasible” *Public Access Shoreline Hawai‘i v. Hawai‘i County Planning Commission (“PASH”)* 79 Hawai‘i 425, 450 n. 43, 903 P.2d 1246, 1271 n. 43 (1995). In the *Ka Pa‘akai* decision of 2000, the Court established a framework “to help ensure the enforcement of traditional and customary Native Hawaiian rights while reasonably accommodating competition private development interests.” 94 Hawai‘i 31, 35, 7 P.3d 1068, 1972 (2000). This analysis is used here to fulfill the goal of this CIA (**Section 1**). It is also used as guidance to state agencies in fulfilling their obligations under *Ka Pa‘akai*.

It is also imperative to emphasize that the State may not delegate its obligations under the *Ka Pa‘akai* decision to another party. Therefore, the state remains responsible for making its own findings on these issues.

To complete a thorough CIA that complies with statutory and case law, it is necessary to fully consider the information available from and provided by Native Hawaiian cultural practitioners and cultural descendants from the project area. From thorough research, data was extrapolated that provides a comprehensive look at the cultural resources in this ‘āina. Through this research, the factors from *State v Hanapi* are met. These factors are: “to establish that his or her conduct is constitutionally protected as a native Hawaiian right, he or she must show, at minimum, the following three factors. First, he or she must qualify as a “native Hawaiian” within the guidelines set out in PASH . . . [as] “those persons who are ‘descendants of native Hawaiians who inhabited the islands prior to 1778,’ ... regardless of their blood quantum.” Second, once a defendant qualifies as a native Hawaiian, he or she must then establish that his or her claimed right is constitutionally protected as a customary or traditional native Hawaiian practice.... Finally, a defendant claiming his or her conduct is constitutionally protected must also prove that the exercise of the right occurred on undeveloped or “less than fully developed property.” 89 Hawai‘i 177, 185-86, 970 P.2d. 485, 493-94 (1998).

The *Ka Pa‘akai* analysis is essentially a legal analysis, as the applicable tests are legal standards. Therefore, a strong analysis is conducted by someone with sufficient legal training. Additionally, at the core of a thoughtful *Ka Pa‘akai* analysis is a comprehensive understanding of traditional and customary practices. In breaking down the Court’s tests, it is important to the different elements that contribute to each test.

The first test - “The identification of valued cultural, historical, or natural resources in the project area, including the extent to which traditional and customary Native Hawaiian rights are exercised in the project area” –consists of two separate elements. First, the simple

identification and existence of valued cultural, historical, or natural resources. These resources are tangible. They can include sacred places, culturally valuable plants, or a religious or historic site. This survey sought to exhaustively identify the great multitude of resources that may exist in the project or adjacent areas.

**As to this test, this survey shows potential resources within the project area. Archaeological survey work has been conducted, and any impacts to historic sites and properties will be formally assessed through the HRS 6E-8 process, which is required for this project.**

The second element of this first test is access. Access requires two things to occur. One is the existence of a resource. Whether a plant, an animal, a place, or site, the resource must exist in order for a practitioner to access it. The second thing is physical access. This includes, but is not limited to, the ability to physically access a plant, animal, site, or location associated with a particular practice. This can also include the traditional and customary route or path taken to access the resource, as well as the cultural protocols that existed in accessing a resource. These are often temporal, in that access protocols can be at a certain time of day or year. Makahiki would be a good example of a traditional custom that has specific cultural protocols associated with access. In the case of Makahiki, the custom takes place at a certain time of year.

Therefore, the first test under *Ka Pa‘akai* should include not only a listing of resources, but the identification of ways in which those resources are accessed and utilized in association with traditional and customary practices.

**As noted in the report and in the ethnographic section, access to the area has been limited by the presence of houseless people, who discourage practitioners from accessing the area due to safety issues.**

Therefore, the second test – “The extent to which those resources—including traditional and customary Native Hawaiian rights—will be affected or impaired by the proposed action” – also looks at two separate elements. The first, does the proposed action and its alternatives have an adverse impact on the existence of resources? This would include the alteration, destruction, modification, or harm of sites, including biological resources, sacred places, burial sites, etc. It also includes a loss of species. Any adverse impact or harm to resources is alone an affect or impairment caused by the proposed action.

Under this element, adverse impacts to historic sites or culturally utilized plants would all be identified adverse impacts. Under this same element, any indirect or cumulative effects would create an adverse impact under *Ka Pa‘akai* if those actions harmed resources.

**It is not anticipated that these impacts would occur on this project. Nonetheless, the project should make every effort to increase the number of native and canoe plants on the property, if feasible.**

In addition, any action that impacts traditional and customary access to resources, even if there is no direct adverse impact on the resource itself, would result in an effect or impairment resulting from the proposed action. Therefore, the limitations on access that could result from the development or use of the project area could create an adverse impact under *Ka Pa‘akai*.

**It is not anticipated any impacts on cultural access would result from this project. Yet, it should be noted that failure to manage the houseless in the area discourages use and potentially impacts resources that may be useful to practitioners.**

The third part of the *Ka Pa‘akai* framework aims to identify “[t]he feasible action, if any, to be taken to reasonably protect Native Hawaiian rights if they are found to exist.” Determining whether or not action has been suitably “feasible” is a matter for the State. These feasible actions could include continued access to the project as needed to conduct cultural practices and potentially taking actions to improve safety in the area, allowing for safe access for the community and practitioners.

**Implementing BMPs during project construction can avoid potential adverse effects, so the third part of the *Ka Pa‘akai* framework becomes moot.**

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## 7.0 Conclusion and Public Trust Analysis

In Hawaiian culture, natural and cultural resources are largely viewed as being one and the same. Without the resources provided by nature, cultural resources could not and would not be procured. From a Hawaiian perspective, all natural and cultural resources are interrelated and culturally significant. This kinship between Hawaiians and their land extends back across many generations, and it was the depth and intimacy of this relationship that enabled Hawaiians to thrive sustainably in the islands for hundreds of years prior to the arrival of Europeans. Therefore, Hawaiians are entitled to the pain and anguish they feel at the loss of their lands and resources.

This loss lies at the heart of Hawaiian struggles for traditional or customary access. Therefore, the state's obligation to ensure that these rights are protected is more than a legal obligation, as such rights are a necessity of indigenous human life. Recognition and respect for these rights also enable a more mutually respectful and beneficial relationship between the military and Hawaiians.

