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**OFFICE OF ENVIRONMENTAL
QUALITY CONTROL**

June 10, 2015

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

Dear Ms. Wooley:

With this letter, the Hawaii Community Development Authority hereby transmits the Draft Environmental Assessment and anticipated Finding of No Significant Impact ("DEA-AFONSI") for the Kupu Green Job Training Center situated at Tax Map Keys: (1)2-1-058: 131 (portion) and (1)2-1-058: 127 (portion), in the Honolulu on the island of Oahu for publication in the next available edition of the Environmental Notice.

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

If there are any questions regarding this matter, please contact Mr. Deepak Neupane, P.E., AIA, Director of Planning and Development, at 594-0300.

Sincerely,


Anthony J. H. Ching
Executive Director

AJHC/DN/CS:ak

- Encs.: (1) Completed OEQC Publication Form
(2) Two copies of the DEA-AFONSI
(3) DEA-AFONSI in electronic format
(4) Summary description of action in electronic format

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

Project Name: Kupu Green Job Training Center Renovations

Island: O'ahu

District: Honolulu

TMK: Portions of (1) 2-10-58-131 and (1) 2-10-58-127

Permits: Development Permit; Special Management Area Permit; Storm Drain Connection Application (as applicable); Grading Permit; Building Permit; Sewer Connection Application

Approving Agency:

Anthony Ching, Executive Director

Hawai'i Community Development Authority, State of Hawai'i

547 Queen Street

Honolulu, HI 96813

Phone: (808) 594-0300

Fax: (808) 587-0299

Applicant:

John Leong, Chief Operating Officer

Kupu

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Honolulu, HI 96813

Phone: (808) 735-1221x1001

Fax: (808) 735-1223

Consultant:

Tom Schnell AICP, Principal

PBR HAWAII and Associates, Inc.

1001 Bishop Street, Suite 650

Honolulu, HI 96813

Phone: (808) 521-5631

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Status (check one only):

X DEA-AFNSI

Submit the approving agency notice of determination/transmittal on agency letterhead, a hard copy of DEA, a completed OEQC publication form, along with an electronic word processing summary and a PDF copy (you may send both summary and PDF to oeqchawaii@doh.hawaii.gov; a 30-day comment period ensues upon publication in the periodic bulletin.

FEA-FONSI

Submit the approving agency notice of determination/transmittal on agency letterhead, a hard copy of the FEA, an OEQC publication form, along with an electronic word processing summary and a PDF copy (send both summary and PDF to oeqchawaii@doh.hawaii.gov; no comment period ensues upon publication in the periodic bulletin.

FEA-EISPN

Submit the approving agency notice of determination/transmittal on agency letterhead, a hard copy of the FEA, an OEQC publication form, along with an electronic word processing summary and PDF copy (you may send both summary and PDF to oeqchawaii@doh.hawaii.gov; a 30-day consultation period ensues upon publication in the periodic bulletin.

Act 172-12 EISPN

Submit the approving agency notice of determination on agency letterhead, an OEQC publication form, and an electronic word processing summary (you may send the summary to oeqchawaii@doh.hawaii.gov. NO environmental assessment is required and a 30-day consultation period upon publication in the periodic bulletin.

DEIS

The applicant simultaneously transmits to both the OEQC and the approving agency, a hard copy of the DEIS, a completed OEQC publication form, a distribution list, along with an electronic word processing summary and PDF copy of the DEIS (you may send both the summary and PDF to oeqc@doh.hawaii.gov); a 45-day comment period ensues upon publication in the periodic bulletin.

- __FEIS
The applicant simultaneously transmits to both the OEQC and the approving agency, a hard copy of the FEIS, a completed OEQC publication form, a distribution list, along with an electronic word processing summary and PDF copy of the FEIS (you may send both the summary and PDF to oeqc@doh.hawaii.gov); no comment period ensues upon publication in the periodic bulletin.
- __ Section 11-200-23
Determination
The approving agency simultaneously transmits its determination of acceptance or nonacceptance (pursuant to Section 11-200-23, HAR) of the FEIS to both OEQC and the applicant. No comment period ensues upon publication in the periodic bulletin.
- __ Statutory hammer
Acceptance
The approving agency simultaneously transmits its notice to both the applicant and the OEQC that it failed to timely make a determination on the acceptance or nonacceptance of the applicant's FEIS under Section 343-5(c), HRS, and that the applicant's FEIS is deemed accepted as a matter of law.
- __ Section 11-200-27
Determination
The approving agency simultaneously transmits its notice to both the applicant and the OEQC that it has reviewed (pursuant to Section 11-200-27, HAR) the previously accepted FEIS and determines that a supplemental EIS is not required. No EA is required and no comment period ensues upon publication in the periodic bulletin.
- __Withdrawal (explain)

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

Kupu, a nonprofit organization which provides training and leadership opportunities to Hawai'i's youth, seeks a long-term lease from the Hawaii Community Development Authority for the Net Shed Building and immediately adjacent land at Kewalo Basin. The lease will enable Kupu to move forward with renovations to the Net Shed Building to transform the building into the Kupu Green Jobs Training Center.

Renovations will include enclosing the building with walls, windows, and doors, and interior changes to provide classrooms, gathering spaces, offices, improved restrooms, a commercial kitchen, and a mezzanine. Improvements to the surrounding grounds will include landscaping, a reduction in paved surfaces, and low impact development features such as bioswales and/or rain gardens. One of Kupu's goals for the renovation is that it be certified as Platinum under the standards of the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) for New Schools.

Kupu further anticipates funding some limited improvements in a portion of Kewalo Basin Park between the Net Shed Building and the waterfront pedestrian promenade.

Kupu seeks to improve the building to provide better facilities for the youth in its programs and to continue to make the area a better neighborhood. The renovations will be critical in multiplying and expanding the impact of Kupu's programs statewide while also creating synergistic opportunities for the community to use the Center.

Kupu Green Job Training Center Renovations

Draft Environmental Assessment –
Anticipated Finding of No Significant Impacts (HRS 343)



Prepared for:



Prepared by:



June 20, 2015

KUPU GREEN JOB TRAINING CENTER RENOVATIONS

*Draft Environmental Assessment –
Anticipated Finding of No Significant Impact
(HRS 343)*

Prepared for:



Prepared by:



June 2015

SUMMARY

Project Name:	Kupu Green Job Training Center Renovations
Location:	Kewalo Basin Park, Honolulu, O‘ahu
Judicial District:	Honolulu
Tax Map Keys (TMK):	Portions of (1) 2-10-58-131 and (1) 2-10-58-127
Area:	<i>Kupu Green Job Training Center Lease Area: approximately 0.56acres Park Improvement Area: approximately 0.29 acres</i>
Applicant:	Kupu
Approving Agency:	Hawai‘i Community Development Authority (HCDA)
Landowner:	HCDA, State of Hawai‘i
Existing Use:	Kupu currently uses the “Net Shed Building” and surrounding area in Kewalo Basin for its Green Job Training Center. The Center provides educational youth services and a variety of programs that primarily focus on training young adults in the fields of sustainability, conservation, and land stewardship. Currently, the building is an open pavilion structure with a roof and chain link walls between columns. The interior space is not divided except for restroom facilities and a small kitchen area.
Project Description:	Renovations to the Net Shed Building exterior and interior and surrounding grounds will provide an improved environment for Kupu to deliver services to Honolulu’s youth. Exterior renovations will add walls, windows, and doors to the Net Shed Building. Interior renovations will include: a redesign of the space into a classroom, gathering spaces, and offices; improved restrooms; a commercial kitchen; and the addition of a mezzanine. Improvements to the surrounding grounds will include increased landscaping, a reduction in paved surfaces, and low impact development (LID) features such as bioswales and/or rain gardens. A goal for the renovations is to incorporate green building practices so that the renovated Net Shed Building qualifies for the highest level of Leadership in Energy and Environmental Design (LEED) for New Schools accreditation.

Current Land Use Designations:	<i>State Land Use District – Urban</i> <i>Primary Urban Center Development Plan Land Use Map – Major Parks and Open Space</i> <i>County Zoning – State Jurisdiction: Kaka‘ako Community Development District (KCDD)</i> <i>Special Management Area – In the SMA</i>
Major Approvals Required:	Lease Agreement Development Permit Special Management Area (SMA) – Major Permit Storm Drain Connection Application (if new connection is made) Grading Permit Building Permit Sewer Connection Application & Wastewater System Facilities Charges
Alternatives Considered:	Two alternatives were considered: <ul style="list-style-type: none">• No Action: no changes to existing conditions.• Alternate Location: locate Center on a different site.
Anticipated Determination:	Finding of No Significant Impact

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ACRONYMS

ALISH	Agricultural Lands of Importance to the State of Hawai‘i
BMPs	Best management practices
BWS	Board of Water Supply, City and County of Honolulu
cfs	Cubic feet per second
CZM	Coastal zone management
DBEDT	Department of Business, Economic Development, and Tourism, State of Hawai‘i
DLNR	Department of Land and Natural Resources, State of Hawai‘i
DOH	Department of Health, State of Hawai‘i
EA	Environmental Assessment
EIS	Environmental Impact Statement
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FONSI	Finding of No Significant Impact
GDP	Gross domestic product
GPI	Genuine progress indicator
gpm/gpd	Gallons per minute/day
HCDA	Hawai‘i Community Development Agency, State of Hawai‘i
HPD	Honolulu Police Department
HRS	Hawai‘i Revised Statutes
HAR	Hawai‘i Administrative Rules
H RTP	Honolulu Rail Transit Project
IMPs	Integrated Management Plans
KCDD	Kaka‘ako Community Development District
HHC	Howard Hughes Corporation
LEED	Leadership in Energy and Environmental Design
LID	Low impact development
LOS	Level of Service
LSB	Land Study Bureau, University of Hawai‘i
mph	Miles per hour
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resource Conservation Service, U.S. Department of Agriculture
ppm	Parts per million
psi	Pounds per square inch
SMA	Special Management Area
SSA	Sole Source Aquifer
TMDLs	Total Maximum Daily Loads
UH	University of Hawai‘i
UIC	Underground Injection Control
USFWS	U.S. Fish and Wildlife Service

1 INTRODUCTION

This Environmental Assessment (EA) is prepared in accordance with Chapter 343, Hawai'i Revised Statutes (HRS) and Title 11; Chapter 200, Hawai'i Administrative Rules (HAR) for the Kupu Green Job Training Center in Kaka'ako, Honolulu, Island of O'ahu, State of Hawai'i.

1.1 LANDOWNER

The State of Hawai'i is the landowner.

Contact: Anthony Ching, Executive Director
HCDA, State of Hawai'i
547 Queen Street
Honolulu, HI 96813
Phone: (808) 594-0300
Fax: (808) 587-0299

1.2 APPLICANT

Kupu is the applicant.

Contact: John Leong, Chief Operating Officer
Kupu
677 Ala Moana Blvd, Suite 1200
Honolulu, HI 96813
Phone: (808) 735-1221x1001
Fax: (808) 735-1223

1.3 ENVIRONMENTAL CONSULTANT

The environmental planning consultant is PBR HAWAII and Associates, Inc.

Contact: Tom Schnell AICP, Principal
PBR HAWAII and Associates, Inc.
1001 Bishop Street, Suite 650
Honolulu, HI 96813
Phone: (808) 521-5631
Fax: (808) 523-1402

1.4 APPROVING AGENCY

HCDA is the approving agency.

Contact: Anthony Ching, Executive Director
HCDA, State of Hawai‘i
547 Queen Street
Honolulu, HI 96813
Phone: (808) 594-0300
Fax: (808) 587-0299

1.5 COMPLIANCE WITH STATE OF HAWAI‘I ENVIRONMENTAL LAWS

Preparation of this document is in accordance with the provisions of Chapter 343, HRS and Title 11, Chapter 200, Hawai‘i Administrative Rules (HAR) pertaining to Environmental Impact Statements (EIS). Section 343-5, HRS established nine types of actions that “trigger” compliance. The use of State or County lands or funds is one of these “triggers.” Because the Kupu Green Job Training Center is located on state land, compliance with HRS and HAR is required.

In addition, State of Hawai‘i Declaratory Ruling No. 80-01 required preparation of an EIS for “the entire Kaka‘ako Development District Plan as a ‘group of proposed or possible actions’ taken as a comprehensive whole.” The Ruling further required that, as subsequent phases of the plan are produced or as specific components are planned in greater detail, each component or detailed part of the plan should be assessed under Chapter 343, HRS.

In accordance with the Ruling, the original EIS for the overall Kaka‘ako Community Development District (KCDD) was accepted in 1983. Subsequent to the acceptance of the EIS, HCDA adopted a separate Makai Area Plan in 1983. In accordance with State of Hawai‘i, Declaratory Ruling No. 80-01 and as required by State of Hawai‘i Declaratory Ruling No. 84-01, in 1985 a supplemental EIS was prepared for the Makai Area Plan. As the Makai Area Plan continued to evolve: 1) additional supplemental EISs were prepared for the Makai Area Plan in 1990, 1994, and 1998; and 2) an environmental assessment for the Makai Area Plan was prepared in 2005.

Now, as a detailed part of the Makai Area Plan, and in accordance with Declaratory Ruling No. 80-01, this EA for the Kupu Green Job Training Center Renovations is being prepared.

1.6 STUDIES CONTRIBUTING TO THIS EA

The information contained in this report has been developed from site visits, generally available information regarding the characteristics of the Site and surrounding areas (see References section), and architectural plans, a preliminary engineering report, and a traffic impact assessment report prepared specifically for the Kupu Green Job Training Center Renovations.

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2 PROJECT DESCRIPTION

2.1 BACKGROUND INFORMATION

Kupu

Kupu is a 501(c)3 nonprofit organization whose mission is “to empower youth to serve their communities through character-building, service-learning, and environmental stewardship opportunities that encourage integrity (pono) with God (Ke Akua), self and others.”

The word kupu, in Hawaiian means, “to sprout, grow, germinate, or increase.” Similarly, the kupukupu fern is one of the first plants to emerge after a destructive lava flow. Kupu administers programs in the fields of conservation and sustainability that help young adults, like the kupukupu fern, emerge as strong leaders for a greener future and stronger communities.

Kupu was developed in response to the growing needs of Hawai‘i’s communities to train the next generation in natural resource management, renewable energy, energy conservation, and other green job skill sets. Kupu is predicated on the Hawaiian concept of maka hana ka‘ike, “in working one learns.”

Through its programs Kupu strives to teach youth vital life and work skills, leadership traits, social responsibility, and the value of teamwork, by incorporating vocational training, educational degree achievement, and community service. Kupu’s programs include:

- **Hawai‘i Youth Conservation Corps**, which is centered on environmental conservation, restoration, education, and cultural awareness. HYCC gives individuals the opportunity to work outdoors with environmental agencies across Hawai‘i and learn principles of natural resource stewardship, while gaining valuable experience, knowledge, and skills that assist them in continuing their life pursuits.
- **CommunityU**, which equips under-resourced young adults ages 16-24 with the experiences, education, training, and support needed to become productive members of society and positively impact the community around them. CommunityU provides training and support in the areas of teamwork, life skills, personal and cultural development, education, and job readiness.
- **RISE**, which develops Hawai‘i’s green workforce and implements sustainability projects across the state, innovatively addressing two paramount needs: local job creation and sustainable development. RISE works with private, public, and non-profit partners to develop high-paying internship opportunities for higher-education students and graduates seeking professional experience in the sustainability sector. RISE also links interns with the intellectual and community networks they need to grow their knowledge base and build their careers.

- E²U, which is an environmental education program aimed toward engaging students and the community in stimulating, educational, and hands-on activities and curriculum that broadens knowledge of conservation and sustainability, engages youth in service, and strives to inspire aspirations of higher education and a career in natural resource management or a related field.

Kupu is also dedicated to coastal, nearshore, and watershed conservation. Volunteers from Kupu assist with and learn about traditional Hawaiian marine conservation from several native fishpond non-profits, including Paepae o He'eia, Mālama Loko Ea, and Maikaluloko. Working with the Nature Conservancy, Kupu volunteers are helping remove invasive algae from Kāne'ohe Bay. In addition, volunteers have also assisted with stream restoration projects during which they have learned about non-point source pollution and the impacts of land use on the coastal environment. Kupu also has a U.S. Environmental Protection Agency (EPA) grant to remove marine debris. In 2014, Kupu volunteers cleaned 2,250 meters of coastline and removed more than 2,500 pounds of debris (the majority at Kahuku Beach). This effort involved over 400 volunteer hours; with over 150 volunteers engaged.

In 2013-2014, Kupu provided hundreds of paid internships, engaged over 11,000 volunteers, and provided benefits to Hawai'i valued at nearly \$7 million. Kupu's volunteers provided over 230,000 service hours. Kupu distributed nearly half a million dollars in college and continued education funds to Hawai'i's youth. Since its formation in 2007, Kupu has had a cumulative economic benefit of over \$42 million (Kupu, 2015).

Net Shed Building

The Net Shed Building, an 8,400-square foot open-sided pavilion at Kewalo Basin, was originally constructed in 1989/1990 by HCDA for use as a fishing net storage and drying area by Honolulu's fishing fleet. Due to changes in the fishing fleet at Kewalo Basin, as well as changes in equipment (nylon nets are now used), the facility is no longer needed as a net drying shed.

Between 2006 and 2010 HCDA leased the Net Shed Building to Hālau Kū Māna, a public charter school. Hālau Kū Māna used the building as a learning laboratory for the school's coastal education programs. The school also planted and maintained a Native Hawaiian plant garden in a small area adjacent to the Net Shed Building to provide educational opportunities for their students and educational value for patrons of the park.

2.1.1 Location and Property Description

Kupu currently leases the Net Shed Building from HCDA on a month-to-month basis for use as its main facility for its statewide programs, which provide training and leadership opportunities to Hawai'i's youth.

As it is now, the Net Shed Building is an open-sided pavilion with a roof and chain link walls between columns. The interior space is not divided except for restroom facilities and a small kitchen area.

Kupu Green Job Training Center Lease Area. Kupu seeks a long-term lease of the Net Shed Building and land immediately adjacent to building including:

- An asphalt parking area containing six parking stalls immediately adjacent to the Net Shed Building on the Diamond Head side;
- An existing asphalt driveway on the makai side of the Net Shed Building;
- The access way behind the Net Shed Building (mauka side);
- A flat asphalt pad between the Net Shed Building and the Kewalo Basin harbor channel; and
- An area adjacent to and makai of flat asphalt pad which contains a portion of the Native Hawaiian plant previous installed by Hālau Kū Māna.

Throughout this EA the terms “Kupu Green Job Training Center Lease Area” “Kupu Green Job Training Center” and “the Center” refer to the approximately 0.56-acre area (including the Net Shed Building) that Kupu seeks to lease from HCDA. The long-term lease will enable Kupu to: 1) make needed improvements to the Center (as described in Section 2.3 below) to provide space for classes, workshops, community events, and activities; and 2) better serve its programs, participants, volunteers, and the larger community.

Park Improvement Area. Kupu further anticipates funding some limited improvements in a portion of Kewalo Basin Park between the Net Shed Building and the waterfront pedestrian promenade. Throughout this EA, this approximately 0.29-acre area is referred to as the “Park Improvement Area.” Kupu currently informally cares for this area, which contains a public shower for park users a portion of the Native Hawaiian plant garden previous installed by Hālau Kū Māna, and a number of existing trees. The Park Improvement Area will continue to be open to and accessible by the public.

Project Area. For the purpose of this EA “Project Area” refers to the combined area of the Center (inclusive of the Net Shed Building) and the Park Improvement Area.

The scope of this EA also encompasses certain “off-site” improvements pertaining to fire safety and sewer systems that may be necessary for the general Kewalo Basin Park area and the build out the adjacent property formerly occupied by the National Oceanic and Atmospheric Administration (NOAA) that is commonly referred to as the “NOAA site.” These potential fire safety and wastewater system improvements are described in Section 4.7.1 (Water System) and Section 4.7.2 of this EA and in Appendix D (Preliminary Engineering Report). Figure 4 in Appendix D shows the location of the potential fire safety and wastewater system improvements. Funding design, and installation of any “off-site” fire safety

and wastewater improvements would be provided by HCDA or others, as necessitated by adjacent development.

The Project Area is located on portions of TMKs (1) 2-10-58-131 and (1) 2-10-58-127 in Kewalo Basin, which is in the Makai Area of the KCDD. HCDA regulates the entire KCDD. Figure 1 shows the regional location of Project Area. Figure 2 shows the TMKs on which the Project Area is located and shows the boundaries of the Center and the Park Improvement Area. Figure 3 is the zoning under the KCDD Makai Area Rules (§15-23, HAR). Figure 4 contains photographs of the Center and surrounding area.

The area around the Project Area once had issues with crime, drugs, and homelessness, but Kupu has strived to be a catalyst in revitalizing the area by providing a positive presence and through responsible stewardship and caring for the land.

The Project Area is not located within designated floodways, wetlands, or critical habitats.

2.1.2 Existing Land Use Designations

Current land use designations for the Project Area are:

- **State Land Use District:** Urban (Figure 5)
- **City and County of Honolulu Zoning:** State Jurisdiction: Kaka’ako Community Development District
- **KCDD Makai Area Rules (§15-23, HAR):** Park, Waterfront Commercial (Figure 3)
- **Primary Urban Center Development Plan, Land Use Map:** Major Parks and Open Space (Figure 6)
- **Special Management Area (SMA):** In the SMA (Figure 7)

2.1.3 Surrounding Land Uses

The Project Area is bordered on its makai and east edges by Kewalo Basin Park. To the west of the Project Area is the Pacific Ocean/Kewalo Basin Harbor entrance channel. Kewalo Basin Harbor and the Harbor Master’s Office (situated in the NOAA site) is mauka of the Project Area. A pedestrian promenade on the makai edge of Kewalo Basin Park and several picnic tables are used by visitors to the park. Kewalo Basin Park is used as an access point for several popular surf breaks.

2.1.4 Regional Land Use History

The Project Area is located on dredged land that did not exist in place until 1955. However, it is now part of the larger KCDD, which has been primarily a light industrial district since the early 1950s when its zoning changed. Prior to that time, Kaka’ako was a community of small stores, churches, schools, parks,



PDF - Q:\Oahu\Kupu\PDF\REA Figures
 Path: Q:\Oahu\Kupu\GIS\Projects\Kupu Regional Location.mxd

DATE: 5/17/2015

LEGEND

 Project Area

FIGURE 1

Regional Location

KUPU GREEN JOB TRAINING CENTER

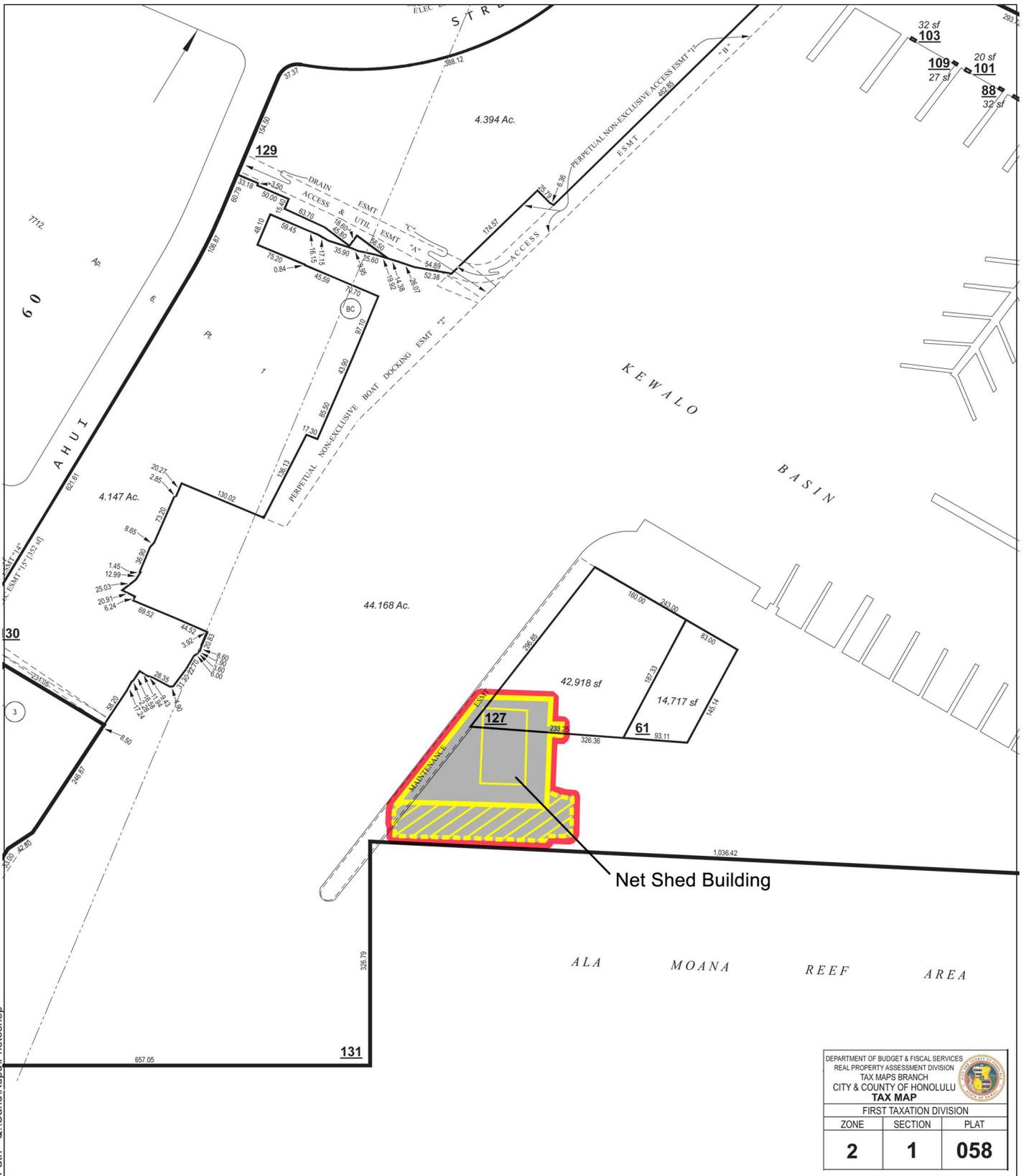
Kupu North  Island of Oahu 

Linear Scale (feet)
 0 375 750 1,500



Source: ESRI Online Basemap. City and County of Honolulu, 2014.

Disclaimer: This graphic has been prepared for general planning purposes only and should not be used for boundary interpretations or other spatial analysis.



DEPARTMENT OF BUDGET & FISCAL SERVICES REAL PROPERTY ASSESSMENT DIVISION TAX MAPS BRANCH CITY & COUNTY OF HONOLULU TAX MAP		
FIRST TAXATION DIVISION		
ZONE	SECTION	PLAT
2	1	058

DATE: 5/17/2015

LEGEND

- Kupu Green Job Training Center
- Park Improvement Area
- Project Area

FIGURE 2
Tax Map Key

KUPU GREEN JOB TRAINING CENTER

Kupu North Island of O'ahu

Linear Scale (in feet)



DATE: 5/21/2015

LEGEND

-  Kupu Green Job Training Center
-  Park Improvement Area
-  Project Area

Zoning

-  MUZ - Mixed Use
-  P - Park
-  WC - Waterfront Commercial

FIGURE 3
HCDA KCDD Makai Area Zoning
KUPU GREEN JOB TRAINING CENTER

Kupu North Island of Oahu

Source: Pictometry, 2013. Kaka'ako Community Development District, 2005.
 Disclaimer: This graphic has been prepared for general planning purposes only and should not be used for boundary interpretations or other spatial analysis.



1. View of existing Kupu Green Job Training Center ("Net Shed Building").



2. Existing entrance to Kupu Green Job Training Center.



3. The asphalt pad on the west side of the Net Shed Building that is part of the Lease Area.



4. Shower area between the Net Shed Building and the waterfront pedestrian promenade.



5. View from the Kupu Green Job Training Center, across the asphalt pad, to the west. Visible across the channel is 53 by the Sea (left) and the Children's Discovery Center (center).



FIGURE 4
Site Photographs
KUPU GREEN JOB TRAINING CENTER

Kupu Island of O'ahu

DRAFT 5/22/2015



Source: PBR HAWAII, 2015.

Disclaimer: This graphic has been prepared for general planning purposes only and should not be used for boundary interpretations or other spatial analysis beyond the limitations of the data.



DATE: 5/17/2015

LEGEND

-  Kupu Green Job Training Center
-  Park Improvement
-  Project Site

State Land Use District

-  A - Agriculture
-  C - Conservation
-  R - Rural
-  U - Urban

FIGURE 5

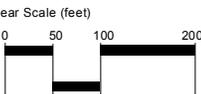
State Land Use District

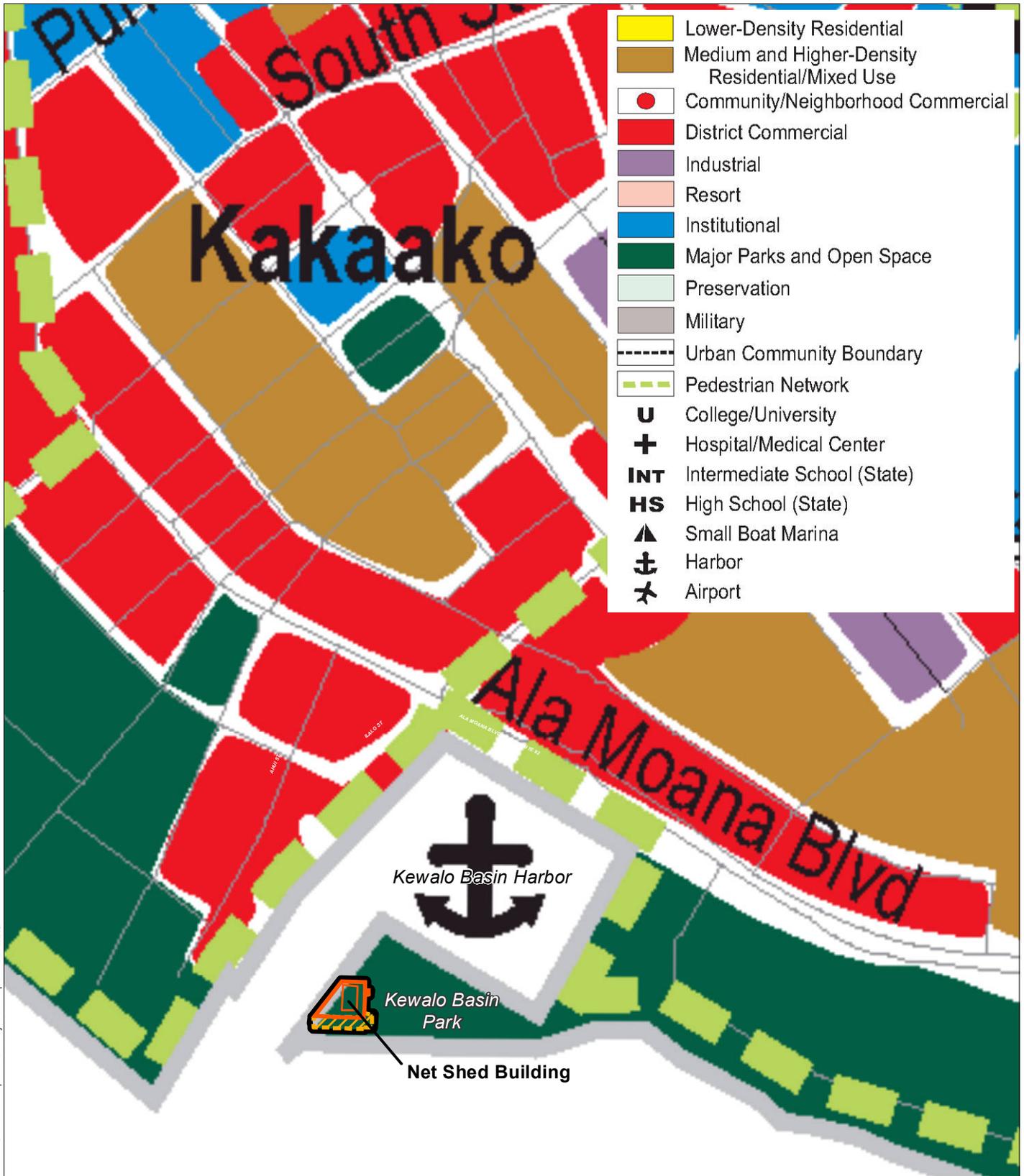
KUPU GREEN JOB TRAINING CENTER

Kupu North Island of Oahu



Linear Scale (feet)



DATE: 5/17/2015

LEGEND

- Kupu Green Job Training Center
- Park Improvement Area
- Project Area

FIGURE 6
Primary Urban Center
Development Plan
KUPU GREEN JOB
TRAINING CENTER

Kupu North

Linear Scale (feet)

Island of Oahu

Source: City and County of Honolulu, 2004.

Disclaimer: This graphic has been prepared for general planning purposes only and should not be used for boundary interpretations or other spatial analysis.



DATE: 5/17/2015

LEGEND

-  Kupu Green Job Training Center
-  Park Improvement Area
-  Project Area
-  Special Management Area

FIGURE 7

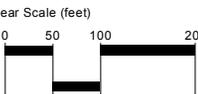
Special Management Area

KUPU GREEN JOB TRAINING CENTER

Kupu North Island of Oahu



Linear Scale (feet)




Source: Pictometry, 2013. City and County of Honolulu, 2014.

Disclaimer: This graphic has been prepared for general planning purposes only and should not be used for boundary interpretations or other spatial analysis.

and neighborhoods clustered roughly by ethnicity (University of Hawai‘i at Mānoa, 2010). Before European contact, Kaka‘ako was an agricultural area and home to Hawaiian royalty, including Kamehameha I who had a residence in the district. Fishpond aquaculture and salt making also took place in the area. Hundreds of sets of iwi have been found in Kaka‘ako as the district has developed (Wu, 2007).

Nearer to the Project Area, Kewalo Basin Harbor was first developed as a commercial and recreational boat harbor in the 1920s with the construction of Kewalo Basin Wharf in front of the former Fisherman’s Wharf restaurant. Construction of the mauka and Waikiki bulkheads followed. During World War II, the Harbor was expanded and in 1955, it reached its present day size of 22 acres. It was at this time, in 1955, that the land on which the Project Area and Kewalo Basin Park are located was created behind the makai revetment. This revetment encloses the Harbor and protects it from Kona storms (Helbert Hastert & Fee, Planners, Inc., 2011). Commercial fishing boats, charter tours, pleasure craft, and research vessels are the primary users of Kewalo Basin Harbor, which is considered a medium-draft facility. Kewalo Basin Park is popular with fishermen and surfers, who use it to access a number of well-known surf sites.

East of Kewalo Basin Park is Ala Moana Regional Park, which was developed in 1928 and is Honolulu’s largest beach park. Prior to the area’s designation as a park, it had been used as a garbage dump by the City of Honolulu. The dump was filled in with dredged coral to create the mile-long beach park (Wiegel, 2008). Today, the 43-acre park is one of the most popular in Honolulu.

2.2 PURPOSE AND NEED

Through its partnerships with more than 80 public and private organizations in Hawai‘i and the Pacific Basin, Kupu provides experiential education and life skills development opportunities to help youth and young adults succeed in life and create lifelong community servants. The Kupu Green Job Training Center will create a “piko,” or center, of O‘ahu with the first-of-its-kind facility for creating leadership in the growing green jobs sector, one of the fastest growing sectors of the Hawai‘i economy (DLIR, Research and Statistics Office, 2010).

Kupu seeks to improve the Center to provide better facilities for the youth in its programs and to continue to leverage its resources to make the area a better neighborhood for the surrounding community. In particular, as it is now, the Net Shed Building is not enclosed, and the interior space is not sufficiently separated to serve Kupu’s various programmatic needs. Kupu would like to increase the number of youth it serves through the Center, and the existing open air building does not adequately support a larger operation or multiple activities occurring concurrently.

The renovations will be critical in multiplying and expanding the impact of Kupu’s programs statewide while also creating synergistic opportunities for the community to use the Center. From the Center, Kupu will develop the next generation of local talent to take the helm of the new “green” industries moving in Hawai‘i. The Center will equip youth with the skills and heart to lead the state toward a more sustainable future and build partnerships that can serve as a global model of responsible stewardship and a thriving community.

Kupu’s vision is to transform not only the existing Center, but also the surrounding waterfront area, into an open and inclusive space to be used for the public benefit and serve as a model of sustainability, environmental restoration, and community and cultural collaboration.

2.3 KUPU GREEN JOB TRAINING CENTER RENOVATIONS

Renovations to allow Kupu to achieve its vision for the Center and fulfil its mission to empower Hawai‘i’s youth to serve their communities include: 1) enclosing the Net Shed Building and making interior modifications and 2) providing landscaping and other improvements to outdoor areas to make these areas more functional and sustainable. Figure 8 shows the site plan.

Kupu Green Job Training Center. Renovations to the Kupu Green Jobs Training Center include both improvements to the Net Shed Building and exterior improvements within the Center grounds as described below.

Net Shed Building. Net Shed Building improvements include:

- The additional of exterior walls, doors, and windows
- Ground floor interior remodeling to provide separated rooms to serve Kupu’s programmatic needs, including:
 - Great room areas
 - A vocational classroom
 - A classroom
 - A commercial kitchen for vocational training
 - A kitchen storage room
 - A dining area
 - An office area with staff conference area
 - Men’s and women’s restrooms with showers
 - Storage room
- The addition of a second floor mezzanine of 1,600 square feet
- The addition of roof insulation

- The installation of skylights (Solatubes)
- Installation of photovoltaic panels to meet all energy needs, thus allowing the Center to become a net zero energy facility.
- Exterior hookups for a food truck (such as connections for water, wastewater, and electricity).

Appendix B contains building floor plans and elevations and section drawings.

Exterior Improvements. Exterior improvements within the Center grounds around the Net Shed Building include additional landscaping and enhanced surfaces. The asphalt pad, curbs, and gutters will be replaced with a surface that will reduce the amount of impervious surface. The goal is to beautify and make the Center more inviting, sustainable, and functional.

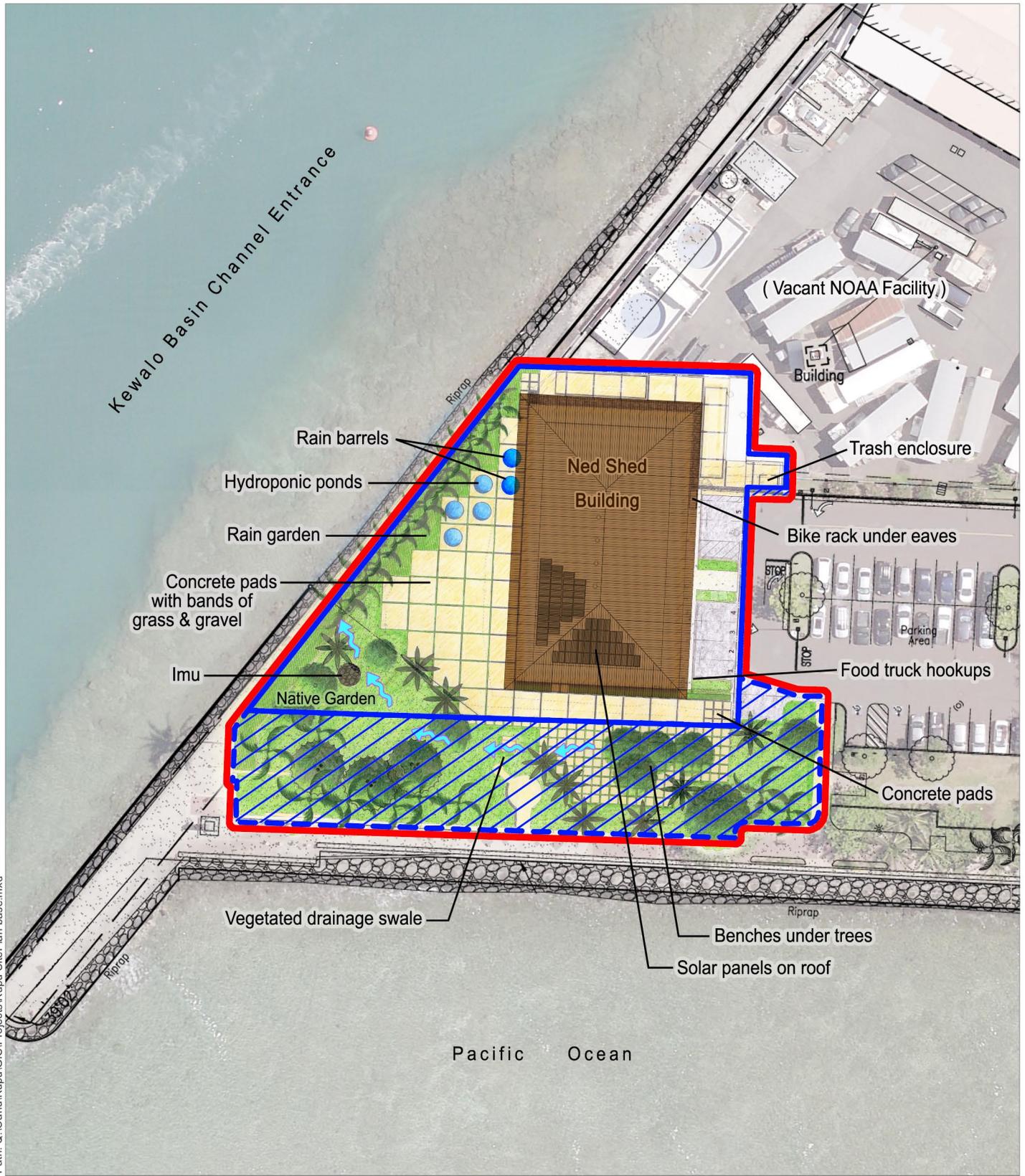
In particular, the large asphalt pad between the Net Shed Building and the Kewalo Basin Harbor channel will be removed to create an area more suited for Kupu’s programs and events. The renovated area will include large concrete pavers (approximately 12-feet x 12-feet) segmented by bands of grass or gravel to allow for stormwater infiltration. Planter boxes and tanks for hydroponics may also be added to the renovated area. In addition, a new rain garden and/or a vegetated swale along the harbor channel edge will allow for additional infiltration as well as some bio-filtration and treatment of stormwater before it enters the ocean. This area may also be outfitted for a temporary special event tent or other removable or retractable shade covering. Added plants in the area and around the building may include shielding loulou palms and na‘u hedges. ‘Akia may be planted near the entrance walkway. All existing trees will be retained.

Other exterior improvements may include:

- An imu in the Native Hawaiian plant garden area
- Rain barrels to capture roof runoff
- A pre-fabricated storage shed or sheds at the rear of the building (mauka side) for storage
- A trash container enclosure
- A gravel bed at the rear perimeter of the building to capture runoff

Park Improvement Area. Kupu anticipates funding some limited improvements, which HCDA will make, in the Park Improvement Area between the Net Shed Building and the waterfront pedestrian promenade. These improvements may include:

- A bioswale to improve drainage
- A patio area made with concrete pavers (approximately 4-feet x 4-feet) segmented with grass or gravel to allow for infiltration of water
- Expansion of the native plant garden



DATE: 5/21/2015

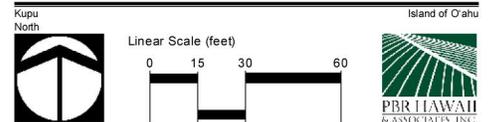
LEGEND

-  Kupu Green Job Training Center
-  Park Improvement Area
-  Project Area

FIGURE 8

Site Plan

KUPU GREEN JOB TRAINING CENTER



The Park Improvement Area will continue to be open to and accessible by the public.

Parking. No stalls from the existing Kewalo Basin Park parking lot will be used for any Kupu parking. This lot serves the Kewalo Basin Park and is reserved for park users.

Six parking stalls in front of the Net Shed Building (Diamond Head side) are reserved for Kupu’s exclusive use as part of its current agreement with HCDA. As part of the renovations, these existing six parking stalls will be reconfigured into five regular parking stalls plus one Americans with Disabilities Act (ADA) accessible stall and an access aisle. Bicycle parking will also be provided near the Net Shed Building entrance.

The addition of the mezzanine will require some additional parking stalls. For any additional stalls that may be required for Kupu, HCDA and Howard Hughes (which has an existing lease to operate the harbor, boat slips, and parking immediately adjacent to the harbor) have committed to working with Kupu to provide for the remaining required parking, as well as event parking. The additional parking will be provided either closer to Ala Moana Boulevard or within Howard Hughes lease areas. It should be noted that Kupu encourages alternative transportation use by subsidizing bus passes for program participants and nearly all participants rely on public transit to and from the Center.

Improvements to the existing asphalt driveways and paved areas around the Net Shed Building will be made, including removal of asphalt and curbs and gutters and replacement with new concrete surfaces and landscaping, which will create a more inviting area for users and for outdoor educational spaces.

2.4 SUSTAINABLE PLANNING AND DESIGN

The Center will itself represent a source of sustainability, through a facility that will include photovoltaic energy panels, hydroponics for food production, waterfront preservation, and micro-enterprise entrepreneurship. It will be a place for collaboration and discussion about the topics that Hawai’i and other Pacific islands will face in the future. The Center is located near the Pacific Ocean to provide for direct study of marine conservation. It will be a scalable model of island sustainability as well as economic and energy self-sufficiency; a community of interaction, learning, growth, and cooperation; and living and breathing aloha as a demonstration to the world.

One of Kupu’s goals for the renovation of the Center is that it be certified as Platinum under the standards of the U.S. Green Building Council’s Leadership in Energy and Environmental Design (LEED) for New Schools. LEED is a green building certification program that recognizes best-in-class building strategies and practices. To receive LEED certification, building projects must satisfy prerequisites and earn credits

to achieve different levels of certification, of which Platinum is the highest. Kupu will receive the majority of its LEED credits from the installation of photovoltaic panels to achieve net zero energy use and a LED light system. Most of the other credits will come from indoor environmental quality measures and the location of the Center near amenities and public transportation.

2.5 SCHEDULE AND COST

Construction is expected to commence once plans and permit applications are approved. Renovation of the Center is expected to be completed by the fall of 2016. The total cost for design and construction is estimated to be approximately \$2.8 million.

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3 DESCRIPTION OF THE NATURAL ENVIRONMENT, POTENTIAL IMPACTS, AND MITIGATION MEASURES

3.1 CLIMATE

The climate of the Honolulu can be characterized as mild and subtropical. Average temperatures range from about 73 degrees Fahrenheit in the coolest month (February) to about 82 degrees Fahrenheit in the warmest month (August). Average annual rainfall is around 20 inches per year, with December typically being the wettest month and June the driest. The prevailing wind throughout the year is the northeasterly trade wind, although southerly or southwesterly winds are not uncommon between October and April.

Potential Impacts and Mitigation Measures

The renovations to the Kupu Green Job Training Center are not expected to have an impact on the region's climate, and no mitigation measures are warranted or planned.

3.2 GEOLOGY AND TOPOGRAPHY

Kaka'ako lies on the Honolulu coastal plain, which is a broad coral reef platform that developed during the last interglacial period in the late Pleistocene when the ocean was warmer and the sea level was higher (University of Hawai'i Coastal Geology Group, 2013). Unlike most of the Kaka'ako District, the land underlying the Project Area is manmade. However, the undeveloped natural condition of the Project Area's substrate may have been low-lying marsh, tidal flats, fishponds, and/or reef (Office of Hawaiian Affairs, 2013).

O'ahu's original southern coastline in the vicinity of the Project Area likely ran along the existing Ala Moana Boulevard. The Kaka'ako Makai district was at or below sea level, but a seawall was constructed between 1913 and 1927 near the current shoreline. Artificial fill material, including ash from burned municipal refuse, unburned refuse, and automobile batteries, was deposited behind the seawall. Two incinerators, one built in the 1930s and the other in the 1940s, deposited ash and other fill material makai of Ahui Street until deposition of ash was banned by the City and County of Honolulu in 1971 (The Limtiaco Consulting Group and EnviroServices & Training Center, LLC, 2009). This material created most of the Kaka'ako Makai district of which the Project Area is a part. However, the substrate below the Project Area was likely created from material dredged from Kewalo Harbor in the 1920s and 1940s. In 1955, workers placed dredged material along the makai side of the Harbor to form the eight-acre land section protected by a revetment that is now Kewalo Basin Park and the Project Area (Young, 2013).

The topography of the Project Area is extremely flat with an elevation of approximately five feet or less above mean sea level (Figure 9).

Potential Impacts and Mitigation Measures

The renovations to the Kupu Green Job Training Center and improvements in the Park Improvement Area are not expected to have a significant impact on the primarily man-made geology or topography of the Project Area. A minimal amount of grading may be required to: relocate an existing drain, create drainage swales, resurface the existing asphalt pad, and possibly add a patio area. All grading will be in conformance with the City and County of Honolulu’s grading ordinance and Section 11-60.133, HAR, Fugitive Dust and Section 11-54-1.1, HAR, Anti-degradation policy.

3.3 SOILS

There are three soil suitability studies prepared for lands in Hawai‘i whose principal focus has been to describe the physical attributes of land and the relative productivity of different land types for agricultural production; these are: 1) the U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) Soil Survey; 2) the University of Hawai‘i Land Study Bureau (LSB) Detailed Land Classification; and 3) the State Department of Agriculture’s Agricultural Lands of Importance to the State of Hawai‘i (ALISH).

3.3.1 NRCS Soil Survey

Reflecting the manmade nature of the geologic history of the land under the Project Area, the NRCS soil survey identifies only one soil type, “Fill land, mixed,” underlying the Project Area (Figure 10). A description of this soil type is as follows:

Fill land, mixed (Fl) – This land type consists of areas filled with material dredged from the ocean, excavation from adjacent uplands, and garbage. Fill land occurs mostly near Pearl Harbor and in Honolulu, adjacent to the ocean. Generally, this land type is used for urban development, including airports, housing, and industrial facilities.

3.3.2 Land Study Bureau Detailed Land Classification

The University of Hawai‘i LSB’s *Detailed Land Classification, Island of O‘ahu* classifies non-urban land by a five-class productivity rating system, using the letters A, B, C, D and E, where “A” represents the highest class of productivity and “E” the lowest. Soils underlying the Project Area are not classified by the LSB.



DATE: 5/17/2015

LEGEND

-  Kupu Green Job Training Center
-  Park Improvement Area
-  Project Area
-  Contour Lines

FIGURE 9

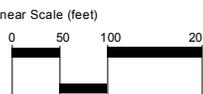
Topography

KUPU GREEN JOB TRAINING CENTER

Kupu North Island of Oahu



Linear Scale (feet)




Source: Pictometry, 2013. City and County of Honolulu, 2014. NOAA.

Disclaimer: This graphic has been prepared for general planning purposes only and should not be used for boundary interpretations or other spatial analysis.

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DATE: 5/17/2015

LEGEND

-  Kupu Green Job Training Center
-  Park Improvement Area
-  Project Area

Soil Type

-  Fill land, mixed

FIGURE 10

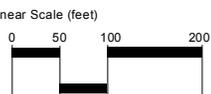
Soil

KUPU GREEN JOB TRAINING CENTER

Kupu North Island of Oahu



Linear Scale (feet)




Source: Pictometry, 2013. USDA Natural Resource Conservation Service.

