DEPARTMENT OF DESIGN AND CONSTRUCTION

**CITY AND COUNTY OF HONOLULU**

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OFC. OF ENVIRONMENTAL QUALITY CONTROL

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CDD-A 12-464102

April 30, 2012

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OFC. OF ENVIRONMENTAL QUALITY CONTROL

Mr. Gary Hooser, Director
Office of Environmental Quality Control
State of Hawaii
235 South Beretania Street, Suite 702
Honolulu, Hawaii 96813

Dear Mr. Hooser:

Subject: Final Environmental Assessment and Finding of No Significant Impact (FONSI) for Bayview Street Relief Drain Project
Waianae, Oahu

The Department of Design and Construction (DDC), City and County of Honolulu, has reviewed the Final Environmental Assessment and comments received on the Draft Environmental Assessment during the 30-day public comment period which ended on December 7, 2011. The comment period was extended to allow several agencies to submit comments beyond the submittal deadline. The DDC has determined that this project will not have significant environmental impacts and has issued a Finding of No Significance Impact. Please publish in the next available OECQ Environmental Notice.

We have enclosed the following:

A completed OEQC Publication form;
One (1) copy of the document in pdf format on a CD; and
One (1) hardcopy of the Final EA.

If you have any questions, please contact Gary Kam with the Civil Division at 768-8819, or by email at gkam2@honolulu.gov.

Very truly yours,

Chris Takashige

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

GK:DT:lal

Enclosure

## Project Name: Bayview Street Relief Drain Project

**Publication Form**
**The Environmental Notice**
**Office of Environmental Quality Control**

| | |
|---|---|
| **Applicable Law:** | EIS law (Ch. 343, HRS and 11-200, HAR) |
| **Type of Document:** | Final Environmental Assessment |
| **Island:** | O‘ahu |
| **District:** | Wai‘anae |
| **TMK:** | Portions of 8-5-08: 35, 36, 43, 44, 45, 49, and 8-5-01:62 |
| **Permits Required:** | May require Department of Health (DOH), Section 401, Clean Water Act, Water Quality Certification; DOH Noise Permit; DOH Community Noise Permit; National Pollutant Discharge Elimination System (NPDES) permit from DOH; City and County of Honolulu, Department of Planning and Permitting (DPP), Grading and Trenching construction permits; DPP Traffic Review Branch approval of traffic control plan; Department of Parks and Recreation approval for work within Pōka‘ī Bay Beach Park; May require Army Corps of Engineers, Department of Army Permit, Section 404, Clean Water Act; Notification and reporting of any changes to the inventory of stormwater outlets under the City and County municipal stormwater permit (NPDES Permit No. HI S000002 |
| **Applicant or Proposing Agency:** | City and County of Honolulu, Department of Design and Construction |
| Address: | 650 South King Street, 15th Floor, Honolulu, Hawai‘i 96813 |
| Contact & Phone: | Gary Kam, 808-768-8819 |
| **Approving Agency/ Accepting Authority:** | City and County of Honolulu, Department of Design and Construction |
| Address: | 650 South King Street, 15th Floor, Honolulu, Hawai‘i 96813 |
| Contact & Phone: | Gary Kam, 808-768-8819 |
| **Consultant:** | Bow Engineering & Development, Inc |
| Address: | 1953 S. Beretania Street, PH-A, Honolulu, Hawaii 96826 |
| Contact & Phone: | Ezra Lum, 808-941-8853 ext. 114 |

### Project Summary:

The City and County of Honolulu Department of Design and Construction plans to construct storm drainage improvements between Farrington Highway and Pōka‘ī Bay in Wai‘anae on the Leeward side of O‘ahu. The proposed drainage improvements would replace a portion of an existing drainage system that currently serves the area around Bayview Street and a portion of Wai‘anae Valley Road. The existing drainage system has inadequate capacity to service the project area, and residents in the area have documented flooding problems. The proposed drainage improvements would increase the drainage system capacity with the use of High Density Polyethylene Pipes (HDPE) and concrete drain boxes of varying sizes. The proposed improvements would occur predominantly along the previous alignment along existing right-of-way, though more extensive trenching would be required to accommodate the larger pipes.

In February 2005, a Draft Environmental Assessment was issued for environmental review of an alternate alignment that would redirect drainage to an existing unlined drainage channel, which discharges south of Pōka‘ī Bay and Kāne‘īlio Point and has been in service for over 20-years with an established National Pollutant Discharge Elimination System (NPDES) permit. To minimize potential impacts to unknown historic or cultural remains, the current Bayview Street Relief Drain Project would construct the drainage improvements along the existing alignment.

The environmental impacts of the proposed alignment are not expected to be significant with implementation of appropriate mitigation measures. Construction activities are anticipated to have short-term noise, erosion, traffic, and air quality impacts in the surrounding area. Compliance with State and City and County rules and regulations would minimize these construction-related impacts. Potential impacts to cultural resources would be minimized with implementation of mitigation. No significant long-term effects from project implementation are anticipated.

# FINAL ENVIRONMENTAL ASSESSMENT

# Bayview Street Relief Drain Project

Waiʻanae, Oʻahu, Hawaiʻi

TMK: 8-5-08: 35, 36, 43, 44, 45, 49, and 8-5-01:62

This environmental document has been prepared pursuant to
Chapter 343, Hawaii Revised Statutes

Proposing Agency:

**Department of Design and Construction**
City and County of Honolulu
650 South King Street, 15th Floor
Honolulu, Hawaii 96813

Prepared By:

**Bow Engineering & Development, Inc.**
1953 South Beretania Street, PH-A
Honolulu, Hawaii 96826

April 2012

## PROJECT SUMMARY INFORMATION

| | |
|---|---|
| **PROJECT:** | Bayview Street Relief Drain Project |
| **PROPOSING AGENCY:** | Department of Design and Construction<br>City and County of Honolulu<br>650 South King Street, 15th Floor<br>Honolulu, Hawai‘i 96813<br>Contact: Gary Kam, 808-768-8819 |
| **LOCATION:** | Wai‘anae, O‘ahu, Hawai‘i<br>Portions of TMK 8-5-08: 35, 36, 43, 44, 45, 49, and 8-5-01:62; 0.50 acres, excluding roadway |
| **LANDOWNERS:** | City and County of Honolulu<br>Various Private Owners, drain lines within easements on private property<br>State of Hawai‘i |
| **EXISTING USE** | Roadway; Vacant Land; Beach park |
| **PROPOSED PROJECT:** | The proposed project is to construct storm drainage improvements between Farrington Highway and Pōka‘ī Bay in Wai‘anae on the Leeward side of O‘ahu. The proposed drainage improvements would replace a portion of an existing drainage system that currently serves the area around Bayview Street and a portion of Wai‘anae Valley Road. |
| **ANTICIPATED IMPACTS:** | Construction activities are anticipated to have short-term noise, erosion, traffic, and air quality impacts in the surrounding area. Compliance with State and City and County rules and regulations would minimize these construction-related impacts. Potential impacts to cultural resources would be minimized with implementation of mitigation. No significant long-term effects from project implementation are anticipated. |
| **SPECIAL MANAGEMENT AREA:** | Within SMA |
| **STATE LAND USE DESIGNATION:** | Urban |
| **DETERMINATION** | Finding of No Significant Impact (FONSI) |

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## PREFACE

This Final Environmental Assessment (Final EA) has been processed as a Finding of No Significant Impact (FONSI) by the City and County of Honolulu Department of Design and Construction. As a result, the preparation of an Environmental Impact Statement (EIS) is not required.

To facilitate the readers' ability to distinguish revisions made to the Revised Draft EA, substantive changes and additions are underlined. Text that has been deleted is indicated by a ~~strikethrough~~. There have been no major substantive changes to the environmental analysis in the Final EA.

The October 2011 Revised Draft Environmental Assessment (EA) included revisions to the Bayview Street Relief Drain project for which a Draft Environmental Assessment was issued in February 2005. During early consultation and circulation of the February 2005 Draft EA, concerns regarding potential impacts to unknown historic or cultural remains were identified. The City and County of Honolulu Department of Design and Construction proposed changes to the project alignment in efforts to minimize these potential impacts by constructing the drainage improvements along the existing alignment and outfall at Pōkaʻī Bay instead of along the previously proposed alignment and outfall at Kāneʻīlio Point. The change in alignment required preparation of the Revised Draft EA. There were no changes to the overall drainage capacity.

# 1 INTRODUCTION

## 1.1 PURPOSE OF THE ENVIRONMENTAL ASSESSMENT

The evaluation of projects to determine their effects on the environment is required by the Hawaii Revised Statutes (HRS), Section 343. An Environmental Assessment (EA) is a "written evaluation to determine whether an action may have a significant effect" (HRS §343-2). The agency with primary responsibility over the project (the proposing agency) is required to prepare an EA and makes a final determination according to significant impacts, or lack of significance. As stated in HRS §343-1:

> An environmental review process will integrate the review of environmental concerns with existing planning processes of the State and counties, and alert decision makers to significant environmental effects which may result from the implementation of certain actions. …The process of reviewing environmental effects is desirable because environmental consciousness is enhanced, cooperation and coordination are encouraged, and public participation during the review process benefits all parties involved and society as a whole.

As described above, the basic purpose of an EA is to provide information to the public and decision makers on proposed actions. The EA must also disclose: potential significant adverse environmental impacts, the expected primary and secondary consequences, and the cumulative as well as the short and long-term effects of the action.

The purposes of the Final EA are to document agency and public consultation on the project and respond to the comments received during the comment period on the Revised Draft EA. The Final EA also considers new issues and changes to the project since publication of the Revised Draft EA, and establishes that there are no significant impacts, and that a FONSI is appropriate so that the project can proceed.

## 1.2 OVERVIEW

The City and County of Honolulu Department of Design and Construction plans to construct storm drainage improvements between Farrington Highway and Pōkaʻī Bay in Waiʻanae on the Leeward side of Oʻahu. The proposed drainage improvements would replace a portion of an existing drainage system that currently serves the area around Bayview Street and a portion of Waiʻanae Valley Road. The existing drainage system has inadequate capacity to service the project area, and residents in the area have documented flooding problems.

## 1.3 PURPOSE AND NEED FOR THE PROJECT

The proposed improvements are intended to serve the following purposes:

- Provide drainage improvements to reduce flood hazards in the Bayview Street area between Farrington Highway and Pōkaʻī Bay.

## 1.4 PUBLIC REVIEW ON THE REVISED DRAFT EA

Following completion of the Revised Draft EA, the environmental document was submitted to the State Office of Environmental Quality Control (OEQC). Notification of the availability of the Draft EA was published in the November 8, 2011 *The Environmental Notice* by OEQC, in addition to the Honolulu Star Advertiser and Waiʻanae Public Library. During the 30-day public comment period ending December 7, 2011, agencies, organizations, and individuals were provided the opportunity to comment on the proposed project. The comment period was extended to allow several agencies to submit comments beyond the submittal deadline.

# 2 PROJECT DESCRIPTION

## 2.1 ENVIRONMENTAL SETTING

### 2.1.1 PROJECT LOCATION

The proposed project would be located in an area between Farrington Highway and Pōkaʻī Bay in Waiʻanae on the Leeward side of Oʻahu, approximately 25 miles west of downtown Honolulu (see Figure 1). Portions of the proposed drainage line would be constructed within the right-of-way of existing public roads, including Bayview and Pōkaʻī Bay Streets. The City and County of Honolulu own most of the surrounding properties affected by the proposed action, though construction of the proposed alignment also would occur along easements on several privately owned parcels. Affected parcels are identified as City and County of Honolulu Tax Map Key (TMK): 8-5-08: 35, 36, 43, 44, 45, 49, and 8-5-01:62. A portion of the proposed alignment is located within the Special Management Area (SMA)[1] (see Figure 2).

### 2.1.2 EXISTING CONDITIONS

The existing drainage system currently serves the area around Bayview Street and a portion of Waiʻanae Valley Road. The drainage alignment is within 10-foot storm drain easements located along Bayview and Pōkaʻī Bay Streets, and currently discharges into an outfall located at Pōkaʻī Beach Park. The existing outlet is currently in a grassed area just to the northwest of the park restroom building and approximately 120 to 170 feet from the water line. The existing drainage system has inadequate capacity to service the project area, and residents in the area have documented flooding problems.

The existing drainage basin has been broken up into eight drainage areas totaling approximately 33.3 acres as shown in Figure 3. Also shown is the present alignment of the drainage system. Drainage areas A1 to A3, totaling 27.1 acres, are *mauka* of Farrington Highway and consist of single-family residences and several minor streets. The remaining drainage areas (B1 to B5), consisting of 6.2 acres, are *makai* of the highway and include public uses and single-family residences (see Figure 3).

## 2.2 PROJECT HISTORY

The Bayview Street Relief Drain project process was initiated with the publication of a study documenting the drainage deficiencies within the area entitled "Drainage Report for the Bayview Street Relief Drain Project" (August 1984). The Department of Public Works (now the City and County of Honolulu Department of Design and Construction) released an Environmental Review Record and Negative Declaration for the Bayview Street Relief Drain project pursuant to HRS 343 in April 1985. The drainline proposed at that time would have emptied to an abandoned sewer outfall at the coral and limestone shoreline on the south side of Kāneʻīlio Point. An

[1] The project is exempt from SMA permitting requirements in accordance with Chapter 25, Revised Ordinances of Honolulu Section 1.3(2)(D), which includes "the repair and maintenance of underground utility lines, including but not limited to water, sewer, power and telephone and minor appurtenant structures such as pad mounted transformers and sewer pump stations."

additional report entitled "Supplemental Drainage Report for the Bayview Street Relief Drain Project" was issued by DSST Engineering in 1994 updated the 1984 report to current City and County of Honolulu Storm Drainage Standards for that time period. Additional environmental review was conducted by the Department of Public Works in a Negative Declaration pursuant to HRS 343 in April 1988. Due to lack of funds, the proposed drainage was not constructed.

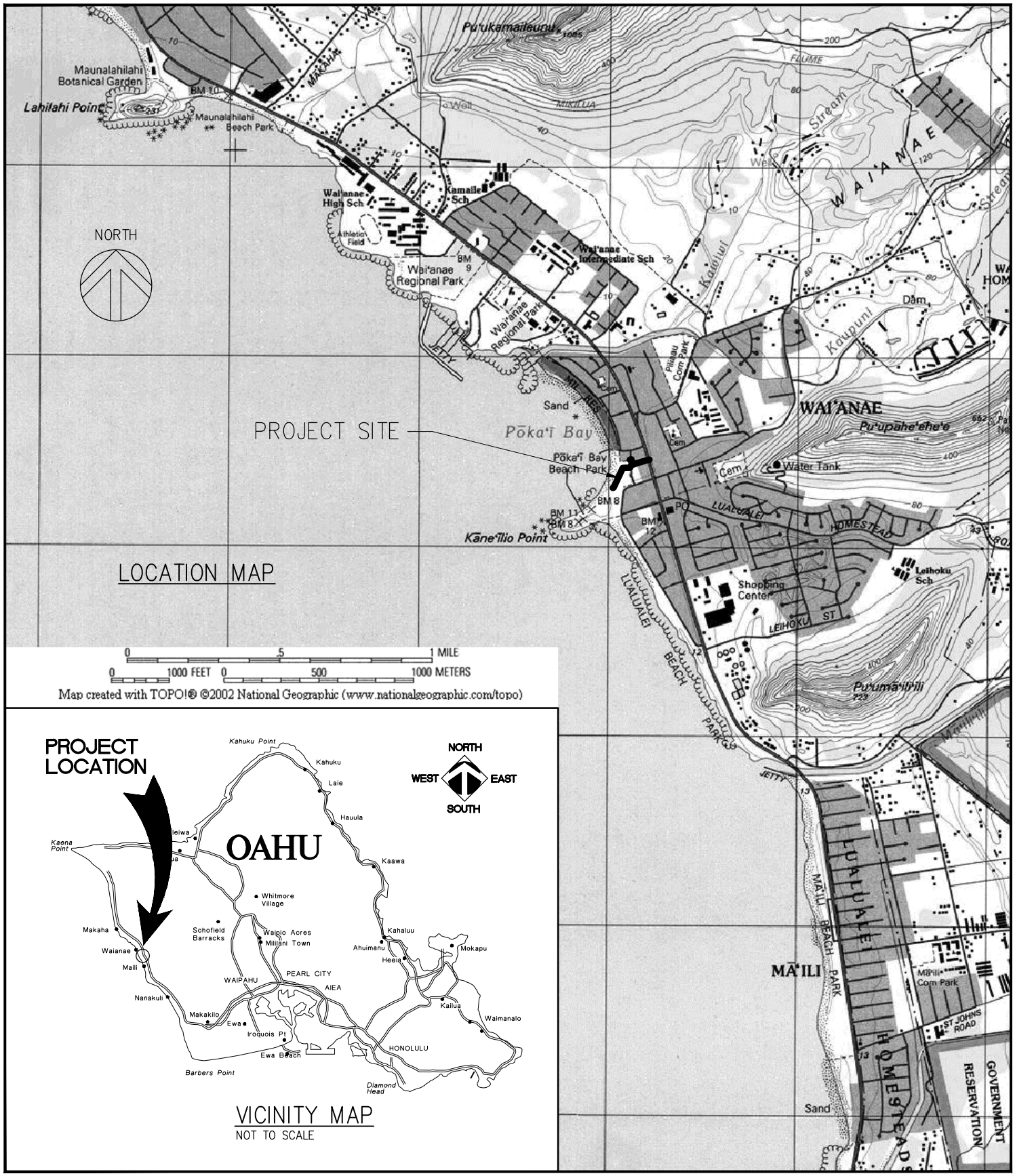
In February 2005, a Draft Environmental Assessment was issued for environmental review of an alternate alignment that would redirect drainage to an existing unlined drainage channel, which discharges south of Pōkaʻī Bay and Kāneʻīlio Point and has been in service for over 20-years with an established National Pollutant Discharge Elimination System (NPDES) permit. During early consultation and circulation of the February 2005 Draft EA, concerns regarding potential impacts to unknown historic or cultural remains were identified for this alignment. In efforts to minimize these potential impacts, the current Bayview Street Relief Drain Project would construct the drainage improvements along the existing alignment and outfall at Pōkaʻī Bay instead of along the previously proposed alignment and outfall at Kāneʻīlio Point. The February 2005 Draft EA alignment and outfall at Kāneʻīlio Point is included in Chapter 5 as an alternative considered but ultimately rejected from consideration.

## 2.3 DESCRIPTION OF THE PROPOSED ACTION

The City and County of Honolulu Department of Design and Construction plans to construct storm drainage improvements between Farrington Highway and Pōkaʻī Bay. The proposed drainage improvements would replace a portion of an existing drainage system that currently serves the area around Bayview Street and a portion of Waiʻanae Valley Road. The proposed drainage improvements would increase the drainage system capacity with the use of High Density Polyethylene Pipes (HDPE) and concrete drain boxes of varying sizes; with the pipes being 18 inches in diameter and the boxes ranging from 24 to 30 inches in height by 72 inches wide. The proposed improvements would occur predominantly along the previous alignment along existing right-of-way, though more extensive trenching would be required to accommodate the larger pipes. The proposed pipe replacement and trenching requirements are included in the table below:

| Drain Line | Replacement / New | Existing Pipe | Proposed Box Width / Pipe Dia. | Length | Trench Width | Max. Depth |
|---|---|---|---|---|---|---|
| A | Replace | 24" | 72" (Box) | 901' | 10' | 8' |
| B | Replace | 18" | 18" (Pipe) | 121' | 4' | 4' |

The proposed drainline would connect to an existing drainage system, which consists of several catch basins and drainage structures that collect stormwater from the mauka side of Farrington Highway. The existing drainage system mauka of Farrington Highway would empty into the proposed drainage alignment at this connection point. The drainage alignment would generally follow the existing drainage alignment (see Figure 2). The drainage system would discharge at Pōkaʻī Bay.




