

OFFICE OF CONSERVATION AND COASTAL LANDS

State of Hawaii
DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION
Honolulu, Hawaii

BOARD OF LAND AND NATURAL RESOURCES

Suzanne D. Case
Chairperson

CONTRACT SPECIFICATIONS AND PLANS

Job No. E00XO30D
KUHIO BEACH STUB GROIN EROSION REMEDIATION
OAHU, HAWAII

Coastal Engineer: Sea Engineering, Inc.

July 2019

State of Hawaii
DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION
Honolulu, Hawaii

CONTRACT SPECIFICATIONS AND PLANS

Job No. E00XO30D
KUHIO BEACH STUB GROIN EROSION REMEDIATION
OAHU, HAWAII

Sam Lemmo

Approved: _____

SAMUEL J. LEMMO
Administrator
Office of Conservation and Coastal Lands

C. S. Chang

Approved: _____

CARTY S. CHANG, P.E.
Chief Engineer
Engineering Division

July 2019

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PLANS (Bound Separately)

DEPARTMENT OF LAND AND NATURAL RESOURCES INTERIM GENERAL
CONDITIONS, DATED OCTOBER 1994 (Bound Separately)

NOTICE TO BIDDERS
(Chapter 103D, HRS)

COMPETITIVE BIDS for Job No. E00XO30D, Kuhio Beach Stub Groin Erosion Remediation, Oahu, Hawaii shall be submitted to the Department of Land and Natural Resources, Engineering Division on the specified date and time through the Hawaii State e-Procurement (HIePRO). HIePRO is accessible through the State Procurement Office website at www.spo.hawaii.gov.

The Department of Land and Natural Resources Interim General Condition, dated October 1994, as amended, and the General Conditions –AG008, latest revision shall be made part of the specifications.

The project is located at Kuhio Beach, Waikiki, Honolulu, Oahu, Hawaii.

The work shall generally consist of constructing a 95-foot-long sand bag groin, to be located at the waterline 140 feet west of the existing Kuhio Beach Park west groin. The groin would have a crest elevation of +3.5 feet msl, and a toe elevation of -2.8 feet. The groin would be constructed of 68 2.5 cubic meter sand-filled geotextile containers, each weighing approximately 12,000 lbs, which will provide a stable structure for the project site wave conditions. The geotextile containers will require 225 cy of sand to fill, which will be obtained from an inland source of carbonate sand. Following construction of the groin, approximately 750 cy of beach sand will be placed between the existing Kuhio Beach west groin and the new ElcoRock groin to fill the cell between the groins to its design shape. The sand fill will be obtained by borrowing sand from the nearby Kuhio Beach Diamond Head (east) basin beach face, from the +5-foot msl beach crest to the -1-foot beach toe, trucking the sand to the placement site, and placing the sand along the beach face.

Due to the nature of work contemplated, bidders must possess a valid State Contractor's license, classification "A" General Engineering.

To be eligible to bid, the prospective bidder must satisfy the requirements of the Bidder's Statement of Qualifications and Section 01200, "Qualification of Bidders." The Department of Land and Natural Resources shall be the sole judge as to whether a bidder satisfies the said requirements by review of their "Bidder's Statement of Qualification" form. The said form, made a part of these Contract Documents, must be properly completed and submitted.

A voluntary pre-bid conference will be held at the Commission on Water Resources Management (CWRM) Office, located at 1151 Punchbowl Street, Room 227, Honolulu, on July 16, 2019, at 10:00a.m. A geotextile sand container filling and placing demonstration video will be shown at the pre-bid conference. Attendance to the pre-bid conference is strongly encouraged due to the unique nature of this project.

The estimated cost of construction is \$670,000.

The award of the contract, if it be awarded, will be subject to the availability of funds.

This project is subject to preference to Hawaii Products established by Section 103D, Hawaii Revised Statutes. The Hawaii Product List may be examined at the State Procurement Office website.

Since the estimated cost of construction is \$250,000 or more, the apprenticeship agreement preference pursuant to Hawaii Revised Statutes §103-55.6 (ACT 17, SLH 2009) shall apply.

Should there be any questions, please refer to the HIePRO solicitation.