Act 50 was passed by the state recognizing:

... the past failure to require native Hawaiian cultural impact assessments has resulted in the loss and destruction of many important cultural resources and has interfered with the exercise of native Hawaiian culture. The legislature further finds that due consideration of the effects of human activities on native Hawaiian culture and the exercise thereof is necessary to ensure the continued existence, development, and exercise of native Hawaiian culture. (Act 50, SLH 2000)

The CIA is a creation of state law and a requirement under HRS Chapter 343. The legislative intent mentioned above is crucial for properly considering the effects the proposed action has and will have on cultural practices, because it emphasizes the importance of ensuring “the continued existence, development, and exercise” of culture. This acknowledges that culture is not fixed; it is dynamic and evolves over time. Act 50 specifically requires consideration of how a proposed action might impact the ongoing “development” of native Hawaiian culture. This means it is not enough to simply review historical practices. Considering effects on the ongoing development of culture means the state, particularly the responsible state agency acting as the authority under Chapter 343 EIS, of which this CIA is a part, must think about how an action could influence a culture’s ability to grow, innovate, and evolve.

The development of a DOCARE field office will enable more enforcement of environmental regulations in the area. This will result in a net benefit to conservation and protection of natural and cultural resources in the region.

The Wahiawā region is rich with both pre-contact and post-contact histories. While the project is unlikely to have any adverse impact on pre-contact historic properties or Hawaiian cultural practices, the project has an opportunity to enrich the area through interpretive botanical, cultural, and historical programs. This study looked comprehensively at all historical records for the region and did not identify any current cultural practices or customs that the project activity would potentially impact. The oral histories from the area supported this conclusion. Nonetheless, valuable cultural information was provided by area residents and practitioners that can be respectfully utilized to enrich the interpretive, landscaping, and educational elements of the project design.

The State and its agencies have an affirmative obligation to preserve and protect the reasonable exercise of Hawaiians' customarily and traditionally exercised rights to the extent feasible. Part of how this is implemented is through the completion of thorough and appropriately focused CIAs, which can effectively research and identify these practices to protect them appropriately. *Ka Pa'akai* calls for a good faith effort on the part of the state to identify cultural resources, including traditional and customary practices, in the area. This CIA conducted an exhaustive and good-faith effort to identify such resources and practices. While there are undoubtedly such resources and practices within the more considerable geographic extent of the kalana of Wahiawā, there are none in the immediate project area or within the area that the proposed project will impact. Therefore, per Act 50 and under the *Ka Pa'akai* analysis, potential effects on cultural resources or practices are negligible due to the absence of ongoing traditional and customary practices in the immediate project area.

The proposed Division of Conservation and Resources Enforcement (DOCARE) Wahiawā Substation represents a modest but significant state action that must be examined through the lens of Hawai'i's constitutional public trust doctrine. Though the project parcel itself is small, already developed, and unlikely to contain intact pre-contact cultural features, the placement of a state facility within the broader cultural landscape of Wahiawā requires careful attention to the fiduciary duties that the State owes to the people of Hawai'i. The public trust doctrine, embedded in Articles XI and XII of the Hawai'i Constitution, obligates the State and its agencies to conserve, protect, and maintain natural resources for the benefit of present and future generations. It also charges the State with holding ceded crown and government lands in trust, to be managed for Native Hawaiians and other enumerated trust purposes. This doctrine has been shaped by decades of case law, beginning with *Waiahole I* and *Ka Pa'akai*, which articulated duties of "the highest responsibility and care" and established analytical frameworks to ensure protection of Native Hawaiian customary practices. Most recently, the Intermediate Court of Appeals in *Frankel v. BLNR* (2025) clarified and reinforced these obligations, emphasizing that public trust principles apply even to urban parcels, and that state agencies must begin their analysis with a presumption in favor of public use, must consider practicable alternatives, and must articulate their reasoning with clarity sufficient for

public review. The application of these holdings to the Wahiawā DOCARE project illuminates both the limits and the opportunities presented by this proposal.

The Wahiawā parcel (TMK: (1) 7-4-001:025) is located in the kalana of Wahiawā, a region of cultural and historical significance that includes the wahi pana of Kūkaniloko, one of the most sacred birthing sites in Hawai'i. While the parcel itself is fully paved and developed with two existing one-story commercial buildings, its geographic context cannot be separated from a larger landscape woven with streams, gulches, place names, and oral histories that reflect long-standing Native Hawaiian relationships with the land. The CIA prepared for this project documents in detail the history of the area, reviewing Hawaiian language newspapers, land commission awards, maps, and ethnographic interviews. This research concluded that no traditional or customary practices are currently exercised on the parcel, and that the project is unlikely to have any adverse impact on historic properties or cultural resources. Oral histories supported this finding, and the report further noted that the proposed substation could yield secondary benefits to cultural practices by enhancing enforcement of conservation laws in the surrounding area. In this respect, the CIA satisfies the preliminary step demanded by *Frankel*: identifying cultural resources and determining whether public trust resources will be impaired. Because none were identified on the parcel itself, the project appears to pose no immediate threat. Yet, consistent with *Frankel*, the analysis cannot end there.

The decision in *Frankel v. BLNR* arose from the Board of Land and Natural Resources' approval of a resort's encroachment on a ceded beach parcel in Kahala. The court held that the Board failed in its fiduciary duties by not beginning with a presumption in favor of public use, by neglecting to consider alternatives to the resort's exclusive occupancy, and by failing to articulate its reasoning in a manner that made clear to the public that trust principles had been applied. The court was explicit: when agencies make decisions regarding trust lands or resources, they must demonstrate in the record that they started from the baseline that public access and use are paramount, and any compromise of that interest must be justified by a clear, reasoned, and transparent analysis. The significance of this holding for the Wahiawā project is that, even where no direct customary practices are found on the parcel, the State must still document that it considered the presumption of public use and weighed alternatives before proceeding.

