

**DOMESTIC AND FIRE WATERLINE
SYSTEM REPLACEMENT AT PIER 51A
HONOLULU HARBOR, OAHU, HAWAII
JOB P10904**

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HARBORS

NOTICE TO BIDDERS
Hawaii Revised Statutes (HRS),
Chapter 103D

The receiving of bids for **DOMESTIC AND FIRE WATERLINE SYSTEM REPLACEMENT AT PIER 51A, HONOLULU HARBOR, OAHU, HAWAII, JOB P10904**, will begin as of the HiePRO Release Date. Bidders shall register and submit complete bids through HiePRO only. Refer to the following HiePRO link for important information on Vendor Registration: <https://hiepro.hawaii.gov/welcome.html>.

The solicitation plans, specifications, proposal, and additional documents designated or incorporated by reference shall be available in HiePRO.

HiePRO OFFER DUE DATE AND TIME is December 3, 2026, at 2:00 p.m., Hawaii Standard Time (HST). **Bidders shall submit and upload the complete proposal to HiePRO prior to the offer due date and time. Proposals received after said due date and time shall not be considered. Any additional support documents explicitly designated as confidential and/or proprietary shall be uploaded as a separate file to HiePRO. Bidders shall not include confidential and/or proprietary documents as part of their proposal. The record of each bidder and their respective proposal shall be open to public inspection. FAILURE TO UPLOAD THE PROPOSAL TO HiePRO SHALL BE GROUNDS FOR REJECTION.**

The scope of work consists of the replacement of the existing fire protection and domestic water system within Pier 51A, including trench restoration and temporary phasing. The estimated cost of construction is between \$10,000,000 and \$13,000,000.

To be eligible for award, bidders shall possess a valid State of Hawaii General Engineering "A" license **at the time of bidding**.

Division, 2016 GENERAL PROVISIONS FOR CONSTRUCTION PROJECTS, applicable to this project are available on the internet at: <http://hidot.hawaii.gov/administration/con/>.

A virtual pre-bid conference is scheduled for October 22, 2026, at 9:00 a.m., HST.

Interested bidders shall contact Mr. Jonathan Yee, Project Manager, directly at Jonathan.sw.yee@hawaii.gov, no later than five working days prior to the scheduled pre-bid conference to receive the meeting invitation. All prospective bidders and/or their respective representatives are encouraged to attend, however, attendance is not mandatory. All information presented at the pre-bid conference shall be provided for clarification and information only. Any amendments to the solicitation shall be made by formal addendum and posted in HlePRO.

All Requests for Information (RFI), including any questions and Substitution Requests shall be submitted in HlePRO **no later than November 6, 2026, at 2:00 p.m., HST**. Supporting documents for substitution requests must be submitted to the Project Manager below via email no later than the RFI deadline. RFI questions received after the stated deadline shall not be addressed. Substitution Requests, including supporting documents, received after the stated deadline shall not be considered. Verbal RFI(s) shall not receive a response. All responses to RFI questions shall be provided for clarification and information only and issued by formal addendum. Any amendments to the solicitation shall be made by formal addendum and posted in HlePRO.

If there is a conflict between the solicitation and information stated in the pre-bid conference, the meeting minutes, and/or the responses to RFI questions, the solicitation shall govern and control, unless as amended by formal addendum.

Apprenticeship Preference. A five percent bid adjustment for bidders that are party to apprenticeship agreements pursuant to HRS § 103-55.6 is applicable to this project.

Employment of State Residents on Construction Procurement Contracts. Compliance with HRS § 103B-3 is a requirement for this project whereby a minimum of 80 percent of the bidder's work force on this project shall consist of Hawaii residents.

Campaign contributions by State and County Contractors. Contractors are hereby notified

of the applicability of HRS § 11-355 which states that campaign contributions are prohibited from specified State or County government contractors during the term of the contract if the contractors are paid with funds appropriated by a legislative body. For more information, contact the Campaign Spending Commission at (808) 586-0285.

Protests. Any protest of this solicitation shall be submitted in writing to the Director of Transportation, in accordance with HRS § 103D-701 and Hawaii Administrative Rules § 3-126.

Bidders are hereby notified that the Department of Transportation shall affirmatively ensure that contracts entered into pursuant to this advertisement are awarded to the lowest responsible bidder without discrimination on the basis of race, color, national origin, sex, age, disability, or any other protected status recognized under applicable State and federal law.

For additional information, contact Mr. Jonathan Yee, Project Manager, by phone at (808) 587-1956, or by email at Jonathan.sw.yee@hawaii.gov.

The State reserves the right to reject any or all proposals and to waive any defects in said proposals in the best interest of the public.


DREANALEE K. KALILI

Deputy Director of Transportation for Harbors

HIePRO RELEASE DATE: October 8, 2026

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PERMITS

- NPDES Permit including the following:
 - Notice of General Permit Coverage (NGPC), National Pollutant Discharge Elimination System (NPDES) Domestic and Fire Waterline System Replacement at Pier 51A Honolulu, Island of Oahu, Hawaii File No. HIR10H796
 - Notice of Intent (NOI) Permit Application, Form C

INSTRUCTIONS FOR CONTRACTOR'S LICENSING

"A" general engineering contractors and "B" general building contractors are reminded that due to the Hawaii Supreme Court's January 28, 2002 decision in Okada Trucking Co., Ltd. v. Board of Water Supply, et al., 97 Haw. 450 (2002), they are prohibited from undertaking any work, solely or as part of a larger project, which would require the general contractor to act as a specialty contractor in any area where the general contractor has no license. Although the "A" and "B" contractor may still bid on and act as the "prime" contractor on an "A" or "B" project (*See, HRS § 444-7 for the definitions of an "A" and "B" project.*), respectively, the "A" and "B" contractor may only perform work in the areas in which they have the appropriate contractor's license (*An "A" or "B" contractor obtains "C" specialty contractor's licenses either on its own, or automatically under HAR § 16-77-32.*). The remaining work must be performed by appropriately licensed entities. It is the sole responsibility of the contractor to review the requirements of this project and determine the appropriate licenses that are required to complete the project.

SPECIAL PROVISIONS

The “General Provisions” are amended as follows:

1.3 DEFINITIONS

1. Section 1.3 Definitions: The definition for “Subcontractor” is amended by deleting it and replacing it with the following:
“Subcontractor — An individual, partnership, firm, corporation, or joint venture, or other legal entity, as licensed or required to be licensed under Chapter 444, Hawaii Revised Statutes, as amended, which enters into an agreement with the Contractor to perform a portion of the work.”
2. Section 1.3 Definitions: The definition for “Bid” is amended by deleting it and replacing it with the following:
“Bid — The offer of a Bidder, on the prescribed HDOT form, to perform the work and to furnish the labor and materials at the prices quoted.”
3. Add the following to 1.3 Definitions.

“HAWAII ePROCUREMENT SYSTEM (HIePRO) - The State of Hawaii eProcurement System for issuing solicitations, receiving proposals and responses, and issuing notices of award.”

2.7 REQUEST FOR SUBSTITUTION OF SPECIFIED MATERIALS AND EQUIPMENT BEFORE BID OPENING is amended as follows:

1. The last sentence in the first paragraph (line 147 to 152) shall be replaced with the following:

“Where a bidder intends to use a material or equipment of an unspecified brand, make, or model, the bidder must submit a request to the Department for review and approval at the earliest date possible. As specified in the Notice to Bidders, all substitution requests shall be posted as a question in HIePRO under the “Question and Answer” tab. Supporting documents for substitution requests shall be emailed to the Project Manager specified in the Notice to Bidders. Requests must be posted in HIePRO and supporting documents must be received by the Project Manager via email no later than the RFI deadline in the Notice to Bidders.”
2. The first sentence in the second paragraph (line 154 to 156) shall be replaced with the following:

“It shall be the responsibility of the bidder to submit sufficient evidence based upon which a determination can be made by the Department that the alternate brand is a qualified equivalent.”

- 2.8 PREPARATION AND DELIVERY OF BID is amended as follows: Last Paragraph (line 189 to 192) shall be replaced with the following:

“Bidders shall submit and upload the complete proposal to HiePRO prior to the bid opening date and time. Proposals received after said due date and time shall not be considered. Any additional support documents explicitly designated as confidential and/or proprietary shall be uploaded as a separate file to HiePRO. Bidders shall not include confidential and/or proprietary documents with the proposal. The record of each bidder and respective bid shall be open to public inspection. Original (wet ink, hard copy) proposal documents are not required to be submitted. Contract award shall be based on evaluation of proposals submitted and uploaded to HiePRO.

FAILURE TO UPLOAD THE COMPLETE PROPOSAL TO HiePRO SHALL BE GROUNDS FOR REJECTION OF THE BID.

If there is a conflict between the specification document and the HiePRO solicitation, the specifications shall govern and control, unless otherwise specified.”

- 2.11 BID SECURITY is amended by deleting (a) and replacing it with:

“(a) Unless directed otherwise in the invitation for bids, each bid shall be accompanied by bid security which is intended to protect the Department against the failure or refusal of a bidder to execute the contract for the work bid or to supply the required performance and payment bonds. Bid security shall be in an amount equal to at least five percent of the base bid and additive alternates. Bid security shall be in one of the following forms:

- (1) A deposit of legal tender;
- (2) A valid surety bid bond, underwritten by a company licensed to issue bonds in the State of Hawaii, in the form and composed, substantially, with the same language as provided herewith and signed by both parties; or
- (3) A certificate of deposit; credit union share certificate; or cashier’s, treasurer’s, teller’s, or official check drawn by or a certified check accepted by a bank, savings institution, or credit union insured by the Federal Deposit Insurance Corporation (FDIC) or the National Credit Union Administration (NCUA) and payable at sight or unconditionally assigned to the Department. These instruments may be utilized only to a maximum of one hundred thousand dollars (\$100,000.00). If the required amount totals over one hundred thousand dollars (\$100,000.00), more than one instrument not exceeding one hundred thousand dollars (\$100,000.00) each and issued by different financial institutions shall be accepted.

If bidder elects options (1) or (3) above for its bid security, said bid security shall be in its original form and shall be submitted before the bid deadline to the Contract Office, Department of Transportation, AliiAIMoku Hale, 869 Punchbowl Street, Room 103, Honolulu, Hawaii 96813. Original surety bid

bonds do not need to be submitted to the Contracts Office. Bidders are reminded that a copy of its surety bid bond shall be included with its bid submitted and uploaded to HiePRO.”

Delete 2.12 PRE-OPENING MODIFICATION OR WITHDRAWAL OF BIDS in its entirety and replace with the following:

“2.12 PRE-OPENING MODIFICATION OR WITHDRAWAL OF BIDS. Bids may be modified or withdrawn prior to the bid opening date and time. Withdrawal or revision of proposal shall be completed and submitted and uploaded to HiePRO prior to the bid opening date and time.”

2.14 PUBLIC OPENING OF BIDS is amended by deleting 2.14 PUBLIC OPENING OF BIDS in its entirety.

2.20 BID EVALUATION AND AWARD is amended by replacing 2.20(a) and 2.20(b) with the following:

“(a) The award shall be made to the lowest, responsive, responsible bidder within 180 days after bid opening and shall be based on the criteria set forth in the invitation for bids. The Department may request the bidders to allow the Department to consider the bids for the issuance of an award beyond the 180 day period. Agreement to such an extension must be made by a bidder in writing. Only bidders who have agreed to such an extension will be eligible for the award. No response to request shall mean bidder shall no longer be eligible for award.

(b) No bid shall be withdrawn or corrected for a period of 180 days after bid opening except for a mistake as described in this article; however, a bidder may withdraw a bid without penalty anytime prior to award of the contract if it finds it is unable to comply with the provisions regarding the employment of State of Hawaii residents as described in Section 7.2 and 103B-3, H.R.S.”

END OF SECTION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION

SPECIFICATIONS

PART I

GENERAL PROVISIONS

The Hawaii Department of Transportation AIR and WATER Transportation Facilities Division General Provisions for Construction Projects dated 2016 is not physically included in these specifications. The General Provisions are available at
<http://hidot.hawaii.gov/administration/con/>

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION

SPECIFICATIONS

PART II
TECHNICAL PROVISIONS

ARTICLE X - PROJECT DESCRIPTION

10.0 CONTENTS

This Article 10 includes the following subsections:

10.1	GENERAL
10.2	WORK INCLUDED
10.3	DIRECTOR
10.4	HARBORS DIVISION CONSTRUCTION ENGINEER
10.5	ALTERNATIVES AND SUBSTITUTIONS FOR EQUIPMENT, ARTICLES OR MATERIALS
10.6	CONTRACTORS RESPONSIBILITY
10.7	STANDARD SPECIFICATIONS AND APPROVED EQUAL
10.8	PERMITS
10.9	SHOP DRAWINGS
10.10	MODIFICATIONS TO PLANS AND SPECIFICATIONS
10.11	CONTRACTOR QUALITY CONTROL
10.12	LAYOUT OF WORK
10.13	TESTING
10.14	HARBOR OPERATIONS
10.15	WATERWAYS
10.16	AS-BUILT DRAWINGS
10.17	MEASUREMENT AND PAYMENT
10.18	CONSTRUCTION ACCESS
10.19	WORKING HOURS
10.20	CONSTRUCTION SCHEDULE
10.21	HARBORS SECURITY

10.1 GENERAL

The work to be done under this contract shall include the furnishing of all labor, materials and equipment, and the supervision and services necessary to construct, complete in place, ready for use, all items of work in accordance with the drawings and these specifications. The Base Bid shall include the total work as shown or specified.

Bidders are encouraged to examine the existing conditions at the project site to familiarize themselves with the nature and extent of work involved. All requests for information shall be submitted electronically in accordance with the Special Provisions.

10.2 WORK INCLUDED

In general, the work shall include but not be limited to the following items of work:

- (A) Environmental protection.
- (B) Mobilization and demobilization.
- (C) Coordination with the Board of Water Supply, the State of Hawaii Department of Transportation – Highways Division, Pasha Hawaii, Hawaii Stevedores, Inc. (HSI), and other private and government agencies.

- (D) Demolition and removal of the existing domestic and fire protection water systems.
- (E) Hazardous Material Mitigation/Handling and removal of contaminated materials.
- (F) Earthwork, including trenching.
- (G) Construction of asphalt concrete pavement.
- (H) Construction of waterlines, fire hydrants, and appurtenances.
- (I) Striping of pavement markings.
- (J) Repair and/or reconstruction of existing utility boxes.
- (K) All incidental items required to complete the work.
- (L) Any other work indicated on plans.

10.3 DIRECTOR

The term "Director" as used in these Specifications shall mean the Director of Transportation or his authorized representative.

10.4 HARBORS DIVISION CONSTRUCTION ENGINEER

The term "Harbors Division Construction Engineer," "Harbors Construction Engineer," "Construction Engineer" or "Engineer," as used in these Specifications shall mean the Construction Engineer for Harbors Division, State Department of Transportation, or his authorized representative. The name and contact information for the Construction Engineer will be provided just prior to, or at, the Pre-construction meeting.

10.5 ALTERNATIVES AND SUBSTITUTIONS FOR EQUIPMENT, ARTICLES OR MATERIALS

These specifications and/or plans may specify equipment, articles or materials under a trade name or the name of a manufacturer and his information catalog. The use of alternatives or substitutions of equal quality and characteristics for the purpose intended will be permitted, upon approval of the Director, in accordance with the requirements of the General Provisions, 2.7 and 6.13, and Special Provision 2.7.

Please note that these requirements include certain deadlines for requests on use of alternatives before bid opening and/or justification for substitutions after the bid opening. The Director also reserves the right to deny any request he deems irregular or not in the best interests of the State.

10.6 CONTRACTOR'S RESPONSIBILITY

- (A) General: The Contractor shall make direct application to the proper utility companies for water, electric power, and telephone service for its use during construction of this project, and shall pay for all connections, service charges, and all costs for construction and ultimate removal of all temporary service line extensions into the site.

The Contractor shall comply with all applicable Federal, State and County laws, including Hawaii Public Health regulations, and all local laws and regulations concerning pollution control and abatement. No burning of debris and/or waste materials shall be permitted on the project site. The Contractor shall be responsible for all dust control. Dust shall be kept within acceptable levels at all times. Noise shall be kept within acceptable levels at all times in accordance with the State of Hawaii Department of Health requirements.

The Contractor shall be responsible for any and all damages to harbor and adjacent facilities caused by the Contractor's operations as well as those of the its sub-contractors, suppliers, and any other parties associated with its work. The Contractor shall, at their own expense, make prompt restitution for damages to items caused by their operations or negligence. The Contractor shall hold the State and its Consultants harmless for all claims from such loss or injury.

The Contractor will prepare and obtain approval of Storm Water Pollution Prevention Plan (SWPPP) from the Harbors Construction Project Engineer prior to the start of construction. The SWPPP shall be prepared in accordance with Hawaii Administrative Rules (HAR) 11-55 Appendix C requirements and comply with the latest edition of the "Construction Site Runoff Control Program" of the Harbors Division. The site specific BMPs shall be submitted to the Harbors Division for review and comment prior to the submittal to the Department of Health.

The Contractor shall ensure that construction dewatering effluent is not allowed to enter State waters, or drainageways or drainage systems that discharge into State waters. Effluent generated by dewatering, from contaminated areas as shown within the construction drawings, if conducted, shall not be disposed of by back-trenching (pit-to-pit discharge) within, or be allowed to infiltrate into, any area that is not shown to be contaminated on the construction drawings. The Contractor is prohibited from discharging dewatering effluent, in any way, into State waters or drainageways or drainage systems that discharge into State waters.

The Contractor shall provide, erect, and maintain warning signs, lights, barricades, fences, and/or other means as necessary to prevent unauthorized persons and the general public from wandering onto the construction area where they may suffer injury or create a hazard to the construction operations or the work. The Contractor shall take all necessary precautions for safety in his operations and to prevent injury to his employees and to others having lawful access to the construction area. This work shall be done at no cost to the State and shall be considered incidental to the various item of work.

The Contractor shall coordinate all work with the Harbors Division Construction Engineer and Oahu District Manager, and shall conform to all harbor regulations affecting their operations.

The Contractor shall coordinate all work within the project limits with Pasha Hawaii, Hawaii Stevedores, and any other company or government agency impacted by this project.

- (B) Site Safety and Health Officer (SSHO): Site Safety and Health Officer shall be provided by the Contractor at the work site at all times to perform safety and occupational health management, surveillance, inspections, and safety enforcement for the Contractor. The Contractor is encouraged to have at least one alternate SSHO approved in order to allow work to be performed in the absence of the (primary) SSHO. The SSHO shall report to an Officer of the Contractor's company. Furthermore, the SSHO shall meet the following qualification requirements:

- (1) An Associate Safety Professional (ASP), Certified Safety Trained Supervisor (STS), Construction Health & Safety Technician (CHST), and/or Construction Site Safety Technician (CSST).
- (2) A minimum of 10 years of safety work of a progressive nature with at least 5 years of experience on similar projects.
- (3) 30-hour OSHA construction safety class or equivalent within the last 5 years.
- (4) An average of at least 24 hours of formal safety training each year for the past 5 years; competent person status training in at least two of the following in the past year: excavation; fall protection; confined space; and personal protective equipment. Absent the SSHO having this competent person training, in any one of the four areas the previous year as stated above, the foreman for the applicable construction activity shall be competent person trained in that activity (in which the SSHO is not competent person trained in the previous year).

The SSHO shall have the following duties and responsibilities:

- (1) Conduct daily safety and health inspections and maintain a written log which includes area/operation inspected, date of inspection, identified hazards, recommended corrective actions, and estimated and actual dates of corrections. Safety inspection logs shall be attached to the Contractor's daily report.
- (2) Conduct mishap investigations and complete required reports. Maintain the OSHA Form 300 and Daily Production reports for prime and subcontractors.
- (3) Maintain applicable safety reference material on the job site.

- (4) Attend the pre-construction conference, pre-work meeting, including preparatory inspection meeting, and periodic in-progress meetings and/or other meetings upon request by the Harbors Construction Engineer.
 - (5) Implement and enforce the accepted Health and Safety Plan.
 - (6) Maintain a safety and health deficiency tracking system that monitors outstanding deficiencies until resolution. A list of unresolved safety and health deficiencies shall be posted on the safety bulletin board.
 - (7) Ensure subcontractor compliance with safety and health requirements.
 - (8) Coordinate safety and health requirements with the Contractor's Certified Industrial Hygienist (CIH). If the CIH satisfies the SSHO qualification requirements and is appointed as the SSHO, all duties of the SSHO position shall also be performed.
 - (9) Failure to perform the above duties may result in dismissal of the SSHO and/or a project stoppage. The project work stoppage will remain in effect pending approval of a suitable replacement. No part of the time lost due to project stoppage will be made the subject of claim for extension of time or for excess costs or damages by the Contractor.
 - (10) No work may be performed on site unless the SSHO is present.
- (C) Safety Requirements: The Contractor must be familiar with, and shall at all times conform to, all applicable health and safety regulations, including all OSHA standards. The Contractor shall submit, to the Harbors Engineer, a Health and Safety Plan within (30) calendar days after the award of contract for review and acceptance. The Contractor shall not be allowed to commence work until the Health and Safety Plan has been accepted by the Harbors Engineer.

The Contractor shall require its employees, subcontractors, and agents to comply with all applicable Federal, State, and local health and safety laws and regulations.

Acceptance of the Health and Safety Plan by the Harbors Construction Engineer shall not relieve the Contractor from its responsibility of complying with Federal, State and local occupational health and safety laws and regulations. The Contractor is solely responsible for its compliance, and ensuring that its employees, subcontractors and agents also comply, with all applicable Federal, State and local occupational health and safety laws and regulations.

The Contractor shall be familiar with any and all Federal, State and local safety and drug-free workplace regulations and shall comply with all applicable provisions and amendments. Failure to do so will result in immediate discontinuation of any, or all, parts of the operation that are in violation until compliance is achieved.

- (1) Precautions at the Jobsite: The Contractor shall take all necessary precautions to protect the workers, invitees and the public, and shall

provide, where reasonable and necessary, barriers, guards, temporary bridges, respiratory equipment and lights. The Contractor shall require all personnel to wear hard hats, safety boots, and appropriate clothing while in any work area. In addition, personnel shall utilize safety harnesses, lines, and other restraint devices as required when working at either excessive heights or depths as defined by OSHA regulations. As a reminder, the Contractor must provide bullrails, or portable concrete barriers (jersey barrier or k-rail) per DOT Highway Standard Plan T-42 or equal approved by the Harbors Construction Engineer, along unprotected waterside edges of aprons and bulk-heads, except where vehicles are prohibited.

When working around existing piping or conduit, the Contractor shall first tone the area to determine underground line locations. Special care shall be taken during excavation to avoid all buried lines, cables, utilities, cathodic protection cables and conduit, and to maintain the minimum distance from existing cables, conduits and pipe.

- (2) Fire Safety: The Contractor's personnel shall be familiar with location and use of firefighting equipment, including blankets, extinguishers, hose and dry powder agents. Smoking materials or other sources of flame or heat should be immediately extinguished in the event of any accident or equipment failure resulting in the release of flammable vapor or liquids. Fire safety equipment shall be provided by the Contractor as may be required by the local, State or Federal authorities.

The Contractor shall not store equipment or park vehicles in a way that obstructs fire lanes nor blocks fire exits from office structures, equipment buildings, or fenced areas.

- (3) Mechanical Safety: Dangerous parts of equipment shall be indicated by safety colors or warning signs. Extreme care shall be exercised in operating mobile or moving equipment.
- (4) First Aid: The Contractor shall ensure that all employees are aware of the locations and use of first aid equipment. Local emergency telephone numbers for ambulance, fire department and law enforcement agencies shall be posted in prominent places. The Contractor shall provide all necessary first aid equipment, including a first aid kit in its vehicles.
- (5) Firearms and Alcohol: Absolutely under no circumstances shall unprescribed, controlled substances, alcohol or firearms of any type be present or carried in vehicles by Contractor's personnel. Any of these items found in the possession of any person shall be grounds for immediate removal from the jobsite and/or dismissal of that person from the job.
- (6) Accidents: In the event that an accident or injury occurs at the jobsite, the Contractor shall immediately notify the State of the occurrence. A complete accident report, including photographs of the accident site, shall be provided to the State within two (2) weeks of the occurrence.

- (7) Jobsite Invitees: The Contractor shall be responsible for the safety of the personnel of any of its Subcontractors, vendors, suppliers, agents or other invitees who enter the job site area and the Contractor shall require said invitees to comply with the requirements of this Section. The Contractor shall notify the State of invitees in advance.

10.7 STANDARD SPECIFICATIONS AND APPROVED EQUAL

The term "Standard Specifications," as used in these Technical Provisions of these Specifications, shall mean the "Hawaii Standard Specifications for Road and Bridge Construction, Department of Transportation Highways Division, Honolulu, Hawaii, 2005," and all subsequent amendments.

References to "roadway" or "highway" in the Standard Specifications shall mean "paved area".

References to "roadbed" in the Standard Specifications shall mean "pavement bed".
References to "highway right-of-way" in the Standard Specifications shall mean "project area".

The term "approved equal" as used in the Technical Provisions of these Specifications and Plans shall mean "an equal approved by the Director in writing."

10.8 PERMITS

The Contractor is responsible for complying with all permit requirements for the project and it shall ensure that all permits remain valid and that all permits are renewed in a timely manner, throughout the duration of the project.

- (A) The Harbors Division has applied for and obtained the following permits and approvals and they are attached to, and included in, the REFERENCE DOCUMENTS section of these specifications.
1. National Pollutant Discharge Elimination System (NPDES) Permit including the following:
 - a. Notice of General Permit Coverage (NGPC), NPDES, Domestic and Fire Waterline System Replacement at Pier 51A, Honolulu Harbor, Oahu, Hawaii (Job P10904), File No. HIR10H796; from State of Hawaii, Department of Health dated June 12, 2025.
 - b. Notice of Intent (NOI) Permit Application, Form C
- (B) Hot Work Permit: The Contractor shall obtain permits for all welding and burning operations on piers, wharves, and aboard vessels. The Contractor shall obtain the permits required for this work directly from the Oahu District manager.
- (C) Noise Permit: The Contractor shall apply for, and obtain, a Community Noise Permit and/or Variance, for any work that the contract requires, or the contractor proposes, to perform outside of normal working hours; whichever is required by the State of Hawaii Department of Health for such work and is responsible for

providing any submittals and materials, and to undertake all efforts and tasks, required by the Department of Health for Permit and/or Variance approval.

- (D) The Contractor also shall consult applicable City, State, and other governmental agencies for required permits, charges and fees. The Contractor shall apply for, and obtain, any permits necessary for it to perform all work required under the contract and is responsible for preparing and furnishing any information needed to complete any permit applications, as well as for paying any permit filing fees and charges, imposed by the permitting agencies as conditions for approval. Permits, charges, and fees required for the Project may include, but not be limited to, the following:

1. Landfill Agreement
2. Fire Hydrant Use Permit
3. Department of Health, NPDES permits for discharges of hydrotesting waters, as well as discharges associated with construction activity dewatering.

The Contractor shall submit two (2) copies of all permits to the Harbors Construction Engineer no later than two working days after receipt of any approved permit.

The Contractor must comply with all conditions and requirements imposed by all clearances and permits listed above, or obtained for and in association with the project, and the Plans and Specifications. See Article XIII, Section 13.2 (B).

10.9 SHOP DRAWINGS

The Contractor shall prepare shop drawings and submit eight (8) sets to the Director. Review of shop drawings is for general conformance with the design concept of the project contract documents and does not relieve the Contractor of his responsibility to provide all work in accordance with the Plans and Specifications.

10.10 MODIFICATIONS TO PLANS AND SPECIFICATIONS

The Contractor and his Subcontractors must submit in writing any requests for modifications to the Plans and Specifications. Shop drawings that are submitted to the design professional for his review do not constitute "in writing" unless it is brought to the attention of the design professional that specific changes are being suggested. In any event, changes to the Plans and Specifications by means of shop drawings become the responsibility of the person initiating the changes. The Contractor shall be responsible for coordinating and making all necessary revisions to the work of all trades to suit the modifications requested.

Construction changes completed without written approval by the Harbor's Construction Engineer will be at the Contractor's risk. All costs associated with unauthorized construction changes shall be the responsibility of the Contractor.

10.11 CONTRACTOR QUALITY CONTROL

- (A) General Requirements: Establish and maintain an effective quality control (QC)

system. QC consists of plans, procedures and organization necessary to produce an end product which complies with the contract requirements. The QC system shall cover all construction operations, both onsite and offsite, and be keyed to the proposed construction sequence. The project superintendent will be held responsible for the quality of work and is subject to removal by the Engineer for non-compliance with the quality requirements specified in the contract. In this context, the highest level manager responsible for the overall construction activities at the site, including quality and production is the project superintendent. The project superintendent must maintain a physical presence at the site at all times during construction and is responsible for all construction and related activities at the site.

(B) Quality Control Plan: Submit no later than 30 days after the award of the contract, the Contractor Quality Control (CQC) Plan. The Engineer will consider an interim plan for the first 90 days of operation. Construction will be permitted to begin only after acceptance of the CQC Plan or acceptance of an interim plan applicable to the particular feature of work to be started. Work outside of the accepted interim plan will not be permitted to begin until acceptance of a CQC Plan or another interim plan containing the additional work.

1. Content of the CQC Plan: Include, as a minimum, the following to cover all construction operations, both onsite and offsite, including work by subcontractors, fabricators, suppliers, and purchasing agents:
 - a. A description of the quality control organization, including a chart showing lines of authority and acknowledgement that the CQC staff will implement the three phase control system for all aspects of the work specified. Include a CQC System Manager who reports to an Officer of the Contractor's company.
 - b. Names, qualifications (in resume format), duties, responsibilities, and authorities of each person assigned a CQC function.
 - c. A copy of the letter to the CQC System Manager signed by an authorized official of the firm which describes the responsibilities and delegates sufficient authorities to adequately perform the functions of the CQC System Manager, including authority to stop work which is not in compliance with the contract as well as to direct that corrective action be initiated to address non-compliant work. Letters of direction to all other various quality control representatives outlining duties, authorities, and responsibilities will be issued by the CQC System Manager. Copies of these letters must be furnished to the Engineer.
 - d. Procedures for scheduling, reviewing, certifying, and managing submittals, including those of subcontractors, offsite fabricators, suppliers, and purchasing agents. These procedures must be in accordance with Article XIX – Required Submittals.
 - e. Control, verification, and acceptance testing procedures for each specific test to include the test name, specification paragraph requiring test, feature of work to be tested, test frequency, and person

responsible for each test. (Laboratory facilities approved by the Engineer must be used).

- f. Procedures for tracking preparatory, initial, and follow-up control phases and control, verification, and acceptance tests including documentation.
- g. Procedures for tracking construction deficiencies from identification through acceptable corrective action. Establish verification procedures that identified deficiencies have been corrected.
- h. Reporting procedures, including proposed reporting formats.
- i. A list of the definable features of work. A definable feature of work is a task which separate and distinct from other tasks, has separate control requirements, and may be identified by different trades or disciplines, or it may be work by the same trade in a different environment. Although each section of the specifications may generally be considered as a definable feature of work, there are frequently more than one definable features under a particular section. This list will be agreed upon during the coordination meeting.

- 2. Acceptance of Plans: Acceptance of the Contractor's CQC plans is required prior to the start of construction. Acceptance is conditional and will be predicated on satisfactory performance during construction. The Engineer reserves the right to require the Contractor to make changes in his CQC Plan and operations including removal of personnel, as necessary, to obtain the quality specified.
- 3. Notification of Changes: After acceptance of the CQC Plan, notify the Engineer in writing of any proposed change. Proposed changes are subject to acceptance by the Engineer.

(C) Coordination Meeting: After the preconstruction conference, before start of construction, and prior to acceptance by the Engineer of the CQC Plan, attend a Coordination Meeting with the Engineer and discuss the Contractor's quality control system. Submit the CQC plan a minimum of 7 calendar days prior to the Coordination Meeting. During the meeting, a mutual understanding of CQC operations, control activities, testing, administration of the system for both onsite and offsite work, and the interrelationship of Contractor's management and control and the Engineer's quality assurance. Minutes of the meeting will be prepared by the Contractor, signed by both the Contractor and the Engineer, and will become a part of the contract file. There may be occasions when subsequent conferences will be called by either party to reconfirm mutual understandings and/or address deficiencies in the CQC system or procedures which may require corrective action by the Contractor.

(D) Quality Control Organization:

- 1. Personnel Requirements: The requirements for the CQC organization are a CQC System Manager, Safety and Health Manager (Site Safety and

Health Officer), and sufficient number of additional qualified personnel to ensure safety and contract compliance. The Safety and Health Manager must receive direction and authority from the CQC System Manager and serve as a member of the CQC staff. Personnel identified in the technical specifications as requiring specialized skills to assure the required work is being performed properly will also be included as part of the CQC organization. The Contractor's CQC staff must maintain a presence at the site at all times during progress of the work and have complete authority and responsibility to take any action necessary to ensure contract compliance. The CQC staff will be subject to acceptance by the Engineer.

Provide adequate office space, filing systems, and other resources as necessary to maintain an effective and fully functional CQC organization. Promptly complete and furnish all letters, material submittals, shop drawing submittals, schedules, and all other project documentation to the CQC organization. The CQC organization shall be responsible to maintain these documents and records at all times, except as otherwise acceptable to the Engineer.

2. CQC System Manager: Identify as CQC System Manager an individual within the onsite work organization who is responsible for overall management of CQC and have the authority to act in all CQC matters for the Contractor. The CQC System Manager must be a graduate engineer, graduate architect, or a graduate of construction management, with a minimum of 5 years of container terminal construction experience and a minimum of 1 years of experience as a CQC System Manager. This CQC System Manager must be on the site at all times during construction and be employed by the prime Contractor. The CQC System Manager must be assigned no other duties. Identify in the plan an alternate to serve in the event of the CQC System Manager's absence. The requirements for the alternate are the same as the CQC System Manager.
3. CQC Personnel: In addition to CQC personnel specified elsewhere in the contract, the Contractor shall provide as part of the CQC organization specialized personnel to assist the CQC System Manager. If it is subsequently determined by the Engineer that the minimum CQC requirements are not being met, the Contractor may be required to provide additional staff personnel to the CQC organization at no cost to the State.
4. Additional Requirement: In addition to the above experience and/or education requirements, the QC System Manager must have completed the course entitled "Construction Quality Management (CQM) for Contractors" within the last three (3) years. This course is periodically offered at the General Contractors Association of Hawaii.
5. Organizational Changes: The Contractor shall maintain the CQC staff at full strength at all times. When it is necessary to make changes to the CQC staff, the Contractor shall revise the CQC Plan to reflect the

changes and submit the changes to the Engineer for acceptance. Requests shall include the names, qualifications, duties, and responsibilities of each proposed replacement. Upon acceptance of any changes, the Contractor shall revise the CQC Plan to accurately reflect the changes. The CQC Plan shall be kept current at all times during the life of the contract.

- (E) Submittals and Deliverables: Submittals shall comply with the requirement stated in Article XIX – Required Submittals. The CQC organization is responsible for certifying that all submittals and deliverables are in compliance with the contract requirements prior to submitting for review.
- (F) Control: Contractor Quality Control is the means by which the Contractor ensures that the construction, to include that of subcontractors and suppliers, complies with the requirements of the contract. At least three phases of control must be conducted by the CQC System Manager for each definable feature of the construction work as follows:
 - 1. Preparatory Phase: This phase is performed prior to beginning work on each definable feature of work, after all required plans/documents/submittals/materials are approved/accepted, and after copies are at the work site. The phase includes:
 - a. Review of each paragraph of applicable specifications, reference codes, and standards. Make available during the preparatory inspection a copy of those sections of referenced codes and standards applicable to that portion of the work to be accomplished in the field. Maintain and make available in the field for use by the Engineer until final acceptance of the work.
 - b. Review of the contract drawings.
 - c. Check to assure that all materials and/or equipment have been tested, submitted, and approved.
 - d. Review of provisions that have been made to provide required control inspection and testing.
 - e. Examination of the work area to assure that all required preliminary work has been completed and is in compliance with the contract.
 - f. Examination of required material, equipment, and sample work assure that they are one hand, conform to approved shop drawings or submitted data, and are properly stored.
 - g. Review of the appropriate activity hazard analysis to assure safety requirements are met.
 - h. Discussion of procedures for controlling quality of the work including repetitive deficiencies. Document construction tolerances and

workmanship standards for that feature of work.

- i. Check to ensure that the portion of the plan for the work to be performed has been accepted by the Engineer.
- j. Discussion of the initial control phase.
- k. A meeting conducted by the CQC System Manager and attended by the superintendent, other CQC personnel (as applicable), and the foreman responsible for the definable feature of work. Provide a minimum of two (2) working days advance notice to the Harbors Construction Engineer of this meeting. Document the results of the preparatory phase actions by separate minutes prepared by the CQC System Manager and attach to the daily CQC report. Instruct applicable workers as to the acceptable level of workmanship required in order to meet contract specifications.

The Engineer shall be notified at least 48 hours in advance of the preparatory control phase.

- 2. Initial Phase: This phase is accomplished at the beginning of the definable feature of work. Accomplish the following:
 - a. Check work to ensure that it is in full compliance with contract requirements. Review minutes of the preparatory phase meeting.
 - b. Verify adequacy of controls to ensure full contract compliance. Verify required control inspection and testing.
 - c. Establish level of workmanship and verify that it meets minimum acceptable workmanship standards. Compare with required sample panels as appropriate.
 - d. Resolve all differences.
 - e. Check safety to include compliance with and upgrading of the safety plan and activity hazard analysis. Review the activity analysis with each worker.
 - f. The Engineer shall be notified at least 1 workday in advance of the beginning of the initial phase. Prepare separate minutes of this phase by the CQC System Manager and attach to the daily CQC report. Indicate the exact location of initial phase for future reference and comparison with follow-up phases.
 - g. The initial phase shall be repeated for each new crew assigned to a definable feature of work to work onsite, or any time acceptable specified quality standards are not being met.
- 3. Follow-up Phase: Perform daily checks to assure control activities,

including control testing, are providing continued compliance with contract requirements, until completion of the particular feature of work. Record the checks in the CQC documentation. Conduct final follow-up checks and correct all deficiencies prior to the start of additional features of work which may be affected by the deficient work. Do not build upon nor conceal non-conforming work.

2. Additional Preparatory and Initial Phases: Conduct additional preparatory and initial phases on the same definable features of work if: the quality of on-going work is unacceptable; if there are changes in the applicable CQC staff, onsite production supervision, or work crew; if work on a definable feature of work is resumed after a substantial period of inactivity; or if other problems develop; or if requested by the Engineer.

(G) Tests:

1. Testing Procedure: Perform specified or required tests to verify that control measures are adequate to provide a product which conforms to contract requirements. Upon request, furnish to the Engineer duplicate samples of test specimens for possible testing by the State. Testing includes operation and/or acceptance tests when specified. Procure the services of a State-approved testing laboratory. Perform the following activities and record and provide the following data:
 - a. Verify that testing procedures comply with contract requirements.
 - b. Verify that facilities and testing equipment are available and comply with testing standards.
 - c. Check test instrument calibration data against certified standards.
 - d. Verify that recording form and test identification control number system, including all of the test documentation requirements have been prepared.
 - e. Record results of all tests taken, both passing and failing on the CQC report for the date taken, including specification paragraph reference, location where tests were taken, and the sequential control number identifying the test. If approved by the Engineer, actual test reports may be submitted later with a reference to the test number and date taken. Provide an information copy of tests performed by an offsite or commercial test facility directly to the Engineer. Failure to submit timely test reports as stated may result in nonpayment for related work performed and disapproval of the test facility for this contract.
2. Testing Laboratories:
 - a. Validation Requirements: Any laboratory used by the Contractor for testing aggregate, concrete, bituminous materials, soils, rock, and other construction materials must be a State-approved facility.

- b. Furnishing or Transportation of Samples for Testing: Costs incidental to the transportation of samples or materials shall be borne by the Contractor. Samples of materials for test verification and acceptance testing by the Contractor shall be delivered to a testing laboratory on the Island of Oahu, State of Hawaii, designated by the Engineer. Notification of each specific test and result, exact delivery location, and dates will be made to the Engineer.

(H) Completion Inspection:

1. Pre-Final Inspection: The CQC System Manager shall develop a punch list of items which do not conform to the contract documents. The Engineer will review the punch list and add to or correct the items listed. The CQC System Manager shall incorporate the Engineer's comments and provide a pre-final punch list. The CQC System Manager shall ensure that all items on this list have been corrected before notifying the Engineer that a final inspection can be scheduled. Any items noted on the pre-final inspection shall be corrected in a timely manner. These inspections and deficiency corrections required by this paragraph shall be accomplished within the time slate for completion of the entire work.
2. Final Acceptance Inspection: The Contractor's quality control inspection personnel, plus the superintendent or other primary management person, and the Engineer must be in attendance at the final acceptance inspection. Additional State personnel, consultants, or users may also be in attendance. The final acceptance inspection will be formally scheduled by the Engineer based upon results of the pre-final inspection. Notify the Engineer at least 14 days prior to the final acceptance inspection and include the Contractor's assurance that all specific items previously identified to the Contractor as being unacceptable, along with all remaining work performed under the contract, will be complete and acceptable by the date scheduled for the final acceptance inspection. Failure of the Contractor to have all contract work acceptably complete for this inspection will cause for the Engineer to bill the Contractor for the Engineer's and attending consultants' cost for attendance.

(I) Documentation: Maintain current records providing factual evidence that required quality control activities and/or tests have been performed. Include in these records the work of subcontractors and suppliers. The Contractor shall provide a sample format for the documentation to the Engineer for review and approval. The documentation, at a minimum, shall include the following:

1. Contractor/subcontractor and their area of responsibility.
2. Operating plant/equipment with hours worked, idle or down for repair.
3. Work performed each day, giving location, description, and by whom. When Network Analysis (NAS) is used, identify each phase of work performed each day by NAS activity number.
4. Test and/or control activities performed with results and references to

specifications/drawing requirements. Identify the control phase (preparatory, initial, follow-up). List of deficiencies noted, along with corrective action.

5. Quantity of materials received at the site with statement as to acceptability, storage, and reference to specifications/drawings requirements.
6. Submittals and deliverables reviewed, with contract reference, by whom, and action taken.
7. Job safety evaluations stating what was checked, results, and instruction or corrective actions.
8. Instructions given/received and conflicts in plans and/or specifications.
9. Contractor's verification statement.

Indicate a description of trades working on the project; the number of personnel working; weather conditions encountered; and any delays encountered. Cover both conforming and deficient features and include a statement that equipment and materials incorporated in the work and workmanship comply with the contract. Furnish the original and one copy of these records in report form to the Engineer daily within 24 business hours after the date covered by the report, including days on which no work was performed. All calendar days must be accounted for throughout the life of the contract. The first report following a day of no work will be for that day only. Reports must be signed and dated by the CQC System Manager. Include copies of test reports and copies of reports prepared by all subordinate quality control personnel within the CQC System Manager report.

- (J) Notification of Non-Compliance: The Contractor shall immediately take corrective action upon receipt of notice, from the Engineer, that non-compliance with the foregoing requirements has been detected or discovered. Such notice, if and/or when delivered to the Contractor at the work site, will be deemed sufficient for the purpose of formal notification.

Should the Contractor fail or refuse to promptly comply, or initiate corrective action, the Engineer may, at its discretion, issue an order to the Contractor to stop all or part of the work (a "stop order") until the Contractor takes corrective action that is satisfactory to the Engineer.

The Contractor is not allowed to make any claim for, nor will it be granted, contract time extension or compensation for excess costs or damages incurred by said stop order, inclusive of remobilization and extended office overhead, resulting from the time lost as well as other impacts due to such stop orders.

10.12 LAYOUT OF WORK

The Contractor shall layout his work from reference points and bench marks indicated on the plans and shall be responsible for all measurements in connection therewith. The Contractor shall furnish all equipment and materials required to establish and maintain all lines and grades as called for in the plans or as required in the process of construction. The Contractor shall be responsible for the proper and accurate layout of the work and for the preservation of stakes and other marks. All survey work shall be performed by a Surveyor licensed in the State of Hawaii for a minimum of 5 years.

10.13 TESTING

The Contractor shall hire an independent certified testing agency to perform all testing required under these specifications. Testing agency shall be subject to the approval of the Director. The Contractor shall be responsible for costs associated with testing, and for the submittal of test results.

Testing results shall be submitted for review by the State's Construction Engineer in a timely manner so as not to affect the construction schedule.

10.14 HARBOR OPERATIONS

All work shall be coordinated with the Harbors Construction Engineer who will be identified at the pre-construction meeting. Before work is started, the Contractor shall submit a work schedule to the Director for approval.

10.15 WATERWAYS

The Contractor shall use all proper precautions and methods of procedure in his operations to ensure that no debris or other deleterious materials be allowed to fall, flow or otherwise enter State waters, or drainageways or drainage systems that discharge into State waters. The Contractor shall notify the State Department of Health and the State's Construction Engineer of any petroleum, oil, or hazardous material spills immediately. Any petroleum or oil spills shall be immediately removed to the satisfaction of the Director.

10.16 AS-BUILT DRAWINGS

(A) Description:

1. As-built drawings shall refer to those documents maintained and annotated by the Contractor during construction and shall be defined as (1) a neatly and legibly marked set of contract drawings showing the final location of piping, structures, equipment, electrical conduits, outlet boxes and cables; (2) additional documents such as schedules, lists, drawings, and electrical and instrumentation diagrams included in the specifications; additional documents placed on reproducible vellum (post-contract drawings); and (3) Contractor layout and installation drawings
2. As-built drawings shall be full-sized and maintained in a clean, dry, and legible condition. As-built drawings shall not be used for construction

purposes and shall be available for review by the Construction Engineer during normal working hours at the Contractor's field office

(B) General:

1. The Contractor shall keep a record of all field changes that occur during the project on two (2) full-sized sets of the contract plans to be kept at the job site. No partial payments will be allowed unless these changes are reflected on both sets of plans, and the plans must be current and kept up to date.
2. The Contractor shall be responsible for furnishing its own 100 percent (full) size as-built drawings set based on the latest Contract Documents. The Contractor shall incorporate any post contract drawings issued under Field Orders, responses to Requests for Information, or as part of Contract Change Orders, into both copies of the as-built plans.
3. Marking of the as-built drawings shall be kept current and annotations, to the as-built drawings, shall be done at the time the material and equipment are installed. These annotations shall be made with an erasable colored pencil conforming to the following color code:
 - a. Additions and deletions shall be marked in red
 - b. Comments, as well as dimensions, shall be marked in blue
4. All deviations from the contract drawings as a result of any and all Addenda, Field Orders, Requests for Information (RFI's) and approved Contract Change Orders shall be annotated on all affected drawings.
5. Annotations to the as-built drawings shall reference the specific Addendum number, Field Order number, Request for Information number, or the Contract Change Order number. Annotations without these reference numbers will not be considered complete

(C) Submittals:

1. At the completion of the work, the Contractor shall transmit both copies of the as-built drawings to the Harbors Construction Engineer as a Submittal. The Contractor shall stamp both sets of drawings with the words "As-Built Drawings" and said stamp shall include a statement signed by the Contractor certifying that the drawings accurately and completely reflect the work as constructed. The stamp format and wording shall be submitted to the Construction Engineer for prior approval. No payment for Demobilization will be released until both copies of the As-Built Drawings are received by the Construction Engineer.
2. Record Drawings:
 - a. The State will prepare the Record Drawing for the State by recording the changes, shown on the As-Built Drawings, onto original tracings. The Final Record Drawings will include an original tracing of the Title Sheet with a stamp containing the words "Record Drawings" as well as a signature line for the Contractor.

- b. The Contractor shall review the Record Drawings prepared by the Design Consultant and certify the Record Drawings by signing and dating the Record Drawing title sheet tracing where indicated. Any deviations from the plans determined by the Harbors Construction Engineer to be missing from, incomplete, or inaccurately drawn on the As-Built drawings shall be corrected on the Record Drawing tracings by the State and the Contractor shall be charged for the services. The State will keep a record of the associated cost impacts and deduct them from the contract price
 - c. Final payment, as well as full payment for Demobilization, will not be released until after the Record Drawing tracings have been signed and certified by the Contractor and returned back to the State.
- (D) Measurement and Payment: Separate measurement or payment will not be made for work required under this Article 10.16. All costs in connection with the work specified herein; furnishing, maintaining, producing and submitting as-built drawings, will be considered to be incidental to the various bid items in the Proposal Schedule

10.17 MEASUREMENT AND PAYMENT

Measurement and payment for the various items of work shall be as shown in the Proposal Schedule and as covered in the following Articles of these Specifications.

10.18 CONSTRUCTION ACCESS

- (A) General: The Contractor shall show all access routes to and from the construction site, including specific travel routes within the project area, in the Traffic Control Plan (TCP) as specified in Article XXIX. The TCP shall be approved by the Construction Engineer prior to the start of construction.

Access for construction vehicles will be allowed at the main entry of the project area. The Contractor shall be responsible for ensuring that access is controlled in such a manner as to allow the safe passage of construction vehicles to and from the site.

The access gate and driveway will not be measured or paid for separately, but will be considered incidental to the various contract items in the Proposal Schedule.

The State does not warrant or guarantee that areas, beyond or outside of the project limits, except as indicated below, and of such size and location that meets the requirements desired by the Contractor for work or storage, will be available to the Contractor within or for the duration of the project. The Contractor is solely responsible for assessing its requirements for work and storage area(s) and for securing such work or storage areas, outside of or beyond the project limits, if it deems that such areas are necessary for it to perform the contract work. The Contractor shall conduct the work in a manner that will not interrupt or otherwise

interfere with full operations of the adjoining existing facilities. The Contractor shall at his own expense, make prompt restitution for damages to these facilities, and payment for loss or injury suffered by users thereof, caused by the Contractor's operations or negligence, holding the State harmless therefrom.

10.19 WORKING HOURS

The Contractor shall coordinate his work to minimize interferences with harbor operations. All work shall be coordinated and scheduled with the Harbors Construction Engineer who will be identified at the Pre-construction meeting. Four (4) weeks before work is started, the Contractor shall submit a work schedule and construction phasing plan to the Construction Engineer for review and approval.