INFORMATION AND INSTRUCTIONS TO BIDDERS

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INFORMATION AND INSTRUCTIONS TO BIDDERS

- A. PROJECT LOCATION AND SCOPE OF WORK: The project location and scope of work shall be as generally described in the Notice to Bidders.
- B. PROPOSALS: Bidders shall submit their bid, including the completed proposal form, bid bond, and any other documents required by the solicitation as part of their bid through the State of Hawaii e-Procurement System (HIePRO). See Item D, PROPOSAL FORM.
- C. GENERAL CONDITIONS: The Department of Land and Natural Resources Interim General Conditions dated October 1994, as amended, shall be made a part of these contract specifications and are referred to hereafter as the General Conditions.
- D. PROPOSAL FORM: **The Bidders shall fill out and upload the electronic copy of the proposal form to the HIePRO website when submitting the bid. Bid Proposals shall not be mailed, faxed or delivered to the State, unless requested to do so after the designated closing date. The successful Bidder shall fill out and print a hard copy of the proposal form, sign and submit the form with the contract award package.**
- E. OMISSIONS OR ERASURES: Any proposal which contains any omission or erasure or alteration not properly initialed, or conditional bid, or other irregularity may be rejected by the Board of Land and Natural Resources (Board).
- F. NOTICE OF INTENT TO BID AND QUESTIONNAIRE:
A Notice of Intent to Bid is not required for this project. In compliance with HRS Section 103D-310, the lowest responsive and responsible bidder may be required to complete a questionnaire. When requested by the State, the completed questionnaire shall be submitted to the Chief Engineer for evaluation. Failure to furnish the requested information within the time allowed may be grounds for a determination of non-responsibility, in accordance with HRS Section 103D-310 and HAR Section 3-122-108.
- G. BID SECURITY: A bid security will be furnished by each bidder as provided in sub-section 2.7 of the General Conditions. The successful bidder's bid security will be retained until Contract execution and furnished a performance and payment bond in an amount equal to one hundred percent (100%) of the total Contract price, including an amount estimated to be required for extra work, is furnished.
- The Board reserves the right to hold the bid securities of the four lowest bidders until the successful bidder has entered into a contract and has furnished the required performance bond. All bid securities will be returned in accordance with sub-section 3.5 of the General Conditions.
- Should the successful bidder fail to enter into a contract and furnish a satisfactory performance bond within the time stated in the proposal, the bid security shall be forfeited as required by law.
- H. CONTRACTOR'S LICENSE REQUIRED: The Board will reject all bids received from contractors who have not been licensed by the State Contractors License Board in accordance

with Chapter 444, HRS; Title 16, Chapter 77, Hawaii Administrative Rules; and statutes amendatory thereto.

- I. IRREGULAR BIDS: No irregular bids or propositions for doing the work will be considered by the Board.
- J. WITHDRAWAL OF BIDS: No bidder may withdraw his bid between the time of the opening thereof and the award of contract.
- K. SUCCESSFUL BIDDER TO FILE PERFORMANCE AND PAYMENT BONDS: The successful bidder will be required to file performance and payment bonds each; in the amount equal to the total contract price, including amounts estimated to be required for extra work, as provided in sub-section 3.6 of the General Conditions.
- L. NUMBER OF EXECUTED ORIGINAL COUNTERPARTS OF CONTRACT DOCUMENTS: If requested by the Board, six copies of the Contract, performance and payment bonds shall be executed.
- M. CHANGE ORDERS: No work of any kind in connection with the work covered by the plans and specifications shall be considered as change order work, or entitle the Contractor to extra compensation, except when the work has been ordered in writing by the Chief Engineer (Engineer) and in accordance with sub-section 4.2 of the General Conditions.

The Contractor shall clearly identify and inform the Engineer in writing of any deviations from the contract documents at the time of submission and shall obtain the Engineer's written approval to the specified deviation prior to proceeding with any work.

- N. WAGES AND HOURS: In accordance with sub-sections 7.3 to 7.9 of the General Conditions relative to hours of labor, minimum wages and overtime pay, the current minimum wage rates promulgated by the Department of Labor and Industrial Relations (DLIR) shall be paid to the various classes of laborers and mechanics engaged in the performance of this contract on the job site. The minimum wages shall be increased during the performance of the contract in an amount equal to the increase in the prevailing wages for those kinds of work as periodically determined by the DLIR.

