

HAWAII COMMUNITY DEVELOPMENT AUTHORITY



David Y. Ige Governor

Brian Lee Chairperson

Anthony J. H. Ching Executive Director

461 Cooke Street Honolulu, Hawaii 96813

Telephone (808) 594-0300

Facsimile (808) 594-0299

E-Mail contact@hcdaweb.org

Web site www.hcdaweb.org Ref. No.: DEV DP 2.79

CEIV

8

February 18, 2015

FILE COP

MAR 0 8 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 Final Environmental Assessment and Finding of No Significant Impact ("FEA-FONSI") for the proposed Renovation of the Historic Ala Moana Pump Station situated at Tax Map Key (1)2-1-015: 063 in the Honolulu District on the island of Oahu for publication in the next available edition of the *Environmental Notice*.

Enclosed is a completed OEQC Publication Form, two copies of the FEA-FONSI, 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 Ms. Amy Mutart at 594-0334 or via email at amy.mutart@hcdaweb.org.

Sincerely,

hilling

Anthony J. H. Ching Executive Director

AJHC/DN/AM:ak

- Encs.: 1. Two (2) hard copies of FEA-FONSI
 - 2. One (1) electronic copy of FEA-FONSI
 - 3. One (1) hard copy of OEQC Publication Form
 - 4. One (1) electronic copy of OEQC Publication Form

AGENCY ACTIONS SECTION 343-5(B), HRS PUBLICATION FORM (FEBRUARY 2013 REVISION)

Project Name: Island: District:	Renovation of the Historic Ala Moana Pump Station Oʻahu Honolulu
TMK:	(1)2-1-015: 063
Permits:	
	<u>State Hawai'i Community Development Authority:</u> Development Permit. <u>State SHPD:</u> Historic Site Review. <u>Office of Planning:</u> Special Management Area Permit. <u>City Department of</u> <u>Transportation Services:</u> Street Usage Permits for Construction. <u>City & County DPP:</u> Building Permit, Grading and Grubbing Permit, Building Permit, Sewer Connection.
Proposing/	Hawai'i Community Development Authority
Determination Agency:	461 Cooke St. Honolulu HI 96813
Accepting Authority: (for EIS submittals only)	Contact: Ms. Amy Mutart, Telephone: (808) 594-0334, E-mail: amy.mutart@hcdaweb.org
Consultant:	Townscape, Inc., 900 Fort Street Mall, Suite 1160, Honolulu HI 96813
Conouncanti	Contact: Gabrielle Sham, Telephone: (808) 536-6999, E-mail: gabrielle@townscapeinc.com
Status (check one only):	
DEA-AFONSI	Submit the proposing 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 <u>oeqchawaii@doh.hawaii.gov</u>); a 30-day comment period ensues upon publication in the periodic bulletin.
_ X FEA-FONSI	Submit the proposing 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 <u>oeqchawaii@doh.hawaii.gov</u>); no comment period ensues upon publication in the periodic bulletin.
FEA-EISPN	Submit the proposing 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 <u>oeqchawaii@doh.hawaii.gov</u>); a 30-day consultation period ensues upon publication in the periodic bulletin.
Act 172-12 EISPN	Submit the proposing agency notice of determination on agency letterhead, an OEQC publication form, and an electronic word processing summary (you may send the summary to <u>oeqchawaii@doh.hawaii.gov</u>). NO environmental assessment is required and a 30-day consultation
DEIS	period upon publication in the periodic bulletin. The proposing agency simultaneously transmits to both the OEQC and the accepting authority, 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 oeqchawaii@doh.hawaii.gov); a 45-day comment period ensues upon publication in
FEIS	the periodic bulletin. The proposing agency simultaneously transmits to both the OEQC and the accepting authority, 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 <u>oeqchawaii@doh.hawaii.gov</u>); no comment period ensues upon publication in the periodic bulletin.
Section 11-200-23	penduc bulletin.
Determination	The accepting authority simultaneously transmits its determination of acceptance or nonacceptance (pursuant to Section 11-200-23, HAR) of the FEIS to both OEQC and the proposing agency. No comment period ensues upon publication in the periodic bulletin.
Section 11-200-27	
Determination	The accepting authority simultaneously transmits its notice to both the proposing agency 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):

Plans for the renovation of the historic Ala Moana Pump Station (AMPS) are being prepared by the Pacific Gateway Center (PGC) for use as a community resource center, Nā Kūpuna Makamae Center, primarily serving senior citizens with educational and cultural programs.

The PGC is a non-profit community based organization that has received a \$1,000,000 appropriation of capital improvement grand-in-aid by the Legislature of the State of Hawaii to conduct planning, design, and renovation for a community resource center. The project is being administered by the State of Hawai'i, Hawai'i Community Development Authority (HCDA).

The AMPS is listed on the National and State Register of Historic Places. It is located on the western side of the Kaka'ako Community Development District Makai area; bordered by Ala Moana Boulevard to the north and Keawe Street to the east. Proposed improvements to the 1900 Pump Station building include site work, architectural improvements, and interior improvements. The building has severely deteriorated over the years and restoration of this iconic and historic structure is needed for its preservation.

Final Environmental Assessment for the RENOVATION OF THE HISTORIC ALA MOANA PUMP STATION

Kaka'ako Makai, District of Honolulu, Island of O'ahu, Hawai'i



February 2015

Prepared for: Hawai'i Community Development Authority



Final Environmental Assessment for the

RENOVATION OF THE HISTORIC ALA MOANA PUMP STATION

Kaka'ako Makai, District of Honolulu, Island of O'ahu, Hawai'i

February 2015

Prepared for: Hawai'i Community Development Authority



PROJECT SUMMARY

Project Name:	Renovation of the Historic Ala Moana (Kaka'ako) Pump Station
Applicant:	Hawaii Community Development Authority 461 Cooke Street Honolulu, HI 96813 Contact: Ms. Amy Mutart Phone: (808) 594-0334 E-mail: amy.mutart@hcdaweb.org
Approving Agency:	Hawaii Community Development Authority 461 Cooke Street Honolulu, HI 96813
Consultant:	Townscape, Inc. 900 Fort Street Mall, Suite 1160 Honolulu, HI 96813 Contact: Ms. Gabrielle Sham Phone: (808) 536-6999 E-mail: gabrielle@townscapeinc.com
Project Location:	Kaka'ako Makai District of Honolulu
Тах Мар Кеу:	(1) 2-1-015: 063
Land Area:	Lot Area Approximately 1.04 acres; Building area 1,321 square feet
Location:	240 Keawe Street (1900 Pump Station)
State Land Use District:	Urban
Existing Zoning:	Kaka'ako Community Development District, "Mixed- Use"
Special Designation:	Special Management Area
Anticipated Determination:	Finding of No Significant Impact (FONSI)
Agencies and Parties Consu	lted:

<u>State</u> Department of Business, Economic Development & Tourism Department of Health Department of Land and Natural Resources Department of Transportation Office of Hawaiian Affairs Office of Planning University of Hawai'i, John A. Burns School of Medicine

<u>City</u>

Board of Water Supply Department of Design and Construction Department of Emergency Services Department of Environmental Services Department of Parks and Recreation Department of Planning and Permitting Department of Transportation Services Honolulu City Council Honolulu Police Department Honolulu Fire Department

<u>Other</u>

Ala Moana/Kaka'ako Neighborhood Board No.11 Historic Hawai'i Foundation Kaka'ako Improvement Association Kamehameha Schools Outdoor Circle

Responses Received during 30-day Comment Period:

No comments were received.

TABLE OF CONTENTS

 1.1. Background 1.2. Project Description 2. BELATIONSHIP TO FEDERAL STATE AND COUNTY PLANS AND POLICIES. 	1 15
	15
2. RELATIONSHIP TO FEDERAL, STATE, AND COUNTY PLANS AND POLICIES	15
2.1. State Land Use Law	
2.2. City and County Zoning and KCDD Makai Area Rules	15
2.3. Coastal Zone Management Program	15
2.4. Kaka'ako Community Development District Makai Area Plan	16
2.5. Special Management Area	16
2.6. City and County of Honolulu General Plan	17
2.7. City and County of Honolulu Primary Urban Center Development Plan	18
2.8. Draft Kaka'ako Community Development District Transit Oriented Developmer Overlay Plan	
3. DESCRIPTION OF THE ENVIRONMENT AND ANTICIPATED IMPACTS	20
3.1. Climate	20
3.2. Geology, Topography, and Soils	20
3.3. Hydrology and Drainage	21
3.4. Hazards	22
3.5. Flora and Fauna	22
3.6. Wetlands	22
3.7. Air Quality	24
3.8. Noise Quality	25
3.9. Socio-economic conditions	25
3.10. Historic Resources	26
3.11. Archaeological and Cultural Resources	27
3.12. Hazardous Material	28
3.13. Roadways and Traffic	29
3.14. Transportation	32
3.15. Wastewater	32
3.16. Water Supply	33
3.17. Electrical Utilities and Communication Systems	

:	3.18.	Police, Fire and Medical Services	
4.	Det	ermination	
5.	Rec	uired Permits and Approvals	
6.	6. Alternatives to Proposed Action		
(5.1.	No Action	
(5.2.	Demolition of Structure	

APPENDICES

- Appendix A: Agency Comments from Early Consultation
- Appendix B: Response to Agency Comments
- Appendix C: Topographic Survey
- Appendix D: Architectural Report
- Appendix E: Secretary of the Interior's Standards for Rehabilitation
- Appendix F: Cultural Impact Assessment
- Appendix G: Cultural Anthropology and Archaeology of the Kaka'ako Makai Area
- Appendix H: Letter from SHPD

List of Figures

Figure 1.	Project Location	2
Figure 2.	Project Parcel	4
Figure 3.	Conceptual Plan 1	6
Figure 4.	Conceptual Plan 2	7
Figure 5.	Conceptual Plan 3	8
Figure 6.	Conceptual Plan 4	9
Figure 7.	Conceptual Plan 5	10
Figure 8.	Conceptual Plan 6	11
Figure 9.	Conceptual Plan 7	12
Figure 10.	Conceptual Plan 8	13
Figure 11.	Conceptual Plan 9	14
Figure 12.	Soils	19
Figure 13.	Hazards	23

List of Tables

Table 1. Level of Service	29
Table 2. Daily Participants per Activity	30
Table 3. Vehicle Estimates per Activity	30
Table 4. Projected Trips during Peak Hours	

List of Acronyms

AMPS	Ala Moana Pump Station
BWS	Board of Water Supply
City	City and County of Honolulu
CZM	Coastal Zone Management
DOH	Department of Health
DPP	Department of Planning and Permitting
EA	Environmental Assessment
HAR	Hawai'i Administrative Rules
HCDA	Hawai'i Community Development Authority
HRS	Hawai'i Revised Statutes
KCDD	Kaka'ako Community Development District
LOS	Level of Service
NPDES	National Pollutant Discharge Elimination System
PUC	Public Utilities Commission
SHPD	State Historic Preservation Division
SMA	Special Management Area
SOI	Secretary of the Interior's
ТМК	Тах Мар Кеу
TOD	Transit Oriented Development
WWPS	Wastewater Pump Station

1. INTRODUCTION

1.1. Background

Plans for the renovation of the historic Ala Moana Pump Station (AMPS; also referred to as the Kaka'ako Pump Station) are being prepared by the Pacific Gateway Center. The Pacific Gateway Center is a non-profit community based organization that has received a \$1,000,000 appropriation of capital improvement grand-in-aid by the Legislature of the State of Hawaii to conduct planning, design, and renovation for a community resource center. The project is being administered by the State of Hawai'i, Hawai'i Community Development Authority (HCDA).

Pursuant to Chapter 343, Hawai'i Revised Statutes (HRS), an environmental review is required. This environmental review is triggered by:

- Use of State lands and funds
- Use within any historic site as designated in the National Register or Hawai'i Register
- Development within the Special Management Area

1.2. Project Description

1.2.1. Project Location

The project site is located in the "Kaka'ako Makai" district of Honolulu (Tax Map Key 2-1-015: 063). The HCDA is the property owner of this site. The street address of the project site is 240 Keawe Street, located on the western side of the Kaka'ako Community Development District (KCDD) Makai area; bordered by Ala Moana Boulevard to the north and Keawe Street to the east. The HCDA has planning and zoning jurisdiction over the KCDD. The project area is zoned as "Mixed-Used" in the KCDD Makai Area Plan (2005) and is subject to the HCDA's Makai Area Rules.

1.2.2. Existing Uses

There are three structures located on the historic AMPS site that are listed on the National and State Register of Historic Places: the 1900 Pump Station, the Screen House, and the 1940 Pump Station. All three structures are considered contributing elements to the historic pump station. However, renovations are only proposed for the 1900 Pump Station which is currently being used for storage. A section of the site on the Diamond Head side of the property has been fenced off for use as a parking area by a car rental company.

1.2.3. Proposed Action

The HCDA is proposing to rehabilitate the historic 1900 Pump Station for use as a community resource center primarily serving senior citizens. Pacific Gateway Center plans to transform the historic Pump Station into Nā Kūpuna Makamae Center. It is envisioned that the Center will serve as a gathering place that provides educational and cultural programs to seniors, and encourages intergenerational learning where youths will assist elders through workshops.



The project boundary is illustrated in **Figure 2**. No improvements are proposed for the Screen House or the 1940 Pump Station at this time. The proposed improvements to the 1900 Pump Station building and land immediately adjacent to the building include:

Exterior Improvements

- Site work
 - $\circ \quad \text{Grading of site} \quad$
 - Removing concrete slabs and planting grass
 - o Removing a section of chain link fence
 - Installing automatic irrigation system
 - o Installing underground site utilities
 - New concrete paving from the existing gravel parking lot to provide for handicap accessibility to the building structure
- Architectural improvements
 - New roofing
 - Repairing and renovating existing metal sash and doors
 - Installing new doors and windows
 - Cleaning and patching existing masonry
 - Painting of metal trim

<u>Interior improvements</u> will include minor demolition; partial restoration of plaster work; resurfacing of concrete floors, and installing ADA accessible toilet rooms.

Conceptual plans for site work are included in Figures 3 to 11.

1.2.4. Programs and Uses

The proposed Nā Kūpuna Makamae Center will be open from approximately 8:00 a.m. to 7:30 p.m. (depending on class schedules). Class offerings throughout the day will vary in length from 30 to 90 minutes. The building footprint of the 1900 Pump Station is approximately 1,321 square feet and will provide space for a wide range of programs and classes for seniors that include the following:

- <u>Education programs</u> where seniors will have the opportunity to interact with others; play concentration and memory games; participate in arts and crafts activities including making leis and weaving lau hala; enjoy Hawaiian and other popular music with a goal of health education including memory retention; and lessons on ukulele and other musical instruments.
- <u>Exercise programs</u> for seniors to stay active though dance, such as hula and stretch movements. There will also be exercises appropriate for the age group including those with handicaps and those who can participate only while seated.
- <u>Empowerment</u> through classes on the use of smart phones and technology.



1.2.5. History of the Property

The AMPS is historic for both its iconic architecture and because it also served as part of the first comprehensive sanitary system developed for Honolulu after an outbreak of the bubonic plague in 1898. Both the 1900 Pump Station and one-story screen house were designed by architect O.G. Traphagen in 1898. D.L. Davis & Company was awarded the contract for the construction of the two structures in 1900. The 1900 Pump Station served as the main structure and contained a 60-foot tall signature chimney.

The architectural style of the 1900 Pump Station is Industrial Romanesque. The Pump Station contained the steam powered pumps that carried the sewage through a force main out to the ocean. No historic equipment or utilities remain within the present-day structure.

Sewage arrived via the screen house and was then pumped to the 1900 Pump Station. The 1900 Pump Station was later converted in 1925 into a machine shop, storeroom and office. An additional pump building was built to house a high-speed electric powered pump at that time. The historic AMPS was abandoned by the City and County of Honolulu (City) in 1955 when the new wastewater pumping station located makai of the project area was built.



Photo of the 1900 Pump Station circa1902 Photo credit: HCDA



Figure 3. Conceptual Plan 1

Final Environmental Assessment



Figure 4. Conceptual Plan 2



Figure 5. Conceptual Plan 3

Final Environmental Assessment



Figure 6. Conceptual Plan 4



Figure 7. Conceptual Plan 5



Figure 8. Conceptual Plan 6



Figure 9. Conceptual Plan 7



Figure 10. Conceptual Plan 8

Final Environmental Assessment



Figure 11. Conceptual Plan 9

2. RELATIONSHIP TO FEDERAL, STATE, AND COUNTY PLANS AND POLICIES

2.1. State Land Use Law

The State Land Use Law, Chapter 205 HRS, established the State Land Use Commission, which classifies all lands in Hawai'i into four land use districts: Urban, Rural, Agricultural, and Conservation. The project area is within the Urban district; therefore a Conservation District Use Permit is not required.

2.2. City and County Zoning and KCDD Makai Area Rules

The City's Land Use Ordinance regulates land use to encourage orderly development in accordance with adopted land use policies, including the Oahu General Plan and the City's eight Development Plans and Sustainable Communities Plans. The project area is located within the Makai area of the KCDD. The KCDD is regulated by the State of Hawaii and not the City and County of Honolulu. The KCDD Makai Area Rules (HAR Chapter 23, Title 15) adopted in September 2005 supersede any provisions of the City's Land Use Ordinance or the City's Primary Urban Center Development Plan.

2.3. Coastal Zone Management Program

The Hawaii Coastal Zone Management (CZM) Program was created in 1977 through the enactment of Chapter 205A, Hawaii Revised Statues. The program was created to coordinate federal, state and county agency efforts in the comprehensive management of Hawaii's precious coastal resources. The Hawaii CZM Program is administered by the Office of Planning, but the four counties are responsible for administering the program locally through the Special Management Area (SMA) permits and shore setback provisions in their respective counties. However, within the community development districts, such as the KCDD, the Office of Planning is responsible for processing the SMA permits and shoreline setback variances.

The proposed renovation of the historic AMPS supports one of the objectives of the CZM Program to "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."

The proposed project will not impact coastal views as existing coastal views are limited from the project site due to existing structures that are already blocking views to the ocean. Recreational resources will not be impacted as a result of the proposed project. Coastal recreational activities will continue to be accessible to the public and will not be affected due to the proposed actions.

2.4. Kaka'ako Community Development District Makai Area Plan

The State Legislature created the HCDA in 1976 to guide the revitalization of underdeveloped urban communities in the State. Kaka'ako was the first designated Community Development District. Lands makai of Ala Moana Boulevard were added to the KCDD boundaries in 1982. The project area is within the Makai Area of the KCDD.

Work within the Makai area will conform to the KCDD Makai Area Rules (Hawai'i Administrative Rules, Title 15, Subtitle 4, Chapter 23). The project area lies within areas designated as "Mixed Use Zone (MUZ)," which allows for development of commercial and residential use. The former AMPS is identified as a significant historic resource in the Kaka'ako Makai area.

Under the most recent KCDD Makai Area Plan adopted in October 2005, the overall vision for the Kaka'ako Makai Area is "to create an active, vibrant area through a variety of new developments, including an expansive waterfront park, maritime uses along the harbor, restaurants, markets and entertainment along Kewalo's Basin, a children's museum, educational and research facilities, residential and commercial developments. In addition, the provision of public open spaces, cultural facilities and amenities will distinguish the Kaka'ako Makai Area as a place dedicated and attractive to the people of Hawaii." However, Residential development in the KCDD Makai Area is not permitted per HRS 206E-31.5 (2006). The proposed project supports the urban design principles and elements of the Makai Area Plan by serving as a cultural and educational facility for seniors. Cultural and educational facilities have been a fundamental element in HCDA's community development plans and objectives.