Normal working hours within the project site are from 7:00 AM to 3:30 PM, Monday to Friday, except on State Holidays, unless otherwise authorized by the Construction Engineer. Working hours for construction within the City and County of Honolulu or Department of Transportation – Highways Division Rights-of-Way shall conform to the requirements of the authority having jurisdiction. If overtime is required, Contractor to pay Harbors inspector's overtime charges and expenses.

10.20 CONSTRUCTION SCHEDULE

The Contractor shall prepare, update, revise and submit project progress schedules, including the Project Schedule, Updated Project Schedule, Four-Week Work Plan Schedule, the Monthly Progress Status Report, and the Payment Schedule and Schedule of Cost Loading and Cash Flow as described in Article XXX – Construction Progress Documentation.

10.21 HARBOR SECURITY

The Contractor shall submit required documentation of all contractor's and sub-contractor's employees, their representatives, suppliers, manufacturers, and alike, and of all necessary vehicles needing access to the project site to the Harbors Division Construction Engineer and District Manager before starting work on the project. The documentation will include the following:

- (A) Authorized personnel's first name, middle initial(s), and last name by company name.
- (B) Vehicle(s) license plate number(s) by company name.
- (C) Security personnel used to control perimeter access must be an employee of an established security guard company doing business in the State of Hawaii for at least the past 12 months. Each guard providing security services for the project shall have, at a minimum, been successfully trained in accordance with the Maritime Transportation Security Act of 2002, MTSA 109 and 33 CFR (Code of Federal Regulations) Part 105.210, Facility personnel with specific security duties. Contractor shall submit a letter to verify qualifications and/or copies of proof of successful training for each assigned security guard.

In addition, for each work day, Harbors security procedures will be as follows:

- (D) The State will designate at least one access control point to the project site. Contractor may use the State designated access point during the normal working hours defined in the General Provisions. If the Contractor desires to use an alternate or additional access point(s), or utilize the State designated access point beyond the above indicated normal working hours, a request shall be submitted to the Harbors Construction Engineer at least seven (7) days prior to such action. The request shall identify the location of the alternate access point(s) and/or extended hours of work. Harbors approval of the request must be obtained prior to executing the request.
- (E) The Contractor will be responsible for all coordinating, hiring and costs associated with providing any and all security guards to secure the site (to the satisfaction of the State) while the project is on-going (see Item C, above). The State shall bear no additional costs for security. Upon every entry, each employee must present and possess a valid photo identification (ID) card. If additional guards are required at an existing State controlled access point due to contractor activity, then the State will contact and coordinate the hiring of an additional guard(s). In this case, the Contractor shall be responsible for all costs with providing additional guards. All situations are upon approval of Harbors and solely at contractor's cost.
- (F) In the event Harbors Division receives any USCG Notice of Violation (NOV) and/or civil penalties as a result of negligence on the part of the Contractor, its sub-contractors, their representatives, suppliers and manufacturers, the Contractor shall assume full responsibility for said NOVs and/or penalties.
- (G) Contractor's vehicles must be identified with a company logo and will be subject to search. Any employee's personal belongings will also be subject to search.
- (H) If the Contractor wishes to remove any fencing or open any locked gates, they shall coordinate with and request approval from the Harbors Construction Engineer and District Manager. If approval is granted, the Contractor shall then be responsible for securing open fencing or gate(s) immediately after entering, or posting security guard(s) (see Item C, above) to monitor ingress and egress. The State shall bear no additional costs for additional labor, materials and/or security guards required for such actions.
- (I) All employees shall have the appropriate working credentials on their person at all times. See paragraph M.
- (J) By the end of each day, the Contractor shall re-erect and/or restore any and all fencing/barrier/perimeter security measures to the satisfaction of the Construction Engineer and/or the District Manager. Electricity and lighting shall also be restored and in satisfactory working order, to no less than pre-construction conditions, by the end of each day, to the satisfaction of the Construction Engineer and/or District Manager.

- (K) Under no circumstances shall perimeter security be compromised. If determined by the State, and solely by the State, that the contractor has left the project site in a condition that compromises security of the harbor, the State reserves the right to make the necessary arrangements to provide and/or enhance perimeter security, including restoration of electrical power and lighting, all at the sole expense of the contractor.
- (L) At times, the maritime security level for the State of Hawaii and/or the general color-coded security level for State of Hawaii may be temporarily elevated. In these events, the contractor may be prohibited to access the project site and may be required to stop work as directed by either the Harbors Division's Construction Engineer or District Manager. The Harbors Division will consider impacts to the work and schedule as a result of prolonged work stoppages longer than 1 week (7 calendar days) in accordance with Articles 8.5 and/or 8.10 of the General Provisions.
- (M) The project site is a regulated facility and is a Transportation Worker Identification Credential (TWIC) controlled site. The Contractor shall comply with the following requirements for working on the project site:
1. Under the federal Maritime Transportation Security Act (MTSA) and the federal Security and Accountability for Every (SAFE) Port Act all individuals desiring unescorted access to a regulated harbor facility must possess a Transportation Worker Identification Credential (TWIC), proof of MARSEC Awareness training, a valid government issued picture ID card, a valid reason for entry, and a valid driver's license for the drivers of any of their vehicles. The State reserves the right to issue a ninety (90) day suspension of authorized access and entry into the project site to Contractor's and subcontractor's employees, their representatives, suppliers, manufacturers, and authorized personnel needing access to a TWIC controlled site if they have violated or compromised site security. The above mentioned staff are responsible and will be held accountable for any Notice of Violations, fines, and any civil penalties imposed by the United State Coast Guard (USCG) MTSA inspectors if found at fault. The State shall not be responsible for any additional costs or loss of construction time as a result of the suspension(s). The Transportation Worker Identification Credential application can be found on the internet at the following website: <http://www.tsa.gov/for-industry/twic>. The process for obtaining a TWIC can take an extended period of time. The Contractor will not be granted an extension in contract time if the construction work is delayed by the TWIC process.
 2. Maritime Security Awareness training is mandatory for all personnel entering the Harbor facility. The Contractor shall ensure all of its employees, representatives, subcontractors, vendors, and all alike, requiring access to the harbor area for this project, have been trained before entering the Harbor's property. Prior to starting work on this project, the Contractor shall provide a list of names of all employees, representatives, subcontractors, vendors, and alike, together with a letter attesting that all personnel have received this training to the Harbors

District Manager and Construction Engineer. All employees, representatives, subcontractors, vendors, and alike, shall wear their respective company's identification card bearing the company's name, the individual's first and last name, and middle initial (s), and recent photograph of the individual on the front of the identification card at all times while on Harbor's property.

With the possible exception of paragraph L, all other requirements indicated shall be considered incidental to the project, for the life of the project, and shall be provided by the contractor at no additional cost to the State.

END OF ARTICLE

ARTICLE XI - PROJECT SIGN

11.1 GENERAL

This work shall consist of furnishing, constructing, placing, maintaining and subsequently removing three (3) project signs.

11.2 MATERIALS

The Contractor shall furnish and install all materials necessary to complete this work.

11.3 CONSTRUCTION REQUIREMENTS

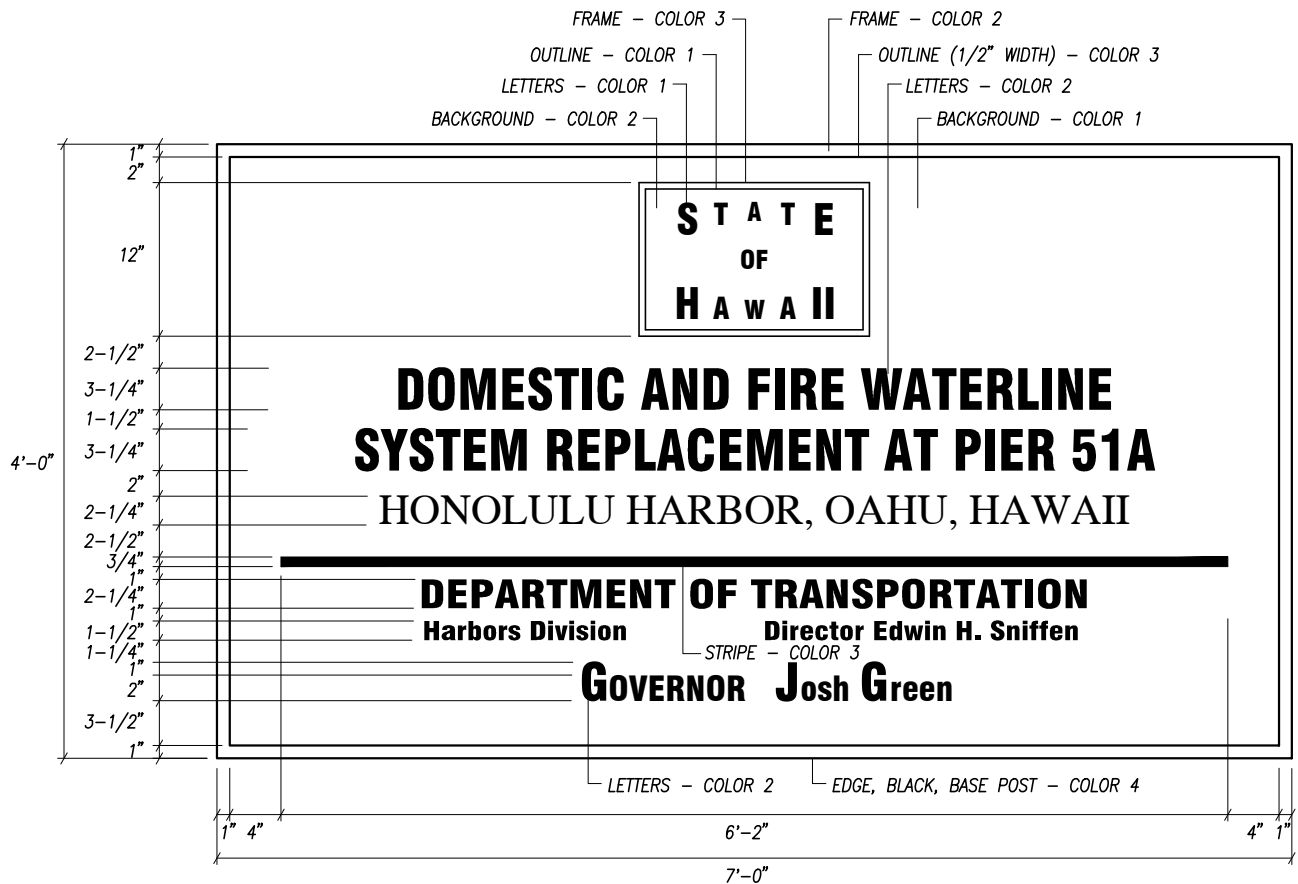
- (A) General: Furnish, construct, and erect a project sign as detailed on the attached Project Sign Detail and at the locations designated by the Engineer. The Contractor shall provide posts, brackets, braces, and appurtenances as required to mount the sign. The Contractor shall ensure that the project sign is structurally stable.
- (B) Sign Specifications:
 - (1) Letter Style: Project title shall be centered and set in a Helvetica Compact Bold. Other letters are set as shown and in Helvetica Medium, with the exception of the initial capitals of "GOVERNOR JOSH GREEN", which is set in Baskerville. Sign letters shall be set and spaced by a professional type-setter and enlarged photographically as indicated for photo stencil screen process.
 - (2) Artwork: Constant elements of the sign layout-frame, stripe, and official State information may be duplicated following working drawing measurements as specified in drawings. The "STATE OF HAWAII" masthead letters shall be Baskerville Bold as indicated on the drawing layout.
 - (3) Title: The specific major work of the project under construction is emphasized by using 3-1/2" and 3" type, all capitals. Other related information of lesser importance use 1-1/2" or 1" type in initial caps and lower case letters.
 - (4) Materials: Panel shall be 3/4", exterior grade high density overlaid plywood with resin bonded surfaces on both sides.
 - (5) Paints and Inks: Screen print inks shall have matte finish. Paints shall be satin finish, exterior grade. References to Ameritone color key paints are for color match only.

(6) Colors:

- | | | |
|-----|--------|-----------------|
| (a) | 1BL10A | Bohemian Blue |
| (b) | 2H16P | Softly (white) |
| (c) | 2VR2A | Hot Tango (red) |
| (d) | 1M52E | Tokay (gray) |

11.4 MEASUREMENT AND PAYMENT

The Project Signs will not be measured and paid for separately but will be considered incidental to the lump sum price bid for mobilization and demobilization in the Proposal Schedule.



NOTE: PAINTS ARE SATIN FINISH, EXTERIOR GRADE.
REFERENCES TO AMERITONE, COLOR KEY PAINT
ARE FOR COLOR MATCH ONLY
COLOR: 1 - 1BL10A BOHEMIAN (BLUE)
2 - 2h16p SOFTLY (WHITE)
3 - 2VR2A HOT TANGO (RED)
4 - 1M52E TOKAY (GRAY)

END OF ARTICLE

ARTICLE XII - MOBILIZATION AND DEMOBILIZATION

12.1 GENERAL

This work shall include the furnishing of plant, equipment, labor, and materials to perform all work in conjunction with mobilization and demobilization for the job in accordance with this Article of the Specifications.

12.2 DESCRIPTION

- (A) Mobilization shall include the setting up and preparing for use, all plant, equipment and materials at the jobsite, for the project.
- (B) Demobilization shall include the removal of all Contractor's plant, equipment and surplus materials from the jobsite, for each phase of the project. The cleanup of the jobsite, satisfactory to the Director, shall also be included in this article.

12.3 EXECUTION

Delay in demobilizing completely from outside of the construction limits by the specified date will inconvenience harbor users' operations. The Contractor shall pay the amount shown in the Schedule of Liquidated Damages, as amended by the Special Provisions, for each calendar day delayed in demobilizing completely from outside of the construction limits by the specified date. The terms governing the assessment of liquidated damages, as specified in the General Provisions, and as amended by the Special Provisions, shall be applicable to the Contractors delay in demobilizing from the site by the specified date.

12.4 PAYMENT

- (A) Maximum Bid Amount: The maximum bid amount allowed for Mobilization and Demobilization shall be limited to no more than six percent (6%) of the sum of all bid items, with the exception of this bid item, and excluding any allowance items as well as force account items.
- (B) Payment:
 - 1. Mobilization and Demobilization: Sixty percent (60%) of the mobilization and demobilization lump sum bid price in the Proposal Schedule shall be paid to the Contractor upon completion of mobilization at the work site. The remaining forty percent (40%) shall be provided upon demobilization from the work site. Mobilization and demobilization line item not to exceed 6% of the sum of all items excluding the bid price of this item.
 - 2. The remaining Forty percent (40%) of the Mobilization and Demobilization lump sum price in the Proposal shall be paid to the Contractor upon demobilization from the project site.

ITEM NO.	PAY ITEM	PAY UNIT
1.	Mobilization and Demobilization (6% sum of all items, excluding this bid item, allowance items, and force account items)	Lump Sum

END OF ARTICLE

ARTICLE XIII - ENVIRONMENTAL PROTECTION

13.1 DESCRIPTION

- (A) This work shall include the following:
- (1) Obtain the necessary permits to satisfactorily complete this project as required by the EPA, State of Hawaii and City and County of Honolulu.
 - (2) Provide all material testing and monitoring work required by the permits during construction, this Article, and as specified in Article XVII – Handling and Removal of Contaminated Materials Encountered During Construction.
 - (3) Provide all necessary safeguards to the environment as required under this Article and by the permits, and as stated in Article XVII – Handling and Removal of Contaminated Materials Encountered During Construction.
 - (4) Comply with the Notice of General Permit Coverage (NGPC), National Pollutant Discharge Elimination Permit Standard (NPDES) requirements, Form C.
 - (5) Comply with Clean Water Act and Harbors Stormwater Management Program, especially Harbors Construction Site Runoff Control Program. This document is available for review online at <https://hidot.hawaii.gov/harbors/malamaikeawakai/>. No pollutants are allowed to be discharged directly or indirectly into adjacent harbor water, through storm conveyance system or other potential pathways.
- (B) For the purpose of this specification, environmental pollution is defined as the presence of chemical, physical, or biological elements or agents which adversely affect human health or welfare, unfavorably alter ecological balances of importance to human life, affect other species of importance to man, affect endangered or threatened species and their habitat, or degrade the utilization of the environment for aesthetic and recreational purposes. The control of environmental pollution requires consideration of air, water and land, and involves noise and solid waste-management as well as other pollutants. With the exception of those measures set forth elsewhere in these specifications, environmental protection shall consist of the prevention of environmental pollution as the result of operations conducted under this contract.
- (C) The Contractor shall submit their contact information to the Construction Engineer.

If there is a conflict between the applicable rules and regulations, these Specifications, and the Plans, the more stringent shall apply as determined by the Construction Engineer.

13.2 GENERAL REQUIREMENTS

- (A) Applicable Regulations: In order to provide for abatement and control of environmental pollution arising from the activities of the Contractor and subcontractors in the performance of this contract, the work performed shall comply with the intent of the applicable Federal, State and County laws and regulations concerning environmental pollution control and abatement, the applicable rules and regulations as detailed in these Specifications, and the following:
- (1) State of Hawaii, Department of Health, Administrative Rules, Chapter 59, Ambient Air Quality; and Chapter 60, Air Pollution Control Law.
 - (2) State of Hawaii, Department of Health, Administrative Rules, Chapter 44A, Vehicular Noise Control.
 - (3) State of Hawaii, Department of Health, Administrative Rules, Chapter 54, Water Quality Standards.
 - (4) State of Hawaii, Department of Health, Administrative Rules, Chapter 55, Water Pollution Control.
 - (5) State of Hawaii, Occupational Safety and Health Standards, Title 12, Department of Labor and Industrial Relations.
 - (6) Rules Relating to Soil Erosion Standards & Guidelines, April 1999, City and County of Honolulu.
 - (7) Construction Site Runoff Control Program, August 2014, Department of Transportation Harbors Division.
- (B) The Contractor shall comply with all applicable Federal, State and local laws relating to the NGPC for Discharges of Storm Water Associated with Construction Activity, including but not limited to the following:
- (1) Contractor shall keep a copy of the NGPC, Form C, enclosures, plans, reports, specifications and other related materials submitted in and with the NOI and/or later amendments to the NOI at the job site. Copies will be provided by the Construction Engineer.
 - (2) Contractor shall provide its legal name, address, contact person, telephone and fax number to the Construction Engineer to be submitted to the State Department of Health (DOH).
 - (3) 60 calendar days prior to start of construction, Contractor shall submit its site-specific BMPs to DOH. A copy shall be submitted to the Construction Engineer for their information.
 - (4) The Contractor shall be completely, and solely, responsible for obtaining approval of site-specific BMPs from DOH.

- (C) Certifications and Permits: The Contractor will be required to obtain the State of Hawaii, Department of Health, Notification of Demolition and Renovation for asbestos abatement work. The Contractor must file this notification at least ten (10) working days with the State of Hawaii, Department of Health, and with the EPA, Region IX, before the start of demolition. The Contractor shall be responsible for completing and submitting this notification in accordance with its project schedules.
- (D) Test Data: The Contractor shall provide all testing and monitoring required as specified in Article XVII – Handling and Removal of Contaminated Materials Encountered During Construction, and all State and Federal regulations.

13.3 CONTRACTOR USE OF PREMISES

- (A) The Contractor shall inform his employees, subcontractors and all other persons engaged in the project, of the possible presence of asbestos-containing materials (ACM) at the jobsite, in accordance with the requirements of Chapter 110, Article 12-110-2(f)(1) of the Occupational Safety and Health Standards, State of Hawaii. All disturbances to asbestos containing materials shall be performed in accordance with Article XVII – Handling and Removal of Contaminated Materials Encountered During Construction, and all applicable State and Federal regulations.
- (B) In the event the Contractor, subcontractors and/or other persons he engages in the project must work in any other area(s) under Harbors Division control other than the one designated for this project, the Contractor shall obtain written approval from the Director or his authorized representative for said use. Adequate notification must be given to the Director or his authorized representative for said use.

13.4 EXECUTION

- (A) Compliance with the provisions of this Article by its subcontractors will be the responsibility of the Contractor.
- (B) Prior to commencement of the work, the Contractor shall meet with the Director or his authorized representative to develop mutual understandings relative to compliance with this provision and administration of the environmental pollution control program.
- (C) It is intended that the land resources within the project boundaries and outside the limits of permanent work performed under this contract be preserved in their present condition. Insofar as possible, the Contractor shall confine his activities to areas defined by the Plans and Specifications.
- (D) The Contractor shall obliterate all signs of temporary construction facilities such as haul roads, work areas, structures, foundations of temporary structures, stockpiles of excess or waste materials, or any other vestiges of construction as directed by the Director or his authorized representative.

- (E) All items having any apparent historical or archaeological interest which are discovered in the course of performing the work of this contract shall be left undisturbed and shall be immediately reported to the Director or his authorized representative so that the proper authorities may be notified.
- (F) The Contractor shall not dispose of any material into Harbor waters including, but not limited to, fuels, oils, bitumens, calcium chloride, acids, construction debris, or other harmful or hazardous materials. The Contractor shall not dispose of any material into Harbor waters which will result in an increase of turbidity. It is the responsibility of the Contractor to comply with all applicable Federal, State and County laws concerning pollution of water resources.
- (G) Erosion Control
- (1) Surface drainage from trenches, cuts or fills within the construction site, whether or not completed, and from demolition, abatement and construction waste disposal areas, shall, if turbidity producing materials are present, be held in suitable collection areas or shall be bermed to control erosion and runoff. Temporary erosion and sediment control measures such as berms, dikes, drains, or sedimentation basins, if required to meet the above standards, shall be provided and maintained until permanent drainage and erosion control facilities are completed and operative. The area of exposed bare soil and waste areas shall be kept to a minimum. Fills and waste areas shall be constructed by selective placement to eliminate silts or clays on the surface that will erode and contaminate adjacent waters.
- (2) Whenever trucks or vehicles leave the site and enter surrounding paved streets, the Contractor shall prevent any material from being carried onto the pavement. Trucks hauling fine material shall be covered in compliance with PUC regulations. Waste water shall not be discharged into existing waterways, or drainage systems such as gutters and catch basins unless treated to comply with State Department of Health water pollution regulations.
- (H) Spillage: At all times, special measures shall be taken to prevent chemicals, fuels, oils, greases, bituminous materials, waste washing, herbicides, pesticides, insecticides, and cement from entering public waters, including Harbor waters.
- (I) Washing and Waste Water: Water used in washing, abatement, demolition or construction and other waste waters shall not be allowed to enter public waters, including Harbor waters.
- (J) Disposal of any materials including tanks, wastes, effluent, trash, garbage, oil, grease, chemicals, in areas adjacent to public waters is prohibited. If any waste material is dumped in unauthorized areas, the Contractor shall remove the material and restore area to the condition of the adjacent undisturbed area. If during normal operations of the project, contaminated ground is excavated, the Contractor shall notify the Director or his authorized representative for review. Appropriate action will be determined at that time.

Construction dewatering effluent shall not be discharged, in any way, into the ocean or into drainage systems or drainage ways that ultimately empty into state waters. Dewatering, when required, shall be done by back-trenching (pit-to-pit discharge). Dewatering effluent within contaminated areas, as shown within the construction drawings, shall be infiltrated within the contaminated areas shown within the construction drawings.

(K) Disposal of Construction Debris

- (1) All rubbish, scrap lumber and other construction site debris shall be hauled away daily and disposed of off-site by the Contractor. Such disposal shall be accomplished in compliance with all Federal, State, and County laws and regulations governing waste disposal. To the extent possible, the Contractor shall recycle demolition debris at no extra cost to the State when compared to typical disposal costs.
- (2) No burning of debris and construction waste material will be permitted on the project site at any time.
- (3) No burying of debris and/or waste material except for materials which are specifically indicated elsewhere in these Specifications as suitable for backfill shall be permitted on the project site.
- (4) All unusable debris and waste material shall be hauled away daily to an appropriate off-site disposal area. During loading operations, debris and waste materials shall be watered down to allay dust.
- (5) Cleanup shall include the collection of all waste paper and wrapping materials, cans, bottles, construction waste materials, and removal as required. Frequency of cleanup shall coincide with rubbish producing events.
- (6) Construction debris should be disposed of daily.

(L) Air Pollution Control

- (1) The Contractor, for the duration of the project, shall maintain all excavations, embankments, haul roads, permanent access roads, plant sites, waste disposal areas, borrow areas, and all other work areas within or outside the project limits free from dust which would cause a hazard to the work, or the operations of other contractors, or to persons or property. Dust shall be kept down at all times, including non-working hours, weekends and holidays. Approved temporary methods consist of water sprinkling or similar methods to control dust. Sprinkling must be repeated at such intervals as to keep all parts of disturbed areas damp at all times. The Contractor must have sufficient equipment on the job to accomplish this if sprinkling is used. Dust control shall be performed as the work proceeds and whenever a dust nuisance or hazard occurs.

Dust control activities must comply with the Hawaii Administrative Rules, Title 11 Chapter 60.1, Air Pollution Control.

- (2) The methods of dust control and costs shall be the responsibility of the Contractor. Methods of dust control shall include the use of water and/or chemicals over surfaces which may create fugitive airborne dust per HRS 11-60.1.
- (3) Wet cutting will be required for cement blocks, concrete and asphaltic concrete pavement, unless attachments are used with dry cutting equipment to capture the dust created thereby.
- (4) No unnecessary shaking of bags will be permitted where cement, mortar and plaster are used unless the dust therefrom can be confined.
- (5) No dry power brooming will be allowed in unconfined areas. No dry sweeping shall be permitted in cleaning rubbish and fines which can become airborne from floors and other paved areas. Vacuuming, wet mopping, wet and damp power sweeping are permissible. Air blowing will be permitted on written approval from the Director's authorized representative.
- (6) The Contractor shall be responsible for all damage claims in accordance with Section 7.15 - "Responsibility for Damage" of the General Provisions.

(M) Noise

- (1) Noise shall be kept within acceptable levels at all times in conformance with the State Department of Health Administrative Rules, Title 11, Chapter 46 - Community Noise Control. All internal combustion engine powered equipment shall have mufflers to minimize noise and shall be properly maintained to reduce noise to acceptable levels. The Contractor shall comply with all applicable Federal, State and County noise rules.
- (2) The Contractor shall obtain and pay for a Community Noise Permit from the Department of Health when construction equipment or other devices emit noise at levels exceeding allowable limits.
- (3) All internal combustion engine-powered equipment shall have mufflers to minimize noise and shall be properly maintained to reduce noise to acceptable levels.
- (4) Starting-up of construction equipment meeting allowable noise limits shall not be done prior to 6:45 a.m. without prior approval of the Construction Engineer. Equipment exceeding allowable noise levels shall not be started-up prior to 7:00 a.m.

(N) Other

- (1) Whenever trucks and vehicles enter surrounding paved streets, the Contractor shall prevent any materials from being carried or dropped onto the pavement.

- (2) Waste water shall not be discharged into existing waters such as harbors, streams, waterways, oceans, or drainage systems such as gutters and catch basins, unless treated to comply with Federal and State of Hawaii water pollution regulations. Waste water shall not be discharged into existing waterways, or drainage systems such as gutters and catch basins unless treated to comply with the State Department of Health water pollution regulations.
- (3) Trucks hauling debris and/or fine materials within and off the project site shall be covered as required by PUC Regulations.
- (4) Except in an emergency, such as a mechanical breakdown, all vehicle fueling and maintenance will be done offsite or if onsite, in a designated area. A temporary berm shall be constructed around the area to confine any runoff from the designated area. Upon project completion, the area shall be cleaned of wastes and returned to prior condition.
- (5) No dumping of waste concrete will be permitted on the site. Except for rinsing of the hopper and delivery chute, and for wheel washing when required, concrete trucks shall not be cleaned on site.
- (O) Maintenance of Pollution Control Facilities During Construction: During the life of this contract, the Contractor shall maintain all facilities constructed for pollution control as long as the operations creating the particular pollutant are being carried out, or until the material concerned has become stabilized to the extent that pollutants are no longer being created.

13.5 WARNING SIGNS

- (A) General: Furnish all labor, materials and equipment necessary to construct and install temporary warning signs and barricades that comply with OSHA requirements and as directed by the Director or his authorized representative. These warning signs and barricades shall delineate the work area and exclude the public from the work area as specified hereinafter.
- (B) Materials:
 - (1) Backing: Backing shall be 6061-T6 aluminum 0.032" minimum thickness.
 - (2) Paint: Paint shall be satin finish, exterior grade or factory based enamel or a combination thereof.
- (C) Sign Colors: Signs shall have white background; remaining items shall be similar to Rust-Oleum Federal Safety Red.
- (D) Installation: Signs shall be located at 50-foot intervals around roped off work area or at all entrances in the case of interior work. Signs shall be attached to the rope barrier, rope barrier supports, individual sign supports or buildings.
- (E) Clean-Up: Remove all signs upon completion of this project. Repair any damages caused by sign mounting and removal.

13.6 SUSPENSION OF THE WORK

- (A) Violations of any of the above requirements or any other pollution control requirements which may be specified in these Specifications shall be cause for suspension of the work creating such violation. No additional compensation shall be due to the Contractor for remedial measures to correct the offense. Also, no extension of time or compensation will be granted for delays or impacts, caused by such suspensions.
- (B) The Director or his authorized representative will notify the Contractor of any non-compliance with the foregoing provisions. The Contractor shall, after receipt of such notification, immediately take corrective action.
- (C) If the Contractor fails or refuses to comply within 72 hours after a suspension is ordered by the Construction Engineer, the Director or his authorized representative may issue an order suspending all or part of the work until satisfactory corrective action has been taken. The State reserves the right to take whatever action is necessary to correct the situation and to deduct all costs incurred by the State in taking such action from monies due the Contractor. No additional compensation shall be due the Contractor for remedial measures to correct the condition(s), and no extension of time or compensation for extended overhead will be granted for delays for the time needed to complete remedial measures as well as caused by such suspensions.
- (D) The Director may also suspend any operations which it feels are creating pollution problems although they may not be in violation of the requirements contained herein. In this instance, work required to correct the pollution problem and prevent its recurrence shall be done by force account as described in sub-Article 4.3 - "Extra Work" of the General Provisions and paid for in accordance with sub-Article 9.4, "Extra and Force Account Work" therein. The count of elapsed working days in this situation shall be computed in accordance with sub-Article 8.7 - "Determination and Extension of Contract Time" of the General Provisions.

13.7 MEASUREMENT AND PAYMENT

Environmental Protection, including material and labor required to obtain approval of site specific BMPs for DOH, permit fees, erosion control measures, dust control, and other related work will not be measured and paid for separately but will be considered incidental to the various pay items in the Proposal Schedule which require such work.

END OF ARTICLE

ARTICLE XIV - DEMOLITION AND REMOVAL WORK

14.1 GENERAL

- (A) This work includes the removal of all water lines, asphalt concrete (AC) pavement, and other structures indicated within the limits indicated on the plans unless indicated otherwise. All materials resulting from removal work shall become the property of the Contractor except as indicated or otherwise specified and shall be removed from the project site. The salvage value of the light poles shall be taken into account by the Contractor's pricing.
- (B) Demolition and removal work shall include but not be limited to the following items of work:
 - (1) Demolition and removal of asphalt concrete pavement and other structures as indicated within the limits indicated on the plans in accordance with these Specifications.
 - (2) Sawcutting and removal of pavements in accordance with these Specifications.
 - (3) Demolition and removal of water lines and miscellaneous structures within the project limit unless otherwise indicated on the plans to remain in accordance with these Specifications.
 - (4) Disposal of waste materials offsite at a State approved dumpsite.
 - (5) Cutting and plugging of existing underground pipelines where indicated on the plans.
 - (6) Providing temporary utility service.
 - (7) Demolition and removal of unforeseen items.
 - (8) Remove vegetation.
- (C) The Contractor shall perform all hazardous and regulated waste removal and disposal work in accordance with Article XVII – Handling and Removal of Contaminated Materials Encountered During Construction.

Non-hazardous waste and debris shall be kept separate from hazardous and regulated waste.
- (D) The Contractor shall be responsible for all costs related to petroleum or any other hazardous waste mitigation and disposal.

14.2 GENERAL REQUIREMENTS

The provisions of Section 202 - Removal of Structures and Obstructions of the "Standard Specifications" shall apply except as hereinafter modified.

14.3 SUBMITTALS

- (A) Submit proposed demolition and removal procedures to the Construction Engineer before work is started. Procedures shall provide for coordination with other work in progress, a detailed description of methods and equipment to be used for each operation, and sequence of operations. Required sets of submittals are specified in Article XIX – Required Submittals.
- (B) Gas Free Certificate: Submit free certificate to the Construction Engineer for record purposes.

14.4 EXECUTION

- (A) Water Lines to be Removed: All work shall be executed in an orderly and careful manner with due consideration for all items to remain. All work shall be as indicated and as required to complete the removal work.
- (C) Utilities and Related Equipment: Disconnect and remove existing above and underground utilities as indicated on the plans and these specifications and terminate in a manner conforming to the latest edition of the appropriate nationally recognized code as a minimum covering the specific utility at the time. Remove all abandoned utilities.
- (D) Asphalt Concrete Pavement: Where asphalt concrete pavement work is to be removed, sawcut along straight line to minimize the disruption of surrounding pavements.
- (E) Dust Control: Take appropriate action to check the spread of dust and to avoid the creation of nuisance in the surrounding area. Comply with all dust regulations imposed by local air pollution agencies.
- (F) Use of explosives will not be permitted.
- (G) Where pedestrians and driver safety is endangered in the area of removal work, use traffic barricades as specified in Article XXIX – Traffic Control.
- (H) The Contractor shall take precautions to prevent damage to items indicated to remain. The Contractor shall repair any damage to items indicated to remain at no cost to the State.
- (I) The Contractor shall not damage the bulkhead and pier. Any damage will be repaired immediately to equal or better condition at the Contractor's cost. Repair designs will be done by a structural engineer licensed in the State of Hawaii retained by the Contractor.
- (J) Unforeseen Items: The Contractor shall demolish, remove, and dispose of all unforeseen items from the project site at the discretion of the construction Engineer.
- (K) Stockpiles: Stockpiles shall comply with the City & County of Honolulu stockpile requirements. The location of all stockpiles shall be coordinated with the

Construction Engineer and shall be relocated as necessary to maintain continuous operation of the container terminal.

14.5 DUST AND DEBRIS CONTROL

Prevent the spread of dust and debris and avoid the creation of a nuisance or hazard in the surrounding area. Do not use water if it results in hazardous or objectionable conditions such as, but not limited to, flooding or pollution.

14.6 DISPOSITION OF MATERIAL

- (A) Title to Materials: Title to all materials and equipment to be removed, except as specified otherwise, is vested in the Contractor upon approval by the Construction Engineer of the Contractor's demolition and removal procedures, and authorization by the Construction Engineer to begin demolition. The State will not be responsible for the condition or loss of, or damage to, such property after notice to proceed.
- (B) Unsalvageable Materials: Noncombustible and combustible materials shall be disposed of outside the limits of the project site at the Contractor's responsibility and expense.
- (C) Survey for Hazardous Areas: The Contractor shall survey the entire area around the project site to ensure that no hazardous vapors are present. The Contractor shall certify in writing that the project site shall be safe for hot work and free of hazardous vapor. No open flame, hot cutting, welding or other hot work will be permitted without the certification.

14.7 CLEANUP

- (A) Debris and Rubbish: Remove and transport debris and rubbish in a manner that will prevent spillage on pavements, streets or adjacent areas. Clean up spillage from pavements, streets and adjacent areas.
- (B) Comply with Federal, State, and County hauling and disposal regulations.

14.8 MEASUREMENT AND PAYMENT

Demolition and removal of water lines, cold planing, asphalt concrete, and all other items within the limit of demolition and removal, excluding items indicated to remain, will be paid for on a lump sum basis in the Proposal Schedule.

Payment shall be full compensation for the demolition, removal, and disposal water lines, asphalt concrete, and all other items within the limit of demolition and removal, excluding items indicated to remain or salvaged materials removed according to the contract. Salvage of materials removed includes their custody, preservation, storage in the container yard, and delivery to Harbors Division storage facilities as designated by the Construction Engineer. Also, the price shall be full compensation for equipment, tools, labor, disposal, materials and incidentals necessary to complete the work.

Removal, handling, hauling, and disposal of asbestos-containing materials will be paid for under Article XVII – Handling and Removal of Contaminated Materials Encountered During Construction.

Cutting and plugging underground pipelines will not be measured or paid for separately, but will be considered incidental to the various contract items in the Proposal Schedule.

Demolition, removal, and disposal of all unforeseen items discovered at the project site will not be measured or paid for separately, but will be considered incidental to the various contract items in the Proposal Schedule.

Backfill, including backfill, soil compaction, soil compaction testing, and all other work related to backfill for demolition and removal shall not be measured or paid for separately, but will be considered incidental to the various contract items in the Proposal Schedule.

Excavation for demolition and removal work will be paid for under Article XVII – Handling and Removal of Contaminated Materials Encountered During Construction.

Temporary utility service will not be measured or paid for separately, but will be considered incidental to the various contract items in the Proposal Schedule.

ITEM NO.	PAY ITEM	PAY UNIT
2.	Demolition and removal of water lines, cold planing, asphalt concrete, and all other items within the limit of demolition and removal, excluding items indicated to remain, in place, complete.	Lump Sum

END OF ARTICLE

ARTICLE XV – STRUCTURAL EXCAVATION AND BACKFILL

15.1 GENERAL

The work consists of furnishing equipment, materials, labor and appliances and perform all work in connection with excavation, backfill and compaction necessary for the job, including providing and installing the exterior waterproofing system to the below-grade structures in accordance with this Article of the specifications and the standard specifications, Sections 206 and 703.20.

15.2 DESCRIPTION

- (A) Excavating and backfill for water structures
- (B) Excavating and backfill for valve structures
- (C) Excavating and backfill for utility structures
- (D) Disposing of uncontaminated surplus material from excavations
- (E) Provide and install asphalt primer, hot asphalt and fabric waterproofing membrane system where specified on the contract drawings

15.3 MATERIALS

- (A) Structural Backfill shall be per Subsection 703.20 of the standard specifications. Only Structural Backfill Material A is allowed for backfilling of drainage structures and light pole foundations.
- (B) Controlled Low Strength Material (CLSM) shall be in accordance with Section 314 – Controlled Low Strength Material (CLSM) for Utilities and Structures.

15.4 STRUCTURE EXCAVATION

- (A) Excavation for structures shall be adequate to accommodate the new structure at the specified elevation. Excavation shall conform to Subsection 206.03(A) of the standard specifications.
- (B) Contractor is responsible for design, construction and inspection of any shoring required for excavations in conformance with OSHA requirements and shall be sufficient in strength to prevent movement of the soil held in place by the shoring.
- (C) Due to anticipated soft and/or loose subsurface soil conditions, some movement of soil around the underground structure excavations should be anticipated due to changes in the earth stresses during and after construction, especially during extraction of a sheet pile system, where utilized.

15.5 STRUCTURAL BACKFILL

- (A) Backfill against structures shall be compacted to 95% relative compaction [per Subsection 203.03(C)(2)] and in conformance with Subsection 206.03(B) of the standard specifications.
- (B) Backfill to the elevation of the pavement aggregate subbase or the elevation where installation of CLSM is to occur as indicated on the contract documents.
- (C) CLSM shall be provided for backfill against structures where detailed. The Contractor shall get written approval to use CLSM backfill in location not specifically specified in the project documents.
- (D) Contractor shall submit CLSM mix design for review at least two weeks prior to pouring.
- (E) Furnish batch/delivery tickets to the Construction Engineer at the time CLSM is poured or no later than when the truck leaves the work area where the CLSM was poured.

15.6 MEASUREMENT AND PAYMENT

Structure excavation and backfill will not be measured or paid for separately, but will be considered incidental to the various contract items in the Proposal Schedule.

END OF ARTICLE

ARTICLE XVI - TRENCH EXCAVATION AND BACKFILL

16.1 DESCRIPTION

This work shall include trench excavation and backfill for underground water as shown on the plans and specified under Article XXIV - Water System. This work shall also include all excavation, backfilling and installing bedding materials for stanchions and all other structures shown on the plans and specified herein.

16.2 GENERAL REQUIREMENTS

The provisions of Section 204 - Excavation and Backfill for Miscellaneous Facilities of the Standard Specifications shall apply except as hereinafter modified:

- (A) Section 204.02 - Materials is amended as follows:

Backfill placed below water level shall consist of clean gravel, such as open graded gravel (ASTM C33, No. 67 Gradation), and shall extend to at least 12 inches above the water level.

Backfill placed above the high water level shall consist of aggregate base course or subbase course material. The excavated on-site base course and subbase course materials may be used as structural backfill.

- (B) Section 204.04 - Method of Measurement and 204.05 - Basis of Payment are deleted.

16.3 STRUCTURAL EXCAVATION

- (A) Localized soft spots encountered shall be overexcavated and removed and the resulting void backfilled with approved structural fill properly compacted in accordance with these Specifications.
- (B) Structural excavation carried below specified levels shall be filled with approved structural fill compacted in accordance with these Specifications, to the proper level at the expense of the Contractor.
- (C) Trenching for utilities and utility structures shall be made to the depths and profiles required to install the utility properly. Bottom of trenches shall be even, solid and free from loose material. Overexcavation shall be corrected as specified, for which no extra compensation will be allowed. Any rock or hardpan encountered during excavation shall be broken out to a minimum depth of 12 inches below the bottom of the utility structure.
- (D) Contaminated soils encountered during excavation shall be handled in accordance with Article XVII – Handling and Removal of Contaminated Materials Encountered During Construction.

16.4 STRUCTURAL FILL

- (A) Backfill placed below water level shall consist of clean No. 3B fine gravel conforming to ASTM C33, No. 67 gradation and shall extend to at least 12 inches above water level. The material need not be placed in compacted lifts. The top of the gravel level shall be compacted to a level surface prior to placing additional structural fill.
- (B) Backfill above water levels shall be placed in horizontal lifts not to exceed 8 inches in loose thickness and compacted to a minimum of 95 percent compaction as determined by ASTM D 1557. Excavated onsite granular materials to be re-used as backfill shall be free of deleterious materials and shall have a maximum particle size of 3 (three) inches. Excavated onsite soils may require aeration to reduce the moisture content prior to being used as backfill material.
- (C) Areas that fail to meet the minimum density requirements shall be rescarified, recompacted and retested.
- (D) Stabilization of Local Soft Spots: If soft and/or loose materials are encountered at the subgrades, the soft and/or loose material shall be overexcavated to a depth of 24 inches. The overexcavation shall be backfilled with open graded gravel (ASTM C33, No. 67 gradation) wrapped in a non-woven filter fabric (Mirafi 180N or approved equal). Excavated soft and/or loose materials shall not be re-used as backfill.

Soft and yielding areas encountered shall be removed in accordance with the specifications and as directed by the Contractor's geotechnical engineer, and as follows. Upon first encountering soft and yielding soils, the Contractor shall mark and locate the horizontal limits proposed for removal, by ground survey conducted by a surveyor licensed in the State of Hawaii in the presence of the Harbors Construction Engineer, prior to proceeding with the removal. The area to be marked and surveyed shall be either the area proposed for removal during a single work shift, or an entire area containing the soft and yielding soils, or some other method agreed to by the Contractor and the Harbors Construction Engineer. After the Contractor's geotechnical engineer, and the Harbors Construction Engineer have agreed on the horizontal limits for removal, the soft and yielding soils shall be overexcavated and backfilled as specified. The Contractor shall compute the volume of soft and yielding soils removed, based on the ground survey conducted, and submit the volume, along with calculations as well as the electronic data file of the ground survey, to the Harbors Construction Engineer for its use in verifying the volume of soft and yielding soil removed and replaced. Payment for the over-excavation, removal, and backfill material, shall be based on this computed volume as well as a unit cost pursuant to General Provision 9.1, as applicable to excavation for trench excavation from the allowance items in the proposal. Separate payment for marking, surveying of, and time required for, the horizontal limits or removal, and preparation and submittal of calculations and data files will not be made separately but shall be incidental to costs associated with the removal of soft and yielding soils and replacement with, and compaction of, the open graded gravel.

The State will not make payment on the removal of any volume of soft and yielding soils, and subsequent replacement with, and compaction of, select

granular material, that were not pre-marked and surveyed, in the presence of the Harbors Construction Engineer, and which cannot be substantiated by ground survey.

16.5 SUBMITTALS

- (A) Soils Testing: The compaction of all fill and the subgrade shall be tested by an independent testing agency. All test results shall be attested to by a geotechnical engineer licensed in the State of Hawaii for a minimum of 5 years and shall be submitted to the Construction Engineer for approval. The cost of soils density and laboratory testing shall be borne by the Contractor. One field density test shall be made throughout the area for each 1500 square feet of each compacted layer. All test results must be approved before the Contractor can proceed with placing additional fill or the placing of base course.

16.6 MEASUREMENT AND PAYMENT

Backfill, including pipe cushion and gravel backfill, trench restoration, including asphalt concrete pavement, tack coat, prime coat, soil compaction testing, structural and all other work related to trench backfill will not be measured and paid for separately, but shall be considered incidental to the various waterline and utility construction costs in the Proposal Schedule.

Trench excavation and separation of excavated material will be paid for under Article XVII – Handling and Removal of Contaminated Materials Encountered During Construction.

Overexcavation and removal of soft and yielding areas for stabilization of local soft spots will be paid for under Article XVII – Handling and Removal of Contaminated Materials Encountered During Construction.

Backfill and placement of non-woven filter fabric in soft and yielding areas for stabilization of local soft spots shall be considered incidental to the various items of work.

END OF ARTICLE

ARTICLE XVI - TRENCH EXCAVATION AND BACKFILL

16.1 DESCRIPTION

This work shall include trench excavation and backfill for underground water as shown on the plans and specified under Article XXIV - Water System. This work shall also include all excavation, backfilling and installing bedding materials for stanchions and all other structures shown on the plans and specified herein.

16.2 GENERAL REQUIREMENTS

The provisions of Section 204 - Excavation and Backfill for Miscellaneous Facilities of the Standard Specifications shall apply except as hereinafter modified:

- (A) Section 204.02 - Materials is amended as follows:

Backfill placed below water level shall consist of clean gravel, such as open graded gravel (ASTM C33, No. 67 Gradation), and shall extend to at least 12 inches above the water level.

Backfill placed above the high water level shall consist of aggregate base course or subbase course material. The excavated on-site base course and subbase course materials may be used as structural backfill.

- (B) Section 204.04 - Method of Measurement and 204.05 - Basis of Payment are deleted.

16.3 STRUCTURAL EXCAVATION

- (A) Localized soft spots encountered shall be overexcavated and removed and the resulting void backfilled with approved structural fill properly compacted in accordance with these Specifications.
- (B) Structural excavation carried below specified levels shall be filled with approved structural fill compacted in accordance with these Specifications, to the proper level at the expense of the Contractor.
- (C) Trenching for utilities and utility structures shall be made to the depths and profiles required to install the utility properly. Bottom of trenches shall be even, solid and free from loose material. Overexcavation shall be corrected as specified, for which no extra compensation will be allowed. Any rock or hardpan encountered during excavation shall be broken out to a minimum depth of 12 inches below the bottom of the utility structure.
- (D) Contaminated soils encountered during excavation shall be handled in accordance with Article XVII – Handling and Removal of Contaminated Materials Encountered During Construction.

16.4 STRUCTURAL FILL

- (A) Backfill placed below water level shall consist of clean No. 3B fine gravel conforming to ASTM C33, No. 67 gradation and shall extend to at least 12 inches above water level. The material need not be placed in compacted lifts. The top of the gravel level shall be compacted to a level surface prior to placing additional structural fill.
- (B) Backfill above water levels shall be placed in horizontal lifts not to exceed 8 inches in loose thickness and compacted to a minimum of 95 percent compaction as determined by ASTM D 1557. Excavated onsite granular materials to be re-used as backfill shall be free of deleterious materials and shall have a maximum particle size of 3 (three) inches. Excavated onsite soils may require aeration to reduce the moisture content prior to being used as backfill material.
- (C) Areas that fail to meet the minimum density requirements shall be rescarified, recompacted and retested.
- (D) Stabilization of Local Soft Spots: If soft and/or loose materials are encountered at the subgrades, the soft and/or loose material shall be overexcavated to a depth of 24 inches. The overexcavation shall be backfilled with open graded gravel (ASTM C33, No. 67 gradation) wrapped in a non-woven filter fabric (Mirafi 180N or approved equal). Excavated soft and/or loose materials shall not be re-used as backfill.

Soft and yielding areas encountered shall be removed in accordance with the specifications and as directed by the Contractor's geotechnical engineer, and as follows. Upon first encountering soft and yielding soils, the Contractor shall mark and locate the horizontal limits proposed for removal, by ground survey conducted by a surveyor licensed in the State of Hawaii in the presence of the Harbors Construction Engineer, prior to proceeding with the removal. The area to be marked and surveyed shall be either the area proposed for removal during a single work shift, or an entire area containing the soft and yielding soils, or some other method agreed to by the Contractor and the Harbors Construction Engineer. After the Contractor's geotechnical engineer, and the Harbors Construction Engineer have agreed on the horizontal limits for removal, the soft and yielding soils shall be overexcavated and backfilled as specified. The Contractor shall compute the volume of soft and yielding soils removed, based on the ground survey conducted, and submit the volume, along with calculations as well as the electronic data file of the ground survey, to the Harbors Construction Engineer for its use in verifying the volume of soft and yielding soil removed and replaced. Payment for the over-excavation, removal, and backfill material, shall be based on this computed volume as well as a unit cost pursuant to General Provision 9.1, as applicable to excavation for trench excavation from the allowance items in the proposal. Separate payment for marking, surveying of, and time required for, the horizontal limits or removal, and preparation and submittal of calculations and data files will not be made separately but shall be incidental to costs associated with the removal of soft and yielding soils and replacement with, and compaction of, the open graded gravel.

The State will not make payment on the removal of any volume of soft and yielding soils, and subsequent replacement with, and compaction of, select

granular material, that were not pre-marked and surveyed, in the presence of the Harbors Construction Engineer, and which cannot be substantiated by ground survey.

16.5 SUBMITTALS

- (A) Soils Testing: The compaction of all fill and the subgrade shall be tested by an independent testing agency. All test results shall be attested to by a geotechnical engineer licensed in the State of Hawaii for more than 10 years and shall be submitted to the Construction Engineer for approval. The cost of soils density and laboratory testing shall be borne by the Contractor. One field density test shall be made throughout the area for each 1500 square feet of each compacted layer. All test results must be approved before the Contractor can proceed with placing additional fill or the placing of base course.