The Department of Land and Natural Resources will not recognize any claim for additional compensation because of the payment by the Contractor of any wage rate in excess of the said minimum wage rates. The possibility of wage increase is one of the elements to be considered by the Contractor in determining his bid, and will not, under any circumstances, be considered as the basis of a claim against the Department under this Contract.

No work shall be done on Saturdays, Sundays, legal State holidays, and/or in excess of eight (8) hours each day without the written consent of the Engineer. Should permission be granted to work at such times, the Contractor shall pay for all inspection administrative costs thereof. No work shall be done at night unless authorized by the Engineer.

- O. PERMITS: The State will process permit applications whenever possible, and the Contractor shall procure the pre-processed permits and pay the required fees. If permit applications are not processed by the State, the Contractor shall process the permit applications, permits and

licenses, and pay all charges and fees. In all cases, the Contractor shall give all notices necessary and incident to the due and lawful prosecution of the work.

- P. PROPERTY DAMAGE: It shall be the responsibility of the contractor to respect State property and to prevent damage to existing improvements. The Contractor will be responsible for damages resulting from construction operations. Immediately upon discovery, the Contractor shall repair such damage to the satisfaction of the Engineer.

All trees and shrubbery outside the excavation, embankment or construction limits shall be fully protected from injury.

- Q. TIME: The time of completion is specified in the Proposal. It is the Board's intention to insist the Contractor diligently prosecute the work to completion within the specified time.

Prospective bidders are reminded that the State has the option to proceed with or abandon a project depending on whether the project can be completed for occupancy in the specified time.

It is the bidder's responsibility to check the availability of all materials before bidding. The bidder shall select sub-contractors and suppliers who can warrant availability and delivery of all specified or qualified materials to assure project completion within the specified time.

The successful bidder must assume all risks for completing the project by the specified date. There shall be no extension of time for any reason except for delays caused by acts of God, labor disputes involving unions, or actions of the State. If for any reason the project falls behind schedule, the Contractor shall at its own cost, take necessary remedial measures to get the project back on schedule, i.e., working overtime, air freighting all materials, etc. In addition, if the Contractor fails to fully complete the project by the completion date, Contractor will be required to make the facility usable at its own cost.

- R. BIDDER'S RESPONSIBILITY TO PROVIDE PROPER SUPERINTENDENCE: The successful low bidder shall designate in writing to the Engineer the name of its authorized superintendent (Superintendent), who will be present at the job site whenever any work is in progress. The Superintendent shall be responsible for all work, receiving and implementing instructions from the Engineer in a timely manner. The cost for superintendence shall be considered incidental to the project.

If the Superintendent is not present at the site of work, the Engineer shall have the right to suspend the work as described under sub-section 5.5 c. and 7.20 - Suspension of Work of the General Conditions.

- S. LIQUIDATED DAMAGES: Liquidated damages in the amount specified in the Proposal will be assessed for each and every calendar day from and after the expiration of the time period stated in the Contract for the completion of the project.

- T. HIRING OF HAWAII RESIDENTS: The Contractor shall comply with Act 68, SLH 2010, in the performance and for the duration of this contract. The Contractor shall ensure that Hawaii residents compose not less than eighty percent of the workforce employed to perform the contract work on the project. The eighty percent requirement shall be determined by

dividing the total number of hours worked on the contract by Hawaii 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 with shortage trades, as determined by the Department of Labor and Industrial Relations (DLIR), shall not be included in the calculation for this section.

The requirements shall apply to any subcontract of \$50,000 or more in connection with the Contractor, that is, such Subcontractors must also ensure that Hawaii residents compose not less than eighty percent of the Subcontractor's workforce used to perform the subcontract.