F-1

# BAYVIEW STREET RELIEF DRAIN

ENVIRONMENTAL ASSESSMENT

## VICINITY AND LOCATION MAP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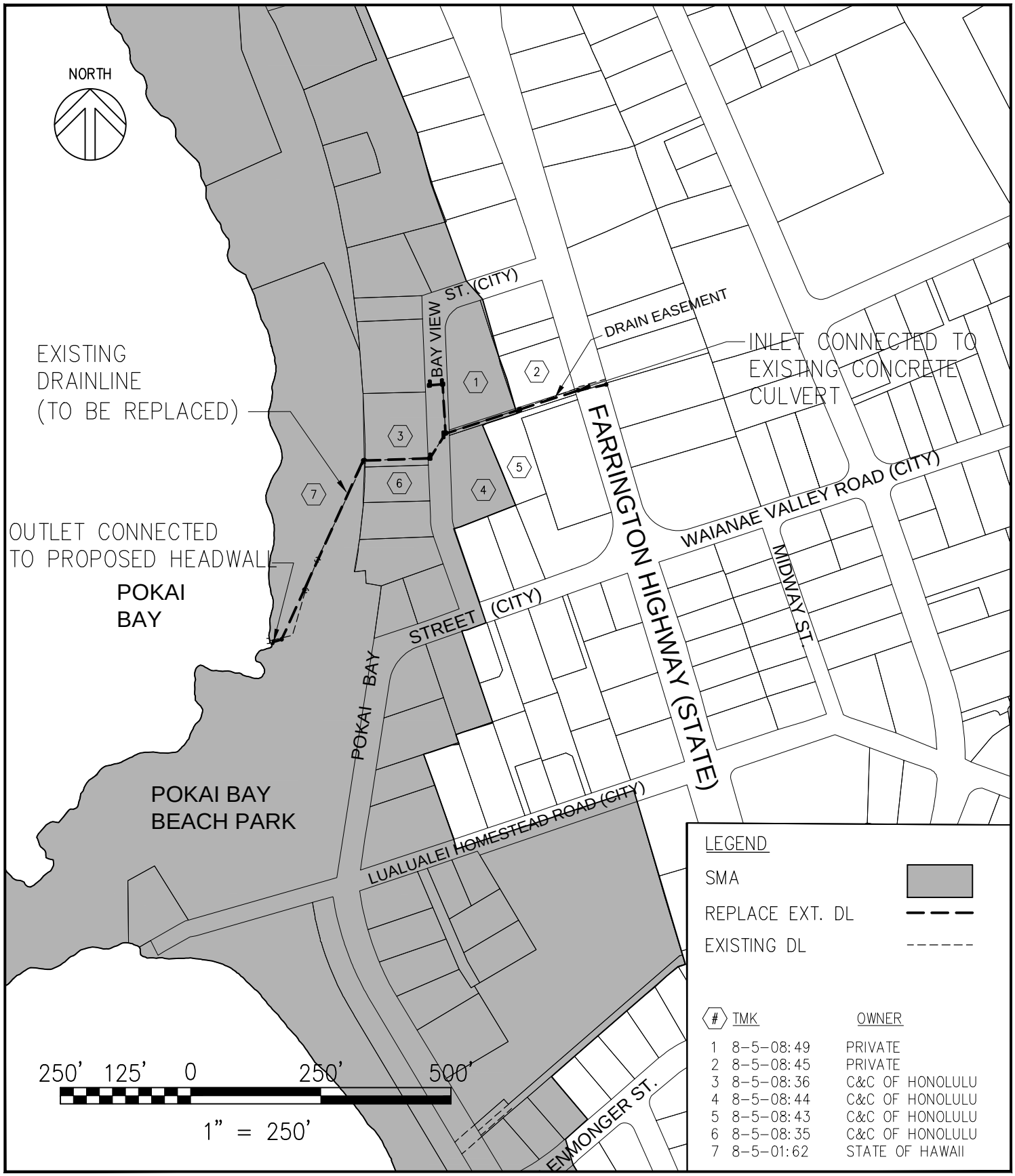


F-2

# BAYVIEW STREET RELIEF DRAIN
ENVIRONMENTAL ASSESSMENT

PROJECT ALIGNMENT AND LAND OWNERSHIP MAP

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F-3

# BAYVIEW STREET RELIEF DRAIN

ENVIRONMENTAL ASSESSMENT

## HYDROLOGICAL MAP


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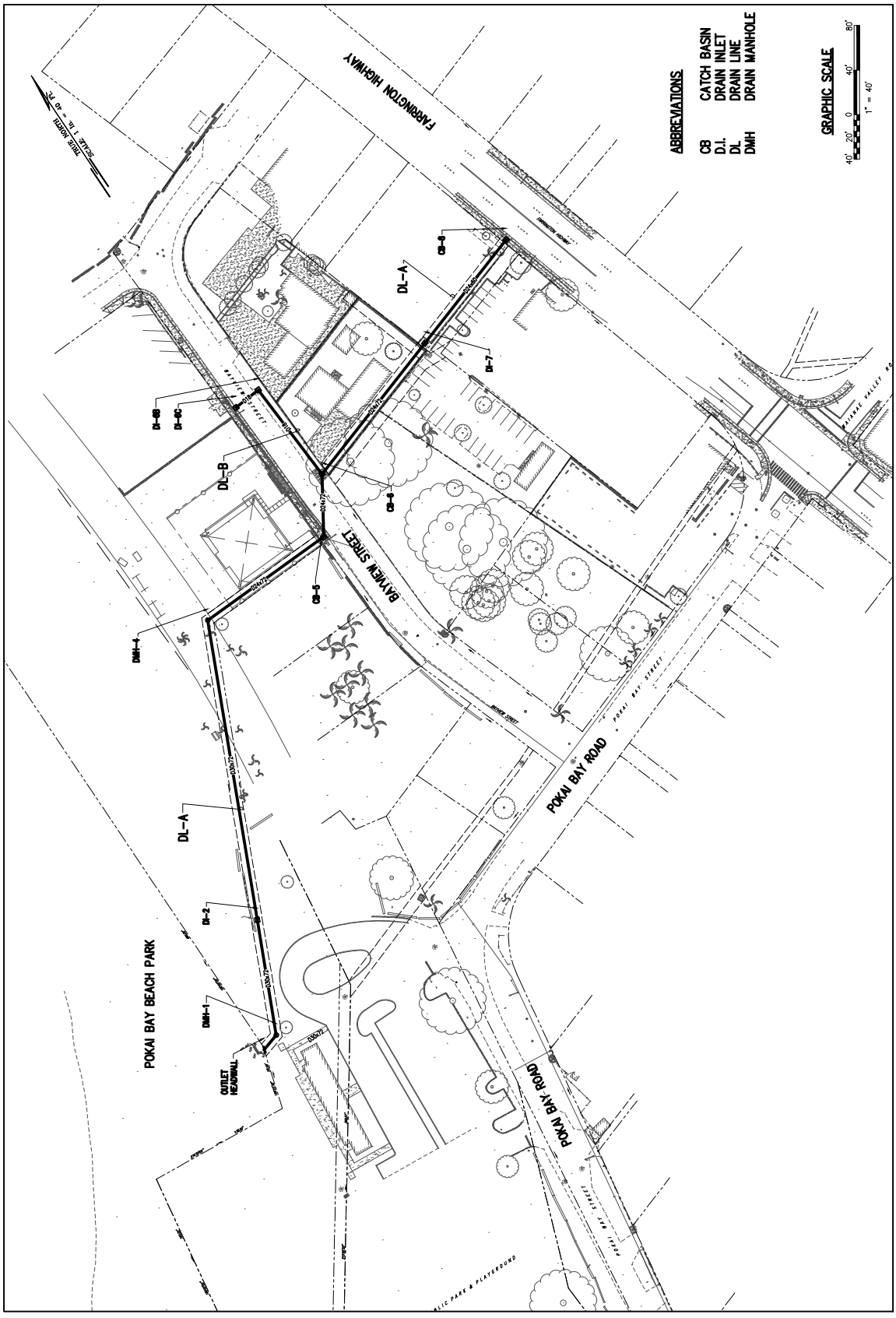


F-4

# BAYVIEW STREET RELIEF DRAIN

ENVIRONMENTAL ASSESSMENT

## PROPOSED DRAIN ALIGNMENT


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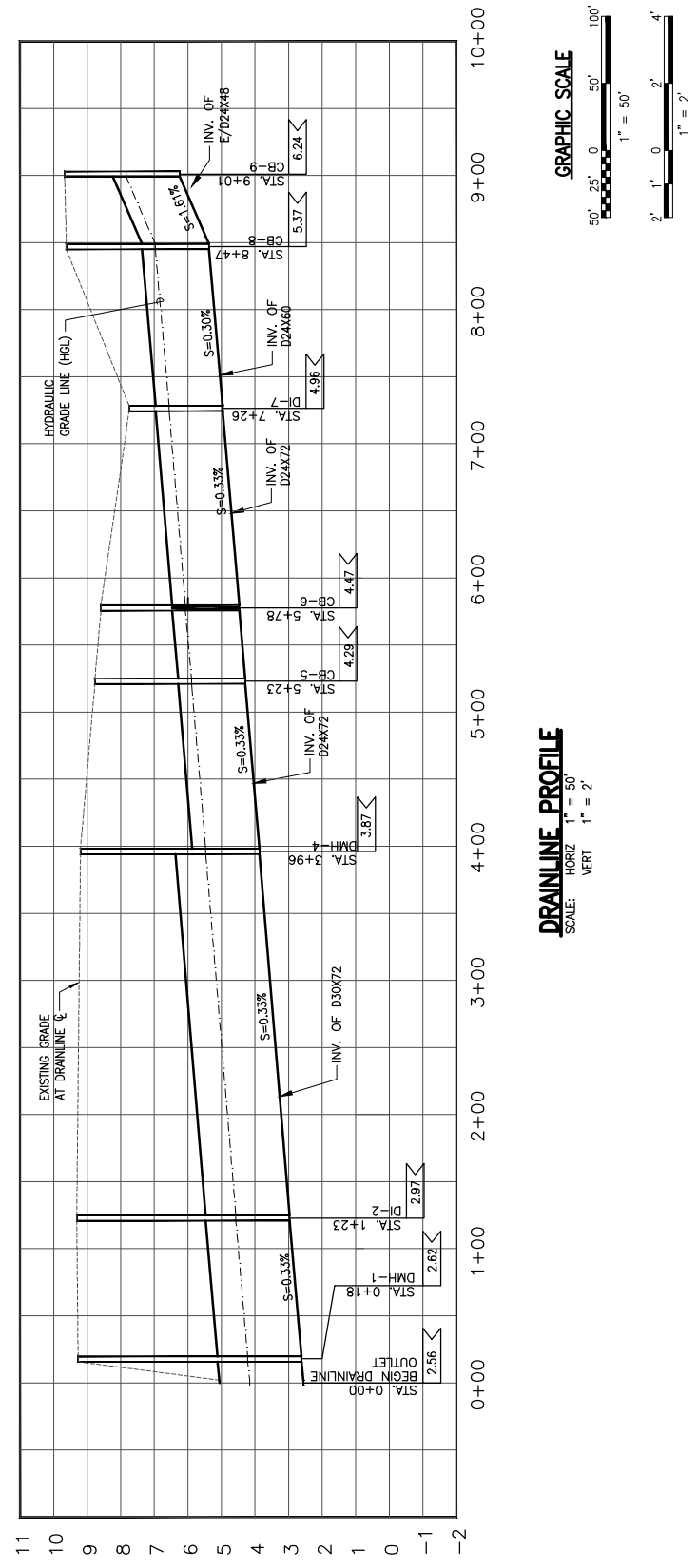


F-5

# BAYVIEW STREET RELIEF DRAIN

ENVIRONMENTAL ASSESSMENT

## PROPOSED DRAINLINE PROFILE


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The existing outlet at Pōkaʻī Bay is a 24-inch diameter Reinforced Concrete Pipe (RCP) with a Concrete Rubble Masonry (CRM) headwall. The proposed outlet would be constructed with a reinforced concrete box 72 inches wide by 30 inches high. There may be a short concrete headwall attached to the outlet structure to adjust for the grades.

Additional improvements include modifications to drainage structures, and construction of new drainline and manholes.

## 2.4 PROJECT PHASING AND CONSTRUCTION COST

Construction of the drainage improvements is projected to begin during fall 2012. The construction start date will be dependent on funding and obtaining the required permits and approvals. The project would be constructed in one phase for the duration of approximately one year. The estimated construction cost for the Bayview Street Relief Drain project is $1,201,700, to be funded by the City and County of Honolulu.

# 3 DESCRIPTION OF THE AFFECTED ENVIRONMENT

The intent of this chapter is to describe the existing physical and social environment that is affected by the proposed action. Potential impacts that may result from implementation of the proposed action and mitigation measures to minimize the adverse impacts are described below.

## 3.1 CLIMATE

The climate of Wai‘anae can be characterized as hot and dry. Annual rainfall averages less than 25 inches along the coastline to 80-100 inches at the higher elevations of the Wai‘anae Mountains. Daily temperatures range between 72 and 80 degrees Fahrenheit and can reach the low to mid-90s during the summer. Prevailing winds blow from a northeast direction at an average 10-13 miles per hour.

## 3.2 TOPOGRAPHY

Ground elevations of the proposed drainage range from sea level to 15 feet. In general, the terrain slopes mauka to makai (see Figure 3 for topographic relief in the project area). From the drainage collection areas in the mauka area, project alignments at ground surface are located at a maximum of 15 feet elevation. The ground gently slopes downward as the drainage alignments move makai.

### 3.2.1 IMPACTS AND MITIGATION MEASURES

Impacts to the existing topography would be minimal. The proposed stormwater drainage would be laid in an excavated trench with appropriate cover over the pipe (see Figure 5 for the drainline profile). Most of the drainage would be constructed along existing right-of-way and previously disturbed areas. Existing grades would generally be maintained or slightly modified.

## 3.3 SOILS

According to the *Soil Survey of Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii* (Soil Conservation Service, 1973) the soils in the project area are classified as Pulehu clay loam, 0 to 3 percent slopes (PsA) and Beaches (BS). The Pulehu soil type usually occurs on alluvial fans with moderate permeability, slow runoff, and only a slight erosion hazard. Beaches (BS) occur as sandy, gravelly, or cobbly areas and are washed and rewashed by ocean waves. The beaches consist mainly of light-colored sands derived from coral and seashells, and are often considered highly suitable for recreational uses.

### 3.3.1 IMPACTS AND MITIGATION MEASURES

There would be a short-term increase in soil erosion during construction. While onsite soils are predominantly clay and silts with slight erosion hazard, trenching associated with construction of the proposed drainline would result in the exposure of bare soil to potential erosion.

Mitigation measures shall be implemented during construction to minimize soil erosion and offsite sediment transport. Engineering measures to control soil erosion and storm runoff shall be

implemented by the contractor during construction. An erosion control plan shall be submitted prior to grading/trenching activities and shall specify Best Management Practices in accordance with Chapter 14, Article 13 "General Provisions for Grading, Soil Erosion and Sediment Control" of the Revised Ordinances of Honolulu (ROH). Installation of cut-off ditches or berms may be required to control and minimize the amount of runoff around trenched areas. For a discussion of drainage on the project site, see Section 3.3, *Water Quality and Marine Environment* below.

## 3.4 WATER QUALITY AND MARINE ENVIRONMENT

Coastal waters in the vicinity of Pōkaʻī Bay were classified "A" and Class 2 for inland waters in State Department of Health water quality regulations (Hawaii Department of Health, 1987). The objective of Class A waters is that their waters be protected for recreational purposes and aesthetic enjoyment. Similarly, the objective of Class 2 waters is to "protect their use for recreational purposes, the support and propagation of aquatic life, agricultural and industrial water supplies, shipping, and navigation" (HAR §11-54-3(b)(2)). According to HAR §11-54-3(c)(2), Class A waters "shall not act as receiving waters for any discharge which has not received the best degree of treatment or control compatible with the criteria established for this class." Stormwater discharges covered by a NPDES general permit that meet the requirements of basic water quality criteria set forth in HAR §11-54-4 are considered acceptable discharges.

The Hawaii Department of Health Environmental Management Division, Clean Water Branch has established water quality monitoring in Pōkaʻī Bay. As included in the 2006 State of Hawaii Water Monitoring and Assessment Report, Pōkaʻī Bay is identified as a Category 5 waters in the Section 303(d) of the Clean Water Act, List of Impaired Waters. Priority 5 waters are described as surface waters where available data and/or information indicate that at least one designated use is not being supported or is threatened, and a Total Maximum Daily Loads (TMDL) is needed (DOH, 2008). Pōkaʻī Bay achieved this rating since the applicable water quality standard for nutrients, turbidity, and chlorophyll n were exceeded. Increased turbidity and nutrients is often due to increased polluted runoff during significant rain events.

A 2007 report prepared to collect data on the Ordnance Reef, a military munitions sea disposal site in the deeper areas of Pōkaʻī Bay, includes the following description of the areas coastal and marine ecosystem:

> Waiʻanae's coastal and marine ecosystems are characterized by rocky intertidal zones, coral reefs, and offshore pelagic and deep sea marine environments. Intertidal zones provide rocky habitat to marine invertebrates and plants that are specifically adapted to constantly changing levels of exposure to waves and seawater. Coral reefs are found on the more protected leeward exposure of the Waiʻanae coast but are subject to infrequent but severe Kona storms. Offshore pelagic and deep sea ecosystems off the Waiʻanae coast are vast and support large marine animals like dolphins, whales, sea turtles, and the occasional endangered Hawaiian monk seal… Coral cover is low along much of the Waiʻanae coast, due to the shallow, flat, and low-relief bottoms in this area. (NOAA 2007)

Benthic habitat in the nearshore waters of Pōkaʻī Bay include sand and macroalgae with very little coral cover (NOAA 2007).

The project area is located within the Kaupuni watershed. The Kaupuni watershed land use is composed of 44.6 percent agriculture; 45.9 percent conservation; and 9.4 percent urban (DAR 2008). The proposed alignment and drainage area is composed of predominantly urban land uses. Many of the streams of the Waiʻanae district have been channeled through urban areas, causing water to reach the ocean much more quickly and potentially increasing the amount of rubbish, nutrients, and other pollutants entering the coastal water (NOAA 2007). Increased transport of sediment, rubbish, and other pollutants can also occur during storm events. Corals and fish can be adversely impacted from urban and agricultural runoff and sedimentation.

### 3.4.1 IMPACTS AND MITIGATION MEASURES

The existing outlet is currently in a grassed area just to the northwest of the park restroom building and approximately 120 to 170 feet from the water line, depending on the tide. The existing outlet is a 24-inch diameter Reinforced Concrete Pipe (RCP) with a Concrete Rubble Masonry (CRM) headwall. The proposed outlet would be constructed with a reinforced concrete box 72 inches wide by 30 inches high. There may be a short concrete headwall attached to the outlet structure to adjust for the grades. Because the proposed action would replace the outlet at its existing location, there would be no significant change to existing beach access along the shoreline area.

The proposed action consists of increasing the pipe size along the drainage alignment, which would result in increased flow capacity for the existing drainage system and alleviate flood conditions. Inlets and catch basins along the alignment would be replaced as well. The drainage area and the number of catch basins would remain the same as the existing drainage system, and therefore in theory the amount of pollutants entering the system would not increase (see Section 2.1.2 for discussion of drainage areas). During large storm events, the drainage system "washes out" the pipes or carries the accumulated pollutants and rubbish to the outfall area. Some trash would continue to accumulate at the mouth of the outlet as it currently does at Pōkaʻī Bay (see Photo below). Due to the distance to the shoreline and nearshore waters, drainage waters generally percolate into the ground at the grassed area at the outlet. During storm events with higher volume water leaving the outlet, drainage waters can reach the sandy areas of the beach, and would continue to do so with implementation of

the proposed action.

Stormwater pollutants and rubbish reaching the Pōkaʻī Bay outlet would be minimized with regular maintenance and cleaning of the drainage system; in addition, regular maintenance would prevent blockage of the drainage system during storm events. The City and County of Honolulu would continue to be responsible for maintenance of the proposed drainage facilities. With continued use of the Pōkaʻī Bay outlet, the City and County of Honolulu municipal stormwater permit and management plan shall be amended to reflect the proposed revisions to the existing drainage system, as needed.

According to HAR Chapter 11-55, projects are required to obtain a National Pollutant Discharge Elimination System (NPDES) permit for discharges of wastewater, including stormwater runoff, into State surface waters. Construction activities disturbing one or more acres are regulated under the NPDES stormwater program and are required by the State to obtain a NPDES permit. Prior to the initiation of grading, the project applicant shall prepare and implement a stormwater pollution prevention plan and best management practices designed to reduce potential impacts to water quality during construction of the project. The best management practices shall identify the most effective erosion, sedimentation, and turbidity control measures to reduce the amount of soil and sediment accumulation in the coastal waters as a result of construction activities. The following mitigation measures shall ~~may~~ include, but not be limited to, the onsite use of the following best management practices:

- Best Management Practices shall be implemented to ensure that water quality and marine resources are protected and preserved.
- Maintain storage areas that keep construction materials, equipment, and maintenance supplies (e.g., fuels, lubricant, paints, solvents, and adhesives) out of the rain and/or protected from the wind to minimize contact of these materials with stormwater.
- Avoid paving during wet weather.
- Employ soil stabilization practices designed to prevent the loss of disturbed soil through the use of vegetation and/or geotextiles.
- Retain ground cover until the last possible date.
- Properly and promptly dispose of all loosened and excavated soil and debris material from drainage structure work.
- No construction materials shall be stockpiled in the aquatic environment.
- All construction-related materials shall be placed or stored in ways to avoid or minimize disturbance to the aquatic environment.
- All construction-related materials shall be free of pollutants.
- Avoid fertilizers and biocides, or apply only during periods of low rainfall to minimize chemical runoff.
- Extreme care shall be taken to ensure that no debris, petroleum products, or deleterious materials or wastes be allowed to fall, flow, leach, or otherwise enter the water.
- Any turbidity and siltation generated from activities proposed shall be minimized and contained in the immediate vicinity of construction through the use of effective silt containment devices and the curtailment of construction during adverse weather conditions.

Specific best management practices would be determined during design and construction phases. With implementation of NPDES permit requirements, best management practices, and mitigation measures listed above, the construction of the project would not result in a violation of water quality standards. As stated above, stormwater discharges covered by a NPDES general permit that meet the requirements of basic water quality criteria are considered acceptable discharges. Therefore, with implementation of best management practices and regular maintenance and removal of debris from the drainage system, the proposed action would be compliant with the State's anti-degradation policy (HAR §11-54-1.1), which requires that the existing uses and the level of water quality necessary to protect the existing uses of the receiving State water be maintained and protected. Further, the proposed action would be compliant with the designated and existing recreational uses of Pōkaʻī Bay (as described above and in HAR §11-54-3) within and adjacent to the existing unlined drainage channel since the project does not propose any change in use or increase of stormwater runoff. The proposed drainage improvements would continue to be subject to water quality criteria requirements HAR, Sections 11-54-4 through 11-54-8. For a discussion of impacts due to soil erosion and offsite sediment transport, see Section 3.2, *Topography and Soils* above.

The proposed action may require a Department of the Army (DA) permit from the Army Corps of Engineers (Corps). Permits may be required for work performed in, over, and under navigable waters of the United States. In addition to the DA permit, a Section 401 Water Quality Certification (WQC) from the State Department of Health, Environmental Management Division may be required prior to construction. By the federal requirements of §401 of the Clean Water Act, every applicant for a federal permit or license for an activity which may result in a discharge into a water body must request state certification that the proposed activity will not violate state and federal water quality standards. Water quality standards include beneficial uses of water, water quality objectives, and anti-degradation policy. Consultation with the Corps has been initiated to determine if a DA permit would be required.

## 3.5 DRAINAGE

The existing drainage system currently serves the area around Bayview Street and a portion of Waiʻanae Valley Road. The drainage alignment currently discharges into an outfall located at a grassed area just to the northwest of the park restroom building at Pōkaʻī Beach Park. The existing drainage system has inadequate capacity to service the project area during storm events, and shallow flooding temporarily occurs along a portion of Bayview Street (see Section 2.1.2 for discussion of drainage areas).

### 3.5.1 IMPACTS AND MITIGATION

The proposed drainage improvements would replace the existing drainage system with higher drainage system capacity and eliminate the existing deficiencies that cause stormwaters to overflow into adjacent streets during storm events. The City and County of Honolulu would be responsible for maintenance of the proposed drainage facilities. There would be a beneficial impact on drainage with implementation of the proposed action.

## 3.6 NATURAL HAZARDS

Portions of the proposed drainage alignment are within the 100-year coastal flood zone due to wave action and 100-year storm flood zone (parcels through which the drainage passes are in Zone D, Zone AE, and Zone VE). Portions of the project alignment are subject to tsunami inundation—a 100-year tsunami could flood the area to an elevation of 13 feet above sea level near the shoreline, with flood heights decreasing gradually to about 10 feet above sea level inland of Bayview Street.

### 3.6.1 IMPACTS AND MITIGATION MEASURES

Because construction of the proposed relief drain would not result in increased flooding or hazards from flooding in surrounding areas, this would not be a significant impact. The proposed outlet would be constructed with a reinforced concrete box, with a short concrete headwall attached to the outlet structure to adjust for the grades, and would be capable of withstanding repeated storm surges or tsunami.

## 3.7 SOCIAL CHARACTERISTICS

Surrounding uses in the project vicinity include Pōkaʻī Bay Beach Park, single-family residences, multi-family residences, Waiʻanae District Courthouse and Police Station, and commercial uses along Farrington Highway. Pōkaʻī Bay Beach Park consists of 13 acres that include picnic areas, restrooms, parking, sandy beach, camping areas, and a boat launching ramp. The bay waters are protected by a breakwater, providing a safe haven for ocean recreation activities such as swimming, snorkeling, boating, and canoe paddling.