2.5. Special Management Area

The SMA area is the most sensitive area of the coastal zone, and is much smaller than the CZM area. An SMA permit is required for any development within the SMA.

The City's Department of Planning and Permitting administers the SMA permits for Oahu, but pursuant to HRS 206E-8.5 and HAR Chapter 15-150, the State Office of Planning administers and manages the SMA permits for the KCDD. An SMA permit from the State's Office of Planning is required for the proposed project.

2.6. City and County of Honolulu General Plan

The General Plan sets forth the long-range objectives and policies for the general welfare of the O'ahu community and, together with the regional development plans and sustainable communities plans, provides a direction and framework to guide the programs and activities of the City and County of Honolulu. The original General Plan was created in 1982, and amended in 2002. The most recent update of the plan will be finalized as the 2035 O'ahu General Plan.

The proposed project supports the following objectives and policies of the General Plan:

HEALTH AND EDUCATION

- <u>Objective B</u>: To provide a wide range of educational opportunities for the people of O'ahu
- Policy 2: Encourage the provision of information educational programs for people of all age groups.

CULTURE AND RECREATION

- Objective A: To foster the multiethnic culture of Hawaii.
- Policy 1: Encourage the preservation and enhancement of Hawaii's diverse cultures.
- Policy 3: Encourage opportunities for better interaction among people with different ethnic, social, and cultural backgrounds.
- <u>Objective B</u>: To protect Oahu's cultural, historic, architectural, and archaeological resources.
- Policy 2: Identify, and to the extent possible, preserve and restore buildings, sites, and areas of social, cultural, historic, architectural, and archaeological significance.
- Policy 3: Cooperate with the State and Federal governments in developing and implementing a comprehensive preservation program for social, cultural, historic, architectural, and archaeological resources.
- Policy 5: Seek public and private funds, and public participation and support, to protect social, cultural, historical, architectural, and archaeological resources.

The proposed project will provide a wide range of informational educational programs to seniors and protect O'ahu's historic and architectural resources by preserving the historic AMPS that is listed on the State and National Registers.

2.7. City and County of Honolulu Primary Urban Center Development Plan

O'ahu is divided into eight planning areas, each of which has a Development Plan or Sustainable Communities Plan that provide the vision for future development, and policies and guidelines to implement that vision. The proposed project area is addressed by the Primary Urban Center (PUC) Development Plan (adopted in June 2004), which provides long-range policies for urban Honolulu.

The goals of the proposed project are consistent with the PUC Development Plan vision to protect and enhance Honolulu's cultural resources; and to provide livable neighborhoods that attract both residents and visitors.

2.8. Draft Kaka'ako Community Development District Transit Oriented Development Overlay Plan

The Transit Oriented Development (TOD) Overlay Plan is intended to supplement the existing Kaka'ako Makai and Mauka Plans. Its purpose is to improve the overall quality of the KCDD through pedestrian focused, transit-oriented, community development. The proposed project supports the following objectives of the TOD Overlay Plan:

- Density: Concentrate and intensify activities near frequent transit
- Diversity: Encourage a mix of uses

The renovation of the iconic structure located along a major bus route and in close proximity to a future rail station in Kaka'ako provides more options for other modes of transportation rather than driving and for people to access the proposed senior center. Transforming the historic Ala Moana Pumping Station into a senior community center will provide a diverse range of services that will improve the quality of life for residents.



3. DESCRIPTION OF THE ENVIRONMENT AND ANTICIPATED IMPACTS

3.1. Climate

The climate in the area of the project site is similar to other coastal areas of Honolulu, which is characterized by relatively constant temperatures, moderate humidity, and northeasterly trade winds ranging from 8 to 18 miles per hour. Temperature ranges from an average of 71 degrees Fahrenheit in the winter to 84 degrees Fahrenheit in the summer. The Beretania Pump Station is the nearest station that measures rainfall and has recorded data since 1945. The average annual rainfall is approximately 25 inches with most of the rainfall occurring between the months of November and April.

Potential Impacts and Mitigation Measures

The proposed project is not anticipated to have any negative impact on the climate.

3.2. Geology, Topography, and Soils

According to the U.S. Department of Agriculture Soil Conservation Service (1972), the soil throughout the project area is Fill Land, mixed (FL). This type of soil occurs mostly near Pearl Harbor and in Honolulu near the ocean. Fill land soil consists of areas that have been filled with material dredged from the ocean or hauled from nearby areas, garbage, and general material from other sources. This land type is used for urban development including airports, housing areas, and industrial facilities.

The topography of the project area is relatively flat at approximately five feet above mean sea level. A topographic survey was conducted for the project site on March 1, 2012 (Appendix C).

Potential Impacts and Mitigation Measures

The proposed project is not anticipated to have any significant impact on soils. Areas not covered by impervious surfaces are currently covered with withered grass or exposed dirt.

Proposed actions include removing concrete areas and replacing them with grass that will help reduce erosion and sediment runoff. An automatic irrigation system with backflow preventer is proposed for the site. Areas of the site will be graded to remove excess fill to allow for positive drainage away from the building. BMPs will be used to ensure that erosion is minimized during construction. Construction practices will comply with the guidelines found in the following regulations:

- Revised Ordinances of Honolulu (ROH) Chapter 14, Articles 13-16, relating to Grading, Grubbing, Stockpiling, Soil Erosion, and Sediment Control
- Rules Relating to Soil Erosion Standards and Guidelines (April 1999), Department of Planning and Permitting, City and County of Honolulu

3.3. Hydrology and Drainage

The Kaka'ako peninsula is underlain by sedimentary deposits that form a caprock. The caprock extends along the coastline to about 800 to 900 feet below sea level. There is no natural surface water flow through the project site. The nearest surface stream in the vicinity of the project area is Nu'uanu Stream.

The project area is makai of the Underground Injection Control Line, which means that the underlying aquifer is not considered a potable water source.

Runoff from the Kaka'ako Makai area is collected by the storm drain system and routed to an open channel that is approximately 30 feet wide, 15 feet deep and 650 feet long. The open channel is located on Keawe Street and conveys runoff from the storm drain system into the ocean. The nearshore waters near the project site are classified as "Class A" State waters by the DOH. Class A waters are to be protected for recreational uses, aesthetic enjoyment, and propagation of marine life.

Potential Impacts and Mitigation Measures

Proposed actions include removing existing concrete and replacing it with grass, which would reduce the amount of runoff resulting from impervious surfaces in the long-term. Construction at the project site is unlikely to introduce or release into the soil any substance that could adversely affect ground water.

During the construction period, short term impacts may include an increase in the amount of sediment in storm runoff because of exposed soils. The runoff could potentially impact the water quality of nearshore waters in the area. Grading activities associated with construction of the proposed improvements will comply with the City's grading ordinances and include appropriate erosion control measures. Project activities will comply with State DOH regulations as set forth in HAR, Title, 11, Chapter 54, "Water Quality Standards" and Chapter 55, "Water Pollution Control." Should more than one acre of land be graded or disturbed, a National Pollutant Discharge Elimination System (NPDES) permit for construction related storm water discharges will be obtained from the DOH to protect nearshore waters.

No significant impacts to water quality are anticipated in the long-term as a result of the proposed project. While new concrete paving is proposed to provide a handicap accessible path to the building, concrete in other areas surrounding the structure is proposed to be removed and replaced with grass. The net decrease of impervious surfaces should minimize the potential volume of runoff generated from the project site.

3.4. Hazards

According to the Federal Emergency Management Agency's Flood Insurance Rate Map, the project area is within Zones AE and X. Zone AE is an area within the 100-year floodplain and Zone X is an area that is determined to be outside of the 500-year floodplain. Construction within Zone AE requires approval by the City & County of Honolulu Department of Planning and Permitting (DPP).

The project site is outside of the tsunami evacuation zone.

Potential Impacts and Mitigation Measures

While the project parcel is within Flood Zones AE and X, the proposed action and building to be renovated are located in Flood Zone X, which is outside of the 100-year floodplain. The proposed project is not anticipated to increase flood hazards. Proposed actions include planting grass in areas that are currently paved with concrete, which will minimize the amount of impervious surfaces.

3.5. Flora and Fauna

The FEA of the 2005 KCDD Makai Area Plan found that introduced weedy grasses and plants were commonly found throughout the Kaka'ako Makai area with occasional native species found on Kewalo Peninsula. No endangered or threatened flora species are known to exist in the Kaka'ako Makai area.

A large Ficus tree is located in the mauka Diamond Head corner of the project area. The Ficus tree is believed to be under infestation, therefore, has been recommended to be removed and replaced with a native Hawaiian tree.

Potential Impacts and Mitigation Measures

The proposed project is not anticipated to adversely affect any endangered and threatened flora species as none are known to exist in the urbanized Kaka'ako Makai area. Since the property will be under construction, the infested Ficus tree will be under added stress, therefore, the Ficus tree should be removed and replaced with another tree that will thrive in the existing conditions.

3.6. Wetlands

There are no wetlands identified within the vicinity of the project site.

Potential Impacts and Mitigation Measures

None.


3.7. Air Quality

The U.S. Environmental Protection Agency (EPA) sets national ambient air quality standards for six criteria pollutants: carbon monoxide, nitrogen dioxide, sulfur dioxide, lead, ozone, and particulate matter. There are two air quality monitoring stations in the vicinity of the project site to ensure that air quality standards are met: "Honolulu Station" at 1250 Punchbowl Street and "Sand Island Station" at 1039 Sand Island Parkway.

Due to the location of the project site in an urbanized area and with close proximity to Ala Moana Boulevard, vehicular traffic is the main contributor to air pollution in the vicinity of the project area. The air quality is occasionally affected by the vog that drifts from Kīlauea Volcano on the Big Island. South winds may carry odors from the existing wastewater pump station. In the Policy and Development Strategy Plan (2006) for the project site, it recommended that "any proposed development should take into account the need for a visual barrier or treatment between the Active Pumping Station and the Project Site."

Potential Impacts and Mitigation Measures

Impacts on air quality are anticipated to be minor and short-term. Short-term effects on air quality may result from construction-related activities that may generate dust affecting the air quality in and around the project area. With the presence of normal tradewind conditions, it is anticipated that pollutants will be blown towards the ocean. However, with Kona winds, the pollutants may be blown landward, resulting in a decline in area air quality. A dust control management plan will be developed to identify and address all activities that may have a potential to create fugitive dust. The short-term effects on air quality will be mitigated by compliance with State DOH Administrative Rules, Title 11, Chapter 60, "Air Pollution Control." The following are BMPs that may be implemented to control dust:

- Phase construction activities, focus on minimizing the amount of dust-generating materials and activities;
- Landscape and rapidly cover bare areas, including slopes;
- Control dust from debris being hauled away from the project site;
- Provide adequate dust control measures during weekends, after hours, and prior to daily start-up of construction activities.

No significant long-term impacts on air quality are anticipated as a result of the proposed project. In the long-term, minimal impacts to air quality will be associated with the traffic. The slight increase in vehicular traffic as a result of the proposed senior center may contribute to a decrease in air quality. However, it is anticipated to have negligible impacts in comparison to the overall increase in traffic as a result of development in Kaka'ako.

3.8. Noise Quality

The major sources of noise in the vicinity of the project site are from vehicular traffic along Ala Moana Boulevard and aircraft flying to and from Honolulu International Airport. According to HAR, Title 11, Chapter 46 "Community Noise Control," the maximum permissible noise levels for a multi-family and commercial zoned area are 60 dBA during daytime hours (7 a.m. to 10 p.m.) and 50 dBA during nighttime hours (10 p.m. to 7 a.m.).

Potential Impacts and Mitigation Measures

Impacts on noise are anticipated to be short-term from construction-related activities. While noise from construction-related activities will likely be unavoidable during the construction phase, there are no noise-sensitive land uses in the immediate vicinity that would be adversely affected, including the Ala Moana Wastewater Pump Station (WWPS) to the south of the project site. Should noise levels exceed the permissible noise levels mentioned above for more than ten percent of the time within any twenty minute period, a permit is required from the State DOH. Chapter 11-46 rules also require that construction equipment and onsite vehicles requiring an exhaust for gas or air be equipped with mufflers.

No significant long-term impacts on noise conditions are anticipated as a result of the proposed project. In the long-term, the community center will be open during daytime hours between 8 a.m. to 6 p.m. The majority of the programs offered by the center will be held indoors in an air conditioned building. Any special events to be held at the center that may exceed permissible noise levels will be subject to the State DOH noise permit and variance conditions.

3.9. Socio-economic conditions

The KCDD is generally comprised of the Civic Center, Kaka'ako, and Ala Moana census tracts. The project site is located within the Civic Center census tract. In the 2010 U.S. Census, there were 10,204 persons living in the three aforementioned census tracts. The overall household size for the Civic Center, Kaka'ako, and Ala Moana census tracts were 1.15, 1.77, and 1.92, respectively, which is significantly lower than the O'ahu's average of 2.98 persons per household. Approximately 41.2% of the population of the Civic Center census tract and 26.4% of the population of the Kaka'ako census tract were 62 years of age or older.

Potential Impacts and Mitigation Measures

The proposed project is not expected to have any negative socio-economic effect, but is anticipated to provide significant benefit to the surrounding community. The future Nā Kūpuna Makamae Center will serve as a gathering place and a place of learning that will provide services to seniors, but also encourage intergenerational programs that bring in youth to help seniors through workshops and cultural programs. The community center may employ several staff members to help with daily operations of the center.

3.10. Historic Resources

The AMPS is listed on both the National and State Register of Historic Places (No. 80-14-9710) based on the following criteria: (1) associated with events that have made a significant contribution to broad patterns of our history; and (2) embody the distinctive characteristics of a type, period, or method of constriction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction. All three structures on the parcel are considered contributing elements to the historic pump station.

Potential Impacts and Mitigation Measures

While the proposed project will not include the renovation of the historic Screen House and the 1940 Pump Station, those structures will be preserved in place and protected during construction and use of the renovated 1900 Pump Station. Exterior and interior photographs of structures to be affected by the project, and a brief history of the property are included in Appendix D.

To prevent the potential to adversely affect the historic integrity of the AMPS all renovation work will comply with the Secretary of the Interior's (SOI) Standards for Rehabilitation of Historic Properties. The SOI standards include but are not limited to the following (see Appendix E for complete SOI standards):

- Avoid removing distinctive materials or alternation of features, spaces, and spatial relationships that characterize a property
- Preservation of distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property
- Repairment rather than replacement of deteriorated historic features
- Chemical or physical treatments will be undertaken using the gentlest means possible
- Archeological resources will be protected and preserved in place



Current condition of the historic Ala Moana Pump Station

3.11. Archaeological and Cultural Resources

A Cultural Impact Assessment report was prepared in 2002 for the John A. Burns School of Medicine, which is located in the Kaka'ako Makai area. The report, included in Appendix F of this EA, found that the Kaka'ako Makai area is located on previously submerged and fill land that is identified as the near-shore waters and coral reef of the 'ili of Ka'ākaukukui. The majority of the 'ili of Ka'ākaukukui (approximately 125 acres) was awarded to Victoria Kamāmalu through Land Commission Award 7713. Seven other tenants were also awarded smaller kuleana lands. A review of Native and Foreign Testimony records revealed that claimants registered for house lots, fishponds, salt beds and cultivation areas including mauka kalo patches. A beach road was located along the shoreline and makai boundary of the 'ili, which approximately overlaps the existing Ala Moana Boulevard.

Princess Bernice Pauahi Bishop later inherited the land awarded to Victoria Kamāmalu, which was then later acquired by the Territory of Hawai'i in 1919 as part of the Bishop Estate. During this time, the area makai of Ala Moana Boulevard was filled along with the construction of a retaining wall along the approximate alignment of the existing Olemehani Street. The area eventually became a large settlement of squatters and supported an unauthorized fishing village. In 1926 the Territorial government began to evict the squatters from this area referred to as "Squattersville." Ongoing cultural activities in the makai area include fishing, shoreline gathering and recreational activities such as swimming and surfing.

A study done by Cultural Surveys Hawai'i in 2010, "Summary Report on the Cultural Anthropology and Archaeology of the Kaka'ako Makai Area," documented the history of the land use of the Kaka'ako Makai area and evaluated the area for potential cultural resources. The study (included in Appendix G) concluded that:

 Human skeletal remains were identified just west of Kamake'e Street on the mauka side of Ala Moana Boulevard. Further finds adjacent to the Ala Moana/Nimitz alignment in the vicinity of the present study area would **not** be expected.

Potential Impacts and Mitigation Measures

In a letter dated February 18, 1998, the SHPD commented that "because the area makai of the Ala Moana Boulevard is comprised of fill lands, we believe that the development of the area will have 'no effect' on subsurface cultural deposits because it is unlikely any are present" (refer to Appendix H). However, if any archaeological features or human burials are uncovered during construction activities, all work will cease immediately and the SHPD will be contacted.

The proposed project is not anticipated to affect existing cultural activities that are practiced in the Kaka'ako Makai area such as fishing and shoreline gathering. Access to ocean-related activities that occur at Kaka'ako Waterfront Park makai of the project area is also not anticipated to be disrupted. The proposed programs and classes that will be offered at the center will enhance and perpetuate Native Hawaiian traditional and cultural practices.

3.12. Hazardous Material

A Phase I Environmental Site Assessment was performed for the project site in March 2007. Recognized environmental conditions found for the project site include the following:

- Potential impacts associated with the Historic Ala Moana Pumping Station operations and structures
- Potential impacts resulting from the former "chimney/vent stack" operations and the apparent observed ash
- Potential presence of petroleum and metals impacted soil and groundwater
- Potential offsite contaminant migration from the Ala Moana WWPS facility to the project site
- Potential impacts to soil and groundwater on the project site resulting from the historical filling operations

Potential Impacts and Mitigation Measures

Due to the potential hazards within the chimney/vent stack that is attached to the west side of the 1900 pump house structure, the chimney/vent stack is proposed to be sealed off for the safety of the users at the center. The existing fuel door into the chimney area is proposed to be filled in with CMU plastered on the exterior face to prevent any unauthorized and/or accidental entry into this area.

Soils should be tested prior to reuse or disposal. Any waste generated will be handled in accordance with State solid waste disposal laws. If encountered, all appropriate measures will be taken while handling any hazardous waste. Procedures include wearing proper personal protective equipment, dust and runoff controls, and soil and groundwater handling and disposal procedures. A soil management plan should be implemented if petroleum impacted soils are encountered.

Project activities will comply with State DOH regulations as set forth in HAR, Title 11, Chapter 501, "Asbestos Requirements" and Chapter 504, "Asbestos Abatement Certification Program."

3.13. Roadways and Traffic

The project site is bounded by Ala Moana Boulevard and Keawe Street. Ala Moana Boulevard is a State-owned road with three lanes in each direction in addition to separate left-turn lanes at the majority of the intersections. Keawe Street is a City-owned two-way street and serves as a north-south collector road. A traffic light is located at the intersection of Ala Moana Boulevard and Keawe Street.

The main vehicular access to the AMPS is via Keawe Street into the existing gravel parking lot area. This entrance is accessible to police, fire, and medical emergency vehicles.

The Center will typically be open from 8:00 a.m. to 7:30 p.m. from Monday to Saturday. Various programs and classes will be held throughout the day, varying between 60 to 90 minutes. Approximately 45 to 55 seniors are anticipated to use the Center daily. The majority of the seniors will either arrive by public transportation (TheBus) then walk to the Center, by HandiVan, or drive. It is anticipated that a majority of those that will arrive by car will carpool with other seniors to the Center.