The CIA already provides a strong foundation for meeting this obligation. It explicitly states that no practices will be impaired, thereby affirming that the presumption in favor of public use has not been compromised. Nevertheless, the record should also show that alternative courses of action were evaluated. Alternatives in this context might include continuing DOCARE operations from the Pearl City station, siting a substation elsewhere in Wahiawā, or utilizing shared facilities with other agencies. Each alternative has limitations: continuing operations from Pearl City leaves Wahiawā and the North Shore underserved; selecting a different site could disturb undeveloped or culturally sensitive lands; and sharing facilities

might compromise enforcement capacity. Against these, the chosen parcel offers the advantage of being already urbanized, previously commercial, and thus carrying minimal risk of cultural disruption. By documenting that such alternatives were considered and by clearly stating why the selected parcel is the least harmful option, the agency would meet the second requirement articulated in *Frankel*.

The third and most critical requirement is clarity of reasoning. In *Frankel*, the court criticized BLNR for issuing permits with only vague justification, thereby depriving the public of any assurance that trust principles were applied. By contrast, the Wahiawā CIA is notable for its transparency: it lays out its methodology, documents its sources, summarizes consultations, and states its conclusions directly. What remains is for decision makers at DLNR and DOCARE to adopt these findings explicitly in their final approval documents. They should state clearly that they began with a presumption favoring public use, that they considered practicable alternatives, and that they found no impairment of trust resources. In doing so, they would not only comply with *Frankel* but also reinforce public confidence in the State's stewardship.

The fiduciary nature of the State's obligations demands this careful approach. As trustee, the State owes duties of loyalty, care, and transparency to the beneficiaries of the trust—the people of Hawai'i, with a particular emphasis on Native Hawaiians. The duty of loyalty requires that the State manage lands and resources in the beneficiaries' best interest, not for narrow or private gain. In this case, establishing a DOCARE substation serves the broader public by enhancing enforcement of conservation laws. The duty of care obligates the State to gather and consider the best information available. The CIA's extensive use of Hawaiian language sources, oral histories, and ethnographic consultation demonstrates that this duty has been met. Finally, the duty of transparency requires that decisions be articulated clearly, with reasoning accessible to the public. This is the area where the *Frankel* decision sounded the loudest warning, and it is the area where the Wahiawā project must take particular care. Only by publishing explicit findings can the State show that it has lived up to its fiduciary role.

It is also important to recognize that the public trust doctrine encompasses not only tangible resources such as land and water but also intangible cultural heritage. The CIA rightly emphasizes that Hawaiian culture views natural and cultural resources as inextricable. Knowledge, access, and resources together constitute the foundation of customary practice. While the parcel itself is unlikely to provide any of these directly, the broader landscape of Wahiawā, with its wahi pana and streams, is suffused with cultural meaning. By enhancing DOCARE's enforcement capacity in Central O'ahu, the project may indirectly protect these broader resources by deterring illegal dumping, poaching, or development. In this sense, the project does not merely avoid harming the trust but may actively fulfill it. Such an outcome is precisely what the doctrine demands: not a minimalist avoidance of harm, but a proactive stewardship that ensures resources are preserved for future generations.

## Conclusion

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Taken together, the Wahiawā CIA and the guidance of *Frankel v. BLNR* show how the public trust doctrine can be faithfully applied even in urbanized contexts. The parcel is not pristine; it does not host an ongoing customary practice. Yet the doctrine still applies, and the State still must meet its fiduciary obligations. By documenting that the presumption of public use was respected, by considering alternatives, and by articulating findings with clarity, the State can demonstrate compliance. More than that, by situating the substation as an instrument for fulfilling the trust through enhanced enforcement, the State can show that it is not only avoiding harm but actively advancing the purposes of the trust.

In conclusion, the proposed Wahiawā DOCARE Substation is a project that embodies the complexities of Hawai'i's public trust doctrine in the twenty-first century. It illustrates how trust principles extend beyond remote valleys and undeveloped beaches into towns and urban parcels, requiring vigilance even where risks appear minimal. It demonstrates that the fiduciary duties of loyalty, care, and transparency apply to all state actions affecting trust lands, regardless of their scale. It also provides an opportunity for the State to model best practices by integrating the insights from *Frankel v. BLNR* into its administrative record. If the State explicitly adopts the CIA's findings, acknowledges its fiduciary obligations, and proceeds with clarity, then the Wahiawā project can move forward not only in compliance with the law but also as a testament to the State's commitment to the public trust. In this way, a small urban parcel can become a meaningful site for reaffirming the covenant between the people of Hawai'i and their government: that natural and cultural resources are to be safeguarded, respected, and passed on, undiminished, to future generations.

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2013 USGS Topographic Map

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## Appendix I: Glossary of Hawaiian Terms

The following list of terms were used throughout this report. All definitions were compiled using Pukui and Elbert's *Hawaiian Dictionary* (1986).

Ahupua'a	Land division usually extending from the uplands to the sea, so called because the boundary was marked by a heap (ahu) of stones surmounted by an image of a pig (pua'a), or because a pig or other tribute was laid on the altar as tax to the chief.
'Āina	Land, earth. <i>Lit.</i> That which feeds.
'Āina Aupuni	Government lands.
'Āina Konohiki	Konohiki lands.
'Āina Lei Ali'i	Crown lands.
Akua	1. God, goddess, spirit, ghost. 2. Divine, supernatural, godly.
Ali'i	1. Chief, chiefess, ruler, monarch. 2. Royal, regal. 3. To act as chief, reign. Ali'i kāne: male chief. Ali'i wahine: chiefess. Ali'i nui: high chief.
Aloha 'Āina	Love of the land or of one's country, patriotism; a very old concept, to judge from the many sayings (perhaps thousands) illustrating deep love of the land.
'Aumakua	Family or personal gods, deified ancestors who might assume the shape of sharks, owls, hawks, dogs, plants, etc. A symbiotic relationship existed; mortals did not harm or eat them, and the 'aumakua warned or reprimanded mortals in dreams, visions, and calls.
'Aumākua	Plural of 'aumakua.
Ha'i Mo'olelo	Storytelling performances.
Hālau	1. Long house, as for canoes or hula instruction; meeting house. 2. Large, numerous; much.
Hale	House, building, institution, lodge, station, hall; to have a house.
Haole	White person, American, Englishman, Caucasian; American, English; formerly, any foreigner; foreign, introduced, of foreign origin, as plants, pigs, chickens.
Heiau	Pre-Christian place of worship, shrine.
Huaka'i ali'i	Royal entourage.
Hula	A Polynesian dance form accompanied by chant or song. Hula 'auana: modern dance. Hula kahiko: ancient hula. Hula 'āla'apapa: type of ancient dramatic hula.
'Ili	Land section, next in importance to ahupua'a and usually a subdivision of an ahupua'a.
'Ili kūpono	A nearly independent 'ili land division within an ahupua'a, paying tribute to the ruling chief and not to the chief of the ahupua'a. Transfer of the