Disclaimer: This graphic has been prepared for general planning purposes only and should not be used for boundary interpretations or other spatial analysis.

3.3.3 Agricultural Lands of Importance to the State of Hawai‘i

The State of Hawai‘i Department of Agriculture’s ALISH system rates agricultural land as “Prime,” “Unique” or “Other” lands. The remaining land is not classified. The land underlying the Project Area is not classified by the ALISH system and therefore is not considered important agricultural land.

Potential Impacts and Mitigation Measures

The renovations and improvements in the Project Area are not expected to have a significant long-term impact on the manmade soils underlying the Project Area.

However, the renovations may have short-term impacts on the soils, particularly soil erosion and the generation of dust during construction. All construction activities will comply with all applicable federal, state, and county regulations and rules for erosion control. Contractors will use best management practices (BMPs), such as employee training, silt fences, and dust control, to minimize erosion during construction and planting.

3.4 GROUNDWATER AND SURFACE WATER RESOURCES

3.4.1 Groundwater Resources

Based on the State Commission on Water Resource Management’s coding system, the Project Area overlies the Nu‘uanu Aquifer System (30102) of the Honolulu Aquifer Sector (301). The Nu‘uanu Aquifer System is one of six aquifer systems that comprise the Honolulu Groundwater Management Area. Water development and groundwater use within the Honolulu Groundwater Management Area is regulated by the CWRM through the issuance of water use permits, well construction permits, and pump installation permits.

The Nu‘uanu Aquifer System is an unconfined basal aquifer with sedimentary lithology and has a sustainable yield of 14 million gallons per day. This aquifer is not a direct drinking water source as it has moderate salinity (1,000 to 1,500 mg/L Cl⁻) and high vulnerability to contamination. It is considered replaceable. However, the Project Area is also underlain by a sub-aquifer (30302121) of the Nuuanu Aquifer System that is currently used as a drinking water source. This sub-aquifer is a confined basal aquifer in flank compartments and has fresh salinity (less than 250 mg/L Cl⁻) and low vulnerability to contamination. In investigations of the nearby Office of Hawaiian Affairs properties, groundwater was found at depths of 5.8-feet to 8.5-feet below ground surface.

The Project Area is below (makai of) the Underground Injection Control (UIC) Line. Underground Injection Wells are used for injecting water or other fluids into a groundwater aquifer and are controlled

by the Department of Health (DOH). Being below the UIC Line means that the underlying aquifer is not considered a drinking water source, a wider variety of wells are allowed, and some permit limitations are imposed.

The EPA also classifies a large portion of O‘ahu, including the Nu‘uanu Aquifer System, as a Sole Source Aquifer (SSA). SSAs are designated in areas where few or no alternate drinking water sources are available and where, if contamination occurred, using an alternative source would be extremely expensive. A SSA designation gives the EPA the authority to review any proposed projects in the area using federal funds.

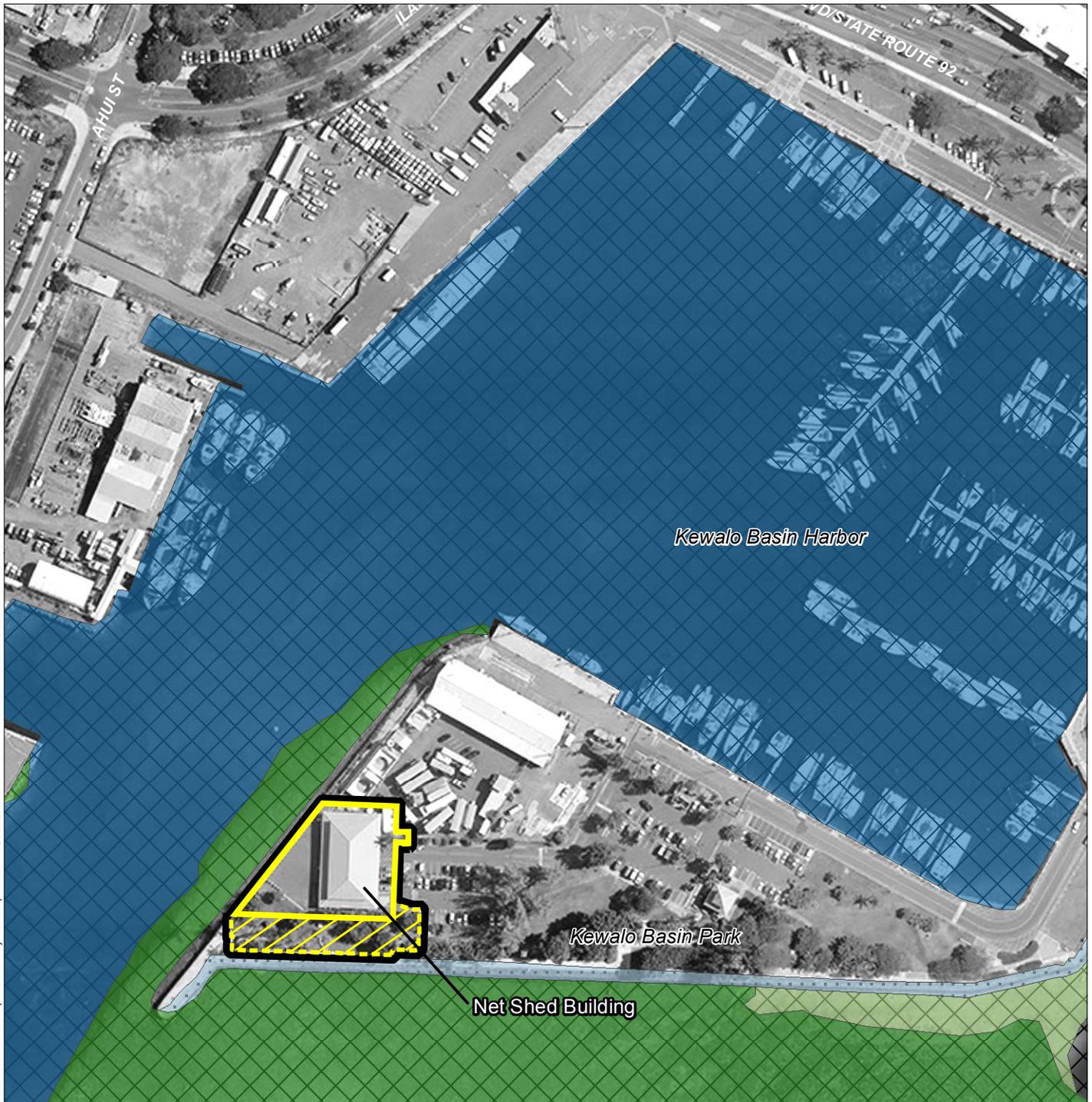
3.4.2 Surface Water Resources

There are no surface freshwater resources in or near the Project Area. The nearest surface water bodies are Kewalo Basin and Mamala Bay, both of which are part of the Pacific Ocean. The nearest streams, as classified by the Hawai‘i Department of Aquatic Resources, are the non-perennial, channelized Kamokuakulikuli Stream (one-mile to the west) and the Ala Wai Canal (one mile to east). The Ala Wai Canal is used for boating and is a Fishery Management Area, which restricts certain types of fishing to enhance and improve near-shore recreational fishing. The Project Area is within the Ala Wai Watershed.

According to the U.S. Fish and Wildlife Service’s (USFWS) National Wetlands Inventory, a small strip of Estuarine and Marine Wetland borders the makai boundary of the Park Improvement Area. The only other wetlands near the Project Area are makai of this strip and are classified Estuarine and Marine Deepwater (Figure 11).

The State DOH Water Quality Standards Map classifies the marine waters makai of the Project Area as a Class A and the surface water near the Project Area as Class 2. The objective of Class 2 waters is to protect their use for recreational purposes, the support and propagation of aquatic life, agricultural and industrial water supplies, shipping, and navigation. The objective of Class A waters is to protect their use for recreational purposes and aesthetic enjoyment. Discharges into either Class A or Class 2 waters must receive the best degree of treatment or control compatible with the criteria established for this class.

Both the Ala Wai Canal and Kewalo Basin have been identified as impaired water bodies by the State DOH pursuant to section 303(d) of the Clean Water Act. According to the 2014 Integrated Report, Kewalo Basin exceeds state Water Quality Standards (Chapter 11-54, HAR) for total nitrogen, total phosphorous, turbidity, and chlorophyll a. Total Maximum Daily Loads (TMDLs) have been established for the Ala Wai Canal. TMDLs are calculations of the maximum amount of total nitrogen and phosphorus that can enter the Canal without violating Hawai‘i’s Water Quality Standards.



DATE: 5/17/2015

LEGEND

-  Kupu Green Job Training Center
-  Park Improvement Area
-  Project Area

- Wetlands Type**
-  Estuarine and Marine Deepwater
 -  Estuarine and Marine Wetland

Wetlands Classification

-  M2RSN
*System: Marine
 Subsystem: Intertidal
 Class: Rocky Shore
 Water Regime: Regularly Flooded*
-  M1UBLx
*System: Marine
 Subsystem: Subtidal
 Class: Unconsolidated Bottom*
-  M1ABL
*System: Marine
 Subsystem: Subtidal
 Class: Aquatic Bed*
-  M1RF1L
*System: Marine
 Subsystem: Subtidal
 Class: Reef
 Subclass: Coral*

FIGURE 11

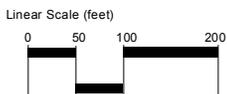
Wetlands

KUPU GREEN JOB TRAINING CENTER

Kupu North



Linear Scale (feet)



Island of Oahu



3.4.3 Near Shore Resources

Traditionally, pa‘akai harvesting, fishpond farming activities, and other marine subsistence activities took place in the nearshore waters and former reef system now partially overlain by the Project Area (Office of Hawaiian Affairs, 2013). Modern day visitors to the nearby Kaka‘ako Makai Parks still participate in some of these activities, particularly fishing. Surfing is also a popular use of the nearshore resources at Kewalo Basin Park. Competitions take place regularly during the summer months.

Potential Impacts and Mitigation Measures

The renovations improvements in the Project Area are not anticipated to have any significant adverse impact on groundwater resources. The renovations and improvements will not add any use that could contaminate groundwater.

Wetlands and surface water resources are not anticipated to be adversely impacted by renovations and improvements in the Project Area.

Renovations to the Center will reduce the amount of impervious surface area due to increased landscaping. To reduce stormwater quality/quantity impacts, renovations to the Center will mimic existing on-site drainage conditions but peak flows are likely to decrease. Best management practices will be incorporated during construction to prevent stormwater discharges from affecting coastal water quality. Best management practices may include phasing grading activities, installing silt fences and other structural controls, directing runoff to retention/detention basins, and installing temporary groundcover.

Existing infrastructure will be replaced with new low impact development (LID) Integrated Management Plans (IMPs) to manage stormwater flow permanently in way that better protects near-shore water quality from non-point pollution. IMPs are expected to include a vegetated swale within the Park Improvement Area (between the Net Shed Building and the pedestrian promenade along the ocean) in lieu of the existing concrete curb and gutter. The majority of runoff from the Net Shed Building and the adjacent area will be directed the vegetated swale and then to a concrete gutter that flows over the existing seawall and discharges into the Kewalo Basin entrance channel. The vegetated swale is expected to provide for infiltration as well as some level of bio-filtration and treatment of the stormwater. Additional IMPs may include planter boxes used for stormwater management along the Kewalo Basin channel area that may pick up additional sheetflow from areas ‘Ewa of the net shed. Finally, the renovations and improvements will not increase pesticide or fertilizer use in the Project Area.

3.5 NATURAL HAZARDS

The Hawaiian Islands are susceptible to potential natural hazards, including flooding, tsunami inundation, hurricanes, and earthquakes. The Project Area's vulnerability to such hazards is described below.

Flood. According to the Flood Insurance Rate Map (FIRM) prepared by the Federal Emergency Management Agency (FEMA), National Flood Insurance Program, the Project Area is designated as Zone AE, inundation by the one-percent-annual-chance flood. See Figure 12.

Tsunami. Since the early 1800s, approximately 50 tsunamis have been reported in Hawai'i. Seven caused major damage and two were generated locally. The Project Area is within the tsunami evacuation zone designated by the Hawai'i State Civil Defense. See Figure 13.

Hurricanes. Hurricanes are relatively rare in Hawai'i, but since 1980, two hurricanes have had a major effect on Hawai'i – Hurricane 'Iwa in 1982 and Hurricane 'Iniki in 1992. Hurricane season in Hawai'i runs from May to November. While it is difficult to predict such natural occurrences, it is reasonable to assume that future incidents are likely, given historical events. The Project Area would likely be impacted primarily by the storm surge from a hurricane, but the Net Shed Building could also be vulnerable to wind damage. These impacts will be exacerbated with sea level rise due to climate change.

Earthquakes. Unlike other areas where a shift in tectonic plates is the cause of an earthquake, in Hawai'i most earthquakes are linked to volcanic activity. Because of this unique situation, most of the thousands of earthquakes that occur in Hawai'i each year are primarily located on Hawai'i Island. The vast majority of earthquakes are so small they are detectable only with highly sensitive instruments, but there have been several damaging earthquakes in the past.

Potential Impacts and Mitigation Measures

The renovations to the Kupu Green Job Training Center will not present or exacerbate any hazard condition relating to tsunamis, hurricanes, and earthquakes, and no mitigation measures are planned or warranted at this time.

The Project Area is located in the one percent annual flood zone (Zone AE) and may be impacted by flooding during storms. Because the Project Area is near sea level, the potential impacts from flooding will be exacerbated as sea level rises as a result of global climate change. Kupu is using the Center for Island Climate Adaptation and Policy and the University of Hawai'i Sea Grant's recommendations to plan for a sea level rise of one foot by 2050 and three feet by 2100. The Center is built up well above sea level on an



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DATE: 5/17/2015

LEGEND

-  Kupu Green Job Training Center
-  Park Improvement Area
-  Project Area

Flood Insurance Rate Map Zones

-  AE Subject to inundation by the 1% annual chance flood
-  VE Subject to velocity hazard (wave action)

FIGURE 12

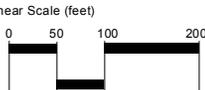
Flood Insurance Rate Map

KUPU GREEN JOB TRAINING CENTER

Kupu North



Linear Scale (feet)



Island of Oahu



PBR HAWAII & ASSOCIATES, INC.

Source: Pictometry, 2013. Federal Emergency Management Agency, 2012.

Disclaimer: This graphic has been prepared for general planning purposes only and should not be used for boundary interpretations or other spatial analysis.



DATE: 5/17/2015

LEGEND

-  Kupu Green Job Training Center
-  Park Improvement Area
-  Project Area
-  Tsunami Evacuation Zone

FIGURE 13

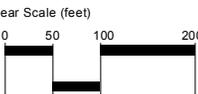
Tsunami Evacuation Zone

KUPU GREEN JOB TRAINING CENTER

Kupu North Island of Oahu



Linear Scale (feet)




Source: Pictometry, 2013. State of Hawaii Civil Defense, 2013.

Disclaimer: This graphic has been prepared for general planning purposes only and should not be used for boundary interpretations or other spatial analysis.

armored shoreline that is protected from erosion, and so a sea level rise of one to three feet will not have an inundation effect. Such a sea level rise may however increase the risk of flooding at the Center.

To mitigate against increased flood damage, in accord with the Chapter __, Section 1.8 “Flood fringe areas” of the Revised Ordinances of Honolulu (ROH)¹, renovations to the Net Shed Building will include three-foot high (minimum) waterproofed concrete masonry unit or concrete sill walls around the building along with removable flood barriers at door openings. The walls will either be newly constructed or part of the existing concrete masonry unit walls. The walls will be certified by licensed surveyor that they reach or exceed the height of the base flood elevation.

Renovations to the Center will also be designed to adhere to the rules and regulations of the National Flood Insurance Program as presented in Title 44 of the Code of Federal Regulations.

The potential impacts of hurricanes and earthquakes will be mitigated through designing all structures in compliance with the City and County of Honolulu’s building code. Impacts from natural hazards will be further mitigated by adherence to appropriate civil defense evacuation procedures. Kupu is currently developing an Enterprise Risk Management protocol, and it periodically participates in American Red Cross disaster preparedness and emergency shelter operations training.

3.6 FLORA AND FAUNA

As discussed in section 3.2, the Project Area is located on manmade land. Most of the Project Area is covered by the Net Shed Building, a large asphalt pad, an asphalt parking area, and a driveway. There are no state or federally designated threatened or endangered plants or animals known to exist in the Project Area. In a letter dated September 30, 2014, the USFWS confirmed that there is no federally designated critical habitat in the vicinity of the Project Area. However, the letter also stated that Hawaiian seabirds, specifically White fairy Terns (*Gygis alba*), protected under the Migratory Bird Treaty Act may occur within the Project Area.

The Project Area presently provides little habitat for other faunal species due to its long history of urban use and man-made landscaping. However, a number of introduced species, including feral cats and non-native birds, likely live in or frequent the Project Area.

The existing landscaping is primarily confined to the Park Improvement Area. Vegetation observed in the Park Improvement Area includes coconut palms (*Cocos nucifera*), hau (*Hibiscus tiliaceus*), Loulu palms (*Pritchardia* spp.), milo (*Thespesia populnea*), naupaka (*Scaevola taccada*), spider lily (*Crinum* spp.),

¹ As established by Ordinance 14-9, adopted May 7, 2014 by the Honolulu City Council.

monkey pod (*Albizia saman*), hala (*Pandanus tectorius*), kamani (*Calophyllum inophyllum*), kou (*Cordia subcordata*), autograph tree (*Clusia rosea*), pōhinahina (*Vitex rotundifolia*), and banana (*Musa* spp.). All of these plants are either salt tolerant or know to thrive in coastal areas. In addition, there are some recently planted, large coconut palms along the harbor channel edge of the Center.

In the late 2000s, Hālau Kū Māna charter school planted a Native Hawaiian plant garden in a small area adjacent to the Net Shed Building to provide educational opportunities for their students and educational value for patrons of the park. Some of the above listed plants may have been planted as part of this garden.

Potential Impacts and Mitigation Measures

The renovations and improvements in the Project Area are not anticipated to have any significant impact to existing flora onsite as the plants do not naturally occur in the area (given the man-made nature of the land), and the fauna is likely exclusively non-native. No rare, threatened, or endangered plants or animals are known to exist in the Project Area. As such, no mitigation measures are warranted or planned.

Additional landscaping will be facilitated by the removal of the asphalt pad, curbs, and gutters, which will be replaced with a surface that will reduce the amount of impervious surface in the Center. In particular, the large asphalt pad between the Net Shed Building and the Kewalo Basin Harbor channel will be removed to create an area more suited for Kupu’s programs and events. The renovated area will include large concrete pavers segmented by bands of grass or gravel to allow for stormwater infiltration. Planter boxes and tanks for hydroponics may also be added to the renovated area. In addition, a new rain garden and/or a vegetated swale along the harbor channel edge will allow for additional infiltration and some bio-filtration and treatment of stormwater before it enters the ocean. Added plants in the area and around the building may include shielding loulu palms and na‘u hedges. ‘Akia may be planted along walkways. All existing trees will be retained.

Following the USFWS’s recommendations to protect Hawaiian seabirds and specifically White fairy Terns, the contractor for the Center renovations will examine all trees slated to be cut for signs that White fairy Terns are present. Signs include an accumulation of white feathers or white droppings underneath the tree or structure.

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4 DESCRIPTION OF THE HUMAN ENVIRONMENT, POTENTIAL IMPACTS, AND MITIGATION MEASURES

4.1 ARCHAEOLOGICAL AND HISTORIC RESOURCES

Because the land on which the Project Area is located did not exist in full until 1955 and is made from dredged coral material, there are likely no archaeological or historic resources present.

Potential Impacts and Mitigation Measures

No impacts to significant archaeological or historic resources are anticipated as none are likely to be present. In addition, renovations and improvements in the Project Area will not require significant grading or excavation, as the renovations and improvements will be to an existing building (the Net Shed Building), the surrounding grounds, and an existing park area. Minimal grading is expected to be necessary to relocate an existing drain, create drainage swales, resurface the existing asphalt pad, and possibly add a patio area. In addition, limited trenching may be necessary for the installation of new water and sewer lines. As any expected grading and trenching is expected to be minimal, no mitigation measures are planned or warranted at this time.

However, Kupu and its contractors will comply with all state and county laws and rules regarding the preservation of archaeological and historic sites. Should historic sites such as walls, platforms, pavements and mounds, or remains such as artifacts, burials, concentrations of shell or charcoal be inadvertently encountered during the construction activities, work will cease immediately in the immediate vicinity of the find and the find will be protected. The contractor shall immediately contact the State Historic Preservation Division, which will assess the significance of the find and recommend appropriate mitigation measures, if necessary. In addition, prior to the HCDA Development Permit approval, Kupu will be required to show compliance with Section 6E-42, and Section 13-284, HRS.

4.2 CULTURAL RESOURCES

The Project Area is located in the moku of Kona, ahupua'a of Waikīkī, and 'ili of Kukuluāe'o. It is just outside the historic coastal village of Kou (known today as Downtown Honolulu). Although the land on which the Project Area is located is new as of the mid-1900s, the adjacent pre-existing lands and waters have been consistently recorded as part of an abundant and productive agri- and aquacultural landscape. Traditionally, pa'akai harvesting, fishpond farming activities, and other marine subsistence activities took place in the nearshore waters and former reef system now partially overlain by the KCDD (Office of Hawaiian Affairs, 2013).

During the Māhele, Kukuluāe‘o, which was recorded as being comprised of fishing grounds, coral flats, and salt beds, was conveyed to the Commissioners for Foreign Missions and associated with Punahou School.

In the late 19th and early 20th century, Kukuluāe‘o became a part of a large maritime industrial center. During this time, Kaka‘ako was also the location of several quarantine camps and hospitals for patients with smallpox (1853 epidemic), Hansen’s Disease (1853), and the bubonic plague (1899). Kaka‘ako became home to a sewage disposal pumping station (1899), several waste incinerators, iron works, lumber yards, a tuna cannery, and draying companies. Fort Armstrong was constructed on Ka‘ākaukukui Reef (adjacent to the west of Kaka‘ako Waterfront Park) to protect Honolulu Harbor.

Potential Impacts and Mitigation Measures

The Project Area has likely not been used for cultural purposes in recent times except potentially for fishing. However, if it has been used, the Center renovations and park improvements will not restrict the existing public access to the ocean available both through the adjacent Kewalo Basin Park and by traversing the open parts of the Project Area. Therefore, it is reasonable to conclude that the proposed renovations and improvements in the Project Area will not affect the exercise of Native Hawaiian rights, or any ethnic group, related to gathering, access or other customary activities. Kupu has also had a positive impact on the cultural heritage of the area as its programs aim to perpetuate Native Hawaiian cultural practices such as canoe carving, practicing oli, canoe navigation, and native plant cultivation.

4.3 VISUAL RESOURCES

The Center has views of the Pacific Ocean, Lē‘ahi (Diamond Head), and Waikiki. These views are somewhat obstructed by large trees planted in the Park Improvement Area.

The Primary Urban Center Development Plan identifies significant panoramic views in the region. All of the views from the Center are depicted on the Primary Urban Center Development Plan’s “Significant Panoramic Views” map. The only Significant Views from the Center that are obstructed are those of the Mānoa and Kalihi valleys from Kewalo Basin.

Potential Impacts and Mitigation Measures

The renovations and improvements in the Park Project Area will not alter the panoramic views identified in the Primary Urban Center Development Plan that are currently visible from the Project Area. The renovations and improvements also will not alter the existing quality of any significant stationary or roadway views defined in the City and County of Honolulu’s 1987 *Coastal View Study*. Most of the renovations will be done on an existing building and will not include any height or bulk change in the

building. Existing trees in the Project Area will remain, and no additional trees that could potentially block views are proposed.

4.4 NOISE

The existing ambient noise level in the vicinity of the Project Area is relatively high due to its proximity to a major road (Ala Moana Boulevard), Kewalo Basin Harbor, and the Pacific Ocean.

Potential Impacts and Mitigation Measures

Potential impacts on the ambient noise quality of the site and surrounding area due to the renovations to the Kupu Green Job Training Center will be limited to short-term construction activity.

During the construction phase, there may be temporary noise impacts associated with the operation of heavy construction machinery, paving equipment, pile driving and material transport vehicles. Proper mitigation measures will be employed to minimize construction-related noise impacts and comply with all Federal and State noise control regulations. Increased noise activity due to construction will be limited to daytime hours and persist only during the construction period. Noise from construction activities will be short-term and will comply with State DOH noise regulations (Chapter 11-46, Community Noise Control, HAR). When construction noise exceeds, or is expected to exceed, the DOH's allowable limits, a permit must be obtained from the DOH. Specific permit restrictions for construction activities are:

- No permit shall allow any construction activities that emit noise in excess of the maximum permissible sound levels before 7:00 a.m. and after 6:00 p.m. of the same day, Monday through Friday;
- No permit shall allow any construction activities that emit noise in excess of the maximum permissible sound levels before 9:00 a.m. and after 6:00 p.m. on Saturday; and
- No permit shall allow any construction activities that would emit noise in excess of the maximum permissible sound levels on Sundays and holidays.

4.5 AIR QUALITY

Air quality at the Project Area is generally considered to be good due to the presence of northeasterly trade winds that tend to disperse pollutants seaward. Vehicular traffic on nearby roadways, particularly Ala Moana Boulevard, is anticipated to be the primary source of air pollutants in the vicinity of the Project Area. DOH operates several air monitoring stations throughout the state. The closest air monitoring stations to the Project Area are the Sand Island station located in the University of Hawai'i Anuenue Fisheries Research Center, about one mile west of the Project Area, and the Honolulu Station located on Punchbowl Street on the roof of the DOH building (Kinau Hale), about one mile north of the Project Area. The Sand Island station measures concentrations of ozone, PM_{2.5} (particulate matter that is

2.5 microns or less in diameter), wind direction, and wind speed. The Honolulu Station measures concentrations of PM_{2.5}, PM₁₀ (particulate matter that is 10 microns or less in diameter), carbon monoxide, sulfur dioxide (ppm), wind direction, and wind speed.

According to the State of Hawai‘i Annual Summary 2013 Air Quality Data, at these stations, measured levels of ozone, PM₁₀, PM_{2.5}, carbon monoxide, and sulfur dioxide were well within state and federal ambient air quality standards. There are no ambient air quality standards for air toxics.

Potential Impacts and Mitigation Measures

The renovations and improvements in the Project Area will not have long-term air quality impacts. No state or federal air quality standards will be violated during or after renovations.

However, emissions from construction vehicles and equipment may temporarily affect ambient air quality in the immediate vicinity. Temporary adverse air quality impacts may also occur during site preparation and construction. Impacts will be minimized through proper maintenance of construction equipment and vehicles and, as necessary, through development and implementation of a dust control plan. Dust control measures may include watering loose soils, erecting dust screens, phasing land disturbing activities to minimize open soils, or establishing temporary groundcover. All construction activities will comply with the provisions of Chapter 11-60.1-33, HAR on fugitive dust.

4.6 ROADWAYS AND TRAFFIC

AECOM Technical Services prepared a traffic impact assessment report (TIAR) for the Kupu Green Jobs Training Center. The information from the report and the report conclusions are summarized below. Appendix C contains the complete traffic assessment report. Figure 14 shows roads and intersections in the vicinity of the Project Area.

Access to the Project Area is from Ala Moana Boulevard, therefore the traffic assessment report focused on transportation impacts along Ala Moana Boulevard including the:

- Ward Avenue intersection
- Kewalo Basin entrance driveway from Ala Moana Boulevard near Ward Avenue;
- Kewalo Basin exit driveway on to Ala Moana Boulevard,
- East Kewalo Basin driveway “T” intersection with Ala Moana Boulevard (signalized, near Kamake‘e Street); and
- Kamake‘e Street intersection



DATE: 5/26/2015

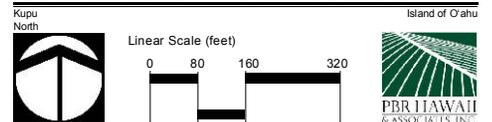
LEGEND

-  Kupu Green Job Training Center
-  Park Improvement Area
-  Project Area
-  Bus Stops
-  Bus Routes
-  Rail Stations (Proposed)
-  Rail Line (Proposed)
-  Access Points

FIGURE 14

Roadways and Public Transit

KUPU GREEN JOB TRAINING CENTER



Source: Pictometry, 2013. City and County of Honolulu, 2012 (Bus) & 2015 (Rail Transit)

Disclaimer: This graphic has been prepared for general planning purposes only and should not be used for boundary interpretations or other spatial analysis.

Ala Moana Boulevard. Ala Moana Boulevard is an ‘Ewa-Diamond Head major arterial roadway providing sub-regional access and is a major corridor for access to Waikiki. In the vicinity of Kewalo Basin, there are three lanes in each direction with a raised center median. This segment of Ala Moana Boulevard is bordered by Ward Warehouse on the mauka side and Kewalo Basin on the makai side. The State of Hawai‘i Department of Transportation (HDOT) has jurisdiction of Ala Moana Boulevard. The posted speed limit is 35 miles per hour (mph).

Ward Avenue. Ward Avenue is a mauka-makai roadway providing access between Ala Moana Boulevard and the H-1 Freeway. The Ward Avenue intersection with Ala Moana Boulevard is signalized. Ward Avenue provides two lanes in each direction, with a center left-turn lane. Makai of Ala Moana Boulevard, Ward Avenue continues as Ilalo Street which curves to align parallel with Ala Moana Boulevard. Ilalo Street provides access and vehicular circulation for the Kaka‘ako Makai area.

At the Ward Avenue intersection with Ala Moana Boulevard, the both ‘Ewa and Diamond Head-bound Ala Moana Boulevard approaches to Ward Avenue have exclusive left-turn lanes and the ‘Ewa-bound approach adds an exclusive right-turn lane. The Ward Avenue approach to Ala Moana Boulevard is configured with exclusive left, shared through-left, and shared through-right lanes. The Ilalo Street approach is configured with separate left, through, and right lanes.

In the vicinity of its intersection with Ala Moana Boulevard, both sides of Ward Avenue are lined by mostly commercial retail land uses, and on-street parallel parking is provided on the Diamond Head side of Ward Avenue between Auahi Street and Ala Moana Boulevard. The posted speed limit is 25 mph.

Kamake‘e Street. Kamake‘e Street is a mauka-makai street connecting Ala Moana Boulevard with Kapi‘olani Boulevard where it terminates. The Kamake‘e Street intersection with Ala Moana Boulevard is signalized. For most of its length, Kamake‘e Street is two lanes in each direction. Makai of Ala Moana Boulevard, Kamake‘e Street becomes Ala Moana Park Drive, an internal roadway within Ala Moana Park.

At Ala Moana Boulevard, the Kamake‘e Street and Ala Moana Park Drive approaches are configured with a shared through and left-turn lane, and an exclusive right-turn lane. Adjacent land use between Ala Moana Boulevard and Auahi Street is commercial retail and residential high-rise uses. On-street parallel parking is provided along Ala Moana Park Drive. The posted speed limit is 25 mph.

East Kewalo Basin Driveway. The East Kewalo Basin Driveway “T” intersection with Ala Moana Boulevard is signalized. However, the ‘Ewa-bound to makai-bound left turn into Kewalo Basin is not allowed at this “T” intersection. Therefore, vehicles on Ala Moana Boulevard approaching Kewalo Basin in the ‘Ewa-bound direction must either execute a U-turn at the Ward Avenue intersection or find an

alternative route to access Kewalo Basin. At the East Kewalo Basin Driveway approach to Ala Moana Boulevard, there are separate left and right turn lanes.

Kewalo Basin Entrance and Exit Driveways. Along Ala Moana Boulevard between Ward Avenue and the East Kewalo Basin Driveway, there are separate entrance and exit driveways to/from Kewalo Basin. These driveways serve primarily the ‘Ewa and mauka sides of Kewalo Basin. The Diamond Head side of Kewalo Basin is more directly served by the East Kewalo Basin Driveway. These driveways allow access from and to Diamond Head-bound Ala Moana Boulevard and are unsignalized.

Existing Traffic Conditions

Currently, during the peak PM hour (5 PM to 6 PM) intersections with Ala Moana Boulevard at Ward Avenue and Kamake‘e Street operate acceptable levels of service for urban conditions with Level of Service (LOS) C and D operation. The East Kewalo Basin Driveway intersection operates very well, with LOS A, given that only selected traffic movements are allowed.

Bicycle & Pedestrian Facilities

There are sidewalks on both sides of Ala Moana Boulevard between Ward Avenue and Kamake‘e Street. Crosswalks are provided across all legs of the Ward Avenue/Ala Moana Boulevard intersection and across all legs except the ‘Ewa leg at the Kamake‘e Street/Ala Moana Boulevard intersection. A crosswalk is provided across the East Kewalo Basin driveway.

There are no marked bicycle facilities along Ala Moana Boulevard between Ward Avenue and Kamake‘e Street. The State of Hawai‘i Bicycle Master Plan indicates future plans for bike lanes along this segment of Ala Moana Boulevard.

Public Transit

Four bus stops (two mauka side and two makai side) are located on Ala Moana Boulevard in the vicinity of Kewalo Basin. The bus stops located near Kamake‘e Street are more likely to be used by people associated with the Kupu Green Jobs Training Center. The ‘Ewa-bound stop near Kamake‘e Street is #764 and the Diamond Head-bound stop is #955.

The bus stops are served by six routes: 19, 20, 42, 55, 56, and 57/57A. Route 19 (Waikiki–Airport-Hickam) runs from around 6 AM to 12:25 AM. Route 20 (Waikiki–Airport-Pearlridge) runs from 5 AM to 6 PM. Route 42 (Waikiki–‘Ewa Beach) runs from about 4 AM to 3 AM (span of 23 hours). Route 55 (Ala Moana-Kāne‘ohe–Hale‘iwa) runs from around 5 am until 10:30 pm. Route 56 (Ala Moana-Kailua-Kāne‘ohe) runs from around 5 AM to 9:30 PM. Route 57/57A (Ala Moana-Kailua-Waimanalo) runs from around 5 AM to 10:40 PM. Service headways vary according to the time of day.

The Kupu Green Job Training Center is also under a mile from the planned Civic Center Station and less than half mile from the Kaka‘ako Station of the Honolulu Rail Transit Project (H RTP) currently under construction. The full H RTP is anticipated to be complete in 2019.

Existing Kupu Use at the Center

According to Kupu, currently the Center serves a total of approximately 24 youth/participants during weekdays, although the number of youth/participants can vary depending on what programs are offered on specific days. Almost all of these youth/participants rely on public transit to and from the Center. Kupu also provides bus passes to program participants. A small number of program participants bike or walk to the Center, and an even smaller number are dropped off.

As part of Kupu’s goal to make the Center available to various community groups, Kupu currently allows Life 360 Network, Inc. to use the Center on Sundays. Life 360 has similar goals as Kupu in that they provide educational and recreational programs for at-risk youth to positively move their lives forward. Up to 190 youth participants may come to the Sunday program and are transported by chartered bus.

Kupu also hosts various community and special events at the Center. The number of people coming to community and special events varies, but could range up to 100 people per event. Event frequency and times vary.

Potential Impacts and Mitigation Measures

The TIAR concludes that renovations to the Center are expected to have minimal traffic and other transportation impacts. Kupu estimates that with the renovations the number of youth/ participants served by the Center during weekdays would double from 24 to 40 and the number of employees/volunteers would increase from 6 to 10.

The TIAR assumed that all nearly all youth/participants served would use public transportation to and from the Center, as this is the current situation and is expected to continue. However to be conservative, the TIAR assumed that 10 percent of the youth/participants would be dropped off and picked up by someone driving a vehicle. The TIAR further assumed that all employees/volunteers would drive to the Center, although this may not be the actual situation. With these conservative assumptions, the amount of vehicular traffic generated during the weekday PM peak hour after the renovations is small: only five vehicles per hour inbound and 15 outbound. As a result, the PM peak hour weekday intersection impacts attributable to vehicular traffic from combined staff and student attendance would be minimal.

Six public transit bus routes provide service in the Ala Moana Boulevard corridor in the vicinity of Kewalo Basin. These routes have the capacity to handle youth/participants demand after the renovations.

There are adequate pedestrian facilities to allow youth/participants access between the Center and Ala Moana Boulevard. While there are no formal bicycle facilities in the vicinity of Kewalo Basin, Kamake'e Street provides reasonable access to streets such as Pohukaina and Halekauwila that provide a less intense cycling environment than Ala Moana Boulevard. Additionally, Ala Moana Park Drive and paths in Ala Moana Park provide routes for cyclists coming from the Diamond Head direction.

For Sunday church services held at the Center, youth participants will continue to be transported by chartered bus. Five buses are used to transport the youth. The five bus trips into and out of the Kewalo Basin area on Sundays will not negatively impact traffic operations on Ala Moana Boulevard.

Community and special events are expected to continue at the Center after the renovations and may increase in frequency; although the frequency and timing of the events are still expected vary. Kupu will monitor the traffic situation during special events and if it is found that special events starting during the PM Peak (5 to 6 PM weekdays) are having a significant impact on traffic conditions, Kupu can then adjust the starting times of special events so as not to have a significant impact on traffic conditions during the PM peak.

Given that the renovation of the Kupu Green Jobs Training Center is not projected to have significant impacts on traffic, transit, bicycle, or pedestrian facilities, recommendations of the TIAR of focus on actions Kupu can take to help improve non-motorized access and maintain its low impact profile.

- Avoid supply deliveries during the AM and PM peak hours of Ala Moana Boulevard;
- Continue to utilize vans/buses to transport students for excursions and recreational trips;
- Continue to provide bus passes to program participants;
- Provide bicycle parking at the “Net Shed” site;
- Monitor the traffic situation during special events and if it is found that special events starting during the PM Peak (5 to 6 PM weekdays) are having a significant impact on traffic conditions, adjust the starting times of special events so as not to have a significant impact on traffic conditions during the PM peak.
- Encourage other development within Kewalo Basin to provide pedestrian facilities that increase the redundancy of the pedestrian facility network within the area.

These recommendations will allow the Kupu Green Jobs Training Center to continue to operate in a low-impact, sustainable manner while providing important services to the community.

4.7 INFRASTRUCTURE AND UTILITIES

Group 70 International prepared preliminary engineering report for the Kupu Green Jobs Training Center. Information from the report is summarized below. Appendix D contains the complete report.

4.7.1 Water System

The Honolulu Board of Water Supply (BWS) is responsible for the management, control and operation of O'ahu's municipal water system. The BWS presently provides water service to the Kewalo Basin Park area and the Center where water is used for irrigation, bathrooms, showers, and a wash basin in the Center's existing ad hoc kitchen. From BWS's distribution line in Ala Moana Boulevard water is conveyed to Kewalo Basin Park area and the Center via private water lines within the private Kewalo Basin roadway from Ala Moana Boulevard to Kewalo Basin Park.

Existing potable water demand of the Center is estimated to be 19 gallons per minute (gpm). The capacity of the water submeter specifically for Kupu is approximately 30 gpm.

The nearest BWS fire hydrant, #M-1765, is located along the makai side Ala Moana Boulevard, east of Ala Moana Park Drive. According to BWS, the hydrant has a static pressure of 76 pounds per square inch (psi) and a residual pressure of 51 psi at a flow rate of 4,000 gpm. These numbers are based on a BWS model and do not represent the actual pressure in the field.

Figure 2 in Appendix D shows a schematic diagram of existing infrastructure, including water lines.

Potential Impacts and Mitigation Measures

The potable water demand for the renovated Kupu Green Job Training Center is expected to minimally increase primarily due to the addition of a new commercial kitchen. However, the increase may be offset by the installation of new, efficient bathroom fixtures in the relocated restrooms. Improvements to the potable water lines to the Center will include relocation of service lines to the Net Shed Building, including relocation of: 1) an existing meter near the makai/Diamond Head corner of the building; and 2) the service lateral to the building from the private waterline in the adjacent Kewalo Basin Park parking lot. However, the existing private water lines from Ala Moana Boulevard to the Kewalo Basin Park area are of sufficient size to provide potable water to the renovated Center.

In a letter dated September 17, 2014, the Honolulu Fire Department (HFD) noted the Uniform Fire Code requirements applicable to the renovations. In addition, on December 5, 2014, Kupu's civil engineer and architect met with the HFD to better understand fire protection requirements. The renovated Kupu

Green Job Training Center will be designed and operated in conformance with all applicable fire protection requirements.

As part of overall and ongoing master planning efforts for the entirety of Kewalo Basin, fire water supplies and fire vehicle access will be required by adjacent developments. HCDA has shown interest in developing the adjacent NOAA site with commercial, retail, and restaurant spaces. Such improvements would require improved fire protection, fire water service, and fire vehicle access in the immediate area and to NOAA site.

Portions the private water lines from Ala Moana Boulevard will need to be increased in size to provide adequate water fire flow pressure. In addition, the portions of the private Kewalo Basin roadway from Ala Moana Boulevard to Kewalo Basin Park may need to be improved to provide adequate turning radii for fire vehicle access requirements, particularly in areas where the main driveway weaves around the existing parking lots and planter islands. Funding design, and installation of any “off-site” fire safety improvements would be provided by HCDA or others, as necessitated by adjacent development.

Figure 4 in Appendix D shows a schematic diagram of proposed infrastructure, including water lines and fire vehicle access improvements.

4.7.2 Wastewater System

Wastewater service to the Center is provided by the City and County of Honolulu Department of Environmental Services. The Center is serviced through an existing private sewer system, which includes a 6-inch lateral sewer line from the Net Shed Building connected to a private sewer lift station located within the parking lot closest to the former National Oceanic and Atmospheric Administration (NOAA) site. The lift station includes two above ground grinder pumps and a below ground wet storage well 60 inches in diameter and approximately 11 feet deep. The private sewer system eventually discharges into a public sewer main in Ala Moana Boulevard from which wastewater flows are conveyed to the City’s Honouliuli Wastewater Treatment Plant, which provides secondary treatment of effluent.

The existing wastewater demand is minimal at 760 gpd or 19 gpm, as the Center currently only includes a men’s and women’s restroom. Wastewater generation is not constant like a fully occupied office building or school because Kupu’s classes currently are not conducted every day or on a set daily schedule.

Figure 2 in Appendix D shows a schematic diagram of existing infrastructure, including wastewater lines.

Potential Impacts and Mitigation Measures

The renovations to the Kupu Green Job Training Center are expected to minimally increase wastewater flows. According to the private operator who operates and maintains the sewer lift station for HCDA, the existing pumps, if functioning properly and within design capacity, have sufficient capacity to serve Center and minimal additional wastewater generated due to the renovations.

Slight increases to wastewater flows from the Center are expected due to the installation of a commercial kitchen and the provision of office areas that will be regularly used (as opposed to the somewhat sporadic existing uses). The increase in wastewater generation may be offset by the replacement of existing restroom fixtures with new, efficient fixtures. The kitchen wastewater demand will also be minimal, as the kitchen will be only for certain occasions, not for daily meal preparation. Appropriate site hookups for a food truck will be included in the renovations, but generated wastewater is expected to be negligible.

The wastewater flow with the renovations is estimated to be 960 gpd, or approximately 24 gpm at peak flow, an increase of 200 gpd or 5 gpm at peak flow compared to existing conditions. The existing 6-inch lateral sewer line from the Net Shed Building to the sewer lift station is sufficient in size to convey the additional wastewater flows. The flow is calculated based on the wastewater generation rates listed in Chapter 11-62, Appendix F, Table 1, HAR where the rate is 20 gallons per person per day (gpd/person) for a school (with cafeteria, but without gyms or showers).

Regarding the sewer lift station capacity to accommodate the increased flow, the below ground wet storage well can hold nearly 5,000 gallons and each grinder pump can discharge 14 gpm. With the adjacent NOAA site vacant, and the comfort station in the Kewalo Basin Park providing minimal wastewater flow, the increase in flow from the Center can be accommodated by the sewer lift station as sufficient storage volume in the below ground wet to mitigate daily wastewater volume increases and the slight increase in peak wastewater discharges.

Improvements to the existing sewer line within the Net Shed Building are anticipated to include the relocation or extension of the line from the existing restrooms to the new restrooms as well as to the new kitchen. In addition, a new, minimum grease interceptor for the kitchen will be installed outside of the building.

As part of overall and ongoing master planning efforts for the entirety of Kewalo Basin, replacement of the existing sewer lift station and sewer infrastructure will be required by adjacent developments. HCDA has shown interest in developing the adjacent NOAA site with commercial, retail, and restaurant spaces, while Howard Hughes, who leases and operates the harbor, has expressed interest in installing sewer service for boaters. Such improvements would require: 1) replacement of the existing sewer lift station

with a larger capacity sewer lift station in a new location; and 2) upsizing of force mains and gravity sewer lines from the lift station to the public sewer main in Ala Moana Boulevard. Funding design, and installation of any “off-site” sewer system improvements would be provided by HCDA or others, as necessitated by adjacent development.

Figure 4 in Appendix D shows a schematic diagram of proposed infrastructure, including sewer system improvements.

4.7.3 Drainage System

Stormwater runoff from the Center sheet flows toward the makai side of the Center. It is then collected and conveyed via concentrated flow along an existing curb and gutter that runs along the entire harbor side of the Center. Runoff is conveyed along the curb and gutter to the west toward the Kewalo Basin entrance channel, where it is conveyed over the seawall and discharges via surface flow directly to the harbor waters. Stormwater runoff from adjacent areas, including the parking lot and vacant NOAA site, discharges to other drainage facilities.

It is estimated that under a ten-year, one-hour storm event, the peak flow of stormwater runoff from the Center area would be 2.7 cubic feet per second (cfs).

Stormwater management for during-construction and post-construction stormwater discharges from new construction projects are governed by the Storm Water Management Program Plan for Kewalo Basin Harbor, September 2012 (SWMPP). Kewalo Basin also has its own Municipal Separate Storm Sewer (MS4) permit (NPDES Small MS4 Permit No. HI 03KB487).

The Center area is less than one acre, and as such, the requirements to comply with the SWMPP are the following:

- Construction BMP plan consisting primarily of the City and County of Honolulu’s Construction BMP Plan Checklist
- Any construction of a new stormwater connection will need to submit the “Kewalo Basin Private Drain Connection Permit Application.”

Potential Impacts and Mitigation Measures

Proposed hydrology and drainage patterns for the Center are expected to mimic existing conditions, but peak flows are expected to decrease due to increased landscaped areas and installation of new LID features. Asphalt pavement generally will be replaced with large concrete pavers segmented by bands of grass or gravel to allow for stormwater infiltration. Under a ten-year, one-hour storm event, the peak flow

of stormwater runoff from the Center area would be 1.69 cfs, which is 1.01 cfs less than existing conditions.

The Center's proximity to the ocean means that it will be critical to maintain runoff onsite as much as is feasible. Existing infrastructure will be replaced with new LID Integrated Management Plans (IMPs) to manage stormwater flow permanently. IMPs are expected to include a vegetated swale within the Park Improvement Area (between the Net Shed Building and the pedestrian promenade along the ocean) in lieu of the existing concrete curb and gutter. The majority of runoff from the Net Shed Building and the Lease Area will be directed the vegetated swale and then to a concrete gutter that flows over the existing seawall and discharges into the Kewalo Basin entrance channel. The vegetated swale is expected to provide for infiltration as well as some level of bio-filtration and treatment of the stormwater. Additional IMPs may include planter boxes used for stormwater management along the Kewalo Basin channel area that may pick up additional sheetflow from areas 'Ewa of the net shed. Drainage from the Lease Area will meet LEED standards for Stormwater Design Quantity and Quality.

When feasible, the contractors will schedule site work during periods of minimal rainfall to minimize contaminated runoff into the ocean. Lands denuded of vegetation will be replanted or covered as quickly as possible.

4.7.4 Electrical and Communication Systems

The Hawaiian Electric Company, Inc. provides electricity to the Center.

Potential Impacts and Mitigation Measures

The renovations to the Center will significantly decrease the electrical demand as it will become a net zero energy facility. The renovations will include the installation of photovoltaic panels that will meet all of the energy needs of the Center.

4.7.5 Solid Waste

Currently solid waste from the Center that cannot be recycled is hauled to the Campbell Industrial Park H-POWER (Honolulu Program of Waste Energy Recovery) Plant. Residual ash and non-combustible waste is disposed of at the Waimanalo Gulch Sanitary Landfill.

Potential Impacts and Mitigation Measures

Kupu currently recycles as many items as possible (such as bottles and cans). Renovations to the Center include a trash enclosure area for items that cannot be recycled and Kupu intends to improve its existing recycling efforts to limit the amount of waste generated from the Center. Kupu will also use reusable

plates for smaller groups and find second uses for food waste (such as composting or providing to local farmers for composting) when feasible.

4.8 SOCIO-ECONOMIC CHARACTERISTICS

4.8.1 Population and Housing

The KCDD is part of the Urban Honolulu Census Designated Place and is roughly made up of 86 Census blocks (Figure 15). Population in the KCDD is increasing and is expected to continue to increase in the coming decades. According to the U.S. Census, the population of the KCDD was 7,482 people in 2000 and 10,673 people in 2010, a 42 percent increase. By contrast, during the same time period, Oahu's total population increased by only 8.9 percent. HCDA projects that by 2030 the population of the KCDD will be approximately 30,000 people.