A Traffic Plan developed by Wilson Okamoto in 2005 for the Makai Area Plan FEA reported that peak hours of traffic at the Ala Moana Boulevard and Keawe Street in the morning generally occurred between the hours of 7:00 a.m. and 8:15 a.m., while the peak hours in the afternoon generally occurred between 4:15 p.m. and 5:15 p.m. At the intersection of Ala Moana Boulevard and Keawe Street, 2,384 vehicles traveled eastbound and 2,088 vehicles traveled westbound during the morning peak hour of traffic. Afternoon traffic volumes were relatively similar.

Intersections were assessed based on their Level of Service (LOS), which describes the traffic operation deficiencies associated with traffic demands during peak traffic hours. The LOS are defined from A through F; where LOS A represents ideal or free-flow traffic operating conditions and LOS F represents unacceptable or potentially congested traffic operating conditions. The chart below provides the LOS at the intersection of Ala Moana Boulevard and Keawe Street for 2005 for both morning and afternoon peak hours.

Table 1. Level of Service

	Ala Moana	Boulevard	Keawe Street	
	Eastbound Westbound		Northbound	Southbound
Morning Peak	E	E	E	E
Afternoon Peak	D	Ē	Ē	Ē

The table below summarizes the total number of anticipated participants per activity offered at the center on a typical day. For example, on a typical Monday, ten seniors are anticipated to attend the 8:00 a.m. Tai chi class; fifteen seniors are anticipated for the Arts and Crafts session from 10:30 a.m. to 12:30 p.m.; ten seniors for the music and entertainment program; and twenty seniors to attend the hula class.

A ativity	Time		Daily Participants per Activity				
Activity	Time	Monday	Wednesday/Friday	Tuesday/Thursday	Sat		
Tai chi	8:00-9:00	10	10	0	0		
	a.m.						
Informational	9:30- 10:30	0	0	15	15		
session	a.m.						
Arts and crafts	10:30 a.m	15	15	0	15		
	12:00 p.m.						
	Lunch Break						
Exercise/Stretch	1:30-2:30	0	0	15	15		
	p.m.						
Music and	3:00-4:00	10	10	0	0		
entertainment	p.m.						
Care of Elders	4:30-5:30	0	0	15	0		
Training	p.m.						
Hula	6:00-7:30	20	0	0	0		
	p.m.						
Internet Savvy	6:00-7:30	0	15	0	0		
	p.m.						
	TOTAL	55	50	45	45		

The following table shows the vehicle estimates based on the maximum amount of people anticipated from the table above.

Table 3. Vehicle Estimates per Activity

Activity	Time	Participants	Car ¹	Walking/Bus ²	Bike
Tai chi	8:00-9:00 a.m.	10	5	5	0
Informational	9:30-10:30 a.m.	0	0	0	0
session					
Arts and crafts	10:30 a.m12:00 p.m.	15	10	5	0
Exercise/Stretch	1:30-2:30 p.m.	0	0	0	0
Music and entertainment	3:00-4:00 p.m.	10	5	5	0
Care of Elders	4:30-5:30 p.m.	0	0	0	0
Training					
Hula	6:00-7:30 p.m.	20	15	5	0
Internet Savvy	6:00-7:30 p.m.	0	0	0	0
TOTAL		55	35	15	0

¹ Includes participants that will arrive using the HandiVan.

² It is assumed that participants taking the bus will walk to the Center from the bus stop.

The trips generated during peak hours based on the number of participants arriving by car are as follows:

	Projected Trips
Morning Peak (6:30-8:30 a.m.)	5
Afternoon Peak (3:30-5:30 p.m.)	10

Classes will be scheduled with sufficient time in between classes to minimize traffic impacts and congestion from participants arriving and leaving the center. No more than twenty seniors are anticipated for a class, with the average participants per class ranging between 10 and 15 at the maximum.

Potential Impacts and Mitigation Measures

The operation of the community center is not anticipated to have a significant impact on traffic in Kaka'ako. During the morning peak time between 6:30 to 8:30 a.m., only five people are anticipated to arrive in personal vehicles, for a total of five trips. During the afternoon peak time between 3:30 to 5:30 p.m., approximately ten people will either arrive or leave the Center in personal vehicles, for a total of ten trips.

Increases in traffic are expected in the long-term, but will more likely be associated with the anticipated population growth in the Kaka'ako area. No significant long-term impacts are anticipated as a result of the proposed Center. Visitors to the Center are not anticipated to arrive all at one time, but will be staggered throughout the day. Classes will be strategically scheduled during off-peak hours so that users will not contribute to traffic congestion during peak traffic hours/times. The increase in vehicular traffic to the Center on Ala Moana Boulevard and Keawe Street is anticipated to have negligible impacts in relation to the overall increase in traffic as a result of development of Kaka'ako. Should the Center generate significant unanticipated traffic, classes can be moved to another time to minimize impacts during peak traffic periods.

As parking is provided within the project parcel, public access, including availability of parking for park users, to the ocean and Kaka'ako Waterfront Park is not anticipated to be impacted. Short-term impacts to traffic may occur during the construction phase of the project. A street usage permit from the City's Department of Transportation Services will be obtained for any construction-related work that may require the temporary closure of any traffic lane on Keawe Street, or any City street. However, these short-term impacts may be mitigated by scheduling construction vehicles and supply deliveries during off-peak hours. The contractor will be asked to schedule the movement of construction material and equipment between 8:30 a.m. and 3:30 p.m. The public, including the Neighborhood Board, residents, businesses, emergency personnel, and TheBus will be informed about the timing of construction work and any potential delays in and around the project area. An area shall be designated within the project area for on-site boarding and disembarking of passengers using TheHandi-Van or other related service vehicles. A handicap accessible path is proposed from the parking area to the building.

3.14. Transportation

The project site is not along the proposed rail alignment, but the nearest transit station would be less than half a mile away on Halekauwila Street (Station 19, Civic Center).

The project site is located along Ala Moana Boulevard, which is served by at least eight different bus routes. There are no bus routes on Keawe Street. The nearest bus stop from the project site is about a block away, on Coral Street and Ala Moana Boulevard.

Potential Impacts and Mitigation Measures

In the long-term, the proposed project may improve bus ridership and encourage alternative transit options rather than driving personal vehicles to the Center.

3.15. Wastewater

The existing wastewater infrastructure servicing the vicinity of the project site is maintained by the City's Department of Wastewater Management. A sewer line will be connected from the building to the sewer manhole located within the parcel. The sewer line will be connected to a 36-inch line that runs through the mauka side of the parcel that connects to a 78-inch line on the Diamond Head side of the parcel, which runs parallel to Keawe Street. Another 60-inch sewer line runs parallel to the southeast side of the 78-inch sewer line. There are sewer easements associated with the sewer lines. Any development within the sewer easements will be limited to comply with specifications in the sewer easement documents.

Wastewater from this parcel goes to the Ala Moana WWPS, makai of the project site. It is then conveyed to the Sand Island Wastewater Treatment Plant. The Ala Moana WWPS is the largest wastewater pumping system on the island, serving Niu Valley to Nu'uanu.

The proposed project will install a new 4-inch sewer line from the building to the sewer manhole.

Potential Impacts and Mitigation Measures

A sewer connection permit from the City's DPP, Wastewater Branch will be obtained prior to connecting to the existing sewer lines. The proposed project will require wastewater disposal, but the amount will be negligible relative to anticipated full build-out of the Kaka'ako Makai Area.

Development within the sewer easements will be limited to comply with specifications in the sewer easement documents.

3.16. Water Supply

The water lines in the vicinity of the project are maintained and serviced by the City's Board of Water Supply (BWS). Distribution water lines are located along Ala Moana Boulevard and Keawe Street.

Potential Impacts and Mitigation Measures

The proposed project area will require potable water, but the amount will be negligible relative to water use by existing and proposed housing and commercial developments in the area. Based on previous consultation with the BWS (letter dated October 8, 2014), the existing water system is adequate to accommodate the proposed development. The landowner/lessee will be required to pay the BWS' Water System Facilities Charges for resource development, transmission and daily storage. The proposed project is also subject to the BWS Cross-Connection Control and Backflow Prevention requirements prior to the issuance of the Building Permit Applications. The project will incorporate water conservation best management practices to ensure efficient water use, such as low flow fixtures and drip irrigation systems.

3.17. Electrical Utilities and Communication Systems

Power and communication systems are currently served by Hawaiian Electric Company, Inc., Hawaiian Telecom and Oceanic Cablevision. An underground 200 Amp electric service and undergrounded conduit run for communication service is proposed for the project site.

Potential Impacts and Mitigation Measures

No negative impacts are anticipated to result from the provision of electrical and communication services to the project site since demands will be negligible relative to the full build-out of the Kaka'ako Makai area.

3.18. Police, Fire and Medical Services

The fire station serving the project site is the Kaka'ako Fire Station approximately a half mile north of the site at 555 Queen Street. The police station servicing the project site is the Chinatown Substation. The major health care facility closest to the project site is Queen's Medical Center approximately 1.4 miles north of the site at 1301 Punchbowl Street.

Potential Impacts and Mitigation Measures

The proposed project is not anticipated to result in an increase in calls for police, fire, or medical services. Due to the change in occupancy classification for the proposed project, the proposed project will comply with the Fire Code. In the long-term, expected increases in demand for police, fire, and medical services are associated with the anticipated population growth of Kaka'ako that is served by the proposed senior center.

4. Determination

The proposed project is consistent with the vision expressed by the City's General Plan and PUC Development Plan to protect Oahu's cultural, historic, and architectural resources. Nā Kūpuna Makamae Center will support an important component of the HCDA's Makai Area Plan to provide cultural and educational facilities.

The primary impacts of the proposed actions would result from construction activities, such as dust, noise, traffic, and erosion. However, these short-term impacts would cease upon project completion. No significant adverse long-term impacts are anticipated to affect air quality, water quality, existing utilities, noise, endangered species, or archaeological sites.

The following findings and reasons indicate that the proposed actions will not have a significant adverse impact on the environment based on the significance criteria as provided in HAR, Section 11-200-12.

1. Irrevocable commitment to loss or destruction of any natural or cultural resource

The proposed project is not expected to adversely impact any natural or cultural resources. The proposed activity will involve use of fill lands makai of Ala Moana Boulevard. The proposed project involves the restoration of an existing structure, on land which has been previously disturbed. It is unlikely any subsurface cultural deposits are present.

2. Curtailment of the range of beneficial uses of the environment.

The proposed project is not expected to curtail the range of beneficial use of the environment since the proposed project involves the use of previously disturbed areas of land.

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

The proposed project is consistent with the environmental policies, goals, and guidelines expressed in HRS Chapter 344.

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

The proposed project is not expected to have any negative socio-economic effect, but is anticipated to provide significant benefits to the surrounding community. The future Nā Kūpuna Makamae Center will serve as a gathering place and a place of learning that will provide services to seniors, but will also encourage intergenerational programs that bring in youths to help seniors through workshops and cultural programs. The project will require help with daily operation of the Center; thus creating several employment opportunities. Construction activities will mobilize existing labor and generate income and secondary effects in the local economy.

5. Substantially affects public health.

The proposed project is not anticipated to substantially affect public health.

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

The proposed project is not anticipated to have secondary impacts such as population changes or effects on public facilities. The proposed project will provide for short-term employment opportunities during the construction phase and several longterm employment opportunities to assist with daily operation of the Center. However, the proposed project will not encourage changes in population size. Public infrastructure requirements for the proposed project are anticipated to be negligible relative to the full build-out of the Kaka'ako Makai area. The proposed project is intended to provide additional facilities serving senior citizens.

7. Involves substantial degradation of environmental quality.

No substantial degradation of environmental quality is expected as a result of the proposed project.

8. Is individually limited but cumulatively has considerable effects on the environment, or involves a commitment for larger actions.

The proposed project is not expected to have a significant cumulative effect upon the environment. Rather, the proposed project will result in the renovation and preservation of a historic structure that is listed on the National and State Register of Historic Places. The proposed Center will serve as a gathering and learning place for our kūpuna, where they can engage with others and participate in educational and cultural enrichment programs and activities.

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

No rare, threatened, or endangered species or its habitat has been identified within the project site.

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

The proposed project is not anticipated to have any long-term impacts on air or water quality or noise conditions. It is anticipated to have negligible impacts in comparison to the overall increase resulting from the full build-out of Kaka'ako Makai.

Impacts on air and water quality and noise conditions are anticipated to be minor and short-term resulting from construction-related activities, and will cease upon project completion. Short-term impacts may include an increase in dust generating around the project area affecting air quality; increase in the amount of sediment in storm runoff because of exposed soils and potentially impacting the water quality of nearshore waters in the area; and increase in noise levels from construction equipment and onsite vehicles. However, these short-term impacts will be mitigated though use of BMPs to

minimize and mitigate potential negative impacts. Appropriate mitigation measures will be implemented as described in its respective section of this EA.

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

The project site is located approximately 1,800 feet inland from the shoreline and within the SMA. Pursuant to Chapter 15-150 HAR, an SMA permit from the State's Office of Planning is required for the proposed project.

However, the project site is located outside of the 100-year floodplain and outside of the tsunami evacuation zone.

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

The proposed project will not adversely affect the public's enjoyment of scenic vistas and view planes. The proposed project will improve the overall appearance of the existing project site and enhance the visual view of the area from outside of the site. The proposed project will improve the quality of the existing Ala Moana corridor since the existing building appears to be poorly maintained.

13. Requires substantial energy consumption.

The proposed project is not anticipated to consume a substantial amount of energy, and demands will be negligible relative to the full build-out of the Kaka'ako Makai area.

Based on the evaluation of the significant criteria and the information contained in this Final Environmental Assessment, an Environmental Impact Statement will not be required and a Finding of No Significant Impact has been determined for this project.

5. Required Permits and Approvals

Permit	Oversight Agency
Building Permit	Department of Planning and Permitting
Grubbing and Grading	Department of Planning and Permitting
Historic Site Review	State Historic Preservation Division
Development Permit/Approval	Hawaii Community Development Authority
Sewer Connection	Department of Planning and Permitting,
	Wastewater Branch
Special Management Area Permit	Office of Planning
Street Usage Permits for Construction	Department of Transportation Services

6. Alternatives to Proposed Action

6.1. No Action

Under the No Action alternative, the existing site conditions and structure will continue to deteriorate until building renovations will be cost prohibitive. Previous descriptions of the historic structure have noted that the windows and the interior plaster finish of the building have severely deteriorated. Stormwater will continue to infiltrate into the structure through leakages in the roof during inclement weather as well as from the exterior grade around the structure that is higher than the floor level in the Pump Station. Without the proposed improvements, the project site would not be able to serve the growing population and large percentage of senior citizens in the community. The No Action alternative is not desirable because nothing will be done to help preserve and restore the iconic and historic structure, and would preclude all benefits described in this EA.

6.2. Demolition of Structure

Another alternative action to the proposed project is to demolish the structure. With this alternative, all efforts to preserve this historic structure that played a significant role in Hawaii, serving as part of the first comprehensive sanitary system developed for Honolulu, would be diminished. After demolishing the structure, the vacant land would be available for development. As the parcel is zoned for "Mixed-use," it could allow for multi-storied buildings to support commercial and possibly residential uses if HRS 206E-31.5 is changed. If the AMPS is demolished and the land is developed, it is likely that it will increase traffic in the area. Demolition of the historic AMPS is not a desirable option.

Appendix A:

Agency Comments from Early Consultation

DEPARTMENT OF DESIGN AND CONSTRUCTION CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 11[™] FLOOR HONOLULU, HAWAII 96813 Phone: (808) 768-8480 ● Fax: (808) 768-4567 Web site: <u>www.honolulu.gov</u>

KIRK CALDWELL MAYOR



ROBERT J. KRONING, P.E. DIRECTOR DESIGNATE

MARK YONAMINE, P.E. DEPUTY DIRECTOR

October 21, 2014

Townscape, Inc. 900 Fort Street Mall Suite 1160 Honolulu, Hawaii 96813

Attn: Gabrielle Sham

Dear Ms. Sham:

Subject: Initial consultation for the planned renovation of the Historic Ala Moana Pump Station

The Department of Design and Construction does not have comments to offer on the initial consultation.

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

Sincerely,

For M. Jonanno

Robert J. Kroning, P.E. Director Designate

RJK: cf (582157)

NEIL ABERCROMBIE GOVERNOR OF HAWAII



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

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

October 13, 2014

In reply, please refer to File:

EPO 14-221

Gabrielle Sham, Project Coordinator Townscape, Inc. 900 Fort Street Mall, Suite #1160 Honoulu, Hawaii 96813 Email: gabrielle@townscapeinc.com

Dear Gabrielle Sham:

SUBJECT: Initial Consultation for the renovation of the Historic Ala Moana Pump Station

The Department of Health (DOH), Environmental Planning Office (EPO), acknowledges receipt of your letter to the Director dated September 26, 2014. Thank you for allowing us to review and comment on the one page letter and site map. 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. You are also required to adhere to all permitting requirements. If you plan to grade more than an acre of land, EPO recommends that you contact the Clean Water Branch regarding appropriate permitting. Since the site is historic and is planned for rehabilitation EPO suggests you contact the Indoor & Radiological Health Branch regarding potentially harmful substances.

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: <u>https://eha-cloud.doh.hawaii.gov</u> 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 sustainability: 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: <u>www.epa.gov/sustainability</u>; International Well Building Standard: <u>http://delosliving.com</u>; and Intergovernmental Panel on Climate Change (IPCC):

http://ipcc-wg2.gov/AR5/images/uploads/WGIIAR5-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

HONOLULU FIRE DEPARTMENT

CITY AND COUNTY OF HONOLULU

Phone: 808-723-7139

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

KIRK CALDWELL MAYOR



MANUEL P. NEVES FIRE CHIEF

LIONEL CAMARA JR. DEPUTY FIRE CHIEF

October 20, 2014

Ms. Gabrielle Sham Project Coordinator Townscape, Inc. 900 Fort Street Mall, Suite 1160 Honolulu, Hawaii 96813

Dear Ms. Sham:

Subject: Environmental Assessment Initial Consultation for the Planned Renovation of the Historic Ala Moana Pump Station 240 Keawe Street Tax Map Key: 2-1-015: 063

In response to your letter dated September 26, 2014, regarding the above-mentioned subject, due to the change in occupancy classification, the Honolulu Fire Department (HFD) requires that the Fire Code be complied with, including the following:

 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 ft 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, UFC[™], 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

Ms. Gabrielle Sham Page 2 October 20, 2014

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 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, UFCTM, 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,

1. Bratakor

SOCRATES D. BRATAKOS Assistant Chief

SDB/SY:bh

BOARD OF WATER SUPPLY

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



KIRK CALDWELL, MAYOR

DUANE R. MIYASHIRO, Chair ADAM C. WONG, Vice Chair MAHEALANI CYPHER THERESIA C. McMURDO DAVID C. HULIHEE

ROSS S. SASAMURA, Ex-Officio 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

Ms. Gabrielle Sham, Project Coordinator Townscape, Inc. 900 Fort Street Mall, Suite 1160 Honolulu, Hawaii 96813

Dear Ms. Sham:

Subject: Your Letter Dated September 26, 2014 on the Draft Environmental Assessment Initial Consultation for the Planned Renovation of the Historic Ala Moana Pump Station– Tax Map Key: 2-1-015: 063

Thank you for the opportunity to comment on the planned renovation of the historic Ala Moana Pump Station.