	ahupua‘a from one chief to another did not include the ‘ili kūpono located within its boundaries. Sometimes shorted to ‘ili kū.
Inoa ‘āina	Place names.
Iwi	Bone; carcass (as of a chicken); core (as of a speech). The bones of the dead, considered the most cherished possession, were hidden, and hence there are many figurative expressions with iwi meaning life, old age.
Kahu	Honored attendant, guardian, nurse, keeper of ‘unihipili bones, regent, keeper, administrator, warden, caretaker, master, mistress; pastor, minister, reverend, or preacher of a church
Kalana	Division of land smaller than a moku or district; county.
Kama‘āina	Native-born, one born in a place, host; native plant; acquainted, familiar, <i>Lit.</i> , land child.
Kānaka ‘Ōiwi	Term for the indigenous people of Hawai‘i. Native Hawaiians.
Kāne	Male, husband, male sweetheart, man; brother-in-law of a woman.
Kanikau	1. Dirge, lamentation, chant of mourning, lament. 2. To chant, wail, mourn.
Kaona	Hidden meaning, as in Hawaiian poetry; concealed reference, as to a person, thing, or place; words with double meanings that might bring good or bad fortune.
Kapa	Tapa, as made from wauke or māmaki bark; formerly clothes of any kind or bedclothes; quilt.
Kapu	1. Taboo, prohibition. 2. Special privilege or exemption from ordinary taboo. 3. Sacredness, prohibited, forbidden, sacred, holy, consecrated. 4. No trespassing, keep out.
Kī	Ti, a woody plant ( <i>Cordyline fruticose</i> ) in the lily family, native to tropical Asia and Australia. It consists of a branched or unbranched, slender, ringed stem, ending in a cluster of narrow-oblong, leaves 30 to 60 cm long, from among which at times rises a large panicle of small, light-colored flowers. The leaves were put to many uses by the Hawaiians, as for house thatch, food wrappers, hula skirts, sandals; the thick, sweet roots were baked for food or distilled for brandy.
Kilo hōkū	Astronomy.
Kula	Plain, field, open country, pasture.
Kuleana	Right, privilege, concern, responsibility, title, business, property, estate, portion, jurisdiction, authority, liability, interest, claim, ownership, tenure, affair, province.
Kumu	Teacher, tutor, manual, primer, model, pattern.
Kumu Hula	Hula teacher.
Kupua	Demigod or culture hero, especially a supernatural being possessing several forms.

## Appendix I: Glossary of Hawaiian Terms

Kupuna	Grandparent, ancestor, relative or close friend of the grandparent's generation, grandaunt, granduncle.
Kūpuna	Plural of kupuna.
Loko i'a	Traditional Hawaiian fishpond.
Māhele 'Āina	Land Division.
Maka'āinana	Commoner, populace, people in general.
Makahiki	Ancient festival beginning about the middle of October and lasting about four months, with sports and religious festivities and taboo on war
Makai	On the seaside, toward the sea, in the direction of the sea.
Mālama	To take care of, tend, attend, care for, preserve, protect, beware, save, maintain.
Mauka	Inland, upland, towards the mountain.
Mele	1. Song, anthem, or chant of any kind. 2. Poem, poetry. 3. To sing, chant.
Mele inoa	Name chant.
Menehune	Legendary race of small people who worked at night, building fish ponds, roads, temples; if the work was not finished in one night, it remained unfinished.
Mō'ī	King, sovereign, monarch, majesty, ruler, queen.
Moku	1. District, island, islet, section, forest, grove, clump, fragment. 2. To be cut, severed, amputated, broken in two.
Mo'o	Lizard, reptile of any kind, dragon, serpent.
Mo'o 'āina	Strip or fragment of land smaller than an 'ili.
Mo'olelo	Story, tale, myth, history, tradition, literature, legend, journal, log, yard, fable, essay, chronicle, record, article.
Mo'okū'auhau	Genealogy.
Mo'owahine	Female lizard deity.
'Ohana	Family, relative, kin group.
'Ōlelo no'eau	Proverb, wise saying, traditional saying.
Oli	Chant that was not danced to, especially with prolonged phrases chanted in one breath, often with a trill at the end of each phrase; to chant thus.
Pae 'āina	Group of islands, archipelago.
Pua	Flower, blossom, tassel and stem of sugar cane; to bloom, blossom.
Pueo	Hawaiian short-eared owl ( <i>Asio flammeus sandwichensis</i> ), regarded often as a benevolent 'aumakua.
Wahi pana	A legendary place; a place made special celebrated in stories associated with it. Often sacred.
Wahine	Woman, lady, wife; sister-in-law, female cousin-in-law of a man, female.
Wai	Water, liquid or liquor of any kind other than sea water.

Appendix I

# **Draft EA Comment Letters**



## Kira Ramos

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**From:** Seto, Joanna <joanna.seto@doh.hawaii.gov>  
**Sent:** Monday, December 22, 2025 4:07 PM  
**To:** 224085-01 DOCARE Wahiawa Substation  
**Cc:** DOH.EMD  
**Subject:** DEA DLNR DOCARE Wahiawa Substation

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

You don't often get email from joanna.seto@doh.hawaii.gov. [Learn why this is important](#)

Aloha Ms. Camuso,

For Standard Comments and Records Requests, please see the [EPO Land Use Planning Review](#) webpage at <https://health.hawaii.gov/epo/landuse/> and contact the appropriate Environmental Health Administration branches and offices directly.

A comprehensive contact list is available at [https://health.hawaii.gov/epo/files/2025/09/DOHEHALandUseContactList\\_20250917.pdf](https://health.hawaii.gov/epo/files/2025/09/DOHEHALandUseContactList_20250917.pdf).