### 3.7.1 IMPACTS AND MITIGATION

Implementation of the proposed action would not displace any residents or businesses since construction would occur along existing easements, public lands, and existing right-of-way. The existing stormwater outfall at Pōkaʻī Bay Beach Park would continue to be used with implementation of the proposed drainage alignment. There would be no new impacts on recreation use at Pōkaʻī Bay. Construction activities would cause temporary disruption to park grounds. Once the construction schedule has been determined, the City and County of Honolulu shall coordinate with the District 3 Park Manager's office to obtain the required right of entry, the approval of any construction staging areas that may be required on park property, and to coordinate any other construction-related activities. Areas affected by construction at the beach park shall be restored to previous conditions.

## 3.8 VEGETATION AND FAUNA

The proposed alignment would be constructed along existing right-of-way, through previously disturbed lots along easements, through paved parking lots, and along grassed areas in the park. No rare or endangered species are planted within the park. No important natural communities occur within the project alignment.

No significant wildlife is known to frequent the areas of the proposed alignment. Dogs, cats, and common birds are known to frequent the vicinity of the project alignment. However, protected species including humpback whales, the Hawaiian Monk Seal, and the green sea turtle may be seen in the offshore waters of Wai‘anae (NOAA 2007).

### 3.8.1 IMPACTS AND MITIGATION MEASURES

Because of the disturbed nature of the project alignment and the lack of suitable habitat, no significant wildlife would be present along the project alignment. ~~and no mitigation would be necessary~~. However, construction noise and activity could result in the disturbance of monk seals or other protected species. NMFS Protected Resources Division recommends implementation of the following BMPs to reduce potential adverse affects on protected marine species.

All workers associated with this project, irrespective of their employment arrangement or affiliation (e.g. employee, contractor, etc.) shall be fully briefed on these BMPs and the requirement to adhere to them for the duration of their involvement in this project.

A. Constant vigilance shall be kept for the presence of ESA-listed marine species during construction of the proposed alignment within Pōka‘ī Bay Beach park.

1. The project manager shall designate an appropriate number of competent observers to survey the areas adjacent to the proposed action for ESA-listed marine species.
2. Surveys shall be made prior to the start of work each day, and prior to resumption of work following any break of more than one half hour. Periodic additional surveys throughout the work day are strongly recommended.
3. All work shall be postponed or halted when ESA-listed marine species are within 50 yards of the proposed work, and shall only begin/resume after the animals have voluntarily departed the area. If ESA-listed marine species are noticed within 50 yards after work has already begun, that work may continue only if, in the best judgment of the project supervisor, that there is no way for the activity to adversely affect the animal(s). For example; divers performing surveys or underwater work would likely be permissible, whereas operation of heavy equipment is likely not.
4. Do not attempt to feed, touch, ride, or otherwise intentionally interact with any ESA-listed marine species.

B. No contamination of the marine environment shall result from project-related activities.

5. A contingency plan to control toxic materials is required.
6. Appropriate materials to contain and clean potential spills shall be stored at the work site, and be readily available.
7. The project manager and heavy equipment operators shall perform daily pre-work equipment inspections for cleanliness and leaks. All heavy equipment operations shall be postponed or halted should a leak be detected, and shall not proceed until the leak is repaired and equipment cleaned.
8. Fueling of land-based vehicles and equipment shall take place at least 50 feet away from the water, preferably over an impervious surface.

9. Turbidity and siltation from project-related work shall be minimized and contained through the appropriate use of erosion control practices, effective silt containment devices, and the curtailment of work during adverse weather and tidal/flow conditions.
10. A plan shall be developed to prevent debris and other wastes from entering or remaining in the marine environment during the project.

Implementation of these BMPs as recommended by NMFS Protected Resources Division would minimize potential impacts to protected species.

## 3.9 HISTORICAL, ARCHAEOLOGICAL, AND CULTURAL RESOURCES

The general project area has been noted as the site of the active fishing village of Waiʻanae Valley, and abundant in historic and cultural resources. The remains of Kūʻilioloa Heiau are located at the tip of Kāneʻīlio Point at the southern end of the beach park. A large portion of the site was destroyed during World War II, but it was restored and is currently maintained by the Waiʻanae Hawaiian Civic Club. The project area is designated as Section 5(b) Ceded Lands of the Hawaii Admission Act (see Appendix A, OHA letter). These lands are held by the state in trust for Native Hawaiians and the general public.

Previous historical research and conversations with community members have indicated historic uses including an old rail station, fishing village, plantation area, and Hawaiian and Chinese burial grounds. There are existing military and residential uses within the project area. Previous archaeological research indicated the presence of a pre-historic cultural layer and human burials within the Waiʻanae Army Recreation Center area of Pōkaʻī Bay. This cultural layer is located to the north of the Waiʻanae Army Recreation Center land to be returned to the City and County of Honolulu. This site was previously assigned State Site # 50-80-07-3998.

In a subsurface archaeological investigation conducted in conjunction with the Pōkaʻī Bay Beach Park Master Plan, two test units within that portion of the Waiʻanae Army Recreation Center to be returned to the City and County of Honolulu were the only units that contained evidence of a probable pre-historic cultural layer. As a result of these findings, and upon consultation with the State Historic Preservation Division, the cultural layer is designated as part (a southern extension) of Site # 50-80-07-3998. The inclusion of this area within Site 3998 extends the site 75 meters to the south and maintains the same width. This spatial extension places the site within Pōkaʻī Bay Beach Park (Cultural Surveys Hawaii, 1999). In addition, archaeological investigations for the proposed Pōkaʻī Bay Beach Park Canoe Hālau concluded that improvements had the potential to have an "adverse effect" on significant historic sites, especially in the area adjacent to the proposed canoe hālau, which is located near a portion of the proposed drain alignment along Bayview Street.

Formal consultation with the State Historic Preservation Division (SHPD) has been conducted regarding potential impacts to cultural resources in the project area. The Historic Preservation Review response is included in Appendix A. Consultation with community leaders in the project area was conducted in 2005 (see Section 7.2 for additional details regarding community consultation).

### 3.9.1 IMPACTS AND MITIGATION MEASURES

The proposed drainage alignment consists of previously disturbed right-of-way surrounded by mixed commercial and residential neighborhoods. Based on previous historical data and interviews with area residents, there is the potential for burial sites or other historic or cultural remains within the project alignment despite the history of disturbance and modern development along the proposed project alignment. As noted above, consultation with SHPD has been conducted and is included in Appendix A.

The following recommendations are included based on State regulations and consultation with community members. It is emphasized that sensitivity to cultural concerns be employed when dealing with burial issues.

- For the construction of the proposed action, an archaeological monitoring plan acceptable to the approving agencies shall be developed during the design phase of the project.
- During construction of the proposed action, a certified archaeologist shall be present to monitor construction activities.
- Should any archaeological, cultural, historical resources, artifacts or other features, or human remains be discovered during the course of construction anywhere along the drainage alignment, work shall be suspended in that location and the SHPD and the Oahu Island Burial Council shall be notified.
- For construction activities occurring in sandy areas, a cultural monitor shall be present. The cultural monitor shall be selected based on criteria set forth by the City and County Department of Design and Construction.
- In the event of discovery of burial remains, prepare and implement a Burial Treatment Plan to be developed in consultation with SHPD, Oahu Island Burial Council, and interested Hawaiian organizations, including lineal and/or cultural descendants.

With implementation of these conditions, adverse effects to cultural, historic, or archaeological resources would be minimized.

## 3.10 UTILITIES

There are underground and overhead utilities located along project roadways, including water lines, sewer lines, and electrical lines.

### 3.10.1 IMPACTS AND MITIGATION

The proposed drainline has been designed to avoid disruption of existing utility lines. Construction of the proposed alignment would be coordinated with appropriate agencies in the City and County of Honolulu, Hawaiian Electric Company, Verizon Hawaii, the Gas Company, and Oceanic Cable to minimize impacts to existing utilities. Prior to trenching, the contractor shall verify the location of existing utilities and shall be required to protect existing utilities from damage during construction. Damage to existing utilities resulting from construction shall be repaired by the contractor.

## 3.11 AIR QUALITY

The Department of Health, Clean Air Branch, monitors the ambient air in the State of Hawai‘i for various gaseous and particulate air pollutants. The U. S. Environmental Protection Agency (EPA) has set national ambient air quality standards (NAAQS) for six criteria pollutants: carbon monoxide, nitrogen dioxide, sulfur dioxide, lead, ozone, and particulate matter ($PM_{10}$ and $PM_{2.5}$). Hawai‘i has also established a state ambient air standard for hydrogen sulfide. The primary purpose of the statewide monitoring network is to measure ambient air concentrations of these pollutants and ensure that these air quality standards are met.

There are six monitoring stations on the island of O‘ahu; the nearest monitoring stations to the project area are located in West Beach and Makaiwa to monitor emissions from a nearby power plant and industrial activities. In the year 2007, the State of Hawai‘i was in attainment for all federal ambient air quality standards. As stated in the report, “[a]ir quality in the State of Hawaii continues to be one of the best in the nation, and criteria pollutant levels remain well below state and federal ambient air quality standards” (Clean Air Branch, 2008).

### 3.11.1 IMPACTS AND MITIGATION MEASURES

Construction of the proposed alignment could result in temporary air quality effects, including exhaust emissions from construction vehicles and dust generated by short-term, construction related activities. Components of construction emissions include employee trips, exhaust emissions from trenching equipment, and fugitive dust emissions. Trenching of the project alignment could generate airborne dust particulates.

Dust control measures such as watering and sprinkling shall be implemented as needed to minimize wind-blown dust. To minimize construction-related exhaust emissions, project contractors shall ensure that all internal combustion engines are maintained in proper working order. In addition, the work shall be in conformance with the air pollution control standards contained in Hawaii Administrative Rules, Title 11, Chapter 59, “Ambient Air Quality Standards.”

There would be no long-term air quality impacts associated with the proposed action.

## 3.12 NOISE

The proposed project alignment is located along Pōka‘ī Bay and Bayview Streets in the developed area of Wai‘anae. Existing noise sources are from area traffic. Surrounding noise sensitive uses include residences in the near vicinity.

### 3.12.1 IMPACTS AND MITIGATION MEASURES

Noise impacts from a project can be categorized as those resulting from construction and those from operational activities. Construction noise would have a short-term effect; operational noise would continue throughout the lifetime of the project. Implementation of the proposed drainage alignment could temporarily increase noise levels during construction above maximum allowable limits that would impact nearby existing residences and businesses.

A Community Noise Permit for construction activities may be required by the Department of Health. Prior to construction, consultation with the state Department of Health shall occur to determine permitting requirements. Should the permit be required, allowable construction conditions shall be specified. Construction shall be confined to 7 a.m. to 6 p.m., Monday through Friday, and 9 a.m. to 6 p.m. on Saturday. No trenching work shall occur on Sundays and holidays without prior notice. Construction activities shall comply with HAR Chapter 11-46, "Community Noise Control."

There would be no increase in operational noise due to implementation of the proposed Bayview Relief Drain project.

## 3.13 TRAFFIC

The proposed project alignment to be modified is located along portions of Pōkaʻī Bay and Bayview Streets. Local streets in the project area are located off of the heavily used Farrington Highway (State Highway) and are single lane, low-volume roadways. The project roadways are used for public transportation (specifically TheBus Route 401), and there is a bus stop on Waianae Valley Road.

### 3.13.1 IMPACTS AND MITIGATION

The proposed alignment would have a short-term temporary impact on traffic along the affected roadways that may create temporary delays. Travelers, recreationists, and residents traveling along these roadways could be inconvenienced by these delays during construction. Impacts to the traveling public would be minimized by providing notification of any temporary closures. Construction drawings shall be submitted to the City and County of Honolulu, Department of Transportation Services to determine if construction would affect public transportation operations and require re-routing of the bus line. Emergency services (police, fire, and ambulance services), businesses, bus personnel, the neighborhood board, and area residents would be given adequate notice of potential delays prior to construction. The use of vehicles and heavy equipment during construction would require a permit from the Department of Transportation, and all construction to be completed in the State highway right-of-way must be submitted to Department of Transportation Highways Division for review and approval.

A temporary construction staging area shall be located at a legally designated site to minimize illegal parking and ensure safety. Temporary traffic control shall include one lane closure to maintain traffic flow and emergency access and would be in accordance with City standards. Traffic control plans shall be prepared and submitted to City and County of Honolulu Department of Transportation Services and the Department of Planning and Permitting for approval prior to construction. The construction company performing the work shall notify the Honolulu Fire Department when trench work is conducted.

There would be no increase in operational traffic due to implementation of the proposed Bayview Relief Drain project.

## 3.14 LAND USE CONTROLS

Sate and County policy, and land use and community plans and controls are established to address the long-term physical, social, economic, and environmental needs in Hawai‘i. State and County land use controls for the Bayview Street Relief Drain project include:

| | |
|---|---|
| State Land Use Designation: | Urban District |
| O‘ahu General Plan: | Rural Community |
| Wai‘anae Sustainable Communities Plan: | Country Town and Rural Residential |
| Zoning: | N/A (construction would occur along drainage easements, along existing right-of-way, and through public lands) |
| Special Management Area: | Inside Special Management Area (SMA) |

The proposed action would not require a change in the existing land use or zoning since construction of the proposed drainage alignment would occur along existing drainage easements and along existing right-of-way. (For zoning designations in the project area, see Figure 6.)

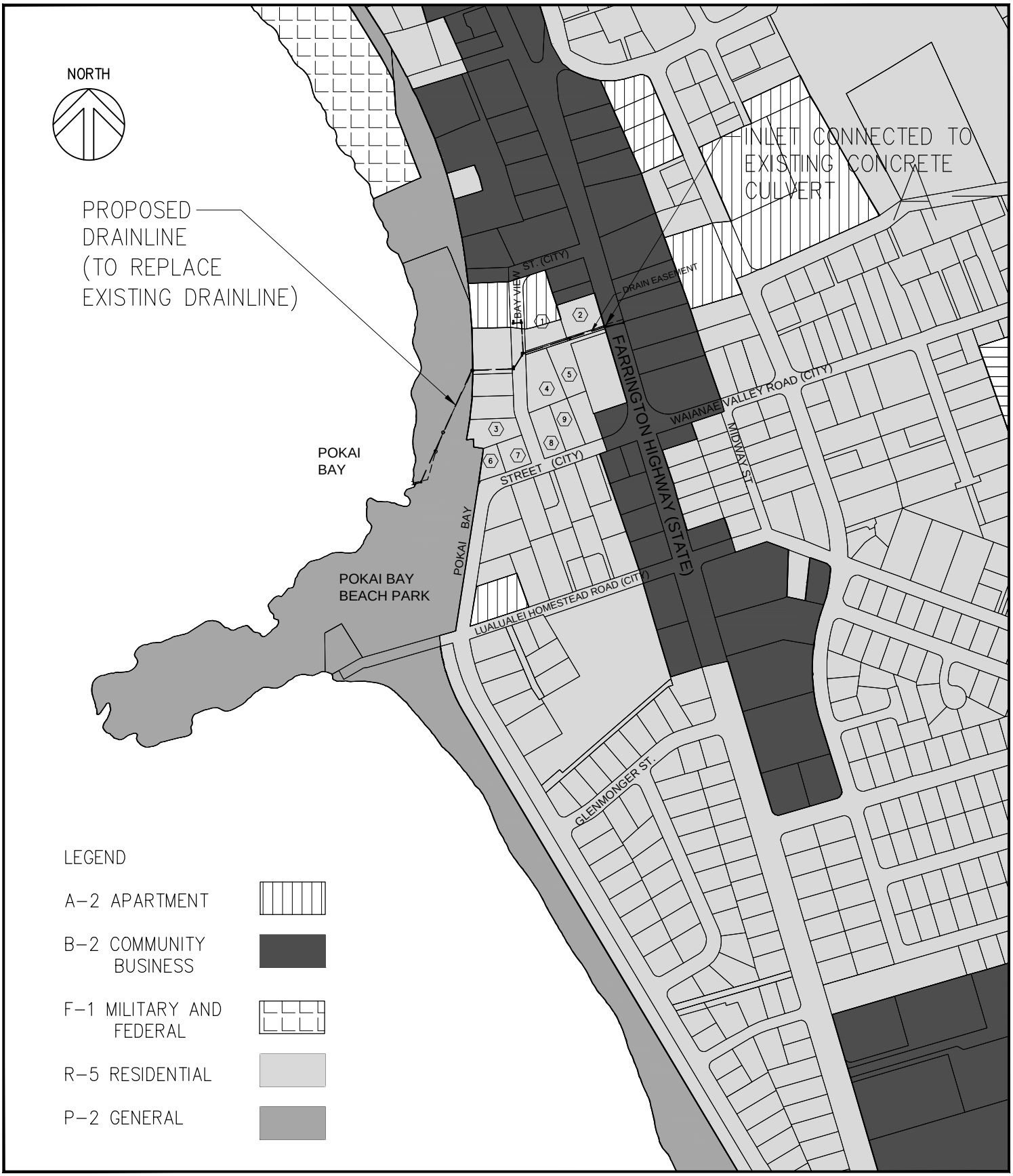
The Wai‘anae Sustainable Communities Plan recognizes the flooding problems in the project area and identifies the need to prepare a comprehensive drainage evaluation and plan for Wai‘anae to provide a long-range plan of action (Department of Planning and Permitting, 2000 and 2008). The proposed action would improve drainage in the project area during major storm events.

In October 1972, the Congress passed the Coastal Zone Management Act for the purpose of establishing a national program for the management, beneficial use, protection, and development of land and water resources of the coastal areas of the United States. The Hawaii Coastal Zone Management (CZM) Program (HRS Chapter 205A) was promulgated in 1977 in response to the Federal Coastal Zone Management Act of 1972. The objectives and policies of the CZM are to provide recreational resources; protect historic, scenic, and coastal ecosystem resources; provide economic uses; reduce coastal hazards; and manage development in the coastal zone.

The CZM outlines controls and policies within an area along the shoreline called the Special Management Area (SMA). The objectives of the SMA were “the maintenance, restoration, and enhancement of the overall quality of the coastal zone environment, including, but not limited to, its amenities and aesthetic values, and to provide adequate public access to publicly owned or used beaches, recreation areas and national reserves.” The purpose of the SMA Permit is to regulate any use, activity or operation that qualifies as a “development” and is administered at the County level. The majority of the project site is located within the SMA boundary. However, the project is exempt from SMA permitting requirements in accordance with Chapter 25, Revised Ordinances of Honolulu Section 1.3(2)(D), which includes “the repair and maintenance of underground utility lines, including but not limited to water, sewer, power and telephone and minor appurtenant structures such as pad mounted transformers and sewer pump stations.”

The proposed action requires compliance with the Shoreline Setback Rules of the City and County of Honolulu, Department of Planning and Permitting and Revised Ordinances of Honolulu Chapter 23, Shoreline Setbacks. The Shoreline Setback area is the area between the

shoreline and the shoreline setback line established by the City and County of Honolulu. Structures or portions of a structure are not permitted in the shoreline setback area without a variance, and conditions must be imposed to maintain safe lateral access to and along the shoreline or adequately compensate for its loss; to minimize risk of adverse impacts on beach processes, to minimize risk of structures failing and becoming loose rocks or rubble on public property; and to minimize adverse impacts on public views to, from, and along the shoreline. The shoreline setback line is generally 40 feet inland from the certified shoreline. While existing documents indicate the proposed project improvements would occur outside of the shoreline setback area, continued consultation with the Department of Planning and Permitting will occur to determine if the project requires approval of a shoreline setback variance.

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# BAYVIEW STREET RELIEF DRAIN

ENVIRONMENTAL ASSESSMENT

## ZONING DESIGNATIONS IN THE PROJECT AREA

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# 4 NECESSARY PERMITS AND APPROVALS

The proposed improvements may require the following approvals and/or permits prior to construction.

- Grading permit from the City and County of Honolulu, Department of Planning and Permitting.
- Trenching permit from the City and County of Honolulu, Department of Planning and Permitting, Civil Engineering Branch (CEB) will be required for excavations within the city roadways.
- Approval from the Department of Planning and Permitting, Traffic Review Branch (TRB), for a traffic control plan.
- The use of vehicles and heavy equipment during construction would require a permit from the Department of Transportation, and all construction to be completed in the State highway right-of-way must be submitted to Department of Transportation Highways Division for review and approval.
- Shoreline Setback Variance may be required from the Department of Planning and Permitting.
- Approval from the City and County of Honolulu, Department of Parks and Recreation, for work within Pōkaʻī Bay Beach Park.
- A Community Noise Permit for construction activities may be required by the City and County of Honolulu, Department of Health.
- A National Pollutant Discharge Elimination System (NPDES) permit would be required from the State Department of Health prior to construction. Along with the Notice of Intent (NOI) or NPDES permit application, the SHPD determination letter as included in Appendix A would be appended.
- The proposed action may require a Department of the Army (DA) permit from the Army Corps of Engineers (Corps) and a Section 401 Water Quality Certification (WQC) from the State Department of Health, Environmental Management Division prior to construction.
- Notification and reporting of any changes to the inventory of stormwater outlets under the City and County municipal stormwater permit (NPDES Permit No. HI S000002).

# 5 ALTERNATIVES TO THE PROPOSED ACTION

This chapter considers alternatives to the proposed action, including the No Action Alternative. The alternatives were rejected for their inability to meet the project objectives or because attainment of the objectives were achieved at a higher cost, either financially or environmentally.

## 5.1 NO ACTION ALTERNATIVE

Under the No Action Alternative, the project area would continue to be served by the existing drainage system with the outfall located at Pōkaʻī Bay Beach Park. This alternative would not meet the project objective to provide drainage improvements to reduce flood hazards in the Bayview Street area between Farrington Highway and Pōkaʻī Bay.