16.6 MEASUREMENT AND PAYMENT

Backfill, including pipe cushion and gravel backfill, trench restoration, including asphalt concrete pavement, tack coat, prime coat, soil compaction testing, structural and all other work related to trench backfill will not be measured and paid for separately, but shall be considered incidental to the various waterline and utility construction costs in the Proposal Schedule.

Trench excavation and separation of excavated material will be paid for under Article XVII – Handling and Removal of Contaminated Materials Encountered During Construction.

Overexcavation and removal of soft and yielding areas for stabilization of local soft spots will be paid for under Article XVII – Handling and Removal of Contaminated Materials Encountered During Construction.

Backfill and placement of non-woven filter fabric in soft and yielding areas for stabilization of local soft spots shall be considered incidental to the various items of work.

END OF ARTICLE

ARTICLE XVII – HANDLING AND REMOVAL OF CONTAMINATED MATERIALS
ENCOUNTERED DURING CONSTRUCTION

17.1 GENERAL

(A) SCOPE: The General Instructions to Bidders, the General Conditions of Construction Contracts, and Special Provisions preceding these specifications shall govern this section of the work. The soil in the project area impacted by the trenching and excavation activities has no known contamination; however, if the contaminated soil and groundwater are observed during the construction (e.g., free product on groundwater within excavation), the Contractor shall stop work and notify Hawaii Department of Health Hazard Evaluation and Emergency Response office (HDOH HEER). In consultation with HDOH HEER, the Contractor shall conduct any required soil and groundwater sampling and update the enclosed Construction Environmental Hazard Management Plan (C-EHMP) developed for the project site. Management and disposal of contaminated media shall be conducted following corresponding protocols outlined in Hawaii Administrative Rules (HAR) 11-451 and the HEER Office Technical Guidance Manual (TGM). Work to be completed under this article also includes handling and removal of concrete/asphalt, asbestos waterline piping and debris, as required, from the project site. If the contaminated soil and groundwater are observed, the Contractor shall follow all the requirements under this Article. The Contractor shall also perform work in accordance with 29 CFR 1910.120, 40 CFR 761, 49 CFR 171-180, HAR 11-451, all applicable regulations and the requirements specified herein.

(B) REFERENCES: The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

(1) American Society for Testing and Materials (ASTM)

ASTM D 4397 (1996) Polyethylene Sheeting for Construction, Industrial, and Agricultural Applications

(2) Code of Federal Regulations (CFR)

29 CFR 1910.120 Hazardous Waste Operations and Emergency Response

29 CFR 1910.145 Accident Prevention Signs and Tags

29 CFR 1926 Safety and Health Regulations for Construction

40 CFR 260 Hazardous Waste Management Systems: General

40 CFR 261 Identification and Listing of Hazardous Waste

40 CFR 262 Generators of Hazardous Waste

40 CFR 263 Transporters of Hazardous Waste

40 CFR 264	Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities
40 CFR 265	Interim Status Standard for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities
40 CFR 268	Land Disposal Restrictions
40 CFR 761	Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions
49 CFR 107	Hazardous Material Program Procedures
49 CFR 171	General Information, Regulations, and Definitions
49 CFR 172	Hazardous Materials Table, Special Provisions, Hazardous Materials Communications Requirements and Emergency Response Information Requirements
49 CFR 173	Shippers - General Requirements for Shipments and Packagings
49 CFR 177	Carriage by Public Highway
49 CFR 178	Shipping Container Specification
49 CFR 171-180	Department of Transportation Regulations for Shipping and Transporting Hazardous Materials

(3) Hawaii State Department of Health (DOH) Guidelines on Soil and Groundwater Contamination

Technical Guidance Manual for Underground Storage Tank Closure and Release Response, March 2000.

Hawaii DOH Technical Guidance Manual for the Implementation of the State Contingency Plan

Hawaii DOH Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater

Guidance Fact Sheet for Use When Petroleum Contamination is Encountered during Subsurface Soil Excavation

General Guidelines for Taking Action in the Course of Encountering Petroleum Hydrocarbon Contamination during Public Works Activities in Hawaii.

Screening for Environmental Hazards at Sites with Contaminated Soil and Groundwater, Spring 2024 Updates (Revised July 2024). Prepared by Hawaii Department of Health Environmental Management Division, Hazard Evaluation and Emergency Response Office.

(4) State of Hawaii Administrative Rules

- HAR 11-58 Solid Waste Management Control
- HAR 11-260 General Provisions
- HAR 11-261 Identification and Listing of Hazardous Waste
- HAR 11-262 Standards Applicable to Generators of Hazardous Waste
- HAR 11-263 Standards Applicable to Transporters of Hazardous Waste
- HAR 11-266 Standards for Management of Specific Hazardous Waste and Specific Types of Hazardous Waste Management Facilities
- HAR 11-268 Land Disposal Restrictions
- HAR 11-270 State Administered Permits: The Hazardous Waste Permit Program
- HAR 11-271 Procedures for Decision Making
- HAR 11-273 Standards for Universal Waste Management
- HAR 11-279 Standards for the Management of Used Oil
- HAR 11-280 Public Information
- HAR 11-281 Underground Storage Tanks
- HAR 11-451 State Contingency Plan

(5) Soil and Groundwater Testing Guidance

Test Methods for Evaluation of Solid Wastes, EPA/SW-846, 3rd ed.

(6) Construction Environmental Hazard Management Plan

17.2 SUBMITTALS

Submit under provisions of Article XIX - Required Submittals.

(A) Pre-Project Submittals:

- (1) Site Safety and Health Plan; to be submitted within 14 calendar days of the Notice to Proceed
- (2) Worker Training Certification; to be submitted within 14 calendar days of the Notice to Proceed

(B) Completion Submittals:

- (1) Completion Report; to be submitted within 30 calendar days of receipt of the Certificates of Disposal from the disposal facility.
- (2) Vehicle Decontamination Reports

17.3 DEFINITIONS

- (A) Asbestos-Containing Material: The term asbestos includes chrysotile, amosite, crocidolite, tremolite, asbestos, anthophyllite asbestos, and actinolite asbestos and any of these minerals that has been chemically treated or altered. Materials are considered to contain asbestos if the asbestos content of the material is determined to be at least one percent.
- (B) Certified Industrial Hygienist: Industrial hygienist hired by the Contractor and certified by the American Board of Industrial Hygiene (ABIH). The CIH shall have a minimum of five (5) years of experience in working at sites with contaminated soil and groundwater. The CIH shall be present on-island during construction.
- (B) Chemical of Potential Concern (COPC): A term often used to refer to chemicals that are more likely to be found at a particular facility because they are the chemicals that the facility routinely handles. This term is often used to refer to environmental contaminants.
- (C) Contaminated Groundwater: Groundwater contaminated with petroleum hydrocarbons and other related contaminants.
- (D) Contaminated Sediment: Sediment contaminated with heavy metals and other related contaminants.
- (E) Contaminated Soil: Soil contaminated with petroleum hydrocarbons and other related contaminants such as heavy metals, PCBs, PAHs, and pesticides. Contaminated soil includes both non-grossly contaminated soil and grossly contaminated soil.
- (F) Contractor: The individual and/or legal entity and its subcontractors and employees of the contractor and subcontractor awarded the contract.

- (G) Contractor's Qualified Consultant: The qualified environmental scientist/engineer/ geologist hired by the Contractor to perform sampling and testing services and to updated the draft C-EHMP. The Qualified Consultant shall have a minimum of five (5) years of experience in working at sites with contaminated soil and groundwater.
- (H) Disposal Facility: A Private, City, State and/or Federal permitted facility approved by the State to dispose of contaminated materials.
- (I) Grossly Contaminated Soil: Soil that is determined by the Contractor's Qualified Consultant to be grossly contaminated by visual evidence of petroleum staining and/or olfactory evidence of petroleum odor and photoionization (PID) reading greater than 10 parts per million(ppm).
- (J) Harbors Design Engineer: State of Hawaii DOT Harbors design representative for this project .
- (K) Hazardous Material: Any materials regulated as such under Hawaii State Law (HAR 11-451). Hazardous materials may include soil, groundwater, oily product, sediment, concrete/asphalt, or landfill debris contaminated with polychlorinated biphenyls (PCBs), heavy metals, petroleum hydrocarbons, or solvents.
- (L) Hazardous Waste: Any material defined as hazardous waste in 40 CFR 261.
- (M) Hazardous Waste Facility: A Federally-permitted facility equipped to dispose of hazardous waste.
- (N) Harbors Construction Engineer: State of Hawaii DOT Harbors construction representative for this project.
- (O) Landfill Debris: Landfill debris buried on-site, including, but not limited to concrete, asphalt, metal, wood, machinery, vehicle/ship parts, miscellaneous industrial debris, and/or fill material.
- (P) Non-grossly Contaminated Soil: All soil from the project site that is **not** determined to be Grossly Contaminated Soil.
- (Q) Toxic Substances Control Act (TSCA) Regulated Waste: Any material defined as TSCA regulated waste in 40 CFR 761.
- (R) Transite: A generic name for asbestos cement board and pipe.
- (S) Transporter: The individual and/or legal entity (may be the Contractor or a subcontractor) properly licensed and experienced in hauling contaminated material.
- (S) Treatment Facility: A State-permitted facility for the treatment of petroleum-contaminated material.

17.4 DESCRIPTION OF WORK:

- (A) The project involves the excavation and trenching activities to allow for the demolition and replacement of existing underground waterline. The existing water line maybe of asbestos containing material. The work may include the removal and disposal of contaminated soil, groundwater, oily product, sediment, concrete/asphalt, or asbestos waterline piping and debris excavated from the project site. Work to be done under this article includes providing environmental controls during project activities, specifically during excavation/removal, segregation, and stockpiling of contaminated materials that may be encountered. The work to be completed may include, but is not necessarily limited to, the following:
- (B) The Contractor's Qualified Environmental Consultant (QEC) shall be onsite for the duration of the excavation/trenching/stockpiling activities to ensure Contractor's compliance with the C-EHMP for the project site to mitigate the potential exposure of construction workers and other on-site workers to known and suspected COPCs during activities associated with future construction. The C-EHMP prepared by the State consists of several individual plans, each addressing specific potential COPC sources and methods of handling contaminated media. The individual plans include the following:
1. Release Reporting Plan
 2. Health and Safety Plan
 3. Construction Activities Release Response Plan
 4. Soil Management Plan
 5. Groundwater Management Plan
 6. Free Product Management Plan
 7. Storm Water Management Plan

The plans include engineering and administrative controls, as well as requirements for personal protective equipment [PPE] and a monitoring program. Prior to the initiation of construction work, on-site workers shall be informed and educated about the potential hazards posed by COPCs and the methods used to prevent exposure.

The Contractor shall be responsible for following all the requirements of C-EHMP as necessary for their specific construction means and methods.

(C) Contaminated Soil Management and Removal

- (1) Contaminated soil shall be segregated from potentially clean soil. If subsurface soil and/or groundwater contamination is encountered during construction, soil shall be further segregated under the direction of the Contractor's Qualified Environmental Consultant into two storage containment areas (i.e., holding cells), one for non-grossly contaminated soil and one for grossly contaminated soil. If visual or olfactory evidence of petroleum is observed, the Contractor's Qualified Environmental

Consultant shall also conduct field analyses for gross contamination using a PID. Headspace samples for PID testing shall be collected at a frequency of 1 sample per 20 cubic yards of soil excavated. Soil shall be considered grossly contaminated if any of the following is found: visual or olfactory evidence of petroleum staining or other severe contamination, as determined by the QEC following the HEER Office TGM. If the PID headspace test indicates grossly contaminated soil, the entire 20 cubic yards of soil from which the sample was collected shall be considered grossly contaminated and deposited into the grossly contaminated soil holding cell.

The Contractor's QEC shall be continuously onsite to inspect such soil and to expedite the segregation, testing, transportation and disposal of the grossly contaminated soil. The Contractor shall construct two storage containment areas for depositing segregated non-grossly and grossly contaminated soil. The Contractor shall be responsible for removal, handling, and disposal of contaminated soil. Grossly contaminated soil removal shall be performed with oversight from the Harbors Construction Engineer.

- (2) Grossly contaminated soil shall be segregated and stockpiled in a storage containment area designated and constructed by the Contractor. Grossly contaminated soil shall not be mixed or stockpiled with other soils. The Contractor shall be responsible for testing both non-grossly and grossly contaminated soil prior to daily disposal, and removal of the storage containment areas upon completion of work. The Contractor shall be responsible for handling, segregating, transport, disposal, and removal of containment areas for all contaminated soil.

(D) Contaminated Groundwater Removal, As Applicable

Groundwater shall be re-infiltrated using a back trench, or treated and disposed of off-site in accordance with the updated C-EHMP. In the event that the Contractor elects to utilize a back trench for dewatering within the contaminated areas indicated within the construction drawings, the dewatering effluent shall be infiltrated within the contaminated areas shown within the construction drawings. Any oily product (possibly ranging from 1 to 1.5 inches thick) shall be separated and stored in approved containers, stored within a storage containment area designated and constructed by the Contractor. The Contractor shall be responsible for testing and proper temporary storage and disposal of groundwater and oily product and removal of the storage containment areas upon completion of work. The Contractor shall be responsible for handling, segregating, transport, disposal, and removal of containment areas for all groundwater.

(F) Asbestos Waterline Piping Removal

The existing waterline buried on-site that shall be considered asbestos containing material. Upon excavation, debris shall be segregated under the direction of the

Contractor's QEC into a storage containment area (i.e., holding cell) for asbestos debris.

The Contractor shall be responsible for removal, handling, and disposal of all asbestos debris. Asbestos waterline excavation shall be performed with oversight from the Harbors Construction Engineer (587-1866).

(G) Contaminated Concrete/Asphalt Removal

Contaminated concrete and asphalt debris shall be segregated under the direction of the Contractor's QEC into four storage containment areas (i.e., holding cells), one each for non-contaminated concrete and asphalt debris and one each for contaminated concrete and asphalt debris. The Contractor's QEC shall observe the debris excavation for visual evidence of petroleum staining, in which case, the debris shall be considered contaminated. Specific concrete slabs have been identified as contaminated, as indicated on the Plans. Non-contaminated concrete and asphalt may be recycled and reused on-site. Contaminated concrete shall be handled and reused/disposed in accordance with the C-EHMP. Contaminated asphalt shall be recycled or disposed off-site.

17.5 QUALITY ASSURANCE:

- (A) Training: The Contractor's employees exposed to contaminated materials shall have completed 40-hour Hazardous Waste Operations and Emergency Response Health and Safety Training (which satisfies OSHA 29 CFR 1910.120) and annual 8-hour refresher courses.
- (B) Certified Industrial Hygienist (CIH): The Contractor shall obtain the services of an industrial hygienist certified by the American Board of Industrial Hygiene (ABIH) to certify training and provide recommendations on the need for personal protective equipment (PPE) in performing removal work. The Contractor shall pay for the services of the CIH.
- (C) Site Safety and Health Plan (SSHP): The Contractor's CIH shall prepare and submit a SSHP for the contaminated material removal and disposal. The SSHP shall include protection of workers and the environment from contaminated material hazards. Specific protection requirements shall be determined by the CIH and, as a minimum, as specified herein.
- (D) Construction Environmental Hazard Management Plan: This plan prepared by the State describes the methods, techniques, and phases of dealing with the contaminated soil, groundwater, oily product, sediment, concrete/asphalt, and asbestos waterline debris, including: a schedule to be employed in the excavation, a sequence of operations, the method of excavation, back trenching, public protection, stockpiling, hauling, and handling of the contaminated materials, transportation and disposal, and the proposed equipment to be utilized during all field activities. Define the Contractor's source for fill and method for importing the fill material. Ensure that work operations or processes involving contaminated materials are conducted in accordance with 29 CFR 1910.120, 40 CFR 761, 49 CFR 171-180, HAR 11-451 and the applicable requirements of this section, including but are not limited to:

- (1) Obtaining advance approval of storage and/or disposal facilities.
 - (2) Notifying the Harbors Construction Engineer prior to commencing the operation.
 - (3) Reporting leaks and spills to the Harbors Construction Engineer and regulatory agencies..
 - (4) Maintaining a spill kit.
 - (5) Proper handling, shipping, and disposal of contaminated materials.
 - (6) Proper decontamination.
 - (7) Maintaining inspection, inventory, transport, and disposal records.
- (E) Sampling and Analysis Plan: As part of C-EHMP, this plan describes the field sampling and testing procedures, testing methods, and quality control procedures. For sample reports, indicate the sample identification, the sample location, the sample date, the sample time, the sample method, the contamination level, the name of individual sampler, and the quality control procedures. Consultations, meetings, and follow up consultations may be required prior to acceptance of this plan. The Contractor shall be responsible for making any necessary revisions to this plan until deemed acceptable by the State.
- (F) Training Certification: Based on the applicable training requirements for job tasks to be provided, submit the applicable training certificates (generated by appropriate training providers) to the CIH for review. The certificates shall be signed and dated by the CIH and by each employee stating that the employee has received training.
- (G) CIH Qualifications: Submit the name, address, and telephone number of the industrial hygienist selected to perform the duties in the paragraph entitled "Certified Industrial Hygienist." Submit proper documentation that the industrial hygienist is certified, including ABIH certification number and date of certification and recertification. CIH must be located on the Island of Oahu during the project and must be provided by the Contractor.
- (H) Vehicle Decontamination Verification: Provide documentation verifying that all vehicles and containers were decontaminated prior to leaving the project or disposal site, were properly operating, and were covered. The documentation shall be prepared within 24 hours after removal of waste from the site. Submit one (1) copy, in PDF format, to the Harbors Construction Engineer for review and approval.
- (I) Completion Report: Prepare a completion report containing the following items: analytical results including concentrations and sample locations, a diagram of the limits of the excavated area with sample locations indicated (indicate reference benchmark used), a diagram of the limits of all the proposed stockpile holding

cells, the volume of material excavated, chain of custody forms, signed certificates of disposal, waste shipment manifests for both hazardous and non-hazardous wastes, final disposition of all wastes along with weight/volume disposed, and description of the work completed. Submit three (3) copies to the Harbors Division Construction Engineer for review and approval.

17.6 POTENTIAL ADDITIONAL MONITORING/HEALTH AND SAFETY EQUIPMENT

- (A) MULTI-GAS METER: To monitor explosion hazard and unsafe atmospheric conditions in the excavation area.
- (B) PERSONAL PROTECTIVE EQUIPMENT (PPE): As needed to ensure safety of on-site personnel. To be determined by CIH and specified in the SSHP.
- (C) PHOTOIONIZATION DETECTOR (PID): To monitor organic vapor in the breathing zone.

17.7 EXECUTION

- (A) PROTECTION OF WORKERS AND THE ENVIRONMENT: Protect workers and the environment from hazards in accordance with the SSHP and, as a minimum, as specified herein.
 - (1) Worker Safety: Provide portable decontamination. Workers shall wear and use PPE, as recommended by the CIH, upon entering a control area. If PPE is not required by the CIH, specify in the SSHP. Keep work footwear inside work area until completion of the job. Have available extra sets of PPE required for use by the Harbors Construction Engineer and additional site visitors for inspection of work. Do not carry out contaminated material handling operations in confined spaces. Do not delay aid to a seriously injured worker for reasons of decontamination. All work must be conducted in accordance with the site-specific SSHP as well as applicable sections of OSHA 29 CFR 1910.
 - (2) Control Area: Establish a control area to prevent unauthorized entry of personnel. Fence off area and provide 29 CFR 1910.145 approved signs at approaches and around perimeter. Locate signs at such a distance that personnel may read the sign and take the necessary precautions before entering the area. Allow only personnel briefed on the elements and trained as specified herein into the area. Do not permit food, drink, or smoking materials in the control area. Smoking is not permitted within 50 feet of the control area. Provide "No Smoking" signs as directed by the Harbors Division Construction Engineer.
 - (3) Air Monitoring: Conduct air monitoring around the perimeter of the site. If air monitoring results exceed regulatory action levels, work shall be stopped immediately and the CIH and Harbors Division Construction Engineer shall be notified. The Contractor through consultation with the CIH shall implement a change in work practices and/or engineering controls to reduce exposure levels at the perimeter of the site to below regulatory action levels.

(B) EXCAVATION PROCEDURES: Notify the Harbors Construction Engineer at least 48 hours prior to the start of excavation/removal of contaminated materials. Use methods and equipment that result in minimal disturbance to remaining soil beyond the excavation limits. Remove and dispose of any material that becomes contaminated as a result of the Contractor's operation at no additional cost to the State of Hawaii. Stage operations to minimize the time the contaminated materials are exposed to the weather. Provide protection measures around the area of contaminated materials to divert runoff of water from within the excavation boundaries. Runoff that comes in contact with contaminated materials shall be retained onsite and shall not be allowed to drain into adjacent storm conveyance system and the harbors waters.

(1) Underground Utilities: Locations of existing utilities depicted on the site drawings are approximate and other underground utilities may be present. The Contractor shall verify the location and elevation of the existing utilities indicated prior to starting construction. If utilities other than those indicated are found, the Contractor shall immediately notify the Harbors Division Construction Engineer.

(2) Dust Control: Maintain strict dust control at all times to prevent dust contaminated particles from becoming airborne. Sprinkle or treat the contaminated materials at the site and other areas disturbed by operations with dust suppressants or water as necessary. The Contractor shall ensure that runoff associated with dust control activities is retained onsite and is not allowed to drain into the harbors waters.

(3) Underground Structures/Objects: The work area may contain pockets of grossly contaminated soil and groundwater and may include underground objects. Excavation shall be performed in a manner that shall limit the potential for grossly contaminated material to be mixed with non-grossly contaminated material.

17.8 CONFIRMATION SAMPLING AND ANALYSIS

(A) The Harbors Construction Engineer and Contractor's QEC shall be present to inspect the removal of contaminated material from the site. In the event that grossly contaminated material is encountered, the Contractor shall be responsible for confirmation sampling as described in Section 40.4 above. After all material suspected of being grossly contaminated has been removed, the excavation shall be examined for evidence of gross contamination to determine the presence of volatile and/or semi-volatile contamination by the Contractor's QEC. Any remaining evidence of gross contamination shall be documented by the Contractor's QEC and reported to the Harbors Construction Engineer.

17.9 PERMITS

(A) Prior to beginning excavation work, the Contractor shall obtain all necessary federal, state, and county permit(s) for:

(1) Transporting contaminated material from the site to the treatment/disposal site.

- (2) Any activities related to holding cell construction that requires permits.
- (3) Handling, treatment, and/or disposal of construction dewatering effluent (that may be contaminated) by back trenching (i.e., re-infiltration trench).

17.10 SAFETY BARRIERS

- (A) Prior to beginning excavation work, the Contractor shall provide, erect, and maintain temporary safety barriers and security devices to reasonably prevent public entry into active work areas and stockpile areas.

17.11 CONTAMINATED MATERIAL HOLDING CELLS

- (A) Prior to beginning excavation work, the Contractor shall construct separate holding cells for non-grossly and grossly contaminated soil, contaminated concrete/asphalt, contaminated sediment, asbestos waterline piping and landfill debris as follows:
 - (1) The Contractor shall construct the holding cell liner from two (2) layers of 10 mil polyethylene sheeting.
 - (2) The Contractor shall lay down the polyethylene liner and secure the edges of the liner with a soil berm, stakes, or equivalent, to contain potential surface water runoff within the lined cells.
 - (3) The Contractor shall ensure that the holding cell is water-tight and that the berm is at least 1.5 feet above the ground surface. The polyethylene sheeting shall extend to the top of the berm. No overlaps, seams, joints, or defects shall be allowed in the polyethylene liner.
 - (4) Prior to placing material in the holding cells, the Contractor's QEC shall approve cell construction quality and size.
 - (5) Prior to construction of holding cells, the Harbors and the local tenants shall approve the location of the holding cells. The holding cell location, construction materials and layout shall be identified in the C-EHMP.

17.12 TRANSPORT OF CONTAMINATED MATERIALS TO HOLDING CELLS

- (A) The Contractor shall place material from the excavation/trenching into separate holding cells for non-grossly and grossly contaminated soil, contaminated sediment, clean and contaminated concrete and asphalt, asbestos waterline piping and contaminated landfill debris. If grossly contaminated material is encountered, the Contractor shall be responsible for the construction of the holding cell(s), oversight of segregation, testing, handling, transport, and disposal, as directed in Section 40.4 above. Stockpiles shall be placed on polyethylene sheeting. In general, the following shall apply during transport of material to holding cells. (In the case of grossly contaminated material, the Contractor's QEC and the Harbor's Construction Engineer shall be responsible for oversight and direction and may alter the parameters outlined below).

- (1) The bed of the truck used for transporting the material shall be clean and capable of holding the material without spillage or leakage.
- (2) The Contractor shall separate concrete and asphalt debris from the excavated material and properly dispose of the debris, as appropriate.
- (3) The Contractor shall employ a placement method that does not disturb or damage the polyethylene liner, and the driving of machinery onto the material is not allowed.
- (4) The Contractor shall leave the temporary excavated material stockpile area free of excess materials.
- (5) The Contractor shall moisten the material enough to minimize dust, if necessary but leave no standing water.
- (6) If dewatering is necessary, the Contractor shall adhere to all local, State and Federal regulations regarding back trenching (i.e., re-infiltration trench).
- (7) At the end of each work day or if it begins to rain, the Contractor shall cover the excavated material stockpiles with polyethylene sheeting in a secure manner which shall prevent winds from blowing the sheeting from the piles. Stockpiles that are not in use shall remain covered with polyethylene sheeting to minimize odors and prevent runoff. No surface runoff shall be allowed to enter, flow through, or exit the stockpiles.

17.13 TRANSPORTATION AND DISPOSAL

The Contractor shall furnish labor, materials, and equipment necessary to store, transport, and dispose of contaminated material and asbestos waterline piping in accordance with Federal, State, and local requirements. The Contractor shall prepare and maintain waste shipment records and manifests required by the Resource Conservation and Recovery Act (RCRA), U.S. Federal Department of Transportation (DOT), and State Department of Transportation. The EPA RCRA ID Number for this project is: HI0000463869. Any non-grossly contaminated and grossly contaminated soil, oily product, contaminated sediment, asbestos waterline piping, clean and contaminated concrete and asphalt, and debris shall be properly disposed of at a State approved/permitted disposal facility. The Contractors Qualified Consultant shall complete contaminated material testing in accordance with the testing requirements of the disposal facility. The contaminated material testing procedures are included in the C-EHMP. The Contractor shall be responsible for obtaining acceptance of contaminated material disposal at the disposal facility. Upon transportation and disposal, the Contractor shall submit copies of the waste shipment manifests for both hazardous and non-hazardous wastes and certificates of disposal to the Harbor's Construction Engineer. The Contractor shall also include all waste shipment manifests and certificates of disposal in the Completion Report.

17.14 HAZARDOUS WASTE GENERATOR

HDOT Harbors will retain title to all petroleum contaminated and/or hazardous waste materials presently existing, or been determined to have existed, on the project site as of the Notice to Proceed; and encountered during demolition, excavation, and removal; hereafter referred to in this paragraph as "on-site petroleum-contaminated and/or hazardous waste". This does not include petroleum-contaminated and/or hazardous materials generated by the Contractor, such as used motor oil, lubricants, cleaners, etc., or petroleum-contaminated and/or hazardous waste materials transported into the project site from offsite locations after the Notice to Proceed. The Contractor shall dispose of such petroleum contaminated and/or hazardous waste materials in accordance with the Contract Documents, City, State, and Federal regulations. HDOT Harbors will be shown as the generator for on-site petroleum-contaminated and/or hazardous waste and will sign all shipment manifests for on-site petroleum-contaminated and/or hazardous waste. Nothing in these Contract Documents shall be construed or interpreted as requiring the Contractor to assume the status of Owner or generator of on-site petroleum-contaminated and/or hazardous waste

17.15 MEASUREMENT AND PAYMENT

The cost of soil, groundwater, oily product, sediment, concrete/asphalt surfacing materials, and landfill debris excavation, removal, and disposal shall be included in the in the Proposal Schedule. The Contractor will pay for:

ITEM NO.	PAY ITEM	PAY UNIT
11.	Excavation, characterization, profiling, and hauling of grossly contaminated soils for the demolition and installation of new waterline inclusive of excavation, hauling, disposal, equipment, tools, labor, materials and incidentals necessary to complete the work.	Allowance
12.	Excavation, characterization, profiling, and hauling of non-grossly contaminated soils for the demolition and installation of new waterline inclusive of excavation, hauling, disposal, equipment, tools, labor, materials and incidentals necessary to complete the work.	Lump Sum

ITEM NO.	PAY ITEM	PAY UNIT
13.	Cost of separating petroleum grossly and non-grossly contaminated material for the demolition and installation of new waterline , including, but not limited to concrete building foundations, concrete footings, asphalt concrete pavement, underground utility structures, and loose material removed as part of the demolition and removal work. Costs shall include physically separating material, loss of production, protective wear, safety plan, and other costs related to petroleum contamination.	Allowance
14.	Excavation, hauling and disposal of the existing asbestos containing waterline for the demolition and installation of new waterline inclusive of excavation, hauling, disposal, equipment, tools, labor, materials and incidentals necessary to complete the work.	Allowance
15.	Preparation of Planning Documents, inclusive of C-EHMP	Lump Sum
16.	Contractors Environmental Qualified Consultant	Lump Sum
17.	Setup, maintenance, and removal of soil staging area for non-grossly contaminated soils.	Lump Sum
18.	Setup, maintenance, and removal of soil staging area for grossly contaminated soils.	Allowance
19.	Setup, maintenance, and removal of soil staging area for contaminated sediment.	Allowance
20.	Setup, maintenance, and removal of soil staging area for excavated asbestos waterline	Allowance
21.	Removal and disposal of oily sheen/product from groundwater, during backtrenching.	Allowance

END OF ARTICLE

Project-Specific Construction EHMP (C-EHMP)

For
Honolulu Harbor Pier 51A
Domestic and Fire Waterlines Systems Replacement Project
Job No. P10904

Located at:
Honolulu, Oahu, Hawaii
Tax Map Key: (1) 1-5-041:111

Prepared for:

State of Hawaii
Department of Transportation
Harbors Division

and

RM Towill
2024 North King Street, Suite 200
Honolulu, HI 96819

Prepared by:

EnviroQuest, Inc.
98-029 Hekaha Street, Suite 21
Aiea, Hawaii 96701

and

Environmental Risk Analysis LLC
905A Makahiki Way
Honolulu, Hawaii 96826

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Signatures

This document is not finalized until it is signed. A signed copy will be present on-site at all times.

I certify that as the property owner, I am responsible for ensuring all parties who work or reside at my site are aware of the contamination at my property, and the associated hazards, and that the information in this document is true and accurate to the best of my knowledge. I am responsible for ensuring compliance with all land use controls as well as State of Hawaii Department of Health (DOH) regulations.

Property Owner

I certify that I am a qualified environmental professional, capable of ensuring compliance with the requirements of this Construction Environmental Hazard Management Plan (C-EHMP). It is my duty on this project to understand the requirements of this document and be on-site during groundbreaking activities. I will communicate hazards, management protocols, and other C-EHMP requirements to construction professionals at the site.

Qualified Environmental Professional

As Construction Manager, I am responsible for understanding the requirements of this C-EHMP, effectively communicating the requirements and hazards to my crews and subcontractors and providing the required training and personal protective equipment to site workers. I will work with the Qualified Environmental Professional to ensure compliance with this C-EHMP during work at this property.

Construction Manager

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List of Acronyms and Abbreviations

%	percent
<	less than
AAF	Army Airfield
AC	asphalt concrete
AP	adjacent property
AFB	Air Force Base
AST	aboveground storage tank
AVGAS	aviation gasoline
bgs	below ground surface
BMP	Best Management Practices
BTEX	benzene, toluene, ethylbenzene, and total xylenes
CBR	California Bearing Ratio
CCH	City and County of Honolulu
C-EHMP	Construction Environmental Hazard Management Plan
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESQG	Conditionally Exempt Small Quantity Generator
CIH	Certified Industrial Hygienist
Cl-	chloride ion
COMPACFLT	Commander, United States Pacific Fleet
COPC	chemical of potential concern
CWB	Clean Water Branch
cy	cubic yards
DoN	Department of the Navy
DRO	diesel range organics
DU	decision unit
EAL	environmental action level
EHE	Environmental Hazard Evaluation
EHMP	Environmental Hazard Management Plan
ENG Control	Engineering Control
EPA	United States Environmental Protection Agency
ESA	Environmental Site Assessment
ESCP	Erosion and Sediment Control Plan
FSA	fuel storage annex
ft	feet
GRO	gasoline range organics
H&A	Hirata & Associates, Inc.
HAR	Hawaii Administrative Rules
HASP	Health and Safety Plan

HDOH	State of Hawaii Department of Health
HDOT	State of Hawaii, Department of Transportation
HECO	Hawaiian Electric Company; Hawaiian Electric Company, Inc.
HFFC	Honolulu Fueling Facilities Corporation
HI SHWS	State of Hawaii Solid and Hazardous Waste Site
HRS	Hawaii Revised Statutes
HVOC	Halogenated volatile organic compounds
IEC	Institutional and Engineering Control
INST Control	Institutional Control
IRP	Installation Restoration Program
JBPBH	Joint Base Pearl Harbor-Hickam
JP-4	jet propulsion fuel-grade
JP-8	jet fuel-grade
LEL	lower explosive limits
LEPC	Local Emergency Planning Committee
LUST	leaking underground storage tank
mg/kg	milligrams per kilogram
mg/l	milligrams per liter
MOGAS	motor gasoline
MtBE	methyl-tert-butyl ether
N/A	Not Applicable
NFA	no further action
NFRAP	no further remedial action plan
NPDES	National Pollutant and Discharge Elimination System
NPL	National Priorities List
NRC	National Response Center
OCI	organochlorine
OR&L	Oahu Railway and Land Company
OSHA	Occupational Safety and Health Administration
OU	Operable Unit
PAH	polynuclear aromatic hydrocarbon
PCB	polychlorinated biphenyl
PEL	permissible exposure level
PHHT	Pearl Harbor Historic Trail
PHNC	Pearl Harbor Naval Complex
PID	photoionization detector
PM	Project Manager
POL	Petroleum, Oils, and Lubricants
POOU	permanently out of use
PPE	personal protective equipment
ppmv	parts per million per volume
QEP	qualified environmental professional
RCRA	Resource Conservation and Recovery Act

ROH	Revised Ordinances of Honolulu
ROW	right-of-way
RRO	residual range organics
SMA	Special Management Area
SQG	Small Quantity Generator
SVOC	semi-volatile organic compound
TGM	Technical Guidance Manual
TMK	Tax Map Key
TPH	total petroleum hydrocarbons
UIC	underground injection control
USAF	United States Air Force
USCG	United States Coast Guard
UST	underground storage tank
VOC	volatile organic compound

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Section 1 Introduction and Purpose

1.1 Project Purpose

This Project-Specific Construction Environmental Hazard Management Plan (C-EHMP) for the Honolulu Harbor Pier 51A Domestic and Fire Waterline Systems Replacement Project provides guidance for construction-related and ground-disturbing activities at Pier 51A on Sand Island. The project includes the demolition, removal, and replacement of the current domestic service water system and fire protection water system with a new waterline system. These guidelines should be used by all who may be hired to perform any of the activities described above to keep workers, site users, the environment, and the general public safe from contact with contamination on-site and prevent chemicals of potential concern (COPCs) from leaving the site without proper management. Not adhering to this plan may have serious consequences, including, but not limited to, stopping construction and being liable for any damage or harm caused by on-site contamination.

These guidelines are specific to the demolition and/or construction phase(s) of the specific project described in Section 6 only. In general, the C-EHMP is no longer required once ground-disturbing activities are completed, unless above-ground soil vapor management is required. This C-EHMP does *not address the ongoing operations subsequent to construction*. Future projects at the site will require a separate C-EHMP if contaminated media will be impacted.

This plan provides required environmental management plans for all phases of the construction project, including, but not limited to, demolition, utility excavation, geotechnical boring, footing installation, grading, landscaping, soil import and/or export, and slab installation.

Currently there is no known contamination existing on site. If contaminated media are observed during construction and will be left on-site following the completion of construction, a full site characterization and an Environmental Hazard Evaluation (EHE) must be conducted and a separate Environmental Hazard Management Plan (EHMP) will have to be prepared to manage the contamination in the long-term. EHEs and EHMPs must be submitted to the State of Hawaii, Department of Health (HDOH) for review and approval following the completion of construction activities detailed in this C-EHMP.

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Section 2 Background

2.1 Project Site Location and Description

The C-EHMP applies to the property shown in Figure 1, included in Appendix A. Property identification is listed in Table 2-1. The Site is located on an 89.69 acre parcel of land designated by TMK (1) 1-5-041:111. Several smaller discontinuous parcels of land also owned by State of Hawaii Department of Transportation (HDOT) are located within TMK (1) 1-5-041:111 and are anticipated to be impacted by the project. Construction activities will include the demolition, removal, and replacement of the current domestic service water system and fire protection water system with a new waterline system.

Table 2-1: Property Identification

Main Addresses:	Honolulu Harbor
TMK No.:	(1) 1-5-041:111
Owner:	Under the jurisdiction of the State of Hawaii Department of Transportation (HDOT)

Note: TMK = Tax Map Key

2.2 Site Conditions

Site conditions are identified in Table 2-2.

Table 2-2: Site Conditions

Distance to Nearest Surface Water Body (meters):	The north end of the Site borders the Kapalama Basin (0 ft)
Approximate Depth to Groundwater (ft bgs):	Approximately 6 to 7 feet.
Property Above or Below UIC Line:	Below (makai) the UIC line.
Is the first-encountered groundwater classified as a potential source of drinking water in the Mink & Lau Aquifer Identification and Classification Report?	No, the shallow aquifer is identified as 30103116(13321) and is classified as currently used, neither drinking nor ecologically important water with moderate salinity (1,000 to 5,000 mg/l Cl ⁻), replaceable, and has a high vulnerability to Contamination. The depth to groundwater is expected to vary with tidal fluctuations.
Current Property Use Type (Residential, Commercial, Zoning, etc.)	The current and future property use is not anticipated to change. It is used as an industrial Site and is zoned as an I-3 Waterfront Industrial District. The site is located within the SMA.
Proposed/Future Property Use Type (Residential, Commercial, Zoning, etc.)	
Typical Soil Profile from Surface to Groundwater (Include Depth Range, Lithology)	Soil types within the project site are identified in the USDA NRCS Web Soil Survey. The USDA NRCS classifies soils at the site as Fill Land, Mixed (FL). Specific soil types including depth range and lithology are included in the representative bore log shown in Figure 4 in Appendix A.
Utilities Serving Site (e.g., Sewer (specify, Cesspool, Septic, Other), Storm Drains, Electrical, Gas, Water)	Sewer: CCH
	Storm Drains: Present at the Site
	Electrical: Hawaiian Electric Company, Inc.
	Portable Water: Board of Water Supply, DOT

Note: ft = feet
bgs = below ground surface
SMA = Special Management Area

AC = asphalt concrete
UIC = underground injection control
CCH = City and County of Honolulu

mg/l = milligrams per liter
Cl⁻ = chloride ion

2.3 Existing Environmental Conditions

Pier 51A is currently used as a container terminal facility. Shipping containers, top handles, carts, cranes, trucks, and chassis can be found scattered around the Site. Several maintenance shops servicing large machinery and an office building are also present at the Site.

Pier 51A is a part of Sand Island, a small (approximately 500 acre) island located at the entrance of Honolulu Harbor.

2.4 Historical Land Use

Sand Island was created from dredged material in the 1800s. The island was initially used as a quarantine station for incoming ships until the 1920s. Additional dredging was used to expand the footprint of the island and raise its general elevation in the early 1940s. By 1944, the island assumed its current configuration of approximately 500 acres. During World War II, Sand Island was used for military purposes including a five-acre barbed wire internment camp. Historical aerial photographs suggest portions of the Site and surrounding areas were used as vehicle junkyards beginning in the 1960s until the late 1990s.

2.5 Summary of Environmental Investigations

The following is a brief summary of the previous environmental investigations conducted at Pier 51A.

2.5.1 Honolulu Fueling Facilities Corporation, Pier 51A

Honolulu Fueling Facilities Corporation (HFFC) previously leased the land upon which the Pier 51A fuel transfer facilities were located from the HDOT, Harbors Division. HFFC gained control of these assets in 1981 from Texaco and Shell Oil Companies, which had installed these facilities in the 1960's and operated them until 1981. HFFC operated a jet fuel ship-to-shore transfer facility at Pier 51A. Since HFFC gained control of the facilities in 1981, the only petroleum products that had been put into the pipelines were Jet-A and Jet-A1 fuel. However, prior to HFFC control of the facilities, gasoline and other petroleum products were transferred in these lines by Texaco and Shell.

Releases of petroleum products from the Pier 51A pipeline occurred in 1991 and 1997, while the facility was under the control of HFFC. In response to the jet fuel releases at Pier 51A, the HDOH requested that HFFC perform a Site Assessment to define the extent and mobility of any residual soil and groundwater contamination in the release areas. The site assessment consisted of installing sixteen groundwater monitoring wells in the vicinity of the known releases. Soil samples were collected during installation, and groundwater elevations and free product thicknesses were measured after the monitoring wells were allowed time to equilibrate. Additionally, periodic measurement of free-product levels and sampling of groundwater were carried out to gauge the extent of contamination and monitor the natural degradation of the remaining free-product. The results of laboratory analysis of soil and groundwater samples are presented in Table 2-3 and Table 2-4, along with the pertinent HDOH Action Levels and 2024 HDOH EALs.

Table 2-3: HFFC Soil Contamination

COPC	Concentration Range	HDOH Action Level (mg/kg)	2024 EAL* (mg/kg)
Acenaphthene	<0.33 - <1.6	18	120
Benzo(a)pyrene	<0.33 - <1.6	3.4	5.9
Flouranthene	<0.33 - <1.6	11	87
Naphthalene	<0.33 - <1.6	41	3.1
Benzene	<0.02 - <0.40	1.7	4.3
Toluene	<0.02 – 2.0	34	0.78
Ethylbenzene	<0.02 – 5.5	0.5	0.9
Xylenes (Total)	<0.06 – 6.2	23	1.4
Petroleum Free-Product	Observed	N/A	N/A

Note: mg/kg = milligrams per kilogram

Bold = Concentrations exceed soil action level and/or 2024 HDOH EAL. These were carried forward as potential COPCs for the Site.

* EAL for Restricted Use; < 150m from surface water, Nondrinking Water Resource

Table 2-4: HFFC Groundwater Contamination

COPC	Concentration Range (µg/L)	HDOH Action Level (µg/L)	2024 EAL* (µg/L)
Acenaphthene	0 – 9.2	0.32	15
Benzo(a)pyrene	0 – 1.8	0.0002	0.06
Flouranthene	0 – 9.9	0.013	0.8
Naphthalene	0 – 0.828	0.24	12
Benzene	0.0	0.005	71
Toluene	0.0	2.1	9.8
Ethylbenzene	0 – 28.0	0.14	7.3
Xylenes (Total)	0 – 15.0	10	13.0
Petroleum Free-Product	0.0 – 0.10 ft thickness		N/A

Note: µg/L = micrograms per liter

Bold = Concentrations exceed groundwater action level and 2024 HDOH EAL. These were carried forward as potential COPCs for the Site.

* EAL for Unrestricted Use; < 150m from surface water; nondrinking water resource

After approximately four (4) years of monitoring, DAI Environmental concluded that almost all free-product release in 1991 and 1997 was collected and removed from the subsurface. Annual sampling and free-product thickness monitoring indicate, no-free product petroleum or petroleum contaminant indicator compound concentrations in excess of the action levels have been observed in groundwater for two (2) years. The two (2) soil samples containing Ethylbenzene concentrations above the HDOH soil action level were not indicative of vadose zone soil contamination. A Closure Request was submitted for the site by DAI Environmental, Inc. (DAI, 2005). **The site was granted an NFA in 2005.**

2.5.2 Inventory Project Report, Defense Environmental Restoration Program for Formerly Used Defense Sites, August 1994

In 1994, an Inventory Project Report was completed for the former Sand Island Military Reservation, which included the Site. A site visit was conducted in 1993, which identified military remnants including four gun emplacements and ancillary magazines, and protective works to a firing range. No OEW was discovered in or around the remnants visually surveyed and toned. **No hazards were observed, and the site was granted a Rac score of 5, indicating that no further action was necessary.**

2.6 Contaminants of Potential Concern

Previous documented releases at Pier 51A have received an NFA status, and there is currently no known contamination in the vicinity of the proposed construction excavation. There still remains the potential to encounter COPCs at the site, and any new identified contamination at the Site should be reported to HDOH. In addition to visible free product, DAI Environmental detected multiple chemicals associated with petroleum in soil and groundwater near the project limits due to petroleum releases which occurred in 1991 and 1997. The previously identified COPCs listed in Table 2-5 and Table 2-6, were detected above the groundwater action levels at the time of the assessment and the HDOH 2024 EALs for restricted land use where water is not a drinking water resource, but the site is < 150 from a surface water body.

While groundwater monitoring conducted between 1999 and 2004 indicated that the identified

contamination had attenuated to levels below the action levels.

Due to the previous detections in soil and groundwater and known contamination around the Honolulu Harbor, this C-EHMP was prepared to provide mitigation measures should these contaminants be observed. The contaminants previously detected continue to be recommended for mitigation during construction activities. These contaminants may pose human health and environmental hazards if contaminated material is exposed and/or removed from the ground/site. Soil with contaminants exceeding EALs that are exported from the site are considered waste material and must be handled according to HDOH Solid and Hazardous Waste Branch (SHWB) Rules and Regulations (Hawaii Revised Statutes [HRS] 342H, Hawaii Administrative Rules [HAR] 11 58). Mishandling of waste may lead to fines.

Table 2-5: Potential Soil COPCs

COPC	Previously Detected Concentration Range	EAL* (mg/kg)
Toluene	<0.02 – 2.0	0.78
Ethylbenzene	<0.02 – 5.5	0.9
Xylenes (Total)	<0.06 – 6.2	1.4
Petroleum Free-Product	Observed	N/A

Note: mg/kg = milligrams per kilogram

* EAL for Restricted Use; < 150m from surface water, Nondrinking Water Resource

Table 2-6: Potential Groundwater COPCs

COPC	Previously Detected Concentration Range (µg/L)	EAL* (µg/L)
Benzo(a)pyrene	0 – 1.8	0.06
Flouranthene	0 – 9.9	0.8
Ethylbenzene	0 – 28.0	7.3
Xylenes (Total)	0 – 15.0	13.0
Petroleum Free-Product	0.0 – 0.10 ft thickness	N/A

Note: µg/L = micrograms per liter

Contaminant concentrations listed were from monitoring events. The last 2 years of monitoring did not have any exceedances of the action levels and the Site was closed with an NFA.

* EAL for Unrestricted Use; < 150m from surface water; nondrinking water resource

2.6.1 Contaminants of Potential Concern and Construction Materials

If COPCs are present in the soil, groundwater, or soil vapor at concentrations above the HDOH EALs for restricted land use where groundwater is not a potential drinking water resource and the nearest surface water body is <150 meters and the answer is “yes” to any questions in Table 2-7, then the construction materials planned need to be assessed to determine whether they are compatible with the COPCs at the site-specific concentrations.

Table 2-7: Construction Material Questions

Question	Yes	No
Are storm drains (including interceptors), or will storm drains be present at the site?	✓	
Will any portion of a storm drain (including interceptors) be present at an elevation that is potentially in contaminated groundwater?	✓	
Will any portion of a utility corridor be present at an elevation that is potentially in contaminated groundwater?		✓
Will a portion of any other utility or subsurface structure (other than foundations) extend potentially into contaminated groundwater?	✓	
Are any potentially flammable or explosive COPCs present at the site (e.g., methane, TPH-GRO)?	✓	
Will any electrical lines/utility corridors be subsurface?		✓
Are any COPCs in vapors present at or above 10% of the LEL?		✓
Will any elevator shafts or escalator pits, potentially extend into contaminated groundwater?		✓

2.6.2 Construction Material Evaluation

Table 2-8: Construction Materials Assessment

Construction Material in Contact with Contaminated Media	COPC, Concentration, and Media	Proposed Material to be Used	Material Safe with COPC	
			Yes*	No
Water Pipelines	Soil: Toluene: <0.02 – 2.0 mg/kg Soil: Ethylbenzene: <0.02 – 5.5 mg/kg Soil: Xylenes: <0.06 – 6.2 mg/kg Soil: Petroleum Free-Product:	Ductile Iron Pipe, Class 53, Bonded Dielectric Coating	✓	
Valve Boxes	GW: Benzo(a)pyrene: 0 – 1.8 µg/L GW: Fluoranthene: 0 – 9.9 µg/L GW: Ethylbenzene: 0 – 28.0 µg/L GW: Xylenes: 0 – 15.0 µg/L GW: Petroleum Free-Product: 0 – 0.10 ft bgs	Concrete Pad	✓	

Notes:

GW: Groundwater

mg/kg milligrams per kilogram

µg/L micrograms per liter

Documentation that material is safe to use, and will remain functional, in the presence of the identified contamination is included as Appendix D of this C-EHMP.

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Section 3 Summary of Potential Environmental Hazards

The environmental hazard table presented in Table 3-1 shows the pathways, exposure routes, and impact to potential receptors based on current and future land use. The planned maximum depth of the construction activities is 7-8 ft bgs for the waterlines at utility crossings. Majority of the excavation work for will extend to approximately 5 ft bgs.

Table 3-1: Environmental Hazard Table

COPC	Media			Hazard					Potential Receptors				
	Soil	Water	Vapor	Direct Exposure	Leaching	Gross Contamination	Ecotoxicity	Vapor Intrusion	Construction Workers	Site Visitors	Site Occupants	General Public	Future Site Users
Petroleum Free-Product	✓	✓	✓	✓	✓	✓	✓		✓				
Flouranthene		✓					✓						
Benzo(a)pyrene		✓		✓		✓	✓		✓				
Toluene	✓		✓		✓								
Ethylbenzene	✓	✓	✓	✓	✓		✓		✓				
Xylenes	✓	✓	✓	✓	✓		✓		✓				

Notes:

Potential hazards listed based on former identified contamination at the Site. As there is no known contamination at the property, no known hazards exist.