- U. WATER AND ELECTRICITY: The Contractor shall make all necessary arrangements and pay all expenses for water and electricity used in the construction of this project.
- V. PUBLIC CONVENIENCE AND SAFETY: The Contractor shall conduct construction operations with due regard to the convenience and safety of the public at all times. No materials or equipment shall be stored where it will interfere with the safe passage of public traffic. The Contractor shall provide, install, and maintain in satisfactory condition, all necessary signs, flares and other protective facilities and shall take all necessary precautions for the protection of the work and the convenience and safety of the public. The Engineer shall have the right to suspend the performance of the work in accordance with sub-section 7.20 - Suspension of Work of the General Conditions.
- W. WORK TO BE DONE WITHOUT DIRECT PAYMENT: Whenever the contract that the Contractor is to perform work or furnish materials of any kind for which no price is fixed in the contract, it shall be understood that the Contractor shall perform such work or furnish said materials without extra charge or allowance or direct payment of any sort. The cost of performing such work or furnishing said material is to be included by the Contractor in a unit price for the appropriate item unless it is expressly specified that such work or material is to be paid for as extra work.
- X. AS-BUILT DRAWINGS: As-built drawings, the intent of which is to record the actual in-place construction so that any future renovations or tie-ins can be anticipated accurately, shall be required. All authorizations given by the Engineer to deviate from the plans shall be drawn on the job site plans. All deviations from alignments, elevations and dimensions which are stipulated on the plans shall be recorded on the as-built drawings. Final as-built drawings shall be submitted to the Engineer for review and approval. After the Engineer approves the as-built drawings, the contractor shall submit an electronic copy in Adobe PDF format on CD ROM.
- Y. ASBESTOS CONTAINING MATERIALS: The use of asbestos containing materials or equipment is prohibited. The Contractor shall insure that all materials and equipment incorporated in the project are asbestos-free
- Z. WORKER SAFETY: The Contractor shall provide, install and maintain in satisfactory condition all necessary protective facilities and shall take all necessary precautions for the protection and safety of its workers in accordance with the Occupational Safety and Health Standards for the State of Hawaii. The Engineer shall have the right to suspend the performance of the work in accordance with sub-section 7.20 - Suspension of Work of the

General Conditions.

- AA. TOILET FACILITIES: All toilet facilities constructed at the project site shall be in accordance with the Public Health Regulations of the State Department of Health (DOH). All necessary precautions shall be observed at the project site. The use of sanitary facilities shall be strictly enforced and workers violating these provisions shall be promptly discharged.
- BB. SIGNS: Whenever the project involves closing or obstructing any public thoroughfare, the Contractor shall provide traffic signs conforming to the applicable provisions of the current edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways", published by the Federal Highway Administration as directed by the Engineer for the purpose of diverting or warning traffic prior to the construction area. All traffic signs shall bear proper wording stating thereon the necessary information as to diverting or warning traffic.

When indicated in the Proposal, the Contractor shall provide a project sign, size 4'-0" x 7'-0" to be placed as directed by the Engineer. The sign shall be constructed in accordance with Section 01581 - Project Sign of these specifications and approved by the Engineer. All wording, type and size of lettering and color selection shall be as specified in these specifications or as approved by the Engineer.

All signs shall be kept neat and clean, and properly erected at all times.

- CC. FIELD OFFICE AREA FOR DEPARTMENT: When indicated in the Proposal, the Contractor shall provide a housed working area of at least 100 square feet adjacent to the Contractor's office for the Department's use. This area will be used by the Engineer to perform tests and to store equipment. As a minimum, the field office shall include the following: standard sized office desk and chair, lighting, ventilation, window-type air conditioning rated at 5,000 BTU, door and window with locking hardware, electrical outlets, and working communications facilities (a cellular telephone is acceptable). The Department will pay for all long distance toll charges made by the Engineer.
- DD. QUANTITIES: All bids will be compared on the basis of quantities of work to be done as shown in the Proposal; the quantities shown in the Unit Price items are estimated, being given as a basis for comparison of bids. The Board reserves the right to increase or decrease the quantities given under the items or delete items entirely as may be required during the progress of the work.
- EE. OTHER HEALTH MEASURES: Forms of work site exposure or conditions which may be detrimental to the health or welfare of workers or of the general public shall be eliminated or reduced to safe levels as required by the DOH codes, standards, and regulations. Suitable first aid kits and a person qualified to render first aid, as specified in the DOH regulations, shall be provided at all times when work is scheduled.
- FF. HAWAII BUSINESS OR COMPLIANT NON-HAWAII BUSINESS REQUIREMENT: Bidders (Contractors) shall be incorporated or organized under the laws of the State or be registered to do business in the State as a separate branch or division that is capable of fully performing under the contract, as stipulated in §3-122-112 HAR.