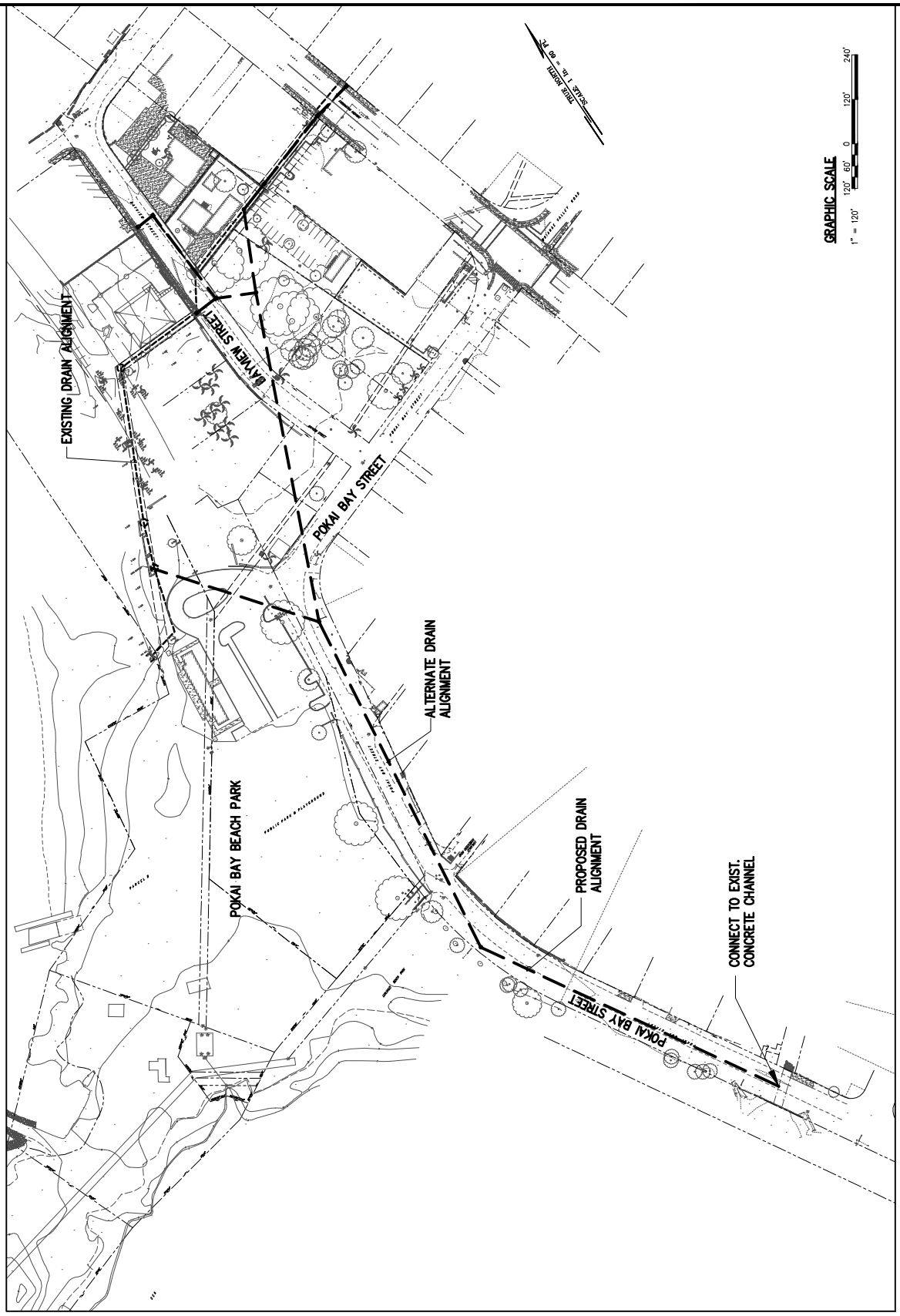
## 5.2 ALTERNATIVE ALIGNMENT: DRAIN OUTLET AT ABANDONED SEWER OUTFALL

The proposed stormwater alignment was one of two alternative alignments evaluated by Bow Engineering & Development, Inc. in their 2002 study. This Alternative Alignment would provide a new relief drain that would discharge to a new drain outlet sited at an abandoned sewer outfall located at the south end of Pōkaʻī Beach Park at a coral shelf away from the sand beach area (see Figure 7). This Alternative would require a longer alignment of 825 feet than the proposed action, and would cost approximately $273,000 more than the proposed action. Since fisherman and surfers frequently use this area, it was determined that it would not enhance the recreation values of Pōkaʻī Bay Beach Park beyond what is currently proposed.

## 5.3 ALTERNATIVE CONSIDERED BUT ULTIMATELY REJECTED: ALTERNATIVE ALIGNMENT WITH DISCHARGE TO EXISTING OUTFALL

One alternative considered but ultimately rejected included the alternative alignment considered in the 2005 Draft EA. The proposed drainline would connect to the existing drainage system, which consists of several catch basins and drainage structures that collect stormwater from the mauka side of Farrington Highway. The existing drainage system mauka of Farrington Highway would empty into the proposed drainage alignment at this connection point. The drainage alignment would generally run along the Bayview Street and Pōkaʻī Bay Street right-of-way and along easements through privately-owned property, with some sections of the drainline traversing City owned properties (see Figure 8). The drainage system would discharge at a concrete box culvert located on Pōkaʻī Bay Street just north of its intersection with Glenmonger Street. The box culvert empties into an existing unlined drainage channel, which discharges south of Pōkaʻī Bay and Kāneʻīlio Point and has been in service for over 20-years with an established National Pollutant Discharge Elimination System (NPDES) permit. This drainage channel was designed for 720 cubic feet per second (cfs) and has adequate capacity to accommodate drainage from the proposed action. Additional improvements include modifications to drainage structures, and construction of new drainline and manholes.

This alternative was rejected due to concerns regarding potential impacts to unknown historic or cultural remains identified during early consultation and circulation of the February 2005 Draft EA.




F-7

# BAYVIEW STREET RELIEF DRAIN

ENVIRONMENTAL ASSESSMENT

## ALTERNATIVE ALIGNMENT

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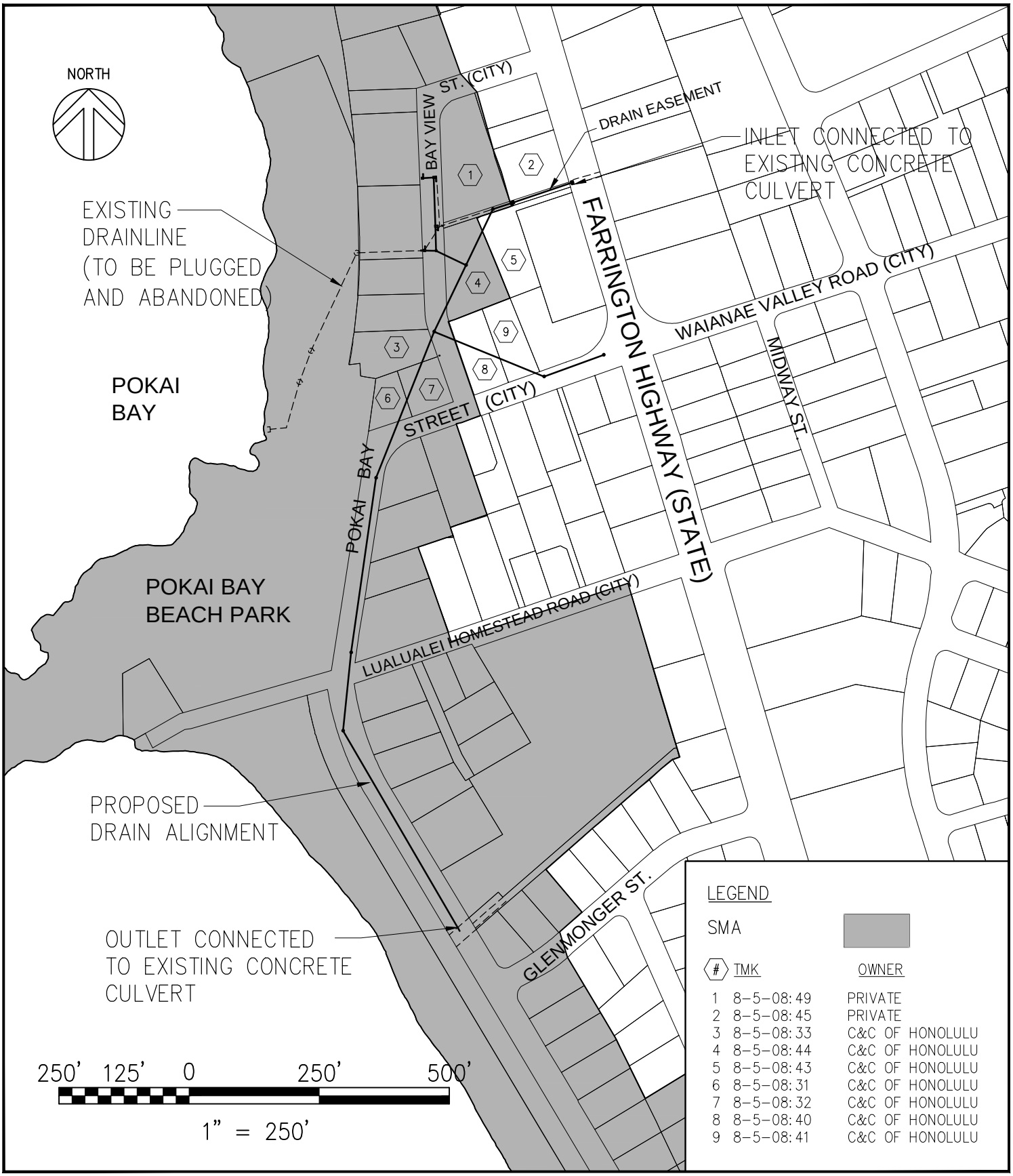


F-8

# BAYVIEW STREET RELIEF DRAIN

ENVIRONMENTAL ASSESSMENT

ALTERNATIVE ALIGNMENT WITH DISCHARGE TO EXISTING OUTFALL

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# 6 FINDINGS AND DETERMINATION

As set forth in HAR, Title 11, Department of Health, Chapter 200, §11-200-12, in considering the significance of potential environmental effects, an agency must "consider every phase of a proposed action, the expected consequences, both primary and secondary, and the cumulative as well as the short-term and long-term effects of the action." As evaluated in this EA, the proposed action is not expected to have a significant effect on the environment. The determination for the Bayview Street Relief Drain Project is a Finding of No Significant Impact (FONSI). No Environmental Impact Statement would be required. The findings supporting this determination are discussed below.

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

The proposed alignment would be constructed along existing right-of-way, through previously disturbed lots along easements, or through paved parking lots. No important natural communities occur within the project alignment. While there is the potential for discovery of burial sites or other historic or cultural remains during construction, mitigation measures contained in Chapter 3 would reduce the adverse effects of these potential impacts. No natural or cultural resources were identified along the proposed drainage alignment.

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

The proposed drainage alignment would be constructed underground and should not curtail any aboveground uses. Use of existing easements through two privately owned parcels would not limit the landowners' current use and plans for the property.

**(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 drainage alignment has been planned and designed in conformance with the environmental policies and guidelines established in HRS Chapter 344.

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

The proposed action would have a positive effect on the welfare of the Waiʻanae community. The proposed action would increase the capacity of the area drainage system and relieve current flooding conditions during storm events.

**(5) Substantially affects public health.**

Construction activities may temporarily increase fugitive dust and noise levels in the project vicinity. However, these impacts would cease upon completion of construction. No long term negative impact on public health is anticipated with implementation of the proposed action.

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

The proposed drainage alignment is not anticipated to induce population growth or affect other public facilities. The project would have a positive impact on stormwater drainage facilities.

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

There would be no long-term impacts associated with the proposed action. Construction activities may temporarily increase dust, noise, and traffic delays in the project vicinity. However, these impacts would cease upon completion of construction. Mitigation measures included in Chapter 3 would minimize potential construction-related impacts.

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

The proposed action is limited to construction of a new drainage alignment to rectify deficiencies in the existing drainage system. The proposed action would increase capacity to serve existing drainage requirements in the project area.

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

The proposed alignment would be constructed along existing right-of-way, through previously disturbed lots along easements, or through paved parking lots. There are no known rare, threatened, or endangered species, or evidence of its habitat, along the proposed alignment.

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

Construction activities would have a short-term effect on air quality, water quality, and ambient noise levels. Mitigation included in Chapter 3 would minimize these potential impacts. No long-term impacts would occur.

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

Implementation of the proposed drainage alignment would require trenching for construction; mitigation included in Chapter 3 would minimize erosion in areas disturbed by trenching. While part of the proposed drainage alignment would be located in an area subject to tsunami inundation, the proposed alignment would not introduce facilities that would increase hazards to flooding.

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

The proposed drainage alignment would be installed underground, and would not affect scenic vistas or viewplanes.

**(13) Requires substantial energy consumption.**

There would be energy consumption associated with construction of the proposed alignment. Stormwater in the drainage system would flow via gravity to the proposed outfall. There would be no long-term increase in energy consumption associated with the proposed Bayview Street Relief Drain project.

# 7 INDIVIDUALS, COMMUNITY GROUPS, AND AGENCIES CONSULTED

## 7.1 CONSULTATION

### 7.1.1 EARLY CONSULTATION

Preliminary consultation with agencies, organizations, and individuals was conducted during preparation of the Draft EA and Revised Draft EA for the Bayview Street Relief Drain project. The following agencies were consulted:

State of Hawaii, State Historic Preservation Division
State of Hawaii, Department of Health
State of Hawaii, Department of Parks and Recreation
State of Hawaii, Office of Hawaiian Affairs (OHA)
City and County of Honolulu, Department of Transportation Services
City and County of Honolulu, Department of Planning and Permitting
Chair of Waiʻanae Coast Neighborhood Board (2005) – Cynthia Rezentes
Waiʻanae Community Members
- William Aila – Harbor Master (2005)
- Glen Kila – Koa Mana group (2005)
- Charles Lopez – Head of Waiʻanae ahupuaʻa (2005)
- Alika Silva – Koa Mana group (2005)

Agencies, organizations, and individuals that provided written comments for the project Revised Draft EA are included in Appendix A of this document. Comments received have been addressed in the appropriate sections of the EA.

### 7.1.2 INDIVIDUALS CONTACTED FOR THE 2005 CULTURAL IMPACT ASSESSMENT

A group of individuals from the Waiʻanae community was selected to assist in the assessment of potential impacts to cultural resources from implementation of the proposed action by contacting the Chair of the Waiʻanae Neighborhood Board for recommendations. Chair Cynthia Rezentes identified three individuals, including William Aila, Harbor Master; Charles Lopez, head of the Waiʻanae ahupuaʻa; and Glen Kila of the group Koa Mana. Consultation with individuals in the Waiʻanae community occurred in November and December of 2004, and January 2005 via telephone interviews. As recommended by Glen Kila, Alika Silva was also contacted. Additional telephone consultation with Glen Kila, Alika Silva, and William Aila occurred in February and March of 2005. Following the telephone interview, these individuals were sent (via fax and/or postal mail) written descriptions of the project scope and figures so they could more clearly understand the extent of the project. There were no written responses from the community members to this correspondence.

In the telephone interviews, the main concern expressed by the community members mentioned above was regarding the potential for unearthing *iwi* during construction and that the proper protocols were followed in handling the burial remains. Historic uses of the area as described by these individuals include an old rail station, fishing village, plantation area, and Hawaiian and

Chinese burial grounds. William Aila recommended that an archaeologist and cultural monitor be present during construction in areas where there is sand. Glen Kila also recommended that a cultural monitor be present during construction in areas where there is sand. Glen Kila and Alika Silva expressed the need for explicit protocol to be agreed upon during the event of discovery, and emphasized the need for recognized lineal descendants to be consulted. While members in the Wai‘anae community have recommended several individuals to serve as cultural monitors to the project, no individual has been selected.

### 7.1.3 COMMENTS AND RESPONSES ON THE DRAFT EA

Notification of the availability of the Draft EA was published in the November 8, 2011 *The Environmental Notice* by OEQC, in addition to the Honolulu Star Advertiser and Wai‘anae Public Library. During the 30-day public comment period ending December 7, 2011, agencies, organizations, and individuals were provided the opportunity to comment on the proposed project. The comment period was extended to allow several agencies to submit comments beyond the submittal deadline. Agencies that provided written comment are listed below. The comment letters and responses are included in Appendix B of this document.

## 7.2 ENVIRONMENTAL ASSESSMENT PREPARATION

This Final EA was prepared for the City and County of Honolulu Department of Design and Construction by Bow Engineering & Development, Inc. The following consultants were involved in the preparation of this document:

| | |
|---|---|
| William H. Q. Bow, P.E. | President, Bow Engineering & Development, Inc. |
| Raadha M. B. Jacobstein | Project Planner, RMBJ Consulting |
| Ezra Lum | Project Engineer, Bow Engineering & Development, Inc. |

# 8 REFERENCES


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Teruya, Terrance, 2004. Environmental Health Specialist, Clean Water Branch, Environmental Management Division, Hawaii Department of Health. Personal communications with Raadha M. B. Jacobstein regarding water quality in the Pōkaʻī Bay area. October 22, 2004 and October 28, 2004.

U.S. Department of Agriculture, Natural Resources Conservation Service (formerly Soil Conservation Service, Soil Survey of Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii. August 1972.

# APPENDIX A

# EARLY CONSULTATION

The following correspondences include responses to early consultation requests from the agencies listed below. The content of this consultation has been incorporated into the analysis contained in this Revised Draft EA.

**State Agencies**

* Department of Health (DOH)
* Office of Hawaiian Affairs (OHA)
* DLNR, State Historic Preservation Division

**Local Agencies**

* City and County of Honolulu, Department of Parks and Recreation
* City and County of Honolulu, Department of Transportation Services
* City and County of Honolulu, Department of Planning and Permitting

LINDA LINGLE
GOVERNOR OF HAWAII

CHIYOME L. FUKINO, M.D.
DIRECTOR OF HEALTH

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

In reply, please refer to:
EMD / CWB

09094PMT.08

September 26, 2008

Mr. Raaadha M. B. Jacobstein
Environmental Planner
Bow Engineering & Development, Inc.
1953 S. Beretania Street, PH-A
Honolulu, Hawaii 96826

Dear Mr. Jacobstein:

**Subject: Proposed Revision to Draft Environmental Assessment (DEA) of February 2005**
**City and County of Honolulu**
**Department of Design & Construction**
**Revised Bayview Street Relief Drain Project**
**Waianae, Oahu, Hawaii**
**Tax Map Key: 8-5-008:035, 36, 43, 44, 45, 49; and 8-5-001:62**

The Department of Health, Clean Water Branch (CWB), has reviewed your letter dated September 12, 2008, that was submitted regarding the subject project and offers these comments. Please note that our review is based solely on the information provided in your letter for the subject project and its compliance with Hawaii Administrative Rules (HAR), Chapters 11-54 and 11-55. You may be responsible for fulfilling additional requirements related to our program. We recommend that you also read our standard comments on our website at http://www.hawaii.gov/health/environmental/env-planning/landuse/CWB-standardcomment.pdf.

1. Any project and its potential impacts to State waters must meet the following criteria:

   a. Antidegradation policy (HAR, Section 11-54-1.1), which requires that the existing uses and the level of water quality necessary to protect the existing uses of the receiving State water be maintained and protected.

   b. Designated uses (HAR, Section 11-54-3), as determined by the classification of the receiving State waters. In particular, the revised DEA should demonstrate that the designated and existing uses of the State waters within and adjacent to the existing unlined drainage channel will be protected and maintained during the construction and operation of the proposed revised storm water drainage system.

   c. Water quality criteria (HAR, Sections 11-54-4 through 11-54-8).

2. The Pokai Bay is identified as a Category 5 waters in the Section 303(d) of the Clean Water Act list of impaired water bodies. Priority 5 waters are described as surface waters where available data and/or information indicate that at least one (1) designated use is not being supported or is threatened, and a Total Maximum Daily Loads (TMDL) is needed. The Pokai Bay is presently identified as not attaining the applicable water quality standard for nutrients, turbidity, and chlorophyll a. Accordingly, the subject DEA should also include this consideration toward ensuring the protection and improvement of this water body with respect to the subject project.

3. You are required to obtain a National Pollutant Discharge Elimination System (NPDES) permit for discharges of wastewater, including storm water runoff, into State surface waters (HAR, Chapter 11-55). For the following types of discharges into Class A or Class 2 State waters, you may apply for NPDES general permit coverage by submitting a Notice of Intent (NOI) form:

   a. Storm water associated with construction activities, including clearing, grading, and excavation, that result in the disturbance of equal to or greater than one (1) acre of total land area. The total land area includes a contiguous area where multiple separate and distinct construction activities may be taking place at different times on different schedules under a larger common plan of development or sale. An NPDES permit is required before the start of the construction activities.

   b. Construction dewatering effluent.

   You must submit a separate NOI form for each type of discharge at least 30 calendar days prior to the start of the discharge activity, except when applying for coverage for discharges of storm water associated with construction activity. For this type of discharge, the NOI must be submitted 30 calendar days before to the start of construction activities. The NOI forms may be picked up at our office or downloaded from our website at http://www.hawaii.gov/health/environmental/water/cleanwater/forms/genl-index.html.

4. For types of wastewater not listed in Item 3 above or wastewater discharging into Class 1 or Class AA waters, you may need an NPDES individual permit. An application for an NPDES individual permit must be submitted at least 180 calendar days before the commencement of the discharge. The NPDES application forms may be picked up at our office or downloaded from our website at http://www.hawaii.gov/health/environmental/water/cleanwater/forms/indiv-index.html.

5. You must also submit a copy of the NOI or NPDES permit application to the State Department of Land and Natural Resources, State Historic Preservation Division (SHPD), or demonstrate to the satisfaction of the CWB that SHPD has or is in the process of evaluating your project. Please submit a copy of your request for review by SHPD or SHPD's determination letter for the project along with your NOI or NPDES permit application, as applicable.

6. The City and County of Honolulu (CCH), Municipal Separate Storm Sewer System, NPDES Permit No. HI S000002, Storm Water Management Plan shall be modified, revised, or amended to reflect the proposed revisions to the existing drainage system, as appropriate.

7. Please call the Army Corps of Engineers (ACOE) at (808) 438-9258 to see if this project requires a Department of the Army (DA) permit. Permits may be required for work performed in, over, and under navigable waters of the United States. Projects requiring a DA permit also require a Section 401 Water Quality Certification (WQC) from our office.

8. Please note that all discharges related to the project construction or operation activities, whether or not NPDES permit coverage and/or Section 401 WQC are required, must comply with the State's Water Quality Standards. Noncompliance with water quality requirements contained in HAR, Chapter 11-54, and/or permitting requirements, specified in HAR, Chapter 11-55, may be subject to penalties of $25,000 per day per violation.

If you have any questions, please visit our website at http://www.hawaii.gov/health/environmental/water/cleanwater/index.html, or contact the Engineering Section, CWB, at 586-4309.

Sincerely,

THOMAS E. ARIZUMI, P.E., CHIEF
Environmental Management Division

c: Mr. Gerald Takayesu, Storm Water Quality Branch,
Department of Environmental Services, CCH [via fax 768-3289 only]

State of Hawai‘i, Department of Health, Clean Water Branch (CWB)
September 26, 2008

This letter relates comments from the CWB on the proposed Bayview Street Relief Drain project. The letter provides details on compliance with Hawaii Administrative Rules (HAR), Chapters 11-54 and 11-55. Potential impacts to water quality and marine environment as a result of the proposed project are evaluated in Revised Draft EA Section 3.4. With implementation of Best Management Practices and regular maintenance and removal of debris from the drainage system, the proposed action would be compliant with the State's anti-degradation policy (HAR §11-54-1.1).