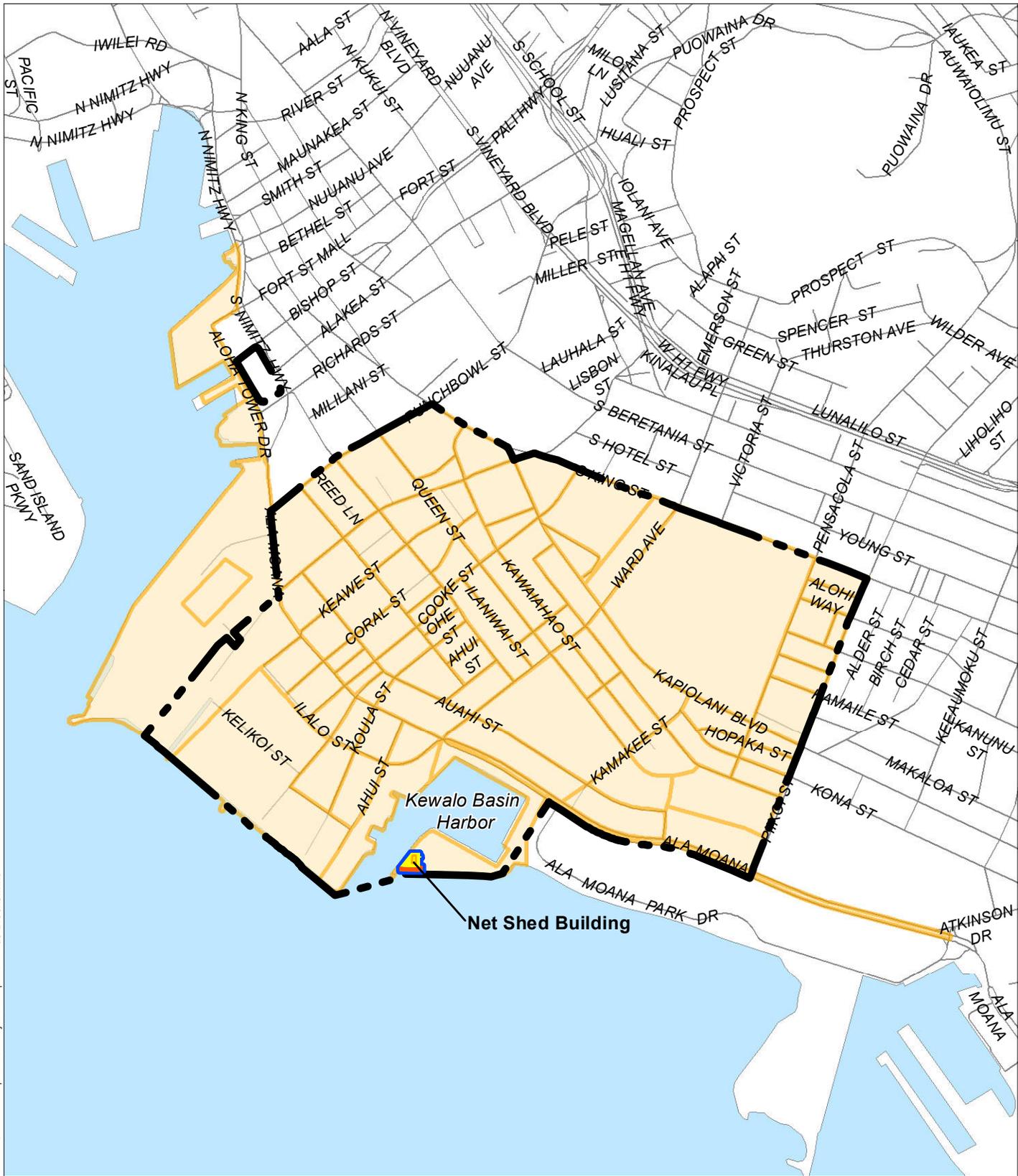
The City and County of Honolulu's General Plan seeks to distribute between 45.1 to 49.8 percent of O'ahu's population within the Primary Urban Center Development Plan area. In 2000, the Primary Urban Center had a population of 419,333 people, or 47.9 percent of O'ahu's population. Based on projections by the City DPP, O'ahu's population is projected to increase to 969,467 people by 2020. This corresponds to a desired population of 437,230 to 487,794 people within the Primary Urban Center area.

The redevelopment of the KCDD, and the new availability of housing in this area that has been largely industrial, likely accounts for much of the increase already experienced in urban Honolulu. A 2014 study by the Department of Business, Economic Development, and Tourism (DBEDT), concluded that the redevelopment of Kaka'ako was at least partly responsible for the higher rate of population growth (0.9%) in the area of Honolulu within two miles of city hall.

Table 1 shows general demographic characteristics of the KCDD and O'ahu.

Potential Impacts and Mitigation Measures

The renovations to the Kupu Green Job Training Center are not expected to impact the population of Kaka'ako or Honolulu as there will be no permanent residents at the Center.



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LEGEND

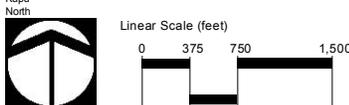
-  Kupu Green Job Training Center
-  Park Improvement Area
-  Project Area
-  Kaka'ako Community Development District
-  Kaka'ako Census Blocks

FIGURE 15

KCDD Census Blocks

KUPU GREEN JOB TRAINING CENTER

Kupu North Island of O'ahu



Linear Scale (feet)
 0 375 750 1,500



Source: U.S. Census Bureau, 2010. City and County of Honolulu, 2014.

Disclaimer: This graphic has been prepared for general planning purposes only and should not be used for boundary interpretations or other spatial analysis.

Table 1: Demographic Characteristics of the Kaka‘ako Community Development District and Oahu

	KCDD (86 Census Blocks)		Oahu	
	Number	Percent	Number	Percent
Total Population	10,673	100%	953,207	100%
Age				
Under 5 years	359	3.4%	61,261	6.4%
18 years and over	9,235	86.5%	742,707	77.9%
65 years and over	2,055	19.3%	138,490	14.5%
Median age	42.80*	--		--
Household (By type)				
Total Households	5,253	100%	311,047	100%
Average household size	2.00*	--	2.95	--
Average family size	2.60*	--	3.48	--
Housing				
Total housing units	6,131	100%	336,899	100%
Owner occupied	2,436	39.7%	174,387	51.8%
Renter occupied	2,817	45.9%	136,660	40.6%
Vacant units	878	14.3%	25,852	7.7%

Source: U.S. Census Bureau 2010

*Excludes zero values.

4.8.2 Economy and Employment

In terms of income, the largest contributors to the State of Hawai‘i’s Gross Domestic Product (GDP) are “Government,” followed by “Real Estate, Rental, & Leasing,” and the “Accommodation & Food Services” industries. Combined, these industries account for about 50 percent of the GDP. As of 2014, Hawai‘i’s real GDP is 63 billion dollars and is expected to grow by about two percent annually through at least 2017 (DBEDT, 2014). The Hawai‘i economy is highly dependent on tourism. Although visitor arrivals declined in 2013 and were up less than one percent in 2014, the overall visitor volume was at or near record levels. The Economic Research Organization at the University of Hawai‘i Office (UHERO) anticipates that both visitor arrivals and spending will increase marginally in 2015 (UHERO, 2014).

In 2014, the labor market added jobs at a slower rate than in 2013 – this slowdown was sharp for the construction industry. UHERO expects payroll job gains will continue to increase at the same relatively low rate in 2015, which will push unemployment to below 4 percent by 2016. UHERO also anticipates that

the construction industry may pick up some of the economic slack left by tourism’s stall and the downturn in federal spending. In general, Hawai‘i is now in a period of much slower growth than during the tourism-centered recovery, and this makes the state more vulnerable to economic disturbances that might come from the rest of the world (UHERO, 2014).

Since 2012, the State of Hawai‘i Environmental Council has assessed the state’s Genuine Progress Indicator (GPI), which offers a framework to move beyond GDP and adjust for hidden costs and benefits of economic growth across three categories: economic, environmental, and social. According to the Environmental Council’s 2013 report, Hawai‘i has made genuine progress since 1969, but there is divergence between the GPI and GDP, suggesting that the GDP overstates the well-being of the state.

Kaka‘ako has traditionally been an industrial area, but in recent years, as residential developments have been constructed, there has been a shift toward more of a mixed use economy. According to the unemployment insurance data from the Hawai‘i Department of Labor, there were 1,260 businesses operating in Kaka‘ako in 2012. Forty-five of these businesses fit under Kaka‘ako’s traditional economic use – Maintenance and Repair, but the remainder are categorized into a diverse mix of sectors (see Table 2). More than three-quarters of businesses in Kaka‘ako have less than ten employees.

Table 2: Kaka‘ako Businesses by Sector (2012)

Sector	Number of Businesses	Percent of Businesses
Professional, Scientific, and Technical Services	171	13.6%
Organizations	156	12.4%
Business Organization (mostly AOA)	(116)	9.2%
Retail Trade	134	10.6%
Food Services and Drinking Places	106	8.4%
Wholesale Trade	100	7.9%
Health Care Services (Ambulatory)	79	6.3%
Finance and Insurance	71	5.6%
Construction	62	4.9%
Real Estate and Rental and Leasing	56	4.4%
Administrative and Support Services	50	4.0%
Maintenance and Repair	45	3.6%
Information	33	2.6%
Other Sectors	197	15.6%
TOTAL	1,260	100%

Source: (DBEDT, 2014)

In 2015, unemployment in Hawai‘i is projected to be 3.9% (DBEDT, 2015). DBEDT projects that unemployment will continue to fall to 3.3% by 2018.

In 2014, median household income in Hawai‘i was \$67,402 (U.S. Census Bureau, 2014). In 2013, 7.9% of families in Hawai‘i had an income below the poverty level.

The top employment sectors in Hawai‘i are “Educational services, and health care and social assistance,” “Arts, entertainment, and recreation, accommodation, and food services,” and “Retail trade.” At \$53,213, public administration is the industry with the highest median earnings (U.S. Census Bureau, 2014).

In terms of general benefit to Hawai‘i’s economy, since its inception in 2007, Kupu has had a cumulative economic benefit of over \$42 million. Kupu has had a great deal of success in training and preparing several thousands of alumni, many of whom are considered underserved by the state, for employment. In 2013-2014, Kupu provided hundreds of paid internships and distributed nearly half a million dollars in college and continued education funds to Hawai‘i’s youth (Kupu, 2015). Of Kupu alumni surveyed, 90 percent are employed or enrolled in school, and 83 percent reported that Kupu helped them attain their current job. Sixty-two percent of Kupu youth that participated in 2013-14 indicated they would have been unemployed if they were not a part of Kupu (Kupu, 2015).

Potential Impacts and Mitigation Measures

The renovations to the Kupu Green Job Training Center are likely to have a positive impact on the economy and employment of Honolulu and Hawai‘i.

Construction of the renovations will provide economic benefits in the form of construction jobs, construction spending, and multiplier effects on the local economy.

In addition, the Center’s goal is to equip youth with the skills needed to facilitate the growth of the green economy and to create leadership in the growing green jobs sector, one of the fastest growing sectors of the Hawai‘i economy (DLIR, Research and Statistics Office, 2010).

Kupu was developed, in part, in response to the growing needs of Hawai‘i’s communities to train the next generation in natural resource management, renewable energy, energy conservation, and other green job skill sets. The Center will be the first “green” job training center of its kind in Honolulu and will meet the demands of this growing industry and exhibit to visitors and locals alike the concept of island sustainability and stewardship in a 21st century context. In this way, the Center will lead Hawai‘i toward a more sustainable future and build partnerships that can serve as a global model of responsible stewardship and a thriving community.

4.9 PUBLIC SERVICES AND FACILITIES

4.9.1 Schools

The Project Area is located in the Department of Education’s McKinley Complex Area. Table 3 shows the present enrollment for schools in the vicinity of the Project Area.

Table 3: 2013-2014 Enrollment for Public Schools

School	Enrollment in 2013-2014 School Year
Ka’ahumanu Elementary	597
Kaiulani Elementary	421
Kauluwela Elementary	416
Lanakila Elementary	433
Likelike Elementary	401
Royal Elementary	376
Central Middle	351
McKinley High School	1,677
Hālau Lōkahi New Century Public Charter School	176
Myron B. Thomas Academy New Century Public Charter School	525
Voyager Public Charter School	284

Source: State of Hawai‘i Department of Education, 2014

Potential Impacts and Mitigation Measures

The renovations to the Kupu Green Job Training Center will not impact student enrollment at public or private high schools as it will have no permanent residents. Therefore, no mitigation measures are warranted or planned. However, the renovations will enhance the experiential and life skill educational programs already provided by the Center to help youth and young adults succeed in life and create lifelong community servants. In particular, Kupu strives to teach youth vital life and work skills, leadership traits, social responsibility, and the value of teamwork, by incorporating vocational training, educational degree achievement, and community service. The renovations will provide more learning areas, classrooms, workshop space, and a kitchen classroom to train in culinary skills. Kupu currently provides a C-Base course to help their members obtain their diplomas while participating in Kupu programming. Renovations will better equip Kupu to assist such youth in turning their lives around. Many of Kupu’s youth are categorized as underserved by the state and would not receive the high quality training in school that they are receiving as part of Kupu.

4.9.2 Police, Fire and Medical

Police. The Project Area is located within the jurisdiction of the City and County of Honolulu Police Department’s District 1 (Honolulu), Sector 3. The Honolulu Police Headquarters is located less than one mile mauka of the Project Area at 801 South Beretania Street.

Fire. Fire protection in the vicinity of the Project Area is provided by the Honolulu Fire Department’s Headquarters, located less than one mile west of the Project Area at 636 South Street.

Medical. Within three miles of the Project Area, there are 14 medical facilities. The largest facilities are The Queen’s Medical Center, Straub Clinic and Hospital, Kapi’olani Medical Center for Women and Children, Kaiser Honolulu Clinic, and Kuakini Medical Center. Emergency medical service is provided by the City’s Department of Emergency Medical Services. The nearest Emergency Medical Service is at Straub Clinic and Hospital on King Street.

Potential Impacts and Mitigation Measures

In a letter dated September 17, 2014, the Honolulu Police Department (HPD) expressed concerns about the security of the Center and construction equipment and supplies during the evening hours due to the Center’s remoteness from Ala Moana Boulevard. The contractor will be informed of these concerns and, as they deem it necessary, will hire adequate security for the storage of construction-related equipment and supplies during the evening hours. The proposed renovations should address HPD’s security concerns with the Center as they involve enclosing the Net Shed Building with walls, thereby better controlling access to the building.

The renovations and improvements in the Park Project Area are not expected to create an increased demand on existing fire or medical services. However, HCDA has shown interest in developing the adjacent site formerly occupied by NOAA with commercial, retail, and restaurant spaces. Such improvements may require improved fire protection, fire water service, and fire vehicle access be provided to the area to the NOAA site. Figure 4 in Appendix D shows the location of the potential fire safety improvements. Funding design, and installation of any “off-site” fire safety improvements would be provided by HCDA or others, as necessitated by adjacent development.

4.9.3 Recreational Facilities

The Project Area is adjacent to the state-owned recreational facility of Kewalo Basin Park. Other nearby public recreational facilities include Ala Moana Regional/Beach Park, Kolowalu Park, Kaka‘ako Waterfront Park, Kaka‘ako Gateway Parks, Mother Waldron Park and Playground, Sand Island State Recreation Area, and Thomas Square Park.

Kewalo Basin Park is a small park makai of Kewalo Basin Harbor that includes a short walking path, a comfort station, picnic tables, and a grassed area at the Diamond Head end with a statue of Saint Marianne Cope, who cared for people with leprosy on Moloka‘i during the late 1800s. Surfers are the primary users of Kewalo Basin Park. Ala Moana Park is adjacent to Kewalo Basin Park and has a half-mile long sandy beach, lifeguards, pedestrian trails, tennis courts, a music pavilion, food concessions, and comfort stations. Sand Island State Recreation Area offers picnicking, shore fishing, surf access, and weekend-only shoreline camping. Sand Island is physically close to the Project Area (less than one mile), but the recreation area is not directly accessible across the Honolulu Channel and requires a six-mile trip from the Project Area to access.

Potential Impacts and Mitigation Measures

The renovations to the Kupu Green Job Training Center will not have a negative impact on nearby public recreational facilities and may in fact have a positive impact. Kupu’s vision is to transform not only the existing Center, but also the nearby waterfront area, into an open and inclusive space to be used for the public benefit. Kupu has strived to be a catalyst in revitalizing the area by providing a positive presence and through responsible stewardship and caring for the land.

In their pre-consultation letter dated September 17, 2014, the City and County of Honolulu Department of Parks and Recreation stated that the proposed renovations will have no impact on any program or facility of their department.

5 LAND USE CONFORMANCE

This section describes the State of Hawai‘i and City and County of Honolulu land use plans, policies, and ordinances relevant to the renovations of the existing Kupu Green Job Training Center. Each section includes discussion of how the project conforms to the plans and requirements.

5.1 STATE OF HAWAI‘I

5.1.1 State of Land Use Law, Chapter 205, Hawai‘i Revised Statutes

The State Land Use Law (Chapter 205, HRS), establishes the State Land Use Commission and authorizes this body to designate all lands in the State into one of four (4) Districts: “Urban,” “Rural,” “Agricultural,” or “Conservation.”

The Project Area is within the State Land Use Urban District (Figure 5). The Center is consistent with uses permitted in the Urban District.

5.1.2 Coastal Zone Management Act, Chapter 205A, Hawai‘i Revised Statutes

The U.S. Congress enacted the Coastal Zone Management (CZM) Act to assist states in better managing coastal and estuarine environments. The act provides grants to states that develop and implement federally-approved CZM plans. The State of Hawai‘i’s CZM Act Program was enacted pursuant to Chapter 205A, HRS. The program outlines management objectives centered around ten areas: 1) Recreational Resources; 2) Historic Resources; 3) Scenic and Open Space Resources; 4) Coastal Ecosystems; 5) Economic Uses; 6) Coastal Hazards; 7) Managing Development; 8) Public Participation in Coastal Management; 9) Beach Protection; and 10) Marine Resources. All lands within the State of Hawai‘i fall within the CZM area, including the Project Area.

The Project Area is located within the SMA (Figure 7). The objectives and policies of the Hawai‘i CZM Program, along with a detailed discussion of how the renovations and improvements in the Project Area conform to these objectives and policies, are discussed below.

(1) *Recreational resources;*

Objective: Provide coastal recreational opportunities accessible to the public.

Policies

- (A) *Improve coordination and funding of coastal recreational planning and management; and*

- (B) *Provide adequate, accessible, and diverse recreational opportunities in the coastal zone management area by:*
- (i) *Protecting coastal resources uniquely suited for recreational activities that cannot be provided in other areas;*
 - (ii) *Requiring replacement of coastal resources having significant recreational value including, but not limited to surfing sites, fishponds, and sand beaches, when such resources will be unavoidably damaged by development; or requiring reasonable monetary compensation to the State for recreation when replacement is not feasible or desirable;*
 - (iii) *Providing and managing adequate public access, consistent with conservation of natural resources, to and along shorelines with recreational value;*
 - (iv) *Providing an adequate supply of shoreline parks and other recreational facilities suitable for public recreation;*
 - (v) *Ensuring public recreational uses of county, state, and federally owned or controlled shoreline lands and waters having recreational value consistent with public safety standards and conservation of natural resources;*
 - (vi) *Adopting water quality standards and regulating point and nonpoint sources of pollution to protect, and where feasible, restore the recreational value of coastal waters;*
 - (vii) *Developing new shoreline recreational opportunities, where appropriate, such as artificial lagoons, artificial beaches, and artificial reefs for surfing and fishing; and*
 - (viii) *Encouraging reasonable dedication of shoreline areas with recreational value for public use as part of discretionary approvals or permits by the land use commission, board of land and natural resources, and county authorities; and crediting such dedication against the requirements of section 46-6;*

Discussion: The renovations to the Kupu Green Job Training Center and improvements in the Park Improvement Area will not have a negative impact on recreational resources and are expected to have a positive impact. The Center renovations and improvements in the Park Improvement Area will in no way restrict the existing public access to the ocean available through the adjacent Kewalo Basin Park. Kupu's vision is to transform not only the existing Center, but also the nearby waterfront area, into an open and inclusive space to be used for the public benefit. Kupu has strived to be a catalyst in revitalizing the area by providing a positive presence and through responsible stewardship and caring for the land. In addition, in their pre-consultation letter dated September 17, 2014, the City and County of Honolulu Department of Parks and Recreation stated that the proposed renovations will have no impact on any program or facility of their department.

(2) Historic resources;

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

Policies

- (A) *Identify and analyze significant 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: Because the land on which the Project Area is located did not exist in full until 1955 and is made from dredged coral material, there are likely no archaeological or historic resources present. In addition, the renovations and improvements in the Park Project Area will not restrict the existing public access to the ocean available through the adjacent Kewalo Basin Park. In addition, Kupu has had a positive impact on the cultural heritage of the area as its programs have re-introduced cultural practices such as canoe carving and native plant cultivation.

(3) Scenic and open space resources;

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

Policies:

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

Discussion: The Center has views of the Pacific Ocean, Lē‘ahi (Diamond Head), and Waikīkī. These views are somewhat obstructed by large trees planted in Kewalo Basin Park makai of the Center. The renovations and improvements in the Project Area will not alter the panoramic views identified in the Primary Urban Center Development Plan that are currently visible from the Center. The renovations also will not alter the existing quality of any significant stationary or roadway views defined in the City and

County of Honolulu’s 1987 *Coastal View Study*. The majority of the renovations will be done on an existing building and will not include any height or bulk change in the building.

(4) Coastal ecosystems;

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

Policies:

- (A) *Exercise an overall conservation ethic, and practice stewardship in the protection, use, and development of marine and coastal resources;*
- (B) *Improve the technical basis for natural resource management;*
- (C) *Preserve valuable coastal ecosystems, including reefs, of significant biological or economic importance;*
- (D) *Minimize disruption or degradation of coastal water ecosystems by effective regulation of stream diversions, channelization, and similar land and water uses, recognizing competing water needs; and*
- (E) *Promote water quantity and quality planning and management practices that reflect the tolerance of fresh water and marine ecosystems and maintain and enhance water quality through the development and implementation of point and nonpoint source water pollution control measures.*

Discussion: The Center will itself represent a source of sustainability – it will be a place to explore and develop concepts of island sustainability for islanders and the larger ‘global’ island from which to learn. Kupu is also dedicated to coastal, nearshore, and watershed conservation. The Center is located near the Pacific Ocean specifically to provide for direct study of marine conservation. Volunteers from Kupu have learned about traditional Hawaiian marine conservation and participated in Hawaiian fishpond management and service with several native fishpond non-profits, helped remove invasive algae from Kāne’ohe Bay, and assisted with stream restoration projects. Kupu also has an EPA grant to remove marine debris. In 2014, Kupu volunteers cleaned 2,250 meters of coastline and removed more than 2,500 pounds of debris (the majority at Kahuku Beach). In addition, renovations to the Center will reduce the amount of impervious surface area due to increased landscaping. To reduce stormwater quality/quantity impacts, renovations to the Center will mimic existing on-site drainage conditions but peak flows are likely to decrease. Existing infrastructure will be replaced with new LID IMPs to manage stormwater flow permanently in way that better protects near-shore water quality from non-point pollution.

(5) Economic uses;

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

Policies:

- (A) Concentrate coastal dependent development in appropriate areas;
- (B) Ensure that coastal dependent development such as harbors and ports, and coastal related development such as visitor industry facilities and energy generating facilities, are located, designed, and constructed to minimize adverse social, visual, and environmental impacts in the coastal zone management area; and
- (C) Direct the location and expansion of coastal dependent developments to areas presently designated and used for such developments and permit reasonable long-term growth at such areas, and permit coastal dependent development outside of presently designated areas when:
 - (i) Use of presently designated locations is not feasible;
 - (ii) Adverse environmental effects are minimized; and
 - (iii) The development is important to the State's economy.

Discussion: The Center is coastal dependent in that it is important to Kupu's mission to showcase and explore marine conservation and island sustainability. The renovations are being done on an existing building in an area (Kewalo Basin) that has been and will continue to be used for coastal dependent activities, including commercial fishing, pleasure boat activities, tourist-oriented charter boating, and surfing.

(6) Coastal hazards;

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

Policies:

- (A) Develop and communicate adequate information about storm wave, tsunami, flood, erosion, subsidence, and point and non-point source pollution hazards;
- (B) Control development in areas subject to storm wave, tsunami, flood, erosion, hurricane, wind, subsidence, and point and non-point source pollution hazards;
- (C) Ensure that developments comply with requirements of the Federal Flood Insurance Program; and
- (D) Prevent coastal flooding from inland projects.

Discussion: The renovations and improvements in the Project Area will not present or exacerbate any hazard condition relating to tsunamis, hurricanes, or other coastal hazards. However, the Project Area is

located in the one percent annual flood zone (Zone AE) and may be impacted by flooding during storms. Because the Project Area is near sea level, the potential impacts from flooding will be exacerbated as sea level rises as a result of global climate change. Kupu is using the Center for Island Climate Adaptation and Policy and the University of Hawai‘i Sea Grant’s recommendations to plan for a sea level rise of one foot by 2050 and three feet by 2100. The Center is built up well above sea level on an armored shoreline that is protected from erosion, and so a sea level rise of one to three feet will not have an inundation effect. Such a sea level rise may however increase the risk of flooding at the Center.

To mitigate against increased flood damage, in accord with the Chapter __, Section 1.8 “Flood fringe areas,” ROH², renovations to the Net Shed Building will include three-foot high (minimum) waterproofed concrete masonry unit or concrete sill walls around the building along with removable flood barriers at door openings. The walls will either be newly constructed or part of the existing concrete masonry unit walls. The walls will be certified by licensed surveyor that they reach or exceed the height of the base flood elevation. Renovations to the Center will also be designed to adhere to the rules and regulations of the National Flood Insurance Program as presented in Title 44 of the Code of Federal Regulations.

The potential impacts of hurricanes will be mitigated through designing all structures in compliance with the City and County of Honolulu’s building code. Impacts from natural hazards will be further mitigated by adherence to appropriate civil defense evacuation procedures. Kupu is currently developing an Enterprise Risk Management protocol, and it periodically participates in American Red Cross disaster preparedness and emergency shelter operations training.

(7) *Managing development;*

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

Policies:

- (A) Use, implement, and enforce existing law effectively to the maximum extent possible in managing present and future coastal zone development;*
- (B) Facilitate timely processing of applications for development permits and resolve overlapping 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.*

^{2 2} As established by Ordinance 14-9, adopted May 7, 2014 by the Honolulu City Council.

Discussion: The purpose of this EA is to communicate the potential short and long-term impacts of the proposed renovations to the Kupu Green Job Training Center and improvements in the Park Improvement Area at an early stage in the process. After it is published, the Draft EA will be made available to agencies and stakeholders for review. In addition, during the design process for the renovations, Kupu met with general public and stakeholders including Friends of Kewalos, Pacific Century Fellows Program, University of Hawai'i (UH) architecture students, President Obama Library Committee, Howard Hughes Corporation, NOAA, Kamehameha Schools, UH Natural Resource Environmental Management, Alexander and Baldwin, Office of Hawaiian Affairs, McKinley Community School for Adults, and Project Youth Outreach.

(8) Public participation;

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

Policies:

- (A) *Promote public involvement in coastal zone management processes;*
- (B) *Disseminate information on coastal management issues by means of educational materials, published reports, staff contact, and public workshops for persons and organizations concerned with coastal issues, developments, and government activities; and*
- (C) *Organize workshops, policy dialogues, and site- specific mediations to respond to coastal issues and conflicts.*

Discussion: Kupu is an educational organization that, in part, aims to promote youth involvement in the stewardship of the coastal zone. Kupu was developed, in part, in response to the growing needs of Hawai'i's communities to train the next generation in natural resource management, renewable energy, energy conservation, and other green job skill sets that are essential to coastal zone management.

(9) Beach protection;

Objective: *Protect beaches for public use and recreation.*

Policies:

- (A) *Locate new structures inland from the shoreline setback to conserve open space, minimize interference with natural shoreline processes, and minimize loss of improvements due to erosion;*
- (B) *Prohibit construction of private erosion-protection structures seaward of the shoreline, except when they result in improved aesthetic and engineering solutions to erosion at the sites and do not interfere with existing recreational and waterline activities; and*
- (C) *Minimize the construction of public erosion-protection structures seaward of the shoreline.*

Discussion: The Kupu Green Job Training Center encompasses an existing structure and a surrounding area that is primarily paved. It will not add any erosion protection structures and will not in any way restrict the existing public access to the ocean. Although the Center is located along a shoreline, the shoreline is hardened – there is no beach in the vicinity of the Center. Because of the man-made nature of the shoreline, the Center will not interfere with natural shoreline processes.

(10) Marine resources;

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

Policies:

- (A) *Ensure that the use and development of marine and coastal resources are ecologically and environmentally sound and economically beneficial;*
- (B) *Coordinate the management of marine and coastal resources and activities to improve effectiveness and efficiency;*
- (C) *Assert and articulate the interests of the State as a partner with Federal agencies in the sound management of ocean resources within the United States exclusive economic zone;*
- (D) *Promote research, study, and understanding of ocean processes, marine life, and other ocean resources in order to acquire and inventory information necessary to understand how ocean development activities relate to and impact upon ocean and coastal resources; and*
- (E) *Encourage research and development of new, innovative technologies for exploring, using, or protecting marine and coastal resources.*

Discussion: The renovations and improvements in the Project Area will not restrict the existing public access to nearby marine and coastal resources. Kupu is dedicated to coastal, nearshore, and watershed conservation. Kupu will not directly use marine and coastal resources, but the Center is located near the Pacific Ocean specifically to allow participants in Kupu’s programs to perform direct study of marine conservation. Volunteers from Kupu have learned about traditional Hawaiian marine conservation from several native fishpond non-profits, helped remove invasive algae from Kāne‘ohe Bay, and assisted with stream restoration projects. Kupu also has a U.S. Environmental Protection Agency grant to remove marine debris. In 2014, Kupu volunteers cleaned 2,250 meters of coastline and removed more than 2,500 pounds of debris (the majority at Kahuku Beach).

5.1.3 Hawai‘i State Plan

The Hawai‘i State Plan (Chapter 226, HRS), establishes goals, objectives, priorities, and priority guidelines for growth, development, and the allocation of resources throughout the state. As requested by the State Office of Planning, below is discussion regarding the ability of the Center and improvements in the Park

Improvement Area to meet Hawaii State Plan planning objectives, policies, and priority guidelines related to: growth of a diversified economic base, potential growth activities (jobs training programs), and sustainability.

§226-6 Objectives and policies for the economy--in general.

§226-6(2) Expand Hawaii's national and international marketing, communication, and organizational ties, to increase the State's capacity to adjust to and capitalize upon economic changes and opportunities occurring outside the State.

§226-10 Objective and policies for the economy--potential growth and innovative activities.

§226-10(8) Accelerate research and development of new energy-related industries based on wind, solar, ocean, underground resources, and solid waste.

Discussion: Kupu's purpose for the Center is to equip youth with the skills needed to facilitate the growth of the green economy and to create leadership in the growing green jobs sector, one of the fastest growing sectors of both the U.S. and Hawai'i economy (DLIR, Research and Statistics Office, 2010).

Kupu was developed, in part, in response to the growing needs of Hawai'i's communities to train the next generation in natural resource management, renewable energy, energy conservation, and other green job skill sets. The Center will be the first "green" job training center of its kind in Honolulu and will meet the demands of this growing industry and exhibit to visitors and locals alike the concept of island sustainability and stewardship in a 21st century context. In this way, the Center will lead Hawai'i toward a more sustainable future and build partnerships that can serve as a global model of responsible stewardship and a thriving community.

§226-108 Sustainability

§226-108 Sustainability. Priority guidelines and principles to promote sustainability shall include:

- (1) Encouraging balanced economic, social, community, and environmental priorities;*
- (2) Encouraging planning that respects and promotes living within the natural resources and limits of the State;*
- (3) Promoting a diversified and dynamic economy;*
- (4) Encouraging respect for the host culture;*
- (5) Promoting decisions based on meeting the needs of the present without compromising the needs of future generations;*
- (6) Considering the principles of the ahupuaa system; and*

- (7) *Emphasizing that everyone, including individuals, families, communities, businesses, and government, has the responsibility for achieving a sustainable Hawaii.*

Discussion: The Center will itself represent a source of sustainability, through a facility that will include photovoltaic energy panels, hydroponics for food production, waterfront preservation, and micro-enterprise entrepreneurship. It will be a place for collaboration and discussion about the topics that Hawai'i and other Pacific islands will face in the future. It will be a scalable model of island sustainability as well as economic and energy self-sufficiency; a community of interaction, learning, growth, and cooperation; and living and breathing aloha as a demonstration to the world. One of Kupu's goals for the renovation of the Center is that it be certified as Platinum under the standards of LEED for New Schools.

Kupu encourages respect for the host culture through several of its programs, which aim to perpetuate Native Hawaiian cultural practices such as canoe carving, practicing oli, canoe navigation, and native plant cultivation.

In addition, the Center will promote a diversified and dynamic economy as the first "green" job training center of its kind in Honolulu. Kupu was developed, in part, in response to the growing needs of Hawai'i's communities to train the next generation in natural resource management, renewable energy, energy conservation, and other green job skill sets. The Center will meet the demands of this growing industry and exhibit to visitors and locals alike the concept of island sustainability and stewardship in a 21st century context. In this way, the Center will lead Hawai'i toward a more sustainable future and build partnerships that can serve as a global model of responsible stewardship and a thriving community.

5.1.4 Kaka'ako Community Development District Makai Area Rules (§15-23, HAR)

The KCDD Makai Area Rules (§15-23, HAR) were enacted to guide the replanning, renewal, and redevelopment of the KCDD. Among the findings supporting the Rules is that the KCDD as the potential to become blighted and deteriorated if not redeveloped. Below is a discussion of the sections of the Makai Area Rules most relevant to the Kupu Green Job Training Center renovations and improvements in the Park Improvement Area.

§15-23-11 Development permits.

- (a) A development permit certifying that the development complies with this chapter and the makai area plan shall be obtained from the authority prior to the issuance of a building permit.

Discussion: The renovations to the existing Kupu Green Job Training Center constitute development under the definition of development in §15-23-5 that states, in part, that development means

“enlargement of an existing building or use.” Kupu is adding a second floor mezzanine, which will add floor area. Therefore, Kupu will obtain a development permit prior to construction

§15-23-40 Park areas.

Within areas designated "Park" (P), the following uses shall be permitted:

- (1) Amphitheaters;
- (2) Performing arts centers;
- (3) Museums, art galleries and workshops;
- (4) Aquariums and [marine] research facilities;
- (5) Active and passive recreation;
- (6) Gardens, greenhouses;
- (7) Parking;
- (8) Exploratoriums; and
- (9) Uses and structures which are customarily accessory and clearly incidental and subordinate to principal uses and structures. The authority may allow other uses, provided that such other uses shall further the purpose and intent of this chapter and the makai area plan.

In circumstances where there may be uncertainty about applicable provisions, the executive director shall determine which land use zone provisions apply.

Discussion: While not a specifically enumerated park use, the Kupu Green Job Training Center does “further the purpose and intent of this chapter [i.e., KCDD Makai Area Rules (§15-23, HAR)] and the makai area plan” as detailed below. The proposed land use change will require HCDA approval.

Kaka’ako Community Development District Makai Area Plan

The KCDD Makai Area Plan sets forth a number of guidelines and principles to direct development of the Makai Area so that it becomes an active, vibrant area that is dedicated and attractive to the people of Hawai‘i. The Makai Area Plan is incorporated into the Makai Area Rules by reference (§15-23-4, HAR). The Center is in the land use zone “Park” and “Waterfront Commercial” (Figure 3). According to the Makai Area Plan, “within the ‘Park’ land use zone, cultural and educational uses along with a variety of active recreation activities will be allowed and encouraged, to provide additional public resources.”

Discussion: As an educational facility, the Kupu Green Job Training Center is consistent with the “Park” land use zone under HCDA’s Makai Area Plan. Kupu’s vision is to transform not only the existing Center, but also the nearby waterfront area, into an open and inclusive space to be used for the public benefit. The Kewalo Basin Park area around the Center once had issues with crime, drugs, and homelessness, however

Kupu has strived to be a catalyst in revitalizing the area by providing a positive presence and through responsible stewardship and caring for the land.

5.1.5 Special Management Area

The Center is within the Special Management Area. See Figure 7. Pursuant to §206E-8.5, HRS, all requests for developments within the SMA within a community development district, for which a community development plan has been developed and approved in accordance with §206E-5, HRS, shall be submitted and reviewed by the Office of Planning. Because the cost of the renovations to the Center will exceed \$500,000, Kupu is required to obtain SMA use approval under §15-150-11(4), HAR. Prior to construction, Kupu will obtain a SMA use approval from the Office of Planning.

5.2 CITY AND COUNTY OF HONOLULU

County-specific land use plans and ordinances pertaining to the Project include the O‘ahu General Plan, Central O‘ahu Sustainable Community Plan and Land Use Ordinance.

5.2.1 General Plan for the City and County of Honolulu

The General Plan for the City and County of Honolulu is the policy document for the long-range development of the Island of O‘ahu. The General Plan is a statement of social, economic, environmental, and design objectives for the general welfare and prosperity of the people of O‘ahu. These objectives contain desirable conditions to be sought in the 20-year planning horizon. The General Plan also includes policies to help direct attainment of the plan’s objectives. It was originally adopted in 1977 and most recently amended in 2002.

Discussion: The renovations and improvements in the Project Area are in conformance with the relevant objectives and policies of General for the City and County of Honolulu. In particular, the renovations to the Center advance the objectives related to economic activity, energy, and the natural environment. Construction of the renovations will provide economic benefits in the form of construction jobs, construction spending, and multiplier effects on the local economy. In addition, Kupu’s purpose for the Center is to equip youth with the skills needed to facilitate the growth of the green economy and to create leadership in the growing green jobs sector, one of the fastest growing sectors of the Hawai‘i economy (DLIR, Research and Statistics Office, 2010). Kupu was developed, in part, in response to the growing needs of Hawai‘i’s communities to train the next generation in natural resource management, renewable energy, energy conservation, and other green job skill sets.

In conformance with and furtherance of the General Plan’s objectives and policies on the natural environment and energy, the Center will itself represent a source of sustainability, through a facility that

will include photovoltaic energy panels, hydroponics for food production, waterfront preservation, LID stormwater features, and micro-enterprise entrepreneurship. It will be a place for collaboration and discussion about the topics that Hawai'i and other Pacific islands will face in the future. Additionally, one of Kupu's goals for the renovation of the Center is that it be certified as Platinum under the standards of the U.S. Green Building Council's LEED for New Schools.

5.2.2 Primary Urban Center Development Plan

The Primary Urban Center (PUC) Development Plan is intended to help guide public policy, investment, and decision-making through the 2025 planning horizon. The PUC is one of two areas on O'ahu where major growth in population and economic activity will be directed. The PUC's Vision for Honolulu emphasizes retaining the qualities that attract both residents and visitors while encouraging growth and redevelopment to accommodate the projected increases in jobs and residential population.

Discussion: The renovations and improvements in the Project Area are in conformance with the relevant policies and guidelines of PUC Development Plan. In particular, the renovations further the PUC's goal of making Honolulu "the Pacific's leading city and travel destination." Kupu's vision is to transform not only the existing Center, but also the nearby waterfront area, into an open and inclusive space to be used for the public benefit. Kupu has strived to be a catalyst in revitalizing the area by providing a positive presence and through responsible stewardship and caring for the land. The Center will create a "piko," or center, of O'ahu with the first-of-its-kind facility for creating leadership in the growing green jobs sector, one of the fastest growing sectors of the Hawai'i economy (DLIR, Research and Statistics Office, 2010). In addition, the Center will be a place for collaboration and discussion about the topics that Hawai'i and other Pacific islands will face in the future.

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6 ALTERNATIVES

6.1 NO ACTION

Under the No Action Alternative, the Kupu Green Job Center would remain in its current condition. Kupu's green job training goals would be hampered as the existing Center is not enclosed, and the interior space is not sufficiently separated to serve Kupu's various programmatic needs. Kupu would like to increase the number of youth it serves through the Green Job Training Center, and the existing space does not adequately support a larger operation. In addition, the environmental benefits of the renovations, particularly the reduced peak stormwater flow and net zero energy use, would not be realized.

The No Action Alternative would deprive the community of Kupu's vision to transform not only the existing Center, but also the nearby waterfront area, into an open and inclusive space to be used for the public benefit and serve as the heartbeat of sustainability, environmental restoration, and community and cultural collaboration. These reasons make the No Action Alternative an undesirable alternative.

6.2 ALTERNATE LOCATION

Kupu explored several other sites as potential locations for its Green Job Training Center. The other sites were not as centrally located to the youth that Kupu serves as the existing Center. In addition, they did not have the proximity to public transportation services on which most of Kupu's youth rely. Finally, renovations to the buildings on the alternative sites would have been cost prohibitive. These reasons make the Alternate Location Alternative an undesirable alternative.

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7 FINDINGS AND ANTICIPATED DETERMINATION

To determine whether the renovations to the existing Kupu Green Job Training Center may have a significant impact on the physical and human environment, all phases and expected consequences of the proposed project have been evaluated, including potential primary, secondary, short-range, long-range, and cumulative impacts. Based on this evaluation, the Proposing Agency (State of Hawai'i HCDA) anticipates a Finding of No Significant Impact (FONSI). The supporting rationale for this finding is presented below.

7.1 SIGNIFICANCE CRITERIA

The discussion below evaluates the significance of the Project's impacts based upon the Significance Criteria set forth in Hawaii Administrative Rules section 11-200-12.

(1) *Involves an irrevocable commitment to loss or destruction of any natural or cultural resource;*

Discussion: The renovations and improvements in the Project Area will not involve an irrevocable commitment to, loss, or destruction of any natural or cultural resource. The renovations and improvements are being done on an existing building and within an existing park that are located on dredged land that did not exist in place until 1955.

The Center will itself represent a source of sustainability, through a facility that will include photovoltaic energy panels, hydroponics for food production, waterfront preservation, and micro-enterprise entrepreneurship. One of Kupu's goals for the renovation of the Center is that it be certified as Platinum under the standards of the LEED for New Schools.

The Project Area has likely not been used for cultural purposes in recent times except potentially for fishing. However, the Center renovations and park improvements will not restrict the existing public access to the ocean available through the adjacent Kewalo Basin Park. In fact, Kupu has had a positive impact on the cultural heritage of the area as its programs have re-introduced cultural practices such as canoe carving and native plant cultivation.

(2) *Curtails the range of beneficial uses of the environment;*

Discussion: The renovations and improvements in the Project Area will not curtail the range of beneficial uses of the environment. The renovations are being done on an existing building and within an existing park that are located on dredged land that did not exist in place until 1955. The Center renovations and park improvements will not restrict the existing public access to the ocean available through the adjacent

Kewalo Basin Park. The renovations will allow Kupu to better use the environment, particularly through reduced peak stormwater flow and net zero energy use.

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

Discussion: The environmental policies enumerated in Chapter 344, HRS promote conservation of natural resources, and an enhanced quality of life for all citizens. The renovations and improvements in the Project Area are not expected to significantly impact any natural resources. The Center will itself represent a source of sustainability, through a facility that will include photovoltaic energy panels, hydroponics for food production, waterfront preservation, and micro-enterprise entrepreneurship. It will be a place for collaboration and discussion about the topics that Hawai'i and other Pacific islands will face in the future, thereby reaching beyond the youth it serves directly to enhance quality of life for all citizens of Hawai'i.

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

Discussion: The renovations to the Kupu Green Job Training Center are likely to have a positive impact on the economic and social welfare of the community and state. Construction of the renovations will provide economic benefits in the form of construction jobs, construction spending, and multiplier effects on the local economy. In addition, Kupu's purpose for the Center is to equip youth with the skills needed to facilitate the growth of the green economy and to create leadership in the growing green jobs sector, one of the fastest growing sectors of the Hawai'i economy (DLIR, Research and Statistics Office, 2010). Kupu was developed, in part, in response to the growing needs of Hawai'i's communities to train the next generation in natural resource management, renewable energy, energy conservation, and other green job skill sets. The Center will be the first "green" job training center of its kind in Honolulu and will meet the demands of this growing industry. In this way, the Center will lead Hawai'i toward a more sustainable future and build partnerships that can serve as a global model of responsible stewardship and a thriving community.

The renovated Center also will allow Kupu to better serve its programs, participants, volunteers, and the larger community. In 2013-2014, Kupu provided hundreds of paid internships, engaged over 11,000 volunteers, and provided benefits to Hawai'i valued at nearly \$7 million. Kupu's volunteers provided over 230,000 service hours. Kupu distributed nearly half a million dollars in college and continued education funds to Hawai'i's youth. Since its inception in 2007, Kupu has had a cumulative economic benefit of over \$42 million (Kupu, 2015).

(5) *Substantially affects public health;*

Discussion: The renovations and improvements in the Project Area are envisioned to have a substantially positive affect on public health. The renovations are critical in multiplying and expanding the impact of Kupu’s programs statewide. From the Center, Kupu will develop the next generation of local talent to take the helm of the new “green” industries moving in Hawai‘i. The Center will equip youth with the skills and heart to lead the state toward a more sustainable future. Kupu’s vision is to transform not only the existing Center, but also the surrounding waterfront area, into an open and inclusive space to be used for the public benefit and serve as a model of sustainability, environmental restoration, and community and cultural collaboration.

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

Discussion: The renovations and improvements in the Project Area will not have substantial secondary impacts. The renovations will not include residential use and thus will not add any permanent population. Proposed hydrology and drainage patterns for the Center are expected to mimic existing conditions, but peak flows are expected to decrease due to increased landscaped areas and installation of new LID features. The renovated Center is not expected to have a negative impact on nearby public recreational facilities and may in fact have a positive impact. Kupu’s vision is to transform not only the existing Center, but also the nearby waterfront area, into an open and inclusive space to be used for the public benefit. Kupu has strived to be a catalyst in revitalizing the area by providing a positive presence and through responsible stewardship and caring for the land.

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

Discussion: The renovations and improvements in the Project Area will not involve a substantial degradation of environmental quality. In many ways, the renovations and improvements will improve the environmental quality of the area. The renovations and improvements are being done on an existing building existing park that are located on dredged land that did not exist in place until 1955. The Center will itself represent a source of sustainability, through a facility that will include photovoltaic energy panels, hydroponics for food production, waterfront preservation, and micro-enterprise entrepreneurship. One of Kupu’s goals for the renovation of the Center is that it be certified as Platinum under the standards of the LEED for New Schools.

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

Discussion: The renovated Center is envisioned to contribute toward a considerable positive effect on the environment by allowing Kupu to better train the next generation in natural resource management,

renewable energy, energy conservation, and other green job skill sets. The Center will be the first “green” job training center of its kind in Honolulu and will meet the demands of the growing green jobs industry. In this way, the Center will lead Hawai‘i toward a more sustainable future and build partnerships that can serve as a global model of responsible stewardship and a thriving community.

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

Discussion: No rare, threatened, or endangered plants or animals are known to exist in the Project Area. As such, no mitigation measures are warranted or planned. The renovations and improvements in the Park Project Area are not anticipated to have any significant impact to existing flora onsite as the plants do not naturally occur in the area (given the man-made nature of the land), and the fauna is likely exclusively non-native. Following the USFWS’s recommendations to protect Hawaiian seabirds and specifically White fairy Terns, the contractor for the Center renovations will examine all trees slated to be cut for signs that White fairy Terns are present. Signs include an accumulation of white feathers or white droppings underneath the tree or structure.

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

Discussion: No state or federal air quality standards will be violated during or after the renovations and improvements in the Project Area. The only anticipated issues related to air quality may be during construction; however, construction activities would be temporary. Long-term negative impacts related to air quality are not expected.

No state or federal water quality standards will be violated during or after the Center renovation or park improvements. Proposed hydrology and drainage patterns for the Center are expected to mimic existing conditions, but peak flows are expected to decrease due to increased landscaped areas and installation of new LID features.

Construction activities will inevitably create temporary noise impacts. If necessary, contractors will employ mitigation measures to minimize those temporary noise impacts including the use of mufflers and implementing construction curfew periods. Pursuant to Chapter 11-46, HAR, all construction activities must comply with all community noise controls. Long-term noise impacts are expected to return to preconstruction levels.

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

Discussion: The renovations and improvements in the Project Area are not likely to affect an environmentally sensitive area. According to the FIRM prepared by FEMA, National Flood Insurance Program, the Project Area is designated as Zone AE, inundation by the one-percent-annual-chance flood. To mitigate against increased flood damage, in accord with the Chapter __, Section 1.8 “Flood fringe areas,” ROH³, renovations to the existing Net Shed Building will include three-foot high (minimum) waterproofed concrete masonry unit or concrete sill walls around the building along with removable flood barriers at door openings. The walls will either be newly constructed or part of the existing concrete masonry unit walls. The walls will be certified by licensed surveyor that they reach or exceed the height of the base flood elevation.

(12) *Substantially affects scenic vistas and view planes identified in County or State plans or studies; or,*

Discussion: The renovations and improvements in the Project Area will not substantially affect scenic vistas and view planes identified in county or state plans or studies. Specifically, the renovations and improvements will not alter the panoramic views identified in the Primary Urban Center Development Plan that are currently visible from the Project Area. The renovations also will not alter the existing quality of any significant stationary or roadway views defined in the City and County of Honolulu’s 1987 *Coastal View Study*. The renovations will be done on an existing building and will not include any height or bulk change in the building. Existing trees in the Project Area will remain, and no additional trees that could potentially block views are proposed.

(13) *Requires substantial energy consumption.*

Discussion: The renovations to the Center and improvements in the Park Improvement Area will not require substantial energy consumption. In fact, the renovations will significantly decrease the electrical demand from existing conditions as the Center will become a net zero energy facility. The renovations will include the installation of photovoltaic panels that will meet all of the energy needs of the Center.

7.2 ANTICIPATED DETERMINATION

Pursuant to Chapter 343, HRS, the State of Hawai‘i HCDCA anticipates issuing a Finding of No Significant Impact (FONSI) based on this Environmental Assessment. This finding is founded on the basis of impacts and mitigation measures examined in this document, public comments received during the pre-consultation and public review phases, and analyzed under the above criteria.

^{3 3} As established by Ordinance 14-9, adopted May 7, 2014 by the Honolulu City Council.

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8 CONSULTATION

In the course of planning for the renovations to the existing Kupu Green Job Training Center, a pre-consultation letter was mailed out to government agencies and community stakeholders.

8.1 PRE-CONSULTATION

A pre-consultation letter regarding renovations to the Center was provided to following individuals, community organizations, private groups, and government agencies. The information notified them that an EA was being prepared and solicited concerns or comments. Those with an asterisk provided comments. The comments received and corresponding responses are reproduced in Appendix A.

STATE

- Office of Environmental Quality Control
- Department of Accounting and General Services*
- HCDA
- Department of Business, Economic Development & Tourism (DBEDT)
- DBEDT - Energy Division
- DBEDT - Office of Planning*
- Department of Defense
- Department of Education
- Department of Hawaiian Home Lands
- Department of Health*
- Department of Human Services*
- Department of Labor and Industrial Relations*
- Department of Land and Natural Resources (DLNR)*
- DLNR - Historic Preservation Division*
- Department of Transportation*
- Hawai'i Housing Finance and Development Corporation
- Office of Hawaiian Affairs*
- UH Water Resources Research Center

FEDERAL

- U.S. Army - Engineer Division*
- U.S. Fish and Wildlife Service*
- National Marine Fisheries Service*
- Federal Emergency Management Agency

COUNTY OF HONOLULU

- Department of Community Services
- Department of Environmental Services
- Department of Design and Construction*
- Department of Facility Maintenance*
- Department of Parks and Recreation*
- Department of Community Services*
- Board of Water Supply*
- Fire Department*
- Department of Planning and Permitting*
- Police Department*
- Department of Transportation Services*

LIBRARIES

- Hawai'i State Library

NEWS MEDIA

- Honolulu Star Advertiser

ELECTED OFFICIALS

- Senator Brickwood Galuteria
- Representative Tom Brower
- Representative Scott Saiki
- Councilmember Stanley Chang
- Chair Larry Hurst, Neighborhood Board No. 11

CITIZEN GROUPS/INDIVIDUALS, CONSULTED PARTIES

- Hawaiian Electric Company, Inc.*
- Friends of Kewalos*
- Kewalo Keiki Fishing Conservancy
- The Howard Hughes Corporation
- Obama Library Committee*

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**APPENDIX A:
PRE-CONSULTATION CORRESPONDENCE**

BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU
630 SOUTH BERETANIA STREET
HONOLULU, HI 96843



September 12, 2014

KIRK CALDWELL, MAYOR

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DAVID C. HULIHEE

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FORD N. FUCHIGAMI, Ex-Officio

ERNEST Y. W. LAU, P.E.
Manager and Chief Engineer

ELLEN E. KITAMURA, P.E.
Deputy Manager and Chief Engineer *ew*

Mr. Tom Schnell, Principal
PBR Hawaii & Associates, Inc.
1001 Bishop Street, Suite 650
Honolulu, Hawaii 96813-3484

Dear Mr. Schnell:

Subject: Your Letter Dated August 27, 2014 on the Environmental Assessment Pre-Consultation for the Kupu Green Training Center – Tax Map Key: 2-1-058: 128

Thank you for your letter regarding the proposed training center development.