Site Visitors, Occupants, and General Public are not anticipated to have direct exposure to subsurface soil or groundwater.

A detailed description of the effects of exposure to previously identified COPCs at the site will be included in the Site- Specific Health and Safety Plan (HASP) for the project. Details should include how to recognize potential exposure to COPCs, how to avoid exposure to COPCs, and required training and personal protective equipment (PPE) to use when working around the COPCs. Table 3-2 is a simplified table for easy reference.

Table 3-2: Chronic and Acute Direct Exposure Hazards

COPC	Direct Exposure Hazard				Acute Exposure	Chronic Exposure
	Ingestion	Inhalation	Absorption	Injection		
TPH ¹	✓	✓	✓		Irritation of the nose and eyes,	- Central nervous system effects - Developmental effects - Neurological effects (tremors, gait, speech) - Renal damage (kidney and liver) - Respiratory (lungs) - Reproductive effects
Benzene ¹	✓	✓	✓		Skin and eye irritation, drowsiness, dizziness, unconsciousness, and confusion.	- Hematological effects (anemia, hyperplasia, bone marrow) - Neurological effects (tremors) - Ocular - Respiratory - Carcinogen (Leukemia) - Death
Toluene ¹	✓	✓	✓		Skin and eye irritation, dizziness, and confusion	- Gastrointestinal distress - Neurological effects (balance, confusion) - Ocular - Respiratory
Ethylbenzene ¹	✓	✓	✓		Skin and eye irritation, throat irritation, and dizziness.	- Renal (kidney) - Carcinogen
Xylenes ¹	✓	✓	✓		Skin and eye irritation, dizziness, and confusion	- Gastrointestinal distress - Neurological effects (balance, confusion) - Ocular - Respiratory
Fluoranthene	✓	✓	✓		Skin, immune	- Alimentary Tract - Hematologic - Immune - Kidney - Skin
Benzo(a)pyrene	✓	✓	✓		Skin, immune, reproductive	- Immune - Reproductive - Carcinogen

¹ ATSDR, [atsdr.cdc.gov/toxfaqs](https://www.atsdr.cdc.gov/toxfaqs).

A detailed Hazard Map is included in Figure 3, included in Appendix A. Hazard Maps delineate the location of known or presumed contamination at the site and what type of hazard the contamination represents. As seen in Figure 3, the previously identified contamination does not extend to the areas where excavation is scheduled for this construction project.

Any newly identified contaminated media must be properly handled and disposed of in accordance with the guidance in this C-EHMP. Mishandling of contaminated media could result in spreading the contamination to uncontaminated areas of the site or to uncontaminated off-site locations, which could result in fines and other penalties.

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Section 4 Notification Requirements

The effective environmental management of any project requires a coordinated effort from all individuals involved. The following sections outline the need to identify the responsibilities of key personnel involved in project construction.

4.1 Key Project Personnel

The project owner (owner/developer) is expected to maintain a list of project contacts throughout the construction phase of the project.

The key project personnel are as listed in Table 4-1. An updated key project personnel list needs to be maintained throughout the project whenever a change in key project personnel occurs.

Table 4-1: Key Project Personnel

Role	Company	Name	Phone #	e-mail
Construction PM	TBD			
Construction Foreman	TBD			
On-site QEP:	TBD			
QEP PM:	TBD			
Owner:	Department of Transportation Harbors Division			
Operator:				
NPDES Permit Contact:	TBD			
HECO	HECO Planning and Design Section (Excavation Clearance)		(808) 543-5654	
	HECO Customer Installation Department (Overhead Power Lines)		(808) 543-7070	
DOH Oversight:	DOH HEER Office PM		(808) 586-4249	
Landfill Disposal Contact:	TBD			
Waste Transporter Contact:	TBD			

Role	Company	Name	Phone #	e-mail
Contact Export Site (if exporting soil):	TBD			
Contact Import Site (if importing soil):	TBD			

Note: HECO = Hawaiian Electric Company, Inc. PM = Project Manager
QEP = Qualified Environmental Professional NPDES = National Pollutant and Discharge Elimination System
TBD = To Be Determined

Section 5 Requirements for On-site Environmental Oversight

On-site monitoring is a key component of ensuring that the procedures documented in this C-EHMP are implemented properly and function as intended (e.g., appropriate installation and location of erosion and sediment control measures, cleanliness of equipment, the suitability of secondary containment for fuel storage, screening of potentially contaminated material, and stockpile segregation, etc.). A QEP will be retained as the environmental monitor to provide guidance on implementing the recommended measures and to develop additional mitigation measures if the need arises. The on-site QEP will have at least 5 years of experience providing environmental oversight for construction projects and must have completed the 40-hour HAZWOPER training and a recent refresher course, as stipulated in 29 CFR 1910.120, within the last year.

Monitoring events will be conducted at an appropriate frequency based on specific work tasks/procedures and the potential for adverse impacts to occur. An appropriate schedule (frequency and duration of site visits) will be established between the QEP, and all involved regulatory agencies regarding when the QEP is on-site. In general, the QEP will be familiar with the day-to-day conduct of project activities and be on-site during activities with the potential to impact human health or the environment, when contaminated media will be disturbed, when mitigation measures are implemented, or as determined in discussion with the regulatory agencies. Monitoring should be conducted with greater frequency during periods of inclement weather (e.g., heavy precipitation, strong winds) and during critical components/tasks of the project, such as working in contaminated groundwater.

The QEP will be on-site whenever potentially contaminated soil or groundwater may be disturbed and when hazardous vapors may be present. This is necessary to ensure the protection of construction workers, the general public, and the environment. Key monitoring stages may include, but are not necessarily limited to:

- During pre-construction geotechnical and/or environmental sampling;
- During soil exposing (e.g., concrete/asphalt removal) and soil movement activities (e.g., demolition, grading, excavation, utility corridor installation, soil stockpiling, soil disposal, etc.);
- During dewatering activities;
- Prior to and after heavy rain/storm events;
- During engineering control installation and testing; and
- During the installation of erosion and sediment control measures.

The primary responsibility of the QEP is to ensure that the environmental and human health protection measures are implemented and are adhered to and that any movement, transport, and disposal of contaminated material (on-site and to an off-site location) is properly documented *and approved by DOH HEER Office prior to transporting the soil off-site.*

Responsibilities of the QEP include those identified below; however, specific items are expected to be refined and/or expanded as per the needs of the project:

- Report unanticipated encounters with contamination at the site in accordance with HRS 128D. Reportable releases include contamination not already identified at the site, as well as tanks, drums, and/or abandoned pipelines that are not identified in advance and are encountered during excavation.
- Direct the segregation and handling of contaminated soil and/or groundwater.
- Communicate the requirements of the C-EHMP to project members during pre-job and tailgate meetings.
- Remain on-site as per the schedule established between parties prior to the project start. The QEP will remain on-call during non-critical work periods to respond to emerging environmental issues.
- Review the contractor's work procedures to ensure functionality and compliance with the C-EHMP and applicable regulations, standards, and Best Management Practices (BMPs).
- Provide advice in preparing for work activities in a manner that mitigates adverse environmental or health effects.
- Exercise the authority to modify and/or halt any construction activity at any time if deemed necessary for the protection of human health and the environment.
- Advise project members if project activities have caused or are likely to cause an environmental incident and make recommendations for corrective action.
- Monitor compliance with the C-EHMP and relevant permit conditions.
- Liaise directly with project members and provide technical advice for the purpose of resolving situations that may impact human health and the environment as they arise.
- Maintain complete records of activities related to the implementation of the C-EHMP. This should include any measurements taken (e.g., pH, turbidity, temperature, conductivity, PID, air monitoring, equipment calibration, manifests, truck receipts, truck counting spreadsheets), photographs, and reports.
- Complete and submit environmental monitoring reports and report any unanticipated adverse effects to the environment to the DOH HEER Office. Such reports must include the nature of the effect, its cause, mitigation and/or remediation implemented, and whether a work stoppage was ordered, as well as photographs, analyses, and measurements, if applicable.

Project Activities and monitoring equipment that will be used by the QEP specific to the site are listed in Table 5-1.

Table 5-1: Project Activities when QEP Must be Present

Activity	Planned at Site?		QEP Will Be Present		Monitoring Equipment to be Used by QEP
	Yes	No	Yes	No	
Environmental Sampling	✓		✓		Applicable Sampling Equipment
Geotechnical Sampling		✓		✓	
Silt Fence Installation	✓			✓	
Demolition	✓		✓		PID
Grading	✓		✓		PID
Excavation	✓		✓		PID
Pile Installation	✓			✓	
UST Removal		✓		✓	
Dewatering	✓		✓		PID
Utility Trenching	✓		✓		PID
Soil Stockpiling	✓		✓		PID
Soil Export/Import	✓		✓		PID
Vapor Barrier Installation		✓		✓	
Vapor Extraction		✓		✓	
Confined Space Work	✓			✓	
Work Below High-Water Mark	✓		✓		
Engineering Control Installation and Testing	✓		✓		
Pipeline Tapping		✓		✓	
Installation of Erosion/ Sediment Controls	✓		✓		PID
Prior to/During Rainstorm Events	✓		✓		PID

Notes:

N/A not applicable

PID photoionization detector

QEP Qualified Environmental Professional

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Section 6 Construction Activities

The project includes the demolition, removal, and replacement of the current domestic service water system and fire protection water system with a new waterline system. Construction plans and drawings are included in Appendix B. Planned excavations at the site are outlined in Table 6-1.

Table 6-1: Planned Types of Excavations

Excavation Type	Maximum Depth (ft bgs)
Piles	N/A
Caissons	N/A
Potholing for Utility Locating	N/A
Elevator Shafts	N/A
Spread footing	N/A
Landscaping	N/A
Utility Corridors	5 ft. to 8 ft. (majority around 5 feet, up to 8 feet at utility crossings)
Storm Drain	N/A
Mass Excavation	N/A
Grading	N/A
Etc.	N/A

Note: bgs = below ground surface
 ft = foot
 in = inch
 N/A = Not Applicable

Groundwater may be encountered during the above excavations. The handling of groundwater and need for dewatering is further discussed in Section 8.

All efforts will be made to conduct work in a manner to minimize the amount of groundwater which will be encountered such as work during low tides. Should significant dewatering be required, re-infiltration pits/trenches may be required to handle dewatering effluent. The location(s) of re-infiltration pits/trenches are to be determined based on need. Additional details regarding the limitations of use of re-infiltration pits is provided in Section 8. If re-infiltration pits/trenches are required, an addendum to this plan with the proposed locations will be provided to the HEER Office.

It is estimated that 1,500 CY of fill material will be brought onsite. This material will be purchased from a quarry and certified to be clean prior to use onsite. If construction plans change, such that soil will be imported from another site, then import of fill material must be conducted in accordance with the HDOH Guidance for Soil Stockpile Characterization and Evaluation of Imported and Exported Fill Material (HDOH, 2017).

Section 7 Soil Management Plan

The purpose of this section is to ensure that contaminated soil is properly handled and managed. The full extent of contaminated soil is unknown (e.g., no known contamination exists at the Site). Previously identified soil contaminants include Toluene, Ethylbenzene, Xylenes, and Petroleum free-product. The management of potentially contaminated soil will be overseen by an on-site QEP. Construction drawings are included in Appendix B.

7.1 Soil Management

Soil disturbed at the site will be monitored and documented by a QEP with at least five years' experience in environmental oversight associated with construction projects. Where contaminated soil is encountered during excavation, the appropriate response actions must be taken that conform with DOH and EPA guidance, laws, and regulations. The soil management plan includes proactive planning to ensure that workers have the appropriate level of PPE, and that contaminated soil is properly managed when excavated. Tasks associated with properly managing contaminated soil include the following:

- Workers should be made aware of the potential to encounter contamination and trained on identifying contamination. A response plan should be implemented in which workers who suspect contamination has been encountered properly notify the superintendent and the QEP for further evaluation.
- Where soil is disturbed at the Site, a QEP shall provide field oversight to ensure:
 - that suspect contaminated soil (visual, olfactory, or PID evidence of contamination), and grossly contaminated soil is segregated from potentially clean soil (not readily identifiable as contaminated, see Section 7.1.1),
 - that contaminated or suspected contaminated soil is properly stored and covered with plastic sheeting,
 - that the contaminated or suspect contaminated soil is managed properly during and following excavation, and
 - that health and safety guidelines related to the potential exposure of workers to COPCs is provided.
- Workers who may come into contact with contaminated soil must wear the appropriate level of PPE.
- Workers who may come into contact with contaminated soil must have required training (at a minimum, 40-hour HAZWOPER certification, and current 8-hour annual refresher training).
- Soil trucked off-site should be drained of fluids, and the load must be covered with a dust screen during transport.
- The solidification pit is no longer operating in Hawaii, all wet soils must be shipped to the mainland or dried prior to disposal on-island. It is anticipated that any wet soil excavated from the site will be placed in leak-proof containers in the staging area and allowed to dry prior to disposal. These containers will be covered by plastic prior to any rain events.
- If newly encountered soil contamination is discovered at a previously unknown source or location,

the DOH HEER Office must be immediately notified of its discovery by reporting it as a new release.

7.1.1 Field Identification of Contaminated Soil

Previous sampling and historical research into previous industrial operations have identified previous releases at the Site. Specifically, subsurface soil contamination was observed in borings MW-5 and MW-11. However, DAI Environmental stated that these exceedances were taken in the capillary fringe and not indicative of vadose zone soil contamination (DAI, 2005). Additionally, these monitoring wells were located outside of the proposed excavation locations for this project (See Figure 3).

Soil near the project area was previously presumed to be contaminated with petroleum constituents. Petroleum-contaminated soil typically exhibits petroleum staining and/or a petroleum hydrocarbon odor. Free product may or may not be observed. Petroleum-contaminated soil may also be detected indirectly via a rotten egg odor stemming from anaerobic degradation of the product that produces hydrogen sulfide in oxygen-starved zones. Soil with strong petroleum or solvent odor and/or free phase product should be segregated separately from the moderately impacted soil, as soil that is considered grossly contaminated must be removed, may not be replaced in the excavation, and must be properly disposed of.

During the excavation of suspected contaminated soil, the QEP must perform the following activities:

- Visually screen soils for staining, debris, soil waste, discoloration, or other evidence of contamination as the soils are removed from the excavation.
- Check for petroleum or other unusual chemical odors emanating from the soil.
- For presumed contaminated soil, collect soil screening samples in sealable inert bags and test the headspace within each bag for VOCs using a PID and following the Maine Department of Environmental Protection PID Bag Headspace Test procedure described in detail in Section 8.4.2 of the Technical Guidance Manual (TGM) (DOH HEER Office 2018 and updates). Prior to testing, PID meters must be calibrated in accordance with device manufacturer instructions. Soil will be segregated by PID at a frequency of 1 sample per 20 cubic yards of soil excavated.
- For presumed contaminated soil, use the field observations, VOC measurements, and any other field screening tests, such as the glove and paper towel tests, to segregate the soil properly.

7.1.2 Dust and Erosion Control

Dust and erosion controls at the site will be continuously monitored and documented by a QEP with at least five years' experience in environmental oversight associated with construction projects. Prior to excavation activities, the Contractor and the QEP must evaluate and establish erosion control and dust control measures. The erosion control and dust control measures must prevent impacted soils from migrating away from the excavation area. Typically, BMPs are employed to control erosion and prevent the spread of contamination via runoff or wind.

Dust control measures should ensure compliance with ambient air quality standards established in the HAR 11-59 and should comply with air pollution control requirements specified in HAR 11-60.1. During excavation and handling of impacted soil, the following dust control measures must be implemented to minimize dust generation:

- Dust: Dust control shall include sprinkling exposed soils with water to maintain moistness at a depth of 2 to 3 inches during working hours and not to generate any runoff, or another method indicated

in HAR Title 20, Chapter 3, Section 45.

- Equipment decontamination: BMPs to control the transport of contaminated soil from the site and within the site shall be used to limit the tracking of soil away from the excavation area. Decontamination areas will be set up adjacent to excavation areas where contaminated media will be disturbed, adjacent to stockpile areas, and where vehicles and equipment leave the site. An ingress/egress area will provide access to the Site and used for equipment decontamination prior to leaving the Site. Decontamination protocols are described in Section 14.0.
- Wetting/misting: BMPs associated with dust control measures shall include the use of water to be sprayed on the soil during excavation activities. During excavation, water shall be sprayed on the surface of the soil to prevent dust from being generated. However, the amount of water used for dust control shall be minimized as not to create runoff away from the excavation.
- Slope stabilization: BMPs associated with the stabilization of steep slopes (>15%) and on areas of moderate slope that are prone to erosion unless they are being actively worked shall have slope protection. Use diversion upstream of slope (dikes, swales, slope drains) to divert water around the slope. Provide a 10-ft buffer zone at the toe of slope. Only 5 acres may be disturbed at any time on slopes greater than 15%. Temporary stabilization is required on disturbed areas which are at final grade or when the disturbed area will not be worked for 14 consecutive days or more.
- Permanent Stabilization: All disturbed areas shall be permanently stabilized using vegetative covering, pavement, or equivalent, prior to removing erosion and sediment measures. Trapped sediment and areas of disturbed soil which result from the removal of the temporary measures shall be immediately and permanently stabilized.
- At the completion of work in an area, the work area shall be cleaned as necessary, and all contaminated clothing, disposable PPE surface coverings, and waste material shall be properly disposed of.
- Minimize soil compaction areas where final stabilization or infiltration practices will be installed shall be protected from excessive compaction during construction. Vehicle and equipment use shall be restricted or techniques to condition the soils to support vegetation shall be implemented in the areas that have been compacted and are designated to remain vegetative or post-construction infiltration areas. Clearly mark the areas to be avoided with flags or temporary fencing. Where temporary fencing is used, fencing must be adequately supported by posts and maintained in an upright position.
- Preserve Existing Vegetation. Clearly mark the areas to be preserved with flags or temporary fencing. Where temporary fencing is used, fencing must be adequately supported by posts and maintained in an upright position.
- Tracking Control.
 - Transport of excavated soil to the soil staging area will be conducted within the site boundaries and use the ingress/egress location directly onto the staging yard. Any excavated soil from the Site will not be allowed on public roadways until adequately characterized for proper transportation and disposal.
 - Minimize sediment track-out onto off-site streets, other paved areas, and sidewalks from vehicles exiting the construction site by restricting vehicle traffic to properly designated areas and using additional controls to remove sediment from vehicle tires prior to exiting

the site.

- Vehicular parking and movements on project sites must be confined to paved surfaces or predefined parking areas and vehicle paths, which shall be marked with flags or boundary fencing.
- All pollutants and materials that are dropped, washed, tracked, spilled, or otherwise discharged from a project site to off-site streets, other paved areas, sidewalks, or the MS4 must be cleaned using dry methods such as sweeping or vacuuming.
- Washing pollutants and materials that are discharged from the project site to the MS4 into drain inlets or catch basins is prohibited unless the material is sediment, and the inlets are directed to a sediment basin or sediment trap.
- Good housekeeping: BMPs shall be the continuous practice of good housekeeping measures throughout the duration of the construction and weekly inspections. BMPs shall not be removed until final stabilization is complete for that phase.
- Heavy rain forecasted in the Next 48 Hours: BMPs associated with the prediction of heavy rain includes the suspension of active grading, grubbing, and trenching; inspection of all sediment basins, temporary ditches/swales, and perimeter controls, and maintain as needed; reinstall any perimeter controls that were removed due to ongoing work in the area; if a severe storm is expected, cover or relocate material stockpiles and liquid material containers to avoid contact with rainwater; place spill pans or oil-only spill pads under construction vehicles to prevent runoff from contacting any spilled petroleum products and properly dispose of any accumulated oil-water after the rain event; and re-inspect after the approaching heavy rains and replace or maintain BMPs as needed.

7.1.3 Excavation and Stockpiling

Suspect contaminated soil must be stockpiled and segregated from potentially clean soil. The following tasks must be performed with respect to managing contaminated soil.

- Contaminated soil will be segregated from potentially uncontaminated soil. The QEP shall direct the segregation of the soil into three (3) separate soil piles based on visual and olfactory observations, using a PID at a frequency of 1 sample per 20 cubic yards of soil excavated:
 - Pile No. 1 will consist of potentially clean soil (untested soil with no visual, olfactory, or PID evidence of contamination);
 - Pile No. 2 will consist of soil excavated from areas suspected to be contaminated (e.g., PID reading exceeding 5 parts per million per volume [ppmv], but below 200 ppmv, unusual odors, or staining); and
 - Pile No. 3 will consist of soil that is grossly contaminated (e.g., contains mobile, free liquids based on visual inspection, PID reading above 200 ppmv or higher, strong odor, or heavy staining).
- If the PID headspace test indicates grossly contaminated soil, the entire 20 cubic yards of soil from which the sample was collected shall be considered grossly contaminated and deposited into the grossly contaminated soil holding cell.

- The contractor has the option to store dry and wet grossly and non-grossly contaminated soil in leak proof containers (i.e., drums) within the storage containment area.
- Prior to construction of holding cells, the Engineer shall approve the location of the holding cells and the QEP shall approve cell construction quality and size. Holding cell construction is presented below.
- During work below the water table, efforts will be made to minimize the amount of water collected with the excavated soil by allowing excess water to drain back into the excavation during generation to the extent practical. If boring with an auger, the auger will be held above the water table allowing excess water to drain back into the boring prior to bringing up to the surface. If dewatering, sufficient dewatering will be conducted to prevent the excavation of free liquids. An excavator will directly load a truck with material. It will then be hauled to the staging area and spread to dry out for disposal. Trucks will be monitored for free liquids which have the potential to leak during transportation. If necessary, additional measures such as lining the truck with plastic, placement of soil into secondary containment/drums, or additional water removal prior to loading will be used to prevent the spread of potentially contaminated groundwater to uncontaminated areas.
- Stockpile contaminated soil in a 20-millimeter polyethylene-lined (i.e., two layers of 10 mil polyethylene sheeting), bermed holding cells. The stockpiles must be covered with plastic sheeting at the end of each day and during any major wind or rain events. The plastic sheeting must be secured with enough ballast so that it will not be dislodged by strong winds.
- Underlay the edges of the plastic sheeting with clean soil or other material to create a berm around the stockpile holding cell. It is assumed the surface soil of the staging area can be used to create the berms and will be flattened after use. If insufficient soil is available for construction of berms, construction materials such as k-rails or straw waddles can be used for construction of appropriate berms. It is not anticipated that off-site soil will be imported to the Site for berm construction.
- The contractor shall ensure that the holding cell is watertight, and that the berm is at least 1.5 ft above the ground surface. The sheeting shall extend to the top of the berm. No overlaps, seams, joints, or defects shall be allowed in the polyethylene liner.
- Ensure that the height of the berm will be sufficient to prevent stormwater runoff or run-on from breaching it. The contaminated soil must be placed inside the bermed area on top of the plastic sheeting.
- Soil stockpiles shall not be located in drainage ways, within 50 ft from areas of concentrated flows, and are not allowed in the City ROW. Sediment barriers or silt fences shall be used around the base of all stockpiles.
- Stockpiles shall not exceed 15 ft in height. Stockpiles greater than 15 ft in height shall require 8-ft wide benching in accordance with Revised Ordinances of Honolulu (ROH) Chapter 14, Article 15.
- Stockpiles must be covered with plastic sheeting or a comparable material if they will not be actively used within seven days.
- Stockpile soil that has strong petroleum or solvent odor and/or free phase product separately from both clean and moderately impacted soil. This soil may not be reused and must be properly disposed of.

- Soil stockpiles must remain on-site and cannot be transported or stored off-site without prior authorization or characterization.
- Confirmation sampling of the underlying soil will be required following stockpile removal to ensure that COPCs did not leach into the ground. Stockpile sampling is outlined in Section 7.2. Confirmation sampling of the stockpile area is discussed in Section 7.3.

7.2 Soil Reuse/Disposal Sampling

In general, if contaminated soil is discovered, it may be reused on-site if placed under impermeable cover. Contaminated or suspect contaminated soil reused onsite will be replaced in the same area and at a similar depth as where the soil was originally excavated. Any surplus soil will be characterized and exported to a licensed disposal facility. No reuse offsite is currently proposed.

If surplus soil is generated, prior to disposal at a licensed disposal facility, all soil will be sampled to ensure that it is appropriately characterized, so the final disposition of the soil may be determined. Tables 7-2 and 7-3 below list the planned location(s) for soil disposal.

Soil stockpile sampling should be conducted using *MULTI INCREMENT*¹ sampling in accordance with the HEER TGM (<http://www.hawaiidoh.org/tgm.aspx>) (DOH HEER Office 2018 and updates) and the Fill Material and Stockpile Guidance (<https://health.hawaii.gov/heer/files/2019/12/Clean-Fill-Guidance-DOH-Oct-2017-1.pdf>) (DOH HEER Office 2017). See also the DOH SHWB policy and Q&A regarding MULTI INCREMENT sampling and use of the HEER Office TGM (https://health.hawaii.gov/shwb/files/2019/01/20190131_SHWB-TGM-Memo-Draft-complete.pdf) (DOH HEER Office 2011). Soil stockpile sampling for export to a licensed disposal facility is further discussed in Section 7.2.2.

7.2.1 On-site Reuse of Known or Suspect Contaminated Soil

Contaminated soil (included untested soil) may only be reused on-site if replaced in the same area and at a similar depth as where the soil was originally excavated, and only suitable to be reused under areas which will be paved after construction.

If an area of excavation is identified as suitable for reuse of the contaminated soil, the QEP will review and approve the location prior to reuse. Additionally, areas where contaminated soil (or presumed contaminated soil) is reused onsite shall be recorded and documented in a post-construction EHMP. All reused contaminated soil at the site will be covered or placed under asphalt, and/or concrete at the site.

¹ *MULTI INCREMENT* is a registered trademark of EnviroStat, Inc.

The QEP will ensure that contaminated soil is not spread to uncontaminated areas of the site without prior approval from DOH. Field identified contaminated soil excavated from the site will be stockpiled separately from potentially clean soil as discussed in Section 7.1.3. A stockpile map and daily log will be used to track the soil from the location of generation, to the staging yard, and document the location of reuse (at the similar area and depth from where it was generated). If contaminated soil will be reused onsite, each excavated area must be stockpiled separately to ensure reuse within the same area it was generated. A unique stockpile ID number will be assigned to individual stockpiles to assist in tracking soil in logs and maps.

7.2.2 Stockpile Sampling for Disposal at a Disposal Facility

For soil proposed for export from the Site, soil samples will be collected and analyzed. All soil samples should be collected in accordance with the HEER Office TGM (DOH HEER Office 2018 and updates). This requires the collection of *MULTI INCREMENT* soil samples to characterize the soil properly.

Ex-situ MULTI INCREMENT samples will be collected from each Decision Unit (DU) and analyzed to estimate the representative concentration of each targeted contaminant. DUs will be determined based on the size of the stockpile, as shown in Table 7-1, and suspect level of contamination (i.e. potentially clean, suspected contaminated, grossly contaminated) as described in Section 7.1.3. Samples will be collected from soil after it has been stockpiled. The contractor will assist in collection of stockpile samples by flattening the stockpile to the extent practical. Soil test pits will be excavated into the soil stockpile to collect sample increments from approximately equal intervals both laterally and vertically throughout the soil stockpile. Individual sample increments will be placed into appropriate sample containers for the requested analysis. For analysis of volatile constituents (TPH-GRO and VOCs) individual increments will be collected using Terra Core™ samplers, and immediately preserved in a laboratory-supplied amber glass bottle containing methanol. For volatile analysis, approximately 60 increments will be collected, each approximately 5 grams for a total sample mass of approximately 300 grams. For the non-volatile samples, each increment collected will be approximately 30 grams, with approximately 50 increments collected, for a total sample mass of approximately 1,500 grams. The sample containers will be labeled, placed into a cooler containing ice, and transported to Advanced Analytical Laboratory, Inc. in Honolulu, Hawaii for chemical testing. A chain-of-custody form will be completed to establish custody of the samples during transportation to the laboratory. The samples will be subsampled by the laboratory using *MULTI INCREMENT* sampling protocols.

If there is insufficient space within the stockpile holding cells to facilitate sampling from within the stockpile, samples may also be collected during generation of the stockpile by collection of individual increments of soil as the excavator/loader places soil into the holding cells. If the sample is to be collected during generation of the stockpile, approximately two (2) to three (3) increments should be collected per 20CY of soil placed into the soil stockpile for a total of 50 increments per 400CY DU. Individual increments will be collected in appropriate sample containers as described above for the ex-situ stockpile sampling. The samples will be subsampled by the laboratory using *MULTI INCREMENT* sampling protocols.

Samples will be submitted to an analytical laboratory for analysis as outlined in Table 7-1.

Table 7-1: Soil Disposal Sampling

Chemicals to Analyze	Analytical Method(s)	Sampling Frequency (cy per sample)
TPH-GRO	5035/8015B	400 cy
TPH-DRO, RRO	3550C/8015B	
Benzene, Toluene, Ethylbenzene, Xylenes	5035/8021B	
PCBs	3546/8082	
RCRA-8 Metals	3050B/6010B/7471A	
TCLP RCRA-8 Metals	3010A/6010B/7470A	
Ignitability	1030	

Note: cy = cubic yards

If sampling for offsite reuse, a high sampling frequency will be required. An addendum to the C-EHMP should be prepared and approved prior to sampling and reuse offsite.

Table 7-2 lists the amount of potentially contaminated soil to be excavated from the site and temporarily stockpiled on-site until it can be characterized for proper disposal at an approved landfill. Plans and drawings are included in Appendix B. The soil profile forms are included in Appendix C.

Table 7-2: Stockpile Sampling for Disposal at Disposal Facility

Total Estimated Soil Volume of Stockpiled Soil:	<i>Currently Estimated: 2,500-CY soil</i>
Proposed Sampling for disposal:	<i>7 samples</i>
# of increments per MULTI INCREMENT sample:	<i>Minimum 50</i>
Preliminary list of analytes (subject to landfill discretion):	<i>TPH-GRO, TPH-DRO, TPH-ORO/RRO, VOCs, PCBs, RCRA-8 Metals, TCLP Metals, Ignitability</i>
Permitted Disposal Facility:	PVT Land Company, Ltd. 87- 2020 Farrington Highway Waianae, HI 96792
Transporter Name:	TBD
Transporter Address:	TBD

Note: The solidification pit has been closed; therefore, all soils must be dried prior to disposal otherwise wet soil need to be shipped to the mainland for disposal.

The approved soil disposal location information will be communicated to the soil hauler, and it will be ensured that the hauler only disposes of soil at locations approved in this plan. The QEP will monitor and review hauling manifests and disposal records to ensure adherence to the plan. Disposal of soil at a location not previously approved could result in fines.

7.2.3 On-site Reuse of Identified Clean Soil

Soil tested in accordance with the methodology presented in Section 7.2.2 above may also be suitable for unrestricted reuse on-site. Soil tested for potential reuse onsite will also be sampled at a frequency suitable for unrestricted use (maximum 100 cy frequency) and appropriate replicate samples will be collected (minimum collection of a duplicate and triplicate sample of 1 per every 10 DUs sampled). After testing if there are no exceedances of the DOH Tier 1 Unrestricted Environmental Action Levels (EALs), the soil may be reused onsite without restriction (i.e. placed at alternate locations and depth than which it was generated).

Note that while soil tested as clean (below the DOH Tier 1 Unrestricted EALs) may be suitable for reuse offsite, no reuse location has been identified or approved.

The summary of accepted reuse or disposal locations is provided in Table 7-3.

Table 7-3: Soil Re-use/Disposal Options

Testing Results	Accepted Re-use Location	Accepted Disposal Facility
Untested	Soil may be reused onsite at same location/depth of generation	Not Accepted
< Tier 1 Unrestricted EALs	If sampled at a maximum 100 cy frequency and appropriate replicate samples are collected, Suitable for Unrestricted Reuse Onsite. Alternatively, may be placed at the same location/depth of generation	PVT Land Company, Limited
>Tier 1 Unrestricted EALs, < Commercial/Industrial EALs	May be reused onsite at same location/depth of generation. Reuse location should be documented in a post-construction EHMP	PVT Land Company, Limited
> Commercial/Industrial EALs	Not Accepted	PVT Land Company, Limited
Gross Contamination	Not Accepted	PVT Land Company, Limited
Hazardous Waste (> TCLP Limits)	Not Accepted	Hazardous Waste Landfill Off-Island (TBD)

Note: EAL = Environmental Action Level
TCLP = Toxicity Characteristic Leaching Procedure

7.3 Confirmation Sampling

If suspected contaminated or grossly contaminated soil stockpiles are stored on unpaved areas, the underlying soil will be sampled to determine if was impacted due to use of the area for soil storage. Confirmation soil sampling should be conducted using *MULTI INCREMENT*^{®1} sampling in accordance with the HEER TGM (<http://www.hawaiidoh.org/tgm.aspx>) (DOH HEER Office 2018 and updates) and the Fill Material and Stockpile Guidance (<https://health.hawaii.gov/heer/files/2019/12/Clean-Fill-Guidance-DOH-Oct-2017-1.pdf>) (DOH HEER Office 2017). See also the DOH SHWB policy and Q&A regarding MULTI INCREMENT sampling and use of the HEER Office TGM (https://health.hawaii.gov/shwb/files/2019/01/20190131_SHWB-TGM-Memo-Draft-complete.pdf) (DOH HEER Office 2011).

Surface soil underlying the area used for contaminated soil stockpiling will be sampled following the *MULTI INCREMENT*^{®1} sampling approach. The area will be divided into DUs with a maximum DU size of 20,000 square feet. In addition, DUs will also be divided based on use of the staging area with equipment storage,

material storage, and stockpile areas sampled separately.

Surface soil samples (0 to 0.5 feet bgs) consisting of a minimum of 50 increments per sample will be collected from the surface soil, one per DU. Sample increments will be collected in a systematic random sampling methodology by walking parallel transects across each DU. Sample increments will be collected in a manner to collect increments at approximately equal intervals laterally across each DU. Individual sample increments will be placed into appropriate sample containers for the requested analysis. The sample containers will be labeled, placed into a cooler containing ice, and transported to an analytical laboratory for chemical testing. A chain-of-custody form will be completed to establish custody of the samples during transportation to the laboratory. Required laboratory analysis includes the identified COPCs for the project and is summarized in Table 7-4 below.

Table 7-4: Confirmation Sampling

Chemicals to Analyze	Analytical Method(s)	Maximum Sampling Frequency (DU Size)
Toluene	5035/8021B	20,000 square feet
Ethylbenzene	5035/8021B	
Xylenes	5035/8021B	
Petroleum Free-Product	3550C/8015B	

7.4 Record Keeping

The QEP will maintain a log of all soil that leaves the site and its final disposition. All waste manifests, truckload counts at source and receiving site, weigh tickets, and soil profiles will be included in a final report documenting the environmental oversight conducted during construction. For all soil disposed of at a disposal facility, a manifest with all required signatures will be submitted.

If soil will be imported to the site, then the QEP must collect and maintain similar records and provide them to the HEER Office for review and approval. The soil generator must provide documentation that the import material is clean, and a soil agreement must be signed between the generator and the site owner. If contaminated soil will be brought onto the site and used for fill, then the QEP must document where the contaminated soil will be used, the volume of soil, and COPC concentrations. This information must be incorporated into an EHE/EHMP for the site following the completion of the project, and the contaminated soil must be managed for as long as it remains present at the site.

Section 8 Groundwater Management Plan

Table 8-1: Groundwater Information

Estimated Depth to Groundwater at Site (ft bgs):	6 to 7		
Proposed Maximum Excavation Depth (ft bgs):	8		
Estimated Direction of Groundwater Flow:			
Will Contaminated Groundwater be Encountered During this Project?	Yes	No	Unknown
			✓
Will Groundwater from this Site be Dewatered into the Sanitary Sewer System?		✓	
Will Groundwater from this Site be Dewatered into the Storm Sewer System?		✓	
Does the Contractor have a Dewatering Permit Issued by the County and/or DOH CWB?			✓
Is Free Product Known or Suspected to be Present at the Site?			✓

Note: Clean Water Branch (CWB) = Clean Water Branch

Current construction plans include the removal and replacement of a waterline system that may encounter contaminated groundwater. Groundwater dewatering is possible at the project as maximum depth of excavation will be 7 to 8 feet bgs at utility crossings, when groundwater at the Site is anticipated to be encountered around 6 to 7 feet bgs. Other excavations extending to five (5) feet bgs may also temporarily be impacted by groundwater based on tidal fluctuations.

This groundwater management plan is intended to ensure that any contaminated groundwater encountered during construction is properly managed. Some COPCs may be detected through visual and olfactory observations (e.g., petroleum, VOCs); however, many COPCs are not identifiable through field observations (e.g., non-volatiles, metals etc.). Planning dewatering and groundwater management proactively - ahead of construction is essential.

If dewatering is required for utility installation, in most instances, the HEER Office allows for re-infiltration of contaminated groundwater at the site, however, if re-infiltration is not feasible due to location of the dewatering or contamination observed, groundwater may be required to be sampled in-situ to guide additional re-infiltration options or temporarily stored in a frac tank or other container, and sampling and treatment may be required in accordance with DOH SHWB requirements prior to re-infiltration or disposal. Currently, dewatering into a sanitary sewer or storm sewer, is not anticipated to be conducted for this project.

8.1 Groundwater Management

Groundwater disturbed at the site will be continuously monitored and documented by a QEP with at least five years' experience in environmental oversight associated with construction projects. Where contaminated groundwater may be encountered during excavation activities, appropriate response actions must be taken that conform with DOH and EPA guidance, laws, and regulations. This includes proactive planning to ensure that workers have the appropriate level of PPE, and that free product, sheen, and groundwater are managed properly if dewatering is conducted. Task associated with properly managing groundwater include the following:

- Where groundwater is encountered, a QEP shall provide field oversight to direct appropriate dewatering if conducted, manage disposal of groundwater if necessary, and provide health and safety guidance related to potential exposure of workers to COPCs.
- If dewatering is performed, dewatering effluent shall be re-infiltrated using a back trench, evaporated, or treated and disposed of off-site. Any oily product shall be separated and stored in approved containers, stored within a storage containment area designated and constructed by the contractor.
- Workers who may come into contact with contaminated groundwater must wear the appropriate level of PPE.
- Workers who may come into contact with contaminated groundwater must have required training (at a minimum, 40-hour HAZWOPER certification and current 8-hour annual refresher training).
- If free product is encountered it must be recovered to the extent practicable, which is further discussed in Section 9.0.
- If contaminated groundwater is discovered at a previously unknown source or location, the DOH HEER Office must be immediately notified of its discovery.

8.1.1 Dewatering

All efforts will be made to conduct work in a manner to minimize the amount of groundwater which will be encountered such as work during low tides. Should dewatering be required for utility installation, re-infiltration pits/trenches may be required to handle dewatering effluent. The location(s) of re-infiltration pits/trenches are to be determined based on need. Several re-infiltration pits may be required along the utility installation throughout the construction site.

Contaminated groundwater may be dewatered from one excavation into another (or into re-infiltration trenches/pits on-site) as long as the following conditions are met:

- The excavations are within at least 200 feet of each other.
- The receiving excavation is wider than it is deep, is less than 10 feet in depth, and does not meet the definition of an underground injection control well.
- The groundwater within both excavations is contaminated. Contaminated groundwater cannot be discharged into a clean excavation.
- Any free product present in the excavation has been removed (see Section 9.0 below). Under no circumstances can free product be transferred from one excavation to another.
- Any oily product shall be separated and stored in approved containers, stored within a storage containment area designated and constructed by the contractor.
- The contractor shall be responsible for testing and proper temporary storage and disposal of groundwater and oily product and removal of the storage contamination areas upon completion of work.
- The receiving excavation is greater than 150 meters from a surface water body, storm drain inlet, or sensitive environment (e.g., bird sanctuary, endangered species, beach, park).
- The contractor shall be responsible for handling, segregation, transport, disposal, and removal of containment areas for all groundwater.

As a portion of the Site is located directly adjacent to the surface water, the above conditions (greater than 150m to surface water and less than 200 feet between trenches) may not be able to be met. In these cases, groundwater may also be dewatered by the following methods:

- In-situ sampling of groundwater to determine additional re-infiltration options.
- Temporary storage of groundwater into tanks or other storage containers.

In general, groundwater monitoring wells would be installed and sampled in the vicinity of the proposed dewatering. Additionally, groundwater would be sampled at a proposed infiltration point inland.

- If there is no contamination in groundwater exceeding HDOH Tier 1 EALs for sites less than 150m from surface water, the water will be considered suitable for re-infiltration within 150m from surface water.
- If the inland infiltration point is also contaminated at similar levels to the near shore dewatering locations, the water will be considered suitable for re-infiltration at the inland re-infiltration point greater than 200 ft from the dewatering location.
- If only groundwater located in the vicinity of the near shore dewatering locations is contaminated, then the water will have to be pumped into storage for treatment or disposal offsite.

Dewatering effluent may also be pumped into tanks or other temporary storage containers. If the water temporarily stored in tanks or storage containers is to be discharged (e.g., into the sanitary sewer, storm drain) it must be sampled and analyzed for the appropriate COPCs to determine the appropriate disposal or discharge options. The discharge of the water must be in compliance with the CCH, DOH, and the EPA regulations and applicable permits. If it is desired that the water contained within the tanks or storage containers be re-infiltrated into a nearby excavation, the DOH Solid and Hazardous Waste Branch must be consulted to determine whether there are sampling or treatment requirements in accordance with their rules and regulations.

Dewatering into the sanitary sewer system or into the storm sewer is illegal, unless a Dewatering Permit is obtained from the CCH (sanitary sewer) and/or DOH CWB (storm sewer). Dewatering into a storm sewer requires sampling the groundwater for additional chemicals that may not be required by your permit. Advance coordination with the DOH HEER Office is required to ensure the appropriate screening criteria are met prior to *discharge*.

8.2 Groundwater Disposal

The current construction plans do not anticipate disposal of any groundwater off-site. If plans change or new information indicates that off-site groundwater disposal will occur, then this C-EHMP will be revised as soon as the change has been identified.

Section 9 Free Product Management Plan

The purpose of the free product management plan is to ensure proper handling and management of free product that may be encountered. Free product is generally encountered floating on the groundwater or at the capillary fringe and typically presents as either free-flowing, black or brown, viscous product; a thin layer of black or brown product; a discontinuous layer of product (e.g., spots or globules); or a petroleum hydrocarbon sheen. In areas where the groundwater level is tidally influenced, there may be an increase in the amount of free product at either high or low tide.

Table 9-1: Free Product Management

Questions	Yes	No	Unknown
Is free product known or suspected to be present at the site?			✓
Is the groundwater at the site tidally influenced?	✓		
Is groundwater at the site confined?		✓	
Will excavation activities at the site potentially encounter contaminated groundwater and free product.	✓		

Proposed construction plans at the site will encounter groundwater. The locations of the waterlines that require excavation down to groundwater are depicted on plans and specs, included in Appendix B. Free product had previously been identified on groundwater at the property, however was not observed during any of the latest monitoring events (2002 through 2004). It is not anticipated that current construction plans would encounter free product, however as free product was previously observed in the vicinity of the Site, this plan was prepared to provide guidance if additional free product is observed.

- If free product is encountered in soil, the soil is required to be segregated separately from the moderately impacted soil, as soil that is considered grossly contaminated must be removed, may not be replaced in the excavation, and must be properly disposed of.
- Excavations which encounter groundwater must be visually assessed for the presence of free product. If free product is observed in utility excavations, it must be recovered to the extent practicable prior to the placement of concrete or backfill.
- Dewatering effluent should also be inspected for the presence of free product. All free product is required to be recovered to the extent practicable prior to re-infiltration or disposal. Free product should be separated, stored within approved containers, and placed in a designated containment area. Free product containers need to be characterized and properly disposed of upon completion of the work.
- As no free product has currently been identified at the Site, if free product is discovered, the DOH HEER Office must be immediately notified of its discovery by reporting it as a new release.

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Section 10 Stormwater Management Plan

Proactive actions must be taken to prevent stormwater from coming into contact with contaminated groundwater and soil at the site. The actions listed below will minimize the potential for contaminating stormwater.

- Place contaminated soil on plastic sheeting in a lined, bermed area to prevent stormwater from contacting contaminated soil.
- Open excavations should be backfilled as soon as practicable to prevent stormwater and direct precipitation from entering the excavation. When possible, open excavations should be bermed to prevent stormwater runoff from entering the excavation.
- Regularly monitor the weather throughout the day for signs of approaching storms and/or heavy rains.
- If heavy rains are forecasted in the next 48 hours, inspection of all sediment basins, temporary ditches/swales, perimeter controls, and inlet protection devices will be conducted and maintained as needed. Reinstallation of any perimeter controls that were removed due to active work in the area. If a severe storm is expected, the inlet protection devices shall be removed to prevent flooding on the surrounding streets. After the storm, re-inspect, replace, or maintain BMPs as needed.
- The general contractor shall prevent, reduce, or eliminate the discharge of pollutants from material delivery, storage, and use to the stormwater system or watercourses by minimizing the storage of hazardous materials on-site, storing materials in a designated area, installing secondary containment. Construction materials, waste, toxic and hazardous substances, stockpiles, and other sources of pollution shall not be stored in buffer areas, near areas of concentrated flow, receiving waters, or drainage improvements that discharge off-site.
- Prevent fuel spills and leaks by using off-site facilities, fueling only in designated areas, enclosing or covering stored fuel, and implementing spill controls such as secondary containment and active measure using spill response kits.
- Eliminate and minimize the discharge of pollutants to stormwater from vehicle and equipment maintenance operations by using off-site facilities when feasible, performing work in designated areas only, using spill pads under vehicles and equipment, checking for leaks and spills, and containing and cleaning up spills immediately. No refueling may be done in areas subject to storm flows, and no refueling may be undertaken during storm conditions.
- The contractor shall designate a person responsible for implementing the erosion and sediment control plan (ESCP) at the project site.
- All grading operations shall be performed in conformance with applicable provisions of the HAR Title 11, Chapter 54, *Water Quality Standards*, and Title 11, Chapter 55, *Water Pollution Control*, as well as Chapter 14 of the ROH.
- Torn, weathered, or sagging sediment barriers must be repaired or replaced immediately.

- Implement spill prevention response plans to eliminate and minimize the discharge of pollutants to the MS4 and receiving waters from leaks and spills by reducing the chance of spills, absorbing, containing, and cleaning up spills and properly disposing of spill materials. At a minimum, all leaks and spills shall be cleaned up immediately.
- Prevent or reduce the discharge of pollutants to stormwater from hazardous waste through proper material use and waste disposal.
- Prevent or reduce the discharge of pollutants to the land, groundwater, and in stormwater from solid waste or construction and demolition waste by providing designated waste collection areas, collect site trash daily, and ensuring that construction waste is collected, removed, and disposed of only at authorized disposal areas.
- Temporary and portable sanitary and septic waste systems shall be mounted or staked in, well-maintained, and scheduled for regular waste disposal and servicing. Sources of sanitary and/or septic waste shall not be stored near the MS4 or receiving waters.
- Stockpiles shall not be located in drainage ways, within 50 ft from areas of concentrated flows, and are not allowed in the City ROW. Sediment barriers or silt fences shall be used around the base of all stockpiles. Stockpiles shall not exceed 15 ft in height. Stockpiles greater than 15 ft in height shall require 8-ft wide benching in accordance with ROH Chapter 14, Article 15. Stockpiles must be covered with plastic sheeting or a comparable material if they are not being actively used and at the end of each day.
- Liquid waste shall be contained in a controlled area such as a holding pit, sediment basin, roll-off bin, or portable tank of sufficient volume and to contain the liquid waste generated. Containment areas or devices must be impermeable and leak-free. They should not be located where the accidental release of the contained liquid can discharge to water bodies or channels.
- Prevent or reduce the discharge of pollutants to stormwater from concrete waste by conducting washout off-site or performing on-site washout in a designated area constructed and maintained in sufficient quantity and size to contain all liquid and concrete waste generated by washout operations. Plastic lining material should be a minimum of 10-millimeter polyethylene sheeting and should be free of holes, tears, or other defects that compromise the impermeability of the material. Containment areas or devices should not be located where the accidental release of the contained liquid can discharge to water bodies or channels. Washout facilities must be cleaned, or new facilities must be constructed and ready for use once the washout is 75% full. Once concrete wastes are washed into the designated area and allowed to harden, the concrete should be broken up, removed, and disposed of as solid wastes.

Section 11 Vapor Management Plan

The purpose of the Vapor Management Plan is to identify VOC vapors and toxic gases that could adversely affect air quality during construction. Included are procedures to detect and mitigate potential fire and explosion hazards posed by explosive vapors.

Below are the COPCs associated with potential vapors that were previously identified in the vicinity of the project limits.

- Toluene
- Ethylbenzene
- Xylenes

No current vapor hazards are known to exist, however as petroleum pipelines underlie the entire site; soil vapor hazards are potentially present at the site. This plan has been prepared to provide mitigation measures if a vapor hazard is identified.

The principal hazards posed by volatilized COPCs are direct exposure through inhalation, asphyxiation, flammability, and explosivity. Where volatile COPCs are found during construction activities, the concentrations of these vapors must be controlled in accordance with DOH and EPA regulations and guidelines, and OSHA rules and regulations. This includes proactive planning to ensure workers and the general public are not exposed to hazardous volatilized COPC concentrations and that workers have the appropriate level of PPE. Tasks associated with adequate and proper vapor management include the following:

- A QEP with at least five years' experience in environmental oversight associated with construction projects must provide field oversight where COPC vapors may be present and/or are detected at concentrations above EALs, LELs and/or PELs. The QEP should provide health and safety guidelines related to the potential exposure of workers to the vapors.
- The QEP shall establish exclusion areas around the areas of suspected COPC vapors and only workers with appropriate PPE and training will be allowed to work within the exclusion areas.
- Workers who may come into contact with COPC vapors must wear the appropriate level of PPE.
- Workers who may come into contact with COPC vapors must have required training (at a minimum, 40-hour HAZWOPER certification, and current 8-hour annual refresher training).
- Air monitoring will be conducted by the QEP during excavation.
- It is not anticipated that the construction project will require workers entering trenches deeper than four (4) feet. If workers are required to enter excavations for this project, air monitoring will also occur prior to entering and during work within the excavation. Confined space restrictions may also apply. All work performed in the trenches will be done in accordance with applicable HIOSH and OSHA regulations.
- The monitoring will include both workspace and perimeter measurements of COPC vapors.
- If warranted by air monitoring results, the QEP will notify on-site workers to upgrade PPE to include respiratory protection. Requirements for the use of respiratory protection, including medical

monitoring, are described in detail in the Site-Specific HASP.