The Revised Draft EA Section 3.4 includes a discussion of existing water quality at the project site and the potential impacts of the project on water quality. The proposed project would not be increasing the drainage area or the amount of catch basins and inlets than currently exist. During construction of the project, the contractor would need to implement current Best Management Practices to minimize potential impacts to water quality.

As described in this section, construction activities disturbing one or more acres are regulated under the National Pollutant Discharge Elimination System (NPDES) stormwater program and are required by the State to obtain a NPDES permit. The NPDES permit will require a stormwater pollution prevention plan and best management practices designed to reduce potential impacts to water quality during construction of the project. As included in the Revised Draft EA, the proposed action may require a Department of the Army (DA) permit from the Army Corps of Engineers and a Section 401 Water Quality Certification (WQC) from the State Department of Health. These permits would be obtained during the design phase of the project.

PHONE (808) 594-1888

FAX (808) 594-1865

**STATE OF HAWAI'I**
**OFFICE OF HAWAIIAN AFFAIRS**
711 KAPI'OLANI BOULEVARD, SUITE 500
HONOLULU, HAWAI'I 96813

RECEIVED
OCT 16 2008
BOW ENGINEERING & DEVELOPMENT, INC

HRD08/3842

October 6, 2008

Raadha Jacobstein
Bow Engineering & Development, Inc.
1953 S. Beretania Street, PH-A
Honolulu, Hawai'i 96826

**RE: Request for comments on the proposed Bayview Street drain project, Wai'anae, O'ahu, TMKs: 8-5-8: 35, 36, 43, 44, 45, 49 and 8-5-1: 62.**

Aloha e Raadha Jacobstein,

The Office of Hawaiian Affairs (OHA) is in receipt of the above-mentioned letter dated September 12, 2008. OHA has reviewed the project and offers the following comments.

OHA notes that the subject land is designated as Section 5(b) Ceded Lands, which hold a considerable amount of sentimental, historical and legal significance for Native Hawaiians and OHA. These lands were illegally taken from the Hawaiian Kingdom after the 1893 overthrow and later transferred ("ceded") by the United States government to the State of Hawai'i upon statehood. As such, we request that they be treated with the respect due to them, as they are part of the 1.8 million acres of land that belong to the Hawaiian monarchy and were transferred to the state when Hawai'i became a U.S. state. In addition, OHA urges that future documents refer to this parcel as ceded lands so that their special status is known to others and to facilitate the continued registry, creation and maintenance of an accurate ceded lands inventory. Today, the state holds the Ceded Lands corpus in trust for Native Hawaiians and the general public

OHA inquires as to the water quality and state designation of Pōka'ī Bay. As the receiving waters for this proposal, their water quality standards and uses must be maintained. OHA realizes that the drainage channel has a National Pollutant Discharge Elimination System permit; however, this project does not and as such this proposal's additional effects must be considered.

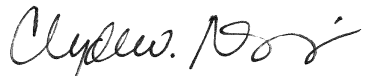
OHA appreciates that catch basins are planned for. OHA generally wishes to see runoff as a resource rather than a nuisance to be channeled and drained away. As stormwater travels down a drainage system, it accumulates industrial waste, pesticides, oils, and chemicals. These pollutants quickly settle into the nearshore sediments and are re-suspended into the water column when disturbed. The use of permeable paving materials can be used to retain some of the rain that falls and catch basins can capture and help to slow the runoff thereby reducing turbidity. OHA suggests that the drainage channel be altered from its smooth bottom with the addition of berms, blocks, or recessed 'checkerboards' to further reduce the introduction of sediments and turbidity into Pōka'ī Bay.

OHA also appreciates that the applicant wishes to minimize impacts to unknown historic or cultural remains. In our experience, however, relying on the absence of cultural deposits being in formerly disturbed areas can be detrimental. The presence of many cultural deposits commonly being found in heavily urbanized Honolulu can attest to this.

OHA notes that storm drains are proposed for this project. Inflow of storm runoff through manhole covers, particularly in areas that are inundated due to poor drainage, can be significant. The City has an ongoing program to outfit manholes with "rain stopper" inserts to minimize the amount of rainwater entering the manhole cover pick-holes and leaking between the cover and frame. The intent is to reduce inflow and infiltration which will result in additional capacity in the existing system, decrease the extent of sulfates in the wastewater to reduce potential for odors and corrosion, reduce peak flows and mitigate the need for wet-weather storage facilities.

Thank you for the opportunity to comment. If you have further questions, please contact Grant Arnold by phone at (808) 594-0263 or e-mail him at granta@oha.org.

'O wau iho nō me ka 'oia'i'o,



Clyde W. Nāmu'o
Administrator

State of Hawai‘i, Office of Hawaiian Affairs (OHA)
October 6, 2008

This letter from OHA notes that the project site is designated as Section 5(b) Ceded Lands, of particular historical and cultural significance to Native Hawaiians. Potential impacts to historic and cultural resources are described in Section 3.9 of the EA, and mitigation measures are included to avoid adverse affects.

The OHA letter also recommends that water quality in the project area be described, in addition to potential impacts to receiving waters. This information is included in Section 3.4, *Water Quality and Marine Environment* of the EA, in addition to permits that may be required for the action.

The OHA letter comments on the proposed catch basins, and recommends the use of permeable paving materials. The project consists of increasing the pipe size to increase the flow capacity of the drainage system and replacing the inlets and catch basins. As proposed, the drainage area or the amount of catch basins or inlets would not be increased, and therefore in theory would not increase the amount of pollutants entering the system. However, during large storm events, the drainage system "washes out" the pipes or carries the accumulated pollutants and rubbish into the receiving waters. Some trash may continue to accumulate at the mouth of the outlet as it currently does at Pōka‘ī Bay. These potential impacts would be minimized by completing regular maintenance and cleaning of the drainage system.

The only type of paving work for this project would consist of the restoration work for replacing the pipes, catch basins, and inlets. The proposed improvements would need to follow the City and County Standards, which currently does not allow porous paving materials. Water velocities would be kept to a minimum due to the very shallow slopes. The only type of surface flow would be at the outlet, which currently consists of a natural grass swale.

The OHA letter also notes storm drains are proposed for the project, and mentions "rain stoppers" to minimize the amount of rainwater entering the manhole covers. The rain stoppers are typically used for sanitary sewer systems. The proposed action is intended to address flooding in this area, and therefore surface flow into the drainage system is being accounted for. However, there can be problems if groundwater infiltration occurs. This can be avoided by using standard construction practices.

Finally, OHA notes that cultural deposits have been found in previously disturbed areas. As discussed in Section 3.9 of the EA, there is the potential for burial sites or other historic or cultural remains within the project alignment despite the history of disturbance and modern development along the proposed project alignment. With implementation of mitigation measures, potential adverse effects to cultural, historic, or archaeological resources would be minimized.

LINDA LINGLE
GOVERNOR OF HAWAII

LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

RUSSELL Y. TSUJI
FIRST DEPUTY

KEN C. KAWAHARA
DEPUTY DIRECTOR - WATER

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

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

STATE HISTORIC PRESERVATION DIVISION
601 KAMOKILA BOULEVARD, ROOM 555
KAPOLEI, HAWAII 96707

October 29, 2008

Raadha M.B. Jacobstein, Environmental Planner
Bow Engineering & Development, Inc.
1953 S. Beretania Street, PH-A
Honolulu, Hawai'i 96826

LOG NO: 2008.4224
DOC NO: 0810ED34
Archaeology

Dear Mr. Jacobstein:

**SUBJECT:** **Chapter 6E-8 Historic Preservation Review –**
**Revised Bayview Street Relief Drainage Project**
**Wai'anae Ahupua'a, Wai'anae District, Island of O'ahu**
**TMK: (1) 8-5-008:035, 036, 044, 045, 049 and 8-5-001:062**

Thank you for the opportunity to comment on the aforementioned project. We received the submittal on September 15, 2008. The proposed undertaking involves storm drain improvements between Farrington Highway and Pōka'ī Bay.

Per the submittal, our office commented on the subject project (LOG NO: 2005.0948, DOC NO: 0505NN01) in May 2005. At that time, the proposed undertaking included construction of a drainage alignment that would redirect drainage to an existing unlined drainage channel. The project has since changed and the current project includes drainage improvements along the existing alignment. Improvements include replacing a portion of the existing drainage system with High Density Polyethylene Pipes (HDPE) and larger diameter drain pipes varying in size from 18 to 54 inches in diameter.

Our May 5, 2005 letter recommended that on-site archaeological monitoring be conducted in accordance with an approved monitoring plan. Our recommendation still stands and we request that an archaeological monitoring plan be submitted to our office for review and approval prior to commencing any ground disturbing activities.

Please contact Teresa Kaneakua-Davan at (808) 692-8015 if you have any questions or concerns regarding this letter.

Aloha,

Nancy A. McMahon

Nancy McMahon, Archaeology and Historic Preservation Manager
State Historic Preservation Division

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BOW ENGINEERING & DEVELOPMENT, INC

State of Hawaii, Department of Land and Natural Resources, State Historic Preservation Division
October 29, 2008

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This letter relates comments from the SHPD on their review of the proposed Bayview Street Relief Drain project. The letter reconfirms the SHPD recommendation for on-site archaeological monitoring to be conducted with an approved monitoring plan. Potential impacts to historic and cultural resources are described in Section 3.9 of the Revised Draft EA, and mitigation measures are included to minimize potential adverse effects to historic and cultural resources.

DEPARTMENT OF PARKS AND RECREATION
CITY AND COUNTY OF HONOLULU
KAPOLEI HALE • 1000 ULUOHIA STREET, SUITE 309 • KAPOLEI, HAWAII 96707
TELEPHONE: (808) 768-3003 • FAX: (808) 768-7053 • INTERNET: www.honolulu.gov

MUFI HANNEMANN
MAYOR

LESTER K.C. CHANG
DIRECTOR

GAIL Y. HARAGUCHI
DEPUTY DIRECTOR

RECEIVED
OCT 1 2008
BOW ENGINEERING & DEVELOPMENT, INC

September 29, 2008

Mr. Ezra Lum
Bow Engineering & Development, Inc.
1953 S. Beretania Street, PH-A
Honolulu, Hawaii 96826

Dear Mr. Lum:

Subject: Bay View Street-Relief Drain Project
Revised Draft Environmental Assessment

Thank you for the opportunity to review and comment on the proposed revisions to the Bayview Street Relief Drain project.

We understand that the Department of Design and Construction has recommended the proposed relief drain project be constructed over the existing drainage alignment as a result of concerns over potential impacts to unknown historic or cultural remains if they were to be constructed over the alignment proposed in the 2005 Environmental Assessment.

The existing alignment runs through Pokai Bay Beach Park and the proposed project increasing the size of the drainage pipe from 24 inches up to 44 or 48 inches has the potential to significantly impact the park over the six months this project is estimated to be under construction.

Please contact our District 3 Park Manager's office at 675-6033 as early as you can once the construction schedule is determined. They can assist you in securing the required right of entry, approving any mobilization/construction/equipment site the contractor may request on park property, requests to relocate trees, and to coordinate any other construction related activities to mitigate the impact of construction to park users and potential damage to other areas of the park from construction equipment.

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

Sincerely,

LESTER K. C. CHANG
Director

LKCC:jr
(279053)

cc: Dexter Liu, D-3

City and County of Honolulu, Department of Parks and Recreation
September 29, 2008

This letter includes comments from the Department of Parks and Recreation on the proposed Bayview Street Relief Drain project. The letter includes contact information for coordination and approval for any construction at Pokai Bay Beach Park. Potential impacts to recreation resources are described in Section 3.7 of the Revised Draft EA.

DEPARTMENT OF TRANSPORTATION SERVICES

**CITY AND COUNTY OF HONOLULU**

650 SOUTH KING STREET, 3RD FLOOR
HONOLULU, HAWAII 96813
Phone: (808) 768-8305 • Fax: (808) 523-4730 • Internet: www.honolulu.gov

MUFI HANNEMANN
MAYOR

WAYNE Y. YOSHIOKA
DIRECTOR

RICHARD F. TORRES
DEPUTY DIRECTOR

TP9/08-279066R

October 1, 2008

Ms. Raadha M.B. Jacobstein
Environmental Planner
Bow Engineering & Development, Inc.
1953 South Beretania Street, PH-A
Honolulu, Hawaii 96826

Dear Ms. Jacobstein:

Subject: Revised Bayview Street Relief Drain Project, Request for Review

This is in response to your letter of September 12, 2008, requesting our review of the proposed revisions to the Bayview Street Relief Drain Project. We offer the following comments:

1. This project will affect TheBus Route 401 which provides bus service up Waianae Valley Road. Since the intersection of Farrington Highway and Waianae Valley Road is too narrow for buses to make the right turn from Farrington Highway, buses must turn left on Lualualei Homestead Road, right onto Pokai Bay, and then right on Waianae Valley Road (see attached). This section of Waianae Valley Road is already narrow and the proposed drain alignment is across the street from a bus stop. Please send us construction drawings as soon as possible so we can determine if construction will affect operations to the extent that we need to re-route the bus. The scope of work, location, proposed closure of any street, traffic lane, or bus stop and duration of project should be forwarded to Sandra Abelaye at 768-8371 or sabelaye@honolulu.gov, and Oahu Transit Services, Inc. (bus operations: Art Akana 852-6030 – para-transit operations: John Black 454-5041).

2. The appropriate neighborhood board as well as the area residents, businesses, emergency and bus personnel should be kept apprised of the progress and details of the project as it moves forward.

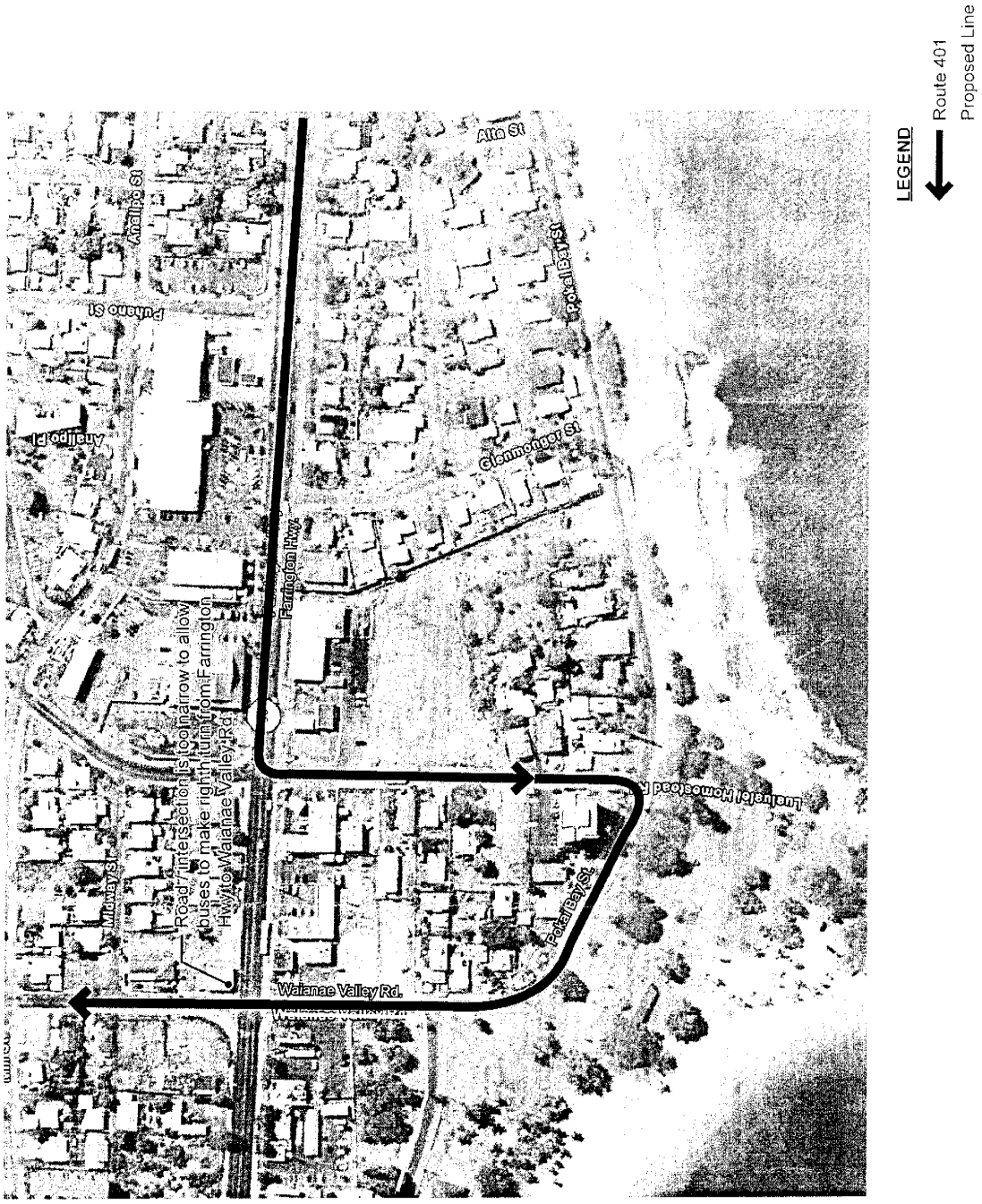
Ms. Raadha M.B. Jacobstein
Page 2
October 1, 2008

Should you have any questions on the matter, please contact Mr. Brian Suzuki at 768-8349.

Very truly yours,

WAYNE Y. YOSHIOKA
Director

Attachment


LEGEND
Route 401
Proposed Line
Alta St
Analipo St
Puhano St
Analipo Pl
Pokal Bay St
Glenmonger St
Farrington Hwy.
Road / intersection is too narrow to allow buses to make right turn from Farrington Hwy to Waianae Valley Rd.
Lualualei Homestead Rd
Pokal Bay St.
Waianae Valley Rd.
Midway St.

City and County of Honolulu, Department of Transportation Services
October 1, 2008

This letter from the Department of Transportation Services identifies potential impacts to public transportation. Potential impacts to traffic and transportation are described in Section 3.13 of the Revised Draft EA.

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 7TH FLOOR • HONOLULU, HAWAII 96813
TELEPHONE: (808) 768-8000 • FAX: (808) 527-6743
INTERNET: www.honolulu.gov • DEPT. WEB SITE: www.honoluludpp.org

MUFI HANNEMANN
MAYOR

HENRY ENG, FAICP
DIRECTOR

DAVID K. TANOUE
DEPUTY DIRECTOR

2008/ELOG-2280(ST)

November 6, 2008

RECEIVED
NOV 10 2008
BOW ENGINEERING & DEVELOPMENT, INC

Ms. Raadha M. B. Jacobstein
Environmental Planner
Bow Engineering & Development, Inc.
1953 South Beretania Street, PH-A
Honolulu, Hawaii 96826

Dear Ms. Jacobstein:

Subject: Revised Bayview Street Storm Relief Drain Project
Bayview and Pokai Bay Streets - Waianae
Tax Map Key 8-5-1: 62; 8-5-8: 35, 36, 43, 44, 45, and 49

We have reviewed the information transmitted by your letter dated September 12, 2008, regarding the changes to the proposed project previously disclosed in an Environmental Assessment (EA) in 2005. You indicate that the project has been revised to utilize larger capacity drain pipes that may require more extensive trenching along the existing street rights-of-way and storm drain easements.

Based on this information, we reiterate the comments contained in our letter of March 21, 2005, that the project will not require a Special Management Area (SMA) Use Permit pursuant to Section 25-1.3(2)(D) and (M), Revised Ordinances of Honolulu. Please note that the applicant still needs to submit a traffic control plan to the DPP Traffic Review Branch (TRB), notify residents prior to commencement of work, and obtain trenching permits from the DPP Civil Engineering Branch (CEB). Copies of plans and inspections of the existing sewer line in the project area are available in our Wastewater Branch.

If you have any questions regarding this letter, please call Steve Tagawa of our staff at 768-8024.

Very truly yours,

Elizabeth A.

for Henry Eng, FAICP, Director
Department of Planning and Permitting

HE:nt

G:\SteveT\SMAs\2008\PokaidrainRevEA.doc

City and County of Honolulu, Department of Planning and Permitting
November 6, 2008

This letter from the Department of Planning and Permitting states that the proposed project would not require a Special Management Area (SMA) permit. Land use controls applicable to the proposed project are discussed in Section 3.14 of the Revised Draft EA.

# APPENDIX B

# COMMENTS ON THE REVISED DRAFT ENVIRONMENTAL ASSESSMENT AND RESPONSES TO SUBSTANTIVE COMMENTS

## APPENDIX B

Notification of the availability of the Revised Draft Environmental Assessment (EA) was published in the November 8, 2011 *The Environmental Notice* by the State Office of Environmental Quality Control. During the 30-day public comment period ending December 7, 2011, agencies, organizations, and individuals were provided the opportunity to comment on the proposed project. The comment period was extended to allow several agencies to submit comments beyond the submittal deadline. The following correspondences include comments on the Revised Draft EA from the agencies listed below, in addition to responses to substantive comments. The content of this consultation has been incorporated into the analysis contained in this EA.

| | | |
|---|---|---|
| **Federal Agencies** | | |
| * | National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NMFS) | December 12, 2011 |
| **State Agencies** | | |
| * | Department of Labor and Industrial Relations | November 14, 2011 |
| * | Department of Education (DOE) | November 29, 2011 |
| * | Department of Health (DOH) | November 29, 2011 |
| * | Department of Defense | December 1, 2011 |
| * | Office of Environmental Quality Control | December 6, 2011 |
| * | Department of Transportation | December 7, 2011 |
| * | Department of Accounting and General Services (DAGS) | November 16, 2011 |
| * | Department of Land and Natural Resources, Land Division | December 22, 2011 |
| * | Department of Land and Natural Resources, Land Division | December 27, 2011 |
| * | Department of Land and Natural Resources, Land Division | December 28, 2011 |
| **City and County of Honolulu** | | |
| * | Board of Water Supply | November 16, 2011 |
| * | Department of Facility Maintenance | November 16, 2011 |
| * | Department of Community Services | November 17, 2011 |
| * | Department of Parks and Recreation | November 19, 2011 |
| * | Police Department | November 25, 2011 |
| * | Honolulu Fire Department | November 28, 2011 |
| * | Department of Transportation Services | December 2, 2011 |
| * | Department of Planning and Permitting | December 6, 2011 |

NEIL ABERCROMBIE
GOVERNOR

DWIGHT TAKAMINE
DIRECTOR

AUDREY HIDANO
DEPUTY DIRECTOR

**STATE OF HAWAII**
**DEPARTMENT OF LABOR AND INDUSTRIAL RELATIONS**
830 PUNCHBOWL STREET, ROOM 321
HONOLULU, HAWAII 96813
www.hawaii.gov/labor
Phone: (808) 586-8844/Fax: (808) 586-9099

November 14, 2011

Mr. Gary Kam
City and County of Honolulu
Department of Design and Construction
650 S. King Street, 15th Floor
Honolulu, HI 96813

Mr. Ezra Lum
Bow Engineering & Development, Inc.
1953 S. Beretania Street, PH-A
Honolulu, HI 96826

Dear Mr. Kam and Mr. Lum:

This is in response to your request for comments dated November 4, 2011, on the Draft Environmental Assessment for the Bayview Street Relief Drain Project located in Waianae, island of Oahu. The Department of Labor and Industrial Relations has no comments, and we foresee no impact on our existing or proposed programs.