The existing water system is adequate to accommodate the proposed development. However, please be advised that this information is based upon current data, and therefore, the Board of Water Supply 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.

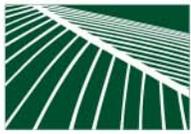
When water is made available, the applicant will be required to pay our Water System Facilities Charges for resource development, transmission and daily storage.

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 Robert Chun, Project Review Branch of our Water Resources Division at 748-5443.

Very truly yours,

ERNEST Y. W. LAU, P.E.
Manager and Chief Engineer



PBR HAWAII

& ASSOCIATES, INC.

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Vice-President

TOM SCHNELL, AICP
Principal

W. FRANK BRANDT, FASLA
Chairman Emeritus

April 14, 2015

Mr. Ernest Y.W. Lau, P.E., Manager and Chief Engineer
City and County of Honolulu
Board of Water Supply
630 South Beretania Street
Honolulu, HI 96843

SUBJECT: PRE-CONSULTATION FOR AN ENVIRONMENTAL ASSESSMENT
– KUPU GREEN JOBS TRAINING CENTER – PORTIONS OF TMK
(1) 2-10-58-128, (1) 2-10-58-127

ASSOCIATES

RAYMOND T. HIGA, ASLA
Senior Associate

KIMI MIKAMI YUEN, LEED® AP BD+C
Senior Associate

SCOTT ALIKA ABRIGO, LEED® AP BD+C
Managing Director - Kapolei

ROY TAKEMOTO
Managing Director - Hilo

SCOTT MURAKAMI, ASLA, LEED® AP
Associate

DACHENG DONG, LEED® AP
Associate

MARC SHIMATSU, ASLA
Associate

CATIE CULLISON, AICP
Associate

Dear Mr. Lau,

Thank you for your letter dated September 12, 2014 regarding our request for pre-consultation comments on the Kupu Green Jobs Training Center, which involves renovations of the “Net Shed Building” and ancillary outdoor areas adjacent to Kewalo Basin Park, Honolulu, O‘ahu.

Thank you for confirming that, based on current data, the existing water system is adequate to accommodate the Green Jobs Training Center. We acknowledge that the Board of Water Supply reserves the right to change its position until the final approval of the building permit application. When water is made available, Kupu will be prepared to pay the Water System Facilities Charge for resource development, transmission, and daily storage.

Kupu’s architect and civil engineer, have begun, and will continue, coordination with the Fire Prevention Bureau of the Honolulu Fire Department to ensure that the Green Jobs Training Center meets on-site fire protection requirements.

We appreciate your participation in the environmental review process and will inform you when the Draft EA is available.

Sincerely,

PBR HAWAII

Tom Schnell
Principal

Copy: John Leong, Kupu

HONOLULU OFFICE
1001 Bishop Street, Suite 650
Honolulu, Hawai'i 96813-3484
Tel: (808) 521-5631
Fax: (808) 523-1402
E-mail: sysadmin@pbrhawaii.com

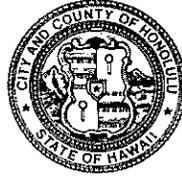
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Fax: (808) 535-3163

HILO OFFICE
1719 Haleloke Street
Hilo, Hawai'i 96720-1553
Tel/Cel: (808) 315-6878

DEPARTMENT OF DESIGN AND CONSTRUCTION
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 11TH FLOOR
HONOLULU, HAWAII 96813
Phone: (808) 768-8480 • Fax: (808) 768-4567
Web site: www.honolulu.gov

KIRK CALDWELL
MAYOR



ROBERT J. KRONING, P.E.
DIRECTOR DESIGNATE

MARK YONAMINE, P.E.
DEPUTY DIRECTOR

October 1, 2014

PBR Hawaii & Associates, Inc.
1001 Bishop Street, Suite 650
Honolulu, Hawaii 96813

Attn: Tom Schnell

Dear Mr. Schnell:

Subject: Pre-consultation for an Environmental Assessment
Kupu Green Jobs Training Center
Tax Map Key: (1) 2-10-58-128, (1) 2-10-58-127

The Department of Design and Construction does not have comments to offer on the pre-consultation environmental assessment.

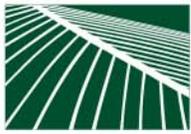
Thank you for the opportunity to review and comment. Should there be any questions, please contact me at 768-8480.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert J. Kroning".

Robert J. Kroning, P.E.
Director Designate

RJK: cf (577928)



PBR HAWAII

& ASSOCIATES, INC.

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Chairman

R. STAN DUNCAN, ASLA
President

RUSSELL Y. J. CHUNG, FASLA, LEED® AP BD+C
Executive Vice-President

VINCENT SHIGEKUNI
Vice-President

GRANT T. MURAKAMI, AICP, LEED® AP BD+C
Vice-President

TOM SCHNELL, AICP
Principal

W. FRANK BRANDT, FASLA
Chairman Emeritus

April 14, 2015

Mr. Robert J. Kroning, P.E., Director
City and County of Honolulu
Department of Design and Construction
650 South King Street, 11th Floor
Honolulu, HI 96813

SUBJECT: PRE-CONSULTATION FOR AN ENVIRONMENTAL ASSESSMENT
– KUPU GREEN JOBS TRAINING CENTER – PORTIONS OF TMK
(1) 2-10-58-128, (1) 2-10-58-127

ASSOCIATES

RAYMOND T. HIGA, ASLA
Senior Associate

KIMI MIKAMI YUEN, LEED® AP BD+C
Senior Associate

SCOTT ALIKA ABRIGO, LEED® AP BD+C
Managing Director - Kapolei

ROY TAKEMOTO
Managing Director - Hilo

SCOTT MURAKAMI, ASLA, LEED® AP
Associate

DACHENG DONG, LEED® AP
Associate

MARC SHIMATSU, ASLA
Associate

CATIE CULLISON, AICP
Associate

Dear Mr. Kroning,

Thank you for your letter dated October 1, 2014 regarding our request for pre-consultation comments on the Kupu Green Jobs Training Center, which involves renovations of the “Net Shed Building” and ancillary outdoor areas adjacent to Kewalo Basin Park, Honolulu, O‘ahu.

We acknowledge that your Department has no comments to offer at this time.

We appreciate your participation in the environmental review process and will inform you when the Draft EA is available.

Sincerely,

PBR HAWAII

Tom Schnell
Principal

Copy: John Leong, Kupu

HONOLULU OFFICE
1001 Bishop Street, Suite 650
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DEPARTMENT OF COMMUNITY SERVICES
CITY AND COUNTY OF HONOLULU

715 SOUTH KING STREET, SUITE 311 • HONOLULU, HAWAII 96813 • AREA CODE 808 • PHONE: 768-7762 • FAX: 768-7792

KIRK CALDWELL
MAYOR



PAMELA A. WITTY-OAKLAND
DIRECTOR

GARY K. NAKATA
DEPUTY DIRECTOR

September 16, 2014

Mr. Tom Schnell, Principal
PBR HAWAII
1001 Bishop Street, Suite 650
Honolulu, Hawaii 96813

Dear Mr. Schnell:

SUBJECT: Pre-Consultation for an Environmental Assessment
Kupu Green Jobs Training Center
Portions of TMK (1) 2-10-58-128 and (1) 2-10-58-127

We have reviewed your letter dated August 27, 2014, and the information and map provided regarding the Pre-Consultation for an Environmental Assessment – Kupu Green Jobs Training Center.

Our review of the information provided indicates that the proposed Kupu Green Jobs Training Center will have no adverse impacts on any Department of Community Services' activities or projects at this time.

Thank you for providing us with the opportunity to comment on this matter.

Sincerely,

A handwritten signature in blue ink, appearing to read "Pamela A. Witty-Oakland".

Pamela A. Witty-Oakland
Director

PAW:sgk



PBR HAWAII

& ASSOCIATES, INC.

PRINCIPALS

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Chairman

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President

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Executive Vice-President

VINCENT SHIGEKUNI
Vice-President

GRANT T. MURAKAMI, AICP, LEED® AP BD+C
Vice-President

TOM SCHNELL, AICP
Principal

W. FRANK BRANDT, FASLA
Chairman Emeritus

April 14, 2015

Ms. Pamela A. Witty-Oakland, Director
City and County of Honolulu
Department of Community Services
715 South King Street, Suite 311
Honolulu, HI 96813

SUBJECT: PRE-CONSULTATION FOR AN ENVIRONMENTAL ASSESSMENT
– KUPU GREEN JOBS TRAINING CENTER – PORTIONS OF TMK
(1) 2-10-58-128, (1) 2-10-58-127

ASSOCIATES

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Senior Associate

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Managing Director - Kapolei

ROY TAKEMOTO
Managing Director - Hilo

SCOTT MURAKAMI, ASLA, LEED® AP
Associate

DACHENG DONG, LEED® AP
Associate

MARC SHIMATSU, ASLA
Associate

CATIE CULLISON, AICP
Associate

Dear Ms. Witty-Oakland,

Thank you for your letter dated September 16, 2014 regarding our request for pre-consultation comments on the Kupu Green Jobs Training Center, which involves renovations of the “Net Shed Building” and ancillary outdoor areas adjacent to Kewalo Basin Park, Honolulu, O‘ahu.

We acknowledge that, in your estimation, the Kupu Green Jobs Training Center will have no adverse impacts on any of your Department’s activities or projects at this time.

We appreciate your participation in the environmental review process and will inform you when the Draft EA is available.

Sincerely,

PBR HAWAII

Tom Schnell
Principal

Copy: John Leong, Kupu

HONOLULU OFFICE
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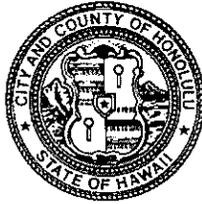
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O:\Job30\3041.01 Kupu Building EA\EA\Pre-consultation\Responses\CCH Dept. of Community Services.docx

DEPARTMENT OF FACILITY MAINTENANCE
CITY AND COUNTY OF HONOLULU

1000 Ulu'ohia Street, Suite 215, Kapolei, Hawaii 96707
Phone: (808) 768-3343 • Fax: (808) 768-3381
Website: www.honolulu.gov

KIRK CALDWELL
MAYOR



ROSS S. SASAMURA, P.E.
DIRECTOR AND CHIEF ENGINEER

EDUARDO P. MANGLALLAN
DEPUTY DIRECTOR

IN REPLY REFER TO:
DRM 14-807

September 9, 2014

Mr. Tom Schnell, AICP
Principal
PBR Hawaii and Associates, Inc
1001 Bishop Street, Suite 650
Honolulu, Hawaii 96813-3484

Dear Mr. Schnell:

SUBJECT: Pre-Consultation for an Environmental
Assessment - Kupu Green Jobs Training Center –
Portions of TMK (1) 2-10-58-128, (1) 2-10-58-127

Thank you for the opportunity to review and comment on your letter dated August 27, 2014, regarding the above subject project.

We have no comments, as we do not have any facilities or easements on the subject property.

If you have any questions, please contact Mr. Kyle Oyasato of the Division of Road Maintenance at 768-3697.

Sincerely,

A handwritten signature in black ink, appearing to read "Ross S. Sasamura".

Ross S. Sasamura, P.E.
Director and Chief Engineer



PBR HAWAII
& ASSOCIATES, INC.

PRINCIPALS

THOMAS S. WITTEN, ASLA
Chairman

R. STAN DUNCAN, ASLA
President

RUSSELL Y. J. CHUNG, FASLA, LEED® AP BD+C
Executive Vice-President

VINCENT SHIGEKUNI
Vice-President

GRANT T. MURAKAMI, AICP, LEED® AP BD+C
Vice-President

TOM SCHNELL, AICP
Principal

W. FRANK BRANDT, FASLA
Chairman Emeritus

April 14, 2015

Mr. Ross Sasamura, P.E., Director and Chief Engineer
City and County of Honolulu
Department of Facility Maintenance
1000 Ulu'ohia Street, Suite 215
Kapolei, HI 96707

**SUBJECT: PRE-CONSULTATION FOR AN ENVIRONMENTAL ASSESSMENT
– KUPU GREEN JOBS TRAINING CENTER – PORTIONS OF TMK
(1) 2-10-58-128, (1) 2-10-58-127
Your reference: DRM 14-807**

ASSOCIATES

RAYMOND T. HIGA, ASLA
Senior Associate

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Managing Director - Kapolei

ROY TAKEMOTO
Managing Director - Hilo

SCOTT MURAKAMI, ASLA, LEED® AP
Associate

DACHENG DONG, LEED® AP
Associate

MARC SHIMATSU, ASLA
Associate

CATIE CULLISON, AICP
Associate

Dear Mr. Sasamura,

Thank you for your letter dated September 9, 2014 regarding our request for pre-consultation comments on the Kupu Green Jobs Training Center, which involves renovations of the “Net Shed Building” and ancillary outdoor areas adjacent to Kewalo Basin Park, Honolulu, O‘ahu.

We acknowledge that your Department has no comments to offer at this time.

We appreciate your participation in the environmental review process and will inform you when the Draft EA is available.

Sincerely,

PBR HAWAII

Tom Schnell
Principal

Copy: John Leong, Kupu

HONOLULU OFFICE
1001 Bishop Street, Suite 650
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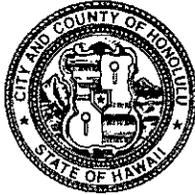
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DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 7TH FLOOR • HONOLULU, HAWAII 96813
PHONE: (808) 768-8000 • FAX: (808) 768-6041
DEPT. WEB SITE: www.honolulu.gov • CITY WEB SITE: www.honolulu.gov

KIRK CALDWELL
MAYOR



GEORGE I. ATTA, FAICP
DIRECTOR

ARTHUR D. CHALLACOMBE
DEPUTY DIRECTOR

2014/ELOG-1608(rns4)

October 1, 2014

Mr. Tom Schnell
Principal
PBR Hawaii & Associates, Inc.
1001 Bishop Street, Suite 650
Honolulu, Hawaii 96813-3484

Dear Mr. Schnell:

SUBJECT: Draft Environmental Assessment for
Kupu Green Jobs Training Center
Tax Map Key: 2-10-058: 127 and 128

Thank you for your letter dated August 27, 2014, regarding a request for comments in anticipation of preparation of a Draft Environmental Assessment (DEA) for the project listed above.

We have the following comments:

1. The DEA should include a discussion of the consistency of the project with the Oahu General Plan and the Primary Urban Center Development Plan.
2. The DEA should address drainage and storm water quality impacts.
3. The DEA should list all permits required from the City and County.
4. An existing connection to the City sewer system could not be verified. A sewer connection application is required.
5. The DEA should include a discussion of how the risk of flooding due to sea level rise will be incorporated in the design of the project and proposed operations at the project site.

The Army Corps of Engineers (COE) has issued an Engineering Circular (EC 1165-2-212) which provides guidance on likely ranges of sea level rise through 2100 which they require to be used in evaluating projects in shoreline areas subject to COE review.

Mr. Tom Schnell
October 1, 2014
Page 2

More recently they have provided online tools which can be used to adapt the circular's guidance to reflect historic sea level rise conditions measured at the closest local tidal gauge.

Using the circular as adapted to reflect the local sea level rise rate, the elevation above sea level at the project site, and the estimated life of the structures involved in the project, a determination can be made as to whether sea level rise is likely to increase the risk of flooding at the project site during the life of the project structures.

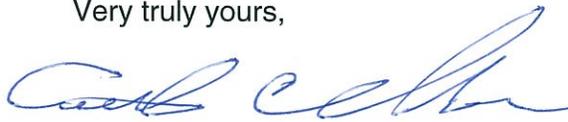
Such a determination should be made for the proposed training center, and if it is likely that sea level rise will increase the risk of flooding during the life of the structure, the DEA should discuss how the design and operation of the project will address that risk and provide resilience in recovering from any flooding.

A practical example of how the COE circular and the tidal gauge adjustments can be incorporated into a Honolulu area study is provided by the Army Corps of Engineers Ala Wai Canal Study.

For further details on how the Engineering Circular and local tidal gauge information could be used to assess sea level rise risk for a local project, contact Mr. Michael Wong, Chief, Engineering and Construction Technical Branch, Army Corps of Engineers, Honolulu District (808-835-4138).

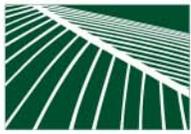
Thank you for the opportunity to provide comments prior to preparation of your DEA. Should you have any questions, please contact Bob Stanfield of our staff, at 768-8051.

Very truly yours,

A handwritten signature in blue ink, appearing to read "George I. Atta".

George I. Atta, FAICP
Director

GIA:bkg
1180062



PBR HAWAII

& ASSOCIATES, INC.

PRINCIPALS

THOMAS S. WITTEN, ASLA
Chairman

R. STAN DUNCAN, ASLA
President

RUSSELL Y. J. CHUNG, FASLA, LEED® AP BD+C
Executive Vice-President

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GRANT T. MURAKAMI, AICP, LEED® AP BD+C
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DACHENG DONG, LEED® AP
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CATIE CULLISON, AICP
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April 14, 2015

Mr. George I. Atta, FAICP
City and County of Honolulu
Department of Planning and Permitting
650 South King Street, 7th Floor
Honolulu, HI 96813

**SUBJECT: PRE-CONSULTATION FOR AN ENVIRONMENTAL ASSESSMENT
– KUPU GREEN JOBS TRAINING CENTER – PORTIONS OF TMK
(1) 2-10-58-128, (1) 2-10-58-127
Your reference: 2014/ELOG-1608(rns4)**

Dear Mr. Atta,

Thank you for your letter dated October 1, 2014 regarding our request for pre-consultation comments on the Kupu Green Jobs Training Center, which involves renovations of the “Net Shed Building” and ancillary outdoor areas adjacent to Kewalo Basin Park, Honolulu, O’ahu. As the planning consultant for Kupu, we offer the following responses in the order of your comments:

1. The Draft Environmental Assessment (EA) will include a discussion of the Kupu Green Jobs Training Center’s consistency with the State and County plans, policies, and controls, including the O’ahu General Plan and the Primary Urban Center Development Plan.
2. The Draft EA will include a description of the potential drainage and stormwater quality impacts resulting from the renovations as well as anticipated mitigation measures.
3. The Draft EA will list permits required from the City and County of Honolulu.
4. The applicant will complete a connection application to the City and County of Honolulu’s sewer system.
5. The Draft EA will include a discussion the likelihood that sea level rise will increase the risk of flooding during the life of the structure. Kupu is using the Center for Island Climate Adaptation and Policy and the University of Hawai’i Sea Grant’s recommendations to plan for a sea level rise of one foot by 2050 and three feet by 2100. The Center is built up well above sea level on an armored shoreline that is protected from erosion, and so a sea level rise of one to three feet will not have an inundation effect. Such a sea level rise may however increase the risk of flooding at the Center. Kupu will mitigate for potential flood damage in accordance with with the Chapter __, Section 1.8 “Flood fringe areas” of the Revised Ordinances of Honolulu (ROH).

Mr. George I. Atta, FAICP
PRE-CONSULTATION FOR AN ENVIRONMENTAL ASSESSMENT – KUPU GREEN
JOBS TRAINING CENTER – PORTIONS OF TMK (1) 2-10-58-128, (1) 2-10-58-127

April 23, 2015

Page 2 of 2

We appreciate your participation in the environmental review process and will inform you when the Draft EA is available.

Sincerely,

A handwritten signature in black ink, appearing to read 'Tom Schnell', written in a cursive style.

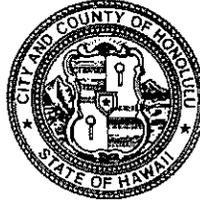
Tom Schnell
Principal

Copy: John Leong, Kupu

DEPARTMENT OF PARKS & RECREATION
CITY AND COUNTY OF HONOLULU

1000 Uluohia Street, Suite 309, Kapolei, Hawaii 96707
Phone: (808) 768-3003 • Fax: (808) 768-3053
Website: www.honolulu.gov

KIRK CALDWELL
MAYOR



MICHELE K. NEKOTA
DIRECTOR

JEANNE C. ISHIKAWA
DEPUTY DIRECTOR

September 17, 2014

Mr. Tom Schnell, Principal
PBR Hawaii & Associates
1001 Bishop Street, Suite 650
Honolulu, Hawaii 96813

Dear Mr. Schnell:

SUBJECT: Pre-Consultation for an Environmental Assessment
Kupu Green Jobs Training Center
Portions of TMK (1) 2-10-58-128, (1) 2-10-58-127

Thank you for the opportunity to review and comment at the pre-consultation stage of an environmental assessment for the Kupu Green Jobs Training Center.

The Department of Parks and Recreation has no comment. As the proposed project will have no impact on any program or facility of the department, you may remove us as a consulted party to the balance of the EIS process.

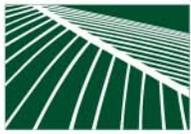
Should you have any questions, please contact Mr. John Reid, Planner, at 768-3017.

Sincerely,

A handwritten signature in black ink, reading "Michele K. Nekota". The signature is written in a cursive style.

Michele K. Nekota
Director

MKN:jr
(577908)



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& ASSOCIATES, INC.

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TOM SCHNELL, AICP
Principal

W. FRANK BRANDT, FASLA
Chairman Emeritus

April 14, 2015

Ms. Michele Nekota, Director
City and County of Honolulu
Department of Parks and Recreation
1000 Ulu'ohia Street, Suite 309
Kapolei, HI 96707

**SUBJECT: PRE-CONSULTATION FOR AN ENVIRONMENTAL ASSESSMENT
– KUPU GREEN JOBS TRAINING CENTER – PORTIONS OF TMK
(1) 2-10-58-128, (1) 2-10-58-127**

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Senior Associate

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Managing Director - Kapolei

ROY TAKEMOTO
Managing Director - Hilo

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Associate

DACHENG DONG, LEED®AP
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MARC SHIMATSU, ASLA
Associate

CATIE CULLISON, AICP
Associate

Dear Ms. Nekota,

Thank you for your letter dated September 17, 2014 regarding our request for pre-consultation comments on the Kupu Green Jobs Training Center, which involves renovations of the “Net Shed Building” and ancillary outdoor areas adjacent to Kewalo Basin Park, Honolulu, O‘ahu.

We acknowledge that your Department has no comments to offer at this time as the Kupu Green Jobs Training Center will have no impact on any program or facility of the Department of Parks and Recreation.

We appreciate your participation in the environmental review process. As you have requested to be removed as a consulted party, we will not send you any further correspondence or documents related to the Kupu Green Jobs Training Center.

Sincerely,

PBR HAWAII

Tom Schnell
Principal

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Copy: John Leong, Kupu

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DEPARTMENT OF TRANSPORTATION SERVICES
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 3RD FLOOR
HONOLULU, HAWAII 96813
Phone: (808) 768-8305 • Fax: (808) 768-4730 • Internet: www.honolulu.gov

KIRK CALDWELL
MAYOR



MICHAEL D. FORMBY
DIRECTOR

MARK N. GARRITY, AICP
DEPUTY DIRECTOR

TP8/14-577938R

September 24, 2014

Mr. Tom Schnell
Principal
PBR Hawaii & Associates, Inc.
1001 Bishop Street, Suite 650
Honolulu, Hawaii 96813-3484

Dear Mr. Schnell:

SUBJECT: Pre-Consultation for Environmental Assessment (EA) Kupu Green
Jobs Training Center; Kewalo Basin Park, Oahu, Hawaii

In response to your letter dated August 27, 2014, we have the following
comments:

1. The Draft EA should include a Traffic Impact Assessment Report to evaluate the existing traffic conditions of the surrounding roadways, possible increase in traffic and pedestrian volumes as a result of the project, including short-term impacts during construction, and measures to mitigate these impacts applying complete streets principles;
2. The area Neighborhood Board, as well as the area residents, businesses, emergency personnel, Oahu Transit Services, Inc. (TheBus), etc., should be kept apprised of the details of the proposed project and the impacts, particularly during construction, the project may have on the adjoining local street area network;
3. Any construction materials and equipment should be transferred to and from the project site during off-peak traffic hours (8:30 a.m. to 3:30 p.m.) to minimize any possible disruption to traffic on the local streets;
4. On-site bicycle facilities for the project should be anticipated and accommodated; and

Mr. Tom Schnell
September 24, 2014
Page 2

5. All access driveways to the project site should be kept safe for pedestrians and bicyclists to cross.

Thank you for the opportunity to review this matter. Should you have any questions, please contact Renee Yamasaki of my staff at 768-8383.

Very truly yours,



for Michael D. Formby
Director



PBR HAWAII

& ASSOCIATES, INC.

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April 14, 2015

Mr. Michael D. Formby, Director
City and County of Honolulu
Department of Transportation Services
650 South King Street, 3rd Floor
Honolulu, HI 96813

**SUBJECT: PRE-CONSULTATION FOR AN ENVIRONMENTAL ASSESSMENT
– KUPU GREEN JOBS TRAINING CENTER – PORTIONS OF TMK
(1) 2-10-58-128, (1) 2-10-58-127
Your reference: TP8/14-577938R**

Dear Mr. Formby,

Thank you for your letter dated September 24, 2014 regarding our request for pre-consultation comments on the Kupu Green Jobs Training Center, which involves renovations of the “Net Shed Building” and ancillary outdoor areas adjacent to Kewalo Basin Park, Honolulu, O‘ahu. As the planning consultant for Kupu, we offer the following responses in the order of your comments:

1. The proposed renovations to the Kupu Green Jobs Training Center will take place at an existing facility and the renovations are not expected to significantly impact traffic or road conditions in the vicinity. In addition, nearly all Kupu program participants are under driving age and thus do not drive to the facility. Further Kupu encourages alternative transportation use by providing bus passes to program participants. For these reasons, the Draft Environmental Assessment (EA) will not include a Traffic Impact Assessment Report.
2. During the renovations of the Kupu Green Jobs Training Center, Kupu or its contractor will inform the area Neighborhood Board, residents, businesses, emergency personnel, and O‘ahu Transit Services, Inc. of the impacts the proposed renovations will have on the adjoining local street network. A copy of the Draft EA will be made available to the Neighborhood Board.
3. As practical, the contractor will transfer construction materials and equipment to and from the site during off-peak traffic hours (8:30 a.m. to 3:30 p.m.).
4. The Kupu Green Jobs Training Center renovations will include on-site facilities to accommodate bicycles.
5. We acknowledge that all access driveways to the site should be kept safe for pedestrians and bicyclists to cross.

Mr. Michael D. Formby
PRE-CONSULTATION FOR AN ENVIRONMENTAL ASSESSMENT – KUPU GREEN
JOBS TRAINING CENTER – PORTIONS OF TMK (1) 2-10-58-128, (1) 2-10-58-127

April 7, 2015

Page 2 of 2

We appreciate your participation in the environmental review process and will inform you when the Draft EA is available.

Sincerely,

A handwritten signature in black ink, appearing to read 'Tom Schnell', written in a cursive style.

Tom Schnell
Principal

Copy: John Leong, Kupu

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NEIL ABERCROMBIE
GOVERNOR



Dean H. Seki
Comptroller

Maria E. Zielinski
Deputy Comptroller

STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES

P.O. BOX 119, HONOLULU, HAWAII 96810-0119

SEP - 4 2014

(P)1284.4

Mr. Tom Schnell, Principal
PBR Hawaii & Assoc., Inc.
1001 Bishop Street, Suite 650
Honolulu, Hawaii 96813

Dear Mr. Schnell:

Subject: Environmental Assessment
Kupu Green Jobs Training Center
Portions of TMK: (1) 2-10-58-128, (1) 2-10-58-127

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

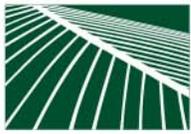
If you have any questions, your staff may call Mr. Alva Nakamura of the Public Works Division at 586-0488.

Sincerely,

A handwritten signature in blue ink, appearing to be "D. Seki", with a long horizontal line extending to the right.

DEAN H. SEKI
Comptroller

c: Mr. John Leong, Kupu
Mr. Carson Schultz, DBEDT/HCDA



PBR HAWAII

& ASSOCIATES, INC.

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W. FRANK BRANDT, FASLA
Chairman Emeritus

April 14, 2015

Mr. Dean H. Seki, Comptroller
State of Hawai'i
Department of Accounting and General Services
P.O. Box 119
Honolulu, HI 96810-0119

SUBJECT: PRE-CONSULTATION FOR AN ENVIRONMENTAL ASSESSMENT
– KUPU GREEN JOBS TRAINING CENTER – PORTIONS OF TMK
(1) 2-10-58-128, (1) 2-10-58-127
Your reference: (P)1284.4

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MARC SHIMATSU, ASLA
Associate

CATIE CULLISON, AICP
Associate

Dear Mr. Seki,

Thank you for your letter dated September 4, 2014 regarding our request for pre-consultation comments on the Kupu Green Jobs Training Center, which involves renovations of the “Net Shed Building” and ancillary outdoor areas adjacent to Kewalo Basin Park, Honolulu, O‘ahu.

We acknowledge that your Department has no comments to offer at this time.

We appreciate your participation in the environmental review process and will inform you when the Draft EA is available..

Sincerely,

PBR HAWAII

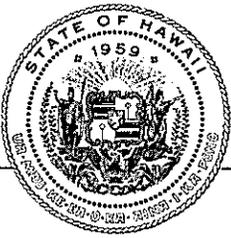
Tom Schnell
Principal

Copy: John Leong, Kupu

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OFFICE OF PLANNING STATE OF HAWAII

NEIL ABERCROMBIE
GOVERNOR

LEO R. ASUNCION
ACTING DIRECTOR
OFFICE OF PLANNING

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

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

Ref. No. P-14511

September 19, 2014

Mr. Tom Schnell, AICP
PBR Hawaii & Associates, Inc.
1001 Bishop Street, Suite 650
Honolulu, Hawaii 96813-3484

Dear Mr. Schnell:

Subject: Early Consultation for a Draft Environmental Assessment for the Kupu Green Jobs Training Center; TMK: (1) 2-1-058:128, (1) 2-1-058:127

Thank you for the opportunity to provide early consultation comments on the Kupu Green Jobs Training Center. We have reviewed the documents sent to us by letter dated August 27, 2014, and have the following comments to offer:

1. The Office of Planning (OP) provides technical assistance to state and county agencies in administering the statewide planning system in Hawaii Revised Statutes (HRS) Chapter 226, the Hawaii State Plan. The Hawaii State Planning Act provides goals, objectives, priorities, and priority guidelines for growth, development, and the allocation of resources throughout the State. The Hawaii State Plan includes diverse policies and objectives of state interest including but not limited to the economy, agriculture, the visitor industry, federal expenditure, the physical environment, facility systems, and socio-cultural advancement.

Because this project intends to develop a jobs training center, please include a discussion on how this project's ability to meet the planning objectives, policies and priority guidelines of the Hawaii State Plan, including but not limited to, HRS § 226-6(2) growth of a diversified economic base, HRS § 226-10(8) potential growth activities (job training programs), as well as the priority guidelines on sustainability listed in HRS § 226-108 sustainable development and resource conservation. The Draft Environmental Assessment (Draft EA) should include an analysis on the Hawaii State Plan, HRS Chapter 226, in a section that addresses the project's consistency to state and county plans, policies, and controls.

2. OP is the lead agency for the Hawaii Coastal Zone Management (CZM) Program. The coastal zone management area is defined as "all lands of the State and the area extending seaward from the shoreline to the limit of the State's police power and management authority, including the U.S. territorial sea" see HRS § 205A-1 (definition of "coastal zone management area"). The Draft EA should include a

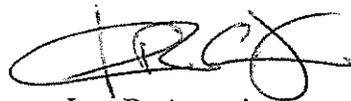
discussion of the proposed project's ability to meet all of the objectives and policies set forth in HRS § 205A-2. These objectives and policies include: recreational resources, historic resources, scenic and open space resources, coastal ecosystems, economic uses, coastal hazards, managing development, public participation, and marine resources. The Draft EA should include the Coastal Zone Management Act, HRS Chapter 205A, in a section that addresses the project's conformance with state and county plans, policies, and controls.

3. The proposed project is located within the makai area of Kakaako area. Pursuant to HRS § 206E-8.5, all requests for developments within a special management area (SMA) and shoreline setback variances for developments within a community development district, for which a community development plan has been developed and approved in accordance with HRS § 206E-5, shall be submitted to and reviewed by OP. Please consult with our office and refer to Hawaii Administrative Rules Chapter 15-150 for the requirements of SMA use and shoreline setbacks.
4. Although this project is situated in an area that is typically dry and sunny, the entire island of Oahu, in general, is subject to flashy and unstable weather during the winter and tropical storms throughout the year. Please consider utilizing OP's *Stormwater Impact Assessment* to identify and evaluate information on hydrology, stressors, sensitivity of aquatic and riparian resources, and management measures to control runoff occurrences. In particular, please examine the section on Low-Impact Development Concepts, which include decentralized micro-scale controls that infiltrate, filter, store, reuse, evaporate, and detain runoff close to its source.

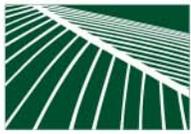
This guidance document will assist in integrating stormwater impact assessment within your review process. The purpose of this document is to provide guidance on assessing stormwater impacts in the planning phase of project development. The goal is to provide a suggested framework and various tools for integrating stormwater impacts assessment. These concepts are listed on pages 14 through 16 of the *Stormwater Impact Assessment* guidance. This can be found at http://files.hawaii.gov/dbedt/op/czm/initiative/stomwater_imapct/final_stormwater_impact_assessments_guidance.pdf.

If you have any questions regarding this comment letter, please contact Josh Hekekoa of our office at 587-2845.

Sincerely,



Leo R. Asuncion
Acting Director



PBR HAWAII

& ASSOCIATES, INC.

April 14, 2015

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Mr. Leo R. Asuncion
State of Hawai'i, Office of Planning
P.O. Box 2359
Honolulu, HI 96804

**SUBJECT: PRE-CONSULTATION FOR AN ENVIRONMENTAL ASSESSMENT
– KUPU GREEN JOBS TRAINING CENTER – PORTIONS OF TMK
(1) 2-10-58-128, (1) 2-10-58-127
Your reference: P-14511**

Dear Mr. Asuncion,

Thank you for your letter dated September 19, 2014 regarding our request for pre-consultation comments on the Kupu Green Jobs Training Center, which involves renovations of the “Net Shed Building” and ancillary outdoor areas adjacent to Kewalo Basin Park, Honolulu, O‘ahu. As the planning consultant for Kupu, we offer the following responses in the order of your comments:

1. The Draft Environmental Assessment (EA) will include a discussion of the ability of the Kupu Green Jobs Training Center to meet Hawaii State Plan planning objectives, policies, and priority guidelines related to: growth of a diversified economic base, potential growth activities (jobs training programs), and sustainability. The Draft EA also will include a discussion of consistency with other State and County plans, policies, and controls.
2. The Draft EA will include a discussion of the Kupu Green Jobs Training Center’s ability to meet the objectives and policies set forth in §205A-2 Hawaii Revised Statutes (HRS). The Draft EA also will include the Coastal Management Act, Chapter 205A, HRS in a section titled “Relationship to Land Use Plans, Policies, and Controls,” which addresses the project’s conformance with state and county plans, policies, and controls.
3. Following the anticipated Finding of No Significant Impact for the EA, a Special Management Area Use Approval Application will be prepared and submitted to the Office of Planning in accordance with §206E-8.5, HRS. In preparing that application, we will refer to Chapter 15-150, Hawai‘i Administrative Rules.
4. We will review the Office of Planning’s *Stormwater Impact Assessment* to ensure that the Kupu Green Jobs Training Center incorporates best practices related to stormwater design and low-impact development.

We appreciate your participation in the environmental review process and will inform you when the Draft EA is available.

Sincerely,

Tom Schnell

Mr. Leo R. Asuncion
PRE-CONSULTATION FOR AN ENVIRONMENTAL ASSESSMENT – KUPU GREEN
JOBS TRAINING CENTER – PORTIONS OF TMK (1) 2-10-58-128, (1) 2-10-58-127
April 7, 2015
Page 2 of 2

Principal

Copy: John Leong, Kupu

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STATE OF HAWAII
DEPARTMENT OF HUMAN SERVICES
Benefit, Employment & Support Services Division
820 Millilani Street, Suite 606
Honolulu, Hawaii 96813

September 5, 2014

Refer to 14-0556

PBR HAWAII & Associates, Inc.
Attn: Tom Schnell
1001 Bishop Street, Suite 650
Honolulu, Hawaii 96813-3484

Subject: Draft Environmental Assessment (EA) for the Kupu Green Jobs Training Center located at Kewalo Basin Park, Ala Wai Watershed, Honolulu Judicial District, Oahu Island TMK: (1) 2-10-58:128 (portion), (1) 2-10-58:127 (portion)

Dear Mr. Schnell:

Thank you for your letter dated August 27, 2014 that requests the Department of Human Services (DHS) review the Pre-Consultation for an Environmental Assessment (EA) on the Kupu Green Jobs Training Center project. We understand that renovations would be for the area commonly known as the "Net Shed Building" and surrounding outdoor areas.

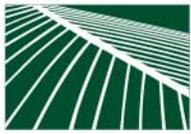
The DHS has reviewed the EA of the proposed project. As there are currently no child care facilities in the immediate vicinity, the DHS has no comment at this time.

If you have any questions or need further information, please contact Ms. Dayna Luka, Child Care Program Specialist, at (808) 586-7058.

Sincerely,

Scott Nakasone
Assistant Division Administrator

c: Patricia McManaman, DHS Director



PBR HAWAII

& ASSOCIATES, INC.

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President

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VINCENT SHIGEKUNI
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April 14, 2015

Mr. Scott Nakasone, Assistant Division Administrator
State of Hawai'i
Department of Human Services
Benefit, Employment, and Support Services Division
820 Mililani Street, Suite 606
Honolulu, HI 96813

SUBJECT: PRE-CONSULTATION FOR AN ENVIRONMENTAL ASSESSMENT
– KUPU GREEN JOBS TRAINING CENTER – PORTIONS OF TMK
(1) 2-10-58-128, (1) 2-10-58-127
Your reference: 14-0556

Dear Mr. Nakasone,

Thank you for your letter dated September 5, 2014 regarding our request for pre-consultation comments on the Kupu Green Jobs Training Center, which involves renovations of the "Net Shed Building" and ancillary outdoor areas adjacent to Kewalo Basin Park, Honolulu, O'ahu.

We acknowledge that your Department has no comments to offer at this time.

We appreciate your participation in the environmental review process and will inform you when the Draft EA is available.

Sincerely,

PBR HAWAII

Tom Schnell
Principal

Copy: John Leong, Kupu

NEIL ABERCROMBIE
GOVERNOR



DWIGHT TAKAMINE
DIRECTOR

JADE T. BUTAY
DEPUTY DIRECTOR

STATE OF HAWAII
DEPARTMENT OF LABOR AND INDUSTRIAL RELATIONS

830 PUNCHBOWL STREET, ROOM 321
HONOLULU, HAWAII 96813
www.hawaii.gov/labor
Phone: (808) 586-8844/Fax: (808) 586-9099

September 8, 2013

Tom Schnell
Principal
PBR Hawaii and Associates, Inc.
1001 Bishop Street, Suite 650
Honolulu, Hawaii 96813-3484

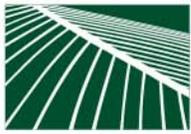
Dear Mr. Tom Schnell:

This is in response to your request for comments dated August 27, 2014 on the Environmental Assessment report for the Kapu Green Jobs Training Center project in Kewalo Basin Park on the island of Oahu.

The Department of Labor and Industrial Relations has no comments, and we foresee no impact on our existing or proposed programs. Should you have any questions, please call me at (808) 586-8844.

Sincerely,

DWIGHT TAKAMINE
Director



PBR HAWAII

& ASSOCIATES, INC.

PRINCIPALS

THOMAS S. WITTEN, ASLA
Chairman

R. STAN DUNCAN, ASLA
President

RUSSELL Y. J. CHUNG, FASLA, LEED®AP BD+C
Executive Vice-President

VINCENT SHIGEKUNI
Vice-President

GRANT T. MURAKAMI, AICP, LEED®AP BD+C
Vice-President

TOM SCHNELL, AICP
Principal

W. FRANK BRANDT, FASLA
Chairman Emeritus

April 14, 2015

Mr. Dwight Takamine, Director
State of Hawai'i
Department of Labor and Industrial Relations
830 Punchbowl Street, Room 321
Honolulu, HI 96813

SUBJECT: PRE-CONSULTATION FOR AN ENVIRONMENTAL ASSESSMENT
– KUPU GREEN JOBS TRAINING CENTER – PORTIONS OF TMK
(1) 2-10-58-128, (1) 2-10-58-127

ASSOCIATES

RAYMOND T. HIGA, ASLA
Senior Associate

KIMI MIKAMI YUEN, LEED®AP BD+C
Senior Associate

SCOTT ALIKA ABRIGO, LEED®AP BD+C
Managing Director - Kapolei

ROY TAKEMOTO
Managing Director - Hilo

SCOTT MURAKAMI, ASLA, LEED®AP
Associate

DACHENG DONG, LEED®AP
Associate

MARC SHIMATSU, ASLA
Associate

CATIE CULLISON, AICP
Associate

Dear Mr. Takamine,

Thank you for your letter dated September 8, 2014 regarding our request for pre-consultation comments on the Kupu Green Jobs Training Center, which involves renovations of the “Net Shed Building” and ancillary outdoor areas adjacent to Kewalo Basin Park, Honolulu, O‘ahu.

We acknowledge that your Department has no comments to offer at this time.

We appreciate your participation in the environmental review process and will inform you when the Draft EA is available.

Sincerely,

PBR HAWAII

Tom Schnell
Principal

Copy: John Leong, Kupu

HONOLULU OFFICE
1001 Bishop Street, Suite 650
Honolulu, Hawai'i 96813-3484
Tel: (808) 521-5631
Fax: (808) 523-1402
E-mail: sysadmin@pbrhawaii.com

KAPOLEI OFFICE
1001 Kamokila Boulevard
Kapolei Building, Suite 313
Kapolei, Hawai'i 96707-2005
Tel: (808) 521-5631
Fax: (808) 535-3163

HILO OFFICE
1719 Haleloke Street
Hilo, Hawai'i 96720-1553
Tel/Cel: (808) 315-6878

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



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



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

September 25, 2014

PBR Hawaii & Associates, Inc.
Attn: Tom Schnell
1001 Bishop Street, Suite 650
Honolulu, HI 96813-3484

via email: tschnell@pbrhawaii.com

Dear Mr. Schnell,

SUBJECT: Pre-Consultation for an Environmental Assessment – Kupu Green Jobs Training Center

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

At this time, enclosed are comments from (1) Land Division – Oahu District; (2) Division of Forestry & Wildlife; (3) Division of Boating and Ocean Recreation; (4) Commission on Water Resource Management; and (5) Division of Aquatic Resources. No other comments were received as of our suspense date. Should you have any questions, please feel free to call Supervising Land Agent Steve Molmen at 587-0439. Thank you.

Sincerely,

A handwritten signature in blue ink, appearing to read "Russell Y. Tsuji".

Russell Y. Tsuji
Land Administrator

Enclosure(s)



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

September 4, 2014

MEMORANDUM

TO: **DLNR Agencies:**
 Div. of Aquatic Resources
 Div. of Boating & Ocean Recreation
 Engineering Division
 Div. of Forestry & Wildlife
 Div. of State Parks
 Commission on Water Resource Management
 Office of Conservation & Coastal Lands
 Land Division – Oahu District
 Historic Preservation

FROM: *R* Russell Y. Tsuji, Land Administrator *RT*

SUBJECT: Pre-Consultation for an Environmental Assessment – Kupu Green Jobs Training Center

LOCATION: Portions of TMK (1) 2-10-58-128, (1) 2-10-58-127

APPLICANT: Kupu Green Jobs Training Center by its consultant, PBR HAWAII & Associates

Transmitted for your review and comment on the above-referenced document. We would appreciate your comments on this document.

Please submit any comments by **September 24, 2014**. If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact Supervising Land Agent Steve Molmen at (808) 587-0439. Thank you.

Attachments

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

Signed: *T. Aila*
 Print Name: *W. J. Aila, Jr.*
 Date: *9/8/14*



RECEIVED
LAND DIVISION

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

2014 SEP -8 PM 2:38



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION
POST OFFICE BOX 621
HONOLULU, HAWAII 96809

September 4, 2014

MEMORANDUM

- ~~TO:~~ From: **DLNR Agencies:**
- Div. of Aquatic Resources
 - Div. of Boating & Ocean Recreation
 - Engineering Division
 - Div. of Forestry & Wildlife
 - Div. of State Parks
 - Commission on Water Resource Management
 - Office of Conservation & Coastal Lands
 - Land Division – Oahu District
 - Historic Preservation

FROM: To.. *[Signature]* Russell Y. Tsuji, Land Administrator *[Signature]*

SUBJECT: Pre-Consultation for an Environmental Assessment – Kupu Green Jobs Training Center

LOCATION: Portions of TMK (1) 2-10-58-128, (1) 2-10-58-127

APPLICANT: Kupu Green Jobs Training Center by its consultant, PBR HAWAII & Associates

Transmitted for your review and comment on the above-referenced document. We would appreciate your comments on this document.

Please submit any comments by **September 24, 2014**. If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact Supervising Land Agent Steve Molmen at (808) 587-0439. Thank you.

Attachments

- We have no objections.
- We have no comments.
- Comments are attached.

Signed: *[Signature]*

Print Name: USA HADWAY

Date: 9/5/14



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

September 4, 2014

MEMORANDUM

TO:

DLNR Agencies:

- Div. of Aquatic Resources
- Div. of Boating & Ocean Recreation
- Engineering Division
- Div. of Forestry & Wildlife
- Div. of State Parks
- Commission on Water Resource Management
- Office of Conservation & Coastal Lands
- Land Division – Oahu District
- Historic Preservation

FROM:

f Russell Y. Tsuji, Land Administrator *RT*

SUBJECT:

Pre-Consultation for an Environmental Assessment – Kupu Green Jobs Training Center

LOCATION:

Portions of TMK (1) 2-10-58-128, (1) 2-10-58-127

APPLICANT:

Kupu Green Jobs Training Center by its consultant, PBR HAWAII & Associates

Transmitted for your review and comment on the above-referenced document. We would appreciate your comments on this document.

Please submit any comments by **September 24, 2014**. If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact Supervising Land Agent Steve Molmen at (808) 587-0439. Thank you.

Attachments

- We have no objections.
- We have no comments.
- Comments are attached.

Signed:

Edward R Underwood

Print Name:

Edward R Underwood

Date:

9/5/14

RECEIVED
LAND DIVISION
2014 SEP -9 AM 9:59
DEPT. OF LAND &
NATURAL RESOURCES
STATE OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

September 4, 2014

MEMORANDUM

~~TO:~~

DLNR Agencies:

- Div. of Aquatic Resources
- Div. of Boating & Ocean Recreation
- Engineering Division
- Div. of Forestry & Wildlife
- Div. of State Parks
- Commission on Water Resource Management
- Office of Conservation & Coastal Lands
- Land Division – Oahu District
- Historic Preservation

FR:

~~TO:~~

FROM: *Russell Y. Tsuji, Land Administrator*

SUBJECT: Pre-Consultation for an Environmental Assessment – Kupu Green Jobs Training Center

LOCATION: Portions of TMK (1) 2-10-58-128, (1) 2-10-58-127

APPLICANT: Kupu Green Jobs Training Center by its consultant, PBR HAWAII & Associates

RECEIVED
 LAND DIVISION
 DEPT. OF LAND & NATURAL RESOURCES
 STATE OF HAWAII
 2014 SEP -8 AM 9:21
 2014 SEP 16 PM 2:34

Transmitted for your review and comment on the above-referenced document. We would appreciate your comments on this document.

Please submit any comments by **September 24, 2014**. If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact Supervising Land Agent Steve Molmen at (808) 587-0439. Thank you.

Attachments

- We have no objections.
- We have no comments.
- Comments are attached.

Signed: *Lenore N. Ohye*

Print Name: LENORE N. OHYE, Acting Deputy Director

Date: SEP 10 2014

FILE ID:	PFD 4047.3
DOC ID:	11772 ✓



WILLIAM J. AILA, JR.
CHAIRPERSON
KAMANA BEAMER
MICHAEL G. BUCK
MILTON D. PAVAO
LINDA ROSEN, M.D., M.P.H.
JONATHAN STARR
WILLIAM M. TAM
DEPUTY DIRECTOR

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

September 10, 2014

REF: 4047.3

TO: Russell Tsuji, Administrator
Land Division

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

SUBJECT: Kupu Green Jobs Training Center, Kewalo Basin Park, Ala Wai Watershed

FILE NO.:

TMK NO.: (1) 2-10-58-128, (1) 2-10-58-127

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

Our comments related to water resources are checked off below.

- 1. We recommend coordination with the county to incorporate this project into the county's Water Use and Development Plan. Please contact the respective Planning Department and/or Department of Water Supply for further information.
- 2. We recommend coordination with the Engineering Division of the State Department of Land and Natural Resources to incorporate this project into the State Water Projects Plan.
- 3. We recommend coordination with the Hawaii Department of Agriculture (HDOA) to incorporate the reclassification of agricultural zoned land and the redistribution of agricultural resources into the State's Agricultural Water Use and Development Plan (AWUDP). Please contact the HDOA for more information.
- 4. We recommend that water efficient fixtures be installed and water efficient practices implemented throughout the development to reduce the increased demand on the area's freshwater resources. Reducing the water usage of a home or building may earn credit towards Leadership in Energy and Environmental Design (LEED) certification. More information on LEED certification is available at <http://www.usgbc.org/leed>. A listing of fixtures certified by the EPA as having high water efficiency can be found at <http://www.epa.gov/watersense/>.
- 5. We recommend the use of best management practices (BMP) for stormwater management to minimize the impact of the project to the existing area's hydrology while maintaining on-site infiltration and preventing polluted runoff from storm events. Stormwater management BMPs may earn credit toward LEED certification. More information on stormwater BMPs can be found at <http://hawaii.gov/dbedt/czm/initiative/lid.php>.
- 6. We recommend the use of alternative water sources, wherever practicable.
- 7. We recommend participating in the Hawaii Green Business Program, that assists and recognizes businesses that strive to operate in an environmentally and socially responsible manner. The program description can be found online at <http://energy.hawaii.gov/green-business-program>

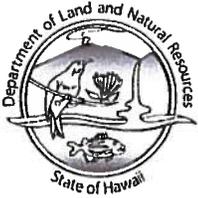
- 8. We recommend adopting landscape irrigation conservation best management practices endorsed by the Landscape Industry Council of Hawaii. These practices can be found online at http://www.hawaiiscape.com/wp-content/uploads/2013/04/LICH_Irrigation_Conservation_BMPs.pdf
- 9. There may be the potential for ground or surface water degradation/contamination and recommend that approvals for this project be conditioned upon a review by the State Department of Health and the developer's acceptance of any resulting requirements related to water quality.