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 (BWS) reserves the right to change any position or information stated herein up until the final approval of the building permit application. The final decision on the availability of water will be confirmed when the building permit application is submitted for approval.

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

The proposed project is subject to BWS Cross-Connection Control and Backflow Prevention requirements prior to the issuance of the Building Permit Applications.

If you have any questions, please contact Robert Chun, Project Review Branch of our Water Resources Division at 748-5443.

Very truly yours,

ERNESTY. W. LAU, P.E. Manager and Chief Engineer

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



MICHAEL D. FORMBY DIRECTOR

MARK N. GARRITY, AICP DEPUTY DIRECTOR

TP9/14-582685R

KIRK CALDWELL MAYOR

October 22, 2014

Ms. Gabrielle Sham Project Coordinator Townscape, Inc. 900 Fort Street Mall, Suite 1160 Honolulu, Hawaii 96813

Dear Ms. Sham:

SUBJECT: Initial Consultation for Environmental Assessment (EA) Historic Ala Moana Pump Station, Kakaako, Oahu, Hawaii

In response to your letter dated September 26, 2014, we have the following comments:

- 1. The Draft EA should include a multimodal 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. The proposed senior center should be designed for on-site boarding and disembarking of passengers using TheHandi-Van or other related service vehicles. The plans shall include appropriate driveway and turnaround geometrics for these vehicles.
- 4. A street usage permit from the City's Department of Transportation Services should be obtained for any construction-related work that may require the temporary closure of any traffic lane on a City street.

Ms. Gabrielle Sham October 22, 2014 Page 2

5. 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.

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,

M M Michael D. Formby Director

DEPARTMENT OF ENVIRONMENTAL SERVICES CITY AND COUNTY OF HONOLULU

1000 ULUOHIA STREET, SUITE 308, KAPOLEI, HAWAII 96707 TELEPHONE: (808) 768-3486 ● FAX: (808) 768-3487 ● WEBSITE: http://envhonolulu.org

KIRK CALDWELL MAYOR



October 17, 2014

LORI M.K. KAHIKINA, P.E. DIRECTOR

TIMOTHY A. HOUGHTON DEPUTY DIRECTOR

ROSS S. TANIMOTO, P.E. DEPUTY DIRECTOR

IN REPLY REFER TO PRO 14-142

Ms. Gabrielle Sham Townscape, Inc. 900 Fort Street Mall, Suite 1160 Honolulu, Hawaii 96813

Dear Ms. Sham:

SUBJECT: Initial consultation for the planned renovation of the Historic Ala Moana Pump Station, (TMK: 2-1-015:063)

We have reviewed the subject document as transmitted to us by your letter dated September 26, 2014. We have the following comments:

- 1. The Department of Planning and Permitting (DPP), Wastewater Branch has the lead role in issuing sewer connection permits.
- 2. The City currently has major trunk sewers that run through the Mauka and Diamond Head portions of the proposed project site (see enclosed Sewer Location Map).
- 3. There are sewer easements associated with the major trunk sewers that run through the Mauka and Diamond Head portions of the proposed project site (see enclosed Tax Map Key and annotated Tax Map Key).
- 4. Development within the sewer easements will be limited to comply with language in the sewer easement documents.
- 5. The City's Ala Moana Wastewater Pump Stations, which service the wastewater basin from Niu Valley on the east all the way to the greater portion of downtown Honolulu, is a critical facility that is essential for the protection of public health, safety, and the environment. Operation and maintenance of this facility, as well as capital improvements, and expansion of capacity in the future, may have an impact on the adjoining parcel where the historic building is located.

Ms. Gabrielle Sham October 17, 2014 Page 2

> 6. The City had previous discussions with the Hawaii Community Development Authority regarding the ½ acre parcel that is adjacent to the Ala Moana Pump Stations. This portion of the property that is shown as being vacant, on the enclosed Sewer Location Map but currently houses the temporary sheriff's facility, could potentially be used for future expansion, installation of auxiliary equipment, and temporary construction staging and storage areas. Consideration should be given to keeping this portion of the parcel as open land, as a contingency, and as additional buffer area.

Should you have any questions, please call Lisa Kimura, Civil Engineer, at 768-3455.

Sincerely,

Resos Tanino

Lori M.K. Kahikina, P.E. Director

Enclosures

cc: Department of Planning and Permitting, SDD, WWB Department of Design and Construction, WWD







NEIL ABERCROMBIE GOVERNOR OF HAWAII



WILLIAM J. AILA, JR. CHAIRFERSON ROARD OF LAND AND NATURAL RESOURCES COMMESSION ON WATTE RESOURCE MANAGEMENT



STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES LAND DIVISION

> POST OFFICE BOX 621 HONOLULU, HAWAII 96809

> > October 23, 2014

Townscape, Inc. Attn: Ms. Gabrielle Sham 900 Fort Street Mall, Suite 1160 Honolulu, HI 96813

via email: gabrielle@townscapeinc.com

Dear Ms. Sham,

SUBJECT: Initial Consultation for the Planned Renovation of the Historic Ala Moana Pump Station

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; and (3) Engineering Division. 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,

Russell Y. Tsufi Land Administrator

Enclosure(s)

NEIL ABERCROMBIE GOVERNOR OF HAWAD



WILLIAM J. AILA, JR. CHARPERSIN ROADOOLLAND AND NATERAL RESOURCES COMMISSION ON WATER SOURCES MANAGMENT

STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES LAND DIVISION

POST OFFICE BOX 621 HONOLULU, HAWAII 96809

September 30, 2014

MEMORANDUM

TO:

DLNR Agencies:

___Div. of Aquatic Resources

____Div. of Boating & Ocean Recreation

X Engineering Division

X Div. of Forestry & Wildlife

____Div. of State Parks

X Commission on Water Resource Management

X Office of Conservation & Coastal Lands

X Land Division – Oahu District

X Historic Preservation

FROM: Russell Y. Tsuji, Land Administrator Way
SUBJECT: Initial Consultation for the Planned Renovation of the Historic Ala Moana Pump Station
LOCATION: 240 Keawe Street in the "Kakaako Makai" district of Honolulu (Tax Map Key 2-1-015: 063).
APPLICANT: Hawai`i Community Development Authority, by its consultant Townscape, Inc.

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

Please submit any comments by October 22, 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: Print Nam Date:

NEIL ABERCROMBIE GOVERNOR OF HAWAII

nd and

ofHa



WILLIAM J. AILA, JR. (TARPHASAN BOARDOLLAND AND NATURAL IN SAMR ES COMMESSION ON WATER RESOLRCY MANAGEMENT

STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES LAND DIVISION

POST OFFICE BOX 621 HONOLULU, HAWAII 96809

September 30, 2014

MEMORANDUM

TO. From	DLNR Agencies: _ Div. of Aquatic Resources _ Div. of Boating & Ocean Recreation X Engineering Division X Div. of Forestry & Wildlife _ Div. of State Parks X Commission on Water Resource Management X Office of Conservation & Coastal Lands X Land Division – Oahu District X Historic PreservationNATURAL OF LAND VALUE STATE OF LAND STATE
FROM: To!	Russell Y. Tsuji, Land Administrator
SUBJECT:	minu consultation for the rained renovation of the resource rain
	Pump Station
LOCATION:	240 Keawe Street in the "Kakaako Makai" district of Honolulu (Tax Map
	Key 2-1-015: 063).
APPLICANT:	Hawai'i Community Development Authority, by its consultant Townscape,
	Inc.

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

Please submit any comments by October 22, 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: Print Name Date:

NEIL ABERCROMBIR GOVERNOR OF HAWAII



WILLIAM J. AILA, JR. CHARPERSIN ROARDOLLAND AND NATUAL RESOURCES COMMISSION ON WATUR SOURCE MANAGEMENT

STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES LAND DIVISION

POST OFFICE BOX 621 HONOLULU, HAWAII 96809

September 30, 2014

MEMORANDUM

-PO: From:

DLNR Agencies:

__Div. of Aquatic Resources Div. of Boating & Ocean Recreation

<u>X Engineering Division</u>

X Div. of Forestry & Wildlife

Div. of State Parks

X Commission on Water Resource Management

X Office of Conservation & Coastal Lands

<u>X</u>Land Division – Oahu District

X Historic Preservation

EROM: TO:Russell Y. Tsuji, Land AdministratorSUBJECT:Initial Consultation for the Planned Renovation of the Historic Ala Moana
Pump StationLOCATION:240 Keawe Street in the "Kakaako Makai" district of Honolulu (Tax Map
Key 2-1-015: 063).APPLICANT:Hawai`i Community Development Authority, by its consultant Townscape,
Inc.

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

Please submit any comments by October 22, 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: Print Name: ity S. Chang, Chief Engineer Date:

DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION

LD/ Russell Y. Tsuji

Ref.: Initial Consultation for the Planned Renovation of the Historic Ala Moana Pump Station, 240 Keawe Street

Oahu.065

COMMENTS

- () We confirm that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Flood Zone ____.
- (X) Please take note that the project site according to the Flood Insurance Rate Map (FIRM), is located in Zones AE and X. The National Flood Insurance Program regulates developments within Zone AE as indicated in bold letters below, but not Zone X.
- () 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) 241-4846 of the County of Kauai, Department of Public Works.
- () The applicant should include project water demands and infrastructure required to meet water demands. Please note that the implementation of any State-sponsored projects requiring water service from the Honolulu Board of Water Supply system must first obtain water allocation credits from the Engineering Division before it can receive a building permit and/or water meter.
- () 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.

А	Additional Comments:				
С	Other:				

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

Signed:	Ch in
0 -	CARTY S. HANG, CHIEF ENGINEER
Date:	16/11/14

FLOOD HAZ	State of Hawaii ARD ASSESSMENT REPORT
Based Fast ZONE X	
0362G BRANKEN CONE AE (EL 5) Arto ST	12-1-015:063
NATIONAL FLOOD INSURA	NCE 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.	PROPERTY INFORMATION COUNTY: HONOLULU TMK NO: (1) 2-1-015-063 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
 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. 	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
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 flood.	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
 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. 	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.

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

October 17, 2014

Ms. Gabrielle Sham Project Coordinator Townscape, Inc. 900 Fort Street Mall, Suite 1160 Honolulu, Hawaii 96813

Dear Ms. Sham:

Subject: Historic Ala Moana Pump Station Pre- Consultation for Draft Environmental Assessment TMK: (1) 2-1-015:063

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

FORD N. FUCHIGAMI

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

IN REPLY REFER TO: STP 8.1688
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: <u>www.honoluludpp.org</u> • CITY WEB SITE: <u>www.honolulu.gov</u>

KIRK CALDWELL MAYOR



GEORGE I. ATTA, FAICP DIRECTOR

ARTHUR D. CHALLACOMBE DEPUTY DIRECTOR

2014/ELOG-1864(as)

October 16, 2014

Ms. Gabrielle Sham Townscape, Inc. 900 Fort Street Mall, Suite 1160 Honolulu, Hawaii 96813

Dear Ms. Sham:

Thank you for your letter dated September 26, 2014, regarding a request for comments on your planned renovation on the historic Ala Moana Pump Station located at Tax Map Key: 2-1-015: 063.

The property is located in the Kakaako Community Development District, which is under the jurisdiction of the State Hawaii Community Development Authority (HCDA) for planning and zoning purposes. The site is also in the Special Management Area District and in the Shoreline Setback Area. Although the parcel is in both Flood Zone X and AE, the buildings to be renovated appear to be in Flood Zone X.

The Environmental Assessment (EA) should include a discussion on how the proposed project is consistent with the City and County of Honolulu's General Plan and the Primary Urban Center. The EA should also include discussion on how it addresses the urban design guidance of HDCA's Makai Area Plan (Section 4.0) and the guiding principles and objections of the Draft Kakaako Community Development District Transit Oriented Development Overlay Plan (Chapter 2).

Thank you for the opportunity to comment on your pre-consultation proposed EA.

Should you have any questions, please contact Adrian Siu-Li of our staff at 768-8031.

Very truly yours,

George I. Atta, FAICF Director

GIA:bkg 1184990 **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

October 3, 2014

Ms. Gabrielle Sham, Project Coordinator Townscape, Inc. 900 Fort Street Mall, Suite 1160 Honolulu, Hawaii 96813

Dear Ms. Sham:

SUBJECT: Environmental Assessment-Initial Consultation Renovation of the Historic Ala Moana Pump Station TMK: 2-1-015:063

Thank you for the opportunity to review and comment at the initial consultation stage of an environmental assessment for the planned renovation of the historic Ala Moana Pump Station.

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,

Michele K. Nekota Director

MKN:jr (582310)



October 15, 2014

Gabrielle Sham Project Coordinator Townscape, Inc. 900 Fort Street Mall, Suite 1160 Honolulu, Hawai'i 96813

RE: Planned Renovation of Historic Ala Moana Pump Station Chapter 343 Draft Environmental Assessment Draft

Dear Ms. Sham,

Thank you for including Historic Hawai'i Foundation (HHF) in the initial consultation for the Planned Renovation and Adaptive Reuse of Ala Moana Pump Station, also referred to as Kaka'ako Pump Station. Since 1974, HHF has been a statewide leader for historic preservation with a mission to preserve and encourage the preservation of historic properties significant to the history of Hawai'i.

As the statewide historic preservation nonprofit, HHF encourages appropriate use and rehabilitation projects that prolong the life of historically-significant places and preserve a sense of place in our communities. Historic Hawai'i Foundation supports the adaptive re-use of the historically significant Ala Moana Pump Station, which is designated on both the State and National Registers of Historic Places.

We understand the project to consist of grading, landscape work, roof, window, and masonry repair, as well as minor interior demolitions and installation of an handicapped-accessible restroom. Work will facilitate the adaptive use of the 1900-era pump station for a Pacific Gateway Center Senior Center. The current project includes work only on the original pump station. Two other historic buildings exist on the property: the Screen House and the 1940-era pump station. Future work to those buildings would be subject to separate review processes. Please note that these buildings are also historically significant and should be preserved in place, and protected during construction and use of the adjacent structure and site.

Architectural and structural work has the potential to adversely affect the historic integrity of the Ala Moana Pump Station. In order to appropriately rehabilitate this building, all work should comply with the Secretary of the Interior's Standards for Rehabilitation of Historic Properties (SOI Standards). These standards ensure that the historic integrity of the building remains intact through the improvements and alterations. HHF received concept plans for the work via email on Oct. 14.

Please provide clarification on:

1. Sheet A101 Floor Plan: Note 3 states "remove plywd at arched opening...fill opening with CMU plastered on exterior face..." HHF recommends that the opening be restored to its original material and look. Was it this a window or door? If so, the glazing or door should be reopened with materials and fenestration to match the original design and materials.

- 2. Sheet A103 Diamond Head Elevation: Note 5 "Remove Paint from Stone"; Note 8 "Sandblast to Remove All Rust"; and Note 11 "Use Chemical Strippers to Remove Old RFG from Stone." SOI Standards state that "Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used." Please confirm that the proposed sandblasting and chemical treatments will not harm the historic materials.
- 3. Sheet A104 'Ewa Elevation: Same note as above regarding chemical and physical treatments.
- 4. Notes indicate that all glass is to be replaced throughout. SOI Standards state that historic materials should be repaired rather than replaced. Are any of the glass panes original? If so, they should be cleaned and reinstalled rather than replaced with new. If the panes are not the historic material due to previous replacement or have been broken or otherwise or not usable, then new glass may be used but should match the old in materials, size, dimensions and installation.

To assist with documentation and any future projects, it recommended that the property owner update the nomination form that designated the property on the State and National Registers of Historic Places to include additional descriptions, statements of significance, photographs and drawings, and to bring the nomination form to current standards for the official documentation of this important property.

The Environmental Assessment should also address previously-identified concerns and issues related to land ownership and use of ceded lands. Previous rehabilitation projects floundered due to objections from beneficiaries of Hawai'i's ceded lands. Has this issue been resolved and the resolution documented?

We look forward to the opportunity to review and comment on the Draft Environmental Assessment. Megan Borthwick, Preservation Program Manager, will be HHF's point of contact. She can be reached at 808-523-2900 or <u>Megan@historichawaii.org</u>

Very truly yours,

Witten Faulhur Kiersten Faulkner, AICP

Kiersten Faulkner, AIC Executive Director

Copies via email: Anna Broverman, State Historic Preservation Division Deepak Neupane, Hawai'i Community Development Authority

Secretary of the Interior's Standards for Rehabilitation

- A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.
- The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.
- Each property will be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.
- Changes to a property that have acquired historic significance in their own right will be retained and preserved.
- Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.
- Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials.
 Replacement of missing features will be substantiated by documentary and physical evidence.
- Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
- Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.
- New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work shall be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.
- New additions and adjacent or related new construction will be undertaken in a such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

More information on the Standards can be found at: http://www.nps.gov/hps/tps/standguide/rehab/rehab_standards.htm POLICE DEPARTMENT

CITY AND COUNTY OF HONOLULU

801 SOUTH BERETANIA STREET · HONOLULU, HAWAII 96813 TELEPHONE: (808) 529-3111 · INTERNET: www.honolulupd.org

PETER B. CARLISLE MAYOR



LOUIS M. KEALOHA CHIEF

DAVE M. KAJIHIRO MARIE A. MCCAULEY DEPUTY CHIEFS

OUR REFERENCE EO-WS

October 3, 2014

Ms. Gabrielle Sham **Project Coordinator** Townscape, Inc. 900 Fort Street Mall, Suite 1160 Honolulu, Hawaii 96813

Dear Ms. Sham:

This is in response to your letter dated September 26, 2014, requesting comments on the proposed Initial consultation for the planned renovation of the Historic Ala Moana Pump Station project.

The Honolulu Police Department anticipates possible short-term impacts to traffic around the area during the construction phase of the project. We recommend scheduling construction vehicles and supply deliveries during off-peak traffic hours and informing the public of any potential delays in and around the project area.

Additionally, once the project is completed, there may be traffic control issues due to the project's location in the developing Kakaako area. We recommend creating a traffic plan that will address future vehicular and pedestrian traffic flow and varying congestion.

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.

Bv

Sincerely,

LOUIS M. KEALOHA Chief of Police

Rek mangy

RANDAL K. MACADANGDANG Assistant Chief Support Services Bureau

Serving and Protecting With Aloha



STATE OF HAWAI'I OFFICE OF HAWAIIAN AFFAIRS 560 N. NIMITZ HWY., SUITE 200 HONOLULU, HAWAI'I 96817

HRD14/7276

October 22, 2014

Ms. Gabrielle Sham Project Coordinator Townscape, Inc 900 Fort Street Mall, Suite 200 Honolulu, Hawai'i 96817

Re: Initial Consultation for Planned Renovation of the Historic Ala Moana Pump Station Honolulu Ahupua'a, Kona Moku, O'ahu Island TMK: (1) 2-1-015:063

Aloha e Ms. Sham:

The Office of Hawaiian Affairs (OHA) is in receipt of your submission, received October 7, 2014, requesting initial consultation for the development of a draft environmental assessment (DEA) for the planned renovation of the Historic 1900 Ala Moana Pump Station located at 240 Keawe Street in the Kaka'ako Makai district. The Ala Moana Pump Station site consists of three buildings, the 1900 Pump Station, the Screen House, and the 1940 Pump Station. The Hawai'i Community Development Authority (HCDA) is proposing to rehabilitate the historic 1900 Pump Station for use as a senior community resource center run by the Pacific Gateway Center, a non-profit community based organization. The center will be named Nā Kūpuna Makamae Center and will focus on educational and cultural programs for seniors.