Should you have any questions, please call me at 586-8844.

Sincerely,

DWIGHT TAKAMINE
Director

**Bow Engineering & Development, Inc.**
**1953 S. Beretania Street, PH-A**
**Honolulu, Hawaii 96826-1342**

**Telephone: (808) 941-8853**
**Fax: (808) 945-9299**
**www.bowengineering.com**

April 6, 2012

File: Bayview

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

RE: Comments on the Revised Draft Environmental Assessment (EA)
Bayview Street Relief Drain Project
Wai'anae, Island of O'ahu

Dear Dwight Takamine;

Thank you for your letter dated November 14, 2011 regarding your review of the Revised Draft Environmental Assessment for the Bayview Street Relief Drain Project. We acknowledge your statement that you have no comments at this time, and that you anticipate no impacts from this project on your existing and proposed programs.

Your letter and this response will be included in the Final EA upon its completion. We appreciate your participation in the environmental review process for this project.

Should you have any questions or comments please feel free to contact Ezra Lum at our office at (808) 941-8853, extension 114, or Ezra Lum at ELum@bowengineering.com.

Yours truly,

Ezra Lum
**BOW ENGINEERING & DEVELOPMENT, INC.**

CC: Gary Kam, City and County of Honolulu, Department of Design and Construction

NOV 18 2011

**BOARD OF WATER SUPPLY**

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

November 16, 2011

PETER B. CARLISLE, MAYOR

RANDALL Y. S. CHUNG, Chairman
DENISE M. C. DE COSTA, Vice Chair
THERESIA C. McMURDO
DUANE R. MIYASHIRO
ADAM C. WONG

WESTLEY K.C. CHUN, Ex-Officio
GLENN M. OKIMOTO, Ex-Officio

DEAN A. NAKANO
Acting Manager

Mr. William H. Q. Bow, P.E.
President
Bow Engineering & Development, Inc.
1953 South Beretania Street, PH-A
Honolulu, Hawaii 96826

Dear Mr. Bow:

Subject: Your Letter Dated November 4, 2011 Requesting Comments on the Draft Environmental Assessment for the Bayview Street Relief Drain Project, TMK: 8-5-8: 35, 36, 43, 44, 45, 49, and 8-5-1: 62

Thank you for the opportunity to comment on the proposed storm drain improvements project.

The construction drawings should be submitted for our review.

The construction schedule should be coordinated to minimize impact to the water system.

If you have any questions, please contact Robert Chun at 748-5443.

Very truly yours,

Susan Uyesugi

SUSAN UYESUGI
Program Administrator
Customer Care Division

cc: Mr. Gary Kam, Department of Design and Construction

**Bow Engineering & Development, Inc.**
**1953 S. Beretania Street, PH-A**
**Honolulu, Hawaii 96826-1342**

**Telephone: (808) 941-8853**
**Fax: (808) 945-9299**
**www.bowengineering.com**

April 6, 2012

File: Bayview

Susan Uyesugi, Program Administrator
City and County of Honolulu
Board of Water Supply
630 South Beretania Street
Honolulu, HI 96843

RE: Comments on the Revised Draft Environmental Assessment (EA)
Bayview Street Relief Drain Project
Wai'anae, Island of O'ahu

Dear Ms. Uyesugi;

Thank you for your letter dated November 16, 2011 regarding your review of the Revised Draft Environmental Assessment for the Bayview Street Relief Drain Project. As suggested in your letter, the construction drawings will be submitted for your review, and the construction schedule will be coordinated to minimize impacts to the water system during the design and construction phases of the project.

Your letter and this response will be included in the Final EA upon its completion. We appreciate your participation in the environmental review process for this project.

Should you have any questions or comments please feel free to contact Ezra Lum at our office at (808) 941-8853, extension 114, or Ezra Lum at ELum@bowengineering.com.

Yours truly,

Ezra Lum
**BOW ENGINEERING & DEVELOPMENT, INC.**

CC: Gary Kam, City and County of Honolulu, Department of Design and Construction

DEPARTMENT OF FACILITY MAINTENANCE

**CITY AND COUNTY OF HONOLULU**

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

RECEIVED
NOV 28 2011
BOW ENGINEERING & DEVELOPMENT, INC

PETER B. CARLISLE
MAYOR

WESTLEY K.C. CHUN, Ph.D., P.E., BCEE
DIRECTOR & CHIEF ENGINEER

KENNETH A. SHIMIZU
DEPUTY DIRECTOR

IN REPLY REFER TO:
DRM 11-941

November 16, 2011

Mr. Ezra Lum
Bow Engineering & Development, Inc.
1953 S. Beretania Street, PH-A
Honolulu, Hawaii 96826

Dear Mr. Lum:

Subject: Bayview Street Relief Drain Project
Portions of TMK: 8-5-008:035, 036, 043, 044, 045, 049
And TMK: 8-5-001:062

Thank you for allowing us the opportunity to review the Revised Draft Environmental Assessment for the subject project. We do not have any comments at this time.

Should you have any questions, please call Thomas Takeuchi of the Division of Road Maintenance, at 768-3608.

Sincerely,

Westley K.C. Chun, Ph.D., P.E., BCEE
Director & Chief Engineer

**Bow Engineering & Development, Inc.**
**1953 S. Beretania Street, PH-A**
**Honolulu, Hawaii 96826-1342**

**Telephone: (808) 941-8853**
**Fax: (808) 945-9299**
**www.bowengineering.com**

April 6, 2012

File: Bayview

Westley K.C. Chun, Director & Chief Engineer
City and County of Honolulu
Department of Facility Maintenance
1000 Uluohia Street, Suite 215
Kapolei, HI 96707

RE: Comments on the Revised Draft Environmental Assessment (EA)
Bayview Street Relief Drain Project
Wai'anae, Island of O'ahu

Dear Mr. Chun;

Thank you for your letter dated November 16, 2011 regarding your review of the Revised Draft Environmental Assessment for the Bayview Street Relief Drain Project. We acknowledge your statement that you have no comments at this time.

Your letter and this response will be included in the Final EA upon its completion. We appreciate your participation in the environmental review process for this project.

Should you have any questions or comments please feel free to contact Ezra Lum at our office at (808) 941-8853, extension 114, or Ezra Lum at ELum@bowengineering.com.

Yours truly,

Ezra Lum
**BOW ENGINEERING & DEVELOPMENT, INC.**

CC: Gary Kam, City and County of Honolulu, Department of Design and Construction

NOV 21 2011

DEPARTMENT OF COMMUNITY SERVICES
CITY AND COUNTY OF HONOLULU
715 SOUTH KING STREET, SUITE 311 ● HONOLULU, HAWAII 96813 ● AREA CODE 808 ● PHONE: 768-7762 ● FAX: 768-7792

PETER B. CARLISLE
MAYOR

SAMUEL E. H. MOKU
DIRECTOR

BRIDGET HOLTHUS
DEPUTY DIRECTOR

November 17, 2011

**MEMORANDUM**

To: Collins Lam, P. E., Director
Department of Design and Construction

ATTN: Gary Kam, Civil Engineer
Department of Design and Construction

From: Samuel E. H. Moku, Director
Department of Community Services

Subject: Bayview Street Relief Drain Project
Revised Draft Environmental Assessment

Thank you for providing us with the opportunity to review and comment on the subject Revised Draft Environmental Assessment (DEA). At this time, we have determined that the subject project will have no adverse impact on the projects and programs of the City and County of Honolulu's Department of Community Services.

However, we would like to bring to your attention our experience that most Federal agencies require, as a condition of release of funds, compliance to the National Environmental Policy Act (NEPA), 42 United States Code (USC) §4321 et seq. NEPA subjects recipients of federal funding to consider how their actions may effect the environment. NEPA, although similar in content to the State of Hawaii's Chapter 343 Hawaii Revised Statutes (HRS) Environmental Assessment, evaluates compliance with Federal Regulations and statues including, but not limited to, Section 106 the National Historic Preservation Act, Section 7 the Endangered Species Act, Section 404 the Clean Water Act, Executive Order 12898 (Environmental Justice), and Executive Order 11990 (Wetland Protection).

Therefore, if there is a possibility that you would apply for Federal funds for the construction of this project, we strongly suggest that you direct your consultant to consider including NEPA analysis in your environmental compliance documents.

In closing, we look forward to receiving the supplemental information and appreciate the opportunity to provide comments. In addition, we eagerly anticipate reviewing your Final EA when it becomes available. Questions regarding this matter may be directed to Environmental Compliance Planner Randall Goto at 768-7756.

SEHM:rg

cc: William H. Q. Bow, P. E., Bow Engineering & Development Inc.

**Bow Engineering & Development, Inc.**
**1953 S. Beretania Street, PH-A**
**Honolulu, Hawaii 96826-1342**

**Telephone: (808) 941-8853**
**Fax: (808) 945-9299**
**www.bowengineering.com**

April 6, 2012

File: Bayview

Samuel E. H. Moku, Director
City and County of Honolulu
Department of Community Services
715 South King Street, Suite 311
Honolulu, HI 96813

RE: Comments on the Revised Draft Environmental Assessment (EA)
Bayview Street Relief Drain Project
Wai'anae, Island of O'ahu

Dear Mr. Moku;

Thank you for your letter dated November 17, 2011 regarding your review of the Revised Draft Environmental Assessment for the Bayview Street Relief Drain Project. We acknowledge your statement that the proposed project will have no adverse impacts on the Department of Community Services project and programs. As stated in the Revised Draft EA, the City and County of Honolulu will fund the entirety of the project, and no federal funds are anticipated. Therefore, compliance with the National Environmental Policy Act (NEPA) is not required.

Your letter and this response will be included in the Final EA upon its completion. We appreciate your participation in the environmental review process for this project.

Should you have any questions or comments please feel free to contact Ezra Lum at our office at (808) 941-8853, extension 114, or Ezra Lum at ELum@bowengineering.com.

Yours truly,

Ezra Lum
**BOW ENGINEERING & DEVELOPMENT, INC.**

CC: Gary Kam, City and County of Honolulu, Department of Design and Construction

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

PETER B. CARLISLE
MAYOR

GARY B. CABATO
DIRECTOR

ALBERT TUFONO
DEPUTY DIRECTOR

November 19, 2011

TO: COLLINS D. LAM, P.E., DIRECTOR
DEPARTMENT OF DESIGN AND CONSTRUCTION

FROM: GARY B. CABATO, DIRECTOR

SUBJECT: REVISED DRAFT ENVIRONMENTAL ASSESSMENT
BAYVIEW STREET RELIEF DRAIN PROJECT
TMK: PORTIONS OF 8-5-08: 35, 36, 43, 44, 45, 49 AND 8-5-01:62

Thank you for the opportunity to review and comment on the Revised Draft Environmental Assessment for the Bayview Street Relief Drain Project.

The Department of Parks and Recreation has no comments in addition to those on the enclosed copy of the department's response to our review of the original Draft Environmental Assessment in March of 2005.

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

Gary B. Cabato
GARY B. CABATO
Director

GBC:jr
(440953)

Enclosure

cc: Bow Engineering & Development, Inc.
Dexter Liu, Department of Parks and Recreation

DEPARTMENT OF PARKS AND RECREATION

CITY AND COUNTY OF HONOLULU

1000 ULUOHIA STREET, SUITE 309 • KAPOLEI, HAWAII 96707
PHONE: (808) 692-5561 • FAX: 692-5131 • INTERNET: www.honolulu.gov

MUFI HANNEMANN
MAYOR

LESTER K. C. CHANG
ACTING DIRECTOR

DANA L. TAKAHARA-DIAS
DEPUTY DIRECTOR

March 15, 2005

TO: WAYNE HASHIRO, P.E., ACTING DIRECTOR
DEPARTMENT OF DESIGN AND CONSTRUCTION

FROM: LESTER K.C. CHANG, ACTING DIRECTOR

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT
BAYVIEW STREET RELIEF DRAIN PROJECT
PORTIONS OF TMK: 8-5-08: 31, 32, 33, 40, 41, 43, 44, 46, AND 49
WAIANAE, OAHU

Thank you for the opportunity to review and comment on the Draft Environmental Assessment relating to the Bayview Street Relief Drain Project in Waianae.

The Department of Parks and Recreation supports this project that includes replacement of the existing storm water system that currently discharges into an outfall located on the sandy beach area of Pokai Beach Park. Relocating the discharge to a site south of Pokai Bay and Kaneilio point will result in improved water quality and return that portion of the beach area to recreational use.

We request that before construction relating to the abandonment and plugging of the existing storm water outfall is started, that the contractor contact my office to coordinate the work with park staff to mitigate disruption of the public's use of the park as much as possible during construction.

Should you have any questions, please contact Mr. John Reid, Planner, at 692-5454.

LESTER K.C. CHANG
Acting Director

LKCC:mk
(96190)

cc: Dexter Liu, District 3 Manager

**Bow Engineering & Development, Inc.**
**1953 S. Beretania Street, PH-A**
**Honolulu, Hawaii 96826-1342**

**Telephone: (808) 941-8853**
**Fax: (808) 945-9299**
**www.bowengineering.com**

April 6, 2012

File: Bayview

Gary B. Cabato, Director
City and County of Honolulu
Department of Parks & Recreation
1000 Uluohia Street, Suite 309
Kapolei, HI 96707

RE: Comments on the Revised Draft Environmental Assessment (EA)
Bayview Street Relief Drain Project
Wai'anae, Island of O'ahu

Dear Mr. Cabato;

Thank you for your letter dated November 19, 2011 regarding your review of the Revised Draft Environmental Assessment for the Bayview Street Relief Drain Project. We acknowledge your statement that previous applicable comments submitted for the March 2005 Draft EA still stand. As included in Chapter 4, Necessary Permits and Approvals, the project requires approval and coordination with the Department of Parks and Recreation for work within Pōka'ī Bay Beach Park. As noted in your letter, this would help minimize disruption of the public's use of the park during construction.

Your letter and this response will be included in the Final EA upon its completion. We appreciate your participation in the environmental review process for this project.

Should you have any questions or comments please feel free to contact Ezra Lum at our office at (808) 941-8853, extension 114, or Ezra Lum at ELum@bowengineering.com.

Yours truly,

Ezra Lum
**BOW ENGINEERING & DEVELOPMENT, INC.**

CC: Gary Kam, City and County of Honolulu, Department of Design and Construction

POLICE DEPARTMENT

CITY AND COUNTY OF HONOLULU

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

NOV 29 2011

PETER B. CARLISLE
MAYOR

LOUIS M. KEALOHA
CHIEF

DAVE M. KAJIHIRO
MARIE A. McCAULEY
DEPUTY CHIEFS

OUR REFERENCE DAT-LS

November 25, 2011

Mr. William H. Q. Bow, P. E., President
Bow Engineering and Development, Inc.
1953 South Beretania Street, PH-A
Honolulu, Hawaii 96826

Dear Mr. Bow:

This is in response to your letter dated November 4, 2011, regarding the Draft Environmental Assessment for the proposed Bayview Street Relief Drain project.

This project may cause an increase in calls for police service because of the anticipated traffic congestion during the construction phase. However, once the project is completed, it should have no significant impact on the facilities or services of the Honolulu Police Department.

If there are any questions, please call Major Raymond Ancheta of District 8 (Kapolei) at 723-8488.

Sincerely,

LOUIS M. KEALOHA
Chief of Police

By
DEBORA A. TANDAL
Assistant Chief of Police
Support Services Bureau

cc: Mr. Gary Kam, DDC

**Bow Engineering & Development, Inc.**
**1953 S. Beretania Street, PH-A**
**Honolulu, Hawaii 96826-1342**

**Telephone: (808) 941-8853**
**Fax: (808) 945-9299**
**www.bowengineering.com**

April 6, 2012

File: Bayview

Louis M. Kealoha
City and County of Honolulu
Police Department
801 South Beretania Street
Honolulu, HI 96813

RE: Comments on the Revised Draft Environmental Assessment (EA)
Bayview Street Relief Drain Project
Wai'anae, Island of O'ahu

Dear Mr. Kealoha;

Thank you for your letter dated November 25, 2011 regarding your review of the Revised Draft Environmental Assessment for the Bayview Street Relief Drain Project. We acknowledge your statement that construction of the proposed project may cause an increase in calls for police service due to traffic congestion, but that no adverse effects to police services or facilities are anticipated with project completion. As stated in the Revised Draft EA, in efforts to minimize impacts to traffic, temporary traffic control would include one lane closure to maintain traffic flow and would be in accordance with City standards. Traffic control plans would be prepared and submitted to City and County of Honolulu Department of Transportation Services and the Department of Planning and Permitting for approval prior to construction.

Your letter and this response will be included in the Final EA upon its completion. We appreciate your participation in the environmental review process for this project.

Should you have any questions or comments please feel free to contact Ezra Lum at our office at (808) 941-8853, extension 114, or Ezra Lum at ELum@bowengineering.com.

Yours truly,

Ezra Lum
**BOW ENGINEERING & DEVELOPMENT, INC.**

CC: Gary Kam, City and County of Honolulu, Department of Design and Construction

HONOLULU FIRE DEPARTMENT

CITY AND COUNTY OF HONOLULU

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

PETER B. CARLISLE
MAYOR

KENNETH G. SILVA
FIRE CHIEF

EMMIT A. KANE
DEPUTY FIRE CHIEF

November 28, 2011

Mr. William Bow, P.E., President
Bow Engineering & Development, Inc.
1953 South Beretania Street, Unit PH-A
Honolulu, Hawaii 96826

Dear Mr. Bow:

Subject: Bayview Street Relief Drain Project

In response to your letter dated November 4, 2011, regarding the above-mentioned subject, the Honolulu Fire Department (HFD) reviewed the information provided and determined our responses should not be affected, as once construction is completed, the work will be buried under the street. However, the one lane scheduled to remain open during construction to through traffic must be wide enough to accommodate a fire apparatus.

In addition, to ensure emergency access to affected residences, trenches must not be opened at the same time and/or one lane must be open for through traffic. The construction company performing the work should notify the HFD when trench work will be conducted.

Should you have any questions, please contact Fire Captain Geoffrey Chang of our Fire Operations at 723-7185 or gchang@honolulu.gov.

Sincerely,

KENNETH G. SILVA
Fire Chief

KGS/GC:jp

**Bow Engineering & Development, Inc.**
**1953 S. Beretania Street, PH-A**
**Honolulu, Hawaii 96826-1342**

**Telephone: (808) 941-8853**
**Fax: (808) 945-9299**
**www.bowengineering.com**

April 6, 2012

File: Bayview

Kenneth G. Silva, Fire Chief
City and County of Honolulu
Honolulu Fire Department
636 South Street
Honolulu, HI 96813-5007

RE: Comments on the Revised Draft Environmental Assessment (EA)
Bayview Street Relief Drain Project
Wai'anae, Island of O'ahu

Dear Mr. Silva;

Thank you for your letter dated November 28, 2011 regarding your review of the Revised Draft Environmental Assessment for the Bayview Street Relief Drain Project. We acknowledge your statement that no adverse effects to fire service response or facilities are anticipated with project completion. Your letter highlights that one lane should remain open during construction, and the Honolulu Fire Department should be notified when trench work will be conducted. As stated in the Revised Draft EA, temporary traffic control would include one lane closure to maintain traffic flow and would be in accordance with City standards. Traffic control plans would be prepared and submitted to City and County of Honolulu Department of Transportation Services and the Department of Planning and Permitting for approval prior to construction. We have revised the Final EA to incorporate notification of the Honolulu Fire Department when trench work is conducted.

Your letter and this response will be included in the Final EA upon its completion. We appreciate your participation in the environmental review process for this project.

Should you have any questions or comments please feel free to contact Ezra Lum at our office at (808) 941-8853, extension 114, or Ezra Lum at ELum@bowengineering.com.

Yours truly,

Ezra Lum
**BOW ENGINEERING & DEVELOPMENT, INC.**

CC: Gary Kam, City and County of Honolulu, Department of Design and Construction

NEIL ABERCROMBIE
GOVERNOR

KATHRYN S. MATAYOSHI
SUPERINTENDENT

STATE OF HAWAI`I
DEPARTMENT OF EDUCATION
P.O. BOX 2360
HONOLULU, HAWAI`I 96804

OFFICE OF SCHOOL FACILITIES AND SUPPORT SERVICES

November 29, 2011

Mr. Ezra Lum
Bow Engineering & Development, Inc.
1953 S. Beretania Street, PH-A
Honolulu, Hawaii 96826

Dear Mr. Lum:

Subject: Revised Draft Environmental Assessment for the Bayview Street Relief Drain Project
Waianae, Oahu, Hawaii, TMK: 8-5-08: 35, 36, 43, 44, 45, 49, and 8-5-01:621

The Department of Education (DOE) has reviewed the Revised Draft Environmental Assessment for the Bayview Street Relief Drain Project.

The DOE has no comment regarding this project.

Thank you for the opportunity to provide comments. If you have any questions, please call Roy Ikeda of the Facilities Development Branch at 377-8301.

Very truly yours,

Kathryn S. Matayoshi
Superintendent

KSM:to

c: Gary Kam, City and County of Honolulu, Department of Design and Construction
Randolph Moore, Assistant Superintendent, OSFSS

**Bow Engineering & Development, Inc.**
**1953 S. Beretania Street, PH-A**
**Honolulu, Hawaii 96826-1342**

**Telephone: (808) 941-8853**
**Fax: (808) 945-9299**
**www.bowengineering.com**

April 6, 2012

File: Bayview

Kathryn S. Matayoshi, Superintendent
State of Hawai'i
Department of Education
PO Box 2360
Honolulu, HI 96804

RE: Comments on the Revised Draft Environmental Assessment (EA)
Bayview Street Relief Drain Project
Wai'anae, Island of O'ahu

Dear Ms. Matayoshi;

Thank you for your letter dated November 29, 2011 regarding your review of the Revised Draft Environmental Assessment for the Bayview Street Relief Drain Project. We acknowledge your statement that you have no comments regarding this project.

Your letter and this response will be included in the Final EA upon its completion. We appreciate your participation in the environmental review process for this project.

Should you have any questions or comments please feel free to contact Ezra Lum at our office at (808) 941-8853, extension 114, or Ezra Lum at ELum@bowengineering.com.