Permits required by CWRM:

Additional information and forms are available at http://hawaii.gov/dlnr/cwrm/info_permits.htm.

- 10. The proposed water supply source for the project is located in a designated water management area, and a Water Use Permit is required prior to use of water. The Water Use Permit may be conditioned on the requirement to use dual line water supply systems for new industrial and commercial developments.
- 11. A Well Construction Permit(s) is (are) required before any well construction work begins.
- 12. A Pump Installation Permit(s) is (are) required before ground water is developed as a source of supply for the project.
- 13. There is (are) well(s) located on or adjacent to this project. If wells are not planned to be used and will be affected by any new construction, they must be properly abandoned and sealed. A permit for well abandonment must be obtained.
- 14. Ground water withdrawals from this project may affect streamflows, which may require an instream flow standard amendment.
- 15. A Stream Channel Alteration Permit(s) is (are) required before any alteration(s) can be made to the bed and/or banks of a stream channel.
- 16. A Stream Diversion Works Permit(s) is (are) required before any stream diversion works is (are) constructed or altered.
- 17. A Petition to Amend the Interim Instream Flow Standard is required for any new or expanded diversion(s) of surface water.
- 18. The planned source of water for this project has not been identified in this report. Therefore, we cannot determine what permits or petitions are required from our office, or whether there are potential impacts to water resources.
- OTHER:
The EA should disclose the projected water requirements, both potable and non-potable, the calculations used to derive the projections, and the planned water source to serve the project.

If there are any questions, please contact Lenore Ohye at 587-0216.



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

September 4, 2014

MEMORANDUM



DAR # 5015

TO:

DLNR Agencies:

- Div. of Aquatic Resources
- Div. of Boating & Ocean Recreation
- Engineering Division
- Div. of Forestry & Wildlife
- Div. of State Parks
- Commission on Water Resource Management
- Office of Conservation & Coastal Lands
- Land Division – Oahu District
- Historic Preservation

DEPT. OF LAND & NATURAL RESOURCES
STATE OF HAWAII

2014 SEP 24 AM 10:41

RECEIVED
LAND DIVISION

FROM:

f Russell Y. Tsuji, Land Administrator *RYT*

SUBJECT:

Pre-Consultation for an Environmental Assessment – Kupu Green Jobs Training Center

LOCATION:

Portions of TMK (1) 2-10-58-128, (1) 2-10-58-127

APPLICANT:

Kupu Green Jobs Training Center by its consultant, PBR HAWAII & Associates

Transmitted for your review and comment on the above-referenced document. We would appreciate your comments on this document.

Please submit any comments by **September 24, 2014**. If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact Supervising Land Agent Steve Molmen at (808) 587-0439. Thank you.

Attachments

- We have no objections.
- We have no comments.
- Comments are attached.

Signed:

William M. Tam

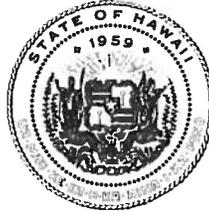
Print Name:

William M. Tam

Date:

9/19/14

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

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

JESSE K. SOUKI
FIRST DEPUTY

WILLIAM M. TAM
DEPUTY DIRECTOR - WATER

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

Date: September 19, 2014
DAR # 5015

MEMORANDUM

TO: *for* Frazer McGilvray, Administrator 
DATE: September 19, 2014
FROM: Annette Tagawa, Aquatic Biologist *AT*
SUBJECT: Pre-consultation for an Environmental Assessment

Comment	Date Request	Receipt	Referral	Due Date
	Sept. 4, 2014	Sept. 4, 2014	Sept. 4, 2014	Sept. 24, 2014

Requested by: Russell Y. Tsuji, Land Administrator

Summary of Proposed Project

Title: Pre-Consultation for an Environmental Assessment – Kupu Green Jobs Training Center

Project by: Kupu Green Jobs Training Center by its consultant, PBR HAWAII & Associates

Location: Kewalo Basin Park, portions of TMK (1) 2-10-58-128, (1) 2-10-58-127

Brief Description: Proposed renovations of a building (commonly called the “Net Shed Building”) and ancillary outdoor areas within Kewalo Basin Park. Renovations to the building interior will provide an improved environment to deliver services to Honolulu’s youth. Improvements within the ancillary outdoor areas include parking, a garden area, and a paved plaza.

Comments: The Division has no objections to this request since the proposed project is not expected to have significant adverse impact on aquatic resource values in this area. However, with the project site being adjacent to the Kewalo Harbor entrance, we recommend that mitigation measures be taken during construction and renovation activities, including Best Management Practices, to prevent contaminants such as sediment, pollutants, petroleum products, and other debris from possibly entering the aquatic environment. We also suggest that site work be scheduled during periods of minimal rainfall and lands denuded of vegetation be replanted or covered as quickly as possible to control erosion.

Thank you for providing DAR the opportunity to review and comment on the proposed project. Should there be any changes to the project plans, DAR requests the opportunity to review and comment on those changes.

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



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



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

September 26, 2014

PBR Hawaii & Associates, Inc.
Attn: Tom Schnell
1001 Bishop Street, Suite 650
Honolulu, HI 96813-3484

via email: tschnell@pbrhawaii.com

Dear Mr. Schnell,

SUBJECT: Pre-Consultation for an Environmental Assessment – Kupu Green Jobs
Training Center

Thank you for the opportunity to review and comment on the subject matter. In addition to the comments sent to you dated September 25, 2014, enclosed are additional comments from the Engineering Division on the subject matter. Should you have any questions, please feel free to call Supervising Land Agent Steve Molmen at (808) 587-0439. Thank you.

Sincerely,

A handwritten signature in blue ink, appearing to read "Russell Y. Tsuji".

Russell Y. Tsuji
Land Administrator

Enclosure(s)



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

September 4, 2014

MEMORANDUM

TO: *FR:*

DLNR Agencies:

- Div. of Aquatic Resources
- Div. of Boating & Ocean Recreation
- Engineering Division**
- Div. of Forestry & Wildlife
- Div. of State Parks
- Commission on Water Resource Management
- Office of Conservation & Coastal Lands
- Land Division – Oahu District
- Historic Preservation

FROM: *FR:*

fr Russell Y. Tsuji, Land Administrator *RT*

SUBJECT:

Pre-Consultation for an Environmental Assessment – Kupu Green Jobs Training Center

LOCATION:

Portions of TMK (1) 2-10-58-128, (1) 2-10-58-127

APPLICANT:

Kupu Green Jobs Training Center by its consultant, PBR HAWAII & Associates

2014 SEP 4 PM 2:46 ENGINEERING
RECEIVED
LAND DIVISION
2014 SEP 25 PM 3:59
DEPT. OF LAND & NATURAL RESOURCES
STATE OF HAWAII

Transmitted for your review and comment on the above-referenced document. We would appreciate your comments on this document.

Please submit any comments by **September 24, 2014**. If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact Supervising Land Agent Steve Molmen at (808) 587-0439. Thank you.

Attachments

- We have no objections.
- We have no comments.
- Comments are attached.

Signed: *Cory S. Chang*
Print Name: Cory S. Chang, Chief Engineer
Date: 9/24/14

DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION

LD/ Russell Y. Tsuji

REF: Pre-Consultation for EA for Kupu Green Jobs Training Center
Oahu.054

COMMENTS

- () We confirm that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Zone ____.
- (X) **Please take note that the project site according to the Flood Insurance Rate Map (FIRM), is located in Zone AE. The National Flood Insurance Program regulates developments within Zone AE**
- () Please note that the correct Flood Zone Designation for the project site according to the Flood Insurance Rate Map (FIRM) is ____.
- (X) **Please note that the project must comply with the rules and regulations of the National Flood Insurance Program (NFIP) presented in Title 44 of the Code of Federal Regulations (44CFR), whenever development within a Special Flood Hazard Area is undertaken. If there are any questions, please contact the State NFIP Coordinator, Ms. Carol Tyau-Beam, of the Department of Land and Natural Resources, Engineering Division at (808) 587-0267.**

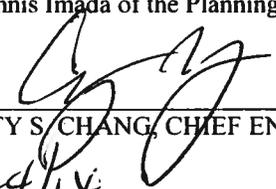
Please be advised that 44CFR indicates the minimum standards set forth by the NFIP. Your Community's local flood ordinance may prove to be more restrictive and thus take precedence over the minimum NFIP standards. If there are questions regarding the local flood ordinances, please contact the applicable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

- (X) **Mr. Mario Siu Li at (808) 768-8098 of the City and County of Honolulu, Department of Planning and Permitting.**
- () Mr. Frank DeMarco at (808) 961-8042 of the County of Hawaii, Department of Public Works.
- () Mr. Carolyn Cortez at (808) 270-7253 of the County of Maui, Department of Planning.
- () Mr. Stanford Iwamoto at (808) 241-4896 of the County of Kauai, Department of Public Works.
- (X) **The applicant should include water demands and infrastructure required to meet project needs. Please note that projects within State lands requiring water service from the Honolulu Board of Water Supply system will be required to pay a resource development charge, in addition to Water Facilities Charges for transmission and daily storage.**
- (X) **The applicant should provide the water demands and calculations to the Engineering Division so it can be included in the State Water Projects Plan Update.**

() Additional Comments: _____

() Other: _____

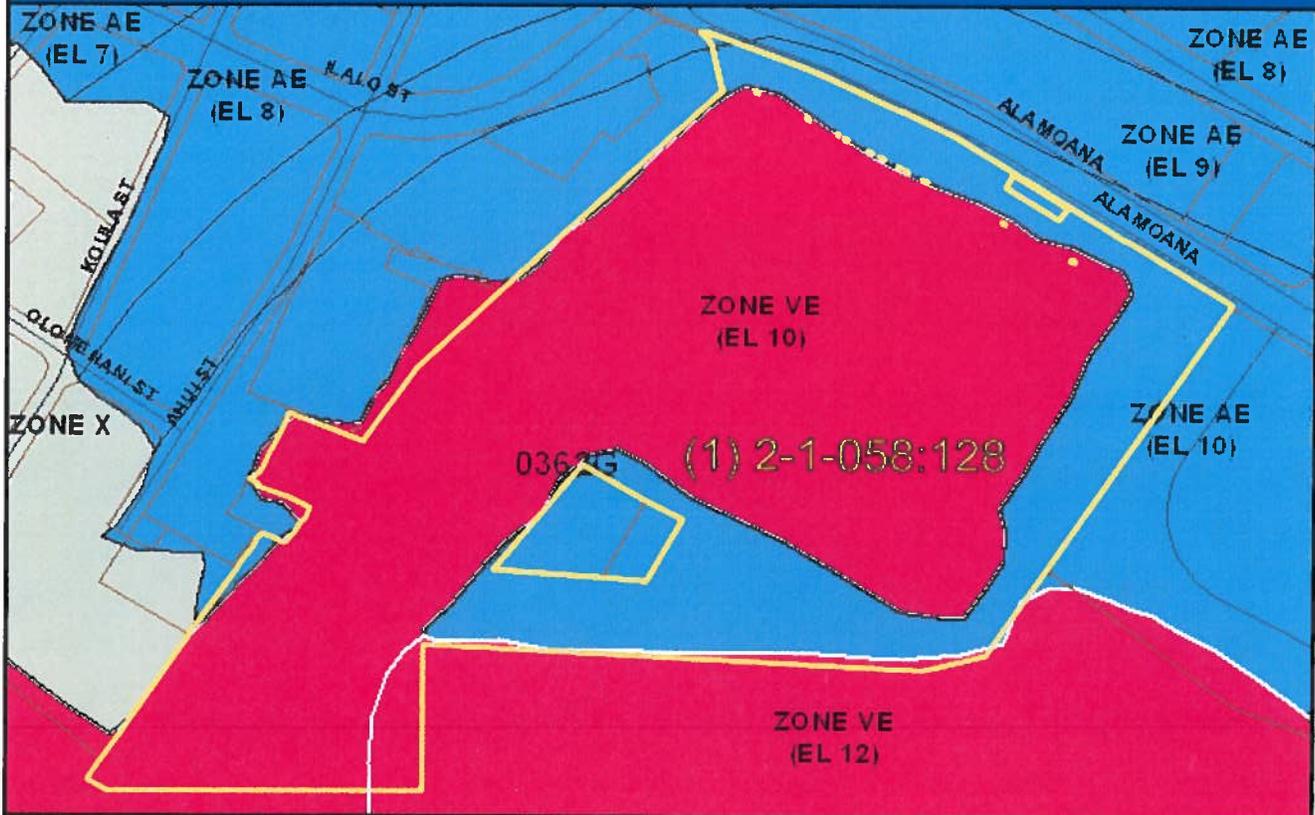
Should you have any questions, please call Mr. Dennis Imada of the Planning Branch at 587-0257.

Signed: 
CARTY S. CHANG, CHIEF ENGINEER

Date: 9/24/14



FLOOD HAZARD ASSESSMENT REPORT



NATIONAL FLOOD INSURANCE PROGRAM

FLOOD ZONE DEFINITIONS

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

- Zone A:** No BFE determined.
- Zone AE:** BFE determined.
- Zone AH:** Flood depths of 1 to 3 feet (usually areas of ponding); BFE determined.
- Zone AO:** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined.
- Zone V:** Coastal flood zone with velocity hazard (wave action); no BFE determined.
- Zone VE:** Coastal flood zone with velocity hazard (wave action); BFE determined.
- Zone AEF:** Floodway areas in Zone AE. The floodway is the channel of stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without increasing the BFE.

NON-SPECIAL FLOOD HAZARD AREA – An area in a low-to-moderate risk flood zone. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities.

- Zone XS (X shaded):** Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.
- Zone X:** Areas determined to be outside the 0.2% annual chance floodplain.

OTHER FLOOD AREAS

- Zone D:** Unstudied areas where flood hazards are undetermined, but flooding is possible. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities.

PROPERTY INFORMATION

COUNTY: HONOLULU
TMK NO: (1) 2-1-058-128
PARCEL ADDRESS:
FIRM INDEX DATE: JANUARY 19, 2011
LETTER OF MAP CHANGE(S): NONE
FEMA FIRM PANEL(S): 15003C0362G
PANEL EFFECTIVE DATE: JANUARY 19, 2011

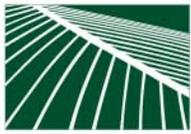
PARCEL DATA FROM: APRIL 2014
IMAGERY DATA FROM: MAY 2006

IMPORTANT PHONE NUMBERS

County NFIP Coordinator
 City and County of Honolulu
 Mario Siu-Li, CFM (808) 768-8098
State NFIP Coordinator
 Carol Tyau-Beam, P.E., CFM (808) 587-0267

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

If this map has been identified as 'PRELIMINARY' or 'UNOFFICIAL', please note that it is being provided for informational purposes and is not to be used for official/legal decisions, regulatory compliance, or flood insurance rating. Contact your county NFIP coordinator for flood zone determinations to be used for compliance with local floodplain management regulations.



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April 14, 2015

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Principal

W. FRANK BRANDT, FASLA
Chairman Emeritus

Mr. Russell Y. Tsuji, Land Administrator
State of Hawai'i
Department of Land and Natural Resources
Land Division
P.O. Box 621
Honolulu, HI 96809

**SUBJECT: PRE-CONSULTATION FOR AN ENVIRONMENTAL ASSESSMENT
– KUPU GREEN JOBS TRAINING CENTER – PORTIONS OF TMK
(1) 2-10-58-128, (1) 2-10-58-127**

ASSOCIATES

RAYMOND T. HIGA, ASLA
Senior Associate

KIMI MIKAMI YUEN, LEED® AP BD+C
Senior Associate

SCOTT ALIKA ABRIGO, LEED® AP BD+C
Managing Director - Kapolei

ROY TAKEMOTO
Managing Director - Hilo

SCOTT MURAKAMI, ASLA, LEED® AP
Associate

DACHENG DONG, LEED® AP
Associate

MARC SHIMATSU, ASLA
Associate

CATIE CULLISON, AICP
Associate

Dear Mr. Tsuji,

Thank you for your emails dated September 25 and 26, 2014 regarding our request for pre-consultation comments on the Kupu Green Jobs Training Center, which involves renovations of the “Net Shed Building” and ancillary outdoor areas adjacent to Kewalo Basin Park, Honolulu, O’ahu.

As the planning consultant for Kupu, we are responding to comments received from the following Department of Land and Natural Resources (DLNR) divisions: (1) Land Division – O’ahu District; (2) Division of Forestry and Wildlife; (3) Division of Boating and Ocean Recreation; (4) Commission on Water Resource Management; (5) Division of Aquatic Resources; and (6) Engineering Division.

(1) Land Division – O’ahu District

We acknowledge that your Division has no comments to offer at this time.

(2) Division of Forestry and Wildlife

We acknowledge that your Division has no comments to offer at this time.

(3) Division of Boating and Ocean Recreation

We acknowledge that your Division has no comments to offer at this time.

(4) Commission on Water Resource Management

The Draft Environmental Assessment (EA) will include: 1) a preliminary engineering report which will describe projected water requirements as compared to existing conditions based on existing and proposed water supply fixture units; and 2) the planned water source, which will be the City and County of Honolulu’s municipal water system.

(5) Division of Aquatic Resources

We acknowledge that, in your estimation, the Kupu Green Jobs Training Center will not have a significant adverse impact on aquatic resource values in this area.

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Mr. Russell Y. Tsuji
PRE-CONSULTATION FOR AN ENVIRONMENTAL ASSESSMENT – KUPU GREEN
JOBS TRAINING CENTER – PORTIONS OF TMK (1) 2-10-58-128, (1) 2-10-58-127
April 7, 2015
Page 2 of 2

The Draft EA will include a description of the mitigation measures to be taken during construction and renovation to prevent contaminants from possibly entering the aquatic environment and specifically Kewalo Harbor. The Draft EA will include the suggestion that, as feasible, the contractors schedule site work during periods of minimal rainfall and that lands denuded of vegetation be replanted or covered as quickly as possible.

(6) Engineering Division

We acknowledge that the Kupu Green Jobs Training Center is in Zone AE according to the Flood Insurance Rate Map. As such, the Draft EA will include a description of how the Kupu Green Jobs Training Center complies with the rules and regulations of the National Flood Insurance Program as presented in Title 44 of the Code of Federal Regulations. The Draft EA will also describe the water demands and infrastructure required to meet the needs of the Center. When the renovations are complete, Kupu will be prepared to pay a Water Facilities Charge for water service from the Board of Water Supply. Finally, the Draft EA will include a preliminary engineering report which will describe projected water requirements as compared to existing conditions based on existing and proposed water supply fixture units.

We appreciate your participation in the environmental review process and will inform you when the Draft EA is available.

Sincerely,

PBR HAWAII



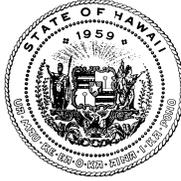
Tom Schnell
Principal

Copy: John Leong, Kupu

Attachments: 14-200_KUPU-Green-Jobs-TC_Project.pdf

From: McIntyre, Laura [<mailto:Laura.McIntyre@doh.hawaii.gov>]
Sent: Tuesday, September 30, 2014 2:01 PM
To: Tom Schnell
Cc: matthew.kurano@doh.hawaii.gov;
Subject: PC for EA for Kupu Green Jobs

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



Grange, Fenix
Training Center at Ke

LINDA ROSEN, M.D., M.P.H.
DIRECTOR OF HEALTH

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

In reply, please refer to:
File:

EPO 14-200

September 30, 2014

Mr. Tom Schnell, Principal
PBR Hawaii
Email: tschnell@pbrhawaii.com

Dear Mr. Schnell:

**SUBJECT: Pre-Consultation for an Environmental Assessment
KUPU Green Jobs Training Center, Portions of TMK (1) 2-10-58-128, (1) 2-10-58-127**

The Department of Health (DOH), Environmental Planning Office (EPO), acknowledges receipt of your letter dated August 27, 2014. Thank you for allowing us to review and comment on the subject document. EPO recommends that you discuss the project with the Clean Water Branch and Hazard Evaluation and Emergency Response Office to ensure the maintenance of pristine waters. They can provide specific comments to you if necessary. EPO recommends that you review the standard comments at: <http://health.hawaii.gov/epo/home/landuse-planning-review-program/>. You are required to adhere to all applicable standard comments.

We encourage you to examine and utilize the Hawaii Environmental Health Portal. The portal provides links to our e-Permitting Portal, Environmental Health Warehouse, Groundwater Contamination Viewer, Hawaii Emergency Response Exchange, Hawaii State and Local Emission Inventory System, Water Pollution Control Viewer, Water Quality Data, Warnings, Advisories and Postings. The Portal is continually updated. Please visit it regularly at: <https://eha-cloud.doh.hawaii.gov>

You may also wish to review the recently revised Water Quality Standards Maps that have been updated for all islands. The new Water Quality Standards Maps can be found at: <http://health.hawaii.gov/cwb/site-map/clean-water-branch-home-page/water-quality-standards/>.

The EPO suggests that you examine the many sources available on strategies to support the sustainable and healthy design of communities and buildings, including the:

2014 National Climate Change Report – Highlights for Hawaii:
http://ipcc-wg2.gov/AR5/images/uploads/WGIIAR5-Chap29_FGDall.pdf;
U.S. Health and Human Services: www.hhs.gov/about/sustainability;

U.S. Environmental Protection Agency's sustainability programs: www.epa.gov/sustainability;

U.S. Green Building Council's LEED program: www.usgbc.org/leed;

Smart Growth America: www.smartgrowthamerica.org;

International Well Building Standard: <http://delosliving.com>; and

Intergovernmental Panel on Climate Change (IPCC):

http://ipcc-wg2.gov/AR5/images/uploads/WGIAR5-Chap29_FGDall.pdf

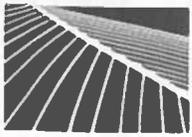
We request you share all of this information with others to increase community awareness on sustainable, innovative, inspirational, and healthy community design.

Mahalo,

Laura Leialoha Phillips McIntyre, AICP
Program Manager, Environmental Planning Office

c. CWB, HEER

Laura Leialoha Phillips McIntyre AICP
Program Manager, Environmental Planning Office
Hawaii State Department of Health
919 Ala Moana Blvd. Rm. 312
Honolulu, Hawaii 96814
Direct Phone: (808) 586-4338
Email: laura.mcintyre@doh.hawaii.gov
Website: <http://health.hawaii.gov/epo>
Ua mau ke ea o ka aina I ka pono



PBR HAWAII & ASSOCIATES, INC.

RECEIVED
OFFICE OF THE DIRECTOR
DEPT OF HEALTH

14 AUG 28 P2:29

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August 27, 2014

Ms. Linda Rosen, Director
State of Hawai'i
Department of Health
Kīna'u Hale
1250 Punchbowl Street
Honolulu, Hawai'i 96813

SUBJECT: PRE-CONSULTATION FOR AN ENVIRONMENTAL ASSESSMENT – KUPU GREEN JOBS TRAINING CENTER – PORTIONS OF TMK (1) 2-10-58-128, (1) 2-10-58-127

Dear Ms. Rosen,

Kupu has contracted PBR HAWAII & Associates, Inc. to prepare an environmental assessment for proposed renovations of a building (commonly called the "Net Shed Building") and ancillary outdoor areas within Kewalo Basin Park, Ala Wai Watershed, Honolulu Judicial District, O'ahu. The attached figure shows the building and related areas.

The building was originally constructed in the mid-1980's as a net shed for Honolulu's fishing fleet. In recent years, with the demise of the fishing industry, Kupu has leased the building from the Hawai'i Community Development Authority for its Green Jobs Training Center. The Green Jobs Training Center offers services to youth including education to complete high school diplomas and training in the field of conservation and land stewardship.

Currently, the "Net Shed Building" is an open, covered structure. The interior space is not divided except for restroom facilities and a small kitchen area. Renovations to the building interior will provide an improved environment in which to deliver services to Honolulu's youth. Improvements within the ancillary outdoor areas include parking, a garden area, and a paved plaza.

When the renovations are complete, possible improvements to the Kupu Green Jobs Training Center may include:

- Renovated ground floor interior spaces, demised for classrooms/meeting rooms, gathering spaces, and administrative offices
- A new interior mezzanine for classroom/meeting room spaces (no changes to roof or roofline proposed)
- Renovated men's and women's restrooms
- A commercial kitchen
- A snack bar, configured to serve the Kewalo Basin Park, which would be

14-200

- 9 SEP 2014

14-003351

SUBJECT: PRE-CONSULTATION FOR AN ENVIRONMENTAL ASSESSMENT –
KUPU GREEN JOBS TRAINING CENTER – PORTIONS OF TMK (1) 2-10-58-128, (1) 2-10-
58-127

August 27, 2014

Page 2 of 2

an addition to the existing building

- Garden plantings refreshed with edible and native vegetation
- Grass and other landscaping in place of an asphalt plaza
- A photovoltaic system to power Kupu facilities
- Low-impact stormwater collection and disposal techniques
- Reconfigured parking spaces

With this letter, we seek input regarding: 1) the proposed renovations; 2) whether these changes may have an impact on any of your existing or proposed projects, plans, policies, or programs; and 3) if there are any specific issues that you think should be addressed in the environmental assessment. Please send us any comments you may have **by September 26, 2014**.

Please contact me by phone at (808) 521-5631 or email at tschnell@pbrhawaii if you have any questions or require any additional information.

Sincerely,



PBR HAWAII
Tom Schnell
Principal

CC: John Leong, Kupu
Carson Schultz, HCDA

Encl. Location Map



Legend

- KUPU
- TMK

DATE: 8/14/2014

Project Area

Kupu- Green Jobs Center


Linear Scale (feet)





PBR HAWAII

& ASSOCIATES, INC.

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April 14, 2015

Ms. Laura Leialoha Phillips McIntyre, AICP
State of Hawai'i
Department of Health
Environmental Planning Office
919 Ala Moana Boulevard, Room 312
Honolulu, HI 96814

**SUBJECT: PRE-CONSULTATION FOR AN ENVIRONMENTAL ASSESSMENT
– KUPU GREEN JOBS TRAINING CENTER – PORTIONS OF TMK
(1) 2-10-58-128, (1) 2-10-58-127
Your reference: EPO14-200**

Dear Ms. McIntyre,

Thank you for your email dated September 30, 2014 regarding our request for pre-consultation comments on the Kupu Green Jobs Training Center, which involves renovations of the "Net Shed Building" and ancillary outdoor areas adjacent to Kewalo Basin Park, Honolulu, O'ahu.

1. We have reviewed the standard comments on your Department's website for applicability to this project.
2. We will review the Hawai'i Environmental Health Portal and the Water Quality Standards Maps in reference to the Kupu Green Jobs Training Center. The Draft Environmental Assessment will include any relevant information from these two sources.
3. We appreciate the references to the many sources available on strategies to support the sustainable design of buildings and communities. The Kupu Green Jobs Training Center is being designed to meet the requirements to be certified under LEED.

We appreciate your participation in the environmental review process and will inform you when the Draft EA is available.

Sincerely,

PBR HAWAII

Tom Schnell
Principal

Copy: John Leong, Kupu

NEIL ABERCROMBIE
GOVERNOR



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

FORD N. FUCHIGAMI
INTERIM DIRECTOR

Deputy Directors
RANDY GRUNE
AUDREY HIDANO
ROSS M. HIGASHI
JADINE URASAKI

IN REPLY REFER TO:

STP 8.1665

September 17, 2014

Mr. Tom Schnell, AICP
PBR HAWAII & Associates, Inc.
1001 Bishop Street, Suite 650
Honolulu, Hawaii 96813-3484

Dear Mr. Schnell:

Subject: Kupu Green Jobs Training Center
Pre- Consultation for Environmental Assessment
TMK: (1) 2-10-058:127 & 128

Our Department of Transportation's (DOT) comments on the subject project are as follows:

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

If there are any questions, please contact Mr. Norren Kato of the DOT Statewide Transportation Planning Office at telephone number (808) 831-7976.

Very truly yours,


FORD N. FUCHIGAMI
Interim Director of Transportation



PBR HAWAII

& ASSOCIATES, INC.

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April 14, 2015

Mr. Ford N. Fuchigami, Director
State of Hawai'i
Department of Transportation
869 Punchbowl Street
Honolulu, HI 96813-5097

SUBJECT: PRE-CONSULTATION FOR AN ENVIRONMENTAL ASSESSMENT
– KUPU GREEN JOBS TRAINING CENTER – PORTIONS OF TMK
(1) 2-10-58-128, (1) 2-10-58-127
Your reference: STP 8.1665

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Associate

DACHENG DONG, LEED® AP
Associate

MARC SHIMATSU, ASLA
Associate

CATIE CULLISON, AICP
Associate

Dear Mr. Fuchigami,

Thank you for your letter dated September 17, 2014 regarding our request for pre-consultation comments on the Kupu Green Jobs Training Center, which involves renovations of the “Net Shed Building” and ancillary outdoor areas adjacent to Kewalo Basin Park, Honolulu, O’ahu.

The renovations to the Kupu Green Job Training Center are not expected to significantly impact traffic or road conditions in the vicinity of the Center. Nearly all Kupu program participants are under driving age and thus do not drive to the facility. Further Kupu encourages alternative transportation use by providing bus passes to program participants.

We appreciate your participation in the environmental review process and will inform you when the Draft EA is available.

Sincerely,

PBR HAWAII

Tom Schnell
Principal

Copy: John Leong, Kupu

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printed on recycled paper

Mr. Leo R. Asuncion

PRE-CONSULTATION FOR AN ENVIRONMENTAL ASSESSMENT – KUPU GREEN
JOBS TRAINING CENTER – PORTIONS OF TMK (1) 2-10-58-128, (1) 2-10-58-127

April 7, 2015

Page 2 of 2

O:\Job30\3041.01 Kupu Building EA\EA\Pre-consultation\Responses\DOT.docx

From: Ron Iwami [<mailto:ronald@kewalo.org>]

Sent: Friday, September 26, 2014 9:25 PM

To: Tom Schnell

Subject: Pre-consultation for EA for KUPU

Aloha Tom,

This email is in response to your letter dated August 27, 2014 asking for our input regarding the Pre-consultation for an EA – Kupu Green Jobs Training Center.

Our comments based on the facts of the letter are as follows:

Friends of Kewalos would like an opportunity to be interviewed in the future by PBR Hawaii for inclusion in the EA. More information on the snack bar as an addition to the existing building.
Grass and other landscaping in place of an asphalt plaza. We were told by KUPU that they would use that area for parking. Parking at Kewalo Basin Park is a premium and any additional parking area needs to be preserved such as the asphalt plaza.
Additional parking for the snack bar would be needed.
No waste material to be disposed of into the harbor or surfing areas.
Expand on the low-impact stormwater collection and disposal techniques
Our main concern is the park user parking will not be compromised by the proposed renovation.

Please provide us a rendering or other details of the project.

Mahalo for this opportunity to provide our input.

Ron Iwami
President, Friends of Kewalos
222-6645



PBR HAWAII

& ASSOCIATES, INC.

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April 14, 2015

Mr. Ron Iwami
Friends of Kewalos
ronald@kewalo.org

**SUBJECT: PRE-CONSULTATION FOR AN ENVIRONMENTAL ASSESSMENT
– KUPU GREEN JOBS TRAINING CENTER – PORTIONS OF TMK
(1) 2-10-58-128, (1) 2-10-58-127**

Dear Mr. Iwami,

Thank you for your email dated September 26, 2014 regarding our request for pre-consultation comments for the proposed renovations of a building (commonly called the “Net Shed Building”) and ancillary outdoor areas within Kewalo Basin Park, Ala Wai Watershed, Honolulu Judicial District, O‘ahu. As the planning consultant for Kupu, we offer the following responses in the respective order of your comments:

1. Thank you for meeting representatives of Kupu and PBR HAWAII on **DATE** to discuss the Net Shed Building renovation plans.
2. A snack bar is no longer part of the renovations to the Net Shed Building. Instead, exterior building hookups (such as connections for water, wastewater, and electricity) for use by a food truck are planned. The option for a mobile food truck, rather than a permanent snack bar, gives Kupu the option to move the truck if it creates too much congestion. However it is envisioned that park users would be the primary food truck customers.
3. Regarding parking, no stalls from the existing Kewalo Basin Park parking lot will be used for any Kupu parking. Kupu recognizes that this lot serves the Kewalo Basin Park and is reserved for park users.

Seven parking stalls in front of the Net Shed Building (Diamond Head side) are reserved for Kupu’s exclusive use as part of its current agreement with the Hawaii Community Development Authority (HCDA). As part of the renovations, these existing seven parking stalls will be reconfigured into five regular parking stalls plus one Americans with Disabilities Act (ADA) accessible stall and an access aisle. Bicycle parking will also be provided near the Net Shed Building entrance.

For any additional stalls that may be required for Kupu, HCDA and Howard Hughes (which has an existing lease to operate the harbor, boat slips, and parking immediately adjacent to the harbor) have committed to working with Kupu to provide for the remaining required parking, as well as event parking. The additional parking will be provided either closer to Ala Moana Boulevard or within Howard Hughes lease areas. It should be noted that Kupu encourages alternative transportation use by subsidizing bus passes for program participants, most of who

Mr. Ron Iwami

PRE-CONSULTATION FOR AN ENVIRONMENTAL ASSESSMENT – KUPU GREEN
JOBS TRAINING CENTER – PORTIONS OF TMK (1) 2-10-58-128, (1) 2-10-58-127

April 14, 2015

Page 2 of 2

are under the driving age.

4. Regarding the asphalt plaza between the Net Shed Building and the Kewalo Basin Harbor channel, Kupu would like to renovate this area to be more inviting and sustainable and also to be more functional for Kupu's programs and events. The renovated area will include large concrete pavers (approximately 12-feet x 12-feet) segmented by bands of grass or gravel to allow for stormwater infiltration. Planter boxes and tanks for hydroponics may also be added to the renovated area. In addition, a new rain garden and/or a vegetated swale along the harbor channel edge will allow for additional infiltration as well as some bio-filtration and treatment of stormwater before it enters the ocean.
5. No waste material will be disposed of in the harbor or surf areas. In fact, the renovations will improve stormwater quality of the site.
6. The Draft EA will contain a detailed description of the low impact stormwater control measures.

We appreciate your participation in the environmental review process. We will inform you when the Draft EA is available for review.

Sincerely,

PBR HAWAII



Tom Schnell
Principal

Copy: John Leong, Kupu

From: Liu, Rouen [<mailto:rouen.liu@hawaiianelectric.com>]

Sent: Thursday, September 25, 2014 4:48 PM

To: Tom Schnell

Cc: sysadmin

Subject: FW: Pre assessment Consultation for Environmental Assessment- Kupu Green Jobs training center

Dear Mr. Schnell,

Thank you for the opportunity to comment on the subject project. Hawaiian Electric Company has no objections to the project. Should HECO have existing easements and facilities on the subject property, we will need continued access for maintenance of our facilities.

We appreciate your efforts to keep us apprised of the subject project in the planning process. As the Kupu Green Jobs Training Center comes to fruition, please continue to keep us informed. Further along in the design, we will be better able to evaluate the effects on our system facilities.

If you have any questions, please call me at 543-7245.

Sincerely,

Rouen Q. W. Liu

Permits Engineer

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April 14, 2015

Mr. Rouen Q.W. Liu
Hawaiian Electric Company
rouen.liu@hawaiianelectric.com

**SUBJECT: PRE-CONSULTATION FOR AN ENVIRONMENTAL ASSESSMENT
– KUPU GREEN JOBS TRAINING CENTER – PORTIONS OF TMK
(1) 2-10-58-128, (1) 2-10-58-127**

Dear Mr. Liu,

Thank you for your email dated September 25, 2014 regarding our request for pre-consultation comments on the Kupu Green Jobs Training Center, which involves renovations of the “Net Shed Building” and ancillary outdoor areas adjacent to Kewalo Basin Park, Honolulu, O’ahu.

We acknowledge that you have no objections to the project but that HECO will need continued access if there are existing easements and facilities on the Kupu property.

We appreciate your participation in the environmental review process and will inform you when the Draft EA is available so that you will be better able to evaluate the effects on your system facilities.

Sincerely,

PBR HAWAII

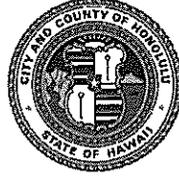
Tom Schnell
Principal

Copy: John Leong, Kupu

HONOLULU FIRE DEPARTMENT
CITY AND COUNTY OF HONOLULU

636 South Street
Honolulu, Hawaii 96813-5007
Phone: 808-723-7139 Fax: 808-723-7111 Internet: www.honolulu.gov/hfd

KIRK CALDWELL
MAYOR



MANUEL P. NEVES
FIRE CHIEF

LIONEL CAMARA JR.
DEPUTY FIRE CHIEF

September 17, 2014

Mr. Tom Schnell, AICP
Principal
PBR Hawaii & Associates, Inc.
1001 Bishop Street, Suite 650
Honolulu, Hawaii 96813-3484

Dear Mr. Schnell:

Subject: Preconsultation for an Environmental Assessment
Kupu Green Jobs Training Center
Tax Map Keys: 2-1-058: 128 and 2-1-058: 127

In response to your letter dated August 27, 2014, regarding the above-mentioned subject, the Honolulu Fire Department (HFD) requires that the following be complied with:

1. Fire department access roads shall be provided such that any portion of the facility or any portion of an exterior wall of the first story of the building is located not more than 150 feet from fire department access roads as measured by an approved route around the exterior of the building or facility. (National Fire Protection Association [NFPA] 1, Uniform Fire Code [UFC]TM, 2006 Edition, Section 18.2.3.2.2.)

A fire department access road shall extend to within 50 feet of at least one exterior door that can be opened from the outside and that provides access to the interior of the building. (NFPA 1, UFCTM, 2006 Edition, Section 18.2.3.2.1.)

2. A water supply approved by the county, capable of supplying the required fire flow for fire protection, shall be provided to all premises upon which facilities or buildings, or portions thereof, are hereafter constructed, or moved into or within the county. When any portion of the facility or building is in excess of 150 feet from a water supply on a

Mr. Tom Schnell, AICP
Page 2
September 17, 2014

- fire apparatus access road, as measured by an approved route around the exterior of the facility or building, on-site fire hydrants and mains capable of supplying the required fire flow shall be provided when required by the AHJ [Authority Having Jurisdiction]. (NFPA 1, UFC™, 2006 Edition, Section 18.3.1, as amended.)
3. The unobstructed width and unobstructed vertical clearance of a fire apparatus access road shall meet county requirements. (NFPA 1, UFC™, 2006 Edition, Section 18.2.3.4.1.1, as amended.)
 4. Submit civil drawings to the HFD for review and approval.

Should you have questions, please contact Battalion Chief Terry Seelig of our Fire Prevention Bureau at 723-7151 or tseelig@honolulu.gov.

Sincerely,



SOCRATES D. BRATAKOS
Assistant Chief

SDB/DB:bh



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Chairman Emeritus

April 14, 2015

Assistant Chief Socrates D. Bratakos
City and County of Honolulu
Honolulu Fire Department
801 South Beretania Street
Honolulu, HI 96813

SUBJECT: PRE-CONSULTATION FOR AN ENVIRONMENTAL ASSESSMENT
– KUPU GREEN JOBS TRAINING CENTER – PORTIONS OF TMK
(1) 2-10-58-128, (1) 2-10-58-127

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MARC SHIMATSU, ASLA
Associate

CATIE CULLISON, AICP
Associate

Dear Assistant Chief Bratakos,

Thank you for your letter dated September 17, 2014 regarding our request for pre-consultation comments on the Kupu Green Jobs Training Center, which involves renovations of the “Net Shed Building” and ancillary outdoor areas adjacent to Kewalo Basin Park, Honolulu, O‘ahu.

Group 70, Kupu’s architect and civil engineer, will work with the Honolulu Fire Department to ensure that the renovations to the Kupu Green Jobs Training Center meet the Uniform Fire Code requirements. We note that representatives from Group 70 met with Fire Department Captain Sheldon Yasso on December 5, 2014, to better understand fire protection requirements.

We appreciate your participation in the environmental review process and will inform you when the Draft EA is available.

Sincerely,

PBR HAWAII

Tom Schnell
Principal

Copy: John Leong, Kupu

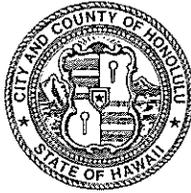
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PETER B. CARLISLE
MAYOR

LOUIS M. KEALOHA
CHIEF

DAVE M. KAJIHIRO
MARIE A. McCAULEY
DEPUTY CHIEFS

OUR REFERENCE EO-WS

September 17, 2014

Mr. Tom Schnell, AICP
Principal
PBR HAWAII & Associates, Inc.
1001 Bishop Street, Suite 650
Honolulu, Hawaii 96813-3484

Dear Mr. Schnell:

This is in response to your letter dated August 27, 2014, requesting comments on the Pre-Consultation, Environmental Assessment for the proposed Kupu Green Jobs Training Center project.

The Honolulu Police Department (HPD) has some concerns with the project. During the construction phase, the HPD recommends the contractor provide adequate security for the storage of construction-related equipment and supplies in the evening hours when most businesses in the area are closed.

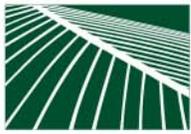
There are also concerns with security when the project is completed due to its remoteness from Ala Moana Boulevard. The HPD recommends hiring adequate security to patrol the area, particularly during the evening hours.

If there are any questions, please contact Major Roy Sugimoto of District 1 (Central Honolulu) at 723-3327 or via e-mail at rsugimoto1@honolulu.gov.

Sincerely,

LOUIS M. KEALOHA
Chief of Police

By 
RANDAL K. MACADANGDANG
Assistant Chief
Support Services Bureau



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Chairman Emeritus

April 14, 2015

Chief Louis M. Kealoha
City and County of Honolulu
Honolulu Police Department
801 South Beretania Street
Honolulu, HI 96813

SUBJECT: PRE-CONSULTATION FOR AN ENVIRONMENTAL ASSESSMENT
– KUPU GREEN JOBS TRAINING CENTER – PORTIONS OF TMK
(1) 2-10-58-128, (1) 2-10-58-127
Your reference: EO-WS

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CATIE CULLISON, AICP
Associate

Dear Chief Kealoha,

Thank you for your letter dated September 17, 2014 regarding our request for pre-consultation comments on the Kupu Green Jobs Training Center, which involves renovations of the “Net Shed Building” and ancillary outdoor areas adjacent to Kewalo Basin Park, Honolulu, O‘ahu.

We acknowledge your concerns about security during and after construction of the Kupu Green Jobs Training Center. The Draft EA will include the Honolulu Police Department’s recommendations to: (a) provide adequate security for storage of construction-related equipment and supplies in the evening hours and (b) hire adequate security to patrol the area, especially in the evening, around the Green Jobs Training Center once the renovations are complete.

Kupu strives to be a catalyst in revitalizing the area by providing a positive presence and through responsible stewardship and caring for the land.

We appreciate your participation in the environmental review process and will inform you when the Draft EA is available.

Sincerely,

PBR HAWAII

Tom Schnell
Principal

Copy: John Leong, Kupu

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Mr. Leo R. Asuncion

PRE-CONSULTATION FOR AN ENVIRONMENTAL ASSESSMENT – KUPU GREEN
JOBS TRAINING CENTER – PORTIONS OF TMK (1) 2-10-58-128, (1) 2-10-58-127

April 7, 2015

Page 2 of 2

O:\Job30\3041.01 Kupu Building EA\EA\Pre-consultation\Responses\HPD.docx

To: Tom Schnell
Subject: RE: Pre-consultation for the Kupu Green Jobs Training Center Renovations

From: Richard Hall - NOAA Federal [<mailto:richard.hall@noaa.gov>]
Sent: Tuesday, September 16, 2014 4:09 PM
To: Tom Schnell
Cc: Danielle Jayewardene - NOAA Affiliate
Subject: Pre-consultation for the Kupu Green Jobs Training Center Renovations

Dear Mr. Schnell,

On August 27th, PBR Hawaii sent a letter to the NOAA Fisheries Pacific Islands Regional Office seeking pre-consultation for an Environmental Assessment (EA) for the proposed renovations of the Kupu Green Jobs Training Center. The training center is located within Kewalo Basin Park, Ala Wai Watershed, Honolulu, Hawaii. Your letter indicates several possible improvements including:

Grass and other landscaping in place of an asphalt plaza,
Low-impact stormwater collection and disposal techniques, and
Reconfigured parking spaces.

I have reviewed the document provided by PBR for NOAA Fisheries Habitat Conservation Division, and would like to offer the following comments for your consideration for inclusion in the EA for this project.

1. Consider describing in detail the nature of the low-impact stormwater collection and disposal techniques, and if possible provide information on the effectiveness in preventing stormwater runoff.
2. Depending on the scope of the reconfigured parking spaces, consider including details on the measures to prevent stormwater runoff (if necessary and different from comment number 1).
3. Consider providing details on the best management practices that will be used to prevent pollution and spills from the equipment that will be required to perform the work for this proposed project.

NOAA Fisheries applauds the proposed effort to make the Kupu Training Center more "green" by proposing to install a photovoltaic system to power the facility, the replacement of the asphalt plaza with grass and other landscaping, and the aforementioned stormwater collection and disposal techniques.

NOAA Fisheries would like to thank you for contacting our office for a pre-consultation on this project, and for the opportunity to provide our comments and suggestions. Please feel free to contact me with any questions or comments, or to engage our office at any point during the process for this project.

--
Richard Hall
Fishery Policy Analyst
Pacific Islands Regional Office
NOAA Inouye Regional Center
1845 Wasp Blvd., Building 176
Honolulu, HI 96818
808-725-5018.



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April 14, 2015

Mr. Richard Hall, Fishery Policy Analyst
Pacific Islands Regional Office
NOAA Inouye Regional Center
1845 Wasp Blvd., Building 176
Honolulu, HI 96818

**SUBJECT: PRE-CONSULTATION FOR AN ENVIRONMENTAL ASSESSMENT
– KUPU GREEN JOBS TRAINING CENTER – PORTIONS OF TMK
(1) 2-10-58-128, (1) 2-10-58-127**

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DACHENG DONG, LEED® AP
Associate

MARC SHIMATSU, ASLA
Associate

CATIE CULLISON, AICP
Associate

Dear Mr. Hall,

Thank you for your email dated September 16, 2014 regarding our request for pre-consultation comments on the Kupu Green Jobs Training Center, which involves renovations of the “Net Shed Building” and ancillary outdoor areas adjacent to Kewalo Basin Park, Honolulu, O‘ahu. As the planning consultant for Kupu, we offer the following responses in the order of your comments:

1. The Draft Environmental Assessment (EA) will include a discussion of the low-impact stormwater collection and disposal techniques planned for the Kupu Green Jobs Training Center.
2. Regarding parking, there are currently seven parking stalls in front of the Net Shed Building (Diamond Head side) reserved for Kupu’s exclusive use. These seven stalls will be reconfigured into five regular parking stalls plus one Americans with Disabilities Act (ADA) accessible stall. This will not result in an increase in impervious area or an increase in storwater runoff.
3. The Draft EA will describe best management practices that will be used to prevent pollution and spills from the equipment used during renovation of the Green Jobs Training Center.

We appreciate your participation in the environmental review process and will inform you when the Draft EA is available.

Sincerely,

Tom Schnell
Principal

Copy: John Leong, Kupu

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Mr. Leo R. Asuncion

PRE-CONSULTATION FOR AN ENVIRONMENTAL ASSESSMENT – KUPU GREEN
JOBS TRAINING CENTER – PORTIONS OF TMK (1) 2-10-58-128, (1) 2-10-58-127

April 7, 2015

Page 2 of 2

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STATE OF HAWAII
OFFICE OF HAWAIIAN AFFAIRS
560 N. NIMITZ HWY., SUITE 200
HONOLULU, HAWAII 96817

HRD 14/7256

September 26, 2014

Mr. Tom Schnell
Principal
PBR & Associates
1001 Bishop Street, Suite 650
Honolulu, Hawai'i 96813-3484

Re: Comments on Pre-Consultation for an Environmental Assessment-Kupu Green Jobs Training Center
TMK: (1) 2-1-058:128; (1) 2-1-058:127

Dear Mr. Schnell:

The Office of Hawaiian Affairs (OHA) received your August 27, 2014 letter requesting comments to assist in the pre-consultation for an environmental assessment (EA) for the Kupu Green Jobs Training Center. The Green Jobs Training Center offers services to youth including education to complete high school diplomas and training in the field of conservation and land stewardship. The EA is required because of the use of State lands.

The proposed improvements may include the renovation of ground floor interior spaces, renovation of men's and women's restrooms, construction of a commercial kitchen, planting of a garden with native vegetation, implementation of low-impact storm water collection, and reconfiguration of parking spaces.

Mr. Tom Schnell
September 26, 2014
Page 2

We have no specific comments at this time. We look forward to the opportunity to review the EA and provide comments at that time. Should you have any questions, please contact Jerry B. Norris at 594-0227 or by email at jerryn@oha.org.

'O wau iho nō me ka 'oia 'i'o,

A handwritten signature in black ink, appearing to read 'Kamana'opono M. Crabbe', written in a cursive style.

Kamana'opono M. Crabbe, Ph.D
Ka Pouhana, Chief Executive Officer

KC:jbn

C: John Leong, Kupu
Carson Schultz, HCDA



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April 14, 2015

Dr. Kamana'opono M. Crabbe, Ka Pouhana, CEO
State of Hawai'i
Office of Hawaiian Affairs
560 Nimitz Highway, Suite 200
Honolulu, HI 96817

**SUBJECT: PRE-CONSULTATION FOR AN ENVIRONMENTAL ASSESSMENT
– KUPU GREEN JOBS TRAINING CENTER – PORTIONS OF TMK
(1) 2-10-58-128, (1) 2-10-58-127**
Your reference: HRD 14/7256

Dear Dr. Crabbe,

Thank you for your letter dated September 26, 2014 regarding our request for pre-consultation comments on the Kupu Green Jobs Training Center, which involves renovations of the "Net Shed Building" and ancillary outdoor areas adjacent to Kewalo Basin Park, Honolulu, O'ahu.

We acknowledge that the Office of Hawaiian Affairs has no comments to offer at this time.

We appreciate your participation in the environmental review process and will inform you when the Draft EA is available.