- Air monitoring will be conducted using a PID and/or four gas meter.
- Workspace and perimeter monitoring will be conducted during ground disturbance, since that is when the vapor concentrations are expected to be the highest.
- Air monitoring will be conducted using a conventional PID to determine VOC vapor concentrations and an Ultra-Rae PID, which is benzene-specific, to determine benzene concentrations.
- If VOC vapor concentrations in the workspace atmosphere exceed an 8-hour time-weighted average (TWA) of 20 parts per million (ppm) or a 15-minute short-term exposure limit (STEL) of 100 ppm, PPE requirements will be upgraded to Level C and it may be necessary to implement a modified work schedule. These levels are based on a maximum benzene concentration in gasoline of five percent by volume. Use of total VOC concentrations were selected based on a conservative assumption for worker protection.
- If VOC concentrations along the Property perimeter (off-site) exceed the 8-hour time-weighted average (TWA) of 20 parts per million (ppm) or a 15-minute short-term exposure limit (STEL) of 100 ppm, work will be stopped immediately.
- If VOC vapor concentrations in the work zone or along the Property perimeter (off-site) equal or exceed 20 ppm, benzene monitoring will be initiated.
- On-site workers will be notified immediately if benzene is detected in the workspace atmosphere at a concentration exceeding 0.5 ppm, and the donning of respirators with organic vapor cartridges will be recommended (i.e., it will be recommended that respiratory protection be upgraded to Level C).
- If benzene concentrations in the workspace atmosphere exceed the 8-hour TWA PEL (1 ppm) or the OSHA 15-minute STEL (5 ppm), PPE requirements will be upgraded to Level C and it may be necessary to implement a modified work schedule.
- If benzene concentrations in the workspace atmosphere exceed the TWA PEL (1 ppm), short-term exposure monitoring will be conducted. To determine short-term exposure, a minimum of five samples will be collected within a 15-minute period.
- If daily average benzene concentrations in the workspace atmosphere exceed the OSHA STEL (5 ppm) or benzene concentrations exceed the OSHA acceptable ceiling concentration (25 ppm), PPE will be upgraded to Level C, with either full-face respirators or powered air-purifying respirators and protective goggles.
- If benzene concentrations in the workspace atmosphere exceed the OSHA 8-hour TWA for a 40-hour work week (10 ppm) or benzene concentrations exceed the OSHA acceptable maximum peak for an 8-hour shift (50 ppm), work will be stopped immediately and workers will be requested to leave the work zone.
- If benzene concentrations along the Property perimeter (off-site) exceed the 15-minute STEL (5 ppm) or the TWA PEL (1 ppm), work will be stopped immediately.
- If PID air testing yields readings above 20 ppm, explosimeter measurements should be conducted. If explosimeter measurements exceed 10 percent of the LEL, active vapor control methods should be initiated. These controls include use of intrinsically safe equipment, minimizing the size of excavations, backfilling excavations on an expedited schedule if it can be done safely, covering soil stockpiles with plastic sheeting, and/or stopping work until less than 5 percent of the LEL.

The following soil vapor concerns should be assessed during construction planning and discussed in this section of the C-EHMP:

Acute Exposure and Explosive Hazards

EALs do not currently consider explosive hazards, acute toxicity, or asphyxiation hazards that are important for potential construction worker exposure. Vapor concentrations should be screened against 10% of the LEL and PELs. Mitigation measures and intrinsically safe tools need to be present if 10% of the LEL is exceeded. Engineering and Administrative Control measures for worker protection are discussed in Section 13.0 and specifically addressed in the Site-Specific HASP, included in Appendix E.

11.1 Engineering and Institutional Controls

Methods to prevent vapor exposure are required during construction activities in areas where known or suspected COPC vapors may be present. The following administrative controls shall be established to protect workers and the public from COPC vapor hazards:

- Appropriate worker training (including 40-hour HAZWOPER and current annual 8-hour refresher) required for workers in areas with potential COPC vapor hazards at the site.
- Establishment of Exclusion Area(s), as depicted in the plans and specs, included in Appendix B.

The following engineering controls shall be established to protect workers and the public from COPC vapor hazards (engineering controls are depicted in the plans and specs included in Appendix B):

- Use of plastic sheeting on soil stockpiles.
- Use of vapor suppressants.
- Use of ventilation during time of low trade winds in the areas of suspected vapor.
- Use of proper PPE.

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Section 12 Spill or Release Response

Releases, should they occur, must be reported in accordance with HRS 128D and HAR 11-451. In addition to contractor releases, a release may include pre-existing contamination encountered during construction activities. If new contamination is discovered that is different from any known previously reported releases, the release must be reported as described in the abovementioned regulations.

12.1 Release Response

If a release occurs, the following actions must be taken:

- Determine the identity of what was spilled, the source of the spill, the volume of the spill, the severity of the spill, and if immediate emergency response actions are necessary.
- Stop work if contaminant releases are extremely large and cannot be contained. If an imminent threat to human health or the environment exists, or if human or environmental receptors are impacted (e.g., human receptors falling ill or suffering sudden illness), notify the CCH Fire Department by calling 9-1-1.
- If the spill is of a volatile, flammable, or combustible liquid or vapor, possible ignition sources should be eliminated, and workers will be directed to remain upwind. In addition, monitor for explosive vapors using an LEL meter.
- Stop work if an unusually large release or contaminated area is encountered unexpectedly or if there is any release of chemicals or hazards not covered by the plan.
- Stop work and take immediate emergency response actions if a worker or member of the general public is injured.
- Eliminate the source of the spill to the extent practicable (e.g., shutting off a valve, righting an overturned container), if it is safe to do so. Do not attempt to stop a release from an active fuel pipeline.
- Protect sensitive ecological receptors threatened by the spill.
- In the event that hazardous materials are discharged to the MS4, the Contractor or ESCP Coordinator shall immediately notify Harbors Construction Engineer, Harbor Environmental Hotline (808-587-1962), and Honolulu Fire Department, of the discharge by phone. A written report describing the pollutants that were discharged, the reasons for the discharge and the measure that have been taken or will be taken to prevent a reoccurrence of the discharge shall be submitted to the direction no less than 3 days after notification by phone.
- In the event that nonhazardous materials are discharged to the MS4, the Contractor or ESCP Coordinator shall notify the Harbors Construction Engineer and Environmental Hotline by phone no later than the next business day. A written report describing the pollutants that were discharged, the reasons for the discharge, and the measures that have been taken or will be taken to prevent a reoccurrence of the discharge shall be submitted to the Director no less than three days after notification by phone.

12.2 Release Reporting

In the event of a release of a hazardous substance that causes an imminent threat to human health or the environment, the first call should be to 9-1-1. Examples of releases requiring a call to 9-1-1 include, but are not limited to, fuel or gas leaking from an active pipeline, an ammonia tank leak, or workers and/or the public becoming ill.

All releases that contains hazardous substance in an amount exceeding the reportable quantity established under 40 CFR Parts 110, 117, or 302, must be reported to the DOH HEER Office (808-586-4249 or 808-247-2191 after work hours) and the Local Emergency Planning Committee (LEPC) at (808) 723-8960 or online at <https://veoci.com/v/p/form/gvgs6ne3kmeq> for non-emergency release/spill. Both agencies must be contacted by telephone or in-person immediately following a release. Note, there is no penalty for reporting a release unnecessarily, but there are large penalties for not reporting a release.

If petroleum is observed on surface water, then notify the U.S. Coast Guard (USCG) through the National Response Center (NRC) at (800) 424-8802. Please note, petroleum observed on groundwater is not reportable to the NRC. For oil and hazardous substance spills that threaten or occur in navigable waters, the USCG is the lead agency.

Any damage to the HECO lines must be immediately reported to HECO Trouble Dispatcher at (808) 548-7961. In case of damage or suspected damage to HECO's fuel pipeline must be immediately reported to HECO Security Command Center at (808) 543-7685.

In the event any artifacts or human remains are uncovered during construction operations, the contractor shall immediately suspend work and notify the Honolulu Police Department, the State Department of Land and Natural Resources-Historic Preservation Division at (808) 692-8015 and inform the Civil Engineering Branch of the Department of Planning and Permitting at (808) 768-8084.

The on-site personnel responsible for ensuring that the appropriate release notifications are conducted are listed below. Please note that in the case of an emergency or imminent threat to the environment, any on-site personnel can contact 9-1-1.

Table 12-1: Personnel Responsible for Release Notification

Name	Company	Title	Phone Number
TBD			

Section 13 Worker Protection

A Site-Specific HASP will be prepared for the site in accordance with the appropriate occupational health and safety regulations. These regulations and requirements include but are not limited to the use of the appropriate level of PPE and appropriate personal hygiene steps associated with the identified COPCs at the site. The HASP is presented in Appendix E. Note that the HASP in this plan relates primarily to exposure to potentially contaminated media and other environmental tasks associated with this C-EHMP. General construction health and safety manual for construction operations also should be prepared and followed.

Administrative Controls for Protecting Workers from COPC Hazards (further detailed in the HASP) include:

- 40-hour HAZWOPER training and current 8-hour refresher required for all workers who may come into contact with contaminated media.
- A discussion of COPC hazards that may be encountered will be discussed during daily tailgate safety meetings.
- A QEP with at least five years' experience in environmental oversight associated with construction projects will be present when contaminated media will be moved or disturbed.
- The QEP will establish Exclusion Areas during excavation activities that may encounter hazardous or explosive soil vapors.

Engineering Controls for Protecting Workers from COPC Hazards (further detailed in the HASP) include:

- The appropriate level of PPE shall be selected based on the potential hazards and COPCs associated with the individual construction tasks. The level of PPE may be upgraded or downgraded depending upon the tasks being conducted and the level of contact with the soil. At a minimum, Modified Level D PPE consisting of Tyvek suits, chemical-resistant boots, and nitrile gloves is to be required for workers directly exposed to contaminated soils within the trenches and excavations.
- Stanchions (delineators) and hazard tape shall be used to delineate exclusion areas where COPCs are present, and access is restricted.
- Fans shall be placed around trenches and excavation pits where vapor hazards are present to increase airflow and redirect hazardous vapors away from workers.
- A handwashing station will be made available for site workers.
- At no time shall workers be allowed to smoke, drink, or eat within the work zone and/or near contaminated soil.

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Section 14 Decontamination

Prior to excavation activities in contaminated media, the Contractor and the QEP must designate areas for decontamination activities. The QEP must also evaluate and establish decontamination procedures for personnel, tools, equipment, and vehicles, prior to construction. Decontamination procedures for personnel and BMPs to limit direct exposure to COPCs are also discussed in the Site-Specific HASP that is attached to this C-EHMP.

14.1 Decontamination of Tools and Personnel

Appropriate personal hygiene practices shall be adhered to at all times when handling potentially impacted soil. Washing facilities shall be made available on the job site to allow workers to wash their hands and avoid cross-contamination before eating, drinking, smoking, and/or heading home for the day.

After contact with the contaminated soil, proper decontamination procedures shall be conducted, including the removal, segregation, and disposal of PPE. Any used PPE shall be placed in plastic garbage bags, double bagged, and deposited in the site dumpster, or a municipal landfill.

Hand-held and manual tools in direct contact with impacted soil must be decontaminated to remove any contaminated soil or water prior to handling un-impacted material that is assumed to be uncontaminated and before they are removed from the work area. The decontamination of tools must include the following:

- At the excavation location, physically remove soil adhering to the surface of the equipment using appropriate hand tools. Soil removed during this step should be placed back into the impacted area, excavation, or the appropriate stockpile following removal.
- Rinse off contaminated groundwater at the excavation location, allowing rinse water to drain back into the excavation or be collected in a container for proper disposal.
- While the tools are located at the excavation, water should be used to wash the surfaces of the tools that were exposed to impacted material. The water used to wash the exposed surfaces should be directed back to the impacted area or excavation and allowed to infiltrate.

During equipment decontamination, proper PPE shall be employed to minimize exposure to COPCs. Proper PPE should include Modified Level D PPE with nitrile gloves, rubber boots, waterproof Tyvek, and an appropriate face shield to protect against splashback during decontamination. The QEP shall designate Decontamination Areas for the donning and doffing of disposable PPE and the cleaning of materials. Decontamination Areas are still to be determined, but will be located between contaminated areas and non-contaminated area and prior to exiting the jobsite.

14.2 Decontamination of Vehicles and Equipment

Vehicle and equipment decontamination should occur following the use of vehicles and equipment (to include haul trucks and heavy machinery) in direct contact with impacted soil. The equipment decontamination procedures are intended to describe methods for reducing and controlling the spread of site COPCs to un-impacted portions of the site or un-impacted materials, and off-site locations.

Equipment and vehicles in direct contact with impacted soil must be decontaminated to remove any contaminated soil before they leave the work area. The decontamination of vehicles equipment must include the following:

- At the excavation location, physically remove soil adhering to the surface of the equipment using appropriate hand tools. Soil removed during this step should be placed back into the impacted area, excavation, or the appropriate stockpile following removal.
- While the vehicle/equipment is located at the excavation, water should be used to wash the surfaces of the vehicle/equipment that was exposed to impacted material. The water used to wash the exposed surfaces should be directed back to the impacted area or excavation and allowed to infiltrate.

During equipment decontamination, proper PPE shall be employed to minimize exposure to COPCs. Proper PPE may include Modified Level D PPE with nitrile gloves, rubber boots, waterproof Tyvek, and an appropriate face shield to protect against splashback during decontamination. The contractor and QEP shall designate Decontamination Areas for the decontamination of vehicles and heavy machinery; the areas have not been determined as of yet but will be located between contaminated areas and non-contaminated area and prior to exiting the jobsite.

Section 15 Recordkeeping and Reporting Requirements

Detailed records of all environmental activities conducted during construction will be kept. These records may include air monitoring results, stockpile sampling, soil segregation, soil and/or groundwater sampling methodologies and results, dewatering activities, free product recovery, vapor suppression, soil disposal or reuse, and any other environmental activities conducted in association with construction activities.

In addition to maintaining these records, within 30 days of the completion of ground-disturbing activities, a removal action report summarizing the environmental activities conducted during construction is to be prepared. Guidance for preparation of a removal action report can be found in Section 18 of the HEER Office TGM (DOH HEER Office 2018 and updates). The report should also include copies of all disposal receipts, truck logs, and laboratory analytical results, as well as a map illustrating the approximate GPS location(s) where any contaminated soil was encountered and/or reused on-site.

If contaminated media is identified and will be left on-site following the completion of construction, a site characterization and an EHE must be conducted and a separate EHMP will have to be prepared to manage the contamination in the long-term. EHEs and EHMPs must be submitted to the HDOH for review and approval following the completion of construction activities detailed in this C-EHMP.

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Section 16 References

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- Soil Survey Staff, NRCS USDA. (2025, January 14). Web Soil Survey. <http://websoilsurvey.sc.egov.usda.gov>.
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- State of Hawaii Department of Health [HDOH]. (1995, August 2). Hawaii Administrative Rules, Title 11, Chapter 451, State Contingency Plan (SCP).
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- . (2014, June 30). Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control.
- . (2017, October). Guidance for Soil Stockpile Characterization and Evaluation of Imported and Exported Fill Material.
- . (2018 and updates). Technical Guidance Manual for the Implementation of the Hawaii State Contingency Plan. <http://www.hawaiidoh.org/tgm.aspx>.
- . (2024, Revised May 2025). Evaluation of Environmental Hazards at Sites with Contaminated Soil and Groundwater, Volume 1: User's Guide, Hawaii Edition. State of Hawaii Department of Health, Hazard Evaluation and Emergency Response Office.
- United States Environmental Protection Agency [EPA]. (n.d.). 29 CFR Title 40 Part 1910, Occupational Safety and Health Standards - General Industry. Retrieved from <https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910TableofContents>

Appendix A

Figures



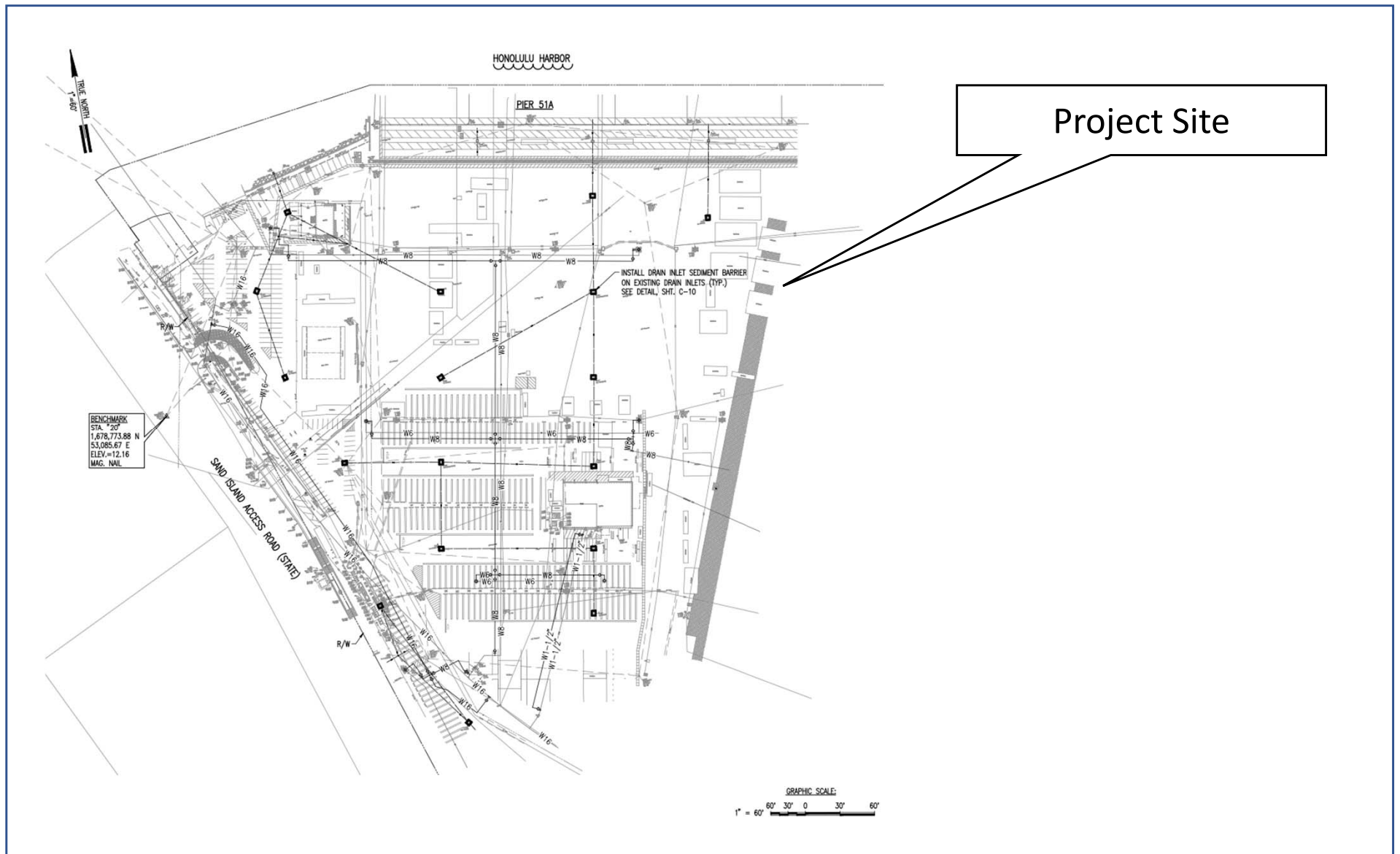
PROJECT NAME:
**Environmental Hazard Management Plan
 for On-Site Construction (C-EHMP)
 Honolulu Harbor Pier 51A
 Honolulu, HI 96819
 TMK: (1) 1-5-041-111**

FIGURE TITLE:

Site Location Map

FIGURE NUMBER:

1



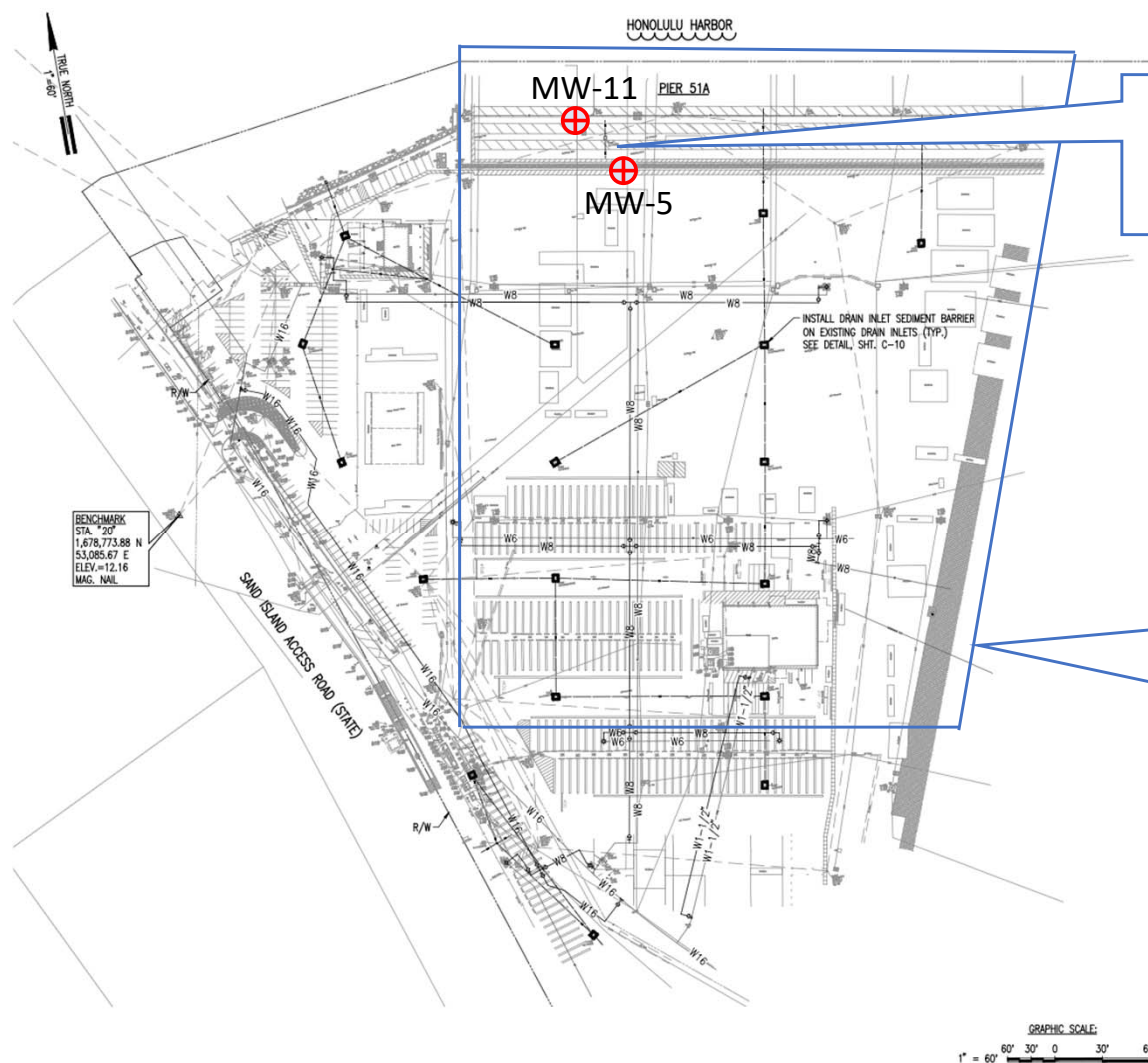
PROJECT NAME:
Environmental Hazard Management Plan
for On-Site Construction (C-EHMP)
Honolulu Harbor Pier 51A
Honolulu, HI 96819
TMK: (1) 1-5-041-111

FIGURE TITLE:

Site Plan Map

FIGURE NUMBER:

2



Previously observed
contamination.

Soil, Groundwater,
and Soil Vapor Hazard
Potentially Exists.

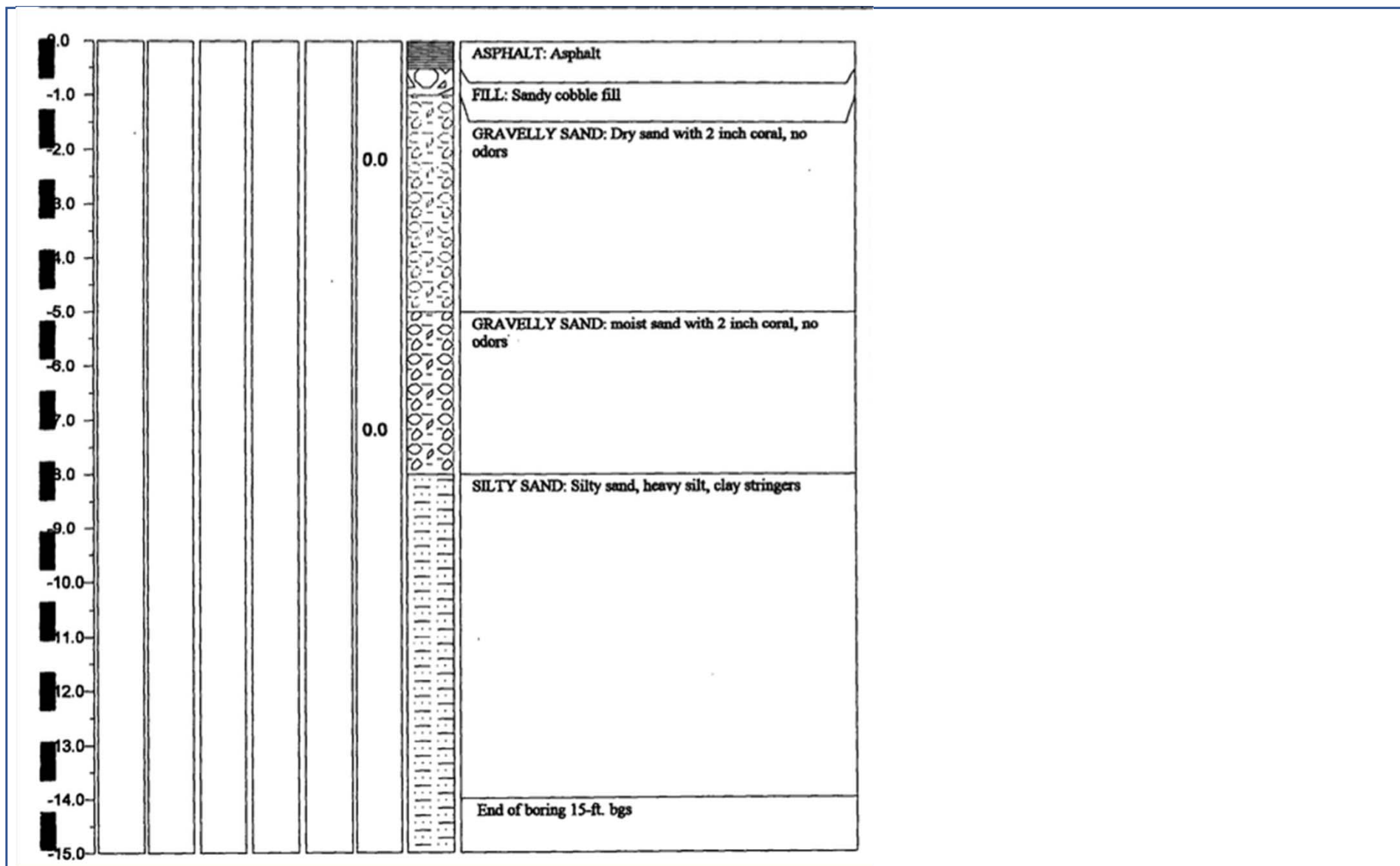


PROJECT NAME:
**Environmental Hazard Management Plan
for On-Site Construction (C-EHMP)
Honolulu Harbor Pier 51A
Honolulu, HI 96819
TMK: (1) 1-5-041-111**

FIGURE TITLE:
Environmental Hazard Map

FIGURE NUMBER:

3



PROJECT NAME:
**Environmental Hazard Management Plan
 for On-Site Construction (C-EHMP)
 Honolulu Harbor Pier 51A
 Honolulu, HI 96819
 TMK: (1) 1-5-041-111**

FIGURE TITLE:

Representative Bore Log

FIGURE NUMBER:

4

Appendix B

Plans and Specifications

Appendix C

Soil Profile Forms

REQUEST FOR CLEARANCE NUMBER

All Clearance Numbers expire 6 months from date of approval. Customers should renew their clearance number or request an extension prior to the expiration date. Clearance Numbers are issued during business hours, Monday through Friday only.

PART I. CUSTOMER INFORMATION (Please print legibly)

JOBSITE ADDRESS Pier 51A		CITY Honolulu	ZIP CODE 96817
NAME OF PROPERTY OWNER Department of Transportation, Harbors Division			
NAME OF DEMOLITION CONTRACTOR			
ADDRESS		CITY	ZIP CODE
PHONE	FAX # or EMAIL	P.O.#	JOB #
*NAME OF TRANSPORTER		PHONE #	FAX # or EMAIL
BILL CHARGES TO: _____			
_____ Authorized Signature		_____ Title	_____ Date

*For additional transporters, please complete the Transporter Authorization Form.

USE OF SITE: ☐ Residential ☒ City ☐ Commercial ☐ State ☐ Industrial ☐ Federal ☐ Vacant Land ☐ Other: _____	JOB/PROJECT: ☐ Demolition ☒ Renovation ☐ Roofing Only ☐ Contaminated Soil ☐ Other: _____	WASTE MATERIAL: (Check one per form) ☐ Canec ☐ Lead Based Paint ☐ Concrete ☐ Paint Chips ☐ Grub ☐ Contaminated Soil ☐ Mixed Waste ☐ Liquid Waste/Sludge ☐ Rock/Dirt Soil ☐ Other: _____
---	--	--

Profile Sheets Attached: ☐ Contaminated Soil ☐ Solidification

PART II. WASTE CERTIFICATION

1. This waste is not a "Hazardous Waste" as defined by EPA or the State of Hawaii.
2. This waste does not contain regulated radioactive materials or regulated concentrations of PCBs (Polychlorinated Biphenyls).
3. The statements and attachments contain true and accurate descriptions of the waste. All relevant information regarding known or suspected hazards in the possession of the undersigned has been disclosed.
4. The analytical data presented herein or attached hereto were derived from testing representative samples taken in accordance with the DOH HEER Technical Guidance Manual.
5. If any changes occur in the character of the waste, the undersigned shall notify a Landfill representative immediately.
6. The waste is not generated from a CERCLA site.

I have read and understand the WASTE CERTIFICATION guidelines and certify the information entered onto this form is accurate and true:

_____ Property Owner or Authorized Agent Signature	_____ Title	_____ Date:
_____ Demolition Contractor or Authorized Agent Signature	_____ Title	_____ Date
_____ Transporter or Authorized Agent Signature	_____ Title	_____ Date

FOR OFFICE USE ONLY

Clearance No.:	☐ Approved ☐ Declined Initials: _____ Date: _____ ☐ Landfill and ☐ Phase I or ☐ Phase II ☐ Asbestos Pit
	Issued by _____ Date: _____ Compuweigh entry by _____ Date: _____ Filed by _____
Comments:	



PART I. SOIL GENERATOR INFORMATION

- a. Generator Name: Department of Transportation - Harbors Division
- b. Generator Address: 79 S Nimitz Hwy, Honolulu, HI c. Zip Code 96813
- d. Address of Soil Generation: Honolulu Harbor - Pier 51A
- e. Address of Soil Storage (if different from generator address): _____
- f. Type of Facility Soil has been generated from: Pier - Construction Site
- g. State DOH Facility ID#: _____
- h. Contact: _____ i. Phone _____

PART II. SOIL INFORMATION

- a. Describe the circumstances by which the soil has been generated.

Construction Excavation

- b. Describe the method used to determine the presence or absence of contaminants in the soil.

c. Name of consultant performing sampling

d. Name of analytical laboratory

e. Was the sampling and analysis performed in accordance with the DOH Office of Hazard Evaluation and Emergency Response Technical Guidance Manual? ☒ Yes ☐ No (If No, explain)

f. Site map and map of sample locations attached? ☒ Yes ☐ No

g. Sampling source (e.g. drum, pit, stockpile, in site, etc.):

h. Analytical results attached? ☐ Yes ☐ No (If No, explain)

i. Amount of Soil (tons and/or cubic yards):

j. Type of Soil:

k. Soil Moisture ☐ Wet ☐ Damp ☐ Dry

l. Soil Color (Munsell Color Chart Code if available):

m. Strong incidental odor? ☐ Yes ☒ No (If yes, describe)

n. pH

o. Is the soil ignitable? ☐ Yes ☒ No

p. Is this a federal or state hazardous waste? ☐ Yes ☒ No

q. Does this waste contain heavy metals? ☐ Yes ☒ No

r. Does the waste contain PCBs? ☐ Yes ☒ No

s. Is the waste TSCA waste? ☐ Yes ☒ No

t. Is the waste CERCLA or HRS Chapter 128D waste? ☐ Yes ☒ No

u. Is the waste the result of a UST removal or response action? ☐ Yes ☒ No

v. Does the waste represented by this profile contain dioxins? ☐ Yes ☒ No

w. Does the waste represented by this profile contain asbestos? ☐ Yes ☒ No

x. Does the waste contain debris? Yes ☐ No ☐ (If yes, list debris type)

y. Personal Protective Equipment Requirements:

z. Does the soil contain radioactive material or disposal regulated by the NRC? ☐ Yes ☒ No

aa. Does the waste profile and all attachments contain true and accurate descriptions of the waste material, and has all relevant information within the possession of the Generator regarding known or suspected hazards pertaining to the waste been disclosed to the contractor? ☒ Yes ☐ No

PART III. TRANSPORTATION INFORMATION

a. Method of Shipment ☐ Bulk Solid ☐ Drum/Box ☐ Other: _____

b. Name of Hauler: _____ Phone No. _____

c. Is this a U.S. Department of Transportation (USDOT) Hazardous Material? ☐ Yes ☐ No

PART IV. ENVIRONMENTAL REPRESENTATIVE'S CERTIFICATION

a. Name: _____ b. Title: _____

c. Employer: _____

The environmental representative's signature certifies that sampling and analysis attached hereto was performed in accordance with the DOH HEER Technical Guidance Manual.

Environmental Representative's Signature

PART V. GENERATOR'S CERTIFICATION

- a. This soil is not a "Hazardous Waste" as defined by EPA or the State of Hawaii.
- b. This waste does not contain regulated concentrations of PCB's (Polychlorinated Biphenyls).
- c. The statements and attachments contain true and accurate descriptions of the soil. All relevant information regarding known or suspected hazards in the possession of the Generator has been disclosed.
- d. The sampling and analysis attached hereto was performed in accordance with the DOH HEER Technical Guidance Manual.
- e. If any changes occur in the character of the soil, the Generator shall notify a Landfill representative immediately.

I have read, understand, and certify the soil being disposed meet the guidelines above and will notify a PVT Landfill representative immediately if any changes occur:

Signature

Date

Print Name & Title

Company

WASTE DISPOSAL DECISION (For PVT Office use only)

Waste Disposal ☐ Accepted ☐ Rejected

Disposal Method ☐ Asbestos Pit ☐ Landfill and ☐ Phase I or ☐ Phase II Date: _____

Precautions, Special Handling Procedures, or Limitations on Approval: _____

Clearance No. _____ Reviewed by: _____ Date: _____

Approved by: _____ Date: _____

Additional Information for Contaminated Soil Reviews

1. Is this a hazardous waste (RCRA C)?

☐ Yes ☐ No

2. Does this waste contain heavy metals?

☐ Yes ☐ No

If yes, explain & identify _____

3. Does the waste contain PCBs?

☐ Yes ☐ No

If yes, explain _____

4. Is the waste a TSCA waste?

☐ Yes ☐ No

If yes, explain & identify _____

5. Is the waste a CERCLA waste?

☐ Yes ☐ No

If yes, explain & identify _____

6. Regulatory agency & Contact _____

7. Generator Department of Transportation - Harbors Division

8. Type of Contamination _____

9. Consultant Name & Number _____

10. Review report attached ☐

If this certification is made by a broker, the undersigned signs as authorized agent of the generator and has confirmed the information contained in this Sheet and additionally attached sheets from information provided by the generator and additional information as it has determined to be reasonably necessary.

Certification Signature: _____ Title: _____

Name (Type or Print): _____ Company: _____ Date: _____

Submittal Instructions

The following are the items that should be in any review report, in the order noted.

1. List of regulatory agencies and regulations applicable to the project. Include Names and contact information (phone numbers) for all agencies involved for follow up.
2. Contact information: generator, type of contamination, and site history in narrative form.
3. Consultant information (i.e. Names, phone numbers) include the consultant that did the original investigation and subsequent investigations.
4. Report format for technical information.
 - A. Background information for site and processes.
 - B. Summary of investigative action. Including sampling and testing information pertinent to disposal.
 - C. Summary of remedial actions and how material being disposed was generated.
 - D. Rational for the determination that material is solid waste this should be based on applicable regulations.
 - E. Site location maps and site drawings.
 - F. Summary table of test data.
 - G. Laboratory data.

Actions Taken

Date _____

Accepted _____

Rejected _____

Reason for rejection _____

Appendix D

Material Chemical Resistance Sheets

Appendix E

Site-Specific Health and Safety Plan

Appendix F

Qualified Environmental Professional Qualifications

ARTICLE XVIII - AGGREGATE BASE COURSE

18.1 DESCRIPTION

This work shall consist of constructing the base course in accordance with the requirements of the contract.

18.2 GENERAL REQUIREMENTS

In general, the provisions of Section 304 - Aggregate Base Course and Section 703.06 Aggregate for Untreated Base Course of the "Standard Specifications" shall apply except as hereinafter modified:

- (A) 304.03 (A) Hauling and Placing shall be amended by adding the following paragraph:

"The Construction Engineer will not permit the spreading of filler material over the surface of the compacted base. Incorporate the additional material, if required, uniformly throughout the thickness of the compacted material by scarifying and blading. The combined material shall meet quality requirements as specified."

- (B) 304.04 Method of Measurement and 304.05 Basis of Pavement are deleted.

18.3 SUBMITTALS

- (A) Submit certificate of compliance with these Specifications and material data for the base course material.
- (B) Soils Testing: The compaction of the base course shall be tested by an independent testing agency. All test results shall be attested to by a civil engineer licensed in the State of Hawaii and shall be submitted to the Construction Engineer for approval. The cost of soils testing shall be borne by the Contractor. Field density tests shall be made throughout the area for each 1500 sf of each compacted layer. All test results must be approved before the Contractor can proceed with placing additional layers of base course. Base course failing the compaction test or placed on untested areas or areas that fail to meet the minimum density requirements shall be removed and the underlying area shall be rescarified, recompacted, and retested at no cost to the state.

18.4 MATERIAL

- (A) Aggregate base course shall be basalt material.

18.5 MEASUREMENT AND PAYMENT

Aggregate base course will not be measured and paid for separately, but will be considered incidental to the various trench excavation and backfill costs in Article XVI – Trench Excavation and Backfill.

END OF ARTICLE

ARTICLE XIX - REQUIRED SUBMITTALS

19.1 GENERAL

This Article describes the Contractor submittals that are required for this project. In general, they include but are not necessarily limited to shop drawings, product and material data sheets, material safety data sheets, work plans and schedules, etc., as specified and required by the plans and specifications. As soon as possible after award of the contract, the Contractor shall submit for approval, all required submittals to the Construction Engineer at 79 S. Nimitz Highway, Honolulu, Hawaii 96813. After the State's approval of the submittals, the Contractor shall promptly and timely order the materials for the project so as to not delay the construction schedule and progression of work.

19.2 REQUIRED SUBMITTALS

The Contractor shall submit for review and approval eight (8) sets of each required submittal listed below. To the best of the State's knowledge, this list is deemed to be complete, however, the Contractor shall consider this list to be the minimum required, and shall be responsible for all submittals required by this contract as may be specified elsewhere on the plans and/or specifications.

Article X - Project Description

- A. Permits
- B. Shop Drawings
- C. Test Results
- D. As-Built Drawings
- E. Traffic Control Plans
- F. Quality Control Plans
- G. Construction Schedule
- H. Harbors Security Documentation
- I. Health and Safety Plan

Article XIII - Environmental Protection

- A. All testing and monitoring required as specified in Article XVII – Handling and Removal of Contaminated Materials Encountered During Construction.
- B. Site Specific Best Management Practices Plan

Article XIV - Demolition and Removal Work

- A. Proposed demolition and removal procedure
- B. Gas Free Certificate

Article XV - Structural Excavation and Backfill

- A. CLSM mix design

Article XVI - Trench Excavation and Backfill

- A. Compaction test results

Article XVII – Handling and Removal of Contaminated Materials Encountered During Construction

- A. Site Safety and Health Plan
- B. Worker Training Certification
- C. Completion Report
- D. Vehicle Decontamination Reports
- E. Permits

- Article XVIII - Aggregate Base Course
 - A. Certificate of Compliance for aggregate base course
 - B. Compaction test results
- Article XXI – Temporary Water Pollution, Dust, and Erosion Control
 - A. Water pollution, dust, and erosion control submittals
- Article XXIII - Reinforced Concrete (Civil Structures)
 - A. Concrete mix design
 - B. Batch ticket information
 - C. Curing concrete elements
- Article XXIV – Water System
 - A. Catalog cuts
 - B. Shop Drawings
- Article XXV – Signage and Pavement Markings
 - A. Catalog cuts
- Article XXIX – Traffic Control
 - A. Traffic control plans
- Article XXX – Construction Progress Documentation
 - A. Baseline project schedule
- Article XXXII – Drilled Shaft
 - A. Installation Plan

19.3 REVIEW AND ACCEPTANCE PROCESS

The Engineer will complete the review of the submittal within 30 days from the date of receipt unless a different review time is established by the contract documents. The Engineer will advise the Contractor, in writing, as to the acceptability of the submittal. Should the Engineer partially or totally reject the submittal, the Contractor shall modify the submittal as required by the Engineer and resubmit the item within 15 days. At this time, the review and acceptance cycle described above shall begin again. The review and acceptance cycle shall begin again as described above each time the submittal is returned to the Contractor for modification. If the volume of the shop drawings submitted at any time for review is unusually large, the Contractor shall inform the Engineer of its preferred order for reviews, and the Engineer will use reasonable efforts to accommodate the Contractor's priority.

The acceptance by the Engineer of the Contractor's submittal relates only to their sufficiency and compliance with the intention of the contract. Acceptance by the Engineer of the Contractor's submittal does not relieve the Contractor of any responsibility for accuracy of dimensions, details, and proper fit, and for agreement and conformity of submittal with the contract drawings and specifications. Nor will the Engineer's acceptance relieve the Contractor of responsibility for variance from the contract documents unless the Contractor, at the time of submittal, has provided notice and indemnification of such variances required by this section. Acceptance of a variance shall not justify a contract price or time adjustment unless the contractor requests such adjustment at the time of submittal and the adjustment is explicitly agreed to in writing by the Engineer. Any such request shall include price details and proposed scheduling modifications. Acceptance of a variance is subject to all contract terms, stipulations and covenants, and is without prejudice to any and all rights under the surety bond.

If the Engineer returns a submittal to the Contractor that has been rejected, the Contractor, so as not to delay the work, shall promptly make a resubmittal conforming to the requirements of the contract documents and indicating in writing on the transmittal and the subject transmittal what portions of the resubmittal have been altered in order to meet the acceptance of the Engineer. Any other differences between the resubmittal and the prior submittal shall also be specifically described in the transmittal.

No mark or notation made by the Engineer on or accompanying the return of any submittal to the Contractor shall be considered a request or order for a change in work. If the Contractor believes any such mark or notation constitutes a request for a change in the work for which it is entitled to an adjustment in contract price, contract time, or both, the Contractor must follow the procedures established in Article IV – Scope of Work of the General Provisions, as amended by the Special Provisions, or lose its right to claim for an adjustment.

19.4 MEASUREMENT AND PAYMENT

Payment for required submittals will not be made separately. The Contractor shall consider this work incidental to the various bid items in the Proposal Schedule.

END OF ARTICLE

ARTICLE XX - ASPHALT CONCRETE PAVEMENT

20.1 DESCRIPTION

This work shall consist of constructing asphalt concrete pavement on a prepared base course, including cold-planing and overlaying asphalt concrete pavement on an existing base surface, in accordance with the requirements of the contract.

20.2 GENERAL REQUIREMENTS

The provisions of Section 401 – Hot Mix Asphalt (HMA) Pavement of the "Standard Specifications" shall apply except as hereinafter modified:

(A) 401.03 (A) Construction Requirements shall be amended to read as follows:

Amend (A) Weather Limitations to read as follows:

"(A) Weather Limitations. Do not place the bituminous plant mix:

- (1) on wet surfaces, or
- (2) when the air temperature is below 50°F, or
- (3) when weather conditions prevent the proper handling or finishing of the bituminous mixtures."

The Contractor shall notify the construction engineer, in writing, if concrete is to be furnished by a ready-mix supplier. The Contractor shall submit Delivery/Batch Ticket Documentation to the construction engineer when the ready-mix concrete is poured and no later than when the truck leaves the work area in which the concrete was poured.

(B) 401.04 Measurement and 401.05 Payment are deleted.

20.3 MEASUREMENT AND PAYMENT

Asphalt concrete pavement, including bituminous material, tack coat, prime coat, and cold-planing, will be paid for on a lump sum basis in the Proposal Schedule, complete in place. Payment shall be full compensation for all tools, material, labor, and appurtenances to complete the work, in accordance with the construction documents, in place, complete.

ITEM NO.	PAY ITEM	PAY UNIT
3.	6" Thick asphalt concrete pavement, State Mix IV, in place, complete.	Lump Sum

END OF ARTICLE

ARTICLE XXI – TEMPORARY WATER POLLUTION, DUST, AND EROSION CONTROL
FOR PROJECT SUBJECT TO NPDES NOI-C PERMIT

21.1 DESCRIPTION

This section is required for all work, including the Contractor's storage sites. It describes the following:

- (A) A detailed Storm Water Pollution Prevention Plan (SWPPP) required by a National Pollutant Discharge Elimination System (NPDES) Appendix C General Permit from the State of Hawaii Department of Health (HDOH) and prepared according to Section 7 of Hawaii Administrative Rules (HAR) Chapter 11-55, Appendix C, will satisfy this requirement. Additionally, all projects at Honolulu, Kalaeha Barbers Point, and Kahului Harbors are subject to State of Hawaii, Department of Transportation (HDOT) Harbors Division, Storm Water Management Plan (SWMP) requirements, and are subject to Harbors Best Management Practice (BMP) inspections. If any requirement conflicts with those administered by HDOH, the Contractor shall follow the more stringent requirement.
- (B) Compliance with applicable federal and other state permit conditions.
- (C) Work associated with dewatering and hydrotesting activities and compliance with conditions of the NPDES general permit coverage authorizing discharges associated with construction activity dewatering and hydrotesting.

21.2 GENERAL REQUIREMENTS

In order to provide for the control of temporary water pollution, dust, and erosion arising from the construction activities of the Contractor and his subcontractors in the performance of this contract, the work performed shall comply with all applicable federal, state, and local laws and regulations concerning water pollution control including, but not limited to, the following regulations:

- (A) State of Hawaii, HDOH, HAR Chapter 11-54 – Water Quality Standards and Chapter 11-55 – Water Pollution Control.
- (B) For projects at Honolulu, Kalaeha Barbers Point, and Kahului Harbors ONLY, HDOT Harbors Division, Storm Water Management Plan.
- (C) For projects at Honolulu, Kalaeha Barbers Point, and Kahului Harbors ONLY, City and County of Honolulu (CCH), Rules Relating to Water Quality.

- (D) For projects at Honolulu, Kalaeloa Barbers Point, and Kahului Harbors ONLY, CCH, Storm Water BMP Manual for Construction.
- (E) 40 CFR Part 110, Environmental Protection Agency (EPA), Discharge of Oil.
- (F) 40 CFR Part 117, EPA, Determination of Reportable Quantities for Hazardous Substances.
- (G) 40 CFR Part 261, EPA, Identification and Listing of Hazardous Waste.
- (H) 40 CFR Part 302, EPA, Designation, Reportable Quantities, and Notification.
- (I) 49 CFR Part 171, U.S. Department of Transportation, Hazardous Materials Regulations.

21.3 MATERIALS

Materials shall conform to the following when applicable:

- (A) Inlet Protection. May be constructed of sandbags or other materials acceptable to the Engineer.
- (B) Slope Drains. Slope drains may be constructed of pipe, fiber, mats, erosion control fabric, geotextiles, rubble, Portland cement concrete, bituminous concrete, plastic sheets, or other materials acceptable to the Construction Engineer.
- (C) Grass. Grass shall be quick growing species such as rye grass, Italian grass, or cereal grasses. Grass shall be suitable to the area and provide a temporary cover that will not compete later with permanent cover. Alternative grasses are allowable if acceptable to the Construction Engineer.
- (D) Fertilizer and Soil Conditions. Fertilizer and soil conditioners shall be a standard commercial grade acceptable to the Construction Engineer.
- (E) Silt Fences. Silt fences shall be synthetic filter fabric mounted on posts and embedded in compacted ground in compliance with American Society for Testing and Materials (ASTM) D6462-03, Standard Practice for Silt Fence Installation.
- (F) Berms. Berms shall be gravel or sand wrapped with geotextile material. Alternate materials are allowable if acceptable to the Construction Engineer.

- (G) Alternate materials or methods to control, prevent, remove, and dispose of pollution are allowable if acceptable to the Construction Engineer.