GG. COMPLIANCE WITH §3-122-112 HAR:

As a condition for award of the contract and as proof of compliance with the requirements of 103D-310(c) HRS, the apparent low bidder shall furnish the required documents to the Department. If the valid required certificates are not submitted on a timely basis for award of a contract, a bidder otherwise responsive and responsible may not receive the award. Bidder is responsible to apply for and submit the following documents to the Department.

- A. **TAX CLEARANCE REQUIREMENTS (HRS Chapter 237):** Bidder shall obtain a tax clearance certificate from the Hawaii State Department of Taxation (DOTAX) and the Internal Revenue Service (IRS). The certificate is valid for six months from the most recently approved stamp date on the certificate; the certificate must be valid on the date received by the Department.
- B. Department of Labor (DLIR) “**Certificate of Compliance**”. (HRS Chapter 383 - Unemployment Insurance, Chapter 386 - Workers’ Compensation, Chapter 392 - Temporary Disability Insurance, and 393 – Prepaid Health Care): Bidder shall obtain a certificate of compliance from the Hawaii State Department of Labor and Industrial relations (DLIR). The certificate is valid for six months from the date of issue; certificates must be valid on the date received by the Department.
- C. Department of Commerce and Consumer Affairs (DCCA), Business Registration Division (BREG) “**Certificate of Good Standing**”. Bidder shall obtain a certificate of good standing issued by the Department of Commerce and Consumer Affairs (DCCA), Business Registration Division (BREG). The certificate of good standing is valid for six months from the date of issue; certificates must be valid on the date received by the Department.

Alternately, instead of separately applying for these certificates at the various state agencies, bidder may choose to use the Hawaii Compliance Express (HCE), which allows businesses to register online through a simple wizard interface at <http://vendors.ehawaii.gov> to acquire a “Certificate of Vendor Compliance” indicating the bidder’s status is compliant with the requirements of §103D-310(c), HRS, and shall be accepted for contracting and final payment purposes. Bidders that elect to use the new HCE services will be required to pay an annual fee of \$15.00 to the Hawaii Information Consortium, LLC (HIC). Bidders choosing not to participate in the HCE program will be required to provide the paper certificates as instructed in the previous paragraphs.

P R O P O S A L

FOR

DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION
State of Hawaii

JOB NO. E00XO30D
KUHIO BEACH STUB GROIN EROSION REMEDIATION
OAHU, HAWAII

_____, 2019

Chief Engineer
Engineering Division
Department of Land and Natural Resources
State of Hawaii
Honolulu, Hawaii

Dear Sir:

The undersigned, having carefully examined the local conditions and all available records and information covering conditions which may affect the cost of the work to be performed, and having carefully examined the Plans and Specifications, and other contract documents, hereby proposes to furnish and pay for all materials, tools, equipment, labor and other incidental work necessary for construction of Kuhio Beach Stub Groin Erosion Remediation, as required or called for in this Proposal, all according to the true intent and meaning of the Notice to Bidders, Information and Instructions to Bidders, Proposal, Detailed Specifications, Interim General Conditions, Plans, and any and all addenda for:

JOB NO. E00XO30D
KUHIO BEACH STUB GROIN EROSION REMEDIATION
OAHU, HAWAII

on file in the office of the Engineering Division for the TOTAL BASE BID (Items 1 to 6) of:

_____ Dollars (\$_____)

and will fully complete all work under this contract within 60 consecutive calendar days from the date of written notice to proceed, including date of said order, said total sum being itemized on the following pages.

PROPOSAL

Item No.	Quantity	Unit	Description	Unit Price	Total
1.		LS	Geotextile container groin, including geotextile containers, sand fill, geotextile filter, and filling and placement.	LS	\$ _____
2.		LS	Beach sand borrow, transport, and placement.	LS	\$ _____
3.		LS	BMPP, Environmental and Pollution Controls, in place and complete.	LS	
4.		LS	Project Sign, in place complete.	LS	\$ _____
5.	Allowance		Field Office.		\$ 10,000.00
Subtotal Base Bid (Items 1-5)					\$ _____
6.		LS	Mobilization and Demobilization (not to exceed 10% of the Subtotal Base Bid)		\$ _____
Total Base Bid (Items 1-6)					\$ _____

NOTE: Bid Item No. 2 is based on a quantity of 750 cy of sand to be borrowed and placed, as shown on the Plans. The Engineer reserves the right to revise the borrow and placement plan within two (2) weeks prior to the start of construction if necessary to reflect current beach conditions. If the sand quantity is reduced the Bid Item Price will be reduced in direct proportion to the sand quantity reduction (e.g., a 10% reduction in sand quantity will result in a 10% reduction in Unit Price). The sand quantity, however, shall not be reduced to less than 500 cy.