Sincerely,

PBR HAWAII

Tom Schnell
Principal

Copy: John Leong, Kupu

From: Jessica.L.Puff@hawaii.gov [<mailto:Jessica.L.Puff@hawaii.gov>]

Sent: Tuesday, September 09, 2014 2:53 PM

To: Tom Schnell

Subject: Pre-consultation for Kupu Green Jobs Training Center

Aloha Tom,

Thank you for your letter. I wanted to touch base with you really quickly about your project. Upon review of your letter (dated August 27, 2014) and attached map indicating the proposed project area, it's difficult to assess what kind of pre-consultation we can assist you with. Without knowledge of a footprint for new additions and specifics regarding alterations to the property it's difficult to advise you on the project's scope of work and the potential affects it may have on historic resources. Perhaps it may be best to schedule a meeting to discuss the project further in person. In addition, it appears that the project may fall under the federal Section 106 review process. It will be helpful to better understand the funding sources associated with this project, as well as if there is any federal involvement in terms of issuing permits, licenses, etc. to determine which reviews the project would be subject to.

I appreciate the opportunity you've given us to pre-consult. Please advise me on how best to proceed to be of better service to you and your project.

Mahalo and best wishes,

Jess

Jessica Puff
Architectural Historian
Hawaii State Historic Preservation Division



PBR HAWAII

& ASSOCIATES, INC.

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TOM SCHNELL, AICP
Principal

W. FRANK BRANDT, FASLA
Chairman Emeritus

April 14, 2015

Ms. Jessica Puff
State of Hawai'i Department of Land and Natural Resources
Historic Preservation Division
Jessica.L.Puff@hawaii.gov

SUBJECT: PRE-CONSULTATION FOR AN ENVIRONMENTAL ASSESSMENT
– KUPU GREEN JOBS TRAINING CENTER – PORTIONS OF TMK
(1) 2-10-58-128, (1) 2-10-58-127

Dear Ms. Puff,

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MARC SHIMATSU, ASLA
Associate

CATIE CULLISON, AICP
Associate

Thank you for your email dated September 9, 2014 regarding our request for pre-consultation comments for the proposed renovations of a building (commonly called the “Net Shed Building”) and ancillary outdoor areas within Kewalo Basin Park, Ala Wai Watershed, Honolulu Judicial District, O’ahu. As the planning consultant for Kupu, we offer the following responses in the respective order of your comments:

1. The renovations to the Net Shed Building will not change the building’s footprint. Specifics regarding alterations to the property will be included in the Draft EA.
2. Kupu is not using federal funds or lands for the renovations. Therefore, it is not subject to the Section 106 review process. The project is being funded with state grants and donations from corporations and private individuals. No federal permits are anticipated be required.

We appreciate your participation in the environmental review process. We will inform you when the Draft EA is available so that you can provide comments on a more detailed description of the renovations.

Sincerely,

PBR HAWAII

Tom Schnell
Principal

Copy: John Leong, Kupu

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From: Maria Simon [<mailto:simonm@hawaii.edu>]

Sent: Monday, September 22, 2014 1:27 PM

To: Tom Schnell

Subject: Kupu Green Jobs Center

Dear Tom,

I am the Site and Architectural Advisor for the UH Presidential Center Initiative project. I was given a letter to follow up with that you addressed to Daniela Kittinger who is one of our office managers.

We do not foresee any issues with your proposed renovations. We find that there might be opportunity to collaborate with the Kupu programs.

Please let me know if you need anything further regarding this or other topics in the future.

On another topic, I am trying to track down some existing topographic maps for Kakaako Makai. Seeing as you are working on the HCDA master plan as well, do you have any topographic information that you would be willing to share with our project until we are able to get a more current topographic survey completed later on this fall?

Thank You for your help.

Mahalo,

--

Maria Simon NCARB

Visiting Assistant Professor
University of Hawaii at Manoa
School of Architecture



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April 14, 2015

Ms. Maria Simon, NCARB
Site and Architectural Advisor
University of Hawai‘i at Mānoa
Presidential Center Initiative
simonm@hawaii.edu

SUBJECT: PRE-CONSULTATION FOR AN ENVIRONMENTAL ASSESSMENT
– KUPU GREEN JOBS TRAINING CENTER – PORTIONS OF TMK
(1) 2-10-58-128, (1) 2-10-58-127

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MARC SHIMATSU, ASLA
Associate

CATIE CULLISON, AICP
Associate

Dear Ms. Simon,

Thank you for your email dated September 22, 2014 regarding our request for pre-consultation comments on the Kupu Green Jobs Training Center, which involves renovations of the “Net Shed Building” and ancillary outdoor areas adjacent to Kewalo Basin Park, Honolulu, O‘ahu.

We acknowledge that the UH Presidential Center Initiative has no comments to offer at this time as your program does not foresee any issues with the proposed renovations.

We appreciate your participation in the environmental review process and will inform you when the Draft EA is available. We hope that the UH Presidential Center Initiative and Kupu can find opportunities to collaborate through the renovation of the Kupu Green Jobs Training Center.

Sincerely,

PBR HAWAII

Tom Schnell
Principal

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Copy: John Leong, Kupu



United States Department of the Interior



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

In Reply Refer To:
2014-TA-0417

SEP 30 2014

Mr. Tom Schnell, AICP, Principle
PBR Hawaii
1001 Bishop Street, Suite 650
Honolulu, Hawaii 96813-3484

Subject: Technical Assistance for Proposed Structural Renovations to the Net Shed Building for Conversion into the Kupu Green Jobs Training Center, Kewalo Basin Park, O'ahu

Dear Mr. Schnell:

The U.S. Fish and Wildlife Service (Service) received your letter, dated August 27, 2014, in which you requested our comments on the proposed structural renovations to the Net Shed Building in Kewalo Basin Park for conversion into the Kupu Green Jobs Training Center as a pre-consultation for the associated Environmental Assessment. The proposed project involves the renovation of the ground floor interior space into sections (i.e., classrooms, gathering spaces, and offices), a new interior mezzanine for meeting room spaces, renovated restrooms, a commercial kitchen, a new structural addition for a snack bar, a garden with edible and native plants, landscaping (in an area that is currently an asphalt plaza), a photovoltaic system to power Kupu facilities, a low-impact stormwater collection and disposal system, and reconfiguration of current parking spaces. This response is in accordance with sect 7 of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 *et seq.*); the Fish and Wildlife Coordination Act of 1934 (16 U.S.C. 661 *et seq.*; 48 Stat. 401); and the Migratory Bird Treaty Act of 1918 (16 U.S.C. 703-712), as amended (MBTA).

We have reviewed the information you provided and pertinent information in our files, including data compiled by the Hawaii Biodiversity Mapping Program. There is no federally designated or proposed critical habitat, or National Wildlife Refuges, wilderness areas, or wildlife preserves in the vicinity of the proposed project. Hawaiian seabirds (e.g., White fairy Terns (*Gygis alba*), protected under the MBTA, may occur in the project area. We offer the following recommendations to assist you with your project.

White fairy terns often nest in urban parks and residential areas from Hawaii Kai to Hickam Air Force Base. White fairy terns do not build nests, instead they lay a single egg directly on a ledge, tree branch, or other suitable location. The egg will hatch after approximately 35 days,

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after which it takes 45 days for the chick to be mature enough to leave the nest on its own. If tree trimming becomes part of your project, please examine all trees slated to be cut to determine if there are white fairy terns nesting in them. Similarly, we recommend examining any structures slated for demolition. Signs that white fairy terns are present include accumulation of white feathers or white droppings underneath the tree or structure.

The federally endangered Hawaiian monk seal (*Monachus schauinslandi*), the endangered hawksbill turtle (*Eretmochelys imbricata*) and threatened green turtle (*Chelonia mydas*), collectively referred to as sea turtles, may occur within the project vicinity; however the Service consults on sea turtles and their use of terrestrial habitats (beaches where nesting and/or basking is known to occur), whereas the National Marine Fisheries Service (NMFS) consults on sea turtles and their use of off-shore and open ocean habitats, and all issues regarding monk seals. We recommend that you consult with NMFS regarding the potential impacts from the proposed project to sea turtles in off-shore and open ocean habitats, and to monk seals.

Your August 27, 2014, letter states that low-impact stormwater collection and disposal techniques may be implemented. We recommend that you include a Stormwater Pollution Prevention Plan to address stormwater runoff into your Environmental Assessment. In addition, due to the close proximity of the proposed structure to the ocean, grading and landscaping should be implemented to minimize runoff.

Because the proposed activities may cause soil erosion and sedimentation into the marine environment, we are attaching the Service's recommended Best Management Practices regarding sedimentation and erosion in aquatic environments. We encourage you to incorporate the relevant practices into your project design.

We appreciate your efforts to conserve endangered species. If you have any questions concerning these recommendations please contact Carrie Harrington, Fish and Wildlife Biologist (phone: 808-792-9400; fax: 808-792-9581).

Sincerely,



Aaron Nadig
Assistant Field Supervisor
Oahu, Kauai, NWHI, and American Samoa

Enclosure: Service BMPs for erosion and sediment control

U.S. Fish and Wildlife Service Recommended Standard Best Management Practices

The U.S. Fish and Wildlife Service (USFWS) recommends the following measures to be incorporated into project planning to avoid or minimize impacts to fish and wildlife resources. Best Management Practices (BMPs) include the incorporation of procedures or materials that may be used to reduce either direct or indirect negative impacts to aquatic habitats that result from project construction-related activities. These BMPs are recommended in addition to, and do not over-ride any terms, conditions, or other recommendations prepared by the USFWS, other federal, state or local agencies. If you have questions concerning these BMPs, please contact the USFWS Aquatic Ecosystems Conservation Program at 808-792-9400.

1. Authorized dredging and filling-related activities that may result in the temporary or permanent loss of aquatic habitats should be designed to avoid indirect, negative impacts to aquatic habitats beyond the planned project area.
2. Dredging/filling in the marine environment should be scheduled to avoid coral spawning and recruitment periods, and sea turtle nesting and hatching periods. Because these periods are variable throughout the Pacific islands, we recommend contacting the relevant local, state, or federal fish and wildlife resource agency for site specific guidance.
3. Turbidity and siltation from project-related work should be minimized and contained within the project area by silt containment devices and curtailing work during flooding or adverse tidal and weather conditions. BMPs should be maintained for the life of the construction period until turbidity and siltation within the project area is stabilized. All project construction-related debris and sediment containment devices should be removed and disposed of at an approved site.
4. All project construction-related materials and equipment (dredges, vessels, backhoes, silt curtains, etc.) to be placed in an aquatic environment should be inspected for pollutants including, but not limited to; marine fouling organisms, grease, oil, etc., and cleaned to remove pollutants prior to use. Project related activities should not result in any debris disposal, non-native species introductions, or attraction of non-native pests to the affected or adjacent aquatic or terrestrial habitats. Implementing both a litter-control plan and a Hazard Analysis and Critical Control Point plan (HACCP – see <http://www.haccp-nrm.org/Wizard/default.asp>) can help to prevent attraction and introduction of non-native species.
5. Project construction-related materials (fill, revetment rock, pipe, etc.) should not be stockpiled in, or in close proximity to aquatic habitats and should be protected from erosion (*e.g.*, with filter fabric, etc.), to prevent materials from being carried into waters by wind, rain, or high surf.
6. Fueling of project-related vehicles and equipment should take place away from the aquatic environment and a contingency plan to control petroleum products accidentally spilled during the project should be developed. The plan should be retained on site with the person responsible for compliance with the plan. Absorbent pads and containment booms should be stored on-site to facilitate the clean-up of accidental petroleum releases.
7. All deliberately exposed soil or under-layer materials used in the project near water should be protected from erosion and stabilized as soon as possible with geotextile, filter fabric or native or non-invasive vegetation matting, hydro-seeding, etc.





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April 14, 2015

Mr. Aaron Nadig, Assistant Field Supervisor
U.S. Fish and Wildlife Service
Pacific Islands Fish and Wildlife Office
300 Ala Moana Boulevard, Room 3-122
Honolulu, HI 96850

**SUBJECT: PRE-CONSULTATION FOR AN ENVIRONMENTAL ASSESSMENT
– KUPU GREEN JOBS TRAINING CENTER – PORTIONS OF TMK
(1) 2-10-58-128, (1) 2-10-58-127
Your reference: 2014-TA-0417**

Dear Mr. Nadig,

Thank you for your letter dated September 30, 2014 regarding our request for pre-consultation comments on the Kupu Green Jobs Training Center, which involves renovations of the “Net Shed Building” and ancillary outdoor areas adjacent to Kewalo Basin Park, Honolulu, O‘ahu. As the planning consultant for Kupu, we offer the following responses in the order of your comments:

1. We acknowledge that, according to your review, there is no federally designated or proposed critical habitat neither are there any National Wildlife Refuges, wilderness areas, or wildlife preserves in the vicinity of the project site.
2. We acknowledge that Hawaiian seabirds protected under the Migratory Bird Treaty Act may occur in the area around the Kupu Green Jobs Training Center. Specifically, the Draft Environmental Assessment (EA) will include your recommendations to examine all trees slated to be cut and structures slated for demolition for signs that White fairy terns (*Gygis alba*) are present.
3. We sent a pre-consultation letter to NOAA Fisheries and received comments from their Pacific Islands Regional Office advising us on maintaining marine water quality.
4. The Draft EA will include a detailed description of measures to minimize stormwater runoff.
5. We have reviewed the USFWS’s Best Management Practices regarding sedimentation and erosion in aquatic environments. The Draft EA will include the recommendation that the contractor utilize these Best Management Practices to prevent sedimentation and erosion during construction.

We appreciate your participation in the environmental review process and will inform you when the Draft EA is available.

Mr. Aaron Nadig
PRE-CONSULTATION FOR AN ENVIRONMENTAL ASSESSMENT – KUPU GREEN
JOBS TRAINING CENTER – PORTIONS OF TMK (1) 2-10-58-128, (1) 2-10-58-127

April 14, 2015

Page 2 of 2

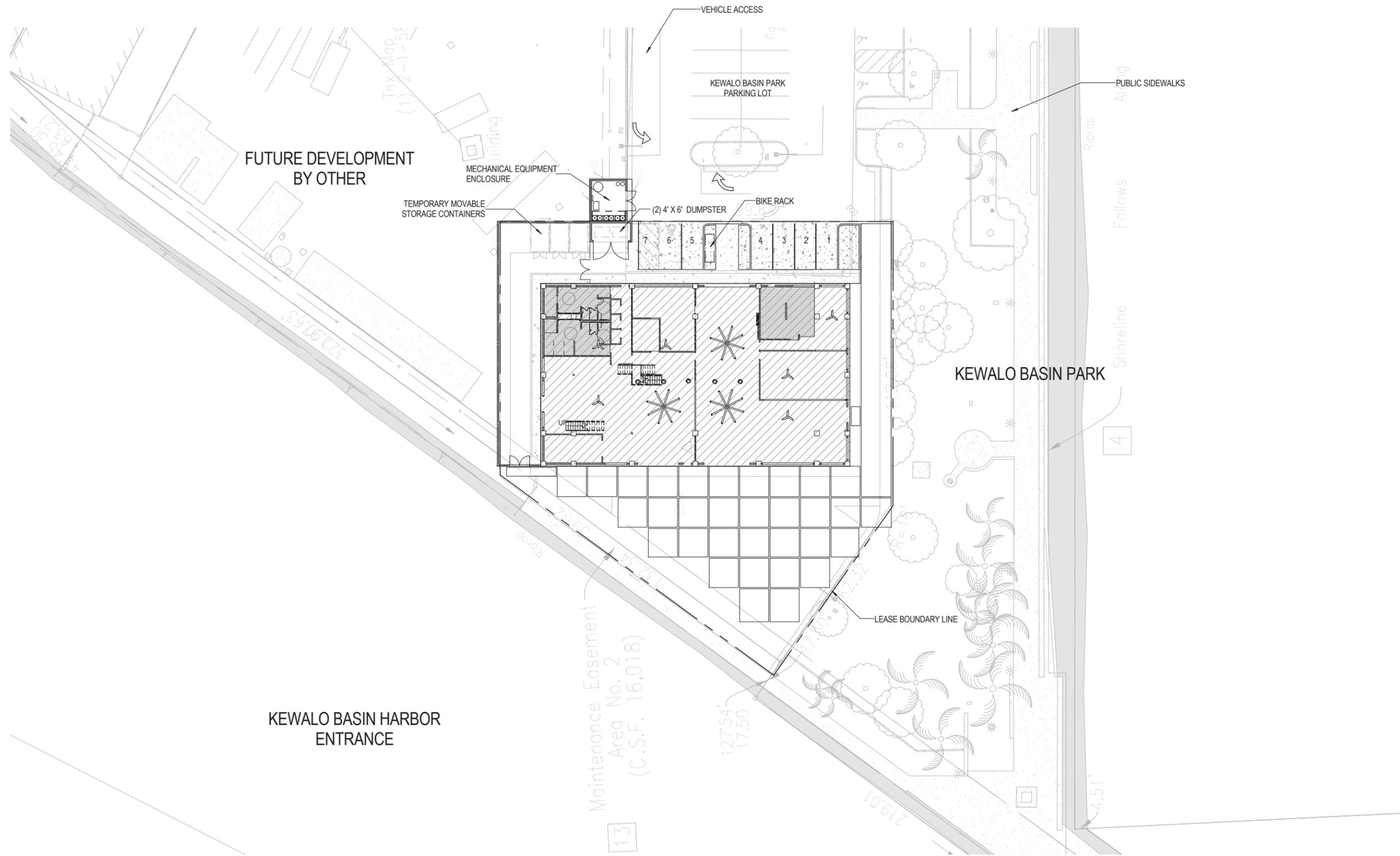
Sincerely,

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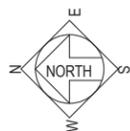
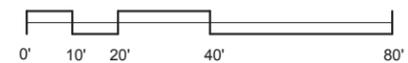
Tom Schnell
Principal

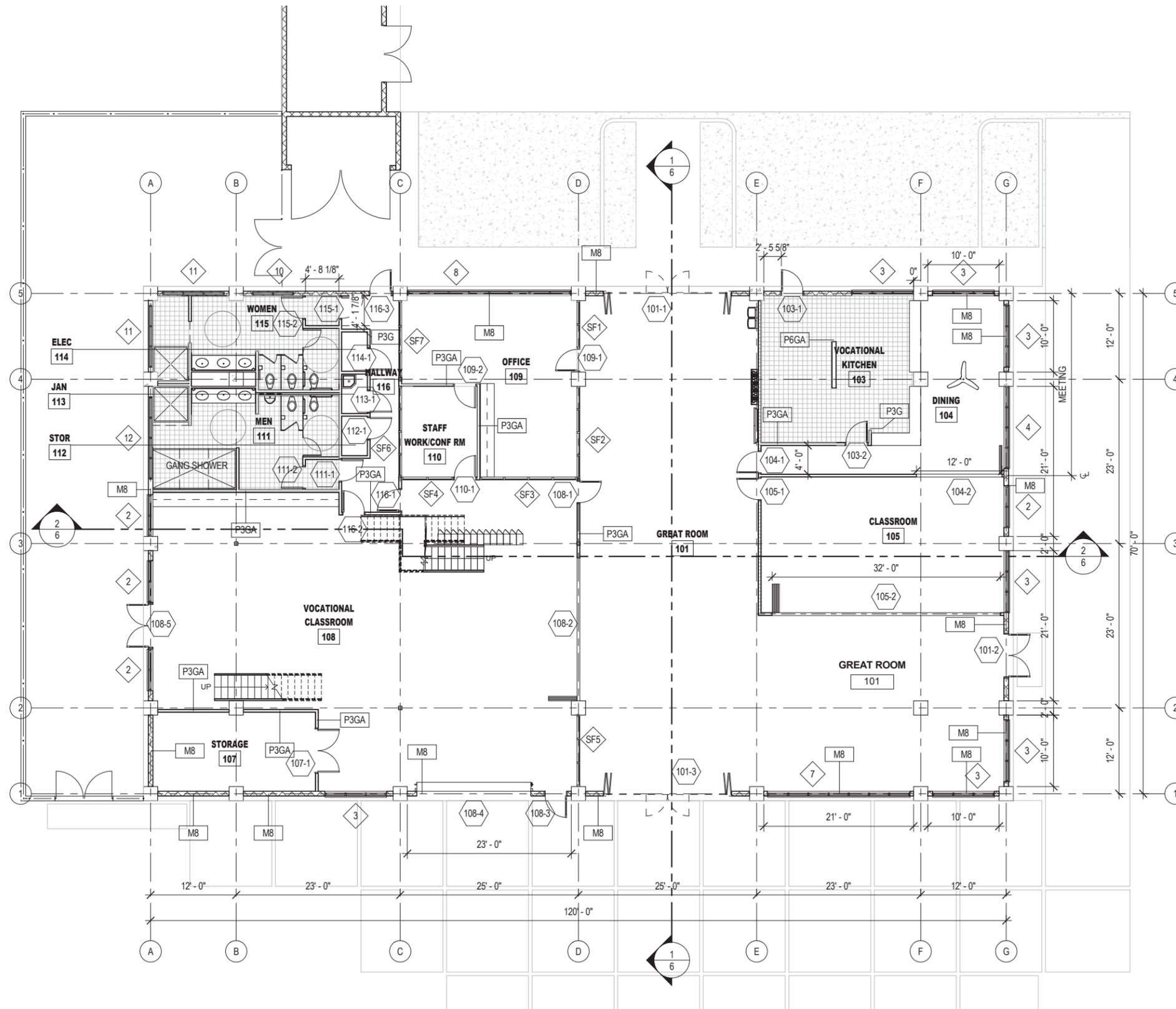
Copy: John Leong, Kupu

**APPENDIX B:
BUILDING FLOOR PLANS, ELEVATIONS, AND SECTIONS**

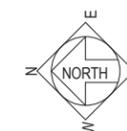
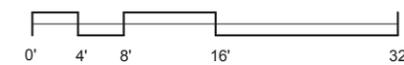


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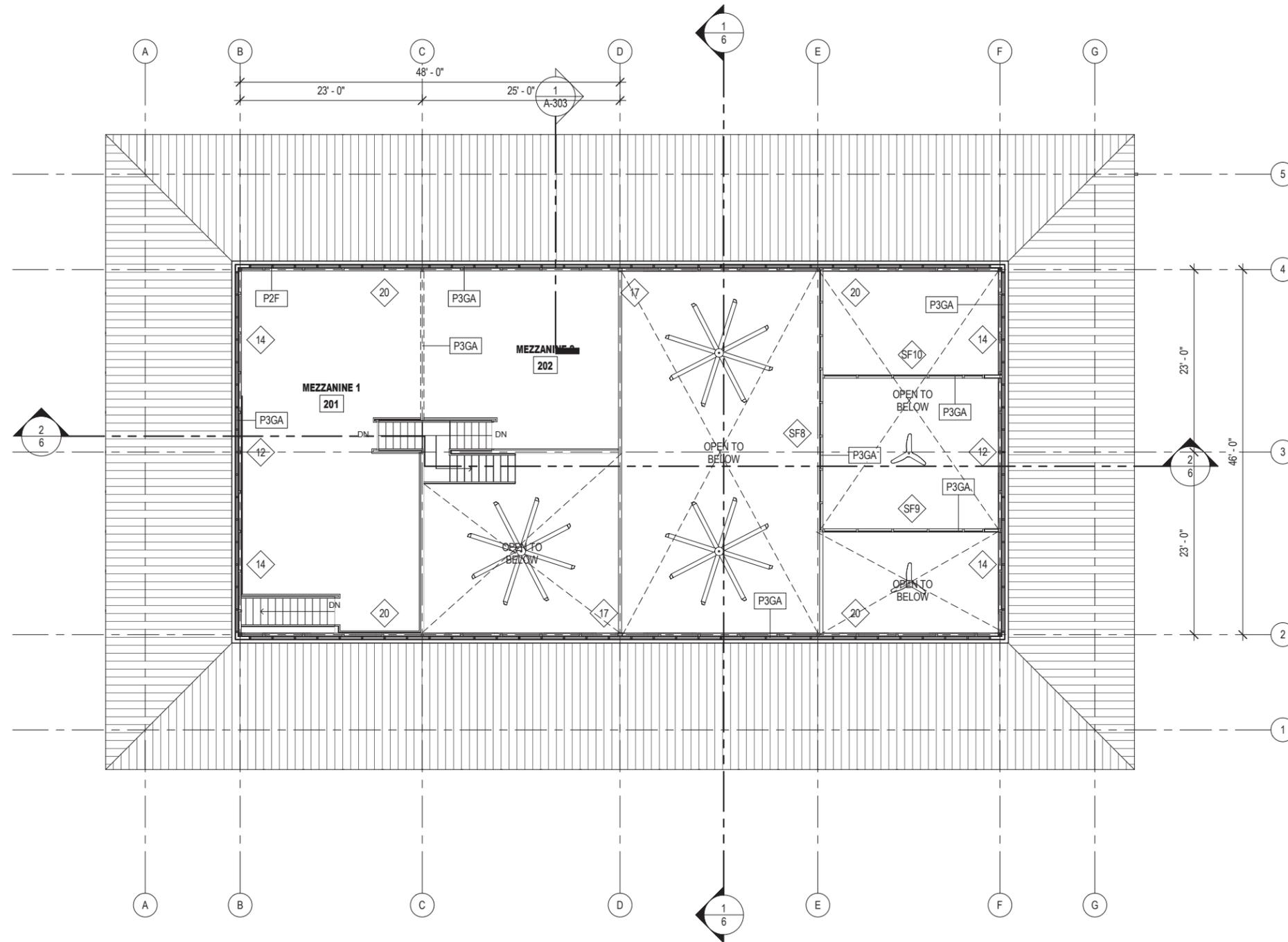


Kupu and Urban Corp Program

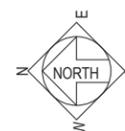
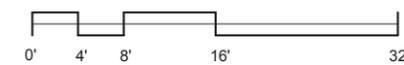
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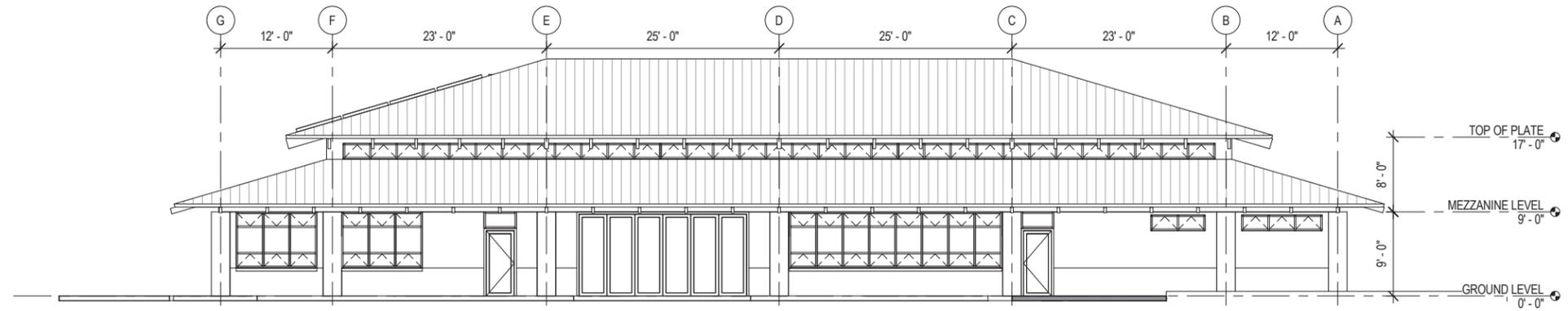
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INTERNATIONAL

08/12/15

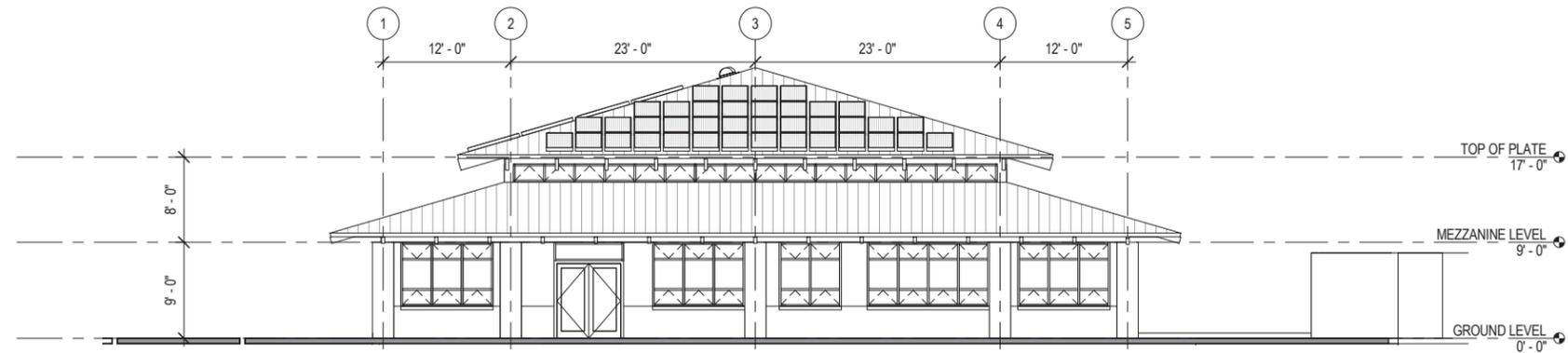


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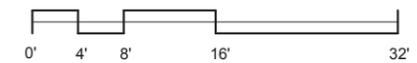


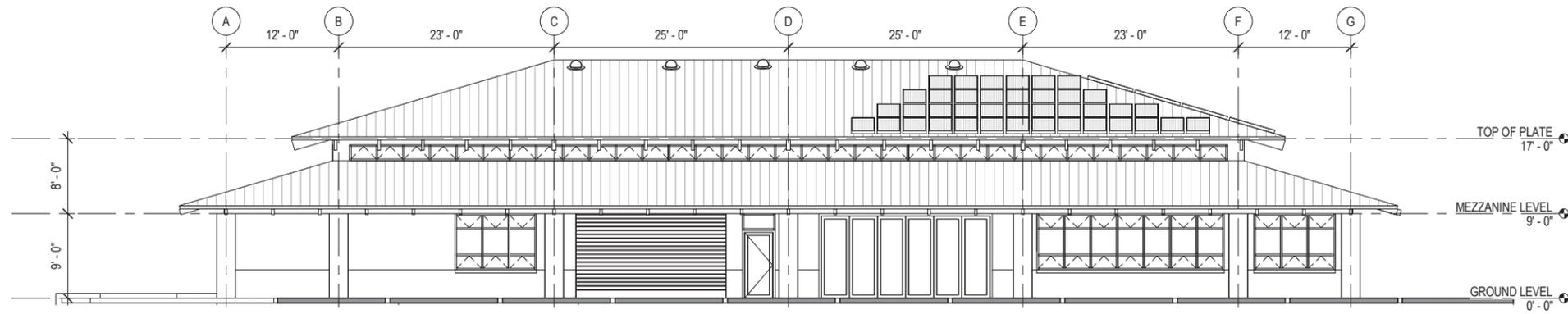
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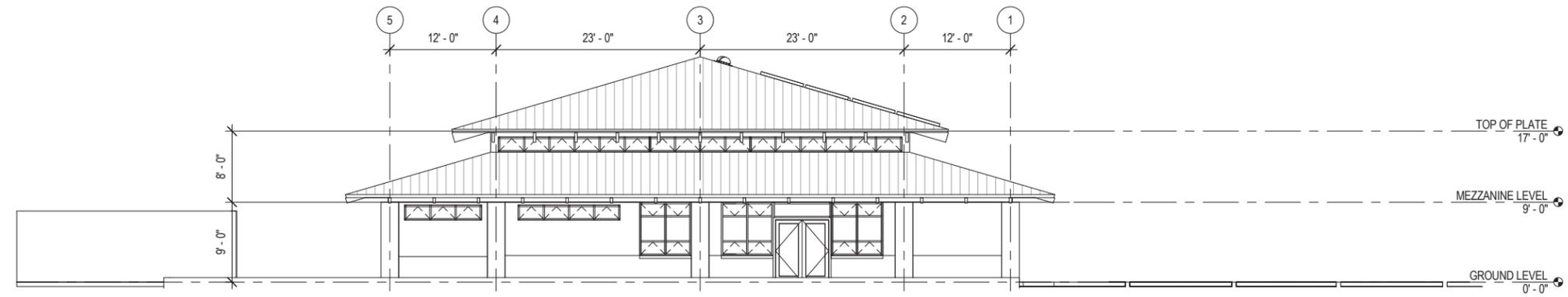
2 ELEVATION - SOUTH
SCALE: 1/8" = 1'-0"

SCALE 1/8" = 1'-0"





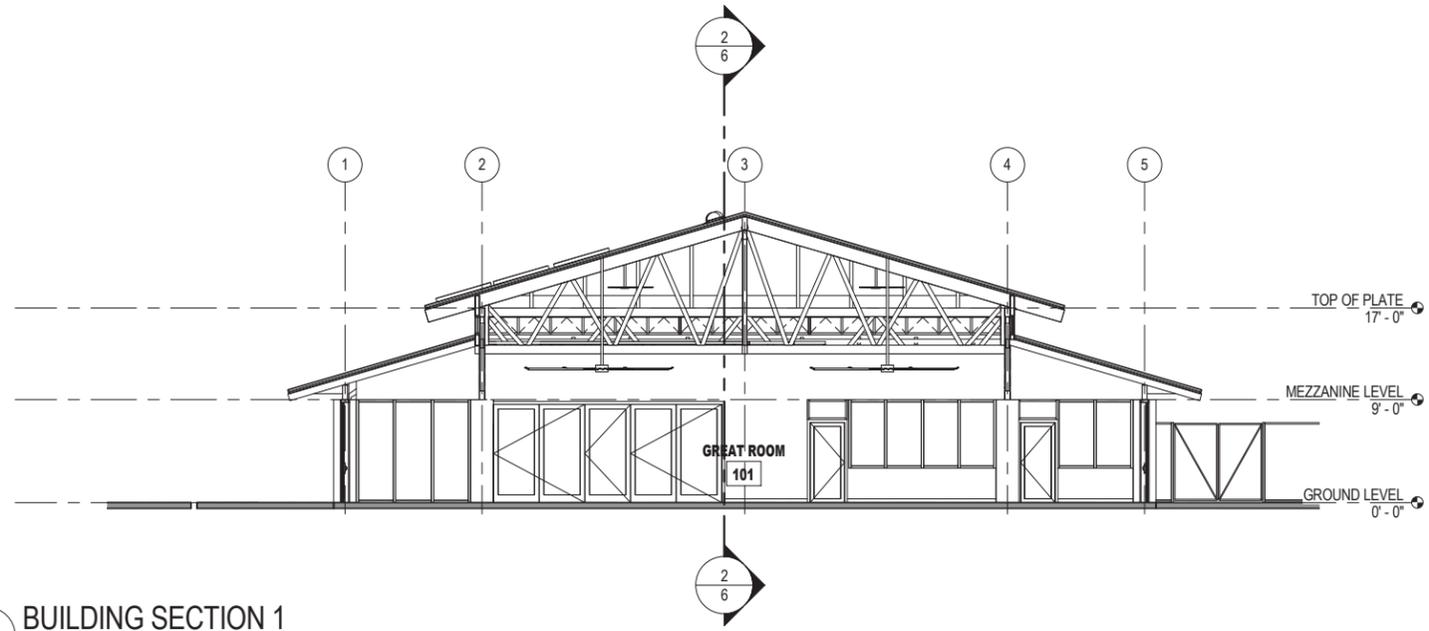
2 ELEVATION - WEST
SCALE: 1/8" = 1'-0"



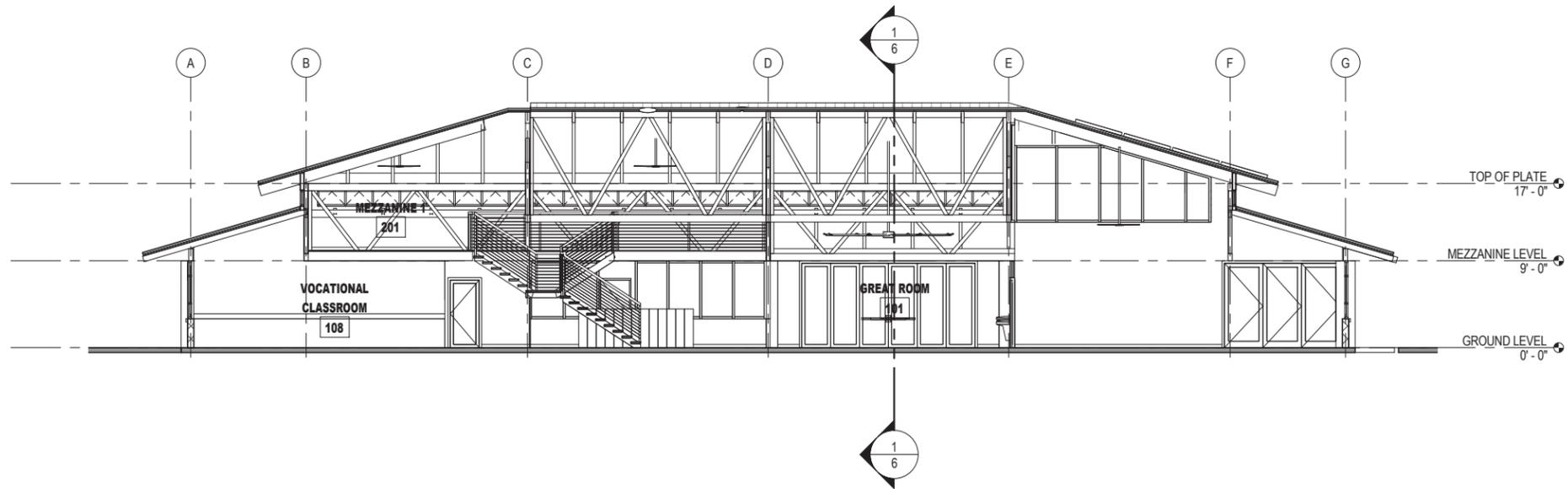
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SCALE 1/8" = 1'-0"



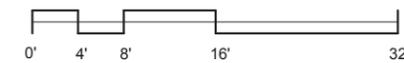


1 BUILDING SECTION 1
SCALE: 1/8" = 1'-0"



2 BUILDING SECTION 2
SCALE: 1/8" = 1'-0"

SCALE 1/8" = 1'-0"





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Great Room



**APPENDIX C:
TRAFFIC IMPACT ASSESSMENT REPORT**

Transportation Impact Assessment Report

Kupu Green Jobs Training Center Kewalo Basin, Hawai'i

June 2015



AECOM Technical Services, Inc.
1001 Bishop Street, Suite 1600
Honolulu, Hawai'i 96813
Ph. (808) 521-5031

Project Reference: 60428436

Transportation Impact Assessment Report

**Kupu Green Jobs Training Center
Kaka'ako, Hawai'i**

June 2015

Prepared for:

Kupu
677 Ala Moana Boulevard, Suite 1200
Honolulu, Hawai'i 96813
(808) 735-1221

Prepared by:

AECOM Technical Services
1001 Bishop Street, Suite 1600
Honolulu, Hawai'i 96813
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Project Reference: 60428436

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I. INTRODUCTION

Kupu is a 501(c)(3) non-profit organization based in Honolulu, Hawaii. Founded in 2007, Kupu was developed in response to the growing needs of Hawai'i's communities to train the next generation in natural resource management, renewable energy, energy conservation and other green job skill sets. Kupu houses and manages four service-learning programs in the "green jobs" sector: the Hawai'i Youth Conservation Corps (HYCC), CommunityU Program, RISE Program and the Environmental Education Program (E2U).

As part of their CommunityU program, Kupu is currently using the former "Net Shed" building at Kewalo Basin as their Green Jobs Training Center. Figure 1 illustrates the location of the site.

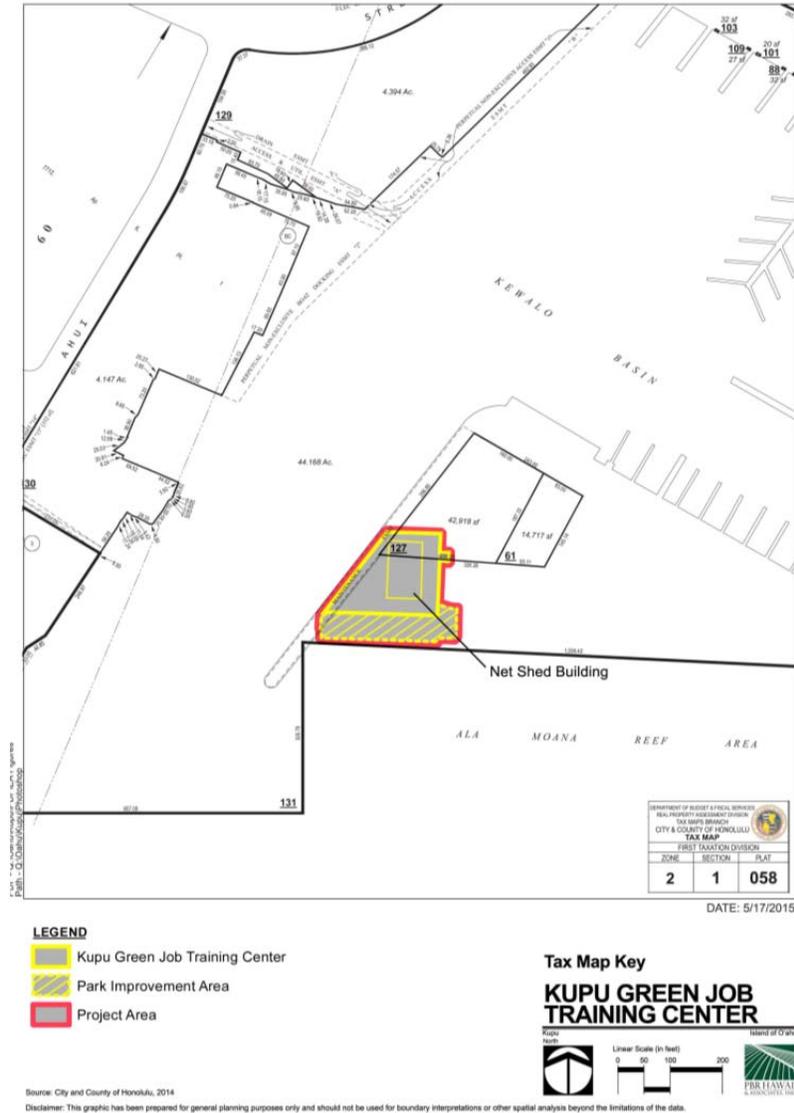


Figure 1 – Location of Kupu Green Job Training Center Site

Kupu is proposing to renovate the “Net Shed” building to improve its CommunityU and CBASE programs. These improvements will enable Kupu to double the number of under-resourced youths that it serves through these programs. Figure 2 illustrates the currently proposed site plan, and Table 1 summarizes the changes in employees and participants for the renovated building.

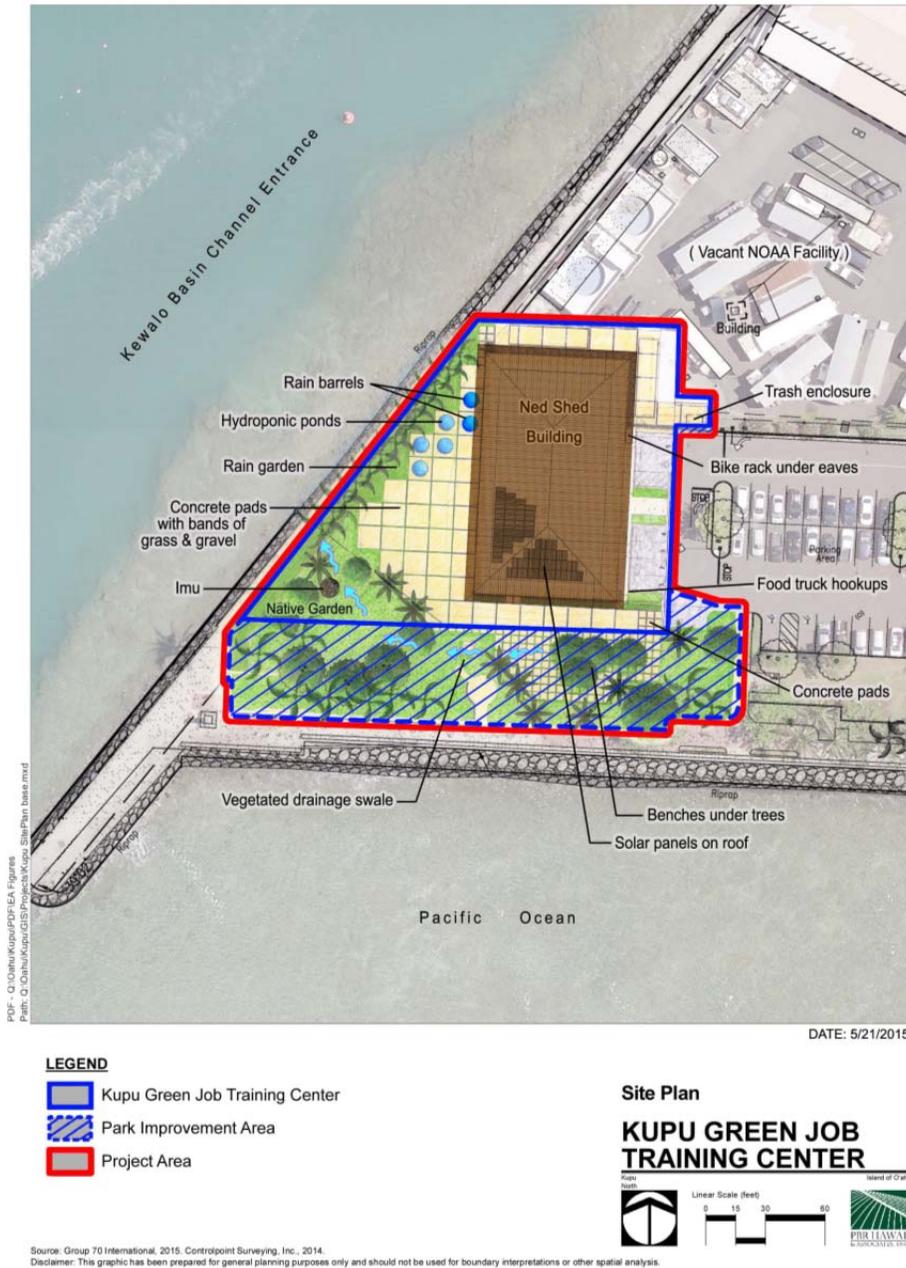


Figure 2 – Kupu Green Jobs Training Center (“Net Shed”) Site Plan

Table 1
“Net Shed” Building Employees and Participants

	Existing Conditions	After Renovations
Employees/Volunteers Monday - Friday	6 total Including Staff, Social Work Students, & Team Leaders	10 total Including Staff, Social Work Students, & Team Leaders
Youth/Participants Monday - Friday	24 total 12 Youth Participants 12 CBASE Students on Monday, Tuesday, & Thursday	48 total 24 Youth Participants 24 CBASE Students on Monday, Tuesday, & Thursday
Life 360 Program Sundays	190 Youth Youth come in vans and buses and are dropped off.	190 Youth Youth come in vans and buses and are dropped off.
Special/Community Events	100 People per event Variable Frequency	100 People per event Variable Frequency

As shown in Table 1, the number of youths served in the weekday programs is small, and even after the renovations, is very small. For the purpose of this analysis the staff is assumed to drive to the facility, but the youth involved in the programs use, and are expected to continue to use, primarily public transit to travel to and from the “Net Shed” site.

Given the relatively small vehicular travel demand generated by the proposed renovation of the “Net Shed” site, this transportation analysis relies on traffic studies conducted recently for two other development parcels located in the immediate vicinity of the “Net Shed” site. The transportation analysis conducted for the Kupu Green Job Training Facility and documented in this report is new, but base year and future traffic volumes were taken directly from the other studies. A more detailed discussion of how information from these other studies were obtained and used for this study are included in Chapter III of this study report.

II. EXISTING CONDITIONS

A. Site Description

The “Net Shed” building, an 8,400-square foot open-sided pavilion at Kewalo Basin, was originally constructed in 1989/1990 by the Hawai‘i Community Development Authority (HCDA) for use as a fishing net storage and drying area by Honolulu’s fishing fleet. Due to changes in the fishing fleet at Kewalo Basin as well as changes in equipment (nylon nets are now used), the facility is no longer needed as a net drying shed.

Between 2006 and 2010 HCDA leased the Net Shed Building to Hālau Kū Māna, a public charter school. Hālau Kū Māna used the building as a learning laboratory for the school’s coastal education programs.

Kupu currently uses the “Net Shed” building and an area surrounding the building for its Green Job Training Center. The Center provides educational youth services and a variety of programs that primarily focus on training young adults in the fields of sustainability, conservation, and land stewardship. Currently, the building is an open pavilion structure with a roof and chain link walls between columns. The interior space is not divided except for restroom facilities and a small kitchen area. Figure 3 is comprised of photographs that illustrate the current “Net Shed” building.



Source: PBR HAWAII, 2015.
 Disclaimer: This graphic has been prepared for general planning purposes only and should not be used for boundary interpretations or other spatial analysis beyond the limitations of the data.

Figure 3 Existing “Net Shed” Building

The “Net Shed” is located adjacent to Kewalo Basin Park, a public park, and a land parcel (commonly referred to as the “NOAA site”) that is planned for redevelopment. Kewalo Basin Park has parking that is intended for users of the park. Six parking stalls in front of the “Net Shed” building (Diamond Head side) are reserved for Kupu’s exclusive use as part of its current agreement with HCDA. For any additional stalls that may be required for Kupu, HCDA and Howard Hughes (which has an existing lease to operate the harbor, boat slips, and parking immediately adjacent to the harbor) have committed to working with Kupu to provide for the remaining required parking, as well as event parking. The additional parking will be provided either closer to Ala Moana Boulevard or within Howard Hughes lease areas.

B. Roadway Conditions

Access to the “Net Shed” building is from Ala Moana Boulevard; therefore this transportation study focuses on transportation impacts along Ala Moana Boulevard. Included in this assessment are the:

- Ward Avenue intersection
- Kewalo Basin entrance driveway from Ala Moana Boulevard near Ward Avenue;
- Kewalo Basin exit driveway on to Ala Moana Boulevard,
- East Kewalo Basin driveway “T” intersection with Ala Moana Boulevard (signalized, near Kamake’e Street); and
- Kamake’e Street intersection.

Ala Moana Boulevard is an ‘Ewa-Diamond Head major arterial roadway providing sub-regional access and is a major corridor for access to Waikīkī. In the vicinity of Kewalo Basin, there are three lanes in each direction with a raised center median. This segment of Ala Moana Boulevard is bordered by Ward Warehouse on the mauka side and Kewalo Basin on the makai side. The State of Hawai‘i Department of Transportation (HDOT) has jurisdiction of this roadway. The posted speed limit is 35 mph.

The Ward Avenue intersection is signalized. Ward Avenue is a mauka-makai roadway providing access between Ala Moana Boulevard and the H-1 Freeway. This street provides two lanes in each direction, with a center left-turn lane. Makai of Ala Moana Boulevard, Ward Avenue continues as Ilalo Street that curves to align parallel with Ala Moana Boulevard. Ilalo Street provides access and vehicular circulation for the Kaka‘ako makai area. At its intersection with Ala Moana Boulevard, the both ‘Ewa and Diamond Head-bound Ala Moana approaches have exclusive left-turn lanes and the ‘Ewa-bound approach adds an exclusive right-turn lane. The Ward Avenue approach is configured with exclusive left, shared through-left, and shared through-right lanes. The Ilalo Street approach is configured with separate left, through, and right lanes. In the vicinity of its intersection with Ala Moana Boulevard, both sides of Ward Avenue are lined by mostly commercial retail land uses, and on-street parallel parking is provided on the Diamond Head side of Ward Avenue between Auahi Street and Ala Moana Boulevard. The posted speed limit is 25 mph.