21.4 CONSTRUCTION

(A) Preconstruction Requirements

- (1) Temporary Water Pollution, Dust, and Erosion Control Meeting. The contractor shall be required to submit a SWPPP to the Construction Engineer and address all comments by the Construction Engineer. After the SWPPP is accepted in writing by the Construction Engineer, the Contractor shall schedule a meeting with the Construction Engineer before the start of construction work to discuss the sequence of work, and plans and proposals for water pollution, dust, and erosion control.
- (2) Temporary Water Pollution, Dust, and Erosion Control Submittals. The Contractor shall submit the SWPPP to the Construction Engineer prior to the start of work for review of compliance with this Article. A SWPPP template is available online at: <https://hidot.hawaii.gov/harbors/malamaikeawakai/>, under HDOT Harbors Construction and Post-Construction Programs – Documents and Forms.
 - (a) The following information shall be described in the SWPPP as specified in Section 7 of HAR 11-55, Appendix C, at a minimum:
 1. **Storm water team** (by name or position), which is responsible for the development of the SWPPP, any later modifications to it, and for compliance with the requirements in the NPDES permit. The SWPPP must identify the personnel that are part of the storm water team as well as their individual responsibilities.
 2. **Nature of construction activities** including the size of the project site (in acres) and the total area expected to be disturbed by the construction activities (in acres), construction support activity areas covered by permit, and the maximum area expected to be disturbed at any one time.
 3. **Emergency-related projects** in response to a public emergency (e.g., natural disaster, extreme flooding conditions). If this applies to the project, documentation of the cause of the public emergency, information

substantiating its occurrence, and a description of the construction necessary to re-establish affected public services shall be included in the SWPPP. The proclamation of a civil defense emergency or similar proclamation is required to be from the President of the United States or State Governor.

4. **Identification of other site contractors** (e.g., sub-contractors) who will be engaged in construction activities at the site, and the areas of the site over which each contractor has control. If this piece of information is not available at the time the SWPPP is submitted, the plan must be amended to include the information prior to the start of construction activities.
5. **Sequence and estimated dates of construction activities** including a schedule of the estimated start dates and the duration of the following activities, according to Section 7.2.5 of HAR 11-55, Appendix C:
 - a. Installation of storm water control measures.
 - b. Commencement and duration of earth-disturbing activities.
 - c. Cessation, temporarily or permanently, of construction activities on-site, or in designated portions of the project site.
 - d. Final or temporary stabilization of areas of exposed soil.
 - e. Removal of temporary storm water conveyances/ channels and other storm water control measures, removal of construction equipment and vehicles, and cessation of any pollution-generating activities.
6. **Site map or series of maps**, showing the following features of the project, according to Section 7.2.6 of HAR 11-55, Appendix C:
 - a. Boundaries of the property and the locations where construction activities will occur, including:

- i. Locations where earth-disturbing activities will occur (noting any sequencing of construction activities);
 - ii. Approximate slopes and drainage patterns with flow arrows before and after construction;
 - iii. Locations where sediment, soil, or other construction materials will be stockpiled;
 - iv. Locations of any contaminated soil or contaminated soil stockpiles;
 - v. Locations of any crossings of state waters;
 - vi. Designated points on the site where vehicle will exit onto paved roads;
 - vii. Locations of structures and other impervious surfaces upon completion of construction; and
 - viii. Locations of construction support activity areas covered by the permit.
- b. Locations of all state waters, including wetlands and indicate which water bodies are listed as impaired.
 - c. The boundary lines of any natural buffers.
 - d. Topography of the site, existing vegetative cover, and features (e.g., forest, pasture, pavement, structures), and drainage pattern(s) of storm water onto, over, and from the site property before and after construction.
 - e. Storm water discharge locations, including locations of any storm drain inlets on-site and in the immediate vicinity of the site to receive storm water runoff from the project; and locations where storm

water will be discharging to state waters (including wetlands).

- f. Locations of all potential pollutant-generating activities.
- g. Locations of storm water control measures; and
- h. Locations where chemicals will be used and stored.

7. **Construction site pollutants generated by on-site activities.** For each pollutant-generating activity, an inventory of pollutants or pollutant constituents (e.g., sediment, fertilizers and/or pesticides, paints, solvents, fuels) associated with that activity, which could be exposed to rainfall and could be discharged from the construction site (include potential spills and leaks).

A list of all materials and heavy equipment to be used during construction. Vehicles and equipment shall be well maintained and free from any type of fluid leaks.

8. **Sources of non-storm water**, including, but not limited to, the design, installation, and maintenance of the control measures to prevent its discharge.
9. **Buffer documentation.** When a State water is located within 50 feet of the project's earth disturbances, the Contractor shall describe which compliance alternative has been selected for the site, and comply with Section 5.1.2.1 of HAR 11-55, Appendix C.
10. **Description of storm water control measures** to be used during construction activity including information on:
- a. Storm water control measures to be used during construction activity meet the requirements of Section 5 of HAR 11-55, Appendix C.
 - i. Information on the type of storm water control measure to be installed and maintained, including design information;

- ii. What specific sediment controls will be installed and made operational prior to conducting earth-disturbing activities in any given portion of the site to meet the requirement of Section 5.1.2.2.1 of HAR 11-55, Appendix C.
 - iii. If contaminated soil exists on-site, the control measures to either prevent the contact of storm water with the contaminated soil, including any contaminated soil stockpiles, or prevent the discharge of any storm water runoff which has contacted contaminated soil or any contaminated soil stockpiles;
 - iv. For exit points on the site, document stabilization techniques to be used and any additional controls that are planned to remove sediment prior to vehicle exit.
 - v. For linear projects, document the location where the use of perimeter controls in portions of the site is impracticable and the reason why (refer to Section 5.1.2.2.1 of HAR 11-55, Appendix C).
- b. Stabilization practices including specific vegetative and/or non-vegetative practices. Document the circumstances preventing from meeting the deadlines specified in Section 5.2.1.1 and/or 5.2.1.2 of HAR 11-55, Appendix C.
 - c. Post-construction measures that will minimize the discharge of pollutants via storm water discharges after construction operations have been finished.

11. **Pollution prevention procedures.**

- a. Spill prevention and response procedures, including:
 - i. Procedures for expeditiously stopping, containing, and cleaning up spills, leaks,

and other releases. Identify the name or position of the employee(s) responsible for detection and response of spills or leaks;

- ii. Procedures for notification of appropriate facility personnel, emergency response agencies, and regulatory agencies where a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Parts 110, 117, or 302, occurs during a 24-hour period. Spill Contact information must be in location that is readily accessible and available.
- b. Waste management procedures on handling and disposing of all wastes generated at the site, including, but not limited to, clearing and demolition debris, sediment removed from the site, construction and domestic waste, hazardous or toxic waste, and sanitary waste.

The Contractor is advised to procure regulated hazardous materials on an as-needed basis, as feasible. All excess regulated hazardous materials at the conclusion of this project shall remain the property of the Contractor and shall be removed from HDOT Harbors Division property upon the completion of the project.

- 12. **Procedures for inspection, maintenance, and corrective action** to be followed for conducting site inspections, maintaining the storm water control measures, and, where necessary, taking corrective actions. Additionally, include following information in the SWPPP:

- a. Personnel responsible for conducting inspections;
- b. Inspection schedule. Contractor's Self-Inspections shall be conducted at applicable schedules listed below. Note that inspections are only required during the project's normal working hours.

- i. **Inspection Frequency for sites discharging to impaired waters¹.** For any portion of the site that discharges to an impaired water, the inspection shall be conducted at the following intervals:
 - (a) Once every seven (7) calendar days; and
 - (b) Within 24 hours of the occurrence of the storm event of 0.25 inches or greater.
 - (c) Daily during periods of a prolonged storm event of 0.25 inches or greater.
- ii. **Inspection Frequency for sites NOT discharging to impaired waters.** At a minimum, the inspection shall be conducted in accordance with one of the two schedules listed below:
 - (a) At least weekly; or
 - (b) Biweekly (once every 14 calendar days), and within 24 hours of the occurrence of a storm event of 0.25 inches or greater, daily during periods of a prolonged storm of 0.25 inches or greater, and within 24 hours after the end of the storm.
- iii. **Reductions in inspection frequency.** For stabilized areas, the Contractor may reduce the frequency of inspections to monthly

¹ “Impaired waters” are waters identified as impaired on the State Clean Water Act Section 303(d) list, and waters with a State-established and EPA-approved Total Maximum Daily Load (TMDL). The construction site will be considered to discharge to an impaired water if the first State water to which the discharge enters is to a water on the section 303(d) list or one with a State established and EPA-approved TMDL. For a discharge that enters a storm water drainage system prior to discharge, the first State water to which discharge occurs is the water body that receives the storm water discharge from the storm water drainage system.

(once per month) in any area of the site where the stabilization steps have been completed as follows:

- (a) For vegetative stabilization, all activities necessary to initially seed or plant the area to be stabilized; and/or
- (b) For non-vegetative stabilization, the installation or application of all such non-vegetative measures.

- c. Any inspection or maintenance checklists or other forms that will be used.

Contractor shall either keep a properly maintained rain gauge in a secure location to monitor rainfall at the project site, or obtain the storm event information from a weather station that is representative of the location. If a rain gauge is to be utilized to determine if a storm event of 0.25 inches or greater has occurred on the site, it must have a tolerance of at least 0.05 inches of rainfall, and an opening of at least 1-inch diameter. Install the rain gauge on the project site in an area that will not deter rainfall from entering the gauge opening. Maintain the rain gauge and replace the gauge if stolen, it does not function properly or accurately, is worn out, or needs to be relocated. Do not begin fieldwork until the rain gauge is installed and the SWPPP is in place. For any day of rainfall during normal business hours that measures 0.25 inches or greater, the Contractor shall record the total rainfall measured for that day.

- 13. **Staff training documentation** that the required personnel were trained in accordance with Section 7.2.13 of HAR 11-55, Appendix C, to ensure that all activities on the site comply with the requirements of the issued permit. The list of major required personnel is as listed below:

- a. Personnel responsible for the design, installation, maintenance, and/or repair of storm water controls (including pollution prevention measures);

- b. Personnel responsible for the application and storage of chemicals (if applicable);
- c. Personnel responsible for conducting BMP inspections;
- d. Personnel responsible for taking corrective actions

At a minimum, personnel must be trained to understand the following, if related to the scope of their job duties (e.g., only personnel responsible for conducting inspections need to understand how to conduct inspections):

- a. The location of all storm water controls on the site required by the issued permit, and how they are to be maintained;
- b. The proper procedures to follow with respect to the permit's pollution prevention requirements; and
- c. When and how to conduct inspections, record applicable findings, and take corrective actions.

The Contractor is not required to provide or document formal training for subcontractor or other outside service providers, but must ensure that such personnel understand any requirements of the permit that may be affected by the work they are subcontracted to perform. Detailed discussion is provided in Section 7.2.13.2 of HAR 11-55 Appendix C.

14. **Documentation of compliance with Safe Drinking Water Act Underground Injection Control (UIC) requirements** for certain subsurface storm water controls, if using any of the following storm water controls at the project site:

- a. Infiltration trench (if storm water is directed to any bored, drilled, driven shaft or dug hole that is deeper than its widest surface dimension, or has a subsurface fluid distribution system);

- b. Commercially manufactured precast or pre-built proprietary subsurface detention vaults, chambers, or other devices designed to capture and infiltrate storm water flow; and
- c. Drywells, seepage pits, or improved sinkholes (if storm water is directed to any bored, drilled, driven shaft or dug hole that is deeper than its widest surface dimension, or has a subsurface fluid distribution system).

15. **Other information listed below.**

- a. Contractor information (general and subcontractors) including legal name, street address, contact person's name and position title, telephone number, and email address.
- b. Other state, federal, or county permits including:
 - i. Copy of the drainage system owner's approval allowing the discharge to enter their drainage system (if applicable);
 - ii. Copy of the Department of the Army permit and Section 401 water quality certification (if applicable); and
 - iii. A list of other permits (if applicable).

16. Any other information as requested by the Director of HDOH and/or HDOT.

17. **SWPPP certification.** The owner or its duly authorized representative must certify, sign, and date the Plan in accordance with Section 15 of HAR 11-55, Appendix A.

- (b) The Contractor shall keep the current accepted SWPPP on-site or at an easily accessible location throughout the duration of the project. Revisions to the Plan shall be included with the original plan. The Contractor shall obtain written acceptance from the Construction Engineer before revising SWPPP. Additionally, the planned modifications to the BMP meeting the conditions listed in

Section 7.4.1 of HAR 11-55, Appendix C, shall be documented and updated in the SWPPP according to Section 7.4 of HAR-55 Appendix C. An updated Plan shall be kept on-site throughout the remainder duration of the project.

The Contractor shall follow guidelines in the “*The City and County of Honolulu Storm Water Best Management Practice Manual – Construction*,” (dated November 2011) in developing, installing, and maintaining BMP for the project. Follow applicable CCH *Rules Relating to Water Quality on Erosion Sediment Control Plan and Post Construction Best Management Practices for all projects at Honolulu, Kalaeloa Barbers Point, and Kahului Harbors*, and use respective Soil Erosion Guidelines for other Maui, Kauai and Hawaii County projects. Information can be found at the respective County websites.

(B) Construction Requirements are as follows

- (1) No work shall be allowed to begin until submittals detailed in Subsection 21.4(A)(2) – Temporary Water Pollution, Dust, and Erosion Control Submittals are completed and accepted in writing by the Construction Engineer. The Contractor shall prevent pollutants from entering state waters. These efforts shall address areas such as those that drain to water, are over water, or drain to storm drains in the area of the project site. The Contractor shall design, operate, implement, and maintain the Plan to ensure that storm water discharges associated with construction activities will not cause or contribute to a violation of applicable state water quality standards.
- (2) All projects at Honolulu, Kalaeloa Barbers Point, and Kahului Harbors are subject to HDOT Harbors Division SWMP requirements for construction at those harbors. The requirements include, but are not limited to, construction site BMP initial, recurring (i.e. every two weeks from October through March and every two months otherwise), and final inspections at the frequencies outlined in the SWMP. No grading or land disturbance activities are allowed until the initial BMP inspection is completed and required BMPs are found to be properly installed.
- (3) Address all comments received from the Construction Engineer.
- (4) Modify and resubmit plans and construction schedules to correct conditions that develop during construction which were unforeseen during the design and pre-construction stages.

- (5) Coordinate temporary control provisions with permanent control features throughout the construction and post-construction period.
- (6) BMP shall be in place and operational until the construction is completed and accepted by Harbors.
- (7) Install and maintain either or both stabilized construction entrances and wheel washes to minimize tracking of dirt and mud onto roadways. Restrict traffic to stabilized construction areas only. Clean dirt, mud, or other material tracked onto the road immediately. Modify stabilized construction entrances to prevent mud from being tracked onto roadways.
- (8) Chemicals may be used as soil stabilizers for either or both erosion and dust control if acceptable to the Construction Engineer.
- (9) Cover exposed surface of materials completely with tarpaulin or similar device when transporting aggregate, soil, excavated material or material that may be a source of fugitive dust.
- (10) Cleanup and remove any pollutant that can be attributed to the Contractor.
- (11) Install or modify BMP due to change in the Contractor's means and methods, or for omitted condition that should have been allowed for in the accepted SWPPP or a BMP that replaces an accepted one that is not satisfactorily performing.
- (12) Properly maintain BMP. For projects that require an NPDES Appendix C General Permit from the HDOH, inspect, prepare a **monthly compliance report**, and make repairs to BMP on a timely basis. Maintain records of BMP inspections for the duration of the project. Submit copies of the inspection reports to the Construction Engineer upon request.
- (13) Remove, replace or relocate any BMP that must be removed, replaced or relocated due to potential or actual flooding, or potential danger or damage to the project or public.
- (14) The Contractor's designated representative specified in Subsection 21.4(A)(2)(a)1. shall address any BMP concerns brought up by the Construction Engineer within 24 hours of notification, including weekends and holidays. Should the Contractor fail to satisfactorily address these concerns, the Construction Engineer reserves the right to employ outside

assistance or use the Construction Engineer's own labor forces to provide necessary corrective measures. The Construction Engineer will charge the Contractor such incurred costs plus any associated project engineering costs. The Construction Engineer will make appropriate deductions from the Contractor's monthly progress estimate. Failure to apply BMP shall result in either or both the establishment and increase in the amount of retainage due to unsatisfactory progress or withholding of monthly progress payment. Continued failure to apply BMP may result in one or more of the following: The Contractor being fully responsible for all additional costs incurred by HDOT Harbors Division including any fines levied by HDOH, suspension of the Contract, or cancellation of the Contract.

- (15) The owner or its duly authorized representative shall be responsible for fulfilling the reporting requirements (e.g., state of construction activities, incident notification) according to Section 12 of HAR 11-55, Appendix C and submittal requirements (e.g., monthly compliance report, Notice of Cessation form) according to Section 13 of HAR 11-55, Appendix C.

- (C) **Hydrotesting Activities.** If work includes removing, relocation or installing waterlines, and the Contractor elects to flush waterline or discharge hydrotesting effluent into state waters or drainage systems, obtain a Notice of General Permit Coverage (NGPC) authorizing discharges associated with hydrotesting waters from the HDOH Clean Water Branch (CWB). If a permit is required, prepare and submit permit application (CWB-Notice of Intent (NOI) Form F) to the HDOH CWB.

Do not begin hydrotesting activities until the HDOH CWB has issued a NGPC. Hydrotesting operations shall be in accordance with conditions in the NGPC. Submit a copy of the NPDES Hydrotesting Waters Application and Permit to the Construction Engineer.

- (D) **Dewatering Activities.** If excavation of backfilling operations requires dewatering, and the Contractor elects to discharge dewatering effluent into state waters or existing drainage systems, obtain an NGPC authorizing discharges associated with construction activity dewatering from the HDOH CWB. If a permit is required, prepare and submit permit application (CWB-NOI Form G) to the HDOH CWB.

Do not begin dewatering activities until the HDOH-CWB has issued an NGPC. Conduct dewatering operations in accordance with the conditions in the NGPC. Submit a copy of the NPDES Dewatering Application and Permit to the Construction Engineer.

21.5 PAYMENT

Payment for Temporary Water Pollution, Dust, and Erosion Control shall not be measured and paid for separately. The Contractor shall consider this work incidental to the various bid items in the Proposal Schedule.

No progress payment will be authorized until the Construction Engineer accepts in writing the SWPPP or when the Contractor fails to maintain the project site in accordance with the accepted SWPPP.

The Contractor shall reimburse the State of Hawaii within 30-day for the full amount of all outstanding costs incurred by the State of Hawaii for all citations or fines received as a result of the Contractor's non-compliance with regulations.

END OF ARTICLE

ARTICLE XXII – MISCELLANEOUS METALS

22.1 GENERAL

The work consists of furnishing equipment, materials, labor and appliances and perform all work in connection with installation of miscellaneous metal items necessary for the job in accordance with this Article of the specifications and the standard specifications, Section 712.07.

22.2 DESCRIPTION

- (A) Manhole frames and covers and drainage grates for drainage structures
- (B) Valve covers frames and covers for valve structures
- (C) Manhole frames and covers for sewer and water drainage structures
- (D) See Article XXXI for pipe stanchions

22.3 MATERIALS

- (A) Frames and covers shall conform to Subsection 712.07(A) of the standard specifications.
- (B) Frames and grating shall conform to Subsection 712.07(B) of the standard specifications.
- (C) The manufacturer, Neenah Foundry, Neenah, WI (www.nfco.com) is indicated on the contract drawings for the purpose of indicating the quality and load-carrying capacity required for this project. Products by other manufacturers shall be submitted for review and approval by the Engineer. See Special Provision 2.7, "Request for Substitution of Specified Materials and Equipment Before Bid Opening," for the substitution requirements.

22.4 PERFORMANCE REQUIREMENTS

Manhole and grating assembly located in the cargo area of the pier shall be designed to support the equivalent Hyster H150E loading.

22.5 INSTALLATION

- (A) Set frame of manhole cover or grating level and at specified elevation in formwork of top slab. Secure in place and temporarily support from below as required. Verify cover and grating properly fit on frames prior to placing concrete.
- (B) Immediately after concrete is finished, clean frame of any splatter or concrete.

22.6 MEASUREMENT AND PAYMENT

Miscellaneous metals will not be measured or paid for separately, but shall be considered incidental to the various items of work in the Proposal Schedule.

END OF ARTICLE

ARTICLE XXIII – REINFORCED CONCRETE (CIVIL STRUCTURES)

23.1 GENERAL

The work consists of furnishing equipment, materials, labor, appliances and performing all work in connection with forming, installation, finishing, and curing necessary for the job, including waterstops and waterproofing in accordance with this Article of the specifications and the standard specifications, Sections 503, 601, 602, 705.06 and 705.07.

23.2 DESCRIPTION

- (A) Foundation and pedestals for light poles in container yard and parking lot, not including drilled shafts in container yard.
- (B) Reinforced concrete drainage and sewer structures
- (C) Retaining walls
- (D) Miscellaneous concrete site work items
- (E) Installation of waterstops as specified.
- (F) Providing and installing exterior waterproofing on below-grade surfaces where specified

See Article XXXII for drilled shaft specifications.

23.3 FORMS

- (A) Forms shall conform to the requirements in Section 503.03(C) of the standard specifications.
- (B) Removal of light pole pedestal forms shall not occur until a minimum of 24 hours after the concrete was finished or the concrete has achieved adequate strength as to not be damaged during form removal, whichever is longer.
- (C) For concrete structures other than the light pole pedestals, form removal time shall be as indicated in Section 503.03(D) and Table 503.03-1.

23.4 REINFORCING STEEL

- (A) Reinforcing steel materials shall conform to Section 602.01 of the standard specifications, ASTM A615, grade 60 and be epoxy-coated in conformance with ASTM A775.

- (B) Reinforcing steel fabrication, placement and quality control measures shall be in accordance with the applicable items specified in Section 602 of the standard specifications.
- (C) Shop drawings that detail fabrication, bending, and placement shall be submitted for review. Include bar sizes, lengths, material, grade, bar schedules, stirrup spacing, bent bar diagrams, bar arrangement, splices and laps, mechanical connections, tie spacing, hoop spacing, and supports for concrete reinforcement.

23.5 CONCRETE

- (A) Materials for concrete, concrete mix requirements and quality control shall be as stated in Section 601 of the standard specifications. All reinforced concrete drainage structures that are located within the container yard shall include Type F fly ash, in accordance with the following requirements:
 - a. All fly ash used in the concrete mix design for drainage structures shall be in accordance with ASTM C618-15.
 - b. Test methods for sampling and testing fly ash shall be in accordance with ASTM C311.
 - c. Fly ash quantity shall be between 25% and 30% by mass of the cementitious material in the mixture.
 - d. The contractor shall submit a certification from the supplier that the fly ash conforms to all applicable requirements of ASTM C618. An example certification report can be viewed in the ASTM C618-15 document.
 - e. Type II cement shall be used.
- (B) Concrete for structures and foundations shall have the following minimum 28 day compressive strengths:
 - 1. Water structures 4,500 psi
 - 2. Pipe stanchions 3,000 psi

See Article 29 for drilled shaft concrete specifications.

Maximum size aggregate in mix design shall be in accordance with standard specifications, Section 601.03(B).

- (C) Mix design requirements for other strength concrete shall be in accordance with Table 601.03-1 of the standard specifications. The mix design for each strength of concrete shall be submitted to the Engineer for review prior to pouring.

- (D) Contractor shall submit a plan showing location of all construction and expansion joints. Location of construction joints is subject to approval of the Engineer.

23.6 WATERSTOPS

- (A) Materials for embedded Stainless Steel waterstops shall conform to ASTM A 240 (type 316ELC), be 20 gauge thick, and be manufactured specifically as a waterstop, with outer flanges and center “V”, as opposed to flat steel.

- (C) Stainless Steel Waterstop shall conform to the following minimum physical properties:

Property	Test Method	Required Results
Tensile Strength	ASTM A 240	70,000 psi
Elongation in 2" minimum	ASTM A 240	40%
Yield Strength	ASTM A 240	25,000 psi
Rockwell B Hardness	ASTM A 240	95

Unless otherwise specified or indicated on the drawings provide the following types:

- Part No. JP558** — 6", 20 gauge, 316 extra low carbon, “W” shaped, as manufactured by **JP Specialties, Inc.**, or approved equal.
 - Part No. JP558R** — 6" retrofit, 20 gauge, 316 extra low carbon, joins to “W” shaped material (558), as manufactured by **JP Specialties, Inc.**, or approved equal.
- (D) Waterstops shall have all change-in-direction joint splices miter cut and factory-fabricated with T.I.G. weld to provide maximum tensile strength. Only butt joint splices shall be performed in the field. Splice embedded waterstops as recommended by manufacturer using the recommended tools.
- (E) Vertically oriented embedded waterstops shall have the edge of the waterstop secured by tying at 12 maximum spacing with wire and hog rings pierced into the ridding of the waterstop. Provide a minimum clearance from the waterstop to reinforcing steel of two times the largest aggregate size.
- (F) Waterstops shall be installed at the locations shown to form a continuous fluid-tight diaphragm. Adequate provision shall be made to support and completely protect the waterstops during the progress of the work. Exposed waterstops shall be protected during application of form release agents to avoid being coated. Suitable guards shall be provided to protect exposed projecting edges and ends of partially embedded waterstops from damage when concrete placement has been discontinued. Splices

shall be made by certified, trained personnel using approved equipment and procedures.

- (G) Splices in stainless steel waterstops shall be welded using a TIG process utilizing a weld rod to match the stainless (weld rod: 316ELC; diameter — .035 to .045). Damaged waterstops shall be repaired by removing damaged portions and patching. Patches shall overlap a minimum of 1 inch onto undamaged portion of the waterstop. Weld all straight run material edge-to-edge (no overlapping).
- (H) Follow manufacturer's recommendations for preparation and installation of waterstops.

23.7 WATERPROOFING

- (A) Materials for waterproofing system consisting of asphalt primer, hot asphalt and fabric shall conform to subsection 705.06 of the Standard Specifications.
- (B) Exterior waterproofing shall be installed on vertical and horizontal surfaces of below-grade structures where specified and like-surfaces as those specified.
- (D) Prepare surface and install waterproofing system as specified in subsection 503.03(H) of the Standard Specifications.

23.8 CONCRETE PLACEMENT

- (A) Verify all embedded items are properly located and secured in place prior to beginning concrete placement.
- (B) Concrete shall be placed in accordance with the applicable items specified in Section 503.03(F)(1) of the standard specifications.
- (C) Concrete shall be place with the aid of closed chute or pipe from no higher than five (5) feet. Aluminum chutes, tremies, troughs and pipes are not permitted to be used to convey concrete.
- (D) Consolidation of concrete shall be as specified in Section 503.03(G)(2)(f) of the standard specifications. Special care to properly consolidate concrete around embedded waterstops shall be taken to avoid voids.
- (E) The concrete shall be protected from injurious action as required in Section 503.03(K) of the standard specifications.

23.9 CURING OF CONCRETE

- (A) The curing of the concrete shall be in accordance with Section 503.03(L) of the standard specifications.
- (B) The concrete light pole pedestals shall be cured by either the water curing [Section 503.03(L)(1)] or the impervious membrane [Section 503.03(L)(2)] methods as specified in the standard specifications.
- (C) All drainage structures shall be cured by the water method only.
- (D) The site work concrete shall be cured by the water curing method only.
- (E) Concrete shall be cured for a period of time as specified in Section 503.03(K) of the standard specifications.

23.10 CONCRETE FINISH

- (A) Concrete finish work in general shall conform to Section 503.03(M) of the standard specifications.
- (B) The concrete finish for surface of pedestal shall be a Class 2 rubbed finish as described in Section 503.03(M)(2) of the standard specifications.
- (C) The exposed surface of concrete drainage structures shall have a light broom finish with a Class 6 Float Finish as described in Section 503.03(M)(3)(b) of the standard specifications for sidewalks and median strips. The interior of the structures shall be provide with a Class 2 Rubbed finish [Section 503.03(M)(2)] and the below grade exterior surfaces shall be provided with a Class 1 Ordinary Surface Finish as described in Section 503.03(M)(1) of the standard specifications.

23.11 CONCRETE REPAIR

- (A) After forms are removed the concrete surface shall be examined for any surface irregularities or rock pockets. Any defects observed shall be brought to the attention of the Engineer and shall be repaired to the satisfaction of the Engineer with no additional cost to the State.
- (B) The area of the defect shall be removed down to sound concrete. Prepare surface as recommended by patch material manufacturer. A manufactured, one-component, non-shrink, cementitious trowel-grade patch material with a minimum 28-day compressive strength of 6,000 psi shall be scrubbed into the exposed surface prior to installing the patch material. The patch material shall be extended with sand aggregate and installed in accordance with the manufacturer's recommendations.
- (C) The patch shall be surface finished to match the surround surface and cured as required by the manufacturer.

- (D) Acceptable products include, "Thorite Rapid Vertical" by Thoro BASF, "Trowel-Grade Mortar w/ CI" (CR701CI) by STO, or approved equal.

23.12 INSPECTION

- (A) Engage a qualified testing and inspecting agency to perform tests and inspections and to submit reports
- (B) The contractor shall be responsible for ensuring that special inspection of portions of the work as required by the building code is made at the appropriate time. The contractor shall submit statement of responsibility to the State and building department prior to the commencement of work. The contractor shall give timely notice of when and where inspections are to be made and provide access for the inspector. Frequency of inspection is defined in the IBC, section 1704 tables, as amended by the City. The contractor shall correct defective work at no additional cost to the State and pay for re-inspection as required.
- (C) Special inspectors shall keep records of inspections. Reports shall indicate that work inspected was done in conformance with approved construction documents. The inspector shall submit a final signed report to the State and Engineer who in turn shall submit a written statement to the City certifying receipt of the final inspection letter and documenting that there are no known unresolved code requirements.

23.13 MEASUREMENT AND PAYMENT

Reinforced concrete and the related work described in the article will not be measured or paid for separately, but shall be considered incidental to the various items of work in the Proposal Schedule.

END OF ARTICLE

ARTICLE XXIV - WATER SYSTEM

24.1 DESCRIPTION

This work includes the construction of water lines, fire hydrants and appurtenances, including abandoned lines.

24.2 GENERAL REQUIREMENTS

- (A) In general, the provisions of Section 624 - Water System of the "Standard Specifications" shall apply except as hereinafter modified.
- (B) The following construction standards, with certain modifications as hereinafter specified, are hereby incorporated into and made a part of these specifications by reference and shall be applicable to all work performed by the Contractor under this section.
 - 1. "Water System Standards", dated 2002, of the Board of Water Supply, City and County of Honolulu.
 - a) Paragraphs relating to Measurement and Payment in the Standards are not applicable to the project.
 - b) The sixth paragraph of Section 302.22 shall be revised to read as follows:

"Due to varying soil conditions, whenever test or thrust blocks or beams for horizontal or horizontal-vertical bends are required, the stamped and signed dimensions and details of the blocks or beams shall be furnished by a licensed structural engineer in the State of Hawaii retained by the Contractor. The design of the blocks shall be furnished by the licensed structural engineer after the Contractor has excavated the trench at the required location to verify the ground conditions."
- (C) Contract time of completion includes all connections to existing water systems, payment of Water System Facilities Charges, chlorination, testing, and initiation of water service.
- (D) Hydrotesting activities shall conform to the requirements of Article XXI – Temporary Water Pollution, Dust, and Erosion Control.
- (E) The Contractor shall provide ductile iron pipe, class 53, and ductile iron fittings, AWWA C153, with a bonded dielectric in accordance with the Board of Water Supply "Water System Standards" and the Board of Water Supply "External Corrosion Control Standards." The requirements for cathodic protection shall not apply to this project.
- (F) The Contractor shall provide shall provide Type K copper pipe for all service laterals in accordance with the Board of Water Supply "Water System Standards."

24.3 ELECTRONIC MARKERS

- (A) Electronic markers shall be manufactured by Tempo, "Omni Marker", Model 161 or approved equal.

Manufacturer/ Product	Color	Frequency	Model Number	UPC Number
Tempo Omni Marker	Blue	145.7 kHz	Model 161	60766

- (B) Electronic markers shall be installed at the following locations to provide adequate coverage and location of important points of the installed pipe:

- One marker every two lengths of joints.
- One marker 10 feet prior to the change in alignment.
- One marker on the bend.
- One marker 10 feet after the change in alignment.
- One marker on each cleanout or end of main.

An electronic marker shall be located over each installed deflection coupling. An electronic marker shall be installed at all fittings.

24.4 ELECTRONIC MARKER READERS

- (A) Electronic marker readers shall be both sonic and digital types

24.5 MODIFICATIONS TO SECTION 624 - WATER SYSTEM

Make the following amendment to said Section:

- (I) Amend **Section 624.04 - Measurement** to read as follows:

- "(A) **Excavation.** Excavation for water system work and separation of excavated materials will be paid for under Article XVII – Handling and Removal of Contaminated Materials Encountered During Construction.
- (B) **Backfill.** Quantities for backfill will not be measured by the Engineer. Payment for backfill shall be included in the various lump sum costs of the water system appurtenances.
- (C) **Pipe and Fittings.** Quantities for pipe will be measured per linear foot by the Engineer. Fittings and warning tape shall not be measured separately, and shall be considered incidental to the pipe.
- (D) **Water System.** Water system appurtenances shall not be measured separately. The Engineer shall consider the items listed incidental to the water system appurtenances in each item of water system appurtenances work.
- (1) Gate Valves (Hub Ends, Mechanical Joints and Flanged).
 - (2) Gate Valve Boxes and Covers.
 - (3) Copper Pipes and Appurtenances.

- (4) Service Laterals, Irrigation Laterals, and Service Connections. Fittings, appurtenances, cutting and plugging, and pipe sleeve installation and other incidentals.
- (5) Temporary Bypass for Water Line, including pipe, fittings, temporary gate valves, gate valve boxes and covers, air relief valves, and air relief valve boxes and covers.
- (6) Air Relief Valves.
- (7) Air Relief Valve Boxes and Covers.
- (8) Manholes.
- (9) Fire Hydrants (above ground and flush mount, inclusive of cover and appurtenances).
- (10) Test Blocks.
- (11) Reinforced Concrete Jacket, Thrust Blocks, and Thrust Beams.
- (12) Pipe Test.
- (13) Valve Markers.
- (14) Electronic Markers.
- (15) Pipe Risers, Fittings, and Couplings.
- (16) Connections to existing water systems.
- (17) Chlorination and Testing
- (18) Leak Detection Wells
- (19) Pipe Stanchions
- (20) Any other items related to the construction of the water system appurtenances."

(II) Amend **Section 624.05 Payment** to read as follows:

- "(A) **Excavation.** Excavation for water system work and separation of excavated materials will be paid for under Article XVII – Handling and Removal of Contaminated Materials Encountered During Construction.
- (B) **Backfill.** The Engineer will not pay for the accepted quantities of backfill according to Section 204 – Excavation and Backfill for Miscellaneous Facilities and modified in Subsection 624.04(B) – Backfill.

The price shall be full compensation for furnishing all labor, materials, equipment, tools, and incidentals necessary to complete the work.

- (C) **Pipe and Fittings.** The Engineer will pay for the accepted quantities of pipe and fittings at the contract price per linear foot installed, as shown in the Proposal Schedule.

The price shall be full compensation for furnishing all labor, materials, inclusive of fittings, equipment, tools, and incidentals necessary to complete the work.

The Engineer will pay for the accepted quantities of pipe and fittings at the contract price per linear foot installed, for the 1-1/2" diameter pipe for the domestic water system and fire protection water system, as part of Additive Alternate #1.

The price shall be full compensation for furnishing all labor, materials, inclusive of fittings, equipment, tools, and incidentals necessary to complete the work.

- (D) **Water System Appurtenances.** Water system appurtenances shall not be measured separately. The Engineer shall consider the items listed incidental to the water system appurtenances in each item of water system appurtenances work.

- (1) Gate Valves (Hub Ends, Mechanical Joints and Flanged).
- (2) Gate Valve Boxes and Covers
- (3) Copper Pipes and Appurtenances.
- (4) Service Laterals, Irrigation Laterals, and Service Connections. Fittings, appurtenances, cutting and plugging, and pipe sleeve installation and other incidentals.
- (5) Temporary Bypass for Water Line.
- (6) Air Relief Valves.
- (7) Air Relief Valve Boxes and Covers
- (8) Manholes.
- (9) Fire Hydrants (above ground and flush mount, inclusive of cover and appurtenances).
- (10) Test Blocks.
- (11) Reinforced Concrete Jacket, Thrust Blocks, and Thrust Beams.
- (12) Pipe Test.
- (13) Abandoning Existing Cast Iron Pipe. The Engineer will not pay for removal, plugging with Class "C" concrete, or filling with flowable fill of the abandoned portion of the existing mains and appurtenances, exclusive of excavation, and other related work and materials separately.

- (14) Adjusting Existing Manholes. The Engineer will not pay for the accepted quantities for adjusting existing manholes to new grades according to Section 604 - Manholes, Inlets and Catch Basins.
- (15) Water Supply for Construction. The Engineer will not pay for the cost for the installation and disconnection of the meters, used for water supply, and replacement and repairs separately.
- (16) Temporary Cleanout. The Engineer will not pay for furnishing and installing temporary cleanouts separately.
- (17) Valve Markers. The Engineer will not pay for furnishing and installing valve markers separately.
- (18) Manufacturer's Certificate of Test. The Engineer will not pay for the cost of the Manufacturer's Certificate of Test according to Subsection 624.02 - Materials. The Engineer will consider them incidental to the various contract items in the proposal.
- (19) Electronic Markers.
- (20) Electronic Marker Reader.
- (21) Pipe Risers, Fittings, and Couplings.
- (22) Connections to existing water systems.
- (23) Chlorination and Testing (including submittal of chlorination certificate)
- (24) Leak Detection Wells
- (25) Pipe Stanchions
- (26) Any other items related to the construction of the water system appurtenances"

The Engineer will make payment under:

ITEM NO.	PAY ITEM	PAY UNIT
4.	Water system appurtenances, inclusive of backfill; crushed rock backfill and dewatering; air relief valves, fire hydrants, laterals and lateral connections, gate valves, cast iron valve and air relief valve boxes and covers, structures, leak detection wells, electronic markers and electronic marker readers (2 each), fittings, and couplings; concrete for reinforced concrete jacketing and reaction blocks; bollards; materials for connections; chlorination, flushing and testing; NPDES requirements; and all other materials, equipment and labor required to construct the water system, in place, complete.	Lump Sum
5.	6" diameter pipe and fittings for domestic water system and fire protection water system construction, inclusive of all labor, material, equipment, tools, and incidentals required to construct the pipelines, in place, complete.	Linear Foot
6.	8" diameter pipe and fittings for domestic water system and fire protection water system construction, inclusive of all labor, material, equipment, tools, and incidentals required to construct the pipelines, in place, complete.	Linear Foot
7.	12" diameter pipe and fittings for domestic water system and fire protection water system construction, inclusive of all labor, material, equipment, tools, and incidentals required to construct the pipelines, in place, complete.	Linear Foot

END OF ARTICLE

ARTICLE XXV – SIGNAGE AND PAVEMENT MARKINGS

25.1 DESCRIPTION

The work shall consist of providing signage and removing and installing temporary and permanent pavement markings in accordance with the requirements of the contract or as established by the Construction Engineer.

25.2 GENERAL REQUIREMENTS

In general, the provisions of Section 629 - Pavement Markings and Section 631 – Traffic Control Regulatory, Warning, and Miscellaneous Signs of the "Standard Specifications" shall apply except as hereinafter modified:

- (1) 629.04 Measurement and 629.05 Payment are deleted.
- (2) 631.04 Measurement and 631.05 Payment are deleted.

The Contractor shall provide retroreflective thermoplastic compound pavement markings within the project site.

25.3 MEASUREMENT AND PAYMENT

Signage and pavement markings will be paid for at the lump sum price bid for pavement markings in the Proposal Schedule. Payment shall be full compensation for: signage, posts, and fittings; removal of existing markings in areas where existing pavement is to remain; temporary pavement markings; new pavement markings; and furnishing labor, materials, tools, equipment, and incidentals required to complete the work.

ITEM NO.	PAY ITEM	PAY UNIT
9.	Signage and pavement markings, in place, complete.	Lump Sum

END OF ARTICLE

ARTICLE XXVI - PRIME COAT

26.1 DESCRIPTION

This work includes the furnishing and application of prime coat for asphalt concrete pavements.

26.2 SPECIAL REQUIREMENTS

(A) In general, the provisions of Section 404 – Slurry Seal and Section 702.04 – Emulsified Asphalt (Type SS-1h, CSS-1h) of the "Standard Specifications" shall apply except as hereinafter modified:

(1) 404.04 Method of Measurement and 404.05 Basis of Payment are deleted.

26.3 MATERIALS

Emulsified asphalt shall be SS-1h.

26.4 MEASUREMENT AND PAYMENT

Prime coat will not be paid for separately, but will be considered incidental to the asphalt concrete pavement items in the Proposal Schedule.

END OF ARTICLE

ARTICLE XXVII - TACK COAT

27.1 DESCRIPTION

This work includes the furnishing and application of tack coat for asphalt concrete pavements.

27.2 SPECIAL REQUIREMENTS

(A) In general, the provisions of Section 407 - Tack Coat of the "Standard Specifications" shall apply except as hereinafter modified:

(1) 407.04 Method of Measurement and 407.05 Basis of Payment are deleted.

27.3 MEASUREMENT AND PAYMENT

Tack coat will not be paid for separately, but will be considered incidental to the Asphalt Concrete Pavement items in the Proposal Schedule.

END OF ARTICLE

ARTICLE XXVIII – HOT MIX ASPHALT CONCRETE BASE COURSE

28.1 DESCRIPTION

This work shall consist of constructing hot mix asphalt concrete base course on a prepared subbase, including cold-planing and overlaying hot mix asphalt concrete base course on an existing subbase, in accordance with the requirements of the contract.

28.2 GENERAL REQUIREMENTS

The provisions of Section 301 – Hot Mix Asphalt Base Course of the "Standard Specifications" shall apply except as hereinafter modified:

(A) 301.04 Measurement and 301.05 Payment are deleted.

28.3 MEASUREMENT AND PAYMENT

Hot mix asphalt concrete base course, including bituminous material, tack coat, prime coat, and cold-planing, will be paid for on a contract price per unit basis in the Proposal Schedule, complete in place. Payment shall be full compensation for all tools, material, labor, and appurtenances to complete the work, in accordance with the construction documents, in place, complete.

ITEM NO.	PAY ITEM	PAY UNIT
8.	26" thick hot mix asphalt concrete base course, in place, complete.	Lump Sum

END OF ARTICLE

ARTICLE XXIX - TRAFFIC CONTROL

29.1 GENERAL

In general, the applicable provisions of Section 645 – Work Zone Traffic Control of the "Standard Specifications" shall apply except as hereinafter modified:

- (A) The Contractor shall submit a detailed Traffic Control Plan to the Construction Engineer for approval at least 15 days before work on that phase commences. All items as specified in Section 645.03 shall be provided. Additional items shall include the location and installation of gate(s) in the container yard fencing for construction access, and the location and marking of all barriers and temporary fencing for the Construction Storage and Staging area.
- (B) Traffic Plates. Skid resistant plates shall be used. Plates shall be rated and secured to permit the safe passage of all container yard traffic under maximum load conditions, including top pick and Fantuzzi carriers, forklifts, and semi-trailers.
- (C) The Contractor shall remove all concrete barriers, temporary signs, temporary striping, and all other Contractor-owned temporary traffic control devices off of the State Department of Transportation, Harbors Division's property after construction is complete.

29.2 PAYMENT

The Engineer will make payment under:

ITEM NO.	PAY ITEM	PAY UNIT
10.	Traffic Controls, in place, complete.	Lump Sum

END OF ARTICLE

ARTICLE XXX – CONSTRUCTION PROGRESS DOCUMENTATION

30.1 GENERAL

Scheduling of Work performed by the Contractor under this Contract shall be in accordance with the requirements of this Section.

- (A) The requirements specified herein are established to ensure adequate planning, scheduling, management, and execution of the Work by the Contractor and to enable the State to evaluate progress and validate the Contractor payment requests.
- (B) Development of the Baseline Project Schedule (BPS), cost and resource loading of the BPS, monthly Project Schedule Updates, payment requests, and Project status reporting requirements of the Contract shall employ computerized Critical Path Method (CPM) scheduling, using project scheduling software such as Microsoft Project, or other equivalent software as approved by the Engineer.
- (C) Submit schedules and reports as specified in this Section, but at a minimum once per month with the Contractor's payment request.
- (D) The Baseline Project Schedule shall be based on and incorporate Contract milestones and completion dates specified in the Contract Documents. In addition, the Contractor shall establish intermediate milestones as necessary to develop the BPS. Such intermediate milestones must be submitted and accepted by the Engineer before they can be incorporated in the Contractor's BPS or subsequent updates to the BPS.
- (E) The Baseline Project Schedule shall be the basis for evaluating job progress, payment requests, and time extension requests. Responsibility for developing the BPS and maintenance of the updated current Project Schedule to monitor actual progress against the Baseline Project Schedule (BPS) rests with the Contractor. Failure to produce and maintain schedules in accordance with this Section and that accurately reflect the true progress of the job may result in the Engineer withholding authorization of progress payment requests.
- (F) Failure of the Baseline Project Schedule to include any element of the Work or any inaccuracy in updates to the Project Schedule will not relieve the Contractor from responsibility for accomplishing the Work in accordance with the Contract. The State's acceptance of the BPS and updates to the Project Schedule shall be for use in monitoring and evaluating job progress, payment requests, and time extension requests, and shall not, in any manner, impose a duty of care upon the State, or act to relieve the Contractor of its responsibility for means and methods of construction.
- (G) Contract time extensions for Contract performance will be granted only to the extent that delays or disruptions to affected Work paths exceed total float along those paths of the current and updated Project Schedule approved by the Engineer in effect at time of the delay or disruption. Such delays or disruptions must also cause the end date of Work to exceed the current Substantial

Completion Date and must be beyond the control and without fault or negligence of the Contractor or any Contractor's subcontractor at any tier.

- (H) Early Project completion (as in the difference between early completion and contract date) is float to the benefit of the Project.

30.2 SUBMITTALS

(A) Baseline Project Schedule

The Contractor shall develop, submit, and maintain a cost-loaded Baseline Project Schedule (BPS) within 30 days after NTP to effectively manage and control the performance of the Work. The BPS shall represent the Contractor's plan to complete the Work within the Contract time. The BPS shall logically incorporate all design and construction activities for the entire Project under this Contract. BPS Requirements include, but are not limited to, the following:

1. The BPS shall include required milestones.
2. The CPM shall be extracted, identifying the BPS critical path and longest path.
3. Use of float-suppression techniques such as preferential sequencing or logic, special lead/lag logic restraints, and extended activity time or duration are prohibited. Use of any network technique solely for purpose of suppressing float shall be cause for rejection of schedule submittal.
4. The Contractor shall provide the BPS electronically in Microsoft Project (.mpp) and Adobe (.pdf) formats. The diagram shall clearly show activities on the critical path, including the following for each activity:
 - a. Activity ID;
 - b. Activity Description;
 - c. Original Duration in Work Days;
 - d. Remaining Duration;
 - e. Percent Complete;
 - f. Early Start Date;
 - g. Early Finish Date; and
 - h. Total Float.
5. The activity codes as described below shall be included in the BPS.

6. At a minimum, the Contractor shall establish activity codes for each of items listed below. Once established, activity codes and values cannot be changed without approval of the Officer-in-Charge:
 - a. Phase: All activities shall be assigned a 4-digit code value based on the phase of the Work it occurs in.
 - b. Area Code: All activities shall be assigned an area code value identifying the area in which the activity occurs. Activities shall not belong to more than one area. "Area" is defined as a distinct space, function or activity category. (C) Work Item: All activities in the BPS shall be assigned a 4-digit Work Item Code value.
 - c. Work Item: All activities in the BPS shall be assigned a 4-digit Work Item Code value.
 - d. Location: Assign a 4-digit location code value to all activities to identify the location within the Area or Work Item that an activity is occurring.
 - e. Responsibility Code: All activities in the BPS shall be identified with the party responsible for completing the task. Activities shall not belong to more than one responsible party.
 - f. Project Start Date Milestone: The first activity on the schedule is "Contract Execution," which shall have a mandatory start constraint equal to the Contract execution date (when all parties have executed the Contract); that is, the first activity shall be the Contract execution date.
 - g. Projected Substantial Completion Milestone: The BPS shall include an unconstrained finish milestone entitled, "Project Substantial Completion." Final Acceptance and Contract Completion Date milestone must be its only successor.
7. Other requirements of the BPS shall include, without limitation, as follows:
 - a. Construction activities are to be shown in work days (material procurement can be in calendar days.);
 - b. Approvals, tests or inspections required by or performed by regulatory agencies or other third parties;
 - c. Dependencies (or relationships) between activities;
 - d. All sample submittals, sample review/approval, procurement, manufacture, manufacturer test, test report preparation, delivery and installation activities, for all major materials and equipment;
 - e. Show procurement of major equipment, through receipt and inspection at job site, as a separate activity. Include time for

fabrication and delivery of manufactured products for Work and dependencies between procurement and construction activities;

- f. Include in the activity description what Work is to be accomplished and where.
- g. Identify the activities that constitute the controlling operations or critical path. No more than twenty-five percent (25%) of the activities shall be critical or near critical. Near critical is defined as float in the range of one (1) to ten (10) working days;
- h. Show the interface with Work of other contractors and other agencies such as utility companies, including access to and availability of Work areas;
- i. Once an activity exists on the schedule it may not be deleted or renamed to change the scope of the activity and shall not be removed from the schedule logic without approval of the Engineer. The ID number for a deleted activity shall not be re-issued for another activity;
- j. Contractor shall distribute the BPS to subcontractors for review and written acceptance.

Submittal of the BPS and subsequent schedule updates, shall be understood to be the Contractor's representation that the schedule meets requirements of the Contract and that the Work shall be executed in sequence on the schedule.

(B) SCHEDULE ACCEPTANCE PRIOR TO START OF WORK

- 1. The Contractor shall schedule a preliminary meeting after Contract execution to discuss the proposed schedule and requirements prior to the Contractor preparing the BPS.
- 2. The State's review and comments to the Contractor's BPS shall not relieve the Contractor from compliance with requirements of the Contract. Submittal of an "early completion" schedule will not obligate the State for delay damages resulting from an event that delays the "early completion" but does not delay the Contract completion date.
- 3. The Contractor's submittal of the BPS shall be a condition precedent to starting construction Work under the Contract and acceptance of the BPS shall be a condition precedent to processing the Contractor's pay request for activities of Work items Completed.
- 4. Submittal of the BPS and subsequent updated Project schedules shall be understood to be the Contractor's certification that the submitted schedule meets all of the requirements of the Contract, represents the Contractor's plan on how the Work shall be accomplished, and accurately reflects the Work that has been accomplished and how it was sequenced (as-built logic).