BIDDER’S STATEMENT OF QUALIFICATION

This BIDDER’S STATEMENT OF QUALIFICATION shall be included and made a part of the contractor’s bid proposal. Failure to fully complete, and have notarized, this STATEMENT will be sufficient cause for the State to disqualify a prospective bidder. The completed and notarized STATEMENT must be submitted to the Department of Land and Natural Resources, Engineering Division, through the HIePRO system as indicated in the NOTICE TO BIDDERS.

Bidders must demonstrate prior work force experience in working with geotextile sand containers satisfying the minimum requirements of SECTION 01200 QUALIFICATION OF BIDDERS. Bidders who, in the judgment of the State, do not meet such minimum requirements will have their bids rejected.

Full and explicit replies to the inquiries are required. Attach additional sheets as required.

Print or Type All Information

A. GENERAL BIDDER INFORMATION

Bidder’s Name and Mailing Address

Bidder’s Street Address (if different than above)

Name of Contact Person _____

Bidder’s Telephone Number () _____

Bidder’s Fax Number () _____

Hawaii Contractor’s License _____

B. GENERAL QUALIFICATION REQUIREMENTS

A bidder’s bid will be rejected if the bidder cannot provide for the Project a minimum work force whose members have been deemed “qualified” by the State.

The minimum work force required for the Project geotextile sand containers, for which each member must be deemed “qualified” by the State, shall include one (1) WORK SUPERVISOR and one (1) WORK CREW MEMBER. Each member of the Contractor’s geotextile sand

container work force must be under the Contractor's, or his subcontractor's, employment **at the time of the Notice to Proceed.**

Prospective bidders are permitted to name more than one person in this STATEMENT for each position requiring qualifying experience. Attach additional sheets as required.

C. **QUALIFICATIONS REQUIREMENTS**

All work involving geotextile sand containers shall be performed by an experienced Contractor's or Subcontractor's work force. The geotextile sand container work force shall include, but not be limited to, the work supervisor and one work crew member (other than the supervisor) who will be involved in installation of the geotextile sand containers.

1. GEOTEXTILE SAND CONTAINER WORK SUPERVISOR – The geotextile sand container work supervisor shall have direct supervisory experience as specified in Section 01200 - QUALIFICATION OF BIDDERS.

Name of geotextile sand container Work Supervisor: _____

List Supervisor's qualifying projects below:

a) **PROJECT #1** _____

Employer _____

Employer Address _____

Contact Person _____

Employer Telephone Number () _____

Project Start Date _____

Project Completion Date _____

Owner _____

Address _____

Contact Person _____

Telephone Number () _____

Total area of geotextile sand container work that Supervisor directly performed in Qualifying Supervisory Position (in Square Feet)

b) **PROJECT #2** _____

Employer _____

Employer Address _____

Contact Person _____

Employer Telephone Number () _____

Project Start Date _____

Project Completion Date _____

Owner _____

Address _____

Contact Person _____

Telephone Number () _____

Total area of geotextile sand container work that Supervisor directly performed in
Qualifying Supervisory Position (in Square Feet)

c) **PROJECT #3** _____

Employer _____

Employer Address _____

Contact Person _____

Employer Telephone Number () _____

Project Start Date _____

Project Completion Date _____

Owner _____

Address _____

Contact Person _____

Telephone Number () _____

Total area of geotextile sand container work that Supervisor directly performed in
Qualifying Supervisory Position (in Square Feet)

2. **GEOTEXTILE SAND CONTAINER WORK CREW MEMBER – The geotextile sand container work crew member shall have direct field experience as specified in Section 01200 - QUALIFICATION OF BIDDERS.**