The Kamake’e Street intersection is signalized. Kamake’e Street is a mauka-makai street providing access connecting Ala Moana Boulevard with Kapi‘olani Boulevard where it terminates. For most of its length, Kamake’e Street is two lanes in each direction. Makai of Ala Moana Boulevard, Kamake’e Street becomes Ala Moana Park Drive, an internal roadway within Ala Moana Park. At Ala Moana Boulevard, the Kamake’e Street and Ala Moana Park Drive approaches are configured with a shared through and left-turn lane, and an exclusive right-turn lane. Adjacent land use between Ala Moana Boulevard and Auahi Street will be commercial retail and residential high-rise uses. On-street parallel parking is provided along Ala Moana

Park Drive. The posted speed limit on Kamake'e Street is 25 mph. The posted speed limit on Ala Moana Park Drive is 15 mph

The East Kewalo Basin Driveway intersection is signalized. However, the 'Ewa-bound to makai-bound left turn into Kewalo Basin is not allowed at this "T"-intersection. Therefore, vehicles on Ala Moana Boulevard approaching Kewalo Basin in the 'Ewa-bound direction must either execute a U-Turn at the Ward Avenue intersection or find an alternative route to access Kewalo Basin. At the East Kewalo Basin Driveway approach, there are separate left and right turn lanes.

Between Ward Avenue and the East Kewalo Basin Driveway, there are separate entrance and exit driveways. These driveways serve primarily the 'Ewa and mauka sides of Kewalo Basin. The Diamond Head side of Kewalo Basin is more directly served by the East Kewalo Basin Driveway. These driveways allow access from and to Diamond Head-bound Ala Moana Boulevard and are unsignalized.

C. Bicycle & Pedestrian Conditions

There are sidewalks on both sides of Ala Moana Boulevard between Ward Avenue and Kamake'e Street. Crosswalks are provided across all legs of the Ward Avenue intersection and across all legs except the 'Ewa leg at the Kamake'e Street intersection. A crosswalk is provided across the East Kewalo Basin Driveway.

There are no marked bicycle facilities along this segment of Ala Moana Boulevard. The State of Hawai'i Bicycle Master Plan indicates future plans for bike lanes along this segment of Ala Moana Boulevard.

D. Public Transit Conditions

Four bus stops (two mauka side and makai side) are located on Ala Moana Boulevard in the vicinity of Kewalo Basin. The bus stops located near Kamake'e Street are more likely to be used by people associated with the Kupu Green Jobs Training Center. The 'Ewa-bound stop near Kamake'e Street is #764 and the Diamond Head-bound stop is #955.

These bus stops are served by Routes 19, 20, 42, 55, 56, and 57/57A.

Route 19 (Waikiki-Airport-Hickam) runs from around 6 AM to 12:25 AM. Route 20 (Waikiki-Airport-Pearlridge) runs from 5 AM to 6 PM. Route 42 (Waikiki-'Ewa Beach) runs from about 4 AM to 3 AM (span of 23 hours). Route 55 (Ala Moana-Kāne'ohe-Hale'iwa) runs from around 5 am until 10:30 pm. Route 56 (Ala Moana-Kailua-Kāne'ohe) runs from around 5 AM to 9:30 PM. Route 57/57A (Ala Moana-Kailua-Waimanalo) runs from around 5 AM to 10:40 PM. Service headways vary according to the time of day.

The Kupu Green Job Training Center is also under a mile from the planned Civic Center Station and less than half mile from the Kaka'ako Station of the Honolulu Rail Transit Project (H RTP) currently under construction. The full H RTP is anticipated to be complete in 2019.

E. Traffic Conditions

Base year 2014 PM peak hour turning movement traffic counts documented in the following reports were used to establish base year 2014 conditions at intersections on Ala Moana Boulevard between Ward Avenue and Kamake'e Street:

- Traffic Assessment Report for the Proposed Napule Restaurant, Honolulu, Hawai'i by The Traffic Management Consultant (TMC), November 6, 2014;

- Kewalo Basin Restaurant and Retail Project Transportation Impact Analysis Report by Fehr-Peers and Associates, October 2014.

The PM peak hour was used as the analysis time period because it was the most constrained weekday time period. The Base Year 2014 PM peak hour occurred from 5:00 PM to 6:00 PM.

Figure 4 summarizes the Base Year 2014 PM peak hour turning movements at the intersections on Ala Moana Boulevard in the vicinity of Kewalo Basin, and Table 2 summarizes the intersection operations at the signalized intersections within this segment of Ala Moana Boulevard.

The signalized intersections were analyzed using the method described in Chapter 16 of the 2000 Highway Capacity Manual (HCM) (Special Report 209, Transportation Research Board) through the Synchro/Sim Traffic software. The Synchro worksheets are included in Appendix A of this report.

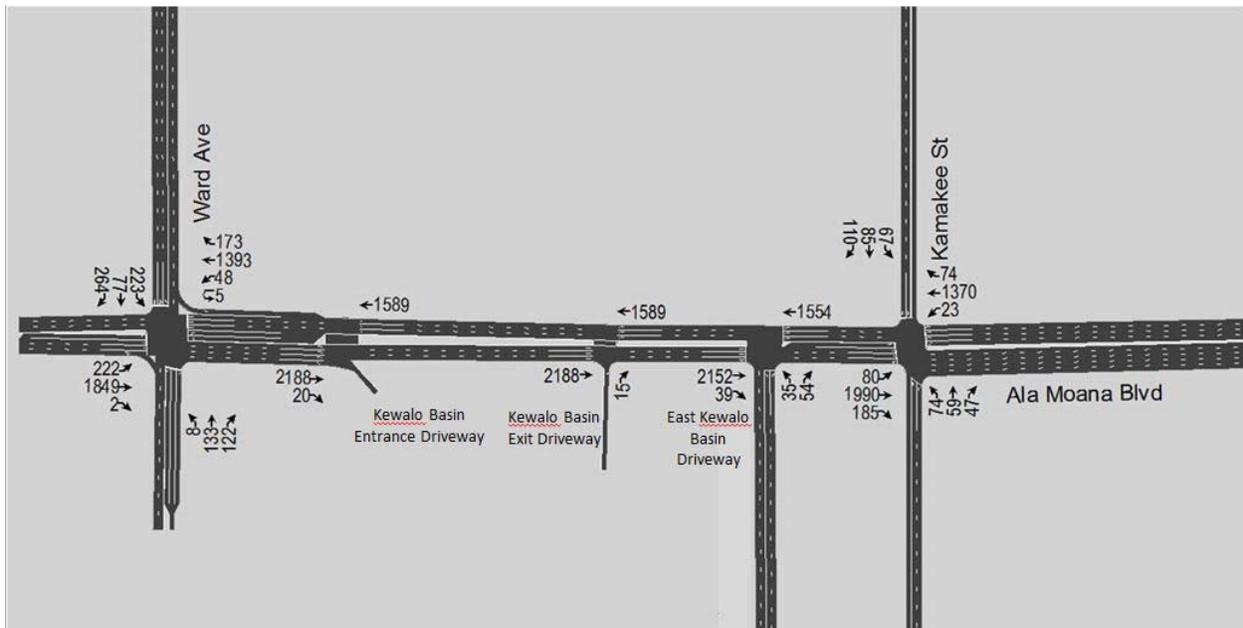


Figure 4 Base Year 2014 PM Peak Hour Traffic Volumes

Intersection	Control	Delay	LOS
Ward Avenue	Signalized	39.8	D
East Kewalo Basin Driveway	Signalized	5.8	A
Kamake'e Street	Signalized	28.2	C

Note: Delay is in seconds/vehicle
Synchro worksheets are in Appendix

Table 2 Base Year 2014 PM Peak Hour Intersection Operations

As shown in Table 2, the key intersections at Ward Avenue and Kamake'e Street operate acceptably for peak hour conditions with Level of Service (LOS) C and D operation. The East Kewalo Basin Driveway intersection operates very well, LOS A, given that only selected traffic movements are allowed. LOS for signalized intersections is a qualitative index that is referenced to the intersection delay. LOS ranges from LOS A, the least congested operating condition, to LOS F, the most congested operating condition. LOS D is considered an acceptable level of service for urban conditions.

III. FUTURE CONDITIONS

A. Proposed Renovation of the “Net Shed”

Kupu currently uses the “Net Shed” for its CommunityU (CU) program. The proposed renovation of the “Net Shed” will allow Kupu to double the number of youths served.

Table 3 summarizes the existing and proposed levels of activity at the “Net Shed.” It is expected that the proposed renovation would be completed in approximately 2 years.

Table 3 Summary of Activity with Existing and Renovated “Net Shed”

	Existing Conditions	After Renovations
Employees/Volunteers Monday – Friday	6 total Including Staff, Social Work Students, & Team Leaders	10 total Including Staff, Social Work Students, & Team Leaders
CommunityU Youth/Participants Monday – Friday	24 total 12 Youth Participants 12 CBASE Students on Monday, Tuesday, & Thursday	48 total 24 Youth Participants 24 CBASE Students on Monday, Tuesday, & Thursday
Life 360 Program Sundays	190 Youth Youth come in buses and are dropped off.	190 Youth Youth come in buses and are dropped off.
Special/Community Events	100 People per event Variable Frequency	100 People per event Variable Frequency

Notes: Source of information: Kupu
CommunityU internship is designed for young adults seeking hands-on service opportunity
CBASE is competency-based high school diploma equivalency program.

B. Vehicular Trips Generated by the Kupu Green Jobs Training Center

1. Vehicular Trips Generated by Staff

The “Net Shed” currently has six parking spaces. The renovation will convert one parking space to an ADA-compliant parking stall, leaving five parking spaces for general use. For any additional stalls that may be required for Kupu, HCDA and Howard Hughes (which has an existing lease to operate the harbor, boat slips, and parking immediately adjacent to the harbor) have committed to working with Kupu to provide for the remaining required parking, as well as event parking. The additional parking will be provided either closer to Ala Moana Boulevard or within Howard Hughes lease areas.

Therefore, even though the Green Jobs Training Center will initially be constrained to only allowing five employees to drive vehicles to the “Net Shed,” it is assumed that in the future, all

ten employees will drive to the “Net Shed.” Further, to estimate the worst-case scenario, all employees were assumed to depart during the PM peak hour.

2. Vehicular Trips Generated by Students

The CU and CBASE programs serve under-resourced young adults age 16-24 years old. Based on discussions with Kupu, almost all of these students rely primarily on public transit. Kupu also provides bus passes to program participants. A small number program participants bike or walk to the site and an even smaller number are dropped off at the site. Students are at the “Net Shed” on Monday, Tuesday, Thursday, and Friday. For the purposes of this study, it was assumed that approximately 10 percent of the students (5 students) will be dropped off and picked up by someone driving a vehicle. Further, to estimate the worst-case scenario, it was assumed that the students would be picked up during the PM peak hour.

3. Vehicular Trips Generated by the Life 360 Program

As part of Kupu’s goal to make the Green Jobs Training Center available to various community groups, Kupu currently allows Life 360 Network, Inc. to use the “Net Shed” building on Sundays. Life 360 has similar goals as Kupu in that they provide educational and recreational programs for at-risk youth to positively move their lives forward. According to Kupu, up to 190 youth may attend the Sunday program and are transported by chartered bus. Currently five buses are used to transport the youth to the “Net Shed” building. This will remain the same after the proposed renovations to the “Net Shed” building.

4. Vehicular Trips Generated by Community Events

Community events are currently held at the “Net Shed” and will continue to be held after the proposed renovation. The occurrences of these events are variable. There could be months where several events are held and there could be months where no events are held. Kupu commits to proper monitoring the traffic associated with events and may need to adjust the starting times of special events in the future so as not to have a significant impact on traffic conditions during the PM peak hour. Kupu may also make advance arrangements for parking and traffic control if needed. These events are handled on a case by case basis and are not usually analyzed as part of a transportation impact analysis report.

5. Vehicular Trips Generated by Total Kupu Green Jobs Training Center Renovation

Table 4 summarizes the vehicular traffic generated by the components of the proposed “Net Shed” renovation. As shown, the total generation from the Kupu Green Jobs Training Center Renovation is very small.

The PM peak hour vehicular trips were assigned to the traffic turning movements at the analyzed intersections on Ala Moana Boulevard based on a directional distributed of 60 percent to/from Diamond Head and 40 percent to/from ‘Ewa.

Table 4 Peak Hour Traffic Volumes Generated by Renovated “Net Shed”

Trip Generator	PM Peak Hour			Life 360 Program (Sundays)		
	In	Out	Total	In	Out	Total
Staff/Employees	0	10	10	0	0	0
Students	5	5	10	0	0	0
Life 360 Program	0	0	0	5 ¹	5 ¹	10 ¹
Community Events	*	*	*	*	*	*
Total	5	15	20	5	5	10

Note: Staff working days are Monday-Friday. PM peak hour is the most congested time period.
¹ The Life 360 program is on Sunday and reflect trips by buses that transport youth to the “Net Shed” building.
 *Community events occur with variable frequency and are addressed through event permitting process.

C. Projected Year 2017 PM Peak Hour Background Traffic Volumes

Projected future background traffic volumes estimate the growth in traffic volumes based on development in the vicinity of the “Net Shed” and due to growth in regional traffic at the analysis intersections.

Future background traffic volumes were obtained from the following traffic analyses:

- Traffic Assessment Report for the Proposed Napule Restaurant, Honolulu, Hawaii by The Traffic Management Consultant (TMC), November 6, 2014;
- Kewalo Basin Restaurant and Retail Project Transportation Impact Analysis Report by Fehr-Peers and Associates, October 2014.

Because the Fehr-Peers report utilized a horizon year of 2017 (as opposed to 2016 for the TMC study) that more closely matched the timing of the Kupu Green Jobs Training Center renovation schedule, its future traffic volumes including the proposed Kewalo Basin Restaurant and Retail Project were utilized as the background future traffic volumes for the Kupu Green Jobs Training Center analysis. The TMC report was used to add in the traffic generated by the proposed Napule Restaurant. Both the Fehr and Peers and the TMC studies acknowledged future traffic generated by new development in the surrounding Kaka’ako area and regional traffic growth.

Figure 5 illustrates the Future Year 2017 PM peak hour traffic volumes background traffic volumes.

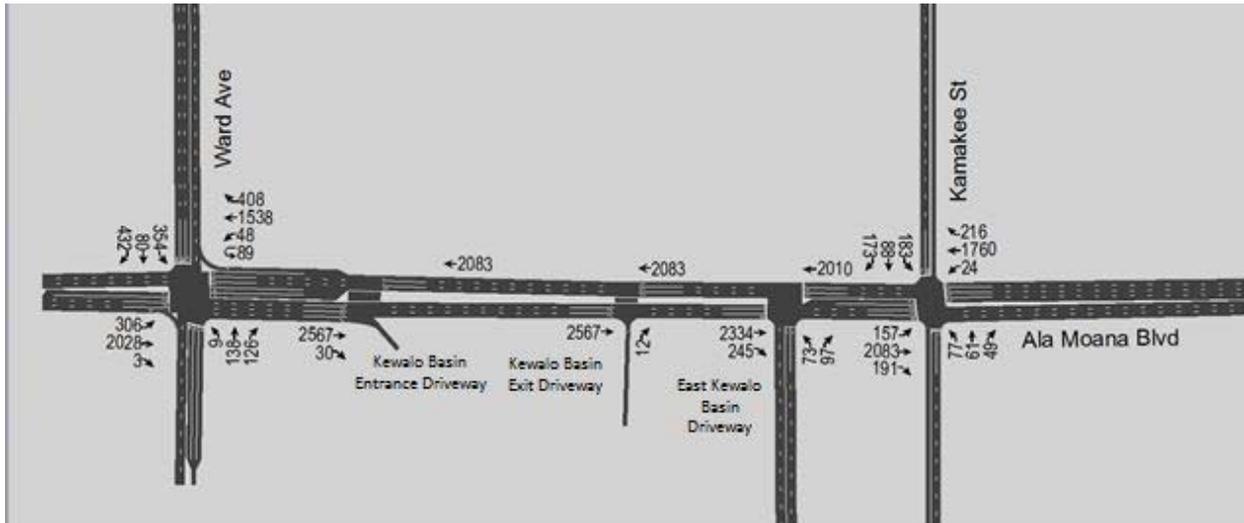


Figure 5 Projected Year 2017 PM Peak Hour Background Volumes

D. Projected Year 2017 PM Peak Hour Traffic Volumes with Kupu Green Jobs Training Center Renovation

The vehicular traffic volumes summarized in Table 4 of this report for the PM peak hour time period were added to the projected 2017 background traffic volumes shown in Figure 5. Figure 6 summarizes the resulting projected year 2017 traffic volumes with the added traffic from the Kupu Green Jobs Training Center Renovation.

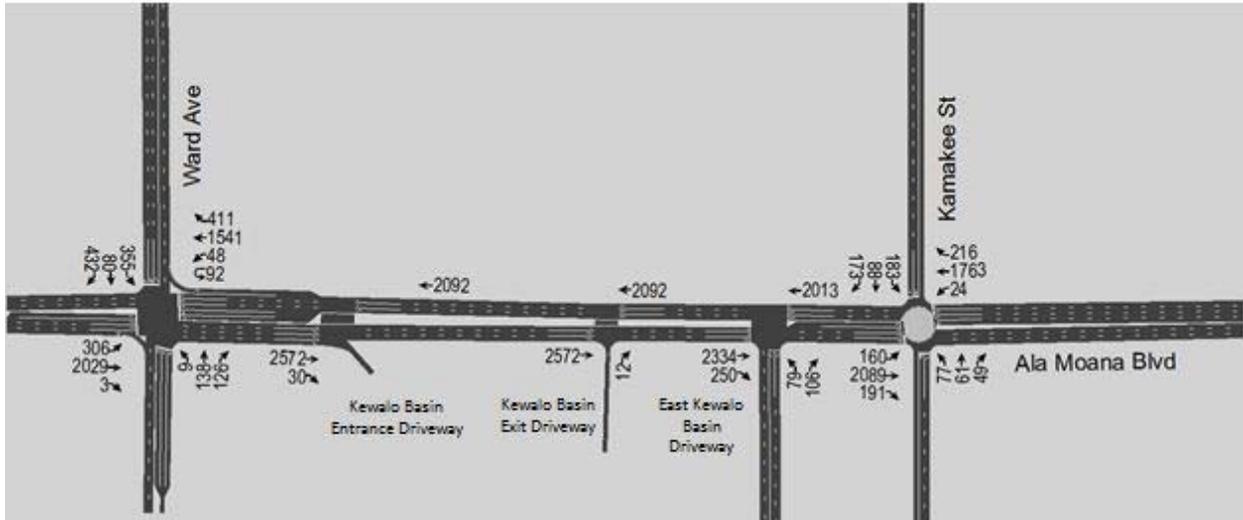


Figure 6 Projected Year 2017 PM Peak Hour Traffic Volumes with Kupu Green Jobs Training Center

E. Projected Year 2017 PM Peak Hour Intersection Operations

Projected Year 2017 PM peak hour traffic volumes without and with the Kupu Green Jobs Training Center Renovation were evaluated at the signalized intersections on Ala Moana Boulevard at Ward Avenue, East Kewalo Basin Driveway, and Kamake’e Street.

The signalized intersections were analyzed using the method described in Chapter 16 of the 2000 Highway Capacity Manual (HCM) (Special Report 209, Transportation Research Board) through the Synchro/Sim Traffic software. The Synchro worksheets are included in Appendix A of this report.

The results of the analyses are summarized in Table 5. As shown, even though growth in background traffic creates more congested operations at the intersections, the addition of the Kupu Green Jobs Training Center traffic volumes has virtually no effect on operations at any of the analyzed intersections.

Table 5 Projected Year 2017 PM Peak Hour Intersection Operations at Ala Moana Boulevard Intersections

Intersection	Without Kupu Renovation Project		With Kupu Renovation Project	
	Delay	LOS	Delay	LOS
Ward Avenue	76.2	E	76.6	E
East Kewalo Basin Driveway	10.9	B	11.2	B
Kamake’e Street	40.2	D	40.5	D

Note: Delay is in second/vehicle

F. Transit, Pedestrian, and Bicycle Issues

As discussed earlier in this report, almost all of the students attending the CommunityU and CBASE programs at the “Net Shed” will utilize public transit. Since the public transit stops are located on Ala Moana Boulevard, the transit riders will also act as pedestrian between the “Net Shed” and the bus stops.

Figure 7 conceptually illustrates the location of the public transit stops and pedestrian facilities in the vicinity of Kewalo Basin. The public transit stops located just Diamond Head of the Ala Moana Boulevard/ Kamake’e Street intersection would be the closest to the “Net Shed.” The Ala Moana Boulevard/Kamake’e Street intersection is signalized with crosswalks located as illustrated in Figure 7. There is also a strong system of sidewalks that connect the public transit stops to the “Net Shed.” A likely walking path is shown in Figure 7.



Figure 7 Transit and Pedestrian Access

Bicycle riders would benefit from bike parking facilities at the “Net Shed.” Cyclists traveling to and from Diamond Head could utilize Ala Moana Park Drive and other paths within Ala Moana Park to travel up to Atkinson Drive. Kamake’e Street provides a route to streets such as Pohukaina Street and Halekauwila Street that parallel Ala Moana Boulevard and carry a much lower volume of traffic. The State of Hawai’i Bicycle Master Plan indicates future plans for bike lanes along Ala Moana Boulevard in the vicinity of Kewalo Basin.

IV. SUMMARY AND RECOMMENDATIONS

A. Summary

The renovation of the Kupu Green Jobs Training Center at the Kewalo Basin “Net Shed” is expected to have minimal traffic and other transportation impacts.

Even though proposed renovation to the “Net Shed” building would allow a doubling of students served by the CommunityU and CBASE programs, the amount of students after renovation is only 48 students. The staff would increase from 6 to 10 employees/volunteers. The impacts caused by the proposed renovation would be attributed to these incremental increases, but in order to evaluate a worst-case condition, impacts in this report are based on post-renovation totals. For this condition, all employees/volunteers are assumed to drive to the “Net Shed” site separately and 10 percent of the students are assumed to be dropped off and picked up by someone driving a vehicle.

Even with these conservative assumptions, the amount of vehicular traffic generated during the PM peak hour is small: only 5 vehicles per hour (vph) inbound and 15 vph outbound. This is because most of the students are expected to primarily utilize public transit or non-motorized modes to access the site. Current students do this and the additional students accommodated by the proposed renovation are expected to do the same. The PM peak hour was evaluated because it was the most constrained time period during the weekdays. The Training Center does not operate on the weekends.

As a result, PM peak hour weekday intersection impacts attributable to vehicular traffic from combined staff and student attendance would be minimal.

Six public transit bus routes provide service in the Ala Moana Boulevard corridor in the vicinity of Kewalo Basin. These routes have the capacity to handle the student demand from the CommunityU and CBASE programs.

There are adequate pedestrian facilities to allow students access between the “Net Shed” site and Ala Moana Boulevard. There are no formal bicycle facilities in the vicinity of Kewalo Basin. However, Kamake’e Street provides reasonable access to streets such as Pohukaina and Halekauwila that provide a less intense cycling environment than Ala Moana Boulevard. Additionally, Ala Moana Park Drive and paths in Ala Moana Park provide routes for cyclists coming from the Diamond Head direction.

Life 360 conducts a youth program at the Net Shed building on Sundays. Youth participants coming to the program are transported by chartered bus. This will continue unchanged after the renovation. Five buses are used for transport of the youth. The five bus trips into and out of the Kewalo Basin area on Sundays will not negatively impact traffic operations on Ala Moana Boulevard.

Community and special events currently occur are expected to continue at the Center after the renovations to the “Net Shed.” They may increase in frequency; although the frequency and timing of the events are still expected vary. Kupu will monitor the traffic situation during special events and if it is found that special events starting during the PM peak hour (5 to 6 PM weekdays) are having a significant impact on traffic conditions, Kupu can then adjust the starting times of special events so as not to have a significant impact on traffic conditions during the PM peak hour.

B. Recommendations

Given that the renovation of the Kupu Green Jobs Training Center is not projected to have significant impacts on traffic, transit, bicycle, or pedestrian facilities, the recommendations focus on actions Kupu can take to help improve non-motorized access and maintain its low impact profile.

- Avoid supply deliveries during the PM peak hour of Ala Moana Boulevard;
- Continue to utilize vans/buses to transport students for excursions and recreational trips;
- Continue to provide bus passes to program participants;
- Provide bicycle parking at the “Net Shed” site;
- Monitor the traffic situation during special events and if it is found that special events starting during the PM peak hour (5 to 6 PM weekdays) are having a significant impact on traffic conditions, adjust the starting times of special events so as not to have a significant impact on traffic conditions during the PM peak hour.
- Encourage other development within Kewalo Basin to provide pedestrian facilities that increase the redundancy of the pedestrian facility network within the area.

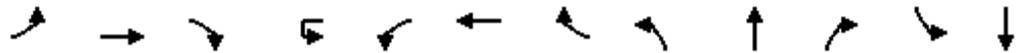
These recommendations will allow the Kupu Green Jobs Training Center to continue to operate in a low-impact, sustainable manner while providing important services to the community.

Appendix – Synchro Intersection Analysis Worksheets

HCM Signalized Intersection Capacity Analysis

1: Ala Moana Blvd & Ward Ave

5/22/2015



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	222	1849	2	5	48	1393	173	8	133	122	223	77
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	7.0		4.0	4.0	7.0	7.0		7.0	7.0	7.0	7.0
Lane Util. Factor	1.00	0.91		1.00	1.00	0.91	1.00		0.95	1.00	0.91	0.91
Frbp, ped/bikes	1.00	1.00		1.00	1.00	1.00	0.92		1.00	0.87	1.00	0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	1.00	0.85		1.00	0.85	1.00	0.89
Flt Protected	0.95	1.00		0.95	0.95	1.00	1.00		1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	5084		1770	1770	5085	1440		3530	1370	1610	2831
Flt Permitted	0.95	1.00		0.51	0.95	1.00	1.00		1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	5084		943	1770	5085	1440		3530	1370	1610	2831
Peak-hour factor, PHF	0.95	0.95	0.95	0.92	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	234	1946	2	5	51	1466	182	8	140	128	235	81
RTOR Reduction (vph)	0	0	0	0	0	0	105	0	0	118	0	230
Lane Group Flow (vph)	234	1948	0	5	51	1466	77	0	148	10	207	157
Confl. Peds. (#/hr)	27		31		31		27	19		50	50	
Turn Type	Prot	NA		custom	Prot	NA	Perm	Split	NA	Perm	Split	NA
Protected Phases	5	2			1	6		4	4		8	8
Permitted Phases				1		6				4		
Actuated Green, G (s)	24.5	79.7		7.9	7.9	63.1	63.1		11.6	11.6	25.8	25.8
Effective Green, g (s)	24.5	79.7		7.9	7.9	63.1	63.1		11.6	11.6	25.8	25.8
Actuated g/C Ratio	0.16	0.53		0.05	0.05	0.42	0.42		0.08	0.08	0.17	0.17
Clearance Time (s)	4.0	7.0		4.0	4.0	7.0	7.0		7.0	7.0	7.0	7.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	289	2701		49	93	2139	605		272	105	276	486
v/s Ratio Prot	c0.13	c0.38			0.03	0.29			c0.04		c0.13	0.06
v/s Ratio Perm				0.01		0.05				0.01		
v/c Ratio	0.81	0.72		0.10	0.55	0.69	0.13		0.54	0.09	0.75	0.32
Uniform Delay, d1	60.5	26.7		67.7	69.3	35.4	26.6		66.7	64.3	59.0	54.4
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	15.3	1.7		0.9	6.5	0.9	0.1		2.2	0.4	10.9	0.4
Delay (s)	75.8	28.4		68.6	75.8	36.3	26.7		68.9	64.7	69.9	54.8
Level of Service	E	C		E	E	D	C		E	E	E	D
Approach Delay (s)		33.5				36.5			66.9			60.1
Approach LOS		C				D			E			E

Intersection Summary

HCM 2000 Control Delay	39.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	87.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Base Year 2014

Weekday PM Peak

HCM Signalized Intersection Capacity Analysis

1: Ala Moana Blvd & Ward Ave

5/22/2015



Movement	SBR
Lane Configurations	
Volume (vph)	264
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frbp, ped/bikes	
Flpb, ped/bikes	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.95
Adj. Flow (vph)	278
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Confl. Peds. (#/hr)	19
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
Intersection Summary	

HCM Signalized Intersection Capacity Analysis

2: Kewalo Basin Dvwy & Ala Moana Blvd

5/22/2015



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑	↘	↗
Volume (vph)	2152	39	0	1554	35	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.5			7.5	7.5	7.5
Lane Util. Factor	0.91			0.91	1.00	1.00
Frbp, ped/bikes	1.00			1.00	1.00	1.00
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	1.00			1.00	1.00	0.85
Flt Protected	1.00			1.00	0.95	1.00
Satd. Flow (prot)	4897			5085	1755	1583
Flt Permitted	1.00			1.00	0.95	1.00
Satd. Flow (perm)	4897			5085	1775	1583
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	2196	40	0	1586	36	55
RTOR Reduction (vph)	1	0	0	0	0	24
Lane Group Flow (vph)	2235	0	0	1586	36	31
Confl. Peds. (#/hr)		51	51		3	
Turn Type	NA			NA	Prot	Perm
Protected Phases	2			2	4	
Permitted Phases						4
Actuated Green, G (s)	134.0			134.0	12.0	12.0
Effective Green, g (s)	133.5			133.5	11.5	11.5
Actuated g/C Ratio	0.83			0.83	0.07	0.07
Clearance Time (s)	7.0			7.0	7.0	7.0
Lane Grp Cap (vph)	4085			4242	126	113
v/s Ratio Prot	c0.46			0.31	c0.02	
v/s Ratio Perm						0.02
v/c Ratio	0.55			0.37	0.29	0.27
Uniform Delay, d1	4.0			3.2	70.4	70.3
Progression Factor	1.00			1.00	1.00	1.00
Incremental Delay, d2	0.5			0.3	5.6	5.9
Delay (s)	4.6			3.4	76.0	76.2
Level of Service	A			A	E	E
Approach Delay (s)	4.6			3.4	76.1	
Approach LOS	A			A	E	

Intersection Summary

HCM 2000 Control Delay	5.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	60.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis

3: Ala Moana Blvd & Kamakee St

5/22/2015



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	80	1990	185	23	1370	74	74	59	47	67	85	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		5.0	5.0			5.0	5.0		5.0	5.0
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00	1.00		1.00	1.00
Frbp, ped/bikes	1.00	0.98		1.00	1.00			1.00	0.80		1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00		0.94	1.00
Frt	1.00	0.99		1.00	0.99			1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97	1.00		0.98	1.00
Satd. Flow (prot)	1770	4916		1770	4966			1812	1227		1618	1583
Flt Permitted	0.95	1.00		0.95	1.00			0.64	1.00		0.74	1.00
Satd. Flow (perm)	1770	4916		1770	4966			775	1227		1038	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	87	2163	201	25	1489	80	80	64	51	73	92	120
RTOR Reduction (vph)	0	7	0	0	4	0	0	0	38	0	0	90
Lane Group Flow (vph)	87	2357	0	25	1565	0	0	144	13	0	165	30
Confl. Peds. (#/hr)	18		52	52		18			77	77		
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases	1	6		5	2			4			8	
Permitted Phases		6					4		4	8		8
Actuated Green, G (s)	13.1	92.4		5.8	85.1			38.3	38.3		38.3	38.3
Effective Green, g (s)	12.6	91.9		5.3	84.6			37.8	37.8		37.8	37.8
Actuated g/C Ratio	0.08	0.61		0.04	0.56			0.25	0.25		0.25	0.25
Clearance Time (s)	4.5	4.5		4.5	4.5			4.5	4.5		4.5	4.5
Lane Grp Cap (vph)	148	3011		62	2800			195	309		261	398
v/s Ratio Prot	c0.05	c0.48		0.01	0.32							
v/s Ratio Perm								c0.19	0.01		0.16	0.02
v/c Ratio	0.59	0.78		0.40	0.56			0.74	0.04		0.63	0.08
Uniform Delay, d1	66.2	21.6		70.8	20.8			51.6	42.4		49.9	42.8
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00		1.00	1.00
Incremental Delay, d2	16.0	2.1		18.4	0.8			22.0	0.3		11.1	0.4
Delay (s)	82.2	23.7		89.2	21.6			73.5	42.7		61.0	43.2
Level of Service	F	C		F	C			E	D		E	D
Approach Delay (s)		25.8			22.7			65.4			53.5	
Approach LOS		C			C			E			D	

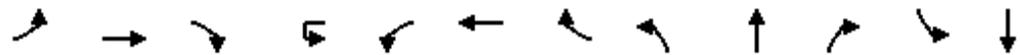
Intersection Summary

HCM 2000 Control Delay	28.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	121.8%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis

1: Ala Moana Blvd & Ward Ave

6/8/2015



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	306	2028	3	89	48	1538	408	9	138	126	354	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	7.0		4.0	4.0	7.0	7.0		7.0	7.0	7.0	7.0
Lane Util. Factor	1.00	0.91		0.86	0.95	0.91	1.00		0.95	1.00	0.91	0.91
Frbp, ped/bikes	1.00	1.00		1.00	1.00	1.00	0.92		1.00	0.87	1.00	0.95
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	1.00	0.85		1.00	0.85	1.00	0.88
Flt Protected	0.95	1.00		0.95	0.95	1.00	1.00		1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	5084		1522	1677	5085	1440		3529	1370	1610	2831
Flt Permitted	0.95	1.00		0.33	0.33	1.00	1.00		1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	5084		534	1770	5085	1440		3529	1370	1610	2831
Peak-hour factor, PHF	0.95	0.95	0.95	0.92	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	322	2135	3	97	51	1619	429	9	145	133	373	84
RTOR Reduction (vph)	0	0	0	0	0	0	297	0	0	122	0	333
Lane Group Flow (vph)	322	2138	0	74	74	1619	132	0	154	11	321	258
Confl. Peds. (#/hr)	27		31		31		27	19		50	50	
Turn Type	Prot	NA		custom	Prot	NA	Perm	Split	NA	Perm	Split	NA
Protected Phases	5	2			1	6		4	4		8	8
Permitted Phases				1		6				4		
Actuated Green, G (s)	27.0	61.0		12.0	12.0	46.0	46.0		11.9	11.9	40.1	40.1
Effective Green, g (s)	27.0	61.0		12.0	12.0	46.0	46.0		11.9	11.9	40.1	40.1
Actuated g/C Ratio	0.18	0.41		0.08	0.08	0.31	0.31		0.08	0.08	0.27	0.27
Clearance Time (s)	4.0	7.0		4.0	4.0	7.0	7.0		7.0	7.0	7.0	7.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	318	2067		42	141	1559	441		279	108	430	756
v/s Ratio Prot	c0.18	c0.42				0.32			c0.04		c0.20	0.09
v/s Ratio Perm				c0.14	0.04		0.09			0.01		
v/c Ratio	1.01	1.03		1.76	0.52	1.04	0.30		0.55	0.10	0.75	0.34
Uniform Delay, d1	61.5	44.5		69.0	66.3	52.0	39.7		66.5	64.1	50.3	44.3
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	53.7	29.3		423.2	3.5	33.4	0.4		2.4	0.4	6.9	0.3
Delay (s)	115.2	73.8		492.2	69.8	85.4	40.1		68.8	64.5	57.2	44.6
Level of Service	F	E		F	E	F	D		E	E	E	D
Approach Delay (s)		79.2				89.8			66.8			49.0
Approach LOS		E				F			E			D

Intersection Summary

HCM 2000 Control Delay	77.9	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	99.3%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

1: Ala Moana Blvd & Ward Ave

6/8/2015



Movement	SBR
Lane Configurations	
Volume (vph)	432
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frbp, ped/bikes	
Flpb, ped/bikes	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.95
Adj. Flow (vph)	455
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Confl. Peds. (#/hr)	19
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
Intersection Summary	

HCM Signalized Intersection Capacity Analysis

2: Kewalo Basin Dvwy & Ala Moana Blvd

6/8/2015



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑	↘	↗
Volume (vph)	2334	245	0	2010	73	97
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0			7.0	4.5	4.5
Lane Util. Factor	0.91			0.91	1.00	1.00
Frbp, ped/bikes	0.99			1.00	1.00	1.00
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	0.99			1.00	1.00	0.85
Flt Protected	1.00			1.00	0.95	1.00
Satd. Flow (prot)	4897			5085	1755	1583
Flt Permitted	1.00			1.00	0.95	1.00
Satd. Flow (perm)	4897			5085	1775	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	2457	258	0	2116	77	102
RTOR Reduction (vph)	8	0	0	0	0	10
Lane Group Flow (vph)	2707	0	0	2116	77	92
Confl. Peds. (#/hr)		51	51		3	
Turn Type	NA			NA	Prot	Perm
Protected Phases	2			2	4	
Permitted Phases						4
Actuated Green, G (s)	124.0			124.0	24.5	24.5
Effective Green, g (s)	124.0			124.0	24.5	24.5
Actuated g/C Ratio	0.78			0.78	0.15	0.15
Clearance Time (s)	7.0			7.0	4.5	4.5
Lane Grp Cap (vph)	3795			3940	268	242
v/s Ratio Prot	c0.55			0.42	0.04	
v/s Ratio Perm						c0.06
v/c Ratio	0.71			0.54	0.29	0.38
Uniform Delay, d1	9.1			6.9	60.0	60.9
Progression Factor	1.00			1.00	1.00	1.00
Incremental Delay, d2	1.2			0.5	2.7	4.5
Delay (s)	10.2			7.5	62.7	65.4
Level of Service	B			A	E	E
Approach Delay (s)	10.2			7.5	64.2	
Approach LOS	B			A	E	

Intersection Summary

HCM 2000 Control Delay	11.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	11.5
Intersection Capacity Utilization	66.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis

3: Ala Moana Blvd & Kamakee St

6/8/2015



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	157	2083	191	24	1760	216	77	61	49	183	88	173
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		5.0	5.0			5.0	5.0		5.0	5.0
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00	1.00		1.00	1.00
Frbp, ped/bikes	1.00	0.98		1.00	0.99			1.00	0.80		1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00		0.91	1.00
Frt	1.00	0.99		1.00	0.98			1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97	1.00		0.97	1.00
Satd. Flow (prot)	1770	4916		1770	4966			1812	1227		1618	1583
Flt Permitted	0.95	1.00		0.95	1.00			0.39	1.00		0.61	1.00
Satd. Flow (perm)	1770	4916		1770	4966			775	1227		1038	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	171	2264	208	26	1913	235	84	66	53	199	96	188
RTOR Reduction (vph)	0	7	0	0	10	0	0	0	40	0	0	81
Lane Group Flow (vph)	171	2465	0	26	2138	0	0	150	13	0	295	107
Confl. Peds. (#/hr)	18		52	52		18			77	77		
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases	1	6		5	2			4			8	
Permitted Phases		6					4		4	8		8
Actuated Green, G (s)	13.1	92.4		5.0	84.3			38.3	38.3		38.3	38.3
Effective Green, g (s)	12.6	91.9		4.5	83.8			37.8	37.8		37.8	37.8
Actuated g/C Ratio	0.08	0.62		0.03	0.56			0.25	0.25		0.25	0.25
Clearance Time (s)	4.5	4.5		4.5	4.5			4.5	4.5		4.5	4.5
Lane Grp Cap (vph)	149	3028		53	2789			196	310		262	401
v/s Ratio Prot	c0.10	c0.50		0.01	0.43							
v/s Ratio Perm								0.19	0.01		c0.28	0.07
v/c Ratio	1.15	0.81		0.49	0.77			0.77	0.04		1.13	0.27
Uniform Delay, d1	68.3	22.1		71.2	25.2			51.6	42.0		55.7	44.6
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00		1.00	1.00
Incremental Delay, d2	118.9	2.5		29.0	2.1			24.3	0.3		93.8	1.6
Delay (s)	187.2	24.6		100.3	27.2			75.9	42.3		149.5	46.2
Level of Service	F	C		F	C			E	D		F	D
Approach Delay (s)		35.1			28.1			67.2			109.3	
Approach LOS		D			C			E			F	

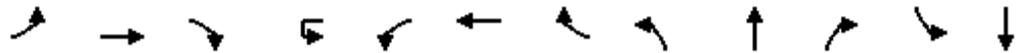
Intersection Summary

HCM 2000 Control Delay	40.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	149.2	Sum of lost time (s)	15.0
Intersection Capacity Utilization	153.3%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis

1: Ala Moana Blvd & Ward Ave

6/8/2015



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	306	2029	3	92	48	1541	411	9	138	126	355	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	7.0		4.0	4.0	7.0	7.0		7.0	7.0	7.0	7.0
Lane Util. Factor	1.00	0.91		0.86	0.95	0.91	1.00		0.95	1.00	0.91	0.91
Frbp, ped/bikes	1.00	1.00		1.00	1.00	1.00	0.92		1.00	0.87	1.00	0.95
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	1.00	0.85		1.00	0.85	1.00	0.88
Flt Protected	0.95	1.00		0.95	0.95	1.00	1.00		1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	5084		1522	1677	5085	1440		3529	1370	1610	2831
Flt Permitted	0.95	1.00		0.33	0.33	1.00	1.00		1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	5084		534	1770	5085	1440		3529	1370	1610	2831
Peak-hour factor, PHF	0.95	0.95	0.95	0.92	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	322	2136	3	100	51	1622	433	9	145	133	374	84
RTOR Reduction (vph)	0	0	0	0	0	0	300	0	0	122	0	333
Lane Group Flow (vph)	322	2139	0	76	75	1622	133	0	154	11	322	258
Confl. Peds. (#/hr)	27		31		31		27	19		50	50	
Turn Type	Prot	NA		custom	Prot	NA	Perm	Split	NA	Perm	Split	NA
Protected Phases	5	2			1	6		4	4		8	8
Permitted Phases				1		6				4		
Actuated Green, G (s)	27.0	61.0		12.0	12.0	46.0	46.0		11.9	11.9	40.1	40.1
Effective Green, g (s)	27.0	61.0		12.0	12.0	46.0	46.0		11.9	11.9	40.1	40.1
Actuated g/C Ratio	0.18	0.41		0.08	0.08	0.31	0.31		0.08	0.08	0.27	0.27
Clearance Time (s)	4.0	7.0		4.0	4.0	7.0	7.0		7.0	7.0	7.0	7.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	318	2067		42	141	1559	441		279	108	430	756
v/s Ratio Prot	c0.18	c0.42				0.32			c0.04		c0.20	0.09
v/s Ratio Perm				c0.14	0.04		0.09			0.01		
v/c Ratio	1.01	1.03		1.81	0.53	1.04	0.30		0.55	0.10	0.75	0.34
Uniform Delay, d1	61.5	44.5		69.0	66.3	52.0	39.7		66.5	64.1	50.3	44.3
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	53.7	29.4		443.1	3.8	34.1	0.4		2.4	0.4	7.0	0.3
Delay (s)	115.2	73.9		512.1	70.1	86.1	40.1		68.8	64.5	57.3	44.6
Level of Service	F	E		F	E	F	D		E	E	E	D
Approach Delay (s)		79.3				91.2			66.8			49.1
Approach LOS		E				F			E			D

Intersection Summary

HCM 2000 Control Delay	78.5	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	99.4%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

1: Ala Moana Blvd & Ward Ave

6/8/2015

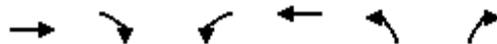


Movement	SBR
Lane Configurations	
Volume (vph)	432
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frbp, ped/bikes	
Flpb, ped/bikes	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.95
Adj. Flow (vph)	455
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Confl. Peds. (#/hr)	19
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
Intersection Summary	

HCM Signalized Intersection Capacity Analysis

2: Kewalo Basin Dvwy & Ala Moana Blvd

6/8/2015



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑	↘	↗
Volume (vph)	2334	250	0	2013	79	106
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0			7.0	4.5	4.5
Lane Util. Factor	0.91			0.91	1.00	1.00
Frbp, ped/bikes	0.99			1.00	1.00	1.00
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	0.99			1.00	1.00	0.85
Flt Protected	1.00			1.00	0.95	1.00
Satd. Flow (prot)	4897			5085	1755	1583
Flt Permitted	1.00			1.00	0.95	1.00
Satd. Flow (perm)	4897			5085	1775	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	2457	263	0	2119	83	112
RTOR Reduction (vph)	8	0	0	0	0	10
Lane Group Flow (vph)	2712	0	0	2119	83	102
Confl. Peds. (#/hr)		51	51		3	
Turn Type	NA			NA	Prot	Perm
Protected Phases	2			2	4	
Permitted Phases						4
Actuated Green, G (s)	124.0			124.0	24.5	24.5
Effective Green, g (s)	124.0			124.0	24.5	24.5
Actuated g/C Ratio	0.78			0.78	0.15	0.15
Clearance Time (s)	7.0			7.0	4.5	4.5
Lane Grp Cap (vph)	3795			3940	268	242
v/s Ratio Prot	c0.55			0.42	0.05	
v/s Ratio Perm						c0.06
v/c Ratio	0.71			0.54	0.31	0.42
Uniform Delay, d1	9.1			6.9	60.2	61.3
Progression Factor	1.00			1.00	1.00	1.00
Incremental Delay, d2	1.2			0.5	3.0	5.3
Delay (s)	10.3			7.5	63.2	66.6
Level of Service	B			A	E	E
Approach Delay (s)	10.3			7.5	65.2	
Approach LOS	B			A	E	

Intersection Summary

HCM 2000 Control Delay	11.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	11.5
Intersection Capacity Utilization	67.2%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis

3: Ala Moana Blvd & Kamakee St

6/8/2015



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	160	2089	191	24	1743	216	77	61	49	183	88	173
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		5.0	5.0			5.0	5.0		5.0	5.0
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00	1.00		1.00	1.00
Frbp, ped/bikes	1.00	0.98		1.00	0.99			1.00	0.80		1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00		0.91	1.00
Frt	1.00	0.99		1.00	0.98			1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97	1.00		0.97	1.00
Satd. Flow (prot)	1770	4916		1770	4966			1812	1227		1618	1583
Flt Permitted	0.95	1.00		0.95	1.00			0.39	1.00		0.61	1.00
Satd. Flow (perm)	1770	4916		1770	4966			775	1227		1038	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	174	2271	208	26	1895	235	84	66	53	199	96	188
RTOR Reduction (vph)	0	7	0	0	11	0	0	0	40	0	0	82
Lane Group Flow (vph)	174	2472	0	26	2119	0	0	150	13	0	295	106
Confl. Peds. (#/hr)	18		52	52		18			77	77		
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases	1	6		5	2			4			8	
Permitted Phases		6					4		4	8		8
Actuated Green, G (s)	13.1	92.4		5.0	84.3			38.3	38.3		38.3	38.3
Effective Green, g (s)	12.6	91.9		4.5	83.8			37.8	37.8		37.8	37.8
Actuated g/C Ratio	0.08	0.62		0.03	0.56			0.25	0.25		0.25	0.25
Clearance Time (s)	4.5	4.5		4.5	4.5			4.5	4.5		4.5	4.5
Lane Grp Cap (vph)	149	3028		53	2789			196	310		262	401
v/s Ratio Prot	c0.10	c0.50		0.01	0.43							
v/s Ratio Perm								0.19	0.01		c0.28	0.07
v/c Ratio	1.17	0.82		0.49	0.76			0.77	0.04		1.13	0.26
Uniform Delay, d1	68.3	22.1		71.2	25.0			51.6	42.0		55.7	44.6
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00		1.00	1.00
Incremental Delay, d2	125.9	2.6		29.0	2.0			24.3	0.3		93.8	1.6
Delay (s)	194.2	24.7		100.3	27.0			75.9	42.3		149.5	46.2
Level of Service	F	C		F	C			E	D		F	D
Approach Delay (s)		35.8			27.9			67.2			109.3	
Approach LOS		D			C			E			F	

Intersection Summary

HCM 2000 Control Delay	40.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	149.2	Sum of lost time (s)	15.0
Intersection Capacity Utilization	153.3%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

**APPENDIX D:
PRELIMINARY ENGINEERING REPORT**

PRELIMINARY ENGINEERING REPORT

KUPU GREEN JOB TRAINING CENTER RENOVATIONS

May 19, 2015

Prepared for:

Kupu

677 Ala Moana Blvd, Suite 1200
Honolulu, HI 96813

Prepared by:



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1 INTRODUCTION

1.1 Overview

Kupu is dedicated to training the next generation in natural resource management, renewable energy, energy conservation, and other green job skills. Through training of technical skills and imparting of knowledge, Kupu also is able to provide leadership and community service experience.

Kupu operates its training program out of an existing, converted, net shed structure along the border of Kewalo Basin, in Kakaako, Honolulu, Hawaii. The net shed is an open air structure, used for drying nets, but was converted decades ago to an educational use by the Hawaii Community Development Authority (HCDA), who is the lessor of the land. Kupu leases the net shed for its use in performing its mission.

This project includes renovations to the existing net shed building and appropriate site improvements, required to provide an adequate and contemporary space to Kupu for their use in their operations. Although the structure has been used for educational purposes for many years, the structure is dated, with open air ventilation, limited lighting, and minimal functionality. Kupu would like to utilize the net shed structure to its potential.

The overall project consists of full interior renovations, including a new kitchen, restrooms, office spaces, and educational spaces, within the entire structure which is approximately 8,000 square feet (sf). The project also includes an addition of 1,600 sf to the existing net shed building, through the installation of a mezzanine level.

1.2 Site Location

The project site is located within the Kewalo Basin area, in Kakaako, Honolulu, Hawaii, on a lot owned by HCDA. This lot also contains the entirety of Kewalo Basin Harbor and Kewalo Basin Park which includes the adjacent park lands and parking lots. HCDA operates and maintains the park, while Howard Hughes Corporation (HHC) has an existing lease to operate the harbor, boat slips, and parking immediately adjacent to the harbor itself.

The net shed itself is located on two TMK parcels: 2-1-058: 131 and 2-1-058: 127. TMK 2-1-058:131 consists of the majority of Kewalo Basin including Kewalo Basin Park and Kewalo Basin Harbor. TMK 2-1-058:127 contains an existing and currently vacant facility that was formerly occupied by the National Oceanic and Atmospheric Administration (NOAA). The area around the net shed, currently utilized and leased by Kupu, is immediately adjacent to the NOAA site to the north and east, Kewalo Basin Park to the south and east, and the Kewalo Basin Harbor entrance channel to the west. **See Figure 1 – Vicinity and Location Map.**

Kupu expects to renegotiate their lease area around the net shed as part of this project. However, the project area analyzed in this report includes areas beyond the anticipated lease boundaries. The expected lease area includes the net shed and areas immediately adjacent to the structure, including:

- An asphalt parking area immediately adjacent to the net shed on the Diamond Head side;
- An existing asphalt driveway on the Makai side of the net shed;
- An existing asphalt delivery and staging area Ewa of the net shed between the net shed and the Kewalo Basin Harbor channel; and
- A portion of a native plant garden adjacent to and Makai of the asphalt delivery and staging area.