Effective 10/03/2025

Mahalo!  
Joanna

**Joanna L. Seto, P.E.**  
Administrator | Environmental Management Division  
Hawai'i State Department of Health | Ka 'Oihana Olakino  
Hale Ola | 2827 Waimano Home Road, Room 234 | Pearl City, HI 96782-1487  
Office: (808) 586-4305 | Mobile: (808) 292-8408

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## Kira Ramos

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**From:** Kitahara, Lisa <lisa.kitahara@doh.hawaii.gov>  
**Sent:** Wednesday, December 10, 2025 3:42 PM  
**To:** 224085-01 DOCARE Wahiawa Substation  
**Subject:** CAB Comments: Wahiawa Substation Project Draft EA AFNSI TMK (1st.) 7-4-001:025, Wahiawa, O'ahu, Hawai'i

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

You don't often get email from lisa.kitahara@doh.hawaii.gov. [Learn why this is important](#)

Dear Tracy Camuso,  
G70,

Thank you for the opportunity to review the Division of Conservation and Resources Enforcement Wahiawā Substation Project, Draft environmental assessment (DEA-AFNSI) in the December 08, 2025 edition of The Environmental Notice. Please visit the Clean Air Branch (CAB) website to download and reference our Standard Comments for Land Use Reviews. The link is provided below.

<https://health.hawaii.gov/cab/clean-air-branch/standard-comments-for-land-use-reviews/>

Mahalo,  
Lisa

**Standard Comments for Land Use Reviews**  
**Clean Air Branch**  
**Hawaii State Department of Health**  
**July 3, 2024**

**All project activities shall comply with Hawaii Administrative Rules (HAR), Chapter 11-59 and 11-60.1.**

**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.
- Permit application forms can be found here: <https://health.hawaii.gov/cab/permit-application-forms/>

**Has the potential to generate fugitive dust**

- You must reasonably control the generation of all airborne, visible fugitive dust. Note that construction activities that occur near existing residences, businesses, 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, it is strongly recommended that buffer zones be established, wherever possible, in order to alleviate potential dust concerns.
- You must 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:
  - 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;
  - Providing an adequate water source at the site prior to start-up of construction activities;
  - Landscaping and providing rapid covering of bare areas, including slopes, starting from the initial grading phase;
  - Minimizing airborne, visible fugitive dust from shoulders and access roads;
  - Providing reasonable dust control measures during weekends, after hours, and prior to daily start-up of construction activities; and
  - 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. Please also see fugitive dust fact sheet at: <https://health.hawaii.gov/cab/files/2024/02/Hawaii-Fugitive-Dust-Fact-Sheet-February-2024.pdf>.

**Includes construction, demolition, or renovation activities that involve potential asbestos and lead containing materials**

- Please contact the Indoor and Radiological Health Branch at (808) 586-4700 or visit: <https://health.hawaii.gov/irhb/>

**Increases the population and potential number of vehicles in an area**

- The creation of apartment buildings, complexes, and residential communities may increase the overall population in an area. Increasing the population in an area may inadvertently lead to more air pollution via vehicle exhaust. Vehicle exhaust releases pollutants in the air that can negatively impact human health and air quality, including lung irritants, carcinogens, and greenhouse gases.
- Ensure that drivers keep vehicle idling times to three (3) minutes or less.
- Consider and incorporate support for alternative transportation options such as bike racks and/or electric vehicle charging stations where possible.

If you have any questions, please contact the Clean Air Branch at (808) 586-4200 or at [cab@doh.hawaii.gov](mailto:cab@doh.hawaii.gov).

## Kira Ramos

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**From:** DOH.CABPASS <DOH.CABPASS@doh.hawaii.gov>  
**Sent:** Wednesday, January 7, 2026 3:48 PM  
**To:** 224085-01 DOCARE Wahiawa Substation  
**Subject:** CAB Comments: DEA DLNR DOCARE Wahiawa Substation

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

You don't often get email from doh.cabpass@doh.hawaii.gov. [Learn why this is important](#)

Aloha Tracy Camuso, AICP,

CAB received the emailed subject letter: Notification for a Chapter 343, Hawai'i Revised Statutes Draft EA State of Hawai'i, Dept. of Land and Natural Resources, Engineering Division, Division of Conservation and Resources Enforcement Wahiawā, O'ahu Hawai'i, Tax Map Key (TMK): (1)7-4-001:025. Thank you for sending this notification and reminder for the opportunity to review the project. Please visit the Clean Air Branch (CAB) website to download and reference our Standard Comments for Land Use Reviews. The link is provided below.

<https://health.hawaii.gov/cab/clean-air-branch/standard-comments-for-land-use-reviews/>

Mahalo,

Katt

Katt Marshall | she/her  
Planner II | Clean Air Branch | Planning & Administrative Support Staff (PASS)  
Hawai'i State Department of Health | Ka 'Oihana Olakino  
2827 Waimano Home Road #130 | Pearl City, Hawaii 96782  
Office: (808) 586-4200

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## Kira Ramos

---

**From:** Miyashiro, Scott <scott.miyashiro@doh.hawaii.gov>  
**Sent:** Wednesday, December 24, 2025 8:28 AM  
**To:** 224085-01 DOCARE Wahiawa Substation  
**Cc:** DOH.CHIO  
**Subject:** DEA DLNR DOCARE Wahiawa Substation  
**Attachments:** 20251208.G70.DEA.DOCAREWahiawaSubstation.pdf

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

You don't often get email from scott.miyashiro@doh.hawaii.gov. [Learn why this is important](#)

Hi Tracy,

The Surface Water Protection Branch (<https://health.hawaii.gov/cwb/swpb/>) of the Department of Health's Environmental Management Division does not have any records pertaining to the subject request dated December 8, 2025.

### Scott Miyashiro

Program Specialist | Environmental Management Division/Surface Water Protection Branch

Hawai'i State Department of Health | Ka 'Oihana Olakino

Hale Ola | 2827 Waimano Home Road Rm 225 | Pearl City, HI 96782

**Office:** (808) 586-4309

[scott.miyashiro@doh.hawaii.gov](mailto:scott.miyashiro@doh.hawaii.gov) | <http://health.hawaii.gov/cwb/>

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December 8, 2025

111 S. King Street  
Suite 170  
Honolulu, HI 96813  
808.523.5866  
www.g70.design

Subject: Notification for a Chapter 343, Hawai'i Revised Statutes  
Draft Environmental Assessment  
State of Hawai'i, Dept. of Land and Natural Resources, Engineering Division  
Division of Conservation and Resources Enforcement Wahiawā Substation Project  
Wahiawā, O'ahu Hawai'i  
Tax Map Key (TMK): (1) 7-4-001:025

Aloha Participant:

On behalf of State of Hawai'i, Department of Land and Natural Resources (DLNR), Engineering Division, G70 is providing notification of the Draft Environmental Assessment (EA) for the Division of Conservation and Resources Enforcement (DOCARE) Wahiawā Substation Project, pursuant to Hawai'i Revised Statutes, Chapter 343, and Hawai'i Administrative Rules, Chapter 11-200.1.