Yours truly,

Ezra Lum
**BOW ENGINEERING & DEVELOPMENT, INC.**

CC: Gary Kam, City and County of Honolulu, Department of Design and Construction

NEIL ABERCROMBIE
GOVERNOR OF HAWAII

LORETTA J. FUDDY, A.C.S.W., 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:
DOH/CWB

11026PDCL.11

November 29, 2011

Mr. Gary Kam
City and County of Honolulu
Department of Design and Construction
650 South King Street, 15th Floor
Honolulu, Hawaii 96813

Dear Mr. Kam:

**SUBJECT: Comments on the Revised Draft Environmental Assessment (DEA) for the Bayview Street Relief Drain Project
Waianae, Island of Oahu, Hawaii**

The Department of Health (DOH), Clean Water Branch (CWB), has reviewed the subject document and has no comments at this time. The DOH-CWB provided comments on the proposed revision to the DEA for this project (Letter No. 09094PMT.08, dated September 26, 2008).

Please note that our review is based solely on the information provided in the subject document and its compliance with Hawaii Administrative Rules (HAR), Chapters 11-54 and 11-55. You may be responsible for fulfilling additional requirements related to our program. We recommend that you also read our standard comments on our website at: http://hawaii.gov/health/environmental/env-planning/wqm/landuse/landuse.html/CWB-standardcomment.pdf.

If you have any questions, please visit our website at: http://www.hawaii.gov/health/environmental/water/cleanwater/index.html, or contact the Engineering Section, CWB, at (808) 586-4309.

Sincerely,

Alec Wong

ALEC WONG, P.E., CHIEF
Clean Water Branch

DCL:ml

c: DOH-EPO # 11-243 [via e-mail only]
Mr. Ezra Lum, Bow Engineering & Development, Inc.

**Bow Engineering & Development, Inc.**
**1953 S. Beretania Street, PH-A**
**Honolulu, Hawaii 96826-1342**

**Telephone: (808) 941-8853**
**Fax: (808) 945-9299**
**www.bowengineering.com**

April 6, 2012

File: Bayview

Alec Wong, P.E., Chief
State of Hawai'i
Department of Health, Clean Water Branch
650 South King Street, 15th Floor
Honolulu, HI 96813

RE: Comments on the Revised Draft Environmental Assessment (EA)
Bayview Street Relief Drain Project
Wai'anae, Island of O'ahu

Dear Mr. Wong;

Thank you for your letter dated November 29, 2011 regarding your review of the Revised Draft Environmental Assessment for the Bayview Street Relief Drain Project. We acknowledge your statement that you have no comments at this time.

Your letter and this response will be included in the Final EA upon its completion. We appreciate your participation in the environmental review process for this project.

Should you have any questions or comments please feel free to contact Ezra Lum at our office at (808) 941-8853, extension 114, or Ezra Lum at ELum@bowengineering.com.

Yours truly,

Ezra Lum
**BOW ENGINEERING & DEVELOPMENT, INC.**

CC: Gary Kam, City and County of Honolulu, Department of Design and Construction

DEC 5 2011

NEIL ABERCROMBIE
GOVERNOR

MAJOR GENERAL DARRYLL D. M. WONG
DIRECTOR OF CIVIL DEFENSE

VICTOR G. GUSTAFSON
INTERIM VICE DIRECTOR OF CIVIL DEFENSE

PHONE (808) 733-4300
FAX (808) 733-4287

STATE OF HAWAII
DEPARTMENT OF DEFENSE
OFFICE OF THE DIRECTOR OF CIVIL DEFENSE
3949 DIAMOND HEAD ROAD
HONOLULU, HAWAII 96816-4495

December 1, 2011

Mr. William H. Q. Bow, President
Bow Engineering & Development, Inc.
1953 South Beretania Street, PH-A
Honolulu, Hawaii 96826

Dear Mr. Bow:

Thank you for your letter of November 4, 2011, and the opportunity to comment on the Revised Draft Environmental Assessment for the Bayview Street Relief Drain Project in Waianae. This project, consisting of pipe replacement and trenching for larger pipes between Farrington Highway and Pokai Bay Beach Park, will give the existing drainage system a higher drainage capacity and may mitigate the recurrence of flooding in the area.

The assessment points out that regular maintenance and removal of debris from the system is required to decrease discharge of pollutants and rubbish into Pokai Bay. It should also be noted that regular maintenance and removal of debris is required to prevent blockage of the system during storm events.

It is noted that the system's outlet lies within the coastal flood zone and tsunami inundation zone. That being the case, it is recommended that the design of the outlet is such that it is capable of surviving repeated storm surges and the forces associated with a tsunami event in the area.

If you have any questions, please have your staff contact Mr. Steven Sigler at ssigler@scd.hawaii.gov or (808) 733-4300, ext. 557.

Sincerely,

VICTOR G. GUSTAFSON
Interim Vice Director of Civil Defense

**Bow Engineering & Development, Inc.**
**1953 S. Beretania Street, PH-A**
**Honolulu, Hawaii 96826-1342**

**Telephone: (808) 941-8853**
**Fax: (808) 945-9299**
**www.bowengineering.com**

April 6, 2012

File: Bayview

Victor G. Gustafson, Interim Vice Director of Civil Defense
State of Hawai'i
Department of Defense
Office of the Director of Civil Defense
3949 Diamond Head Road
Honolulu, HI 96816-4495

RE: Comments on the Revised Draft Environmental Assessment (EA)
Bayview Street Relief Drain Project
Wai'anae, Island of O'ahu

Dear Mr. Gustafson;

Thank you for your letter dated December 1, 2011 regarding your review of the Revised Draft Environmental Assessment for the Bayview Street Relief Drain Project. We acknowledge your statement that regular maintenance and removal of debris is required to prevent blockage of the system during storm events, and we have noted this in the Final EA. The proposed outlet would be constructed with a reinforced concrete box, with a short concrete headwall attached to the outlet structure to adjust for the grades, and would be capable of withstanding repeated storm surges or tsunami.

Your letter and this response will be included in the Final EA upon its completion. We appreciate your participation in the environmental review process for this project.

Should you have any questions or comments please feel free to contact Ezra Lum at our office at (808) 941-8853, extension 114, or Ezra Lum at ELum@bowengineering.com.

Yours truly,

Ezra Lum
**BOW ENGINEERING & DEVELOPMENT, INC.**

CC: Gary Kam, City and County of Honolulu, Department of Design and Construction

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

PETER B. CARLISLE
MAYOR

WAYNE Y. YOSHIOKA
DIRECTOR

KAI NANI KRAUT, P.E.
DEPUTY DIRECTOR

TP11/11-440976R

December 2, 2011

Mr. Ezra Lum
Project Manager
Bow Engineering & Development, Inc.
1953 South Beretania Street, PH-A
Honolulu, Hawaii 96826

Dear Mr. Lum:

Subject: Revised Draft Environmental Assessment (DEA)
Bayview Street Relief Drain Project

This responds to your company's letter of November 4, 2011, requesting our comments concerning this project.

We have no comments to offer at this time.

Thank you for the opportunity to review this matter. Should you have any further questions, please contact Michael Murphy of my staff at 768-8359.

Very truly yours,

WAYNE Y. YOSHIOKA
Director

cc: Mr. Gary Kam
Department of Design and
Construction

**Bow Engineering & Development, Inc.**
**1953 S. Beretania Street, PH-A**
**Honolulu, Hawaii 96826-1342**

**Telephone: (808) 941-8853**
**Fax: (808) 945-9299**
**www.bowengineering.com**

April 6, 2012

File: Bayview

Wayne Y. Yoshioka
City and County of Honolulu
Department of Transportation Services
650 South King Street, 3rd Floor
Honolulu, HI 96813

RE: Comments on the Revised Draft Environmental Assessment (EA)
Bayview Street Relief Drain Project
Wai'anae, Island of O'ahu

Dear Mr. Yoshioka;

Thank you for your letter dated December 2, 2011 regarding your review of the Revised Draft Environmental Assessment for the Bayview Street Relief Drain Project. We acknowledge your statement that you have no comments at this time.

Your letter and this response will be included in the Final EA upon its completion. We appreciate your participation in the environmental review process for this project.

Should you have any questions or comments please feel free to contact Ezra Lum at our office at (808) 941-8853, extension 114, or Ezra Lum at ELum@bowengineering.com.

Yours truly,

Ezra Lum
**BOW ENGINEERING & DEVELOPMENT, INC.**

CC: Gary Kam, City and County of Honolulu, Department of Design and Construction

DEC 7 2011

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 7TH FLOOR • HONOLULU, HAWAII 96813
TELEPHONE: (808) 768-8000 • FAX: (808) 768-6041
DEPT. WEB SITE: www.honoluludpp.org • CITY WEB SITE: www.honolulu.gov

PETER B. CARLISLE
MAYOR

DAVID K. TANOUE
DIRECTOR

JIRO A. SUMADA
DEPUTY DIRECTOR

2011/ELOG-2552(ST)

December 6, 2011

Mr. William H.Q. Bow, P.E.
President
Bow Engineering & Development, Inc.
1953 S. Beretania Street, PH-A
Honolulu, Hawaii 96826

Dear Mr. Bow:

Subject: Revised Draft Environmental Assessment (EA)
Bayview Street Relief Drain Project, Waianae (Pokai Bay)
Tax Map Key: 8-5-8: 35, 36, 43, 44, 45, 49; and 8-5-1: 62

This responds to your request of November 4, 2011, for comment regarding the above project.

Preface - The preface should be expanded to briefly explain, in general terms, how the proposed project differs from the one previously proposed in the 2005 Environmental Assessment (i.e., new alignment, larger pipes or box culverts, new outlet, etc.) and why the previous proposal was not implemented (e.g., budget, engineering or project mitigation considerations/issues, etc.).

Section 2.2 Project History - This section should be revised to carefully explain and illustrate how the current project differs from the previous project proposed in 2005. Exhibits from the earlier EA should be included to provide some reference with which to compare the old and new proposed projects.

Section 3.4 Water Quality and Marine Environment - This section of the Final EA should include information and a discussion of how the drainage system actually empties into the shoreline and the nearshore waters. It should include exhibits, plans and photos of the existing drainage outlet and the new proposed drainage outlet for the project. There should be a discussion of existing lateral beach access along this shoreline area, and how the proposed improvements may affect such access.

In the absence of such information, we are not able verify or determine if there are shoreline setback requirements for the new drainage system outlet pursuant to Chapter 23, Revised Ordinances of Honolulu. Furthermore, although underground drainage system improvements within existing corridors are generally exempt from Special Management Area (SMA) requirements, the proposed drainage outlet improvement, if it would have new headwalls or protective rip rap that extend beyond the 10-foot wide drainage easement, may be subject to SMA requirements. Depending on the additional information, Section 3.14 Land Use Controls may also need to be revised.

Section 3.6 Natural Hazards - This section should be expanded to explain that the proposed improvements, which are within the 100-year flood zone designated as VE (coastal high hazard district), will not aggravate the existing flood related erosion hazards.

If you have any questions, please contact Steve Tagawa of our staff at 768-8024.

Sincerely yours,

for David K. Tanoue, Director
Department of Planning and Permitting

DKT:rk

cc: DOBOR-DLNR

SMAs\PokaiDrainDEA.doc

**Bow Engineering & Development, Inc.**
**1953 S. Beretania Street, PH-A**
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**Fax: (808) 945-9299**
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April 6, 2012

File: Bayview

David K. Tanoue, Director
City and County of Honolulu
Department of Planning and Permitting
650 South King Street, 7th Floor
Honolulu, HI 96813

RE: Comments on the Revised Draft Environmental Assessment (EA)
Bayview Street Relief Drain Project
Wai'anae, Island of O'ahu

Dear Mr. Tanoue;

Thank you for your letter dated December 6, 2011 regarding your review of the Revised Draft Environmental Assessment for the Bayview Street Relief Drain Project. We offer the following responses to your comments:

1. **Preface**: You request additional clarification on how the existing project differs from that evaluated in the 2005 EA. We have included additional language in the Final EA Preface to clarify:

   The October 2011 Revised Draft Environmental Assessment (EA) included revisions to the Bayview Street Relief Drain project for which a Draft Environmental Assessment was issued in February 2005. During early consultation and circulation of the February 2005 Draft EA, concerns regarding potential impacts to unknown historic or cultural remains were identified. The City and County of Honolulu Department of Design and Construction proposed changes to the project alignment in efforts to minimize these potential impacts by constructing the drainage improvements along the existing alignment and outfall at Pōka'ī Bay instead of along the previously proposed alignment and outfall at Kāne'īlio Point. The change in alignment required preparation of the Revised Draft EA. There were no changes to the overall drainage capacity.

2. **Project History**: This comment requests additional information on the previous alignment, including exhibits and detailed illustrations. The project has gone through several iterations in 1985, 1988, and 2005. We have included the alignment proposed in 2005 as an alternative considered but ultimately rejected in Chapter 5 of the Final EA. This section is more appropriate for this level of detail for an alternate alignment.

3. **Water Quality and Marine Environment**: This comment requests additional information and discussion of the existing outlet and how it will change with the proposed action. A more-detailed description of the existing and proposed outlet and drainage has been included in this section of the Final EA. Further, the comment requests additional information on the project to determine if the project would be subject to Special Management Area (SMA) requirements, including shoreline setback requirements. We have continued consultation with the Department of Planning and

Permitting to determine if the project requires approval of a shoreline setback variance, and will work with the Department toward a conclusion.

4. **Natural Hazards**: This comment requests expansion of the discussion of flood related erosion hazards. The Final EA states that the proposed action would not result in increased flooding or hazards from flooding, and includes additional information regarding construction of the outlet.

Your letter and this response will be included in the Final EA upon its completion. We appreciate your participation in the environmental review process for this project.

Should you have any questions or comments please feel free to contact Ezra Lum at our office at (808) 941-8853, extension 114, or Ezra Lum at ELum@bowengineering.com.

Yours truly,

Ezra Lum
**BOW ENGINEERING & DEVELOPMENT, INC.**

CC: Gary Kam, City and County of Honolulu, Department of Design and Construction

**NEIL ABERCROMBIE**
Governor of Hawai'i

RECEIVED
DEPT OF DESIGN & CONSTR
CITY & C OF HONOLULU
11 DEC -7 AM 9:37

**GARY HOOSER**
Director

Telephone (808) 586-4185
Facsimile (808) 586-4186
Electronic Mail: oeqc@doh.hawaii.gov

**STATE OF HAWAI'I**
**OFFICE OF ENVIRONMENTAL QUALITY CONTROL**

Department of Health
235 South Beretania Street
Leiopapa A Kamehameha, Suite 702
Honolulu, Hawai'i 96813

444504
Dep
Cml

December 6, 2011

Collins D. Lam, Director
Department of Design and Construction
City and County of Honolulu
650 South King Street, 11th Floor
Honolulu, Hawai'i 96813

Subject: Revised Draft Environmental Assessment for Bayview Street Drain Relief Project, Wai'anae, O'ahu

Dear Mr. Lam,

The Office of Environmental Quality Control published the subject project in the November 8, 2011 issue of The Environmental Notice. The publication started the statutory 30-day comment period.

OEQC reviewed the subject draft EA and offer one comment: Please make sure that all the proposed mitigations identified in the draft EA are incorporated into the relevant permit to address environmental impacts.

Feel free to call (808) 586-4185 if you have further questions.

Sincerely,

Herman Tuiolosega
OEQC Planner

**Bow Engineering & Development, Inc.**
**1953 S. Beretania Street, PH-A**
**Honolulu, Hawaii 96826-1342**

**Telephone: (808) 941-8853**
**Fax: (808) 945-9299**
**www.bowengineering.com**

April 6, 2012

File: Bayview

Herman Tuiolosega, OEQC Planner
State of Hawai'i
Office of Environmental Quality Control
Department of Health
235 South Beretania Street
Leiopapa A Kamehameha, Suite 702
Honolulu, HI 96813

RE: Comments on the Revised Draft Environmental Assessment (EA)
Bayview Street Relief Drain Project
Wai'anae, Island of O'ahu

Dear Mr. Tuiolosega;

Thank you for your letter dated December 6, 2011 regarding your review of the Revised Draft Environmental Assessment for the Bayview Street Relief Drain Project. We acknowledge your comment that all mitigation measures identified in the Revised Draft EA need to be incorporated into the relevant permit to address environmental impacts.

Your letter and this response will be included in the Final EA upon its completion. We appreciate your participation in the environmental review process for this project.

Should you have any questions or comments please feel free to contact Ezra Lum at our office at (808) 941-8853, extension 114, or Ezra Lum at ELum@bowengineering.com.

Yours truly,

Ezra Lum
**BOW ENGINEERING & DEVELOPMENT, INC.**

CC: Gary Kam, City and County of Honolulu, Department of Design and Construction

NEIL ABERCROMBIE
GOVERNOR

GLENN M. OKIMOTO
DIRECTOR

Deputy Directors
JADE T. BUTAY
FORD N. FUCHIGAMI
RANDY GRUNE
JADINE URASAKI

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

IN REPLY REFER TO:
STP 8.0664

December 7, 2011

Mr. William H. Q. Bow, P. E.
President
Bow Engineering and Development, Inc.
1953 South Beretania Street, Penthouse-A
Honolulu, Hawaii 96826

Attn: Exra Lum

Dear Mr. Bow:

Subject: Bayview Street Relief Drain Project
Revised Draft Environmental Assessment (RDEA)

Thank you for requesting State Department of Transportation's (DOT) review of the subject project. DOT understands the City and County of Honolulu, Department of Design and Construction (CCH, DCC) proposes to construct storm drainage improvements between Farrington Highway and Pokai Bay. The drainage improvements would replace a portion of an existing drainage system that currently serves the area around Bayview Street and a portion of Waianae Valley Road. DOT offers the following comments:

1. The use of construction vehicles and heavy equipment that will be used at the job site will require a permit from the DOT Highways Division to transport oversized and overweight equipment and loads within the State highway facilities.

2. Construction plans for all work done within the State highway right-of-way is required to be submitted to the DOT Highways Division for review and approval.

DOT appreciates the opportunity to provide comments. If there are any questions, including the need to meet with DOT Highways Division staffs, please contact Mr. Elton Teshima of the DOT Statewide Transportation Planning Office at telephone number (808) 831-7978.

Very truly yours,

GLENN M. OKIMOTO, Ph.D.
Director of Transportation

**Bow Engineering & Development, Inc.**
**1953 S. Beretania Street, PH-A**
**Honolulu, Hawaii 96826-1342**

**Telephone: (808) 941-8853**
**Fax: (808) 945-9299**
**www.bowengineering.com**

April 6, 2012

File: Bayview

Glenn M. Okimoto, Ph.D., Director of Transportation
State of Hawai'i
Department of Transportation
869 Punchbowl Street
Honolulu, HI 96813-5097

RE: Comments on the Revised Draft Environmental Assessment (EA)
Bayview Street Relief Drain Project
Wai'anae, Island of O'ahu

Dear Mr. Okimoto;

Thank you for your letter dated December 7, 2011 regarding your review of the Revised Draft Environmental Assessment for the Bayview Street Relief Drain Project. We acknowledge your comment that the use of vehicles and heavy equipment used during construction would require a permit from DOT, and we have added this permit requirement to the Final EA accordingly. In addition, all construction to be completed in the State highway right-of-way must be submitted to the DOT Highways Division for review and approval.

Your letter and this response will be included in the Final EA upon its completion. We appreciate your participation in the environmental review process for this project.

Should you have any questions or comments please feel free to contact Ezra Lum at our office at (808) 941-8853, extension 114, or Ezra Lum at ELum@bowengineering.com.

Yours truly,

Ezra Lum
**BOW ENGINEERING & DEVELOPMENT, INC.**

CC: Gary Kam, City and County of Honolulu, Department of Design and Construction

DEC 9 2011

NEIL ABERCROMBIE
GOVERNOR

JAN S. GOUVEIA
ACTING COMPTROLLER

KERRY K. YONESHIGE
ACTING DEPUTY COMPTROLLER

**STATE OF HAWAI'I**
**DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES**
P.O. BOX 119, HONOLULU, HAWAI'I 96810-0119

(P)1330.1

DEC - 8 2011

Mr. Ezra Lum
Bow Engineering & Development, Inc.
1953 S. Beretania Street, PH-A
Honolulu, HI 96826

Dear Mr. Lum:

Subject: Draft Environmental Assessment (DEA) for
Bayview Street Relief Drain Project
Waianae, O'ahu, Hawai'i

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

If you have any questions, please call me at 586-0400 or have your staff call Ms. Gayle Takasaki of the Public Works Division at 586-0584.

Sincerely,

for JAN S. GOUVEIA
Acting Comptroller

c: Mr. Gary Kam, City & County

**Bow Engineering & Development, Inc.**
**1953 S. Beretania Street, PH-A**
**Honolulu, Hawaii 96826-1342**

**Telephone: (808) 941-8853**
**Fax: (808) 945-9299**
**www.bowengineering.com**

April 6, 2012

File: Bayview

Jan S. Gouveia, Acting Comptroller
State of Hawai'i
Department of Accounting and General Services
PO Box 119
Honolulu, HI 96810-0119

RE: Comments on the Revised Draft Environmental Assessment (EA)
Bayview Street Relief Drain Project
Wai'anae, Island of O'ahu

Dear Ms. Gouveia;

Thank you for your letter dated December 8, 2011 regarding your review of the Revised Draft Environmental Assessment for the Bayview Street Relief Drain Project. We acknowledge your statement that you do not have any comments at this time, as the proposed project would not impact any Department of Accounting and General Services' projects or existing facilities.

Your letter and this response will be included in the Final EA upon its completion. We appreciate your participation in the environmental review process for this project.

Should you have any questions or comments please feel free to contact Ezra Lum at our office at (808) 941-8853, extension 114, or Ezra Lum at ELum@bowengineering.com.

Yours truly,

Ezra Lum
**BOW ENGINEERING & DEVELOPMENT, INC.**

CC: Gary Kam, City and County of Honolulu, Department of Design and Construction

NEIL ABERCROMBIE
GOVERNOR OF HAWAII

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

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

December 22, 2011

City and County of Honolulu
Department of Design and Construction
Attention: Mr. Gary Kam
650 South King Street, 15th Floor
Honolulu, Hawaii 96813

via email: gkam2@honolulu.gov

Bow Engineering & Development, Inc.
Attention: Mr. Ezra Lum
1953 S. Beretania Street, PH-A
Honolulu, Hawaii 96826

via email: elum@bowengineering.com

Gentlemen:

SUBJECT: Draft Environmental Assessment for Bayview Street Relief Drain Project located in Waianae, Island of Oahu; Various TMK's

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 (a) Division of Boating & Ocean Recreation; (b) Division of State Parks; and (c) Land Division – Oahu District on the subject matter. Should you have any questions, please feel free to call Darlene Nakamura at 587-0417. Thank you.

Sincerely,

Russell Y. Tsuji
Land Administrator

Enclosures

NEIL ABERCROMBIE
GOVERNOR OF HAWAII

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

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

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

December 6, 2011

**MEMORANDUM**

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

DEPT OF LAND & NATURAL RESOURCES STATE OF HAWAII
2011 DEC 12 P 3:09
RECEIVED LAND DIVISION

FROM: Russell Y. Tsuji, Land Administrator
SUBJECT: Draft Environmental Assessment for Bayview Street Relief Drain Project
LOCATION: Waianae, Island of Oahu; Various TMK's
APPLICANT: Bow Engineering & Development on behalf of City & County of Honolulu

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by December 20, 2011.