(C) REQUIRED TABULAR REPORTS

The following reports shall be included with the BPS and updated Project Schedules:

1. Log Report: Provide a log report that lists all changes made between the previous schedule and current updated schedules.
2. Narrative Report: Each entry in the narrative report will cite the respective Activity ID and Activity Description, the date and reason for the change, and the description of the change. Each narrative report shall identify and justify:
 - a. Progress made in each area of the Project;
 - b. Critical path;
 - c. Date/time constraint(s) other than those required by the Contract;
 - d. Changes in the following:
 - (i) Added or deleted activities;
 - (ii) Original and remaining durations for activities that have not started;
 - (iii) Logic;
 - (iv) Milestones;
 - (v) Planned sequence of operations;
 - (vi) Critical path; and
 - (vii) Cost loading.
 - e. Any decrease in previously reported activity earned amount;
 - f. Pending items and status thereof, including permits, change orders, and time extensions;
 - g. Status of Contract Completion Date and interim milestones;
 - h. Current and anticipated delays (describe cause of delay and corrective actions); and
 - i. Description of current and future schedule problem areas.
3. Earned Value Report: All listed activities shall be cost-loaded and have a budget amount. The earned value report shall include the compilation of total earnings on the Project from the Notice to Proceed to the current

progress payment request. The report shall show the current budget, previous physical percent complete, to-date physical percent complete, previous earned value, to-date earned value and cost to complete on the report for each activity.

4. Schedule Variance Control (SVC) Diagram: With each schedule submission, Contractor shall provide a SVC diagram showing: (A) cash flow s-curves indicating planned project cost based on projected early and late activity finishing dates, and (B) earned value to date. The cash flow s-curves shall be revised when the Contract is modified or as directed by the Officer-in-Charge.

(D) Schedule of Cost Loading and Cash Flow Projection

1. Along with the Project Schedule submittal, and each Monthly Updated Project Schedule and subsequent revisions, the Contractor must also submit a Schedule of Cost Loading and Cash Flow Projection which shall show the following:
 - a. The amount(s) billed for each of the previous months, the amount(s) being billed in the current month, and the anticipated amount(s) to be billed for each item during each of the remaining months for the duration of the project, for each of the individual bid items as well as the total amount of work.
 - b. Running total amount of work completed for each of the previous months, the running total amount of work completed as of the current month, and running total amounts expected to be accomplished at each of the remaining months of the project.
 - c. Retainage amount withheld for each of the previous months, for the current amount, and amount anticipated to be withheld for each of the remaining months of the project.
 - d. The net payment requests, accounting for amounts paid to date, retainage and monies withheld if any, for the previous months, the current month, and expected net payment requests for each of the remaining months of the project.
2. The Schedule of Cost loading and Cash Flow Projection shall be shown in tabular format and in graphic format.
3. There must be a strict correlation between the Project Schedule and the Schedule of Cost Loading and Cash Flow Projection. The timeline(s) when individual bid items are being shown as billed against, and billed for the full amount, on the Schedule of Cost Loading and Cash Flow Projection must be match the dates when activities associated with these bid items are shown to occur, and be completed, on the Project Schedule.
4. The Engineer may, at its sole discretion, request the Contractor to explain in detail the procedure used to develop the Schedule of Cost Loading and

Cash Flow Projection. The procedure is subject to the review and approval of the Engineer. Receipt and approval of the Schedule of Cost Loading and Cash Flow Projection and Summary methodology is a condition precedent to the making of any payments under the Contract. Therefore, failure to submit an acceptable methodology for the Schedule of Cost Loading and Cash Flow Projection, as well as a Schedule of Cost Loading and Cash Flow Projection based on a methodology accepted by the Engineer, shall be cause for withholding any progress payments due under this Contract

5. The first Schedule of Cost Loading and Cash Flow Projection shall be submitted within fifteen (15) calendar days after award of contract.
6. The Contractor must submit an updated Schedule of Cost Loading and Cash Flow, with each payment request, as a prerequisite for payment on any monthly invoice.
7. When an activity is deemed substantially complete by the Engineer, then such activity will no longer be treated as an activity affecting the critical path or successor activities on the Project. The cost of correction of any punch-list items associated with substantially completed activities will be covered by withheld retention or other amounts deemed by the Engineer to be adequate to cover such costs.

30.3 CURRENT PROJECT SCHEDULE

- (A) Following the acceptance of the Contractor's BPS, the Contractor shall monitor progress of the Work and adjust the schedule each month to reflect accurate progress. The monthly updated schedule submission shall be referred to as the current or updated Project Schedule.
- (B) The Contractor shall schedule and meet with the State (monthly) to discuss the current Project Schedule, progress of the Work, and any potential changes to the current Project Schedule. The Contractor shall submit all changes to the Engineer for acceptance before such changes are incorporated into the current Project Schedule. Contractor shall also bring to the State's attention the minor changes to the current Project Schedule that affect the sequences or durations. The current Project Schedule shall be updated monthly with progress (actual start dates, actual finish dates, remaining duration, and percent complete). The end of the monthly period shall be the last Friday of each month. The submission of an acceptable, Project Schedule to the State is a condition precedent to the processing of Contractor's pay request. An acceptable, updated Project Schedule shall be submitted to the Engineer regardless of whether a Contractor's pay request will be submitted electronically for the given period. The Contractor shall submit the updated current Project Schedule with the Request for Payment and shall include the required tabular reports.

30.4 PROJECT SCHEDULE REVISIONS

- (A) Updating the current Project Schedule to reflect the actual progress shall not be considered a revision to the schedule. Since scheduling is a dynamic process, revisions to activity duration, percent complete and sequence are expected on a monthly basis.
- (B) Only when revisions to the Project Schedule are necessary, the Contractor shall provide to Engineer with a written justification including full description and reason(s) for each work activity. For revisions affecting the sequence of work, the Contractor shall provide a schedule diagram comparing the original sequence to the revised sequence of work.
- (C) Pending change orders shall not be incorporated into the Project Schedule. Only after a Change Order has been approved can the changes to the schedule be made.
- (D) Schedule revisions shall not be incorporated into any schedule updates until the State has reviewed and approved the proposed changes.

30.5 FLOAT

- (A) Project Float is the length of time between the Contractor's projected contract completion date (i.e., Contractor's Early Finish Date) and the Contract Completion Date as established in the Contract.
- (B) Schedule Float should not be for exclusive use or benefit of either the State or Contractor but is an expiring resource available to both parties on a non-discriminatory basis. Float shall be used by either party, as needed to meet Contract milestones and Contract completion dates.

30.6 SCHEDULE OF VALUES; PERIODIC PAYMENT SCHEDULE

- (A) The Contractor shall extract from the BPS a Schedule of Values with projected monthly payment schedule for the life of the Project with a breakdown of the Price Items and Values of the Work to be provided under the Contract.
- (B) Within 7 calendar days of the official commencement date in the Notice to Proceed or within such further time as the Engineer may allow, the Contractor shall submit an itemized breakdown cost for each of the lump sum bid items for acceptance by the Engineer and for subsequent use as a guide in determining progress payments. The breakdown costs shall reflect a separate schedule of prices for the various items of work associated with each lump sum bid item, with adequate detail that includes but is not limited to quantities. The sum of the constituent prices, pertaining to the lump sum bid item, must equal the lump sum bid amount reflected in the Proposal. This payment schedule shall be subject to acceptance by the Engineer who, at its sole discretion, may reject it and require the Contractor to revise and submit another, or several other, payment schedules if in the Engineer's opinion the prices (in the breakdown cost) are unbalanced or the breakdown costs are not sufficiently detailed.

1. No progress payments will be processed until both parties agree to an acceptable breakdown of these bid items.
 2. The Contractor shall submit a tentative Payment Schedule to coincide with submittal of his preliminary Project Schedule.
- (B) The Contractor shall provide a projection of the monthly payment schedule for the life of the Project, referred to here as the Periodic Payment Schedule (PPS). The PPS should reflect the Project Schedule and the estimated value of the Work to be completed on a monthly or periodic basis. The PPS cumulative value shall not exceed the Total Contract Amount. The Contractor shall update and revise the PPS prior to the next pay request. Failure to make corrections will delay processing of the pay request and the periodic payment, and the State shall not be liable for any interest resulting from the delay.
1. The cost-loaded BPS will provide the basis for periodic payments and will include:
 - a. The Contractor's overhead and profit to each activity shall be evenly dispersed over the duration of the Project;
 - b. Each cost-loaded activity shall have a detailed quantity breakdown and unit of measure; and

30.7 LOOK AHEAD SCHEDULES

- (A) Contractor shall prepare rolling "Look Ahead" Schedules for each weekly or bi-weekly progress meeting. Look Ahead Schedules shall be a detailed snapshot of the current Project Schedule covering the current 4-week Work Project period, including one past week, the current week, and the two weeks looking forward. The Look Ahead Schedules shall include efforts of all subcontractors and suppliers during this current period.
- (B) Additionally, the Look Ahead Schedule shall include upcoming outages, closures, preparatory meetings, initial meetings, and critical path activities. The Look Ahead Schedule shall be a bar chart type schedule, maintained separately from the current Project Schedule in an electronic spreadsheet program and formatted to print legibly on 8.5" by 11" or 11" by 17" sheets. The preparatory and initial phases for each definable feature of Work shall be added to each 4-Week Look Ahead Schedule and will also be included in each monthly update. The Look Ahead Schedule shall be keyed to current Project Schedule activity numbers.

30.8 MEASUREMENT AND PAYMENT

Separate measurement or payment will not be made for work required under this Article. All costs in connection with the work specified herein will be considered to be incidental to the various bid items in the Proposal Schedule.

END OF ARTICLE

ARTICLE XXXI – PIPE STANCHIONS

31.1 GENERAL

The work consists of furnishing equipment, materials, labor and appliances and perform all work in connection with installation of fixed pipe stanchions necessary for the job in accordance with this Article of the specifications and the contract plans.

31.2 DESCRIPTION

Pipe stanchion, foundation and paint finish

31.3 MATERIALS

- (A) Stanchions shall be made of galvanized steel pipe conforming to ASTM A-53, Grade B or HSS pipe per ASTM A500, Grade B both with minimum ultimate tensile stress of 58,000 psi. All new stanchions shall have factory prime coat. Galvanizing of pipe shapes shall conform with ASTM A123.
- (B) All fillets and chamfers shall have 1/2 inch radius, unless noted. Sand or grind faces to true plane prior to installing stanchions.
- (C) Concrete shall have a compressive strength at 28 days of 3,000 psi. The materials used for the concrete shall be in accordance with Section 601 of the standard specifications. The proposed concrete mix design shall satisfy the requirements stated in ARTICLE XXIII – REINFORCED CONCRETE.

31.4 INSTALLATION

- (A) The foundation drilled shaft excavation shall meet the requirements of Article XXXII – “Drilled Shaft”, except that an installation plan and temporary casings are not required.
- (B) All stanchions shall be installed as indicated on the plans. All interior drilled shafts shall be filled with concrete. The space around each stanchion in the mounting recess shall be filled with specified class of concrete. The top surface of the concrete shall be sloped to drain away from the post.
- (C) The stanchion shall be positioned plumb and centered in the foundation drilled shaft.
- (D) Shop drawings that detail fabrication, bending, and placement shall be submitted for review. Include bar sizes, lengths, material, grade, bar schedules, stirrup spacing, bent bar diagrams, bar arrangement, splices and laps, mechanical connections, tie spacing, hoop spacing, and supports for concrete reinforcement.

- (E) Drill cuttings shall become the property of the contractor and shall be disposed of from State property in accordance with all local, state, and federal laws.

31.5 FINISH COATING

- (A) Protective coating for pipe stanchions shall be a three (3) coat paint system as follows. Paint coatings shall be as manufactured by ICI Devoe Coatings or approved equal.

1st coat - Prime coat using ICI Devoe Coatings CATHA-COAT 302H Reinforced Inorganic zinc Primer or approved equal. Minimum dry film thickness 3 mils. Spray apply only. Stripe coat all inside and outside angles and edges.

2nd coat - DEVRAN 224 HS High Build Epoxy Coating or approved equal. Minimum dry film thickness of 5 mils for each coat.

3rd coat - DEVTHANE 379 Aliphatic Urethane Gross Enamel or approved equal. Minimum dry film thickness 5 mils.

- (B) Final coating color shall be safety yellow or as indicated in the construction plans.
- (C) The Contractor shall provide a one year warranty of coating against fading, falling, blistering, and chipping.
- (D) Surface Preparation: New Ferrous Steel

Prepare surfaces to receive coating in strict compliance with Steel Structures Painting Councils' Surface Preparation Standards. SSPC-Vis-1-02 (or most recent update) shall be used as a guide to judge abrasive blasted surface areas. Areas of oil and extraneous materials on surfaces to be coated shall be cleaned with clean petroleum solvents and then blast cleaned according to SSPC-SP6 "Commercial".

- (E) Inspections and Approvals: All materials shall be applied in accordance with its Product Data Sheets and Application Instructions or approved equal.

Contractor shall call for inspection from manufacturer's technical representative after application of each coating. Contractor shall obtain written approval from the Director upon completion of each phase of work (phase of work are: surface preparation, prime, 2nd coat, and 3rd coat) before proceeding into the next phase of work.

Failure to obtain approval of any phase of work for a work area may result in redoing the operation at no cost to the State.

31.6 MEASUREMENT AND PAYMENT

Fixed pipe stanchions shall not be measured or paid for separately, but shall be considered incidental to the Water System Appurtenances in Article XXIV – WATER SYSTEM.

END OF ARTICLE

ARTICLE XXXII – DRILLED SHAFT

32.1 GENERAL

The work consists of furnishing equipment, materials, labor and appliances and perform all work in connection with forming, installation, finishing, and curing necessary for the job in accordance with this Article of the specifications and the standard specifications, Sections 503 “CONCRETE STRUCTURES”, 511 “DRILLED SHAFTS”, 601 “STRUCTURAL CONCRETE” and 602 “REINFORCING STEEL”.

32.2 DESCRIPTION

(A) Foundation drilled shaft for pipe stanchions in the container yard.

32.3 PREQUALIFICATION OF DRILLED SHAFT CONTRACTOR

(A) The contractor who will be responsible for the drilled shaft work (or the “drilled shaft contractor”) must, at the time of bid, meet the requirements of Subsection 511.03(A) of the standard specifications modified as follows:

- (1) The drilled shaft contractor shall, at the time of bid, have already successfully completed a minimum of three (3) projects within the last five (5) years on which the drilled shaft contractor had installed a minimum of five (5) drilled shafts with diameters and length similar to the drilled shafts required under this contract.
- (2) The drilled shaft contractor shall have, on its payroll, supervisory personnel who have participated in drilled shaft construction, similar to the type required under this contract, for duration of at least three years within the last 10 years.

The State may determine bidders who lack the foregoing requirements, prior to award, as being non-responsible

(B) The contractor shall submit the following to Harbors Division, within seven (7) days of receipt of request from the State, prior to award:

- (1) Experience record containing the list of at least three projects, along with the diameters and lengths/depths of the drilled shafts associated with those projects, completed by the drilled shaft contractor, as well as the names and phone numbers of owner’s representatives who can verify the drilled shaft contractor’s participation on those projects.
- (2) Name(s) of supervisory personnel, on its payroll, who have participated in drilled shaft construction, similar to the type required under this contract, for duration of at least three years within the last 10 years, that will be working on the project
- (3) Items required by Standard Specification subsection 511.03 (A)(2).

Failure to submit all of the above required documents to the Harbors Division no later than seven (7) working days from the date of receipt of the written request from the State may result in a rejection of bid by the Department of Transportation.

32.4 REINFORCING STEEL

- (A) Reinforcing steel materials shall conform to Section 602.01 of the standard specifications, ASTM A615, grade 60 and be epoxy-coated in conformance with ASTM A775/A 775M.
- (B) Reinforcing steel fabrication, placement and quality control measures shall be in accordance with the applicable items specified in Section 602 of the standard specifications.
- (C) Shop drawings that detail fabrication, bending, and placement shall be submitted for review. Include bar sizes, lengths, material, grade, bar schedules, stirrup spacing, bent bar diagrams, bar arrangement, splices and laps, mechanical connections, tie spacing, hoop spacing, and supports for concrete reinforcement.

32.5 CONCRETE

- (A) Materials for concrete, concrete mix requirements and quality control shall be as stated in Section 511.02(A) of the standard specifications, except that Type II cement shall be used.
- (B) The 28-day compressive strength for all drilled shaft concrete shall be 5,000 psi.

32.6 PRECONSTRUCTION REQUIREMENTS

- (A) The Contractor shall submit an installation plan with all the required documents as stated in subsection 511.03(B)(1) of the standard specifications.
- (B) Contractor shall protect existing structures on the property or adjacent properties as described in subsection 511.03(B)(2) of the standard specifications.
- (C) A trial shaft shall be installed prior to starting the installation of permanent drilled shafts in accordance with subsection 511.03(B)(3) of the standard specifications to examine the drilled shaft construction methodology.

32.7 DRILLED SHAFT CONSTRUCTION REQUIREMENTS

- (A) Temporary casing will be required during the drilled shaft construction to reduce the potential for caving-in of the drilled holes. Installation of casing may be achieved by vibration, driving or twisting to advance the casing. Casing shall comply with requirements of Subsection 511.03(C)(4) "Casings" of the standard specifications.

- (B) Difficult drilling conditions will likely be encountered and should be expected due to the potential for caving-in of the soft subsurface soils anticipated during the drilled shaft installation.
- (C) Excavation shall conform to the applicable provisions of subsection 511.03(C)(3) "EXCAVATION" of the standard specifications. The shaft excavation for this project is considered unclassified.
- (D) Contractor is required to notify the Geotechnical Engineer a minimum of 5 work days in advance to observe the drilled shaft construction. The Engineer shall be present to monitor/inspect the drilled shaft excavation for the project. The shafts shall meet the requirements of Subsection 511.03(C)(6) for excavation inspection of the standard specifications to be consider acceptable. The Geotechnical Engineer shall be contracted by the Contractor.
- (E) The "wet construction method" as described in subsection 511.03(C)(2)(b) "Wet Method Construction" of the standard specifications shall be used for this project.
- (F) Provide the necessary equipment to remove and dispose of materials displaced in forming the drilled shaft excavation. The Contractor shall anticipate encountering boulders and dense coral formations in order to achieve the drilled shaft tip elevation. Rock augers, core barrels and other tools necessary for the removal of the cored material will be required for drilled shaft excavations extending through boulders and dense coral layers. The Engineer will not make separate payment for excavation of materials of different densities, hardness, or character or employment of special tools and procedures necessary for all potential forms of excavation. The Engineer will pay for obstruction removal separately.
- (G) Obstruction Removal: Remove obstructions at drilled shaft locations when authorized by the Engineer. Such obstructions shall include man-made materials such as concrete foundations, waste concrete, and cut-off piles. Drilling tools, lost in excavation are considered obstructions and shall be removed at the Contractor's expense. Remove the drilling tools promptly. The retrieval expense due to tools lost in the excavation shall be at no cost to the State including costs associated with hole degradation due to removal operations or the time the hole remains open.
- (H) Drill cuttings shall become property of the Contractor and shall be disposed of from State property in accordance with all local, state and federal laws.
- (I) Care shall be exercised when removing temporary casing in order to prevent "necking" of the drilled shaft. A minimum 5-foot head of concrete shall be maintained above the bottom of the casing and/or groundwater level during removal of the casing.
- (J) Petroleum products might be encountered in all of the drilled shaft locations. Contractor shall follow the specified procedures provided in Article XVII - "Handling and Removal of Contaminated Materials Encountered During Construction" when the petroleum products in the subsurface (soil and groundwater) are encountered.

- (K) The bottom of the drilled shaft shall be cleaned of disturbed materials prior to constructing the shaft and be relatively level.
- (L) No backfill will be allowed against the drilled shaft foundation.
- (M) Drilling by methods utilizing drilling fluid (slurry) will be not permitted.
- (N) A Construction Method Log shall be maintained for the project as described in subsection 511.03(C)(3)(a)1 of the standard specifications.
- (O) Entry down into shaft will only be permitted in a dry shaft and when the conditions stated in Subsection 511.03(C)(3)(a)6 of the standard specifications are met.

32.8 REINFORCING STEEL CAGE CONSTRUCTION AND PLACEMENT

- (A) Drilled shaft reinforcing construction shall conform to approved shop drawings and Subsection 511.03(C)(7) "Reinforcing Steel Cage Construction and Placement" of the standard specifications, and according to Para. 32.4(C). Unless additional depth of the drilled shaft is required due to modification by the Engineer, the extended steel in the extra depth of the drilled shaft as described in the standard specifications shall be at no cost to the State.
- (B) Placement of reinforcing cage shall conform to requirements of Subsection 511.03(C)(7) of the standard specifications.

32.9 CONCRETE PLACEMENT

- (A) Concrete shall be placed in accordance with the applicable items specified in Subsection 511.03(C)(9) of the standard specifications.
- (B) Monitor concrete volume in each drilled shaft as described in Subsection 511.03(C)(9)(b) of the standard specifications.
- (C) Aluminum tremies, troughs and pipes are not permitted to be used to convey concrete.
- (D) Drilled shaft construction shall meet the construction tolerances specified in Subsection 511.03(C)(10) of the standard specifications.
- (E) Consolidation of concrete shall be as specified in Section 503.03(F)(5) of the standard specifications.
- (F) The concrete shall be protected from injurious action as required in Section 503.03(K) of the standard specifications.

32.10 CURING OF CONCRETE

- (A) The curing of the concrete shall be in accordance with Section 503.03(L) of the standard specifications.

- (B) Concrete shall be cured for a period of time as specified in Section 503.03(K) of the standard specifications.

32.11 CONCRETE FINISH

- (A) Concrete finish work in general shall conform to Section 503.03(M) of the standard specifications.

32.12 DRILLED SHAFT TESTING

Load testing of the shafts are not required if all specified quality control measures are followed and documents as required in the contract documents.

32.13 CONCRETE REPAIR

- (A) After forms are removed the concrete surface shall be examined for any surface irregularities or rock pockets. Any defects observed shall be brought to the attention of the Engineer.
- (B) The area of the defect shall be removed down to sound concrete. Prepare surface as recommended by patch material manufacturer. A manufactured, one-component, non-shrink, cementitious trowel-grade patch material with a minimum 28-day compressive strength of 6,000 psi shall be scrubbed into the exposed surface prior to installing the patch material. The patch material shall be extended with sand aggregate and installed in accordance with the manufacturer's recommendations.
- (C) The patch shall be surface finished to match the surround surface and cured as required by the manufacturer.
- (D) Acceptable products include, "Thorite Rapid Vertical" by Thoro BASF and "Trowel-Grade Mortar w/ CI" (CR701CI) by STO or approved equal.

32.14 MEASUREMENT AND PAYMENT

Drilled shafts will not be measured or paid for separately, but shall be considered incidental to the various items of work in the Proposal Schedule.

END OF ARTICLE

Requirements of Chapter 104, HRS

Wages and Hours of Employees on Public Works Law

Chapter 104, HRS, applies to every public works construction project over \$2,000, regardless of the method of procurement or financing (purchase order, voucher, bid, contract, lease arrangement, warranty, SPRB).

Rate of Wages for Laborers and Mechanics

- Minimum prevailing wages (basic hourly rate plus fringe benefits), as determined by the Director of Labor and Industrial Relations and published in wage rate schedules, shall be paid to the various classes of laborers and mechanics working on the job site. [§104-2(a), (b), Hawaii Revised Statutes (HRS)]
- If the Director of Labor determines that prevailing wages have increased during the performance of a public works contract, the rate of pay of laborers and mechanics shall be raised accordingly. [§104-2(a) and (b), HRS; §12-22-3(d) Hawaii Administrative Rules (HAR)]

Overtime

- Laborers and mechanics working on a Saturday, Sunday, or a legal holiday of the State or more than eight hours a day on any other day shall be paid overtime compensation at not less than one and one-half times the basic hourly rate plus the cost of fringe benefits for all hours worked. If the Director of Labor determines that a prevailing wage is defined by a collective bargaining agreement, the overtime compensation shall be at the rates set by the applicable collective bargaining agreement [§§104-1, 104-2(c), HRS; §12-22-4.1, HAR]

Weekly Pay

- Laborers and mechanics employed on the job site shall be paid their full wages at least once a week, without deduction or rebate, except for legal deductions, within five working days after the cutoff date. [§104-2(d), HRS]

Posting of Wage Rate Schedules

- Wage rate schedules with the notes for prevailing wages and special overtime rates, shall be posted by the contractor in a prominent and easily accessible place at the job site. A copy of the entire wage rate schedule shall be given to each laborer and mechanic employed under the contract, except when the employee is covered by a collective bargaining agreement. [§104-2(d), HRS]

Withholding of Accrued Payments

- If necessary, the contracting agency may withhold accrued payments to the contractor to pay to laborers and mechanics employed by the contractor or subcontractor on the job site any difference between the wages required by the public works contract or specifications and the wages received. [§104-2(e), HRS]

Certified Weekly Payrolls and Payroll Records

- A certified copy of all payrolls shall be submitted weekly to the contracting agency. [§104-3(a), HRS; §12-22-10, HAR]
- The contractor is responsible for the submission of certified copies of the payrolls of all subcontractors. The certification shall affirm that the payrolls are correct and complete, that the wage rates listed are not less than the applicable rates contained in the applicable wage rate schedule, and that the classifications for each laborer or mechanic conform with the work the laborer or mechanic performed. [§104-3(a), HRS; §12-22-10, HAR]
- Payroll records shall be maintained by the contractor and subcontractors for three years after completion of construction. The records shall contain: [§104-3(b), HRS; §12-22-10, HAR]
 - the name and home address of each employee
 - the last four digits of social security number
 - a copy of the apprentice's registration with DLIR
 - the employee's correct classification
 - rate of pay (basic hourly rate + fringe benefits)
 - itemized list of fringe benefits paid
 - daily and weekly hours worked
 - weekly straight time and overtime earnings
 - amount and type of deductions
 - total net wages paid
 - date of payment
- Records shall be made available for examination by the contracting agency, the Department of Labor and Industrial Relations (DLIR), or any of its authorized representatives, who may also interview employees during working hours on the job. [§§104-3(c), 104-22(a), HRS; §12-22-10, HAR]

Termination of Work on Failure to Pay Wages

- If the contracting agency finds that any laborer or mechanic employed on the job site by the contractor or any subcontractor has not been paid prevailing wages or overtime, the contracting agency may, by written notice to the contractor, terminate the contractor's or subcontractor's right to proceed with the work or with the part of the work in which the required wages or overtime compensation have not been paid. The contracting agency may complete this work by contract or otherwise, and the contractor or contractor's sureties shall be liable to the contracting agency for any excess costs incurred. [§104-4, HRS]

Apprentices

- Apprentice wage rates apply to contractors who are a party to a bona fide apprenticeship program which has been registered with the DLIR. In order to be paid apprentice rates, apprentices must be parties to an agreement either registered with or recognized as a USDOL nationally approved apprenticeship program by the DLIR, Workforce Development Division, (808) 586-8877, and the apprentice must be individually registered by name with the DLIR. [§12-22-6(1) and (2), HAR]
- The number of apprentices on any public work in relation to the number of journeymen in the same craft classification as the apprentices employed by the same employer on the same public work may not exceed the ratio allowed under the apprenticeship standards registered with or recognized by the DLIR. A registered or recognized apprentice receiving the journeyman rate will not be considered a journeyman for the purpose of meeting the ratio requirement. [§12-22-6(3), HAR]

Enforcement

- To ensure compliance with the law, DLIR and the contracting agency will conduct investigations of contractors and subcontractors. If a contractor or subcontractor violates the law, the penalties are: [§104-24, HRS]
 - First Violation Equal to 25% of back wages found due or \$250 per offense up to \$2,500, whichever is greater.
 - Second Violation Equal to amount of back wages found due or \$500 for each offense up to \$5,000, whichever is greater.
 - Third Violation Equal to two times the amount of back wages found due or \$1,000 for each offense up to \$10,000, whichever is greater; and
Suspension from doing any new work on any public work of a governmental contracting agency for three years.
- A violation would be deemed a second violation if it occurs within two years of the **first notification of violation**, and a third violation if it occurs within three years of **the second notification of violation**. [§104-24, HRS; §12-22-25(b), HAR]
- **Suspension:** For a first or second violation, the department shall immediately suspend a contractor who fails to pay wages or penalties until all wages and penalties are paid in full. For a third violation, the department shall penalize and suspend the contractor as described above, **except that if the contractor continues to violate the law, then the department shall immediately suspend the contractor for a mandatory three years. The contractor shall remain suspended until all wages and penalties are paid in full.** [§§104-24, 104-25, HRS]
- **Suspension:** Any contractor who fails to make payroll records accessible or provide requested information within 10 days, or fails to keep or falsifies any required record, shall be assessed a penalty including suspension as provided in Section 104-22(b) and 104-25(a)(3), HRS. [§104-3(c), HRS; §12-22-26, HAR]
- If any contractor interferes with or delays any investigation, the contracting agency shall withhold further payments until the delay has ceased. Interference or delay includes failure to provide requested records or information within ten days, failure to allow employees to be interviewed during working hours on the job, and falsification of payroll records. The department shall assess a penalty of \$10,000 per project, and \$1,000 per day thereafter, for interference or delay. [§104-22(b), HRS; §12-22-26, HAR]
- Failure by the contracting agency to include in the provisions of the contract or specifications the requirements of Chapter 104, HRS, relating to coverage and the payment of prevailing wages and overtime, is not a defense of the contractor or subcontractor for noncompliance with the requirements of this chapter. [§104-2(f), HRS]



For additional information, visit the department's website at <http://labor.hawaii.gov/wsd> or contact any of the following DLIR offices:

Oahu (Wage Standards Division)(808) 586-8777
Hawaii Island.....(808) 974-6464
Maui and Kauai(808) 243-5322

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION

PROPOSAL

PROPOSAL TO THE
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION

PROJECT: **DOMESTIC AND FIRE WATERLINE SYSTEM
REPLACEMENT AT PIER 51A
HONOLULU HARBOR, OAHU, HAWAII**

PROJECT NO.: **P10904**

COMPLETION TIME: 450 Calendar days from the date indicated in the Notice to Proceed from the Department. The Contractor is advised that the NTP is anticipated to be issued in June 2027.

LIQUIDATED DAMAGES: THREE HUNDRED AND NO/100 DOLLARS (\$300.00) for each and every calendar day which the Contractor has delayed the completion of this project.

PROJECT MANAGER: Jonathan Yee
Department of Transportation Harbors
Phone: (808) 587-1956
Jonathan.S.W.Yee@hawaii.gov
Fax: (808) 587-1864

ELECTRONIC SUBMITTAL: **Bidders shall submit and upload the complete proposal to HlePRO prior to the bid opening date and time. Any additional support documents explicitly designated as confidential and/or proprietary shall be uploaded as a separate file to HlePRO. See SPECIAL PROVISIONS 2.8 PREPARATION AND DELIVERY OF BID for complete details. FAILURE TO UPLOAD THE COMPLETE PROPOSAL TO HlePRO SHALL BE GROUNDS FOR REJECTION OF THE BID.**

Director of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96813

Dear Sir:

The undersigned Bidder declares the following:

1. It has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with this proposal.
2. It has not been assisted or represented on this matter by any individual who has, in a State capacity, been involved in the subject matter of this contract within the past two years.
3. It has not and will not, either directly or indirectly offered or given a gratuity (i.e. an entertainment or gift) to any State or County employee to obtain a contract or favorable treatment under a contract.

The undersigned Bidder further agrees to the following:

1. If this proposal is accepted, it shall execute a contract with the Department to provide all necessary labor, machinery, tools, equipment, apparatus and any other means of construction, to do all the work and to furnish all the materials specified in the contract in the manner and within the time therein prescribed in the contract, and that it shall accept in full payment therefore the sum of the unit and/or lump sum prices as set forth in the attached proposal schedule for the actual quantities of work performed and materials furnished and furnish satisfactory security in accordance with Section 103D-324, Hawaii Revised Statutes, within 10 days after the award of the contract or within such time as the Director of Transportation may allow after the undersigned has received the contract documents for execution, and is fully aware that non-compliance with the aforementioned terms will result in the forfeiture of the full amount of the bid guarantee required under Section 103D-323, Hawaii Revised Statutes.
2. That the quantities given in the attached proposal schedule are approximate only and are intended principally to serve as a guide in determining and comparing the bids.
3. That the Department does not either expressly or by implication, agree that the actual amount of work will correspond therewith, but reserves the right to increase or decrease the amount of any class or portion of the work, or to omit portions of the work, as may be deemed necessary or advisable by the Director of Transportation, and that all increased or decreased quantities of work shall be performed at the unit prices set forth in the attached proposal schedule except as provided for in the specifications.

4. In case of a discrepancy between unit prices and the totals in said Proposal Schedule, the unit prices shall prevail.
5. Agrees to begin work within 10 working days after the date of notification to commence with the work, which date is in the notice to proceed, and shall finish the entire project within the time prescribed.
6. The Director of Transportation reserves the right to reject any or all bids and to waive any defects when in the Director's opinion such rejections or waiver will be for the best interest of the public.
7. The undersigned Bidder further agrees to the following: Pursuant to HRS §103D-405(d), any contractor (including consultants) paid for services to develop or prepare specifications or work statements shall be precluded from submitting an offer or receiving a contract for that particular solicitation. This includes the preparation of reports relied upon by HDOT in the development of the project scope.

The Bidder acknowledges receipt of and certifies that it has completely examined the following listed items: the Hawaii Department of Transportation, Air and Water Transportation Facilities Division General Provisions for Construction Projects dated 2016, the Notice to Bidders, the Special Provisions, if any, the Technical Provisions, the Proposal, the Contract and Bond Forms, and the Project Plans.

In accordance with Section 103D-323, Hawaii Revised Statutes, this proposal is accompanied with a bid security in the amount of 5% of the total amount bid, in the form checked below. (Check applicable bid security submitted with bid.)

_____ Surety Bid Bond (Use standard form),

_____ Cash,

_____ Cashier's Check,

_____ Certified Check, or

_____ .
(Fill in other acceptable security.)

The undersigned Bidder acknowledges receipt of any addendum issued by the Department by recording in the space below the date of receipt.

Addendum No. 1 _____

Addendum No. 3 _____

Addendum No. 2 _____

Addendum No. 4 _____

In accordance with Section 103D-302, Hawaii Revised Statutes, the undersigned as Bidder, has listed the name of each person or firm, who will be engaged by the Bidder on the project as a Subcontractor or Joint Contractor and the nature of work to be done by each. **The Bidder must adequately and unambiguously disclose the unique nature and scope of the work to be performed by each Subcontractor or Joint Contractor.** For each listed firm, the Bidder declares the respective firm is a Subcontractor or Joint Contractor and is subject to evaluation as a Subcontractor or Joint Contractor. It is understood that failure to comply with the aforementioned requirements may be cause for rejection of the bid submitted.

<u>Name of Subcontractor</u>	<u>Nature and Scope of Work</u>
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____
6. _____	_____
7. _____	_____
8. _____	_____

<u>Name of Joint Contractor</u>	<u>Nature and Scope of Work</u>
1. _____	_____
2. _____	_____
3. _____	_____

NOTES:

"None" or if left blank indicates no Subcontractor or Joint Contractor.

If more space is needed, attach additional sheets.

The undersigned hereby certifies that the bid prices contained in the attached proposal schedule have been carefully checked and are submitted as correct and final.

This declaration is made with the understanding that the undersigned is subject to the penalty of perjury under the laws of the United States and is in violation of the Hawaii Penal Code, Section 710-1063, unsworn falsification to authorities, of the Hawaii Revised Statutes, for knowingly rendering a false declaration.

Bidder (Company Name)

By _____
Authorized Signature

Print Name and Title

Business Address

Business Telephone

Date

Contact Person (If different from above)

Phone: _____ Email: _____

NOTE:

If Bidder is a CORPORATION, the legal name of the corporation shall be set forth above, the corporate seal affixed, together with the signature(s) of the officer(s) authorized to sign contracts for the corporation. Please attach to this page current (not more than six months old) evidence of the authority of the officer(s) to sign for the corporation.

If Bidder is a PARTNERSHIP, the true name of the partnership shall be set forth above, with the signature(s) of the general partner(s). Please attach to this page current (not more than six months old) evidence of the authority of the partner authorized to sign for the partnership.

If Bidder is an INDIVIDUAL, the bidder's signature shall be placed above.

If signature is by an agent, other than an officer of a corporation or a partner of a partnership, a POWER OF ATTORNEY must be on file with the Department before opening bids or submitted with the bid. Otherwise, the Department may reject the bid as irregular and unauthorized.

PREFERENCES

Bidders acknowledge that while preferences are considered in the evaluation of bids, the award of the contract will be in the amount of the bid offered exclusive of any preferences.

A. HAWAII BIDDER PREFERENCE

In accordance with HRS §103D-302, the Hawaii bidder preference is applicable to this solicitation for evaluation purposes only. Bidders desiring to qualify for the five per cent (5%) preference shall submit with their bid a completed *Hawaii Bidder/Offeror Preference Certification Form* (Form SPO-081) at or before the time set for receipt of bids. Certifications submitted for previous or other solicitations will not be accepted.

☐ **Yes, the Bidder elects to receive the Hawaii Bidder Preference and has included the Form SPO-081 with the bid.**

B. APPRENTICESHIP AGREEMENT PREFERENCE

In accordance with HRS §103-55.6, the estimated value of this public works contract is \$250,000 or more and the apprenticeship agreement preference is applicable to this solicitation for evaluation purposes only. Bidders desiring to qualify for the five per cent (5%) preference shall submit with their bid a complete, valid CERTIFICATION OF BIDDER'S PARTICIPATION IN APPROVED APPRENTICESHIP PROGRAM UNDER ACT 17 (Certification Form 1) **for each apprenticeable trade** the Bidder will employ on the project.

☐ **Yes, the Bidder elects to receive the Apprenticeship Agreement Preference and has attached Certification Form(s) 1 for each apprenticeable trade the Bidder will employ for this project (excluding subcontractors).**

By submission of this offer, the Bidder certifies that it has indicated **all apprenticeable trades that Bidder will employ** for this project (excluding subcontractors) by listing the applicable trades below:

(Attach additional sheet if necessary.)

Form 1 Required. Failure to submit a valid Form 1 with the bid for every apprenticeable trade that Bidder will employ on the project will result in the preference being denied, regardless of whether the trade is listed above. If a Form 1 is submitted for a trade that is not listed above, the Form 1 will take

precedence over the listing and may be used to qualify Bidder for the preference.

Form 2 Required. If awarded the contract with the Apprenticeship Agreement Preference applied, then for the duration of the contract, the Bidder **shall** certify each month that work is being conducted on the project that the Contractor continues to be a participant in the relevant apprenticeship program for each trade it employs. Monthly certification shall be made on the Certification Form 2 and submitted to the HDOT.

Failure to comply with the requirements of the Apprenticeship Agreement Preference program will subject the Contractor to sanctions pursuant to HRS §103-55.6.

C. HAWAII PRODUCTS PREFERENCE

Hawaii Products Preference shall not apply to this solicitation.

D. RECYCLED PRODUCT PREFERENCE

Recycled Product Preference shall not apply to this solicitation.



STATE OF HAWAII
Hawaii Bidder/Offeror
Preference Certification Form
(As Defined in HRS103D-1001)

I, _____, _____ of
(Authorized Officer's Name) (Office or Position Held)

_____, certify the following:
(Name of Bidder/Offeror)

- (1) That the Bidder/Offeror holds a valid commercial place of business located in the State of Hawaii at the following address:

and that the above-named office was opened on the following date: _____,

and has been staffed by the Bidder/Offeror or an employee of the Bidder/Offeror for not less than two (2) consecutive years immediately preceding the time and date set for the opening of bids or receipt of proposals;

- (2) That the bid or proposal in response to IFB/RFP No. _____, is submitted under the name under which the Bidder/Offeror is authorized to do business in the State;
- (3) That not less than fifty-one percent (51%) of the total direct labor hours required for performance of the contract will be performed within the State; and
- (4) If the Bidder/Offeror is a joint venture, the Bidder/Offeror is composed entirely of parties meeting the requirements of paragraphs (1), (2), and (3).

I certify under penalty of perjury that the above statements are true. I agree to maintain the above qualifications throughout contract performance; any changes in eligibility shall be reported to the Contract Administrator or purchasing agency's contact person identified in the RFP/IFB. I acknowledge that failure to maintain the above qualifications triggers a price adjustment equal to the value of the preference applied and may constitute cause for debarment under HRS §103D-702.

Signature of Authorized Officer

Print Name and Title

Date

**DOMESTIC AND FIRE WATERLINE SYSTEM REPLACEMENT AT PIER 51A
HONOLULU HARBOR, OAHU, HAWAII**

**PROPOSAL SCHEDULE - BASE BID
P10904**

ITEM NO.	DESCRIPTION	EST. QTY	UNIT	UNIT PRICE	TOTAL
1.	Mobilization and Demobilization (6% sum of all items, excluding this bid item, allowance items, and force account items)	L.S.	L.S.	L.S.	\$ _____
2.	Demolition and removal of water lines, cold planing, asphalt concrete, and all other items within the limit of demolition and removal, excluding items indicated to remain, in place, complete.	L.S.	L.S.	L.S.	\$ _____
3.	6" Thick asphalt concrete pavement, State Mix IV, in place, complete.	L.S.	L.S.	L.S.	\$ _____
4.	Water system appurtenances, inclusive of backfill; crushed rock backfill and dewatering; air relief valves, fire hydrants, laterals and lateral connections, gate valves, cast iron valve and air relief valve boxes and covers, structures, leak detection wells, electronic markers and electronic marker readers (2 each), fittings, and couplings; concrete for reinforced concrete jacketing and reaction blocks; bollards; materials for connections; chlorination, flushing and testing; NPDES requirements; and all other materials, equipment and labor required to construct the water system, in place, complete.	L.S.	L.S.	L.S.	\$ _____
5.	6" diameter pipe and fittings for domestic water system and fire protection water system construction, inclusive of all labor, material, equipment, tools, and incidentals required to construct the pipelines, in place, complete.	280	Linear Foot	\$ _____	\$ _____
6.	8" diameter pipe and fittings for domestic water system and fire protection water system construction, inclusive of all labor, material, equipment, tools, and incidentals required to construct the pipelines, in place, complete.	1,950	Linear Foot	\$ _____	\$ _____
7.	12" diameter pipe and fittings for domestic water system and fire protection water system construction, inclusive of all labor, material, equipment, tools, and incidentals required to construct the pipelines, in place, complete.	600	Linear Foot	\$ _____	\$ _____
8.	26" thick hot mix asphalt concrete base course, in place, complete.	L.S.	L.S.	L.S.	\$ _____
9.	Signage and pavement markings, in place, complete.	L.S.	L.S.	L.S.	\$ _____
10.	Traffic Controls, in place, complete.	L.S.	L.S.	L.S.	\$ _____

**DOMESTIC AND FIRE WATERLINE SYSTEM REPLACEMENT AT PIER 51A
HONOLULU HARBOR, OAHU, HAWAII**

**PROPOSAL SCHEDULE - BASE BID
P10904**

ITEM NO.	DESCRIPTION	EST. QTY	UNIT	UNIT PRICE	TOTAL
11.	Excavation, characterization, profiling, and hauling of grossly contaminated soils for the demolition and installation of new waterline inclusive of excavation, hauling, disposal, equipment, tools, labor, materials and incidentals necessary to complete the work.	Allow.	Allow.	Allow.	\$ 500,000.00
12.	Excavation, characterization, profiling, and hauling of non-grossly contaminated soils for the demolition and installation of new waterline inclusive of excavation, hauling, disposal, equipment, tools, labor, materials and incidentals necessary to complete the work.	L.S.	L.S.	L.S.	\$
13.	Cost of separating petroleum grossly and non-grossly contaminated material for the demolition and installation of new waterline, including, but not limited to concrete building foundations, concrete footings, asphalt concrete pavement, underground utility structures, and loose material removed as part of the demolition and removal work. Costs shall include physically separating material, loss of production, protective wear, safety plan, and other costs related to petroleum contamination.	Allow.	Allow.	Allow.	\$ 500,000.00
14.	Excavation, hauling and disposal of the existing asbestos containing waterline for the demolition and installation of new waterline inclusive of excavation, hauling, disposal, equipment, tools, labor, materials and incidentals necessary to complete the work.	Allow.	Allow.	Allow.	\$ 100,000.00
15.	Preparation of Planning Documents, inclusive of C-EHMP	L.S.	L.S.	L.S.	\$
16.	Contractors Environmental Qualified Consultant	L.S.	L.S.	L.S.	\$
17.	Setup, maintenance, and removal of soil staging area for non-grossly contaminated soils.	L.S.	L.S.	L.S.	\$
18.	Setup, maintenance, and removal of soil staging area for grossly contaminated soils.	Allow.	Allow.	Allow.	\$ 100,000.00
19.	Setup, maintenance, and removal of soil staging area for contaminated sediment.	Allow.	Allow.	Allow.	\$ 100,000.00
20.	Setup, maintenance, and removal of soil staging area for excavated asbestos waterline	Allow.	Allow.	Allow.	\$ 100,000.00
21.	Removal and disposal of oily sheen/product from groundwater, during backtrenching.	Allow.	Allow.	Allow.	\$ 100,000.00
TOTAL - BASE BID					\$

**DOMESTIC AND FIRE WATERLINE SYSTEM REPLACEMENT AT PIER 51A
HONOLULU HARBOR, OAHU, HAWAII**

PROPOSAL SCHEDULE - ADDITIVE ALTERNATE #1
P10904

ITEM NO.	DESCRIPTION	EST. QTY	UNIT	UNIT PRICE	TOTAL
1A.	1-1/2" diameter pipe and fittings for domestic water system and fire protection water system construction, inclusive of all labor, material, equipment, tools, and incidentals required to construct the pipelines, in place, complete.	320	Linear Foot	\$ _____	\$ _____
2A.	Demolition and removal of water lines, cold planing, asphalt concrete, and all other items within the limit of demolition and removal, excluding items indicated to remain, in place, complete.	L.S.	L.S.	L.S.	\$ _____
3A.	6" Thick asphalt concrete pavement, State Mix IV, in place, complete.	L.S.	L.S.	L.S.	\$ _____
4A.	Water system appurtenances, inclusive of backfill; crushed rock backfill and dewatering; air relief valves, fire hydrants, laterals and lateral connections, gate valves, cast iron valve and air relief valve boxes and covers, structures, leak detection wells, electronic markers and electronic marker readers (2 each), fittings, and couplings; concrete for reinforced concrete jacketing and reaction blocks; bollards; materials for connections; chlorination, flushing and testing; NPDES requirements; and all other materials, equipment and labor required to construct the water system, in place, complete.	L.S.	L.S.	L.S.	\$ _____
5A.	26" thick hot mix asphalt concrete base course, in place, complete.	L.S.	L.S.	L.S.	\$ _____
TOTAL - ADDITIVE ALTERNATE #1					\$ _____

**DOMESTIC AND FIRE WATERLINE SYSTEM REPLACEMENT AT PIER 51A
HONOLULU HARBOR, OAHU, HAWAII**

PROPOSAL SCHEDULE - BID SUMMARY
P10904

BASE BID	\$ _____
ADDITIVE ALTERNATE #1	\$ _____
TOTAL AMOUNT FOR COMPARISON OF BIDS	
	\$ _____

Notes:

1. Bids shall include all Federal, State, County and other applicable taxes and fees.
2. The TOTAL AMOUNT FOR COMPARISON OF BIDS shall be used to determine the lowest responsible bidder.
3. Bidders shall complete all unit prices and amounts. Failure to do so shall be grounds for rejection of bid.
4. If a discrepancy occurs between unit bid price and the bid price, the unit bid price shall govern.
5. Bidders are required to bid all items in the BASE BID and all items of the ADDITIVE ALTERNATE #1 to be considered responsive.
6. **Bidders shall submit and upload the complete proposal to HlePRO prior to the bid opening date and time. Proposals received after said due date and time shall not be considered. Any additional support documents explicitly designated as confidential and/or proprietary shall be uploaded as a separate file to HlePRO. Bidders shall not include confidential and/or proprietary documents with the proposal. The record of each bidder and respective bid shall be open to public inspection. Original (wet ink, hard copy) proposal documents are not required to be submitted. Contract award shall be based on evaluation of proposals submitted and uploaded to HlePRO.**

FAILURE TO UPLOAD THE COMPLETE PROPOSAL TO HlePRO SHALL BE GROUNDS FOR REJECTION OF THE BID.

If there is a conflict between the specification document and the HlePRO solicitation, the specifications shall govern and control, unless otherwise specified.

7. Evaluating Bids with Additive Alternate:

Bids will be evaluated based on the total price of the **BASE BID plus ADDITIVE ALTERNATE #1**, in the priority order listed, **up to the point that the total bid does not exceed the Project Control Budget.**

Priority Order:

1. Additive Alternate #1

The evaluation process will proceed as follows:

- a. Prior to opening bids, the State will announce the project control budget on HlePRO.
- b. Each bidder's BASE BID will be considered first.
- c. ADDITIVE ALTERNATE #1 will be added in priority order to the BASE BID, as long as the total bid amount remains **within the established Project Control Budget.**
- d. The bidder with the lowest aggregate amount, within the project control budget, for the BASE BID plus ADDITIVE ALTERNATE #1, is the lowest responsible bidder.

8. No additional compensation will be made by the State for losses, including overhead and profit, resulting from the deletion of the additive alternate items.
9. Contract time shall remain the same whether or not the scope of work is increased.
10. The bidder's attention is directed to Section 2.11 – BID SECURITY of the "General Provisions", as amended by the Special Provisions.

SURETY BID BOND

Bond No. _____

KNOW TO ALL BY THESE PRESENTS:

That we, _____

(full name or legal title of offeror)

as Offeror, hereinafter called the Principal, and

(name of bonding company)

as Surety, hereinafter called Surety, a corporation authorized to transact business as a Surety in the State of Hawaii, are held and firmly bound unto

(State/county entity)

as Owner, hereinafter called Owner, in the penal sum of

(required amount of bid security)

Dollars(\$ _____), lawful money of the United States of America, for the payment of which sum well and truly to be made, the said Principal and the said Surety bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS:

The Principal has submitted an offer for

(project by number and brief description)

NOW, THEREFORE:

The condition of this obligation is such that if the Owner shall reject said offer, or in the alternate, accept the offer of the Principal and the Principal shall enter into a contract with the Owner in accordance with the terms of such offer, and give such bond or bonds as may be specified in the solicitation or Contract Documents with good and sufficient surety for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof as specified in the solicitation then this obligation shall be null and void, otherwise to remain in full force and effect.