The Draft EA may be reviewed and downloaded from The Environmental Review Program:  
[https://files.hawaii.gov/dbedt/erp/Doc\\_Library/2025-12-08-OA-DEA-DOCARE-Wahiawa-Substation-Project.pdf](https://files.hawaii.gov/dbedt/erp/Doc_Library/2025-12-08-OA-DEA-DOCARE-Wahiawa-Substation-Project.pdf)

The Draft EA has been prepared in support of the acquisition of the property for a DOCARE Substation. If you would like to provide comments on the Draft EA, please respond via U.S. mail or send an email to G70, as provided below, no later than January 7, 2026:

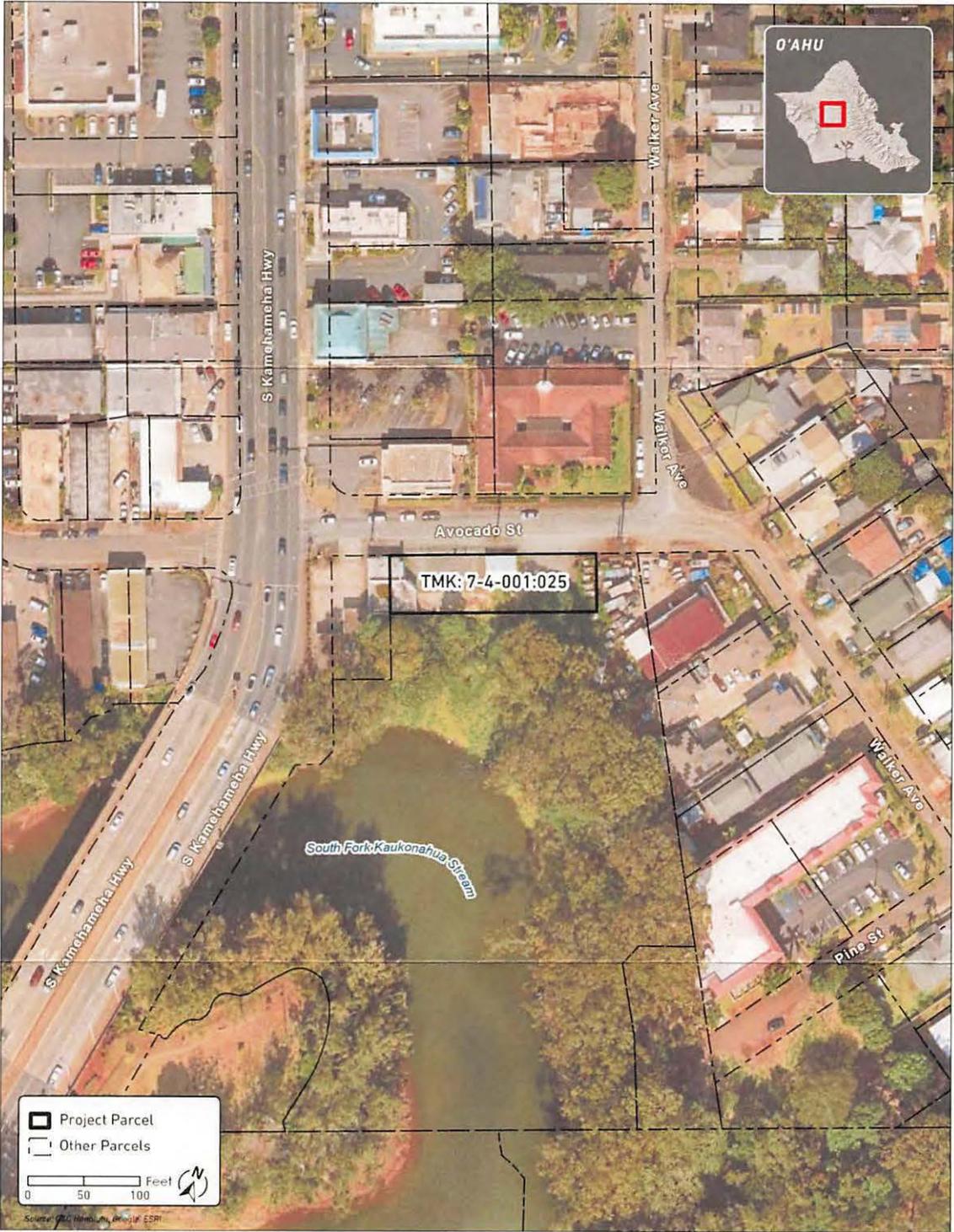
G70  
111 S. King Street, Suite 170  
Honolulu, HI 96813-4307  
Attn: Tracy Camuso, AICP  
Email: [docare\\_wahiawa\\_substation@g70.design](mailto:docare_wahiawa_substation@g70.design)

Thank you for your participation in the environmental review process.

Sincerely,

GROUP 70 INTERNATIONAL, INC., dba G70

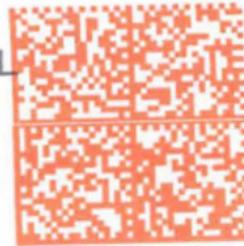
Tracy Camuso, AICP  
Principal



Project Location and TMK Map

HONOLULU HI 967

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**G70**

111 S. King Street, Suite 170, Honolulu, Hawaii 96813

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Department of Health  
Environmental Management Division  
2827 Waimano Home Road  
Hale Ola Building, Room 234  
Pearl City, HI 96782

96782-148759



## Kira Ramos

---

**From:** Thirugnanam, Jeyan <jeyan.thirugnanam@hawaii.gov>  
**Sent:** Monday, December 15, 2025 9:38 AM  
**To:** 224085-01 DOCARE Wahiawa Substation  
**Subject:** Division of Conservation and Resources Enforcement Wahiawā Substation Project

You don't often get email from jeyan.thirugnanam@hawaii.gov. [Learn why this is important](#)

Hi Ms. Camuso,

HDOT Highways has no comments.