The 1900 Pump Station is listed on the State and National Register of Historic Places and is currently being used as a warehouse. The proposed improvements to the 1900 Pump Station building and adjacent land include: site work, such as grading, removing concrete slabs, and chain link fence; planting grass and installing automatic irrigation; architectural improvements to roof, doors, windows; and masonry repairs and interior improvements.

We recommend that HCDA consult with project neighbors Kamehameha Schools and the Office of Hawaiian Affairs Commercial Property Team for collaboration on public utility projects proposed for the area. We recommend that the DEA include an Archaeological Ms. Sham October 22, 2014 Page 2

Inventory Survey (AIS) or Archaeological Assessment (AA), as well as a Cultural Impact Assessment (CIA) completed by the project applicant as required by Hawai'i Revised Statutes (HRS), Chapter 343. The studies must also meet the requirements of HRS Chapter 6E, as well as applicable Hawai'i Administrative Rules (HAR) for archaeological studies. The subject AIS/AA study should include consultation with community members and should be reviewed and approved by the State Historic Preservation Division (SHPD) prior to the completion of the DEA. Early consultation should be conducted with interested community members for appropriate baseline standards for the subject archaeological study. Consultation meetings with community members for projects in the direct vicinity have highlighted an awareness of the potential for iwi kupuna in the immediate area. Additionally, as the 1900 Pump Station is listed on both the National and State Registers of Historic Places, appropriate architectural studies of the building and its associated infrastructure should be completed prior to the renovation work. These studies should be conducted with guidance from the Architecture Branch of the SHPD and adhere to all HAR standards for architectural studies.

We look forward to reviewing a draft of the AIS/AA, as well as the DEA upon its completion. Should you have any questions or concerns please contact Lauren Morawski (808-594-1997 or laurenm@oha.org) of our Kia'i Kānāwai (Compliance Enforcement) division.

'O wau iho nō,

Kamana'opono M. Crabbe, Ph.D. Ka Pouhana, Chief Executive Officer

KC;lm



OFFICE OF PLANNING STATE OF HAWAII

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

> LEO R. ASUNCION ACTING DIRECTOR OFFICE OF PLANNING

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

Ref. No. P-14531

October 7, 2014

Ms. Gabrielle Sham Townscape, Inc. 900 Fort Street Mall, Suite 1160 Honolulu, Hawaii 96813

Dear Ms. Sham:

Subject: Draft Environmental Assessment: Pre-Consultation for the Planned Renovation of the Historic Ala Moana Pump Station, Kakaako, Honolulu, Hawaii; Tax Map Key: 2-1-015: 063

Thank you for the pre-consultation opportunity to provide comments on the Draft Environmental Assessment (EA) associated with the proposed renovation of the historic 1900 Pump Station.

According to the pre-consultation information you provided, the proposed alterations to the subject pump station building and immediately adjacent land include:

- 1) Site work such as grading, removing concrete slabs and chain link fence, planting grass and installing irrigation system, and installing underground utilities.
- Architectural improvements such as new roofing, repairing and renovating existing metal sash and doors, installing new doors and windows, cleaning and patching existing masonry, and painting of metal trim.
- 3) Interior improvements such as minor demolition, restoration of plaster work, resurfacing of concrete floors, and installing ADA accessible toilet rooms.

The Office of Planning (OP) has reviewed your pre-consultation request and has the following comments to offer.

- 1. The Draft EA should identify the triggers for the requirements of Hawaii Revised Statutes (HRS) Chapter 343 for the proposed action, pursuant to Hawaii Administrative Rules (HAR) Chapter 11-200.
- 2. HRS Chapter 205A requires all State and County agencies to enforce the coastal zone management (CZM) objectives and policies. The Draft EA should include an assessment as to how the proposed action conforms to CZM objectives and its supporting policies set forth in HRS § 205A-2. The assessment on compliance with HRS Chapter 205A is an important component for satisfying the requirements of HRS Chapter 343 and obtaining a special management area (SMA) use approval.

Ms. Gabrielle Sham October 7, 2014 Page 2

- 3. Given that the subject building structure is listed on the National and Hawaii Register of Historic Places, the Draft EA should provide the written comments from the State Historic Preservation Division, Department of Land and Natural Resources, regarding the proposed action.
- 4. The subject property area consists of filled material dredged from the ocean or hauled from nearby areas and garbage. The Draft EA should discuss site-specific mitigation measures by consulting with the Hazard Evaluation and Emergency Response Office, State Department of Health, to confine the proposed activities, and to prevent any potential soil and groundwater contaminants from adversely impacting the State waters as specific in HAR Chapter 11-54, and from posing a risk to human health.
- 5. The Draft EA should assess the ingress and egress effects of vehicle traffic, generated from the construction and operation of the proposed project on public access to the ocean and Kakaako Waterfront Park. The Draft EA should propose mitigation measures to ensure the public access, including park users parking, to the ocean and the adjacent park recreation area will not be affected.
- 6. The proposed project is located within the makai area of the Kakaako community development district. Pursuant to HRS § 206E-8.5, all requests for developments within an 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 the OP. As a supporting document for SMA use application, the Draft EA should identify and clarify structural and nonstructural improvements to the existing building structure. Please consult with our office and refer to HAR Chapter 15-150 for the requirements of SMA use.

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

Sincerely,

Leo R. Asuncion Acting Director

c: Mr. Anthony J.H. Ching, HCDA Mr. Richard Lim, DBEDT NEIL ABERCROMBIE GOVERNOR OF HAWAII





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

JESSE K. SOUKI

WILLIAM M. TAM DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES BOATING AND OCEAN RECREATION BUREAU OF CONVEY ANCES COMMISSION ON WATER RESOURCE MANAGEMENT CONSERVATION AND RESOURCE SENFORCEMENT ENGINEERING FORESTRY AND WILDLIFE HISTORIC PRESERVATION KAHOOLAWE ISLAND RESERVE COMMISSION LAND STATE PARKS

STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION KAKUHIHEWA BUILDING 601 KAMOKILA BLVD, STE 555 KAPOLEI, HAWAII 96707

October 24, 2014

Mr. Russell Y. Tsuji, Administrator Department of Land and Natural Resources Land Division P.O. Box 621 Honolulu, HI 96809 LOG NO: 2014.04494 DOC NO: 1410GC14 Archaeology, Architecture

Dear Mr. Tsuji:

SUBJECT: Chapter 6E-8 Historic Preservation Review – Initial Consultation for the Planned Renovation of the Historic Ala Moana Pump Station Honolulu Ahupua'a, Honolulu (Kona) District, Island of O'ahu TMK: (1) 2-1-015:063

Thank you for the opportunity to provide comments regarding the above request, which we received on October 2, 2014. The owner Hawai'i Community Development Authority is proposing to renovate the 1900 Historic Ala Moana Pump Station, the Screen House, and the 1940 Pump Station on the approximately 1.04 acres of land within TMK: (1) 2-1-015:063. The proposed renovations will transform the 1900 Pump Station into Nā Kūpuna Makamae Center, focusing on educational and cultural programs for seniors. The proposed ground disturbing activities will involve grading, removing concrete slabs and chain link fencing, landscaping, and installing irrigation and utility systems. The proposed exterior architectural activities will involve installing new doors, windows, and roofing; repairing and renovating existing metal sash and doors; patching existing masonry; and painting of metal trims. Interior activities will consist of minor demolition, partial restoration of plaster work, resurfacing of concrete floors, and installation of ADA compliant restrooms.

Architecture

The Ala Moana (Kaka'ako) Pumping Station is listed on the State and National Registers of Historic Places (No. 80-14-9710) under Criteria A and C. All three structures on the site are considered contributing elements to the historic pump station.

Archaeology

Our records indicate that no archaeological inventory survey have been conducted within this parcel. In addition, a recent archaeological inventory survey (AIS) conducted on an adjacent property resulted in the identification of two subsurface archaeological historic properties—a cultural layer (SIHP 50-80-14-7412) and remnants of the Hawaiian Sugar Planters Immigration Station (SIHP 50-80-14-7413) (Tulchin and Hammatt 2013).

SHPD Determination

Based on the above we have insufficient information to make a determination that no historic properties will be affected, therefore we request **more information** be provided to our office in the form of:

Architecture:

• Exterior <u>and</u> Interior photograph(s) of all structures or buildings to be affected by the project, photographs should be numbered and keyed to a map/building plan;

Mr. Russell Y. Tsuji October 24, 2014 Page 2

- A brief history of the property, including available information about the date of construction, the designer and/or builder, the early owners, and any other significant historical facts related to the structure;
- Plans and specifications of the proposed work/elevations/project cut sheets;
- A map illustrating the project boundaries; and
- Date of construction for all structures affected by the project.

Archaeology:

An **archaeological inventory survey** be conducted of the project area to identify and document any surface and subsurface historic properties that may be present and, if necessary, an appropriate course of mitigation. We also request that a report of the survey findings that meets the standards of Hawaii Administrative Rule §13-276 be submitted to SHPD for review and acceptance prior to initiation of the proposed project.

Please contact Anna E. Broverman at (808) 692-8028 or at <u>Anna.E.Broverman@hawaii.gov</u> for any architectural concerns. Please contact me at (808) 692-8019 or at <u>Susan.A.Lebo@hawaii.gov</u> if you have any questions or concerns regarding this letter.

Aloha,

Susan A. Lebo

Susan A. Lebo, PhD Oahu Lead Archaeologist

cc: Steve Molmen, DLNR-Supervising Land Agent (<u>Steve.Molmen@hawaii.gov</u>) Gabrielle Sham, Project Coordinator, Townscape Inc. (<u>gabrielle@townscapeinc.com</u>)



CITY AND COUNTY OF HONOLULU 530 SOUTH KING STREET, ROOM 202 HONOLULU, HAWAII 96813-3065 TELEPHONE: (808) 768-5010 • FAX: (808) 768-5011

ERNEST Y. MARTIN CHAIR and PRESIDING OFFICER HONOLULU CITY COUNCIL DISTRICT 2 TELEPHONE: (808)768-5002 FAX: (808) 768-1222 EMAIL: emartin@honolulu.gov

October 23, 2014

Townscape, INC. 900 Fort Street Mall Suite 1160 Honolulu, HI 96813

RE: Comment on the planned renovation of the Historic Ala Moana Pump Station located at 240 Keawe Street (Tax Map Key 2-1-015: 063) for use as a senior community resource center.

To Whom It May Concern,

As the Chair and Presiding Officer of the Honolulu City Council, I am pleased to support this project which addresses the need for quality services and opportunities for our seniors. Additionally, I believe use of the Historic Ala Moana Pump Station as a senior community resource center is fitting as its renovation highlights the desire to honor the past while developing our future.

I appreciate that the proposal aligns with the Hawaii Community Development Authority's vision for the Kaka'ako Community Development District, as stated in the Mauka Area Plan (September 2011), to become "the most sustainable, liveable urban community in the State, a place where people can work, live, visit, learn, and play." As a community leader, I support projects that seek to improve the quality of life for members of our community. This project is a perfect example of such a project which will be a great benefit for our kapuna.

Additionally, I am confident that the Pacific Gateway Center (PGC) has the capacity to see this project through to completion and maintain a high quality of service. PGC has been successful in the development of a number of community start-up projects and has extensive knowledge and expertise in project development gained from decades of successful partnerships in the community. I am sure that this will be yet another successful project in which PGC supports and strengthens participants of the program and the surrounding community.

I would encourage the applicant to reach out for community consultation. With any proposed project, the community's response weighs heavily in my decision to provide continued support and believe reaching out to the community is a key component for success as the project moves forward.

Overall, this project is a step in the right direction for the Ala Moana/Kaka'ako neighborhood and am pleased to offer my support. Should there be any questions or need for further comment please feel free to contact me at 808-768-5002 or emartin@honolulu.gov. Thank you for the opportunity to comment.

Respectfully Ernest Y. Martin **Council Chair District II**

NEIL ABERCROMBIE GOVERNOR OF HAWAI



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:

October 15, 2014

Ms. Gabrielle Sham Townscape, Inc. 900 Fort Street Mall Suite 1160 Honolulu, HI 96813

Dear Ms. Sham:

•

Thank you for your submittal requesting comments to the Initial Consultation for the planned renovation of the Historic Ala Moana Pump Station located at 240 Keawe Street in the Kakaako Makai District of Honolulu.

Project activities shall comply with the following Administrative Rules of the Department of Health:

- Chapter 11-41 Lead-based Paint Activities
 - Chapter 11-46 Community Noise Control
- Chapter 11-501 Asbestos Requirements
- Chapter 11-504 Asbestos Abatement Certification Program

Should you have any questions, please contact me at (808) 586-4700.

Sincerely,

Jeffrey M. Eckerd Program Manager Indoor and Radiological Health Branch

Appendix B:

Response to Agency Comments



PRINCIPALS

Francis S. Oda, Arch.D., FAIA, AICP, LEED AP

Norman G.Y. Hong AIA

Sheryl B. Seaman AIA, ASID, LEED AP

Hitoshi Hida AIA

Roy H. Nihei AIA, CSI, LEED AP

James I. Nishimoto AIA

Stephen Yuen AIA

Linda C. Miki AIA

Charles Y. Kaneshiro AIA, LEED AP

Jeffrey H. Overton AICP, LEED AP

Christine Mendes Ruotola AICP, LEED AP

James L. Stone, Arch.D., AIA, LEED AP

Katherine M. MacNeil AIA, LEED AP

Tom Young, MBA

Paul T. Matsuda PE, LEED AP

Ma Ry Kim RIBA, ARB

OF COUNSEL

Ralph E. Portmore FAICP October 27, 2014

Mr. Ryan Nakaima, LEED-AP | Vice President Nan Inc 636 Laumaka Street Honolulu, HI 96819

Aloha Mr. Nakaima,

Thank you for the opportunity to review and respond to the Historic Hawai'i Foundation comments provided with their October 15, 2014 letter. As stated in the letter it is our intent to provide design and preservation services compliant with the Secretary of the Interior's Standards for Rehabilitation of Historic Properties (SOI Standards).We have reviewed the letter and have the following responses for consideration.

Comment 1: Sheet A101 Floor Plan: Note 3 states "remove plywd at arched opening ... fill opening with CMU plastered on exterior face ... " HHF recommends that the opening be restored to its original material and look. Was this a window or door? If so, the glazing or door should be reopened with materials and fenestration to match the original design and materials.

Response: We site investigated the location indicated on the A-101 and it appears to be the location of the fuel door into the chimney, see reference photo below. However, due to the significant increase of activity and occupancy at the building, combined with the potential hazards within the chimney space, it is recommended to remain with the project scope and infill the opening to prevent any unauthorized/accidental entry. We concur with the recess of the infill, which will help to preserve the historical character while maintaining the safety of the users at the senior center.



Chimney door

Mr. Ryan Nakaima / Historic Renovation of Ala Moana Pump Station Repose to Historic Hawaii Foundation Draft Assessment Letter October 27, 2014 Page 2 of 4

Comment 2: Sheet A103 Diamond Head Elevation: Note 5 "Remove Paint from Stone"; Note 8 "Sandblast to Remove All Rust"; and Note 11 "Use Chemical Strippers to Remove Old RFG from Stone." SOI Standards state that "Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used." Please confirm that the proposed sandblasting and chemical treatments will not harm the historic materials.

Comment 3: Sheet A1 04 'Ewa Elevation: Same note as above regarding chemical and physical treatments.

Response: There appears to be a number of different paints, sealants and other staining coating that have been applied to the structure over the years. We propose that consistent with the SOI guidelines that a visual inspection of each staining coating is undertaken to identify if it's a water, oil or Silone based coating. Once this is discovered the appropriate approach toward removing the coating and/or stain can be made. Note that the substrate is basalt which is resilient, although the grout joints would be the most susceptible to damage. The basalt is susceptible to absorption staining as it is a porous material so special precautions to avoid absorption of any solvent or other liquid used will be prescribed. Also small, sample testing of any proposed removal techniques will be undertaken prior to using in mass on the building to ensure no unanticipated consequences or damage occur. Any method would begin with the gentlest approach in this order:

- 1. Water and soap scrubbing with sponges or soft brushes
- 2. Pressurized water removal
- 3. Wire brush removal
- 4. Solvent with areas taped off to control absorption

The condition of the historic steel windows is from below average to poor condition with a number of window elements and glazing stops missing. There is also significant corrosion to the frames and anchors. We propose that a visual inspection and documentation of each window is undertaken to identify if the extent of damage or corrosion. Once this is discovered and documented the appropriate approach toward removing the corrosion can be made to prepare the window frames for a new finish and rebuilding to support re-glazing. The steps to remove finishes, staining and/or corrosion would begin with the least evasive and as needed progress, such as:

- 1. Water and soap scrubbing with sponges or soft brushes
- 2. Pressurized water removal
- 3. Wire brush removal
- 4. Corrosion removing jelly (Naval jelly)
- 5. Sandblasting as a last resort.

Mr. Ryan Nakaima / Historic Renovation of Ala Moana Pump Station Repose to Historic Hawaii Foundation Draft Assessment Letter October 27, 2014 Page 3 of 4

Comment 4: Notes indicate that all glass is to be replaced throughout. SOI Standards state that historic materials should be repaired rather than replaced. Are any of the glass panes original? If so, they should be cleaned and reinstalled rather than replaced with new. If the panes are not the historic material due to previous replacement or have been broken or otherwise or not usable, then new glass may be used but should match the old in materials, size, dimensions and installation.

Response: Unfortunately a majority of the glass has been lost; many of the steel framed windows have a solid piece of Plexiglas installed directly behind the window in wood frames for basic weather protection. The restoration of these windows will be one of the biggest challenges as the glazing is missing as well as a number of the muttin/mullion stops and other window hardware components. We do observe some existing glass panes on the south facing large round window, see attached site photo. Our proposed approach will be to carefully remove one of the panes to use as a sample for all replacement glass to consistent with. To meet code and provide a safe environment, safety-tempered or laminated glass with some clear heat performance coating will probably be specified to achieve model energy code requirements as well as life safety issues. To replace with exact matching plate glass would present a safety issue as the glass could fail in large shards and possibly fall on occupants.



Evidence of original glass

Mr. Ryan Nakaima / Historic Renovation of Ala Moana Pump Station Repose to Historic Hawaii Foundation Draft Assessment Letter October 27, 2014 Page 4 of 4

Thank you for the opportunity to participate on this project and we look forward to working with The Historic Hawai'i Foundation to ensure that the historic legacy of this structure is maintained. If you have any question please do not hesitate to call me at 808-441-2105

Group 70 International Inc.

James L. Stone D-Arch, AIA, LEED AP Principal

Appendix C:

Topographic Survey



Appendix D:

Architectural Report

Kaka'ako Pumping Station 240 Keawe Street, Honolulu, HI 96813 TMK: 2-1-015: 043, 044

Site Area: Approximately 1.04 Acres

Building Area: 1,321 Sq. Ft.

The Kaka'ako Pumping Station was placed on the National Register of Historic Places in October, 1978

The building was designed by Oliver G. Traphagen, FAIA in 1899 and built in 1900. Traphagen was a prolific architect during his approximately 10 years in Hawaii and a number of his buildings still survive, including the Moana Hotel, the Judd Block, Punahou's President's House, and the Old Archives.

The original stone structures include the Romanesque Revival Pump House and smaller Screen House, and an 800,000 gallon sewage reservoir, now filled in. In 1940 a new pumping station was added; a plastered, tile-roofed structure with a floor well below grade. At that time the roofing of the original pumping station was replaced and the cupolas removed.