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 Darlene Nakamura at 587-0417. Thank you.

Attachments

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

Signed: [signature]
Date: 12/12/11

cc: Central Files

DEC 8'11PM12:19OR DIV

55038

NEIL ABERCROMBIE
GOVERNOR OF HAWAII

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

RECEIVED
STATE PARKS DIV
'11 DEC -7 P3:21

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

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

DEPT OF LAND & NATURAL RESOURCES

December 6, 2011

**MEMORANDUM**

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

DEPT OF LAND & NATURAL RESOURCES STATE OF HAWAII
2011 DEC 14 P 3:10
RECEIVED LAND DIVISION

FROM: Russell Y. Tsuji, Land Administrator
SUBJECT: Draft Environmental Assessment for Bayview Street Relief Drain Project
LOCATION: Waianae, Island of Oahu; Various TMK's
APPLICANT: Bow Engineering & Development on behalf of City & County of Honolulu

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by December 20, 2011.

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 Darlene Nakamura at 587-0417. Thank you.

Attachments

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

Signed: [signature]
Date: 12/13/11

cc: Central Files

NEIL ABERCROMBIE
GOVERNOR OF HAWAII

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

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

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

December 6, 2011

**MEMORANDUM**

TO: **DLNR Agencies:**
_X_ Div. of Aquatic Resources
_X_ Div. of Boating & Ocean Recreation
_X_ Engineering Division
___ Div. of Forestry & Wildlife
_X_ 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
SUBJECT: Draft Environmental Assessment for Bayview Street Relief Drain Project
LOCATION: Waianae, Island of Oahu; Various TMK's
APPLICANT: Bow Engineering & Development on behalf of City & County of Honolulu

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by December 20, 2011.

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 Darlene Nakamura at 587-0417. Thank you.

Attachments

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

Signed: T Chee
Date: 12/9/2011

cc: Central Files

**Bow Engineering & Development, Inc.**
**1953 S. Beretania Street, PH-A**
**Honolulu, Hawaii 96826-1342**

**Telephone: (808) 941-8853**
**Fax: (808) 945-9299**
**www.bowengineering.com**

April 6, 2012

File: Bayview

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

RE: Comments on the Revised Draft Environmental Assessment (EA)
Bayview Street Relief Drain Project
Wai'anae, Island of O'ahu

Dear Mr. Tsuji;

Thank you for your letter dated December 22, 2011 regarding your review of the Revised Draft Environmental Assessment for the Bayview Street Relief Drain Project. We acknowledge your enclosure of comments from Division of Boating & Ocean Recreation; Division of State Parks, and Land Division. We offer the following responses:

- Division of Boating & Ocean Recreation – for your comment dated December 12, 2011, we acknowledge your statement that you have no comments.
- Division of State Parks – for your comment dated December 13, 2011, we acknowledge your statement that you have no comments.
- Land Division – for your comment dated December 9, 2011, we acknowledge your statement that you have no comments.

Your letter and this response will be included in the Final EA upon its completion. We appreciate your participation in the environmental review process for this project.

Should you have any questions or comments please feel free to contact Ezra Lum at our office at (808) 941-8853, extension 114, or Ezra Lum at ELum@bowengineering.com.

Yours truly,

Ezra Lum
**BOW ENGINEERING & DEVELOPMENT, INC.**

CC: Gary Kam, City and County of Honolulu, Department of Design and Construction

NEIL ABERCROMBIE
GOVERNOR OF HAWAII

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

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

December 27, 2011

City and County of Honolulu
Department of Design and Construction
Attention: Mr. Gary Kam
650 South King Street, 15th Floor
Honolulu, Hawaii 96813

via email: gkam2@honolulu.gov

Bow Engineering & Development, Inc.
Attention: Mr. Ezra Lum
1953 S. Beretania Street, PH-A
Honolulu, Hawaii 96826

via email: elum@bowengineering.com

Gentlemen:

SUBJECT: Draft Environmental Assessment for Bayview Street Relief Drain Project located in Waianae, Island of Oahu; Various TMK's

Thank you for the opportunity to review and comment on the subject matter. In addition to the comments previously sent you on December 22, 2011, enclosed are comments from our Engineering Division on the subject matter. Should you have any questions, please feel free to call Darlene Nakamura at 587-0417. Thank you.

Sincerely,

Russell Y. Tsuji
Land Administrator

Enclosures

NEIL ABERCROMBIE
GOVERNOR OF HAWAII

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


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



RECEIVED
2011 DEC 21 P 2:22
DEPT OF LAND & NATURAL RESOURCES
STATE OF HAWAII


December 6, 2011

**MEMORANDUM**

TO: **DLNR Agencies:**
- X Div. of Aquatic Resources
- X Div. of Boating & Ocean Recreation
- X Engineering Division
- __ Div. of Forestry & Wildlife
- X 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
SUBJECT: Draft Environmental Assessment for Bayview Street Relief Drain Project
LOCATION: Waianae, Island of Oahu; Various TMK's
APPLICANT: Bow Engineering & Development on behalf of City & County of Honolulu


'11 DEC 08 PM02:23 ENGINEERING


Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by December 20, 2011.

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 Darlene Nakamura at 587-0417. Thank you.

Attachments

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

Signed: _____
Date: 12/20/11

cc: Central Files

**DEPARTMENT OF LAND AND NATURAL RESOURCES**
**ENGINEERING DIVISION**

**LD DarleneNakamura**
**Ref: RevisedDEABayviewStreetReliefDrainProject**
**Hawaii.521**

**COMMENTS**

**( X)** **We confirm that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Zones D, VE and AE. The National Flood Insurance Program does not have any regulations for developments within Zone D, however, it does regulate developments within Zones VE and AE as indicated in bold letters below.**

( ) Please take note that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Zone.

( ) 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. Robert Sumitomo at (808) 768-8097 or 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. Francis Cerizo at (808) 270-7771 of the County of Maui, Department of Planning.

( ) Ms. Wynne Ushigome at (808) 241-4980 of the County of Kauai, Department of Public Works.

( ) The applicant should include water demands and infrastructure required to meet project needs. Please note that projects within State lands requiring water service from the Honolulu Board of Water Supply system will be required to pay a resource development charge, in addition to Water Facilities Charges for transmission and daily storage.

( ) The applicant should provide the water demands and calculations to the Engineering Division so it can be included in the State Water Projects Plan Update.

( ) Additional Comments: _____

_____

( ) Other: _____

_____

Should you have any questions, please call Ms. Suzie Agraan of the Planning Branch at 587-0258.

Signed: _____
for CARTY S. CHANG, CHIEF ENGINEER

Date: 12/20/11

**Bow Engineering & Development, Inc.**
**1953 S. Beretania Street, PH-A**
**Honolulu, Hawaii 96826-1342**

**Telephone: (808) 941-8853**
**Fax: (808) 945-9299**
**www.bowengineering.com**

April 6, 2012

File: Bayview

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

RE: Comments on the Revised Draft Environmental Assessment (EA)
Bayview Street Relief Drain Project
Wai'anae, Island of O'ahu

Dear Mr. Tsuji;

Thank you for your letter dated December 27, 2011 regarding your review of the Revised Draft Environmental Assessment for the Bayview Street Relief Drain Project. We acknowledge your enclosure of comments from your Engineering Division. We offer the following response:

- Engineering Division – for your comment dated December 20, 2011, we acknowledge the confirmation that the project site is located in Flood Zones D, VE, and AE according to the Flood Insurance Rate Map (FIRM), and that the project must comply with the rules and regulations of the National Flood Insurance Program (NFIP).

Your letter and this response will be included in the Final EA upon its completion. We appreciate your participation in the environmental review process for this project.

Should you have any questions or comments please feel free to contact Ezra Lum at our office at (808) 941-8853, extension 114, or Ezra Lum at ELum@bowengineering.com.

Yours truly,

Ezra Lum
**BOW ENGINEERING & DEVELOPMENT, INC.**

CC: Gary Kam, City and County of Honolulu, Department of Design and Construction

NEIL ABERCROMBIE
GOVERNOR OF HAWAII

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

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

December 28, 2011

City and County of Honolulu
Department of Design and Construction
Attention: Mr. Gary Kam
650 South King Street, 15th Floor
Honolulu, Hawaii 96813

via email: gkam2@honolulu.gov

Bow Engineering & Development, Inc.
Attention: Mr. Ezra Lum
1953 S. Beretania Street, PH-A
Honolulu, Hawaii 96826

via email: elum@bowengineering.com

Gentlemen:

SUBJECT: Draft Environmental Assessment for Bayview Street Relief Drain Project located in Waianae, Island of Oahu; Various TMK's

Thank you for the opportunity to review and comment on the subject matter. In addition to the comments previously sent you on December 22 and 27, 2011, enclosed are comments from the Division of Aquatic Resources on the subject matter. Should you have any questions, please feel free to call Darlene Nakamura at 587-0417. Thank you.

Sincerely,

Russell Y. Tsuji
Land Administrator

Enclosures

LD

AMV
BDV

NEIL ABERCROMBIE
GOVERNOR OF HAWAII

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

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

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

December 6, 2011

DAR 4153

**MEMORANDUM**

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

RECEIVED
DEC 8 2011
AQUATIC RESOURCES

RECEIVED
2011 DEC 23 P 2:40
DEPT OF LAND & NATURAL RESOURCES
STATE OF HAWAII
LAND DIVISION

FROM: Russell Y. Tsuji, Land Administrator
SUBJECT: Draft Environmental Assessment for Bayview Street Relief Drain Project
LOCATION: Waianae, Island of Oahu; Various TMK's
APPLICANT: Bow Engineering & Development on behalf of City & County of Honolulu

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by December 20, 2011.

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 Darlene Nakamura at 587-0417. Thank you.

Attachments

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

Signed: _____
Date: _____

**ROBERT T. NISHIMOTO, Ph.D.**
**Aquatic Resources Program Manager**
DEC 20 2011

cc: Central Files

NEIL ABERCROMBIE
GOVERNOR OF HAWAII

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

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

GUY H. KAULUKUKUI
FIRST DEPUTY

WILLIAM M. TAM
DEPUTY DIRECTOR - WATER

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

16 December 2011

TO: Robert T. Nishimoto, Ph.D., Program Manager
FROM: Brett Schumacher, Ph.D., Aquatic Biologist
THRU: Alton Miyasaka, Aquatic Biologist
SUBJECT: Comments on Revised Draft Environmental Assessment for Bayview Street Relief Drain Project
Requested by: Russell Y. Tsuji, Land Administrator
Date of Request: December 6, 2011 Date Received: December 8, 2011

Summary of Project:

Title: Bayview Street Relief Drain Project

Project by: C & C of Honolulu-Dept. of Design and construction

Location: TMK: 8-5-08: 35, 36, 43, 44, 45, 49, and 8-5-01:62, Wai'anae coastline, O'ahu

Brief Description: The City and County of Honolulu Department of Design and Construction plans to construct storm drainage improvements between Farrington Highway and Poka'i Bay in Wai'anae on the Leeward side of O'ahu. The proposed drainage improvements would replace a portion of an existing drainage system that currently serves the area around Bayview Street and a portion of Wai'anae Valley Road. The drainage system would discharge at Poka'i Bay.

Comments: The Division of Aquatic Resources (DAR) of the Department of Land and Natural Resources notes the following issues:

**Endangered/Threatened (E/T) species:** The Revised Draft Environmental Assessment (RDEA) prepared by Bow Engineering and Development Inc. states that "The proposed alignment would be constructed along existing right-of-way…There are no known rare, threatened, or endangered species, or evidence of its habitat, along the proposed alignment." This may be true over the proposed path on land. However, it does not address potential interactions with E/T species when the outfall enters the shore area. The shoreline where the outfall terminates is a sandy beach area, which may be used as a resting site by sea turtles and/or the highly endangered Hawaiian monk seal (*Monachus schauinslandi*). This area (along with much of the main Hawaiian Islands) has also been proposed as critical habitat for the monk seal.

Monk seals generally give birth in March and April, followed by a period of several weeks where the pups nurse and learn to forage in shallow waters. Monk seals hauled out on

shore are sensitive to the presence of nearby humans, and monk seal mothers may abandon their nursing pups if disturbed. Construction noise and activity, removal of debris and associated activities should not result in the disturbance of monk seals or other E/T species. It is illegal to harass or disturb seals or other protected species, whether the disturbance is intentional or not. Consultation with federal management agencies should also be included in the environmental assessment process to determine whether activities could result in a "take" of protected species, and to determine standard operating procedures to avoid such impacts.

**Erosion/Runoff during construction:** The RDEA lists a number of practices that "may" be implemented to limit pollution during construction periods, but does not say what *will* be implemented. It is likely that the full suite of possible practices would substantially reduce the risk of pollution, but if only a portion of these are implemented environmental protection would likely suffer. A specific plan for BMPs should be included in future drafts to allow for meaningful consultation and comment.

**Erosion/Runoff while the outfall is active:** The RDEA states that "The drainage area and the number of catch basins would remain the same as the existing drainage system, and therefore in theory the amount of pollutants entering the system would not increase." While it is likely that the amount of water moving through the system would be similar, the way in which it enters the ocean will change. With the existing less efficient storm drain system, stormwater enters the ocean over a larger, diffuse area. With the proposed system, a greater proportion of stormwater would enter the ocean through the outfall. In essence, the stormwater and all that it carries will move from a relatively non-point source of pollution towards a point source. The effects of this change, along with a characterization of the marine biological community in the area of the outfall and how it could be affected by increased pulses of freshwater, sediments, nutrients and other pollutants is necessary to adequately evaluate the proposed project.

**Bow Engineering & Development, Inc.**
**1953 S. Beretania Street, PH-A**
**Honolulu, Hawaii 96826-1342**

**Telephone: (808) 941-8853**
**Fax: (808) 945-9299**
**www.bowengineering.com**

April 6, 2012

File: Bayview

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

RE: Comments on the Revised Draft Environmental Assessment (EA)
Bayview Street Relief Drain Project
Wai'anae, Island of O'ahu

Dear Mr. Tsuji;

Thank you for your letter dated December 28, 2011 regarding your review of the Revised Draft Environmental Assessment for the Bayview Street Relief Drain Project. We acknowledge your enclosure of comments from your Division of Aquatic Resources. We offer the following response:

- **Endangered/Threatened Species** – this comment requests that additional information be included regarding potential impacts to protected species, including the Hawaiian monk seal. The Final EA includes additional information in Section 3.8 Vegetation and Fauna, and includes standard Best Management Practices (BMPs) from the NOAA National Marine Fisheries to minimize potential adverse affects on protected marine species.
- **Erosion/Runoff during construction** – this comment states that specific plan for BMPs should be included in future drafts. The Final EA changes "may" to "shall" to clarify that the BMPs listed in the document will be implemented, though additional measures may included during the design and construction phases.
- **Erosion/Runoff while the outfall is active** – this comment requests characterization of how runoff would occur with implementation of the proposed action. We have included additional clarification in the Final EA on the outfall:

  > The existing outlet is currently in a grassed area just to the northwest of the park restroom building and approximately 120 to 170 feet from the water line, depending on the tide. The existing outlet is a 24-inch diameter Reinforced Concrete Pipe (RCP) with a Concrete Rubble Masonry (CRM) headwall. The proposed outlet would be constructed with a reinforced concrete box 72 inches wide by 30 inches high. There may be a short concrete headwall attached to the outlet structure to adjust for the grades.

  Further, the runoff would not change from a non-point source of pollution to a point source, but would be similar to existing conditions. The following language has been added to the Final EA:

  > Due to the distance to the shoreline and nearshore waters, drainage waters

generally percolate into the ground at the grassed area at the outlet. During storm events with higher volume water leavening the outlet, drainage waters can reach the sandy areas of the beach, and would continue to do so with implementation of the proposed action.

Your letter and this response will be included in the Final EA upon its completion. We appreciate your participation in the environmental review process for this project.

Should you have any questions or comments please feel free to contact Ezra Lum at our office at (808) 941-8853, extension 114, or Ezra Lum at ELum@bowengineering.com.

Yours truly,

Ezra Lum
**BOW ENGINEERING & DEVELOPMENT, INC.**

CC: Gary Kam, City and County of Honolulu, Department of Design and Construction

Aydee Zielke <aydee.zielke@noaa.gov>

# Revised Draft EA for Bayview Street Relief Draft Project, Waianae, Oahu

**Aydee Zielke <aydee.zielke@noaa.gov>** **Mon, Dec 12, 2011 at 5:36 PM**
To: gkam2@honolulu.gov, elum@bowengnering.com
Cc: nmfs.pir.hcd.efh.consult@noaa.gov

Aloha,

The NOAA Fisheries Habitat Conservation Division (HCD) has reviewed the Revised Draft EA for Bayview Street Relief Draft Project, Waianae, Oahu, as pursuant to the HRS 343, Magnuson Stevens Fishery Conservation and Management Act; Essential Fish Habitat (EFH). The proposed project would be located in an area between Farrington Highway and Pokai Bay in Waiʻanae on the Leeward side of Oʻahu. A portion of the proposed alignment is located within the Special Management Area; Pokai Bay Beach Park. The proposed drainage improvements would replace a portion of an existing drainage system that currently serves the area around Bayview Street and a portion of Waiʻanae Valley Road. The proposed drainage improvements would increase the drainage system capacity with the use of High Density Polyethylene Pipes (HDPE) and concrete drain boxes of varying sizes; with the pipes being 18 inches in diameter and the boxes ranging from 24 to 30 inches in height by 72 inches wide. The proposed drainline would connect to an existing drainage system, which consists of several catch basins and drainage structures that collect stormwater from the mauka side of Farrington Highway. The existing drainage system mauka of Farrington Highway would empty into the proposed drainage alignment at this connection point. The drainage alignment would generally follow the existing drainage alignment. The drainage system would discharge at Pokai Bay.

The HCD has the following comments regarding the revised Draft EA. Section 3.8, 'Vegetation and Fauna' is very brief, stating that no important natural communities occur within the project alignment but there is no mention of studies or reports and none are provided in the appendices to confirm. Section 3.4, 'Water Quality and Marine Environment' does not mention if Kapui Steam is tidally influenced or describe the benthic habitat at the Pokai Bay outlet. According to the Atlas of Hawaiian Watersheds and other Aquatic Resources, the Kaupuni watershed land use is composed of 44.6% agriculture; 45.9% conservation; and 9.4% urban. This is concerning because land based sources of pollution such as agricultural runoff and sedimentation are one of the main stressors of near shore coral reef ecosystems in Hawaii.

Generally, the HCD encourage the establishment of a Best Management Practice (BMP) Plan including seasonal restrictions to avoid erosion during the rainy season when heavy and /or continual rainfall occurs most often. In addition, silt fences and curtains should be utilized and monitored. Areas with exposed soil should be covered. The project designers should consider incorporating low impact development stormwater practices (e.g. native landscaping, bioretention and infiltration techniques, and green buffers) to the extent practical in order to retain stormflows and pollutants on-site. The project designers should also consider using geotextile underlay that is compatible with subsoil to allow hydraulic infiltration and exfiltration while providing soil particle retention to the extent practical. The HCD strongly supports the incorporation of low impacts stormwater practices when hardening is necessary, in order to improve water quality, stormwater, and soil infiltration. Such actions will also contribute to minimizing sediment from reaching near shore coral reef ecosystems (and other EFH) down stream.

The Draft EA lacks substance in Section 3.8, 'Vegetation and Fauna'. Providing evident studies that confirm no important natural communities and species occur within the project areas footprint, as the section currently states, would greatly help resource agencies with grasping the extent of the project sites environmental setting. Providing additional information in 3.4, 'Water Quality and Marine Environment' regarding tidal influence of the stream and a description of the benthic habitat at the Pokai Bay outlet would be particularity helpful to the HCD to gauge the extent of possible affects to EFH and to explore measures that would avoid and minimize impacts. Thank you for the opportunity to review and comment on the Bayview Street Relief project Draft EA. Please do not hesitate to contact the HCD should you have further concerns.

Mele Kalikimaka,

Aydee Zielke
Natural Resource Specialist
Ocean Associates Inc. Contractor
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Pacific Islands Regional Office
Habitat Conservation Division
808-944-2146
aydee.zielke@noaa.gov
http://www.fpir.noaa.gov/HCD/hcd_efh.html

**Bow Engineering & Development, Inc.**
**1953 S. Beretania Street, PH-A**
**Honolulu, Hawaii 96826-1342**

**Telephone: (808) 941-8853**
**Fax: (808) 945-9299**
**www.bowengineering.com**

April 6, 2012

File: Bayview

Aydee Zielke, Natural Resource Specialist
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Pacific Islands Regional Office
Habitat Conservation Division
Aydee.zielke@noaa.gov

RE: Comments on the Revised Draft Environmental Assessment (EA)
Bayview Street Relief Drain Project
Wai'anae, Island of O'ahu

Dear Ms. Zielke;

Thank you for your email dated December 12, 2011 regarding your review of the Revised Draft Environmental Assessment for the Bayview Street Relief Drain Project. We offer the following response to your comments:

- **Vegetation and Fauna** – this comment requests that additional information be included regarding natural communities along the project alignment. As stated in the Revised Draft EA and updated in the Final EA, The proposed alignment would be constructed along existing right-of-way, through previously disturbed lots along easements, through paved parking lots, and along grassed areas in the park. The Final EA includes additional information in Section 3.8 Vegetation and Fauna, and includes standard Best Management Practices (BMPs) from the NOAA National Marine Fisheries to minimize potential adverse affects on protected marine species.
- **Water Quality and the Marine Environment** – this comment requests additional information on Kaupuni Stream and tidal influences; however, Kaupuni Stream enters Pōka'ī Bay via a channelized outlet some distance north of the project outfall. Additional information on the benthic habitat in the nearshore waters of Pōka'ī Bay has been included in the Final EA, and the discussion on stormwater drainage has been expanded.
- **Best Management Practices** – this comment outlines general BMPs used to minimize sediment from reaching nearshore coral reef ecosystems. BMPs are included in the EA to reduce potential impacts to water quality during construction of the project, and additional BMPs have been included in Section 3.8 Vegetation and Fauna in the Final EA as recommended by the National Marine Fisheries Protected Resources Division. The Department of Design and Construction will consider the measures outlined in the comment and incorporate into the project design, to the extent practicable.

Your letter and this response will be included in the Final EA upon its completion. We appreciate your participation in the environmental review process for this project.

Should you have any questions or comments please feel free to contact Ezra Lum at our office at (808) 941-8853, extension 114, or Ezra Lum at ELum@bowengineering.com.

Yours truly,

Ezra Lum
**BOW ENGINEERING & DEVELOPMENT, INC.**

CC: Gary Kam, City and County of Honolulu, Department of Design and Construction