Thanks,  
Jeyan Thirugnanam  
HDOT Highways Land Use Permits Review



**STATE OF HAWAII  
OFFICE OF PLANNING  
& SUSTAINABLE DEVELOPMENT**

JOSH GREEN, M.D.  
GOVERNOR

SYLVIA LUKE  
LT. GOVERNOR

MARY ALICE EVANS  
DIRECTOR

235 South Beretania Street, 6th Floor, Honolulu, Hawai'i 96813  
Mailing Address: P.O. Box 2359, Honolulu, Hawai'i 96804

Telephone: (808) 587-2846  
Fax: (808) 587-2824  
Web: <https://planning.hawaii.gov/>

Coastal Zone  
Management  
Program

DTS 202512111437NA  
Transmitted via email

Environmental Review  
Program

December 31, 2025

Land Use Commission

Tracy Camuso, AICP  
G70

Land Use Division

111 S. King Street, Suite 170  
Honolulu, Hawai'i 96813-4307

Special Plans Branch

State Transit-Oriented  
Development

Dear Ms. Camuso:

Statewide Geographic  
Information System

Subject: Draft Environmental Assessment (DEA) for the Division of  
Conservation and Resources Enforcement Wahiawā Substation  
Wahiawā, O'ahu; Tax Map Key: (1) 7-4-001:025

Statewide  
Sustainability Branch

The Office of Planning and Sustainable Development (OPSD) is in receipt of your DEA consultation request, received December 11, 2025, for the proposed acquisition of land and subsequent construction for a Division of Conservation and Resources Enforcement (DOCARE) substation.

According to the DEA, the parcel was previously used as a commercial auto-body shop business. Since the closure of this business, the site has been abandoned, and remnants of the former commercial business remain. The State is seeking to obtain ownership of the property. Once State ownership is obtained, a DOCARE substation will be built for officers patrolling the Wahiawā and North Shore area. The purpose of the project is to address the current abandonment and neglect of the project site and strengthen DOCARE enforcement in the area. The DEA states that the project is located in Flood Zone X, which represents areas outside of the 0.2% annual chance flood plain. The project site is located adjacent to the Wahiawā Reservoir.

The OPSD has reviewed the subject request and has the following comments to offer:

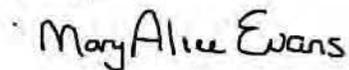
1) The OPSD agrees that the project is consistent with the State Land Use District Boundaries, the Hawai'i State Plan, the 2050 Sustainable Plan, and the Hawai'i Coastal Zone Management Plan. The project will have beneficial effects on the community and improve public safety.

Ms. Tracy Camuso  
December 31, 2025  
Page 2

- 2) The OPSD recommends that site-specific Best Management Practices shall be developed and implemented during demolition and construction to prevent any runoff, sediment, soil and debris from adversely impacting the surrounding area.
- 3) The OPSD has developed guidance documents on stormwater runoff strategies, which offer techniques to prevent land-based pollutants and sediment from potentially affecting water resources. The OPSD recommends that the subject EA consider the following stormwater assessment guidance to mitigate stormwater runoff impacts: [OPSD Low Impact Development Guidance](#).

If you respond to this comment letter, please include DTS 202512111437NA in the subject line. For any questions regarding this letter, please contact Rachel Beasley of our office at (808) 587-2888 or by email at [rachel.e.beasley@hawaii.gov](mailto:rachel.e.beasley@hawaii.gov).

Mahalo,



Mary Alice Evans  
Director

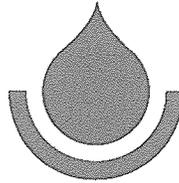
**BOARD OF WATER SUPPLY  
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December 24, 2025

Ms. Tracy Camuso, AICP  
G70  
111 South King Street, Suite 170  
Honolulu, Hawai'i 96813

Dear Ms. Camuso:

Subject: Your Letter Dated December 8, 2025, Requesting Comments on the Draft Environmental Assessment for the Proposed Department of Land and Natural Resources Division of Conservation and Resources Enforcement Substation on Avocado Street in Wahiawā – Tax Map Key: 7-4-001: 025

Thank you for your letter regarding the proposed substation.

The existing water system is adequate to accommodate the proposed substation. However, please be advised that this information is based upon current data, and therefore, the Board of Water Supply (BWS) reserves the right to change any position or information stated herein up until the final approval of the building permit application. The final decision on the availability of water will be confirmed when the building permit application is submitted for approval.

When water is made available, the applicant will be required to pay our Water System Facilities Charges for resource development, transmission and daily storage.

Water conservation measures are required for all proposed developments. These measures include utilization of on-site graywater reuse in accordance with Hawai'i State Department of Health guidelines, rain catchment for nonpotable uses, stormwater capture, and the use of Water Sense labeled ultra-low flow water fixtures and toilets. Landscape elements should incorporate green infrastructure design, drought tolerant plants, xeriscaping, rain catchment, efficient irrigation systems such as a drip system and moisture sensors, and other Water Sense labeled fixtures and devices.

Ms. Tracy Camuso  
December 24, 2025  
Page 2

Consistent with Act 170, 2016 (H.B. 1749), the developer of State-owned and/or managed projects are required to utilize reclaimed water for uses other than drinking and potable water demands of the proposed project. The developer should investigate the feasibility of using reclaimed water and submit a report of the investigation to the BWS for our review.

The proposed project is subject to BWS Cross-Connection Control and Backflow Prevention requirements prior to the issuance of the Building Permit Applications.

The construction drawings should be submitted for our approval, and the construction schedule should be coordinated to minimize impact to the water system.

The on-site fire protection requirements should be coordinated with the Fire Prevention Bureau of the Honolulu Fire Department.

If you have any questions, please contact Daniel Koge, Project Review Branch of our Water Resources Division, at (808) 748-5444.