Pump Station shortly after its completion. Note small cupolas, since removed



The original pump house housed a coal storage area in the large space at the Waikiki end, 2 coal-fired furnaces and boilers in the center section and 2 steam engines and pumps in the room at the Ewa end. A small office existed in the rounded front room.

The Screen Room Building was connected to the reservoir and used to separate large debris from the primary pump stream.

When the "new" Pump Station was built in 1940, the 1900 Pump House was converted to a machine repair and maintenance shop. In 1955 a newer pumping station was completed and the 1940 pump station remained as a standby.

Several concrete block additions were made to the Pump Station and the Screen house after 1950 that were completely incompatible to the original buildings and were removed by volunteers about nine years ago.



Photo taken 2010, with the 76-foot tall stone and plastered brick chimney clearly visible.

The initial phase of work involves only the original Pump House and site work.

SITE WORK

The primary purpose of the site work is to eliminate excess paving and fill that has been added over the past 20 years on the mauka side. That extra fill has resulted in the ground being higher than the interior floor. Removing this fill will to allow for positive drainage away from the building, as originally designed. Hardscaping will include removal of concrete slabs and portions of chain link fence to open the site to the sidewalk and Ala Moana Boulevard. An accessible parking space will be marked within an existing parking area and an accessible path provided to the front door. Landscaping will include installation of grass and an automatic irrigation system with backflow preventer.

Site utilities work to include a 200 Amp electric service; with conduits run underground to the building.

PUMP HOUSE

Work on the building's architectural envelop will include new roofing and associated copper gutters and downspouts, repair and renovation to existing metal sash and doors with new

accessible hardware installed at one door, installation of one door replacement and two windows, and cleaning, patching, and pointing of existing masonry, painting of metal trim.

Interior improvements will provide a finished shell space for the Pacific Gateway Center's use. Work will include minor demolition; partial restoration of plaster work; resurfacing of concrete floors; installation of an ADA Accessible toilet room; air conditioning; general lighting with architectural suspended ambient fixtures; convenience power outlets; fire alarm; and painting. All work shall meet the Secretary of Interior Standards for the Rehabilitation of Historic Properties.









Reference Photo 1



Reference Photo 2



Reference Photo 3



Reference Photo 4



Reference Photo 5



Reference Photo 6






SCREEN HOUSE

This building is proposed for reuse in future. It is a very small building which will be used for one small office and a small meeting room. The exterior will be cleaned and a new tile roof, to match the existing, will be installed. The interior has no details, so walls shall simply be cleaned, patched and repainted.





Screen Room Interior

Screen Room roof structure

PUMP HOUSE – 1940

This building is proposed for reuse in future phases. The exterior of this building shall remain and all windows retained and restored. The interior is a two-story space, with one story underground and a mezzanine at ground level. The interior work shall involve installing a floor at ground level to make the building usable. It is intended to keep this as one open space with exposed ceiling structure to be used for exercise classes for the elderly.



PLAN SHOWING THE LOCATION OF THE PUMPING STATION AND STORAGE RESERVOIR.

0



Appendix E:

Secretary of the Interior's Standards for Rehabilitation

Secretary of the Interior's Standards for Rehabilitation

- A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.
- The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.
- Each property will be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.
- Changes to a property that have acquired historic significance in their own right will be retained and preserved.
- Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.
- Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials.
 Replacement of missing features will be substantiated by documentary and physical evidence.
- Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
- Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.
- New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work shall be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.
- New additions and adjacent or related new construction will be undertaken in a such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

More information on the Standards can be found at: http://www.nps.gov/hps/tps/standguide/rehab/rehab_standards.htm

Appendix F:

Cultural Impact Assessment

Final Environmental Assessment

Kakaako Makai Area Plan Amendment

APPENDIX B

Cultural Impact Assessment

6573-01 March 7, 2002

University of Hawai'i Health and Wellness Center

CULTURAL RESOURCES

The project site is located on fill land that is identified as the near-shore waters and coral reef of Ka'ākaukukui on early historical maps. Ka'ākaukukui is an 'ili awarded to Victoria Kamāmalu in the Great Mahele of 1848 that is situated between the areas traditionally referred to as Kewalo and Kaka'ako. Historical maps of the area from the 1800s indicate a "Beach Road" that follows along the shoreline and makai boundary of the 'ili (see Figure 1). This road approximately coincides with the present day alignment of Ala Moana Boulevard.

The lands of Kaʻākaukukui, Kakaʻako and Kewalo were in close proximity to Kou, a favorite sheltered harbor of Oʻahu's chiefly class. In 1809 under the reign of King Kamehameha I, the seat of government was moved from Hawaiʻi Island to Kou which quickly developed into Honolulu Harbor and Downtown Honolulu. The surrounding area, which included Kaʻākaukukui, grew from a coastal fishing village to support the new maritime industry and increased activities.

In the 1840s during the reign of Kauikeaouli Kamehameha III, son of Kamehameha I, land tenure in Hawai'i entered a transitional period terminating in the "Great Mahele" of 1848. King Kamehameha III who inherited from his brother control of all the lands with the kingdom chose to provide the opportunity for fee simple ownership of land to his chiefs and people. The maka'āinana, the native tenants, were able to make claims for and receive title to their kuleana, the areas of land which they personally used. Kauikeaouli Kamehameha III after reserving certain lands for himself as his own private property, surrendered the majority of the lands to his chiefs and people. The project site is located in what were the nearshore waters of the 'ili of Ka'ākaukukui, of which the majority of the lands, or 125 acres, was awarded to Victoria Kamāmalu through Land Commission Award 7713. Smaller kuleana lands were also awarded to seven other native tenants.

Claims by native tenants are recorded in the *Native and Foreign Registers* which typically includes information regarding the location of the claim, and sometimes information regarding the type of use. Additional information regarding the claims and use of the land can also be found in *Native and Foreign Testimony* records. A review of Native and Foreign Register and Testimony records revealed that claimants registered for house lots, fishponds, salt beds and cultivation areas including mauka kalo patches.

In 1919 the Territory of Hawai'i acquired the land from Bishop Estate which included the lands inherited by Princess Bernice Pauahi Bishop from Victoria Kamāmalu. By this time a retaining wall had been constructed along the approximate alignment of the present Olomehani Street and the area makai of Ala Moana Boulevard was filled (see

Figure 2). During this period of development a large settlement of squatters became established and by 1924 the Territorial government was evicting people from "Squattersville." The following history of this period of change for the area can be found in *The Beaches of O'ahu* by John R.K. Clark.

"The shoreline land that Squattersville occupied was known as Ka'ākaukukui, commonly shortened to 'Ākaukukui. The majority of the homes were comfortable and sturdily built. The dwellings that lined the seashore, where the present Olomehani Street now runs, were protected from the ocean by a low sea wall about three feet high. Relatives and friends of the residents often went there to spend weekends and summers. By the mid-1920s, the community numbered about 700 Hawaiians and part-Hawaiians, but because of the illegality of their settlement all of the families were evicted by May 1926 and all of the dwellings were razed.

During the 1930s and 1940s, the Ka'ākaukukui area continued to be heavily utilized as a fishing and swimming area, especially by children from the nearby community of Kaka'ako. The children surfed on redwood planks in the break they called 'Stonewall.' Many varieties of fish were abundant. Younger divers were warned by old-time residents to stay away from the large shark hole on the Waikīkī side of Kewalo Channel. Many people came to this area to pick *limu* and *wana*, and also to catch squid on the shallow reef.

In August 1948 a severe change took place. The City and County began work on a project to provide a dump for the noncombustible material from the nearby incinerator. A huge seawall was constructed, 10 feet high, 10 feet wide on top, and 30 feet wide at the base, and it extended 500 feet seaward from the old shoreline. From its outer extremity, along the edge of Kewalo Channel, the wall was continued parallel to the coast all the way to Fort Armstrong... With the completion of the seawall in 1949, filling operations began and in the mid-1950s the shallow reef of Ka'ākaukukui was completely covered over. Twenty-nine acres of new land had been added to the old shoreline. (Clark, p. 64)

Since the area makai of Ala Moana Boulevard is comprised of fill land, the project site is located on previously submerged lands. Nevertheless, in the early 1900s these lands supported an unauthorized fishing village until the Territorial government eventually evicted the squatters in 1926.

Although the existing shoreline is the result of land-filling activities that took place in the early 1900s and mid-1950s, the coastline continues to be used for fishing, shoreline gathering and recreational activities including swimming and surfing.

In the vicinity of the project site, these ocean-related activities primarily occur at Kaka'ako Waterfront Park which is located immediately makai of the project site.

Access to the Park and shoreline is via surface streets terminating at the Park's parking lot which is typically where ocean goers leave their cars.

Impacts and Mitigation Measures

The proposed project will have no impact on cultural resources or activities. In their letter dated February 18, 1998 the State Historic Preservation Division determined that "because the area makai of Ala Moana Boulevard is comprised of fill lands, we believe that the development of the area will have 'no effect' on subsurface cultural deposits because it is unlikely any are present."

The proposed project will not affect access to Kaka'ako Waterfront Park or the shoreline. In addition, approximately 850 on-site and off-site parking stalls will be provided for faculty, staff, and students to help ensure that public parking at the Park is not affected.

Bibliography

Clark, John R.K. The Beaches of O'ahu. 1977

LCA. 11219 FLC3 _ (\$ • HAWALI TERRITORY SURVEY TY AWANA SURVEYOR HONOLULU KEWAL0 SECTION MAP AND COMPLETION OF SURVEYS BY S. E. BISHOP 1884 SCALE 1:2400 Lar vil ----Provide Roads to Automatica & 184" 4" 80"- 4304.143/1. Lon 2004118 Do & ROLL & Road \$50"- 495467.17. - " 2098018 The second state of the se Traced from Reg. Map 1090 By Herman K. Aki - June 1951 L

1.8 .

١.





Appendix G:

Cultural Anthropology and Archaeology of the Kaka'ako Makai Area

Summary Report on the Cultural Anthropology and Archaeology of the Kaka'ako Makai Area, Kaka'ako Ahupua'a, Honolulu (Kona District), O'ahu TMK: [1] 2-1-015, 058, 059 and 060 various parcels

Prepared for Peter Apo Company

Prepared by Hallett H. Hammatt, Ph.D. And David W. Shideler M.A.

Cultural Surveys Hawaiʻi, Inc. Kailua, Hawaiʻi (Job Code: KAKAAKO 22)

January 2010

Oʻahu Office P.O. Box 1114 Kailua, Hawaiʻi 96734 Ph.: (808) 262-9972 Fax: (808) 262-4950

www.culturalsurveys.com

Maui Office 1993 Main St. Wailuku, Hawaiʻi 96793 Ph: (808) 242-9882 Fax: (808) 244-1994

Management Summary

Reference	Summary Report on the Cultural Anthropology and Archaeology of
	the Kaka'ako Makai Area, Kaka'ako Ahupua'a, Honolulu (Kona
	District), O'ahu TMK: [1] 2-1-015, 058, 059 and 060 various parcels
	(Hammatt and Shideler 2010)
Date	January 2010
Project Number (s)	CSH project job code KAKAAKO 22
Investigation	CSH is presently carrying out archaeological studies under State
Permit Number	Historic Preservation Division permit 9-20
Project Location	The study area is located in central, coastal Honolulu on the
	central/east portion of the south shore of O'ahu. In general terms the
	study area is bounded on the <i>mauka</i> or north side by the <i>makai</i> or
	south side of Ala Moana Boulevard/Nimitz Highway alignment and
	lies west of the west side of Ala Moana Beach Park extending to the
	east side of the mouth of Honolulu Harbor
Land Jurisdiction	Various
Agencies	This study was prepared to facilitate planning and possibly
	consultation with the State Historic Preservation Division

Summary Report on the Cultural Anthropology and Archaeology of the Kaka'ako Makai Area

Table of Contents

Management Summaryi
Section 1 Introduction
1.1 Project Background11.2 Scope of Work11.3 Environmental Setting11.3.1 Natural Environment11.3.2 Built Environment6
Section 2 Background Research7
2.1 Pre-Contact to Early Nineteenth Century.72.2 Mid Nineteenth Century and the Māhele.112.3 Late Nineteenth Century.172.4 Twentieth Century.25
Section 3 An Evaluation of the Archaeological Potential of Kaka'ako Makai
Section 4 References Cited

List of Figures

Figure	1. Portion of U.S. Geological Survey 7.5 Minute Series Topographical Map, Honolulu
г.	Quadrangle 1998, showing location of project area
	2. TMK Zone 2 Section 1, map showing study area (Hawai'i Tax Map Service)
•	3. Aerial Photograph showing study area (U.S. Geological Survey Orthoimagery 2005)4
•	4. Soils map of Kaka'ako Makai (from Foote et al. 1972)5
Figure	5. 1817 map by Otto von Kotzebue, commander of the Russian ship <i>Rurick</i> , showing study area (Note: a portion of the foreigner's cemetery where Isaac Davis is believed to
	have been buried and that John Papa 'Ī'ī associates with "Kewalo" is located in the middle of the right side (labeled in Russian as "Кладбище") This early map probably
	should be understood as schematic sketch (map reprinted in Fitzpatrick 1986:48-499
Figure	6. 1825 map of "South Coast of Woahoo and Honorurou Harbour" by Lt. Charles
	Malden, showing study area (this and later Nineteenth Century maps show the natural dry land coastline fairly consistently as very close to the present Ala Moana/Nimitz
	alignment (Registered Map No. 431, Hawai'i Land Survey Division)10
Figure	7. 1855 map of Honolulu by Lt. Joseph de LaPasse of the French vessel, <i>L'Eurydice</i> ; project area is adjacent to area labeled "Pecheries" ("Fishponds") (map reprinted in
	Fitzpatrick 1986:82-83)
Figura	8. 1881 Oahu Island Government survey map by R. Covington, showing study area; note:
Figure	
	extensive "Kakaako Salt Works" just inland of the present study area (Hawai'i Land
ъ.	Survey Division, Registered Map No. 1381)
Figure	9. 1884 map of Honolulu, Kewalo Section map, by Sereno Bishop, showing LCAs with
	study area; note in the extreme northern tip of the study area are the Waikahalu'u lands
	that were filled in circa 1887 (Hawai'i Land Survey Division, Registered Map 1090))14
Figure	10. 1902 photograph of the Kewalo Brine Basins; the Kaka'ako salt works may have
	extended back to pre-contact times and are shown here going strong in 1902; photo in the
	general vicinity of today's Ward Warehouse (photograph in Scott 1968:579)15
Figure	11. 1887 map of Honolulu and Vicinity by W. A. Wall, showing lack of road and
U	residential development in the Kaka'ako area in the late nineteenth century (Map on file
	at U. S. Library of Congress)
Figure	12. 1897 map of "Honolulu, Hawaiian Islands" by M. D. Monsarrat map, showing study
i iguit	area (Hawai'i Land Survey Division, No Registered Number)
Figure	
Figure	13. Lyle and Sorenson's "Marine Railway" constructed circa 1885 in the extreme north
	portion of the study area for the haul out of ships; Note: the extensive shallow mudflat
	(Original photograph at Hawai'i State Archives, reprinted in Scott 1968:209)21
Figure	14. View of the King's (Kalākaua's) Boathouse at the extreme north end of the study area
	circa 1890 – this land would soon be filled in to create the Pier 1 area (Jerome Baker
	Collection, Kamehameha Schools Archives)
Figure	15. In this 1894 photograph of the Honolulu waterfront taken from the top of Punchbowl
0	(Kawaiaha'o Church and 'Iolani Palace are clear landmarks) the new seawall is quite
	pronounced at the upper left (photograph from Scott 1968:266)
Figure	16. 1911 G. Podmore map of "Honolulu, Kewalo Section," showing study area (Hawai'i
1 iguit	Land Survey Division, Registered Number 3094)
	Land Survey Division, registered runnoer 5074)25

Figure	17. 1887 photograph of the Kaka'ako Saluting Battery and flagstaff (original photograph	
	taken by Karl Kortum and archived at the San Francisco Maritime Museum; reprinted in	
	Scott 1968:176)	24
Figure	18. Colorized postcard (ca. 1911-1920) of Fort Armstrong (Original black and white	
	photograph at Hawai'i State Archives; reprinted in Wisniewski 1984:18)2	4
Figure	19. 1919 U. S. Army Fire Control Map, Honolulu Quadrangle, showing study area2	6
Figure	20. 1927/1928 U.S. Geological Survey Honolulu Quadrangle map, showing study area .2	27
Figure	21. 1921 photograph of a City worker supervising open burning of trash near Kewalo	
	Basin (Original photograph by R. J. Baker, reprinted in Scott 1968:578)2	28
Figure	22. 1932 aerial photograph of the creation of Ala Moana Beach Park in 1932 including	
	the east side of Kewalo Basin from dredge spoils (Original photograph at Hawai'i State	
	Archives, reprinted in Scott 1968:578)2	28
Figure	23. 1943 U. S. War Department map, Honolulu Quadrangle, showing study area2	9
Figure	24. 1953 U.S. Geological Survey map, Honolulu Quadrange, showing study area3	1
Figure	25. 1956 U.S. Army Map Service, Honolulu Quadrangele, showing study area3	2
Figure	26. 1959 U.S. Geological Survey, Honolulu quad map (Note: seaward portions of the	
	study area are still underwater)	3
Figure	27. 1969 U.S. Defense Mapping Agency, Honolulu quad map (Note: land fill within the	
	study area was completed in the 1960s)	4
Figure	28. This sketch of "Honolulu Beach" by G. H. Burgess in the mid 1850s (from Scott 1968:575) portrays a scene just west of the present study area roughly between Pier 5 (foreground) and Fort Armstrong (at extreme right) (Note: the thatched houses are quite	6
	dense and are constructed surprisingly close, within 10 m or so, to the high tide line)3	0

Section 1 Introduction

1.1 Project Background

Cultural Surveys Hawai'i was hired by Mr. Peter Apo of the Peter Apo Company to prepare a summary report on the cultural anthropology and archaeology of the Kaka'ako Makai area, Kaka'ako Ahupua'a, Honolulu (Kona District), O'ahu Island (TMK: [1] 2-1-015, 058, 059 and 060 various parcels). The vast majority of the study area lands were shallow coral reefs under water at high tide until land fill efforts of the early twentieth century.

The purpose of the present study is understood to be primarily documentation of the history of land use with an evaluation for the potential for cultural resources within the study area. The present project is not intended to fulfill standard SHPD requirements for Archaeological Inventory Surveys but is intended for planning and consultation purposes. As part of the purpose of this study was documentation of the quite recent history of land creation, it may be that no, or minimal, further study may be appropriate for some portions of the lands addressed.

The study area is located in central, coastal Honolulu on the central/east portion of the south shore of O'ahu. In general terms the study area is bounded on the *mauka* or north side by the *makai* or south side of Ala Moana Boulevard/Nimitz Highway alignment and lies west of the west side of Ala Moana Beach Park extending to the east side of the mouth of Honolulu Harbor (Figure 1 U.S. Geological Survey quad map, Figure 2 Tax Map Key Zone 2 Section 1 map and Figure 3 aerial photograph). Major landmarks in this study area include Kewalo Basin (and the associated National Marine Fisheries Service facilities), the Kaka'ako Waterfront Park, the Fisherman's Wharf Restaurant, the John Dominis Restaurant, the Kaka'ako Waterfront Park, the Children's Discovery Center, Fort Armstrong, Pier 1 of Honolulu Harbor, and the Kaka'ako Makai commercial/business and light industrial area.