Signed this _____ day of _____, _____

Name of Principal (Offeror) (Seal)

Signature

Print Name and Title

Name of Surety (Seal)

Signature

Print Name and Title

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HONOLULU, HAWAII

FORMS

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Performance Bond

Labor and Material Payment Bond (Surety)

Labor and Material Payment Bond

Chapter 104 Compliance Certificate

Certification of Compliance for Employment of State Residents

CONTRACT

THIS AGREEMENT, made this day of _____, by and between the STATE OF HAWAII, by its Director of Transportation, hereinafter referred to as "STATE", and «CONTRACTOR», «STATE_OF_INCORPORATION», whose business/post office address is «ADDRESS», hereinafter referred to as CONTRACTOR";

WITNESSETH: That for and in consideration of the payments hereinafter mentioned, the CONTRACTOR hereby covenants and agrees with the STATE to complete in place, furnish and pay for all labor and materials necessary for "«PROJECT_NAME_AND_NO»", or such a part thereof as shall be required by the STATE, the total amount of which labor, material and construction shall be computed at the unit and/or lump sum prices set forth in the attached proposal schedule and shall be the sum of «BASIC»----DOLLARS (\$«BASIC_NUMERIC») as follows:

TOTAL AMOUNT FOR COMPARISON OF BIDS.....\$«BASIC_NUMERIC»

which sum shall be provided from State funds, all in accordance with the specifications, the special provisions, if any, the notice to bidders, the instructions to bidders, the proposal and plans for «PROJECT_NO_ONLY», and any supplements thereto, on file in the office of the Director of Transportation. These documents, together with all alterations, amendments, and additions thereto and deductions therefrom, are attached hereto or incorporated herein by reference and made a part of this contract.

The CONTRACTOR hereby covenants and agrees to complete such construction within «WORKING_DAYS» from the date indicated in the Notice to Proceed from the State subject, however, to such extensions as may be provided for in writing under the specifications.

For and in consideration of the covenants, undertakings and agreements of the CONTRACTOR herein set forth and upon the full and faithful performance thereof by the CONTRACTOR, the STATE hereby agrees to pay the CONTRACTOR the sum of «BASIC»---DOLLARS (\$«BASIC_NUMERIC») in lawful money, but not more than such part of the same as is actually earned according to the STATE's determination of the actual quantities of work performed and materials furnished by the CONTRACTOR at the unit or lump sum prices set forth in the attached proposal schedule. Such payment, including any extras, shall be made, subject to such additions or deductions hereto or hereafter made in the manner and at the time prescribed in the specifications and this contract.

An additional sum of «EXTRAS»-----DOLLARS (\$«EXTRA_NUMERIC») is hereby provided for extra work.

All words used herein in the singular shall extend to and include the plural. All words used in the plural shall extend to and include the singular. The use of any gender shall extend to and include all genders.

IN WITNESS WHEREOF, the parties hereto have caused this instrument to be duly executed the day and year first above written.

STATE OF HAWAII

Director of Transportation

«CONTRACTOR»

(Seal)

Signature

Print name

Print Title

Date

PERFORMANCE BOND (SURETY)
(6/21/07)

KNOW TO ALL BY THESE PRESENTS:

That _____,
(Full Legal Name and Street Address of Contractor)

as Contractor, hereinafter called Principal, and _____

(Name and Street Address of Bonding Company)

as Surety, hereinafter called Surety, a corporation(s) authorized to transact business as a
surety in the State of Hawaii, are held and firmly bound unto the _____,
(State/County Entity)

its successors and assigns, hereinafter called Obligee, in the amount of _____

_____ DOLLARS (\$ _____), to which payment Principal and Surety bind themselves,
their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by
these presents.

WHEREAS, the above-bound Principal has signed a Contract with Obligee on
_____, for the following project: _____

hereinafter called Contract, which Contract is incorporated herein by reference and made a part
hereof.

NOW THEREFORE, the condition of this obligation is such that:

If the Principal shall promptly and faithfully perform, and fully complete the Contract in
strict accordance with the terms of the Contract as said Contract may be modified or amended
from time to time; then this obligation shall be void; otherwise to remain in full force and effect.

Surety to this Bond hereby stipulates and agrees that no changes, extensions of time, alterations, or additions to the terms of the Contract, including the work to be performed thereunder, and the specifications or drawings accompanying same, shall in any way affect its obligation on this bond, and it does hereby waive notice of any such changes, extensions of time, alterations, or additions, and agrees that they shall become part of the Contract.

In the event of Default by the Principal, of the obligations under the Contract, then after written Notice of Default from the Obligee to the Surety and the Principal and subject to the limitation of the penal sum of this bond, Surety shall remedy the Default, or take over the work to be performed under the Contract and complete such work, or pay moneys to the Obligee in satisfaction of the surety's performance obligation on this bond.

Signed this _____ day of _____, _____.

(Seal)

Name of Principal (Contractor)

*

Signature

Title

(Seal)

Name of Surety

*

Signature

Title

*ALL SIGNATURES MUST BE ACKNOWLEDGED
BY A NOTARY PUBLIC

PERFORMANCE BOND

KNOW ALL BY THESE PRESENTS:

That we, _____
(full legal name and street address of Contractor)

as Contractor, hereinafter called Contractor, is held and firmly bound unto the

(State/County entity)

its successors and assigns, as Obligee, hereinafter called Obligee, in the amount

_____ DOLLARS (\$ _____),
(Dollar amount of Contract)

lawful money of the United States of America, for the payment of which to the said Obligee, well and truly to be made, Contractor binds itself, its heir, executors, administrators, successors and assigns, firmly by these presents. Said amount is evidenced by:

- ☐ **Legal Tender;**
- ☐ **Share Certificate** unconditionally assigned to or made payable at sight to _____
Description: _____;
- ☐ **Certificate of Deposit, No.** _____, dated _____
issued by _____
drawn on _____
a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;
- ☐ **Cashier's Check No.** _____, dated _____
drawn on _____
a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;
- ☐ **Teller's Check No.** _____, dated _____
drawn on _____
a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;
- ☐ **Treasurer's Check No.** _____, dated _____
drawn on _____
a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;
- ☐ **Official Check No.** _____, dated _____
drawn on _____
a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;
- ☐ **Certified Check No.** _____, dated _____
accepted by a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;

WHEREAS:

The Contractor has by written agreement dated _____ entered into a contract with Obligeo for the following Project: _____

hereinafter called Contract, which Contract is incorporated herein by reference and made a part hereof.

NOW THEREFORE,

The Condition of this obligation is such that, if Contractor shall promptly and faithfully perform the Contract in accordance with, in all respects, the stipulations, agreements, covenants and conditions of the Contract as it now exists or may be modified according to its terms, and shall deliver the Project to the Obligeo, or to its successors or assigns, fully completed as in the Contract specified and free from all liens and claims and without further cost, expense or charge to the Obligeo, its officers, agents, successors or assigns, free and harmless from all suits or actions of every nature and kind which may be brought for or on account of any injury or damage, direct or indirect, arising or growing out of the doing of said work or the repair or maintenance thereof or the manner of doing the same or the neglect of the Contractor or its agents or servants or the improper performance of the Contract by the Contractor or its agents or servants or from any other cause, then this obligation shall be void; otherwise it shall be and remain in full force and effect.

AND IT IS HEREBY STIPULATED AND AGREED that suit on this bond may be brought before a court of competent jurisdiction without a jury, and that the sum or sums specified in the said Contract as liquidated damages, if any, shall be forfeited to the Obligeo, its successors or assigns, in the event of a breach of any, or all, or any part of, covenants, agreements, conditions, or stipulations contained in the Contract or in this bond in accordance with the terms thereof.

The amount of this bond may be reduced by and to the extent of any payment or payments made in good faith hereunder.

Signed and sealed this _____ day of _____, _____.

(Seal)

Name of Contractor

*

Signature

Title

*ALL SIGNATURES MUST BE
ACKNOWLEDGED BY A NOTARY PUBLIC

LABOR AND MATERIAL PAYMENT BOND (SURETY)
(6/21/07)

KNOW TO ALL BY THESE PRESENTS:

That _____,
(Full Legal Name and Street Address of Contractor)

as Contractor, hereinafter called Principal, and _____

_____,
(Name and Street Address of Bonding Company)

as Surety, hereinafter called Surety, a corporation(s) authorized to transact business as a surety in the State of Hawaii, are held and firmly bound unto the _____,
(State/County Entity)

its successors and assigns, hereinafter called Obligee, in the amount of _____

_____ Dollars (\$ _____), to which payment Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the above-bound Principal has signed Contract with the Obligee on _____
_____ for the following project: _____

hereinafter called Contract, which Contract is incorporated herein by reference and made a part hereof.

NOW THEREFORE, the condition of this obligation is such that if the Principal shall promptly make payment to any Claimant, as hereinafter defined, for all labor and materials supplied to the Principal for use in the performance of the Contract, then this obligation shall be void; otherwise to remain in full force and effect.

1. Surety to this Bond hereby stipulates and agrees that no changes, extensions of time, alterations, or additions to the terms of the Contract, including the work to be performed thereunder, and the specifications or drawings accompanying same, shall in any way affect its obligation on this bond, and it does hereby waive notice of any such changes, extensions of time, alterations, or additions, and agrees that they shall become part of the Contract.

2. A "Claimant" shall be defined herein as any person who has furnished labor or materials to the Principal for the work provided in the Contract.

Every Claimant who has not been paid amounts due for labor and materials furnished for work provided in the Contract may institute an action against the Principal and its Surety on this bond at the time and in the manner prescribed in Section 103D-324, Hawaii Revised Statutes, and have the rights and claims adjudicated in the action, and judgment rendered thereon; subject to the Obligee's priority on this bond. If the full amount of the liability of the Surety on this bond is insufficient to pay the full amount of the claims, then after paying the full amount due the Obligee, the remainder shall be distributed pro rata among the claimants.

Signed this _____ day of _____, _____.

(Seal)

Name of Principal (Contractor)

*

Signature

Title

(Seal)

Name of Surety

*

Signature

Title

*ALL SIGNATURES MUST BE ACKNOWLEDGED
BY A NOTARY PUBLIC

LABOR AND MATERIAL PAYMENT BOND

KNOW ALL BY THESE PRESENTS:

That we, _____
(full legal name and street address of Contractor)
as Contractor, hereinafter called Contractor, is held and firmly bound unto _____
(State/County entity)
its successors and assigns, as Obligee, hereinafter called Obligee, in the amount
_____ DOLLARS (\$ _____),
(Dollar amount of Contract)

lawful money of the United States of America, for the payment of which to the said Obligee, well and truly to be made, Contractor binds itself, its heir, executors, administrators, successors and assigns, firmly by these presents. Said amount is evidenced by:

- ☐ **Legal Tender;**
- ☐ **Share Certificate** unconditionally assigned to or made payable at sight to _____
Description: _____
- ☐ **Certificate of Deposit, No.** _____, dated _____
issued by _____
drawn on _____
a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;
- ☐ **Cashier's Check No.** _____, dated _____
drawn on _____
a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;
- ☐ **Teller's Check No.** _____, dated _____
drawn on _____
a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;
- ☐ **Treasurer's Check No.** _____, dated _____
drawn on _____
a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;
- ☐ **Official Check No.** _____, dated _____
drawn on _____
a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;
- ☐ **Certified Check No.** _____, dated _____
accepted by a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;

WHEREAS:

The Contractor has by written agreement dated _____
entered into a contract with Oblige for the following Project: _____

hereinafter called Contract, which Contract is incorporated herein by reference and made a part hereof.

NOW THEREFORE,

The condition of this obligation is such that, if Contractor shall promptly and faithfully perform the Contract in accordance with, in all respects, the stipulations, agreements, covenants and conditions of the Contract as it now exists or may be modified according to its terms, free from all liens and claims and without further cost, expense or charge to the Oblige, its officers, agents, successors or assigns, free and harmless from all suits or actions of every nature and kind which may be brought for or on account of any injury or damage, direct or indirect, arising or growing out of the doing of said work or the repair or maintenance thereof or the manner of doing the same or the neglect of the Contractor or its agents or servants or the improper performance of the Contract by the Contractor or its agents or servants or from any other cause, then this obligation shall be void; otherwise it shall be and remain in full force and effect.

AND IT IS HEREBY STIPULATED AND AGREED that suit on this bond may be brought before a court of competent jurisdiction without a jury, and that the sum or sums specified in the said Contract as liquidated damages, if any, shall be forfeited to the Oblige, its successors or assigns, in the event of a breach of any, or all, or any part of, covenants, agreements, conditions, or stipulations contained in the Contract or in this bond in accordance with the terms thereof.

AND IT IS HEREBY STIPULATED AND AGREED that this bond shall inure to the benefit of any and all persons entitled to file claims for labor performed or materials furnished in said work so as to give any and all such persons a right of action as contemplated by Sections 103D-324(d) and 103D-324(e), Hawaii Revised Statutes.

The amount of this bond may be reduced by and to the extent of any payment or payments made in good faith hereunder, inclusive of the payments of mechanics' liens which may be filed of record against the Project, whether or not claim for the amount of such lien be presented under and against this bond.

Signed this _____ day of _____, _____.

(Seal) _____
Name of Contractor

* _____
Signature

Title

*ALL SIGNATURES MUST BE
ACKNOWLEDGED BY A NOTARY PUBLIC

CHAPTER 104, HRS COMPLIANCE CERTIFICATE

The undersigned bidder does hereby certify to the following:

1. Individuals engaged in the performance of the contract on the job site shall be paid:
 - A. Not less than the wages that the director of labor and industrial relations shall have determined to be prevailing for corresponding classes of laborers and mechanics employed on public works projects; and
 - B. Overtime compensation at one and one-half times the basic hourly rate plus fringe benefits for hours worked on Saturday, Sunday, or a legal holiday of the State or in excess of eight hours on any other day.
2. All applicable laws of the federal and state governments relating to workers' compensation, unemployment compensation, payment of wages, and safety shall be fully complied with.

DATED at Honolulu, Hawaii, this _____ day of _____, 20__.

«CONTRACTOR»

Name of Corporation, Partnership, or Individual

Signature and Title of Signer

Notary Seal
NOTARY ACKNOWLEDGEMENT

Subscribed and sworn before me this _____ day of _____
Notary signature _____
Notary public, State of _____
My Commission Expires: _____

Notary Seal
NOTARY CERTIFICATION

Doc. Date: _____ #Pages: _____
Notary Name: _____ Circuit _____
Doc. Description: _____

Notary signature _____
Date _____

PROVISIONS TO BE INCLUDED IN CONSTRUCTION PROCUREMENT SOLICITATIONS

1. Definitions for terms used in HRS Chapter 103B as amended by Act 192, SLH 2011:
 - a. "Contract" means contracts for construction under 103D, HRS.
 - b. "Contractor" has the same meaning as in Section 103D-104, HRS, provided that "contractor" includes a subcontractor where applicable.
 - c. "Construction" has the same meaning as in Section 103D-104, HRS.
 - d. "General Contractor" means any person having a construction contract with a governmental body.
 - e. "Procurement Officer" has the same meaning as in Section 103D-104, HRS.
 - f. "Resident" means a person who is physically present in the State of Hawai'i at the time the person claims to have established the person's domicile in the State of Hawai'i and shows the person's intent is to make Hawai'i the person's primary residence.
 - g. "Shortage trade" means a construction trade in which there is a shortage of Hawai'i residents qualified to work in the trade as determined by the Department of Labor and Industrial Relations.
2. HRS Chapter 103B as amended by Act 192, SLH 2011--Employment of State Residents Requirements:
 - a. A Contractor awarded a contract shall ensure that Hawai'i residents comprise not less than 80% of the workforce employed to perform the contract work on the project. The 80% requirement shall be determined by dividing the total number of hours worked on the contract by Hawai'i residents, by the total number of hours worked on the contract by all employees of the Contractor in the performance of the contract. The hours worked by any Subcontractor of the Contractor shall count towards the calculation for this section. The hours worked by employees within shortage trades, as determined by the Department of Labor and Industrial Relations (DLIR), shall not be included in the calculation for this section.

- b. Prior to award of a contract, an Offeror/Bidder may withdraw an offer/bid without penalty if the Offeror/Bidder finds that it is unable to comply with HRS Chapter 103B as amended by Act 192, SLH 2011.
- c. Prior to starting any construction work, the Contractor shall submit the subcontract dollar amount for each of its Subcontractors.
- d. The requirements of this section shall apply to any subcontract of \$50,000 or more in connection with the Contractor; that is, such Subcontractors must also ensure that Hawai'i residents comprise not less than 80% of the Subcontractor's workforce used to perform the subcontract.
- e. The Contractor and any Subcontractor whose subcontract is \$50,000 or more shall comply with the requirements of HRS Chapter 103B as amended by Act 192, SLH 2011.
 - 1) Certification of compliance shall be made in writing under oath by an officer of the General Contractor and applicable Subcontractors and submitted with the final payment request.
 - 2) The certification of compliance shall be made under oath by an officer of the company by completing a "Certification of Compliance for Employment of State Residents" form and executing the Certificate before a licensed notary public.
 - 3) In addition to the certification of compliance as indicated above, the Contractor and Subcontractors shall maintain records such as certified payrolls for laborers and mechanics who performed work at the site and time sheets for all other employees who performed work on the project. These records shall include the names, addresses and number of hours worked on the project by all employees of the Contractor and Subcontractor who performed work on the project to validate compliance with HRS Chapter 103B as amended by Act 192, SLH 2011. The Contractor and Subcontractors shall retain these records and provide access to the State for a minimum period of four (4) years after the final payment, except that if any litigation, claim, negotiation, investigation, audit or other action involving the records has been started before the expiration of the four-year period, the Contractor and Subcontractors shall retain the records until completion of the action and resolution of all issues that arise from it, or until the end of the four-year period, whichever occurs later. Furthermore, it shall be the Contractor's responsibility to enforce compliance with this provision by any Subcontractor.

- f. A General Contractor or applicable Subcontractor who fails to comply with this section shall be subject to any of the following sanctions:
- 1) With respect to the General Contractor, withholding of payment on the contract until the Contractor or its Subcontractor complies with HRS Chapter 103B as amended by Act 192, SLH 2011.
 - 2) Proceedings for debarment or suspension of the Contractor or Subcontractor under Hawai'i Revised Statutes §103D-702.
3. Conflict with Federal Law: This section shall not apply if the application of this section is in conflict with any federal law, or if the application of this section will disqualify the State from receiving Federal funds or aid.

**CERTIFICATION OF COMPLIANCE
FOR
EMPLOYMENT OF STATE RESIDENTS
HRS CHAPTER 103B, AS AMENDED BY ACT 192, SLH 2011**

Project Title: _____

Agency Project No: _____

Contract No.: _____

As required by Hawai'i Revised Statutes Chapter 103B, as amended by Act 192, Session Laws of Hawaii 2011--Employment of State Residents on Construction Procurement Contracts, I hereby certify under oath, that I am an officer of _____ and

(Name of Contractor or Subcontractor Company)

for the Project Contract indicated above, _____ was in

(Name of Contractor or Subcontractor Company)

compliance with HRS Chapter 103B, as amended by Act 192, SLH 2011, by employing a workforce of which not less than eighty percent are Hawai'i residents, as calculated according to the formula in the solicitation, to perform this Contract.

☐ I am an officer of the **Contractor** for this contract.

☐ I am an officer of a **Subcontractor** for this contract.

CORPORATE SEAL

(Name of Company)

(Signature)

(Print Name)

(Print Title)

Subscribed and sworn to me before this
____ day of _____, 2011.

Doc. Date: _____ # of Pages _____ 1st Circuit

Notary Name: _____

Doc. Description: _____

Notary Public, 1st Circuit, State of Hawai'i

My commission expires: _____

Notary Signature

Date

NOTARY CERTIFICATION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HONOLULU, HAWAII

REFERENCE DOCUMENTS

Contents

Notice of General Permit Coverage (NGPC), National Pollutant Discharge Elimination System (NPDES), Domestic and Fire Waterline System Replacement at Pier 51A Honolulu, Island of Oahu, Hawaii File No. HIR10H796; letter from State of Hawaii, Department of Health dated June 12, 2025

Notice of Intent (NOI) Permit Application, Form C



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

In reply, please refer to:
File:

R10H796.FNL.25

June 12, 2025

Via e-mail davis.k.yogi@hawaii.gov only

Mr. Davis Yogi
Engineering Program Manager
State of Hawaii
Department of Transportation
Harbors Division
79 South Nimitz Highway
Honolulu, Hawaii 96813

Dear Mr. Yogi:

**Subject: NOTICE OF GENERAL PERMIT COVERAGE (NGPC)
National Pollutant Discharge Elimination System (NPDES)
Domestic and Fire Waterline System Replacement at Pier 51A
Honolulu, Island of Oahu, Hawaii
File No. HIR10H796**

This letter is to notify you that:

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HARBORS DIVISION

(Permittee) is now covered under the NPDES General Permit authorizing discharges of storm water associated with construction activities. This only authorizes the Permittee to discharge to certain receiving State waters discharge point(s) from certain project location(s), as identified in the Notice of Intent (NOI) Form **HQA-26Y8-4P1YX** that was submitted at the e-Permitting Portal on June 9, 2025, **provided that Permittee shall comply with applicable administrative rules¹ and the information submitted in the NOI (Administrative Requirements).**

¹ Hawaii Administrative Rules (HAR) Chapter 11-54; HAR Chapter 11-55; HAR Chapter 11-55, Appendix A; HAR Chapter 11-55, Appendix C. HAR Chapters 11-54 and 11-55 are available on the DOH, Clean Water Branch website at: <https://health.hawaii.gov/cwb/>.

Unauthorized Discharges. Discharges of any pollutants not authorized by or not in accordance with Hawaii Administrative Rules (HAR) Chapter 11-55, Appendix C, including unauthorized discharges of storm and non-storm water, process and non-process wastewater, toxics, nutrients, and other water pollutants to State waters are prohibited. This NGPC cannot be modified (not including changes to contact information), including additions of discharge point locations.

Term. This NGPC shall take effect on the date of this letter. **This NGPC shall expire at midnight, January 28, 2029**, or when amendments to HAR Chapter 11-55, Appendix C, are adopted, whichever occurs first.

Certain Requirements. As a reminder, this NGPC requires the Permittee, among other things, to do the following.

1. Notify the Department of Health (DOH) of the construction start date within seven (7) calendar days before the start of construction activities.
2. Complete and submit the Solid Waste Disclosure Form for Construction Sites to the DOH, Solid and Hazardous Waste Branch, Solid Waste Section, as specified on the form within seven (7) calendar days before the start of the construction activities. The form is available on the e-Permitting Portal at: <https://eha-cloud.doh.hawaii.gov/epermit>.
3. Implement the Storm Water Pollution Prevention Plan (SWPPP) in accordance with HAR Chapter 11-55, Appendix C. The Director of Health reserves the right to require the Permittee to modify the SWPPP.
4. In the event there are any revisions to the information submitted in the NOI (with the exception of changes to contact person information for non-transfer of ownership and changes to the SWPPP), submit a new NOI with filing fee and obtain a new NGPC.
5. Complete and submit the Notice of Cessation (NOC) within seven (7) calendar days after the end of the month that the subject project was completed.

Compliance Submittals. All NGPC compliance submittals, including the NOC, Notification of Start of Construction or Discharge, Discharge Monitoring Report, and other required information shall be submitted on the Electronic Signature CWB Compliance Submittal Form for Individual NPDES Permits and NGPCs. This form is available on the e-Permitting Portal at: <https://eha-cloud.doh.hawaii.gov/epermit>.

Other Authorizations. The Permittee is responsible for obtaining other Federal, State, or local authorizations as may be required by law.

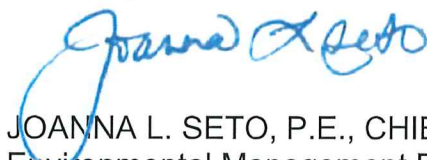
Failure to Comply. Failure to comply with Administrative Requirements is an enforceable violation and this NGPC may be terminated. Violations may be enforced pursuant to Hawaii Revised Statutes (HRS) Chapter 342D and are punishable by civil and criminal penalties thereunder.

Falsification of Information. Providing information (including in the NOI) that does not accurately describe what is actually occurring at the project site/facility, may result in criminal penalties for the Permittee and their authorized representative as provided in Clean Water Act², Section 309 and HRS § 342D-35.

DOH Survey. Please complete the DOH Customer Satisfaction Survey regarding your request for General Permit coverage. This brief survey is available on the e-Permitting Portal at: <https://eha-cloud.doh.hawaii.gov/epermit>. Please use the Application Finder button and search for the "Customer Satisfaction Survey."

If you have any questions, please contact the Clean Water Branch (CWB) Enforcement Section or Mr. Robert Phan of the CWB Engineering Section at (808) 586-4309.

Sincerely,



JOANNA L. SETO, P.E., CHIEF
Environmental Management Division

RTP:ra

- c: Mr. Niko Salvador, State of Hawaii, Department of Transportation, Harbors Division
[via e-mail niko.g.salvador@hawaii.gov only]
Mr. Jonathan Yee, State of Hawaii, Department of Transportation, Harbors Division
[via e-mail jonathan.sw.yee@hawaii.gov only]
Ms. Michelle Marchant, R. M. Towill Corporation
[via e-mail michellem@rmtowill.com only]
DOH-HEER [via e-mail heernotify@gmail.com only]

² Federal Water Pollution Control Act, 33 USC § 1251, *et seq.*

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Electronic Signature CWB NOI Form

version 1.12

(Submission #: HQA-26Y8-4P1YX, version 1)

Details

Originally Started By Michelle Marchant

Project Name Domestic and Fire Waterline System Replacement at Pier 51A

Submission ID HQA-26Y8-4P1YX

Status Draft

Active Steps Application Submitted

Fees

Base Fee (non-refundable) \$500.00

Payments/Adjustments \$0.00

Balance Due \$500.00 (None)

Form Input

NPDES General Permit Requirements

Select the general permit you are requesting coverage under.

Appendix C - Storm Water Associated with Construction Activity

Are you conducting earth-disturbing activities in response to a public emergency that meets the eligibility requirements under HAR, Chapter 11-55, Appendix C, Sections 1.3 and 7.2.3?

No

Notice of Intent (NOI) General Requirements

By submitting this NOI application, you are certifying the following statements:

- I read HAR, Chapters 11-54 and 11-55;
- I understand that State law prohibits any water pollutant to be discharged to a State water except in compliance with HAR, Chapters 11-54 and 11-55;
- I understand that the NPDES General Permits are a privilege and not my right or entitlement;
- I understand that the NPDES General Permits are rules, not permits to be issued;
- I understand that the NPDES General Permits only authorize a specific discharge/activity when I comply with all conditions of the NPDES General Permit;
- I have read every condition of the NPDES General Permit I am requesting coverage under;
- I have determined that my project/activity and organization can, and will, comply with every condition of the applicable NPDES General Permit, and any and all legal obligations;
- I understand that I may only submit the NOI after determining that my project/activity and organization can, and will, comply with every condition of the applicable NPDES General Permit;
- I understand that if I cannot comply with any condition of the NPDES General Permit I need to either fix my organization so that I can comply or I cannot discharge water pollutants to State waters;
- I understand that the Notice of General Permit Coverage (NGPC) is not a permit; it is an authorization to comply with the already issued NPDES General Permit;
- I will design, implement, operate, and maintain appropriate treatment/controls to ensure that my activity/discharge will not violate HAR, Chapters 11-54 and 11-55;
- I have reported any "after the fact" discharges to the CWB enforcement section; and
- The information provided in this application does not include "after the fact" discharges/activities.

I certify under penalty of law that my proposed discharge will not impair any State waters (including but not limited to rivers, streams, wetlands, ponds, ground waters, and ocean), Native Hawaiian cultural resources (including but not limited to burial sites/iwi, heiau, and taro loi), or the exercise of traditional Native Hawaiian cultural practices.
Yes, I certify.

Is this an NOI to continue coverage under a newly re-adopted general permit? This means that you either have a currently effective or administratively extended NGPC under the previous general permit.
No

Is this an NOI to request new or amended coverage (including non-automatic transfers of ownership) for an already permitted facility? Please note that a new NGPC must be issued prior to the project commencing the new activities that are not covered under the currently issued NGPC or NPDES permit.
No

Permittee Information

Operator Applying to Obtain Permit Coverage on Behalf of Owner

Operators may apply for and receive NPDES permit coverage on behalf of the Owner provided that authorization is granted by the Owner.

If an Operator specifies that they are applying to obtain NPDES permit coverage on behalf of the Owner, the permit will be issued to the Operator and will be the legal entity that the permit coverage is issued to.

Do NOT specify that the Operator is applying on behalf of the Owner if the Operator is only preparing the NOI for the Owner and WILL NOT be designated as the Permittee.

This option is to allow for Operators to be designated as the Permittee for projects that are owned by a different entity.

Is the Permittee the operator of the project/activity applying for permit coverage on behalf of the owner of the project/activity?
No

Select the Permittee Organization Type

State

Permittee Legal Name

State of Hawaii

Permittee Department/Office

Department of Transportation

Permittee Division/Program (Optional)

Harbors Division

Permittee Mailing Address

79 S NIMITZ HWY
HALE AWA KU MOKU BUILDING
HONOLULU, HI 96813

Permittee Street Address

79 S NIMITZ HWY
HALE AWA KU MOKU BUILDING
HONOLULU, HI 96813

Select the appropriate signatory type and confirm that the Certifying Person meets the requirements for the corresponding type. The Certifying Person has to meet the applicable requirement and be employed by the Owner.
State Agency

State Agency

I certify that for a state agency, I am a principal executive officer or ranking elected official.

Certifying Person Salutation

Mr.

Certifying Person Information

First Name	Last Name
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Davis	Yogi
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Title

Harbors Administrator

Phone Type	Number	Extension
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Business	808-587-1928	
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Certifying Person Email

davis.k.yogi@hawaii.gov

Permittee Contact Salutation

Mr.

Permittee Contact Information

First Name	Last Name
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Jonathan	Yee
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Title

Project Manager

Phone Type	Number	Extension
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Business	808-587-1956	
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Permittee Contact Email

Jonathan.SW.Yee@hawaii.gov

Do you wish to designate an authorized representative?

Yes

Authorization

The Certifying Person hereby authorizes the named individual or any individual occupying the named position of the company/organization listed below to act as our representative to submit information/documents necessary to complete the NOI or NPDES permit application to discharge to State waters from the subject facility. The Permittee hereby agrees to comply with and be responsible for all NPDES permit conditions.

Our representative is further authorized to submit information/documents for compliance with the NPDES permit conditions. The Authorized Representative is also granted any other signatory authorizations as identified in the applicable NPDES permit.

This authorization begins with NOI or NPDES permit application processing and ends upon authorization of a new authorized representative or receipt of the NOC by the CWB. The Permittee is responsible for all information/documents submitted by the duly authorized representative for completion of the NOI or NPDES permit application and for compliance with the NPDES permit conditions.

The Certifying Person attests that the authorized representative meets the requirements of HAR 11-55-07(b). Both the Certifying Person and authorized representative understand that they can be subject to civil and criminal liability for non-compliance with NPDES permit conditions, non-compliance with HAR Chapters 11-54 and 11-55, and for falsifying information.

Are you designating an individual or position?

Individual

Authorized Representative Salutation

Mr.

Authorized Representative Information

First Name	Last Name	
Niko	Salvador	
Title		
Harbors Engineering Program Manager		
Organization Name		
State of Hawaii Department of Transportation ♦ Harbors Division		
Phone Type	Number	Extension
Business	808-587-1862	

Authorized Representative Email

niko.g.salvador@hawaii.gov

Authorized Representative Mailing Address

79 S NIMITZ HWY
HONOLULU, HI 96813

Authorized Representative Street Address

79 S NIMITZ HWY
HONOLULU, HI 96813

Facility/Project Information

Facility/Project Type of Ownership

State

Facility Organization Formal Name

State of Hawaii Department of Transportation ♦ Harbors Division

Facility Site or Project Name

Domestic and Fire Waterline System Replacement at Pier 51A

City where the project/facility is located.

Honolulu

Island where the project/facility is located.

Oahu

Facility/Project Mailing Address

79 S NIMITZ HWY
HALE AWA KU MOKU BUILDING
HONOLULU, HI 96813

Provide the Facility/Project site address. If no formal street address exists (e.g., for projects constructing new developments with no currently existing roads) enter a location description instead. You must still enter a City, State, and ZIP Code.

Pier 51A, entrance from Sand Island Access Road
HONOLULU, HI 96813

TMK Nos.

Division (e.g., 1)	Zone (e.g., 9)	Section (e.g., 7)	Plat (e.g., 025)	Portion, Parcel, or Lot (e.g., Lots 1-10, 15, & 20)
1	1	5	041	111, 126, 181, 185, 187, 286, 296, 307, 332, 336, 344 to 348, & 352

Facility/Project Site Front Gate Location Coordinates or Start of Linear Construction Location Coordinates

21.310972,-157.885972

Facility/Project Contact Affiliation

Main Contact

Facility/Project Contact Salutation

Mr.

Facility/Project Contact Person Information**First Name**

Jonathan

Last Name

Yee

Title

Project Manager

Organization NameState of Hawaii Department of Transportation  Harbors Division**Phone Type**

Business

Number

808-587-1956

Extension**Facility/Project Contact Person Email**

Jonathan.SW.Yee@hawaii.gov

Standard Industrial Classification (SIC) and North American Industry Classification System (NAICS) Codes

Provide your primary SIC and NAICS code associated with your facility and any co-located activities. The primary SIC and NAICS code are the codes that best describe the primary economic activity at the facility. For co-located activities covered by multiple SIC codes, it is recommended that the primary industrial determination be based on the value of receipts or revenues or, if such information is not available for a particular facility, the number of employees or production rate for each process may be compared. The operation that generates the most revenue or employs the most personnel is the operation in which the facility is primarily engaged. In situations where the vast majority of on-site activity falls within one SIC code, that activity may be the primary industrial activity.

Sector and subsector information are only applicable for industrial storm water coverages.

For construction activities, the SIC code(s) are those that most accurately describe the activities of the Permittee.

SIC Codes

SIC Codes may be found at the link below.

[SIC Codes](#)**NAICS Codes**

NAICS Codes may be found at the link below. Click on Concordances to access the SIC to NAICS code spreadsheets.

[NAICS Codes](#)**Primary SIC and NAICS Code**

Primary SIC Code	Corresponding NAICS Code	Sector	Subsector
1623	237110		

Are there any additional SIC and NAICS codes?

Yes

Additional SIC and NAICS Codes

SIC Code	Corresponding NAICS Code	Sector	Subsector
926120	926120		

Existing or Pending Permits, Licenses or Approvals

Provide the permit number for any applicable Federal, State, or County permits, licenses, or approvals for the project.

Other permits, licenses and approvals include but are not limited to:

- NPDES Individual Permit

- NPDES NGPC
- Section 401 WQC
- Individual Wastewater System Approval
- Recycled Water Reuse Permit
- Hazardous Waste Permit
- Solid Waste Management Permit
- Underground Storage Tank Permit
- Underground Injection Control Permit
- Agricultural Burning Permit
- Air Pollution Control Permit
- Department of the Army Permit (Section 404)

Note: If your project requires work in, above, under or adjacent to State waters, please contact the Army Corps of Engineers (USACE) Regulatory Branch at (808) 438-9258 regarding their permitting requirements.

Are there any other existing or pending NPDES permits/NGPCs associated with this project/facility?

Yes

Associated NPDES Permits

NPDES File Number	Status	Association Reason
HI22KG710	Issued	MS4 Co-Permittee

Are there any other existing or pending (non-NPDES) permits, licenses or approvals associated with this project/facility?

No

Is the facility on the Superfund Amendments and Reauthorization Act (SARA)313 list?

No

Topographic Map(s)

Attach a topographic map or maps to this submission of the area extending at least one mile beyond the property boundaries of the site which clearly show the following:

1. Island on which the project/facility is located;
2. Legal boundaries of the site;
3. Location and an identification number for each of the site's existing and proposed intake and discharge structures; and
4. Receiving state water(s) and receiving storm water drainage system(s) identified and labeled. If the receiving state water is a wetland, submit a map showing the delineated wetland.

Specify the names of the map(s) that identify these items below.

Topographic Maps

C-4 Existing Conditions Plan-5.pdf - 02/19/2025 09:43 AM
Project Location.pdf - 02/19/2025 09:47 AM
Discharge to State Waters.pdf - 02/19/2025 09:54 AM
Comment
NONE PROVIDED

Required Maps

Required Map	Submitted Map(s) Name(s)
Island on Which the Project/Facility is Located	Project Location
Legal Boundaries of the Site	Project Location
Location and an Identification Number for Each of the Site's Existing and Proposed Intake and Discharge Structures (i.e., discharge points/outfalls)	Discharge to State Waters, and C-4 Existing Conditions Plan-5
Receiving State Water(s) and Receiving Storm Water Drainage System(s) Identified and Labeled and Wetland Delineations	Discharge to State Waters, and C-4 Existing Conditions Plan-5

Permitted Feature(s) Information (1 of 7)

Permitted Feature Type

External Outfall

Receiving State Waters Name for Permitted Feature

Pacific Ocean at Honolulu Harbor

Watershed Name for Permitted Feature

Kapalama

Receiving State Water Classification

Class A, Marine

Receiving Water Type

Embayment

Permitted Feature Identifier (Name, e.g., 001, 002, 003, etc.)

01

Permitted Feature Location

21.3138300009,-157.8865849190

Is the receiving State water on the Section 303(d) List?

No

Permitted Feature(s) Information (2 of 7)**Permitted Feature Type**

External Outfall

Receiving State Waters Name for Permitted Feature

Pacific Ocean at Honolulu Harbor

Watershed Name for Permitted Feature

Kapalama

Receiving State Water Classification

Class A, Marine

Receiving Water Type

Embayment

Permitted Feature Identifier (Name, e.g., 001, 002, 003, etc.)

06

Permitted Feature Location

21.31330614110,-157.88309714500

Is the receiving State water on the Section 303(d) List?

No

Permitted Feature(s) Information (3 of 7)**Permitted Feature Type**

External Outfall

Receiving State Waters Name for Permitted Feature

Pacific Ocean at Honolulu Harbor

Watershed Name for Permitted Feature

Kapalama

Receiving State Water Classification

Class A, Marine

Receiving Water Type

Embayment

Permitted Feature Identifier (Name, e.g., 001, 002, 003, etc.)

04

Permitted Feature Location

21.31352153570,-157.8843940740

Is the receiving State water on the Section 303(d) List?

No

Permitted Feature(s) Information (4 of 7)**Permitted Feature Type**

External Outfall

Receiving State Waters Name for Permitted Feature

Pacific Ocean at Honolulu Harbor

Watershed Name for Permitted Feature

Kapalama

Receiving State Water Classification

Class A, Marine

Receiving Water Type

Embayment

Permitted Feature Identifier (Name, e.g., 001, 002, 003, etc.)

03

Permitted Feature Location

21.3136255737,-157.8850598170

Is the receiving State water on the Section 303(d) List?

No

Permitted Feature(s) Information (5 of 7)**Permitted Feature Type**

External Outfall

Receiving State Waters Name for Permitted Feature

Pacific Ocean at Honolulu Harbor

Watershed Name for Permitted Feature

Kapalama

Receiving State Water Classification

Class A, Marine

Receiving Water Type

Embayment

Permitted Feature Identifier (Name, e.g., 001, 002, 003, etc.)

02

Permitted Feature Location

21.31373484490,-157.88561263300

Is the receiving State water on the Section 303(d) List?

No

Permitted Feature(s) Information (6 of 7)

Permitted Feature Type

External Outfall

Receiving State Waters Name for Permitted Feature

Pacific Ocean at Honolulu Harbor

Watershed Name for Permitted Feature

Kapalama

Receiving State Water Classification

Class A, Marine

Receiving Water Type

Embayment

Permitted Feature Identifier (Name, e.g., 001, 002, 003, etc.)

05

Permitted Feature Location

21.31345339660,-157.88398378300

Is the receiving State water on the Section 303(d) List?

No

Permitted Feature(s) Information (7 of 7)

Permitted Feature Type

External Outfall

Receiving State Waters Name for Permitted Feature

Pacific Ocean at Honolulu Harbor

Watershed Name for Permitted Feature

Kapalama

Receiving State Water Classification

Class A, Marine

Receiving Water Type

Embayment

Permitted Feature Identifier (Name, e.g., 001, 002, 003, etc.)

07

Permitted Feature Location

21.313532430308396,-157.88772820122088

Is the receiving State water on the Section 303(d) List?

No

Receiving Drainage System(s) Information (1 of 1)

Does the discharge enter a STORMWATER DRAINAGE SYSTEM before discharging into the receiving State Waters?

Yes

Drainage System Owner's Name

State Department of Transportation, Harbors Division

Drainage System Owner's Approval

Please submit the Drainage System owner's approval to allow the subject discharge to enter their Drainage System. If the project owner also owns the Drainage System, you do not have to submit the approval.

Is the Drainage System Owner the same as the Permittee?

Yes

Please select one of the following.

Private - System is privately owned and the Owner approves of the subject discharge.

Do you have the Drainage System Owner's Approval to Discharge?

Yes. The Drainage System Owner is the same as the Permittee and I will not attach a copy of approval to discharge with this form.

Additional Drainage Systems

If there are additional Drainage Systems that may receive discharges or stormwater runoff from the project, select the "Add New" button below and fill out the required information. Continue this process until all Drainage Systems that may receive discharges or stormwater runoff from the project are identified. Additional drainage systems cannot be added once the NGPC is issued.

NOI Form C

C.1 - General Information

You are required to fulfill all requirements. By submitting the NOI, you are certifying the following statements:

- I prepared a Storm Water Pollution Prevention Plan (SWPPP) in accordance with HAR, Chapter 11-55, Appendix C, Section 7 prior to submitting this NOI;
- I will comply with all terms, conditions, and requirements in HAR Chapter 11-55, Appendix C;
- I will implement, operate, and maintain my SWPPP to ensure that storm water discharges associated with construction activities will not violate HAR, Chapter 11-54; HAR, Chapter 11-55; and HAR, Chapter 11-55, Appendix C;

C.2 - Existing Pollution Sources/History of Land Use

Describe the history of land use at the existing Facility/Project site:

The project site is located on Sand Island on the State of Hawaii, Department of Transportation, Harbors Division land. Pier 51A at Honolulu Harbor was developed in phases starting in 1969 to support container shipping. Over the years, it has been utilized by companies such as Pasha Hawaii and Hawaii Stevedores for cargo operations. Pier 51A is also used for bulk fuel storage by the Hawai'i Fueling Facilities Corporation and Par Hawai'i.

Determine if the existing Facility/Project site may contain any existing pollution source(s) by using the following references. Select all references you utilized to determine existing pollution source(s). You are required to check at least one reference.

Past land use history

DOH, Solid and Hazardous Waste Branch-Hawaii Underground Storage Tank-Leaking Underground Storage Tank database

Describe any existing pollution source(s) identified in the references you selected above.

There are no existing pollution source identified at this time for the project area.

Hazard Evaluation and Emergency Response (HEER) Office

You are also required to check the Department of Health, Hazard Evaluation and Emergency Response (HEER) Office Sites, Incidents and Records through the  Viewer  in iHEER at the link below.

Note: The HEER Office is currently updating site information for sites. Most, but not all sites may be displayed on the viewer map. Site Document data upload is ongoing and not all documents may be currently available via this website. To get the complete record for the site, a record request form can be filled and submitted to the HEER Office. The request form can be at: <https://eha-web.doh.hawaii.gov/eha-cma/Leaders/HEER/public-records>. Users will then be notified when they are able to download all information via the iHEER system website.

[iHEER](#)

Describe any existing pollution source(s) identified in the references you checked above and from HEER Office Sites, Incidents and Records

There are no existing pollution source identified in the iHEER system within the project site. The last record was a "No Further Action Letter" dated December 14, 2005 for the Hawaii Fueling Facilities Corporation Pier 51A.

Describe any corrective measures that have been undertaken for any existing pollution source(s):

No corrective measures are taken as there are no current existing pollution source.

Note

You are required to contact the Department of Health, Office of Hazard Evaluation and Emergency Response at (808) 586-4249 and through e-permitting Form [Notification of Construction Activities](#) at Form Finder from the link below, if contaminated soil, vapor, or groundwater is known to be present at your project site. Notify at least 90 days prior to surface and subsurface disturbing activities (demolition, building/site configuration changes, grading, excavation, or prior to any other activities) that may disturb the ground surface at HEER sites. If you missed the 90 days notification time frame, notify the HEER Office as soon as possible to avoid any potential delays regarding your project.

[Notification of Construction Activities Form](#)

C.3 - Construction Site Estimates

Please provide the following estimates for the construction site.

Parameter	Area	Units
Total project area including areas to be left undisturbed	22.5	acres
Construction site area to be disturbed including storage and staging areas	1.5	acres
Impervious area before construction	22.5	acres
Impervious area after construction	22.5	acres

C.4 - Quantity of Storm Water Runoff

Estimate the quantity of storm water runoff during construction when the greatest and/or maximum area of disturbance occurs. Provide the supporting calculations.

Storm Water Runoff Quantity	Units
129.8	Cubic Feet per Second (CFS)

Storm Water Runoff Supporting Calculations

Pier 51A - NOI Drain Calcs.pdf - 02/07/2025 02:41 PM

Comment

NONE PROVIDED

C.5 - Soil Characterization

Describe the nature of the soil on the project site (including the potential to encounter contaminated soil) and the nature of the fill material to be used.

The soil at Sand Island is fill dredged material. The United States Department of Agriculture identifies the soil as "FL" for fill land, mixed. Pier 51A is entirely paved at the surface.

C.6 - Nature and Sequence of Construction Activity

What is the nature of the construction activity (Select all applicable activity(ies))?

Linear Utility

What is being constructed?

The project will involve the construction of waterlines, fire hydrants, valves, and related water system appurtenances.

Describe the scope of work and major construction activities you wish to be covered in this NOI, including baseyards and staging areas. You may only include project areas where the locations of impervious structures are known; project areas where the final grades are known; and work areas that will be performed by one (1) general contractor. A separate NOI will be required for all other project areas.

The scope of work and major construction activities includes:

1. Mobilization and installation of BMPs;
5. Installation of waterlines, fire hydrants, valves, and related water system appurtenances;
6. Removal of BMPs; and
7. Submittal of Notice of Cessation.

Is a County-approved Erosion and Sediment Control Plan and/or Grading Permit, where applicable for the activity and schedule for implementing each control, required?

No

Please select and complete at least one (1) of the following items to demonstrate that a County-approved Erosion and Sediment Control Plan and/or Grading Permit, as appropriate for the activity and schedule for implementing each control, is not required.

Other: State-owned project on State Land; grading permit and ESCP are exempted. Project does not include any grading work.

C.7 - Project Site Maps and Construction Plans/Drawings

Attach, title, and identify all maps (pdf - minimum 300 dpi) listed below.

Please reference which maps account for the features listed below.

Project Site Maps and Construction Plans/Drawings

[Concept Submittal Drawings.pdf - 02/19/2025 10:07 AM](#)

[Flood Zone.pdf - 02/19/2025 10:07 AM](#)

[Project Location.pdf - 02/19/2025 10:08 AM](#)

Comment

NONE PROVIDED

Vicinity of the project on the island.

Concept Submittal Drawings Sheet T-1, and Project Location

Boundaries of 100-Year flood plans.

Flood Zone

Areas of soil disturbance.

Concept Submittal Drawings Sheets C-5 to C-8

Location(s) of impervious structures (including buildings, roads, parking lots, etc.) after construction is completed.

Concept Submittal Drawings Sheets C-4 to C-8

Pre-Construction Topography including approximate slopes and drainage patterns for the entire Facility/Project site to the receiving storm water drainage system (if applicable) or to the receiving State water(s) (with flow arrows).

Concept Submittal Drawings Sheets C-4 to C-8

During-Construction Topography (after major grading activities) including approximate slopes and drainage patterns for the entire Facility/Project site to the receiving storm water drainage system (if applicable) or to the receiving State water(s) (with flow arrows).

Concept Submittal Drawings Sheets C-4 to C-8

Post-Construction Topography including approximate slopes and drainage patterns for the entire Facility/Project site to the receiving storm water drainage system (if applicable) or to the receiving State water(s) (with flow arrows).

Concept Submittal Drawings Sheets C-4 to C-8

C.8 - Construction Schedule

Provide the following estimated dates.

The date when construction activity will begin.

09/01/2025

The date when each major construction activity begins. This includes those activities identified in Section 7.2.5 of HAR 11-55 Appendix C.

Major Construction Activity	Major Construction Activity Begin Date
Installation of BMPs	11/01/2025
Waterline Work Completion	11/01/2027
Removal of BMPs	12/01/2027

The date when the Notice of Cessation form will be submitted.

02/28/2027

Additional Information

Additional Information

NONE PROVIDED

Comment

NONE PROVIDED

Payment Information

How are you planning to pay the filing fee for this submission?

Offline Payment (check)

Attachments

Date	Attachment Name	Context	Confidential?	User
2/19/2025 10:08 AM	Project Location.pdf	Attachment	No	Michelle Marchant
2/19/2025 10:07 AM	Flood Zone.pdf	Attachment	No	Michelle Marchant
2/19/2025 10:07 AM	Concept Submittal Drawings.pdf	Attachment	No	Michelle Marchant
2/19/2025 9:54 AM	Discharge to State Waters.pdf	Attachment	No	Michelle Marchant
2/19/2025 9:47 AM	Project Location.pdf	Attachment	No	Michelle Marchant
2/19/2025 9:43 AM	C-4 Existing Conditions Plan-5.pdf	Attachment	No	Michelle Marchant
2/7/2025 2:41 PM	Pier 51A - NOI Drain Calcs.pdf	Attachment	No	Michelle Marchant

Status History

	User	Processing Status
1/31/2025 10:40:57 AM	Michelle Marchant	Draft

Processing Steps

Step Name	Assigned To/Completed By	Date Completed
Application Submitted		
In Review		
Issue NGPC		