Very truly yours,

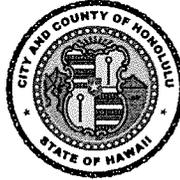


ERNEST Y. W. LAU, P.E.  
Manager and Chief Engineer

**DEPARTMENT OF PLANNING AND PERMITTING**  
**KA 'OIHANA HO'OLĀLĀ A ME NĀ PALAPALA 'AE**  
**CITY AND COUNTY OF HONOLULU**

650 SOUTH KING STREET, 7TH FLOOR • HONOLULU, HAWAII 96813  
PHONE: (808) 768-8000 • FAX: (808) 768-6041 • WEBSITE: honolulu.gov/dpp

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2<sup>ND</sup> DEPUTY DIRECTOR  
HOPE PO'O KUALUA

January 2, 2026

GEN-2025-389 (GT)

Ms. Tracy Camuso  
G70  
111 South King Street, Suite 170  
Honolulu, Hawai'i 96813

Dear Ms. Camuso:

**SUBJECT:** Draft Environmental Assessment (DEA)  
DOCARE Wahiawā Substation Project  
525 Avocado Street – Wahiawā  
Tax Map Key 7-4-001: 025

This is in response to your letter, received December 8, 2025, requesting comments on the DEA as required under Chapter 343, Hawai'i Revised Statutes (HRS), for building a Division of Conservation and Resources Enforcement substation for officers patrolling the Wahiawā and North Shore area at the above-referenced site. The subject site is a 9,288-square-foot lot located in the B-2 Community Business and R-5 Residential Districts. The following items should be addressed in the Final Environmental Assessment (FEA):

1. Land Use Ordinance (LUO): Based on a review of our records, the Project site consists of a 9,288-sq.-ft. lot located in the B-2 Community Business and R-5 Residential Districts. The Project must comply with the development standards applicable to the B-2 Community Business and R-5 Residential Districts, including bicycle parking requirements. Project compliance with these standards should be presented in the FEA, and will be confirmed during the review of future building permits.

The LUO is available on our website at:

<https://www4.honolulu.gov/docushare/dsweb/Get/Document-353043/2025%20CURRENT%20LUO%20Ord%2025-2.pdf>

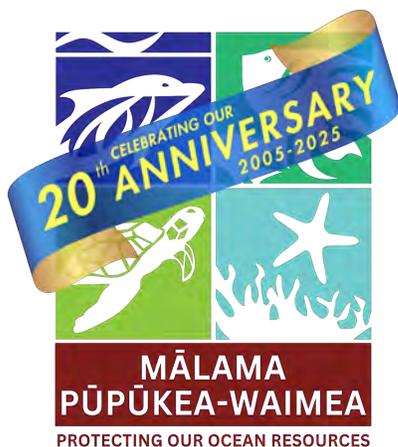
2. Violations: The FEA should discuss the disposition of the violations on the property.
3. Traffic Comments:
  - a. Access should be a minimum 20-foot paved all-weather surface and be able to accommodate two-way traffic.
  - b. All loading and trash pick-up areas should be designed such that vehicles enter and exit front first. All trash pickup-activities should be done on-site. Adequate on-site turn-around areas should be provided and ensured that the layout of parking spaces will not interfere with turning maneuvers for large vehicles.
  - c. Driveway gates should be recessed as far into the driveway as necessary to avoid any queuing onto public streets.
  - d. Construction plans for all work within or affecting the public streets should be submitted for review and approval. Traffic control plans during construction should also be submitted for review and approval, as required. Adequate vehicular sight distance shall be provided and maintained at all driveways to pedestrians and other vehicles. Driveway grades shall not exceed five percent (5%) for a minimum distance of 25-feet from the back of the designated pedestrian walkway.

Thank you for the opportunity to comment on this proposal. Should you have questions, please contact Gerald Toyomura, of our Urban Design Branch, at (808) 768-8056 or email at [gtoyomura@honolulu.gov](mailto:gtoyomura@honolulu.gov).

Very truly yours,



*FOR* Dawn Takeuchi Apuna  
Director



January 5, 2026

Brandon Kim  
DLNR Engineering Division  
1151 Punchbowl Street Room 221  
Honolulu, HI 96813

Via email to: [docare\\_wahiawa\\_substation@g70.design](mailto:docare_wahiawa_substation@g70.design)

Re: Comments on Draft Environmental Assessment (DEA), DLNR Division of Conservation and Resources Enforcement (DOCARE) Wahiawā Substation Project

Mālama Pūpūkea-Waimea  
Post Office Box 188  
Hale'iwa, HI 96712

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[info@pupukeawaimea.org](mailto:info@pupukeawaimea.org)

Mālama Pūpūkea-Waimea (MPW) is pleased to submit comments in support of the Draft Environmental Assessment (DEA) for the proposed Wahiawā Substation Project on Avocado Street.

As stated in the Draft Environmental Assessment (DEA), "the substation will be built for officers patrolling the Wahiawā and North Shore area. Currently, officers patrolling the Wahiawā and North Shore area report from the main station in Pearl City. To support enforcement, a smaller substation will be located in Wahiawā, providing officers with a nearby office space, a secure evidence storage room, and storage for larger equipment."

As a long-time Makai Watch partner of DOCARE on the North Shore, MPW is in full support of any and all improved facilities, funding, staffing, and programs that help DOCARE achieve its critical mission.

The DEA does a thorough job of disclosing the potential environmental and cultural impacts for this project. The information is clear and complete. Good job G70 and Engineering Div!

If the Avocado Street substation comes to fruition, it will be a significant benefit to DOCARE, Wahiawā, DOCARE's community partners, and the 'āina.

If it does not pan out, then MPW strongly supports DLNR finding an alternative substation location in Central O'ahu or on the North Shore.

The time, energy, and cost spent by DOCARE supervisors and field officers commuting daily to the North Shore from Pearl City, and the hassle, wear and tear re equipment/boats in transport, is inefficient and ultimately reduces the prime hours spent on enforcement.

The future North Shore First Responder Center to be built by the City for Ocean Safety and EMS across from Kapo'o (Sharks Cove) could provide some support space/services for DOCARE, and DLNR should engage soon with the City in the planning and design process to explore potential collaboration. Hale'iwa is another good central potential location for a DOCARE substation.

Please count on MPW to advocate for capacity building of DOCARE and its enforcement programs!

Mahalo for receiving our comments.

Denise Antolini, President, MPW



---

**Public input**

---

**From** Carlton Saito <storieswithheart@yahoo.com>

**Date** Mon 12/8/2025 5:26 PM

**To** 224085-01 DOCARE Wahiawa Substation <docare\_wahiawa\_substation@g70.design>

I am in full support of establishing a DOCARE substation on a parcel long occupied by two abandoned buildings on Avocado Street in Wahiawa.

The DOCARE substation is much needed, and this is an appropriate location.

I am a former resident of Wahiawa and often drove by that parcel, which was an eyesore.

Thank you,  
Carlton Saito