1.2 Scope of Work

The scope of Work for this study includes:

- Synthesis of historical research to include study of archival sources, historic maps, Land Commission Awards and previous archaeological reports to construct a history of land use and to determine if archaeological sites have been recorded in or near the area, and
- Preparation of a report to include the results of the historical research

1.3 Environmental Setting

1.3.1 Natural Environment

Virtually the entire study area lies on relatively recently created land. Soil maps indicate that all of the land is "Fill Land Mixed" ("FL"; Figure 4) (Foote et al. 1972). While most residents of Honolulu may think of this area as dominated by parking lots, warehouses and office buildings,

Summary Report on the Cultural Anthropology and Archaeology of the Kaka'ako Makai Area



Figure 1. Portion of U.S. Geological Survey 7.5 Minute Series Topographical Map, Honolulu Quadrangle 1998, showing location of project area



Figure 2. Hawai'i Tax Map Zone 2 Section 1, map showing study area (Hawai'i TMK Service)

Summary Report on the Cultural Anthropology and Archaeology of the Kaka'ako Makai Area

TMK: [1] 2-1-015, 058, 059 and 060 various parcels



Figure 3. Aerial Photograph showing study area (U.S. Geological Survey Orthoimagery 2005)



Figure 4. Soils map of Kaka'ako Makai (from Foote et al. 1972)

in fact much is dedicated to parks including the large Kaka'ako Waterfront Park and Makai Gateway Park (a large park occupying two blocks between Cooke Street and Ohe Street.

1.3.2 Built Environment

The study area is traversed by a grid of streets including north/south (*mauka/makai*) trending streets (from west to east) Channel Street, Forrest Avenue, Keawe street, Coral Street, Cooke Street, Ohe Street, Koula Street and Ahui Street and east/west ('*ewa*/Diamond Head) trending streets (from north to south) Ilalo Street, Kelikoi Street and Olomehani Street. Major enterprises in the area include National Marine Fisheries Service facilities, the Fisherman's Wharf Restaurant, the John Dominis Restaurant, the Children's Discovery Center, Fort Armstrong with the U.S. Immigration Station and GSA Motorpool, Pier 1, the Gold Bond Building, the Cancer Research Center of Hawai'i, the OHA Headquarters, and the John A. Burns School of Medicine in Kaka'ako. Kewalo Basin is one of the major commercial boat harbors of Honolulu.

Summary Report on the Cultural Anthropology and Archaeology of the Kaka'ako Makai Area

Section 2 Background Research

The project area is located in an area identified today called Kewalo, due to the proximity to Kewalo Basin. On early historic maps, the project area is more specifically identified with the place names "Kukuluāe'o" on the east (roughly east of an imaginary *mauka* extension of Ahui Street) and "Ka'ākaukukui" on the west (roughly west of an imaginary *mauka* extension of Ahui Street), The traditional area called Kewalo was generally considered that area *mauka* of Kukuluāe'o and Ka'ākaukukui, although it had a small beach area near the eastern terminus of Queen Stret (two blocks west of Ala Moana Center). For the purpose of this study, the name Kewalo is used, as it is the name that is most often referred today for the area in general.

2.1 Pre-Contact to Early Nineteenth Century

Kewalo was situated between two centers of population and activity on the southern shore of pre-contact O'ahu: Kou and Waikīkī. In Waikīkī, a system of irrigated taro *lo'i* fed by streams descending from Makiki, Mānoa, and Pālolo valleys blanketed the plain, and networks of fish ponds dotted the shoreline. Similarly, Kou - the area of downtown Honolulu on the east side of Nu'uanu Stream and extending to the south east adjacent to the harbor - possessed shoreward fish ponds and irrigated fields watered by ample streams descending from Nu'uanu and Pauoa valleys.

Rev. Hiram Bingham, arriving in Honolulu in 1820, described a still predominantly native Hawaiian environment - still a "village" - on the brink of western-induced transformations:

We can anchor in the roadstead abreast of Honolulu village, on the south side of the island, about 17 miles from the eastern extremity... Passing through the irregular village of some thousands of inhabitants, whose grass thatched habitations were mostly small and mean, while some were more spacious, we walked about a mile northwardly to the opening of the valley of Pauoa, then turning southeasterly, ascending to the top of Punchbowl Hill, an extinguished crater, whose base bounds the northeast part of the village or town... Below us, on the south and west, spread the plain of Honolulu, having its fishponds and salt making pools along the seashore, the village and fort between us and the harbor, and the valley stretching a few miles north into the interior, which presented its scattered habitations and numerous beds of kalo (arum esculentum)in its various stages of growth, with its large green leaves, beautifully embossed on the silvery water, in which it flourishes. (Bingham 1981:92-93)

The Kewalo region would have been in Bingham's view as he stood at "Punchbowl Hill" looking toward Waikiki to the south: it would have comprised part of the area he describes as the 'plain of Honolulu' with its "fishponds and salt making pools along the seashore."

Another visitor to Honolulu in the 1820s, Jacobus Boelen, hints at the possible pre-contact character of Honolulu and its environs, including the Kewalo area:

It would be difficult to say much about Honoruru. On its southern side is the harbor or the basin of that name (which as a result of variations in pronunciation [sic] is also written as Honolulu, and on some maps, Honoonoon). The

Summary Report on the Cultural Anthropology and Archaeology of the Kaka'ako Makai Area

landlocked side in the northwest consists mostly of tarro fields. more to the north there are some sugar plantations and a sugar mill, worked by a team of mules. From the north toward the east, where the beach forms the bight of Whytetee, the soil around the village is less fertile, or at least not greatly cultivated. (Boelen 1988:62)

Boelen's description suggests preliminarily that the Kewalo region *mauka* of the present study area are within a "not greatly cultivated" region of Honolulu perhaps extending from Puowaina (Punchbowl crater) at the north through Kaka'ako to the Kālia portion of Waikīkī in the east. Kewalo is named in John Papa 'Ī'ī's account of the death in 1810 of Isaac Davis, an American sailor who had settled in the Hawaiian islands, becoming a confidant of Kamehameha:

Many chiefs and notables mourned Davis, including Kamehameha and the company of warriors who watched over him. The funeral procession went from Davis' dwelling at Aienui to Kewalo, where his body was deposited on the land of Alexander, a haole who had died earlier. At the time of his death, Davis was an old man with white hair and other signs of age. ($(\bar{1}, 1959:85)$)

The distance inland (perhaps in the vicinity of the King and Pi'ikoi street intersection) supports the concept that the place name "Kewalo" was widely used to refer to areas further inland than we associate with the place name today. An article about Davis in *The Friend* of February 1862 mentions only that his grave was "in a burying place of the Europeans, near Hana-rura," suggesting that the Kewalo region and the "burying place" were outside the limits of Honolulu both at the time of Davis's death and 42 years later when the article was written.

An early, somewhat generalized depiction of the pre-contact native Hawaiian shaping of Waik $\bar{k}\bar{k}$, Honolulu, and the Kewalo region - along with a possible location of the "burying place of the Europeans" within Kewalo - is given on an 1817 map (Figure 5) by Otto von Kotzebue, commander of the Russian ship *Rurick*, who had visited O'ahu the previous year. The map shows taro *lo'i* (the rectangles) massed around the streams descending from Nu'uanu and Mānoa valleys. The depicted areas of population and habitation concentration (indicated by the trapezoids, however, probably reflect distortions caused by the post-contact shift of Hawaiians to the area around Honolulu harbor - the only sheltered landing on O'ahu and the center of increasing trade with visiting foreign vessels. Kamehameha himself had moved from Waik $\bar{k}\bar{k}$ to Honolulu in 1809.

Kotzebue's map suggests that the land between Puowaina (Punchbowl crater) and the shoreline - which would include the Kewalo area - formed a "break" between the heavily populated and cultivated centers of Honolulu and Waikīkī: the area is only characterized by fishponds, trails connecting Honolulu and Waikīkī, and occasional taro *lo'i* and habitation sites. It may be noted that the Kotzebue map (see Figure 5) is the only early map that appears to show a major portion of the present study area as dry land (a geo-referenced overlay appears to show the extreme northwestern extension of the study area as dry land including some residences. We believe (on the basis of comparison with other early maps) that this is primarily surveyor error as is not surprising for what is really little more than a sketch at such an early date (1817). We believe that the Kotzebue map of 1825 (Figure 6) on there is a high degree of consistency in depictions of the natural coastline as very close to the Ala Moana/Nimitz alignment.



Figure 5. 1817 map by Otto von Kotzebue, commander of the Russian ship *Rurick*, showing study area (Note: a portion of the foreigner's cemetery where Isaac Davis is believed to have been buried and that John Papa 'Ī'ī associates with "Kewalo" is located in the middle of the right side (labeled in Russian as "Кладбище") This early map probably should be understood as schematic sketch (map reprinted in Fitzpatrick 1986:48-49



Figure 6. 1825 map of "South Coast of Woahoo and Honorurou Harbour" by Lt. Charles Malden, showing study area (this and later Nineteenth Century maps show the natural dry land coastline fairly consistently as very close to the present Ala Moana/Nimitz alignment (Registered Map No. 431, Hawai'i Land Survey Division)
Interestingly, the only specifically identified feature in the entire area is the cemetery, and this may be the location of Davis' and other foreigners' burials in Kewalo.

Most maps of the nineteenth Century (Malden 1825, see Figure 6; La Passe 1855, see Figure 7; Oahu Island Government Survey 1881 map, Figure 8; Oahu Government Survey 1884 map, Figure 9) show the present project area and vicinity quite similarly. Most notably these maps show all but the most inland margin of the present study area as in the water (albeit mostly within a shallow reef flat that may have been partially exposed at low tide). These maps often show polygons *mauka* of the project area, near the former coast that do not appear to relate to the cartographer's conventions for fish ponds or taro *lo'i*. At least a partial explanation is suggested by the Oahu Island Government Survey 1881 map (see Figure 8) that shows a quite extensive "Kaka'ako Salt Works" just inland of the central portion of the present study area. The salt works continued until well into the twentieth century (Figure 10). This suggests (as do other lines of evidence that the lands inland of the present study area were quite low-lying until overlain with fill.

2.2 Mid Nineteenth Century and the Māhele

Among the first descriptions of Kaka'ako and Kewalo by the Hawaiians themselves are testimonies recorded during the 1840s in documents associated with land awards and awardees of the Great Māhele. These records bring the present study area into clearer focus. A portion of a modern tracing of an 1884 map by S. E. Bishop (see Figure 9) shows the disposition of Land Commission Awards (LCAs) granted in the environs of the study area. The tracing includes some modern streets not present in 1884. These additions, however, permit an accurate positioning of the study area on the 1884 map. This general depiction is believed to be quite accurate, with the annotated "Beach Road," that runs along the edge of the sea, becoming the present Ala Moana Boulevard/Nimitz Highway alignment.

The '*ili* of Ka'ākaukukui (LCA 7713) was awarded to Victoria Kamāmalu, sister of Kamehameha IV and Kamehameha V. There were no awards to commoners in this '*ili*, which seems to have consisted entirely of land used for salt making. No residences are shown in this area until the twentieth century. The largest settlement in the vicinity was the village of Honuakaha, at the corner of Punchbowl and King Streets. A large number of houselots was awarded to commoners in this area, and late nineteenth-century and early twentieth-century maps always show a cluster of houses in this area.

The '*ili* of Kukuluāe'o was originally awarded to the king as LCA 387, but he returned it to the government. The '*ili* was then awarded to the American Board of Commissioners for Foreign Missions (see Figure 9). Initially this land was associated with Punahou School in Mānoa Valley, as Chief Boki gave the Punahou lands to Hiram Bingham, pastor of Kawaiaha'o Church in 1829 (DeLeon 1978:3). In the Māhele, however, this land became "detached" from the Mānoa award and was instead given to the pastor of the Kawaiaha'o Church (Foster 1991).

Testimonies describe the land - identified as "Punahou" (relating to the main ABCFM holding) - and the background of the ABCFM's claim to it:

The boundaries of that part which lies on the sea shore we cannot define so definitely, but presume there will be no difficulty in determining them, as it is

Summary Report on the Cultural Anthropology and Archaeology of the Kaka'ako Makai Area



Figure 7. 1855 map of Honolulu by Lt. Joseph de LaPasse of the French vessel, *L`Eurydice*; project area is adjacent to area labeled "Pecheries" ("Fishponds") (map reprinted in Fitzpatrick 1986:82-83)



Figure 8. 1881 Oahu Island Government survey map by R. Covington, showing study area; note: extensive "Kakaako Salt Works" just inland of the present study area (Hawai'i Land Survey Division, Registered Map No. 1381)



Figure 9. 1884 map of Honolulu, Kewalo Section map, by Sereno Bishop, showing LCAs with study area; note in the extreme northern tip of the study area are the Waikahalu'u lands that were filled in circa 1887 (Hawai'i Land Survey Division, Registered Map 1090)

Summary Report on the Cultural Anthropology and Archaeology of the Kaka'ako Makai Area



Figure 10. 1902 photograph of the Kewalo Brine Basins; the Kaka'ako salt works may have extended back to pre-contact times and are shown here going strong in 1902; photo in the general vicinity of today's Ward Warehouse (photograph in Scott 1968:579)

Summary Report on the Cultural Anthropology and Archaeology of the Kaka'ako Makai Area

TMK: [1] 2-1-015, 058, 059 and 060 various parcels

commonly known as pertaining to Punahou. This part embraces fishing grounds, coral flats and salt beds.

The above land was given by Boki to Mr. Bingham, then a member of the above named Mission and the grant was afterwards confirmed by Kaahumanu. (*Foreign Register*, Vol. 2:33)

The Makai part of Punahou is bounded Mauka by "Kewalo" and "Koula", Waititi side by "Kalia", seaward it extends out to where the surf breaks. Honolulu side by "Honolulu."

This land was given to Mr. Bingham for the Sandwich Island Mission by Gov. Boki in 1829... From that time to these the S. I. Mission have been the only Possessors and Konohikis of the Land.

The name of the Makai part is Kukuluaeo. There are several tenants on the land of Punahou whose rights should be respected." (*Foreign Testimony*, Vol. 3:115)

The '*ili* of Kewalo (LCA 10605) was awarded to Kamake'e Pi'ikoi, wife of Jonah Pi'ikoi (awardee of Pualoalo 'Ili), as part of LCA 10605, '*āpana* (lot) 7. The award was shared between husband and wife (Kame'eleihiwa 1992:269). Kewalo was a large 270.84-acre land section extending from Kawaiaha'o Church to Sheridan Street. This land section had numerous large fishponds, which were awarded as part of the claim to Pi'ikoi.

That the area inland of the present study area was indeed exposed coral flats dotted with salt pans and fish ponds well into the nineteenth century is corroborated in the testimonies recorded for individual *kuleana* awards to some of the commoners on that land "whose rights should be respected."

LCA 1503 to Puaa is recorded as consisting of three fish ponds and a houselot.

LCA 1504 to Pahiha (Pahika on the 1884 map) explicitly defines the general area:

"Peka W.[wahine] sw. I know this place. It is on the salt plains of Honolulu, used for making salt.

Mauka is a stream of salt water. Waititi is several salt ponds - Napela, Kuniae and others own them. Makai - Gov't road. Honolulu - Peka Kaula, Lilea, Bolabola, Poe.

Claimant recd this land from his father who died last year and held it a long time back in Kinau's time." (*Foreign Testimony*, Vol. 3:220)

LCA 9549 to Kaholomoku comprised "three ponds, a salt mo'o (Native Register, Vol. 4:477)

LCA 10463 to Napela is recorded as consisting of "2 ponds, a ditch, 2 deposits, a house site and a salt land section in two pieces: (*Native Testimony*, Vol. 10:445)

Within Kewalo itself is LCA 3169 to Koalele:

Mahoe, sworn, says he knows the land of Claimant in 'Kewalo'.

It consists of some kalo patches mauka and some Lokos makai.

Summary Report on the Cultural Anthropology and Archaeology of the Kaka'ako Makai Area

The kalo patches are bounded mauka by Kealoha; bound Waikiki side by Kuaipaka's, makai by the konohiki, Ewa side by J. Booth.

The fish ponds are bounded mauka by the konohiki. Waikiki and makai side, the same. Honolulu side by J. Booth.

Clt received his land from Kapihi in the life time of Kinau and he has held the same without dispute till the present time." (Foreign Testimony, Vol. 3:507)

The *mauka* portion of Koalele's claim which includes the taro patches is not shown on the 1884 map; it is likely somewhere immediately *mauka* of King Street. The *makai* portion - the "Lokos" or fish ponds - is shown located northeast of the present study area.

The LCA records thus help clarify both the pre-contact and mid-nineteenth century pictures of the study area vicinity. They suggest that the traditional Hawaiian usage of the Kewalo region and its environs may have been confined to salt making and farming of fishponds, with minimal wetland agriculture in those areas *mauka* or toward Waikīkī at the very limits of the field system descending from Makiki and Mānoa. The characterization by a native Hawaiian of the expanse within the present study area as the "salt plains of Honolulu" itself suggests the environmental limitations that would have made the general region less desirable for long-term permanent habitation by any sizeable population. However, the testimonies do indicate that the area was lived on and was shaped by Hawaiians before the nineteenth century.

The LCA records also reveal that, midway through the nineteenth century, taro cultivation and the traditional salt making and fishpond farming activities continued within the environs *mauka* of the present study area. These activities and the land features that supported them would be eliminated during the remainder of the nineteenth century by the increasing urbanized expansion of Honolulu.

The 1884 Honolulu Kewalo Section map (see Figure 9), and a Wall 1887 Government Survey Map (Figure 11) show the nascent traces of the future development in the grid of roads stretching *mauka* of the study area which was until quite late in the 1800s focused north of King Street and west of Punchbowl Street owing to the low-lying marshy nature of the land.

2.3 Late Nineteenth Century

Of note are changes to the land in the extreme northern tip of the study area. In 1857 Honolulu Fort was demolished, its walls became a 2000-foot retaining wall used to extend the land out onto the shallow reef in the harbor. The remaining materials were used as fill to create what came to be known as the "Esplanade" (Wong Smith and Rosendahl 1990:12) largely built on properties known as Waikahalu'u that had been owned by Queen Hakaleleponi Kalama (wife of Kauikeaouli Kamehameha III). Between 1857 and 1870, 22 acres of reef land between Fort Street and Alakea Street was filled in with material dredged from the harbor (Rush 1957:14). Filling activity then continued to the east seaward of Richard and Punchbowl streets extending just slightly into the extreme north portion of the present study area in 1887. The 1887 Wall map (see Figure 11) shows the brand new, in-progress, lay out of streets in the area between Richards Street and Punchbowl Street (near the Prince Kūhiō Federal Building). Thus circa 1886/1887 the filling of the shallow seas of the study area had begun but only a couple percent of the project area was filled at that time.

Summary Report on the Cultural Anthropology and Archaeology of the Kaka'ako Makai Area



Figure 11. 1887 map of Honolulu and Vicinity by W. A. Wall, showing lack of road and residential development in the Kaka'ako area in the late nineteenth century (Map on file at U. S. Library of Congress)

An 1897 Monsarrat map (Figure 12) indicates that there had been very little filling of the coastal shallows in the previous decade. This map shows the development of the coastal area, with commercial wharfs and recreational boathouses built out over the low reef. In 1884-1887, a "Marine Railway" was developed by Lyle and Sorenson in the extreme north end of the present study area (Figure 13) that facilitated the haul out of ships for bottom scrapping and propeller checks.