In addition, Kupu intends to fund some limited improvements adjacent to the lease area within the area of Kewalo Basin Park, between the net shed and the waterfront pedestrian promenade. The area will continue to be open to and accessible by the public. HCDA will continue to own and operate Kewalo Basin Park, which includes the waterfront access and surface asphalt parking lots.

1.3 Purpose of Report

The purpose of this report is to assess existing site infrastructure systems to determine the extent of proposed improvements that may be necessary to support the proposed project and development of the site.

2 ROADWAYS AND WALKWAYS

2.1 Existing Infrastructure

2.1.1 Public Roads

The entirety of the Kewalo Basin area, including the harbor, the adjacent park, parking lots, net shed, and former NOAA facility, is fronted by Ala Moana Blvd. The main driveway access and entrance is located along Ala Moana Blvd., just west of its intersection with Kamakee Street and the entrance to the City & County of Honolulu’s Ala Moana Beach Park. This driveway serves a system of on-site private roadways and surface parking lots which provide public access to the park, waterfront, and boat harbor. **See Figure 2 – Existing Conditions Plan.**

2.1.2 Private Roads

The existing net shed building is located at the end of a private road providing public access to the waterfront. The roadway varies in width, but consists of one lane in each direction and crosses through or functions as an aisle within the existing parking lots in some locations, as it makes its way through the Kewalo Basin lands and to the net shed facility. The roadway is approximately 26 feet wide in most locations.

2.1.3 Parking and Vehicular Access

Parking for the Kewalo Basin users, including the park, the harbor and boat slips, the net shed, and the other existing tenants and leases are provided through surface asphalt parking lots located throughout the basin area. The majority of parking is shared amongst the various users, though lessees have control over certain parking areas.

As part of Kupu's arrangement for parking with HCDA, the existing 6 stalls and striped access aisle fronting the net shed on the Diamond Head side are used exclusively for Kupu.

An existing asphalt paved area is located on the Ewa side of the net shed, which is used by Kupu for deliveries and also where some of the educational activities are staged. The paved area is accessible through an approximately 12-foot wide asphalt driveway, with curb and gutter, which goes from the parking lot on the Diamond Head side to the paved area on the Ewa side of the net shed. The driveway is on the makai side of the structure. The existing asphalt areas are used by vehicles daily.

2.1.4 Pedestrian Access

Pedestrian access for the Kupu net shed is through various concrete sidewalks located on site. Pedestrian access from the parking lot is also available to the neighboring park lands and to the harbor areas.

2.2 Proposed Infrastructure

2.2.1 Public Roads

No improvements to public roadways, including Ala Moana Blvd., are anticipated to be required for the proposed project.

2.2.2 Private Roads

No improvements are anticipated to be required to on-site private roadways.

2.2.3 Parking and Vehicular Access

There are 6 existing stalls reserved for Kupu, along the Diamond Head side of the structure. The addition of the mezzanine, with additional floor area, will require some additional parking stalls. Additional parking stalls may be required if determined during the building permit processes. Bicycle parking will also be provided near the net shed building entrance.

Kupu plans to reconfigure its existing 6 stalls immediately adjacent to the net shed, to accommodate 5 parking stalls plus 1 American with Disabilities Act (ADA) accessible stall and access aisle. The existing stalls will be removed, and the pavement will be restored and re-striped.

For any additional stalls that may be required for Kupu, HCDA and Howard Hughes have committed to working with Kupu to provide for the remaining required parking, as well as event parking, either closer to Ala Moana Blvd. or within Howard Hughes leased areas. No stalls from the existing HCDA park lot, which consists of Kewalo Basin Park, will be used for any Kupu parking.

Improvements to the existing asphalt driveways and paved areas around the net shed will be made, including removal of the asphalt and curb and gutter and replacement with new concrete surfaces and landscaping, which would create a more inviting area for users and for outdoor educational spaces. **See Figure 3A – Proposed Site and Landscape Plan.**

2.2.4 Pedestrian Access

Improvements to the existing pedestrian accesses to the park lands and harbor areas are not anticipated.

3 WATER

3.1 Existing Infrastructure

The net shed building is serviced by a 4" private domestic waterline main located within the existing adjacent parking lot. The size of the service line to the building is unknown, but as-builts and site investigation revealed the presence of a 3/4" submeter near the makai and Diamond Head corner of the building. The net shed building does not have fire sprinklers. See **Figure 2 – Existing Conditions Plan**.

The 4" waterline within the parking lot continues to the north east through the existing private roadways and parking lots, and serves the existing comfort station and water fountains along the park beachfront. Near the sewer lift station closer to the harbor, the 4" waterline expands to an 8" private distribution main, currently used only for domestic service, which runs along the Kewalo Basin's main private roadways and parking lots towards Ala Moana Blvd.

The 8" private distribution main on HCDA property connects to a Board of Water Supply (BWS) 12" cast iron (CI) distribution main that runs along the mauka side of Ala Moana Blvd through a public 8" waterline lateral that crosses Ala Moana Blvd. A 3" compound master meter, located within the State's right-of-way (ROW) along Ala Moana Blvd services the entire Kewalo Basin area. An existing backflow preventer (BFP) device is located on HCDA property near the meter to prevent cross-contamination to BWS systems. The harbor uses, including the net shed, park, NOAA facility, boat slips, and other commercial facilities are submetered.

There are no private fire hydrants located within the Kewalo Basin area, as the existing 8" private distribution main is used only for domestic water purposes. The nearest BWS fire hydrant, #M-1765, is located along the makai side Ala Moana Blvd., east of Ala Moana Park Dr. According to BWS, the hydrant has a static pressure of 76 pounds per square inch (psi) and a residual pressure of 51 psi at a flow rate of 4,000 gallons per minute (gpm). These numbers are based on a BWS model and do not represent the actual pressure in the field.

3.2 Water Demand Estimate

3.2.1 Existing

The existing water demand is estimated from the net shed building's water supply fixture units (WSFU). The WSFU count is based off of record drawings of the net shed and Kewalo Basin Park construction plans. The WSFU assigned to each fixture type is defined by the Uniform Plumbing Code (UPC). The total existing WSFU count for the net shed building is as follows:

Existing Fixture Type	Qty	WSFU/Qty	Total WSFU
Water Closet	4	1.7	6.8
Urinal	2	1.7	3.4
Lavatory	3	0.6	1.8
Kitchen Sink	2	1.6	3.2
Showers	5	1.6	8
Hose Bibb – First	1	2.5	2.5
Hose Bibb - Additional	2	1	2
Total			27.7

Existing water demand based off 27.7 WSFU's measured from the as-builts is approximately 19 gpm. The capacity of the 3/4" water submeter specifically for Kupu is approximately 30 gpm.

3.2.2 Proposed:

The proposed water demand for the improvements and renovations to the net shed is expected to minimally increase. This is due to the addition of a new commercial kitchen. However, the increase may generally be offset by the installation of new and efficient bathroom fixtures in the relocated restrooms inside the net shed. Based upon preliminary plans for the renovation, the expected fixture unit count is as follows:

Proposed Fixture Type	Qty	WSFU/Qty	Total WSFU
Water Closet	5	1.7	8.5
Urinal	1	1.7	1.7
Lavatory	6	0.6	3.6
Wash Sinks	1	1.6	1.6
Hand Sinks	1	0.6	0.6
Drinking Fountain	1	1	1
Ice Machine	1	1	1
Dishwasher	1	1.6	1.6
Coffee Machine	1	1	1
Prep Sinks	1	1.6	1.6
Showers	6	1.6	9.6
Hose Bibb – First	1	2.5	2.5
Hose Bibb - Additional	2	1	2
Total			36.3

Proposed water demand based off 36.3 WSFU's measured from the preliminary plans is approximately 24 gpm. The capacity of the existing 3/4" water submeter specifically for Kupu is approximately 30 gpm.

The net shed will be designed and operated in conformance with all applicable fire protection requirements. The kitchen will have an independent fire-fighting system, and will not utilize water service.

3.3 Proposed Infrastructure

3.3.1 Potable Supply

Improvements to the potable water supply to the net shed will include relocation of the service lines to the structure itself, including the existing 3/4" meter and service lateral from the existing 4" private waterline in the adjacent parking lot. The 4" private waterline from the existing 8" private distribution main on HCDA property is sufficient to serve the net shed and its improvements. Exterior service lines will need to be relocated or extended as the interior of the net shed is reconfigured and the restrooms are relocated and the kitchen is installed. **See Figure 4 – Proposed Conditions Plan.**

3.3.2 Fire Protection

The net shed will be designed and operated in conformance with all applicable fire protection requirements.

However, as part of overall and ongoing master planning efforts for the entirety of Kewalo Basin, fire water supplies and access will be required by adjacent developments. HCDA has shown interest in developing the adjacent site formerly occupied by NOAA with commercial, retail, and restaurant spaces. Such improvements would require improved fire protection, fire water service, and fire vehicle access be provided in the area and to the site formerly occupied by NOAA and could encompass the Kupu net shed and proposed Green Jobs Training Center.

Design of the fire water supply and fire water access for the adjacent improvements would, at minimum, be based upon the State Fire Code: National Fire Protection Agency (NFPA) 1, Uniform Fire Code, 2006 and all additional amendments as part of the Hawai'i Administrative Rules (HAR) Title 12, Subtitle 7, Chapter 45.2. Additional requirements are noted in the BWS Water System Standards dated 2002. Based upon the above referenced standards, the following criteria should be met in terms of adequate fire water supplies and fire access:

- Provide an adequate fire water supply, capable of supplying the required fire flow as determined by BWS Standards. On-site, private hydrants will be required for facilities where any portion of the structure is located more than 150-feet from a water supply on an approved fire apparatus access road.
- Provide 2,000 gpm for 2 hours with a residual pressure of 20 psi for on-site hydrants.
- Hydrant spacing at 250-feet (for public roadways, to be applied to private driveways).
- Fire Department Connections (FDCs) for sprinkler systems should be placed on the address side of the building and within 50 feet of an adequate water supply / fire hydrant.
- Road Width / Vertical Clearance = Unobstructed 20-foot wide and 13-foot, 6-inch clear.
- Surface = Capable supporting 73,000 lbs and constructed with an all-weather material.
- Turning Radius = 42-foot min. on outside front wheel. 28.4-foot min. on inside rear wheel.
- Dead Ends = Provide appropriate turnaround (cul-de-sac or hammerhead).

- Key Boxes = If fire access roadway is gated or locked at any time.
- Signage = Required for entire length of roadway.
- Further coordination with the Honolulu Fire Department (HFD) will be required as the design of the adjacent spaces progresses.

Based upon preliminary review of the on-site water infrastructure, the existing 8-inch private distribution main would be insufficient to supply 2,000 gpm at 20 psi residual pressure at the NOAA site or near the Kupu net shed. The 8-inch private main that serves the entirety of the Kewalo Basin area would need to be upsized to a 12-inch line from Ala Moana Blvd., along the main driveway, to a point around where the driveway bends towards the NOAA site and Kupu net shed. The connection to the 12-inch BWS system in Ala Moana Blvd. would be replaced and a new meter and new backflow preventer device would be required. Additionally, areas along the main private roadway from Ala Moana Blvd. to the project site may need to be improved to provide adequate turning radii for fire vehicle access requirements, particularly in areas where the main driveway weaves around the existing parking lots and planter islands. Funding, design, and installation of the fire protection systems, fire water supply, and fire vehicle access improvements would be provided by HCDA or others, as necessitated by the adjacent development. **See Figure 4 – Proposed Conditions Plan.**

4 WASTEWATER

4.1 Existing Infrastructure

The net shed building is serviced through an existing 6" private sewer lateral and line that gravity flows to a private sewer lift station located within the parking lot east of the former NOAA site. Wastewater is then pumped from the sewer lift station through a private 4" diameter sewer force main, running parallel with and along the basin's private roadway, and discharges into a receiving manhole located near the comfort station by the parking lot closest to Kewalo Basin's driveway on Ala Moana Blvd. From the receiving manhole, wastewater is then conveyed through an existing private 8" gravity line that runs through the parking lot, which then connects to an existing 8" public sewer lateral that discharges to an existing 69" public sewer main that runs along Ala Moana Blvd. **See Figure 2 – Existing Conditions Plan.**

4.1.1 Sewer Lift Station

Details and conditions of the existing sewer lift station were researched through Doonwood Engineering, Inc., who designed the lift station system and currently operates and maintains the station for HCDA.

The existing sewer lift station includes two "Environmental One" (E-1) grinder pumps with motors located above ground, along with the necessary lift station features such as a below ground wet well, level sensors, ventilation, and an emergency by-pass connection. The wet well has a 60" diameter and is approximately 8.5' deep (effective depth). As built drawings are available for the wet well.

According to Doonwood Engineering, the existing pumps, if functioning properly and within design capacity, would have sufficient capacity to serve the proposed improvements and minimal additional wastewater generated from the net shed.

4.2 Wastewater Demand Estimate

4.2.1 Existing

The existing wastewater demand was estimated based upon as-builts and fixture unit counts, and is approximately 760 gallons per day (gpd), or approximately 19 gpm at peak flow. Currently, the site consists of only a men's and women's restroom within the net shed. While the net shed is used for educational purposes, the facility is used sporadically and wastewater generation is not constant like a fully occupied office building or school as the classes are not conducted every day or to a set daily schedule.

4.2.2 Proposed

The proposed wastewater demand for the renovations to the net shed is expected to minimally increase. As part of the renovations, office areas used to support Kupu's educational programs will be provided and are expected to have regular use. Additionally, a commercial kitchen will be installed. Increases to wastewater generation may be offset by the replacement of existing restroom fixtures with new and efficient fixtures. Based upon preliminary plans for the renovation and the estimated proposed fixtures, the proposed demand is estimated to be approximately 960 gpd, or approximately 24 gpm at peak flow, an increase of 200 gpd or 5 gpm. For comparison, the wet well (60" diameter, 8.5' effective depth) can hold nearly 5,000 gallons, and an E-1 grinder pump can discharge 14 gpm. With the adjacent NOAA site vacant, and the comfort station similarly providing minimal wastewater flow, the increase in flow from the proposed project can be accommodated by the existing system with both the current volume and flow capacity of the lift station, as sufficient storage volume is provided to mitigate daily wastewater volume increases as well as the slight increase in peak wastewater discharges.

Appropriate site hookups for a food truck may be included, but generated wastewater is expected to be negligible.

4.3 Proposed Infrastructure

Improvements to the existing sewer line serving the building are anticipated to include the relocation or extension of the service line to the new restroom locations as well as to the newly installed kitchen. A new, minimum 1,000 gallon, grease interceptor for the kitchen will also be installed at the exterior of the building. Other improvements may include the installation of new sewer hookups for a food truck, but will be minimal in size and demand.

As previously mentioned, Doonwood Engineering believes that the existing sewer lift station that currently serves the net shed has sufficient capacity to serve the project improvements as described. Additionally, the 6" lateral serving the net shed to the lift station is sufficient in size convey the estimated sewer demands from the net shed. **See Figure 4 – Proposed Conditions Plan.**

However, as part of overall and ongoing master planning efforts for the entirety of Kewalo Basin, replacement of the existing lift station and sewer infrastructure will be required by adjacent developments. HCDA has expressed interest in developing the adjacent site formerly occupied by NOAA with commercial, retail, and food and beverage spaces, while Howard Hughes, who leases and operates the harbor, has expressed interest in installing sewer service for boaters. Such improvements will require sewer system improvements including a larger capacity lift station in a new location and sewer line upsizing.

The projected wastewater demand for the development of the NOAA site and the leased harbor is based upon the maximum Floor Area Ratio (FAR) of 0.20 for the NOAA site, allowed by HCDA, as well as a rough-estimate of potential demand from the harbor provided by Howard Hughes. For conservative estimating purposes, the FAR will be increased to 0.50 should FAR be allowed to exceed what is provided in the HCDA’s Kakaako Makai Plan rules.

Program:	Lot Area (SF)	FAR ¹	Commercial (SF) ²	Restaurant (SF) ²	Seats ^{3,7}	Employees ⁴	Ave. Daily Flow (gpd) ^{5, 6, 7}	Design Peak Flow (gpm)
NOAA	60,681	0.50	7,800	30,341	911	96	110,045	286
Harbor					500		12,500	43
TOTAL:	60,681	0.50	7,800	30,341	1,411	96	122,545	329

1. FAR increased to 0.5 to account for potential exceedance of allowed FAR and ultimate build-out of the lot.
2. 100% of FAR assumed for restaurant, as most conservative estimate. 7,800 SF assumed for C&C Honolulu lifeguards and storage.
3. Seats are calculated from 1 seat per 20 SF of front of house area. Front of house area is estimated at 60% of total program space.
4. Employees are calculated from 1 employee per 400 SF of total commercial + restaurant space.
5. Employee flows are based on HAR Title 11, Chapter 62, Appendix F, at 20 gal per capita per day.
6. Restaurant flows are based on HAR Title 11, Chapter 62, Appendix F, at 80 gal per capita per day.
7. Harbor flows are calculated from a max. build-out of 250 slips, 2 people per slip. Harbor flows are based on 25 gal per capita per day.

Based upon preliminary review of the on-site sewer infrastructure serving the areas adjacent to the net shed, including the NOAA site, the harbor, and Kewalo Basin Park, the adjacent developments and the associated wastewater demands calculated above, the existing sewer system would be insufficient to serve the increased demand and improvements would be necessary.

First, a new lift station in a new location with a larger wet well and pumps would be required to provide more capacity. Then, the 4-inch sewer force main from the lift station to the existing receiving manhole located near the harbor comfort station near Ala Moana Blvd would need to be upsized to a 6-inch line. Finally, the main 8-inch gravity sewer line from the receiving manhole that connects to the City sewer in Ala Moana Blvd. and also serves the remaining Kewalo Basin areas downstream of the lift station and force main, would also likely require replacement and upgrade. Funding, design, and installation of the sewer improvements would be provided by HCDA or others, as necessitated by the adjacent development. **See Figure 4 – Proposed Conditions Plan.**

5 DRAINAGE

5.1 Existing Topography and Drainage Patterns

The general topography of the site consists of mild slopes and is relatively flat. The project site appears to be generally filled, up to the water front and sea walls surrounding the site, and appears to slope toward the north and mauka side of the site, towards the interior harbor.

Stormwater runoff from the site sheet flows towards the makai side of the site and is collected and conveyed via concentrated flow along an existing curb and gutter that runs along the entire makai end of the lease area. Runoff is conveyed along the curb and gutter to the west towards the Kewalo Basin entrance channel, where it is conveyed over the seawall and discharges via surface flow directly to the harbor waters.

Stormwater runoff from adjacent areas including the parking lot and vacant NOAA site discharges to other stormwater drainage facilities. Runoff from the vacant NOAA site mauka of the project site sheet flows into a trench drain that runs along mauka side of the building, that then discharging into an 18" reinforced concrete pipe (RCP). This 18" pipe discharges directly into the Kewalo Basin entrance channel. The majority of runoff from the parking area sheet flows north toward a concrete curb and gutter within the parking lot itself, where runoff is conveyed to the north and east, along the main private roadway, ultimately discharging to a separate trench drain system in the surface parking lot.

See Figure 2 – Existing Conditions Plan.

5.2 Soils

According to the National Conservation Resource Service (NRCS) web soil survey website, the soil under the project site is classified as fill land, mixed (map unit symbol FL). Historical research into the Kewalo Basin Harbor indicates that the entire portion where the park and net shed are located consists of fill land.

Fill land, mixed, 0 to 3 percent slopes (FL). This type of land consists of areas filled with material dredged from the ocean or hauled from nearby areas, garbage, and general material from other sources. (Data from Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai and Lanai, State of Hawaii, by Soil Conservation Service, in cooperation with the University of Hawaii dated 1972.)

5.3 Flood Hazards

A flood zone assessment of the site is shown from the Flood Hazard Assessment Tool (FHAT). The net shed is located in Zone AE – with a base flood elevation of 10 feet. This indicates that the net shed is in a flood plain area, which are areas that will inundate under the indicated event, and the base flood elevation has been calculated to be 10 feet above mean sea level (MSL). **See Figure 5 – Flood Hazard Assessment Maps.**

As indicated on existing topographic maps of the area, the net shed is located at approximately elevation 7 feet above MSL. Renovations to the net shed will include three-foot high (minimum) flood-proofed concrete masonry unit or concrete sill walls around the building along with

removable flood barriers at door openings. The walls will either be newly constructed or part of the existing concrete masonry unit walls. The wall elevations will be certified by a licensed surveyor to ensure they meet the base flood elevation.

5.4 Existing Hydrology

On-site hydrologic calculations were performed using the City and County of Honolulu's *Rules Relating to Storm Drainage Standards, January 2000*. Calculations are based on the rational method because the drainage area is less than 100 acres. The rational method is defined by the following formula:

$Q = C * I * A$, where:

Q = Flow Rate in cubic feet per second (cfs);

C = Runoff Coefficient;

I = Rainfall intensity in inches per hour (in/hr); and

A = Drainage Area in acres (ac)

Runoff Coefficient, C:

Source: Table 2 of the Rules.

Business Area: C = 0.80 to 0.90

C = 0.80

1-hour Rainfall Intensity, i:

Source (10-year, 1 hour storm): Plate 1 of the Rules.

$i_{10} = 2.5$ in/hr

Existing Drainage for Lease Area

Area = 0.50 ac

Runoff Coefficient, C = 0.90

1-Hour Rainfall Intensity, $i(10) = 2.5$ in/hr

Time of Concentration, $T_c = 9.3$ minutes

(Flow along concrete curb + discharge over paved asphalt)

Correction Factor, CF = 2.4

Rainfall Intensity, $I = 2.5 * 2.4 = 6.0$ in/hr

$Q_{10} = 0.90 * 6.0 * 0.50 = 2.70$ cfs

It is expected that under a 10-year, 1-hour storm event, the lease area would generate a peak flow of 2.70 cubic feet per second (cfs) of stormwater runoff.

5.5 Existing Infrastructure

Existing drainage infrastructure is limited to the existing curb and gutter which appears to capture and convey runoff generated from the lease area for discharge directly into the Kewalo Basin entrance channel. The existing trench drain along north side of the building, 18" RCP,

and the existing curb and gutter along the entire mauka edge of the adjacent parking lot appears to pick up all stormwater flow from adjacent areas.

5.6 Stormwater Management

Stormwater management for during-construction and post-construction stormwater discharges from new construction projects are governed by the Storm Water Management Program Plan for Kewalo Basin Harbor, September 2012 (SWMPP)

Kewalo Basin has its own Municipal Separate Storm Sewer (MS4) permit. NPDES Small MS4 Permit No. HI 03KB487

The expected project area is less than one (1) acre, and as such, the requirements to comply with the SWMPP are the following:

- Construction BMP plan consisting primarily of the City and County of Honolulu's Construction BMP Plan Checklist
- Any construction of a new storm water connection will need to submit the "Kewalo Basin Private Drain Connection Permit Application".

Based upon the State's water quality maps, the project discharges into Class A marine waters.

5.7 Proposed Hydrology

Proposed hydrology and drainage patterns for the project site is expected to mimic existing conditions, but peak flows are expected to decrease as part of the project due to the increased landscaped areas, as well as the proposed installation of new Low Impact Development (LID) features. Asphalt pavement generally will be replaced with concrete and proposed grass or gravel bands will segment the pavement and allow for areas of stormwater infiltration.

General hydrology calculations are based upon the City and County of Honolulu, *Rules Relating To Storm Drainage Standards*, January 2000.

Proposed Drainage for Lease Area

Area = 0.50 ac

Runoff Coefficient, C = 0.75
(Increased pervious areas)

1-Hour Rainfall Intensity, $i(10) = 2.5$ in/hr

Time of Concentration, $T_c = 20$ minutes
(Time over grass + flow through the vegetated swale)

Correction Factor, CF = 1.8

Rainfall Intensity, $I = 2.5 * 1.8 = 4.5$ in/hr

$Q_{10} = 0.75 * 4.5 * 0.50 = 1.69$ cfs

It is expected that under a 10-year, 1-hour storm event, the improved project lease area would generate a peak flow of 1.69 cubic feet per second (cfs) of stormwater runoff, which is less than existing conditions.

5.8 Proposed Infrastructure

Existing infrastructure will be replaced with new LID Integrated Management Plans (IMP) features to manage stormwater flow, though post construction stormwater management features are not technically required (See Kewalo Basin SWMPP, 2012 for Kewalo Basin MS4). IMP's are expected to include a vegetated swale, in lieu of the existing concrete curb and gutter, which would follow the edge of the makai lease boundary and be located just outside of the lease area between the existing net shed and the pedestrian promenade along the ocean. The majority of runoff from the net shed and lease area will be directed to the vegetated swale and then to a concrete gutter that flows over the existing seawall and discharges into the Kewalo Basin entrance channel. The vegetated swale is expected to provide for infiltration as well as some level of bio-filtration and treatment of the stormwater. Additionally, planter boxes for rain gardens along the Kewalo Basin channel area may be installed to pick up additional sheetflow from areas directly Ewa of the net shed.

Additionally, the existing trench drain that is mauka of the net shed, which collects run-on from the adjacent NOAA site, will be removed. The area along the mauka edge of the building will be raised a few feet to match the existing building's finished floor elevation. Currently, there is about a 3 foot drop from the parking lot to the mauka side of the building. The trench drain will be replaced with drain inlets on the downhill side of the raised area along the net shed, and will collect runoff that is directed towards the net shed from the vacant NOAA site, mimicking existing conditions. The existing outlet for the trench drain, an 18" RCP, will continue to be used as the outlet for the relocated drain system and a tie-in connection will be made.

See Figure 3A and B – Proposed Site and Landscape Plans and Figure 4 – Proposed Conditions Plan.

6 ANTICIPATED APPROVALS AND PERMITS

6.1 State of Hawaii

- HCDA – Environmental Assessment (EA)
- HCDA – Lease Agreement and Right of Entry (ROE) Permits
- HCDA – Development Permit
- HCDA – Storm Drain Connection Application (if new connection is made)
- State Office of Planning (OP) – Special Management Area (SMA) Permit

6.2 City and County of Honolulu

- Grading Permit
- Building Permit
- Sewer Connection Application and Wastewater System Facilities Charges
- Water System Facilities Charges may be applicable

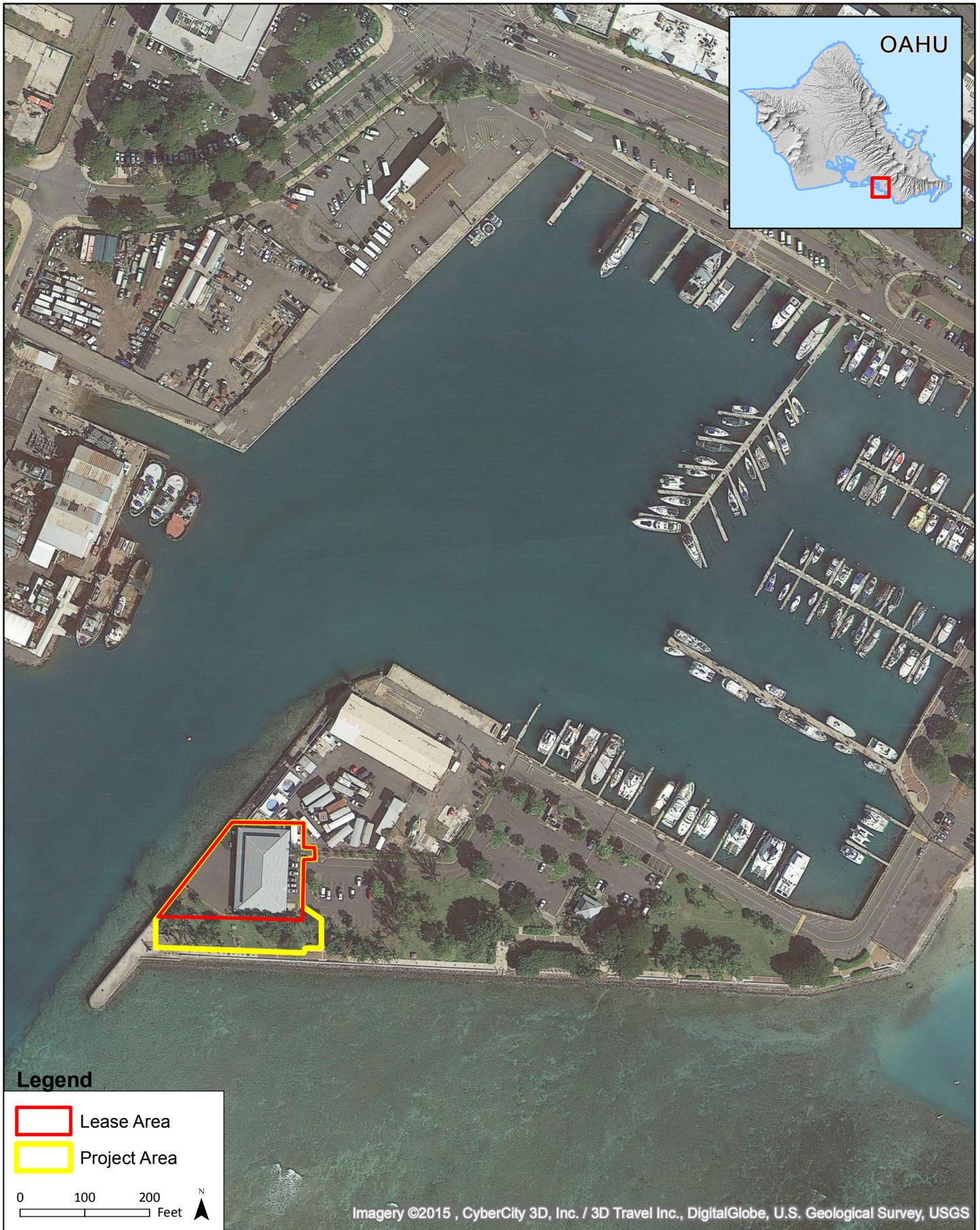


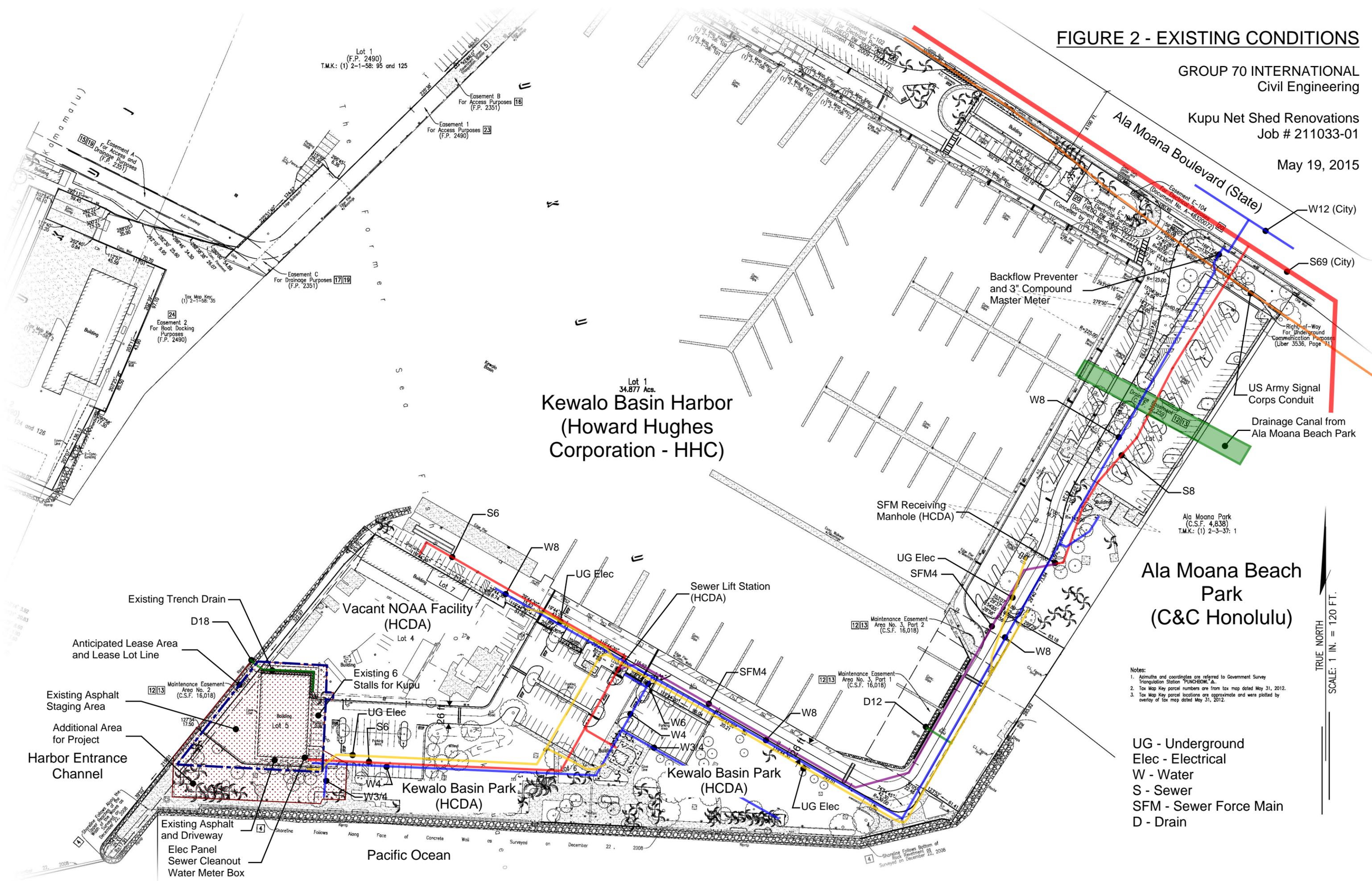
FIGURE 1 - LOCATION MAP

FIGURE 2 - EXISTING CONDITIONS

GROUP 70 INTERNATIONAL
Civil Engineering

Kupu Net Shed Renovations
Job # 211033-01

May 19, 2015



Lot 1
34.877 Acs.
Kewalo Basin Harbor
(Howard Hughes Corporation - HHC)

Ala Moana Beach Park
(C&C Honolulu)

Vacant NOAA Facility
(HCDA)

Kewalo Basin Park
(HCDA)

Kewalo Basin Park
(HCDA)

- Notes:
1. Azimuths and coordinates are referred to Government Survey Triangulation Station "PUNCHBOWL" Δ.
 2. Tax Map Key parcel numbers are from tax map dated May 31, 2012.
 3. Tax Map Key parcel locations are approximate and were plotted by overlay of tax map dated May 31, 2012.

- UG - Underground
Elec - Electrical
W - Water
S - Sewer
SFM - Sewer Force Main
D - Drain

TRUE NORTH
SCALE: 1 IN. = 120 FT.

- Existing Trench Drain
- Anticipated Lease Area and Lease Lot Line
- Existing Asphalt Staging Area
- Additional Area for Project
- Harbor Entrance Channel
- Existing Asphalt and Driveway
- Elec Panel
- Sewer Cleanout
- Water Meter Box

Pacific Ocean

Shoreline Follows Bottom of Beach Revetment 93, 2008

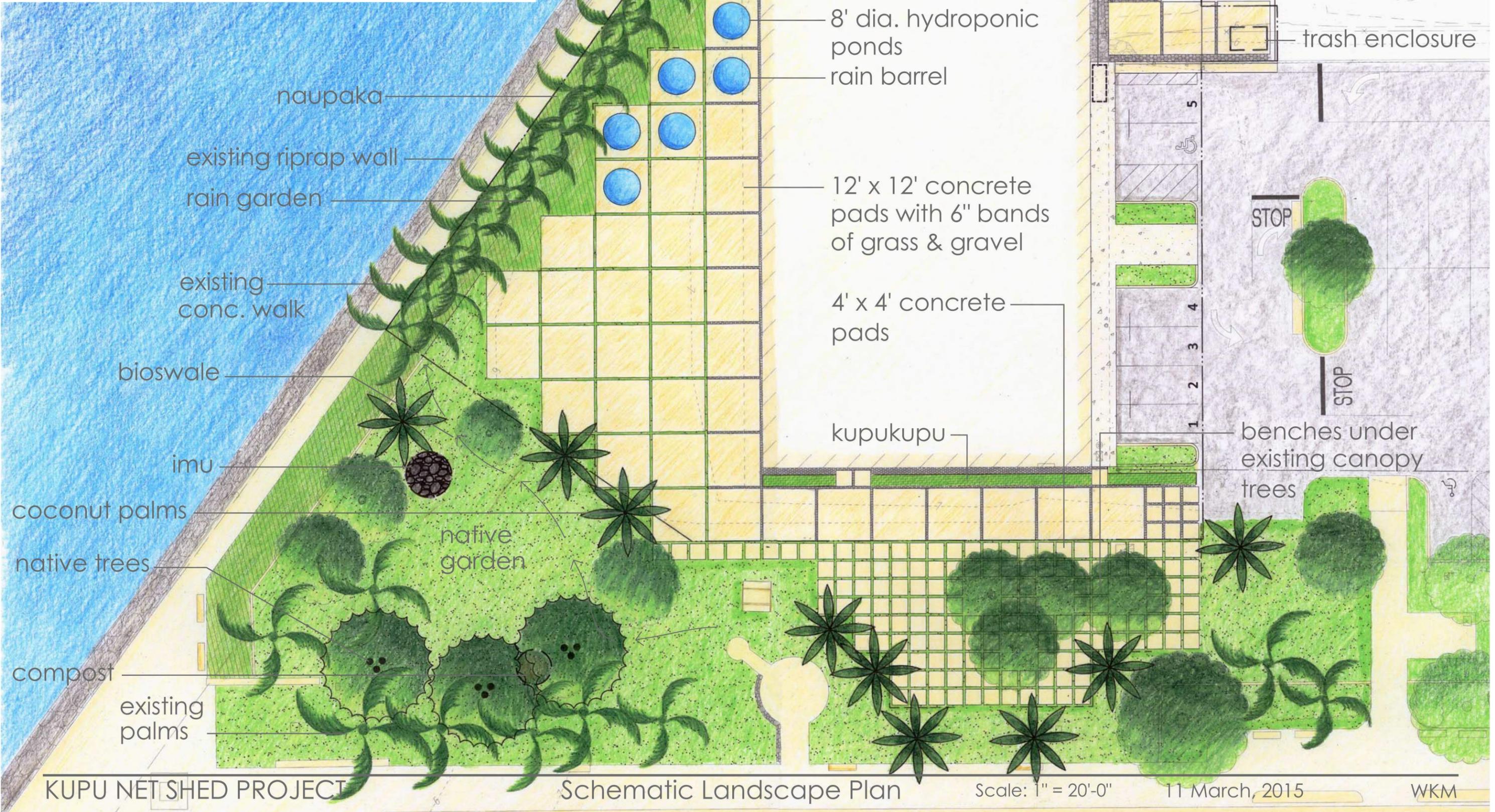
Surveyed on December 22, 2008

FIGURE 3A - PROPOSED SITE AND LANDSCAPE PLAN

GROUP 70 INTERNATIONAL
Civil Engineering

Kupu Net Shed Renovations
Job # 211033-01

March 30, 2015



KEWALO BASIN CHANNEL ENTRANCE

TRUE NORTH
SCALE: 1" = 30'

NEW DRAIN MANHOLE AND
UTILIZE EXISTING DISCHARGE
POINT TO HARBOR

INV. = -0.48(12')

NEW DRAIN INLET AND
DRAIN LINE (TYP)

**NOAA SITE
(HCDA)**

AQUAPONIC
PONDS (TYP)

REMOVE EXISTING TRENCH
DRAIN AND FILL NEXT TO
NET SHED

TEMPORARY STORAGE CONTAINERS

MECHANICAL EQUIPMENT AREA

KUPU PROPOSED LEASE
AREA BOUNDARY

20' MAINTENANCE
EASEMENT IN FAVOR
OF STATE OF HAWAII

NEW CONC
PAVEMENT

**KUPU GREEN
JOBS TRAINING
CENTER**

PROPOSED ENTRY
WALKWAY & PLANTER

NEW CURB AND GUTTER

RE-PAVE & RE-STRIPE
EXISTING PARKING

EX. HCDA LOT LINE

BUILDING EAVE LINE

TEMPORARY FOOD
TRUCK PARKING

EX. HCDA LOT LINE &
KUPU LEASE AREA

ADJACENT EX.
HCDA LOT LINE

KUPU PROPOSED LEASE
AREA BOUNDARY

TOTAL PROJECT AREA

PROPOSED
NATIVE GARDEN

VEGETATED SWALE

COMPOST PILE

NEW CONC
PAVEMENT

TOTAL PROJECT AREA

**KEWALO BASIN
PARK (HCDA)**

PACIFIC OCEAN

LEGEND

- LOT/PROPERTY LINE
- - - ADJACENT LOT/PROPERTY LINE
- - - EXISTING HCDA LOT LINE
- - - PROJECT AREA
- - - KUPU GREEN JOBS TRAINING CENTER LEASE AREA
- - - EXISTING FENCE
- - - ROOT BARRIER
- - - SAWCUT AND JOIN
- CONCRETE
- LANDSCAPING (SEE LANDSCAPING PLANS)
- SITE WALL (SEE STRUCTURAL PLANS)

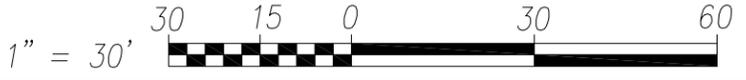


FIGURE 4 - PROPOSED CONDITIONS

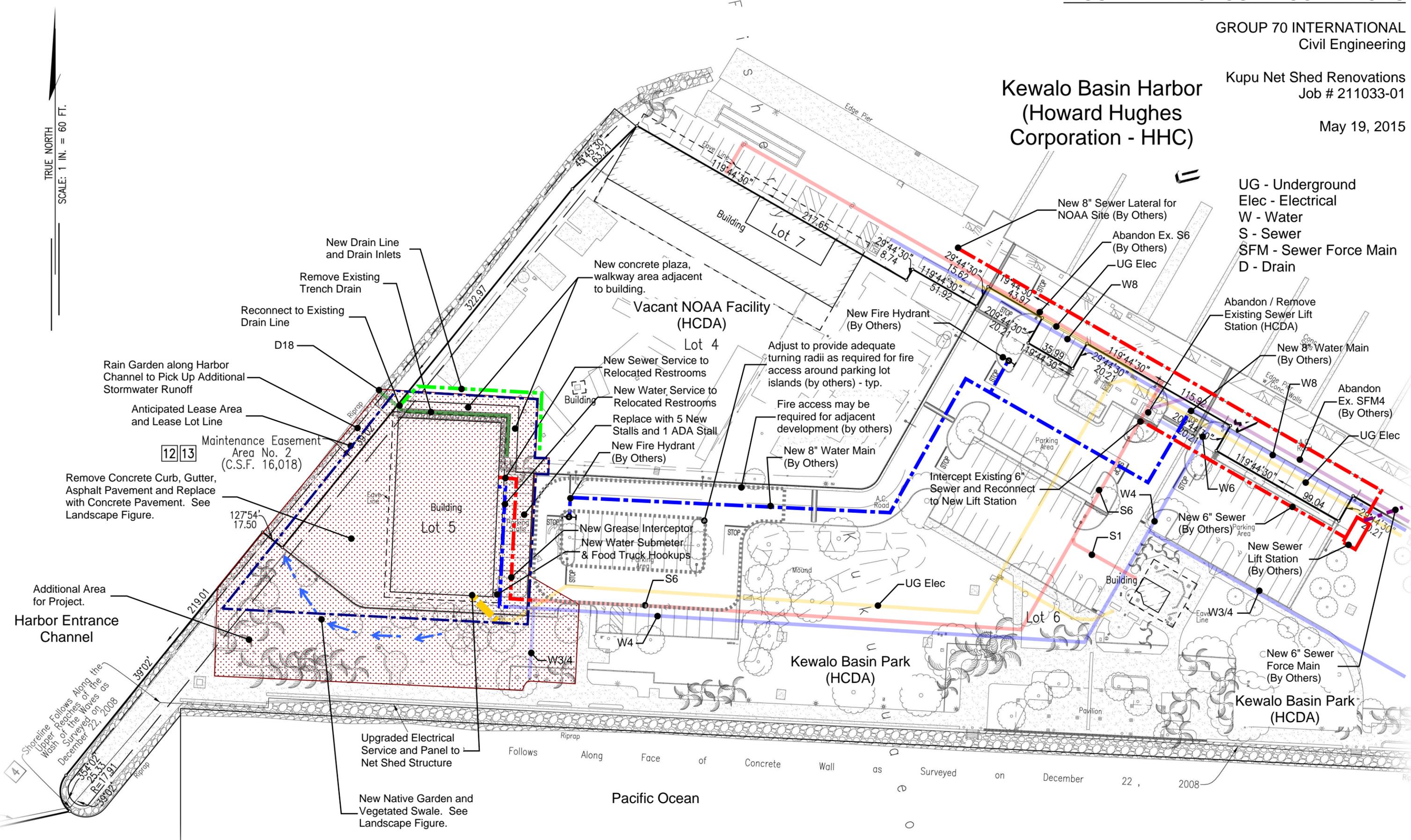
GROUP 70 INTERNATIONAL
Civil Engineering

Kupu Net Shed Renovations
Job # 211033-01

May 19, 2015

Kewalo Basin Harbor
(Howard Hughes
Corporation - HHC)

TRUE NORTH
SCALE: 1 IN. = 60 FT.



UG - Underground
 Elec - Electrical
 W - Water
 S - Sewer
 SFM - Sewer Force Main
 D - Drain

12 13

Maintenance Easement
Area No. 2
(C.S.F. 16,018)

Harbor Entrance
Channel

Kewalo Basin Park
(HCDA)

Kewalo Basin Park
(HCDA)

Pacific Ocean

Shoreline Follows Along the
Upper Reaches of the
Wash Surveyed on
December 22, 2008

Upgraded Electrical
Service and Panel to
Net Shed Structure

New Native Garden and
Vegetated Swale. See
Landscape Figure.

Follows Along Face of Concrete Wall as Surveyed on December 22, 2008

Rain Garden along Harbor
Channel to Pick Up Additional
Stormwater Runoff

Anticipated Lease Area
and Lease Lot Line

Reconnect to Existing
Drain Line

Remove Existing
Trench Drain

New Drain Line and
Drain Inlets

New concrete plaza,
walkway area adjacent
to building.

Vacant NOAA Facility
(HCDA)

New Sewer Service to
Relocated Restrooms

New Water Service to
Relocated Restrooms

Replace with 5 New
Stalls and 1 ADA Stall

New Fire Hydrant
(By Others)

Adjust to provide adequate
turning radii as required for fire
access around parking lot
islands (by others) - typ.

Fire access may be
required for adjacent
development (by others)

New 8" Water Main
(By Others)

New Fire Hydrant
(By Others)

Intercept Existing 6"
Sewer and Reconnect
to New Lift Station

New 8" Sewer Lateral for
NOAA Site (By Others)

Abandon Ex. S6
(By Others)

UG Elec

W8

Abandon / Remove
Existing Sewer Lift
Station (HCDA)

New 8" Water Main
(By Others)

W8

Abandon
Ex. SFM4
(By Others)

UG Elec

New 6" Sewer
(By Others)

W6

S6

W4

S1

New Sewer Lift
Station
(By Others)

New 6" Sewer
Force Main
(By Others)

W3/4

UG Elec

W8

S6

W4

S1

UG Elec

W8

S6



FLOOD HAZARD ASSESSMENT REPORT



NATIONAL FLOOD INSURANCE PROGRAM

FLOOD ZONE DEFINITIONS

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

- Zone A:** No BFE determined.
- Zone AE:** BFE determined.
- Zone AH:** Flood depths of 1 to 3 feet (usually areas of ponding); BFE determined.
- Zone AO:** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined.
- Zone V:** Coastal flood zone with velocity hazard (wave action); no BFE determined.
- Zone VE:** Coastal flood zone with velocity hazard (wave action); BFE determined.
- Zone AEF:** Floodway areas in Zone AE. The floodway is the channel of stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without increasing the BFE.

NON-SPECIAL FLOOD HAZARD AREA – An area in a low-to-moderate risk flood zone. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities.

- Zone XS (X shaded):** Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.
- Zone X:** Areas determined to be outside the 0.2% annual chance floodplain.

OTHER FLOOD AREAS

- Zone D:** Unstudied areas where flood hazards are undetermined, but flooding is possible. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities.

PROPERTY INFORMATION

COUNTY: HONOLULU
TMK NO: (1) 2-1-058-128
PARCEL ADDRESS:
FIRM INDEX DATE: NOVEMBER 05, 2014
LETTER OF MAP CHANGE(S): NONE
FEMA FIRM PANEL(S): 15003C0362G
PANEL EFFECTIVE DATE: JANUARY 19, 2011

PARCEL DATA FROM: APRIL 2014
IMAGERY DATA FROM: MAY 2006

IMPORTANT PHONE NUMBERS

County NFIP Coordinator
 City and County of Honolulu
 Mario Siu-Li, CFM (808) 768-8098
State NFIP Coordinator
 Carol Tyau-Beam, P.E., CFM (808) 587-0267

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If this map has been identified as 'PRELIMINARY' or 'UNOFFICIAL', please note that it is being provided for informational purposes and is not to be used for official/legal decisions, regulatory compliance, or flood insurance rating. Contact your county NFIP coordinator for flood zone determinations to be used for compliance with local floodplain management regulations.

FIGURE 5 - FLOOD HAZARD ASSESSMENT MAP (1 OF 2)



FLOOD HAZARD ASSESSMENT REPORT



NATIONAL FLOOD INSURANCE PROGRAM

FLOOD ZONE DEFINITIONS

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

- Zone A:** No BFE determined.
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- Zone AH:** Flood depths of 1 to 3 feet (usually areas of ponding); BFE determined.
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- Zone VE:** Coastal flood zone with velocity hazard (wave action); BFE determined.
- Zone AEF:** Floodway areas in Zone AE. The floodway is the channel of stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without increasing the BFE.

NON-SPECIAL FLOOD HAZARD AREA – An area in a low-to-moderate risk flood zone. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities.

- Zone XS (X shaded):** Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.
- Zone X:** Areas determined to be outside the 0.2% annual chance floodplain.

OTHER FLOOD AREAS

- Zone D:** Unstudied areas where flood hazards are undetermined, but flooding is possible. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities.

PROPERTY INFORMATION

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PARCEL ADDRESS:
FIRM INDEX DATE: NOVEMBER 05, 2014
LETTER OF MAP CHANGE(S): NONE
FEMA FIRM PANEL(S): 15003C0362G
PANEL EFFECTIVE DATE: JANUARY 19, 2011

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FIGURE 5 - FLOOD HAZARD ASSESSMENT MAP (2 OF 2)