Also of interest is the establishment of a long pier in the waters of the extreme northern portion of the present study area that had branching piers leading to the King's (Kalākaua's) Boat House (Figure 14), Myrtle Boat House (club), and Healani Boat Club House. While outrigger canoes were paddled and sailed, and five-oared whaleboats were raced, the main sport for the rival Myrtle and Healani Boat Clubs was six-oared sliding-seat "barges" – "in addition to things hanky-panky" (Scott 1968:195).

Of note on the 1897 Monsarrat Map is a large U-shaped sea wall just south of the boat house pier that enclosed much of the north portion of the present study area that is also visible in a view from Punchbowl of the time (Figure 15). The 1911 Podmore map (Figure 16) shows this area being rapidly developed through land fill (largely filled with sand and coral from Honolulu Harbor dredging operations) to accommodate a new US Naval Reservation, US Immigration Depot, and Fort Armstrong Military Reservation. The Podmore map indicates a "proposed sea wall" extension extending southeast from the initial seawall and roughly parallel to the coast. Virtually all of the fill in the project area is thus understood to date to the twentieth century.

During the monarchy, the point at Kaka'ako was the location for a battery, with three cannons used to salute visiting naval vessels, which responded with their own cannon salutes. Other saluting batteries were at the top of Punchbowl Crater and at the Honolulu Fort (Dukas 2004:163). The *Hawaiian Annual and Almanac for 1887* (Thrum 1887:37) reported that \$4,500 had been spent to build the battery It was used for gun salutes up to at least the overthrow of the monarchy in 1893 (Judd 1975:57).

After the annexation of the islands by the United States in 1899, the U.S. Congress began to plan for the coastal defenses of their new islands. The major batteries were placed at Pearl Harbor and in Waikīkī, but a small reservation, named Fort Armstrong, was also set up on the Ka'ākaukukui Reef as a station for the storage of underwater mines. Fort Armstrong (1899 to 1950s) was named after General Samuel Chapman Armstrong (1839-1893) who was born on Maui and graduated from Punahou, and was a hero of the Union defense of Cemetery Ridge at Gettysburg. Battery Tiernon, with two 3 inch m 1903 guns, was built at this site in 1911, and took over the job of saluting visiting naval vessels once performed by the Kaka'ako battery (Williford and McGovern 2003:15).

In the attack on the islands in December 7, 1941, the fort escaped relatively unscathed; only one motor pool structure was hit. Antiaircraft shells were fired from the fort, but were ineffective; at least one hit the town rather than any aircraft (Richardson 2005:34). In the 1950s, the federal government returned most of Fort Armstrong to the Territory of Hawai'i, which used the area to expand the shipping piers of the harbor.

Summary Report on the Cultural Anthropology and Archaeology of the Kaka'ako Makai Area



Figure 12. 1897 map of "Honolulu, Hawaiian Islands" by M. D. Monsarrat map, showing study area (Hawai'i Land Survey Division, No Registered Number)



Figure 13. Lyle and Sorenson's "Marine Railway" constructed circa 1885 in the extreme north portion of the study area for the haul out of ships; Note: the extensive shallow mudflat (Original photograph at Hawai'i State Archives, reprinted in Scott 1968:209)



Figure 14. View of the King's (Kalākaua's) Boathouse at the extreme north end of the study area circa 1890 – this land would soon be filled in to create the Pier 1 area (Ray Jerome Baker Collection, Kamehameha Schools Archives)

Summary Report on the Cultural Anthropology and Archaeology of the Kaka'ako Makai Area

TMK: [1] 2-1-015, 058, 059 and 060 various parcels



Figure 15. In this 1894 photograph of the Honolulu waterfront taken from the top of Punchbowl (Kawaiaha'o Church and 'Iolani Palace are clear landmarks) the new seawall is quite pronounced at the upper left (photograph from Scott 1968:266)



Figure 16. 1911 G. Podmore map of "Honolulu, Kewalo Section," showing study area (Hawai'i Land Survey Division, Registered Number 3094)



Figure 17. 1887 photograph of the Kaka'ako Saluting Battery and flagstaff (original photograph taken by Karl Kortum and archived at the San Francisco Maritime Museum; reprinted in Scott 1968:176)



Figure 18. Colorized postcard (ca. 1911-1920) of Fort Armstrong (Original black and white photograph at Hawai'i State Archives; reprinted in Wisniewski 1984:18)

2.4 Twentieth Century

A 1919 Fire Control Map (Figure 19) by the U.S. Army Corps of Engineers indicates that into the 1920s large portions of Kewalo - including the study area - were yet to be developed. It appears that the southeast extension of the seawall indicated in the Podmore map of 1911 (Figure 16 had more-or-less been developed with Fort Armstrong largely completed on the northwest side and the southeast end of the seawall enclosure still undeveloped (and perhaps largely still water).

In 1919, the Hawai'i Government appropriated \$130,000 to improve the small harbor of Kewalo for the aim of "harbor extension in that it will be made to serve the fishing and other small craft, to the relief of Honolulu harbor proper" (Thrum 1920:147). As the area chosen for the harbor area was adjacent to several lumber yards, the basin was initially made to provide docking for lumber schooners, but by the time the wharf was completed in 1926, this import business had faded, so the harbor was used mainly by commercial fishermen. The dredged material from the basin was used to fill a portion of the Bishop Estate on the western edge of Waikīkī and some of the Ward Estate in the coastal area east of Ward Avenue (U. S. Department of Interior 1920:52). In 1941, the basin was dredged and expanded to it's current 55 acres. In 1955, dredged material was placed along the *makai* side to form an 8-acre land section protected by a revetment.

A 1927/1928 U.S. Geological Survey map (Figure 20) shows much of the present Kaka'ako Makai area land filled in west of Kewalo Basin but the fill is so recent that the layout of streets is on-going. Kewalo Basin has been dredged by this time but the east side is still in reef flats. Whereas much of the fill in the northwest portion of Kaka'ako Makai is understood to have been relatively clean coral and sand dredge material, much of the fill in the southeast portion of Kaka'ako Makai is understood to have been from decades of open trash burning (Figure 21).

Prior to dredging, Kewalo Basin was a natural deep pocket in the reef seaward of Ala Moana Boulevard between Ward Ave and Kamake'e Street. The expansion of Kewalo Basin was part of the 1920s and early 1930s dredging operations that included the Ala Wai Canal, Ala Wai Basin, and Ala Moana Beach Park (Figure 22). After the dredging of the Ala Wai Canal, the Ala Wai and Kewalo Basins were dredged, along with a connecting channel. The dredged material was used for fill in and around the basins, and in the area that became Ala Moana Beach Park (Johnson 1991:364).

In the case of Kewalo Basin, most of the land between it and Fort Armstrong, to the northwest, had been previously filled (ca. 1900-1920). The area between Kewalo Basin and Fort Armstrong, *makai* (seaward) of Ala Moana, became a part of Kaka'ako called "Squattersville". "All Squattersville, like Gaul, is divided into three parts. There is the original settlement at Kewalo Basin Point, there is a tiny offshoot of this and there is the later settlement along Ala Moana" (Johnson 1991:111). The later (ca. 1925-1930) dredging and filling created Ala Moana Beach Park and commercial dock space at the Ala Wai and Kewalo Basins.

The 1943 War Department quad map (Figure 23) shows remarkably little urban development of the Kaka'ako Makai study area in the preceding 15 years (compare with the Figure 17 1927/1928 map) but we do see the completion of part of the east side of Kewalo Basin as a result of the creation of Ala Moana Park. Barely discernable on the west side of Kewalo Basin is the



Figure 19. 1919 U. S. Army Fire Control Map, Honolulu Quadrangle, showing study area



Figure 20. 1927/1928 U.S. Geological Survey Honolulu Quadrangle map, showing study area



"The desert waterfront of Honolulu where there is a perpetual volcano," described this forsaken stretch of scrub covered coral wasteland between what would become the Ala Wai and Kewalo Basin. In the center of this desolation stood a refuse dump where, day and night, columns of smoke rose into the Hawaiian sky.

Figure 21. 1921 photograph of a City worker supervising open burning of trash near Kewalo Basin (Original photograph by Ray Jerome Baker, reprinted in Scott 1968:578)



Figure 22. 1932 aerial photograph of the creation of Ala Moana Beach Park in 1932 including the east side of Kewalo Basin from dredge spoils (Original photograph at Hawai'i State Archives, reprinted in Scott 1968:578)



Figure 23. 1943 U. S. War Department map, Honolulu Quadrangle, showing study area

City & County incinerator built in 1930 (and replaced in 1946; the surf break is still called "Incinerators"). It is understood that the products from incineration were generally used right there as land fill.

The 1953 quad map (Figure 24) shows a very substantial expansion seaward that had occurred in the previous decade west of Kewalo Basin. This is understood as part of City & County landfill that, while far more sanitary than the open burning of the 1920s, still may have been less than what we would call sanitary today. The surf break "Flies" off the west end of Kaka'ako Waterfront Park is said to have been named by Joe Kuala in 1963 "for all of the flies at the landfill" (Clark 2002:74). Clark (2002:74) relates the surf site "was the home of many aggressive black flies that bit the surfers and fishermen."

The 1956 Army map service quad map (Figure 25) shows much the same scene but the recent *makai* addition is shown more clearly as still undeveloped.

The 1959 U.S. Geological Survey map Figure 26 clearly shows that the infilling behind the new (present day) seawall was actively on-going at statehood. The present land configuration on the southeast side of Kewalo Basin appears to have been completed in the 1956/1959 timeframe with filling in of a portion of the dredge channel that had formerly been continuous from the dredge channel fronting Ala Moana Beach Park to the dredged Kewalo Basin. As late as this 1959 map there is no indication of the landfill seaward of Fort Armstrong having been initiated.

In the 1969 Defense Mapping Agency Honolulu quad map (Figure 27) we finally see the landfill configuration extant today with substantial fill activities having taken place on the seaward side of Fort Armstrong in the 1960s. This late landfill seaward of Fort Armstrong affected the surf:

...there was another place to surf in Kaka'ako that we called Armstrong's. It was in front of Fort Armstrong. The shore there was different too - it was a shallow reef, and there were many military homes on the beach. We surfed in front of the homes. The landfill on the reef that made Piers 1 and 2 destroyed Armstrong's. (as related by Rawlins "Sonny" Kauhane, in Clark 2002:121).

Summary Report on the Cultural Anthropology and Archaeology of the Kaka'ako Makai Area



Figure 24. 1953 U.S. Geological Survey map, Honolulu Quadrange, showing study area

TMK: [1] 2-1-015, 058, 059 and 060 various parcels



Figure 25. 1956 U.S. Army Map Service, Honolulu Quadrangele, showing study area

TMK: [1] 2-1-015, 058, 059 and 060 various parcels



Figure 26. 1959 U.S. Geological Survey, Honolulu quad map (Note: seaward portions of the study area are still underwater)



Figure 27. 1969 U.S. Defense Mapping Agency, Honolulu quad map (Note: land fill within the study area was completed in the 1960s)

Section 3 An Evaluation of the Archaeological Potential of Kaka'ako Makai

The previous overview documents in some detail that beyond a reasonable doubt as late as circa 1884 (see Figure 9) approximately 98% of the present Kaka'ako Makai study area was awash at high tide and that as late as 1897 (see Figure 12) land fill activities had only filled in 5% or so of the project area (in the extreme northwest portion). As late as the 1960s (see Figure 27) a large portion of the present study area was still under water. This suggests that no pre-twentieth century in-situ deposits would be expected in 95%+ of the project area. While there could potentially be early twentieth century in-situ deposits (such as trash pits) in the inland and north portions of the project area, these would not be anticipated to be major considerations for development. No human burials would be expected anywhere in the project area with the possible exception of the immediate vicinity of the Ala Moana/Nimitz alignment.

From the first maps of any accuracy in about 1825 (see Figure 6), we see that geo-referencing shows the Ala Moana/Nimitz alignment (typically referred to as the "coast road") as pretty much right on the edge of the sea. We cannot rule out however that there may have been small areas of low-lying sandy land extending just slightly seaward of the Ala Moana/Nimitz alignment.

In this regard, a sketch of "Honolulu Beach" by G. H. Burgess in the mid 1850s (Figure 28) is of note in that it appears to show Hawaiian residences as very close to the coastline – within 10 meters or so. Undoubtedly the wide protective expanse of shallows allowed for permanent habitations much closer to the sea than was generally typical. It should be noted that the scene depicted by Burgess is just west of the present study area and is thought to reflect the high population density of coastal Kou at the time. Just Diamond Head (southeast) of the foreground depicted the residential pattern is suggested to have been quite different, with a sea change to a very low density of permanent habitations in the marshy salt lands to the east, with the density of habitations then increasing significantly east of the present study area approaching Kālia of Waikīkī. The density of habitations on the coast depicted by Burgess certainly suggests that small areas of coastal habitation (and associated archaeological deposits and/or burials) could have been present near the Ala Moana/Nimitz alignment of the present study area.

Human skeletal remains (SIHP # 50-80-14-6376) were identified just west of Kamake'e Street on the *mauka* side of Ala Moana Boulevard (Souza et al. 2002). Further finds adjacent to the Ala Moana/Nimitz alignment in the vicinity of the present study area would not be unexpected.

Summary Report on the Cultural Anthropology and Archaeology of the Kaka'ako Makai Area



Figure 28. This sketch of "Honolulu Beach" by G. H. Burgess in the mid 1850s (from Scott 1968:575) portrays a scene just west of the present study area roughly between Pier 5 (foreground) and Fort Armstrong (at extreme right) (Note: the thatched houses are quite dense and are constructed surprisingly close, within 10 m or so, to the high tide line)

Summary Report on the Cultural Anthropology and Archaeology of the Kaka'ako Makai Area

TMK: [1] 2-1-015, 058, 059 and 060 various parcels

Section 4 References Cited

Bingham, Hiram

1981 *A Residence of Twenty-One Years in the Sandwich Islands*. Charles E Tuttle Company: Rutland, Vermont.

Boelen, Jacobus

1988 A Merchant's Perspective: Captain Jacobus Boelen's Narrative of his Visit to Hawai'i in 1828. Hawaiian Historical Society: Honolulu.

Burgess, G. H.

Clark, John R. K.

2002 Hawai'i Place Names Shores, Beaches, and Surf Sites University of Hawai'i Press Honolulu

Foster, Nelson (ed.)

1991 *Punahou: This History and Promise of a School of the Islands.* Punahou School, Honolulu.

'Ī'ī, John Papa

1959 *Fragments of Hawaiian History as Recorded by John Papa Ii.* Honolulu: Bishop Museum Press.

Johnson, Donald D.

1991 *The City and County of Honolulu, A Government Chronicle*. Honolulu: University of Hawaii Press and City Council of the City and County of Honolulu.

Kortum, Karl

1887 Photograph of the Kaka'ako Saluting Battery and Flagstaff. Original photograph archives at the San Francisco Maritime Museum, 900 Beach Street, Fisherman's Wharf, San Francisco, Calif. 94133. Reprinted in Edward Scott, 1968, *The Saga of the Sandwich Islands*, Volume 1, p. 176. Sierra-Tahoe Publishing Co., Crystal Bay, Lake Tahoe, Nevada.

Scott, Edward B.

1968 The Saga of the Sandwich Islands: The Complete Documentation of Honolulu's and Oahu's Development Over One Hundred and Seventy Five Years. Sierra Tahoe Publishing company Lafayette, Indiana

Souza, Kehaulani, Mary Perzinski and Hallett H. Hammatt

2002 Archaeological Monitoring Report for the Kaka'ako Improvement District 7 Project (TMK 2-1-58, 2-3-01 through 05) Cultural Surveys Hawai'i, Kailua, Hawai'i

Thrum, Thomas

1920 Retrospect for 1919, pp. 139-157. *Hawaiian Almanac and Annual for 1920*, Thomas G. Thrum, Honolulu.

U. S. Department of the Interior

1920 *Reports of the Department of the Interior for the Fiscal Year Ended June 30 1920.* Government Printing Office, Washington D. C.

Summary Report on the Cultural Anthropology and Archaeology of the Kaka'ako Makai Area

Wisniewski, Richard A.

1984 Hawaii: The Territorial Years, 1900-1959. A Pictorial History. Pacific Basin Enterprises, Honolulu.

Wong-Smith, Helen, and Paul H. Rosendahl

1990 Aloha Tower Complex Historical Assessment, Honolulu Harbor, Island of Oahu, TMK 2-1-01. Paul H. Rosendahl, Ph.D., Inc. Hilo, Hawai'i.

Summary Report on the Cultural Anthropology and Archaeology of the Kaka'ako Makai Area

Appendix H:

Letter from SHPD





WILSON OKAMOTO & ASSOC., INC.

STATE OF HAWAII

DEPARTMENT OF LAND AND NATURAL RESOURCES

February 18, 1998

STATE HISTORIC PRESERVATION DIVISION 33 SOUTH KING STREET, 6TH FLOOR HONOLULU, HAWAII 96813

Susan Tamura Hawaii Community Development Authority 677 Ala Moana Boulevard, Suite 1001 Honolulu, Hawaii 96813

Dear Ms. Tamura:

SUBJECT: Chapter 6E-8 Historic Preservation Review of a Supplemental Environmental Impact Statement Preparation Notice: Kakaako Makai Area Plan Kakaako, Kona, O'ahu <u>TMK: 2-1-15, 58-60</u>

Thank you for the opportunity to review the Supplemental Environmental Impact Statement Preparation Notice for the revisions to the Kakaako Makai Area Plan, December 1997.

In November 1989 our office commented on the Draft Supplemental EIS for Kakaako Makai Area Plan (Log. 1696b/1939). We noted that since the historic buildings within the Kakaako Makai Area, the Department of Health Building, the U. S. Immigration Station, and the former Ala Moana Wastewater Pump Station, were scheduled for preservation, we believed that the plan would result in "no adverse effect" to these historic sites.

In December 1994, we provided comment on the expansion of the Draft Makai Area Plan *mauka* of Ala Moana Boulevard and commented that this area "includes an area of former sandy beaches where traditional Hawaiian dwelling were located in the past. It is likely that unmarked human burials are also present in the area of the proposed expansion." We also stated that "Our review of projects in this proposed expansion area will take into account the likelihood that the remains of dwelling sites and human burials are extant below the surface here." (Log. no. 13180)

The current Kakaako Makai Area Plan no longer includes the area *mauka* of Ala Moana boulevard. Because the area *makai* of Ala Moana Boulevard is comprised of fill lands, we believe that the development of the area will have "no effect" on subsurface cultural deposits because it is unlikely any are present. Also, the plan in section 3.2.5 states that the historic buildings will be preserved; therefore, we believe that the plan would have "no adverse effect" on these historic sites.

If you have any questions please call Elaine Jourdane at 587-0014.

Aloha

Don Hibbard, Administrator Historic Preservation Division

EJ:jk

c.

🗸 🗸 Rodney Funakoshi, Wilson Okamoto & Associates, Inc., 1907 S. Beretania St., Hon. 96826

MICHAEL D. WILSON, CHAIRFERSON BOARD OF LAND AND NATURAL RESOURCES

DEPUTIES

GILBERT COLOMA-AGARAN

AQUACULTURE DEVELOPMENT PROGRAM

AQUATIC RESOURCES CONSERVATION AND RESOURCES ENFORCEMENT CONVEYANCES FORESTRY AND MULDUFE HISTORIC PRESERVATION DIVISION LAND DIVISION STATE PARKS WATER AND LAND DEVELOPMENT

LOG NO: 21043 DOC NO: 9802EJ06