Name of geotextile sand container Work Crew Member _____

List Work Crew Member's qualifying projects below:

a) **PROJECT #1** _____

Employer _____

Employer Address _____

Contact Person _____

Employer Telephone Number () _____

Project Start Date _____

Project Completion Date _____

Owner _____

Address _____

Contact Person _____

Telephone Number () _____

Total area of geotextile sand container work that Supervisor directly performed in Qualifying Supervisory Position (in Square Feet)

b) **PROJECT #2** _____

Employer _____

Employer Address _____

Contact Person _____

Employer Telephone Number () _____

Project Start Date _____

Project Completion Date _____

Owner _____

Address _____

Contact Person _____

Telephone Number () _____

Total area of geotextile sand container work that Supervisor directly performed in Qualifying Supervisory Position (in Square Feet)

AFFIDAVIT

Affidavit for Individual

State of _____)
County of _____) ss. dba _____

I, _____, being duly sworn and depose and say that the foregoing statements and answers to the questions are correct and true as of the date of this affidavit.

(Applicant sign here)

Subscribed and sworn to before me this _____ day of _____, 20_____.

NOTARY PUBLIC
My commission expires _____

Affidavit for Co-Partnership

State of _____)
County of _____) ss. dba _____

I, _____, being duly sworn and depose and say I am a partner in the firm of _____, that the foregoing statements and answers to the questions are correct and true as of the date of this affidavit.

(Member of firm sign here)

Subscribed and sworn to before me this _____ day of _____, 20_____.

NOTARY PUBLIC
My commission expires _____

Affidavit for Corporation

State of _____)
County of _____) ss. dba _____

I, _____, being duly sworn and depose and say I am a _____ of the _____ Corporation described in and which executed the foregoing statement; that the foregoing statements and answers to the questions are correct and true as of the date of this affidavit.

(Member of firm sign here)

Subscribed and sworn to before me this _____ day of _____, 20_____.

NOTARY PUBLIC
My commission expires _____

HAWAII PRODUCTS PREFERENCE AND/OR USE OF HAWAII PRODUCTS

In accordance with Act 175, SLH 2009, the Hawaii products preference is applicable to this solicitation. Bidders offering a Hawaii product (“HP”) shall identify the HP in the table below.

Persons desiring to qualify their product(s) not currently on the Hawaii Product List, shall complete Form SPO-38, *Certification for Hawaii Product Preference*, and submit the completed form no later than the deadline specified in the procurement notice and solicitation. The responsibility for certification and qualification shall rest upon the person requesting the preference. One form shall be completed and submitted for each product. Form SPO-38 is available at <http://spo.hawaii.gov/>.

For the purpose of selecting the low bid when a solicitation contains both HP and non-HP, the price offered for a HP item shall be decreased by subtracting 10% for the class I or 15% for the class II HP item(s) offered. The lowest total offer, taking the preference into consideration, shall be awarded the contract, unless the offer provides for additional award criteria. The contract amount of any contract awarded, however, shall be the amount of the price offered, exclusive of the preferences.

In the event of any change that materially alters the bidder’s ability to supply the Hawaii product(s), the bidder shall immediately notify the procurement officer in writing and the parties shall enter into discussions for the purpose of revising the contract or terminating the contract for convenience.

Item No.	Pre-Approved Hawaii Product Description & Manufacturer	Class (I or II)	Quantity	Unit Measure	Unit Price	Total Price
1.	<i>[Product Description, Manufacturer Name]</i>	(I)				
2.						
3.						
4.						

RECYCLED PRODUCTS PREFERENCE

This project allows a 10% price preference for recycled products in accordance with HRS 103D-1005. Please indicate your recycled or non-recycled product by indicating its cost FOB jobsite unloaded in the schedule below, including applicable General Excise & Use Taxes.

<u>DESCRIPTION</u>	<u>RECYCLED PRODUCT COST</u>	<u>NONRECYCLED PRODUCT COST</u>
_____	\$ _____	\$ _____
_____	\$ _____	\$ _____
_____	\$ _____	\$ _____
_____	\$ _____	\$ _____

The bidder requesting a recycled product preference shall also complete and submit the form "CERTIFICATION OF RECYCLED CONTENT" as shown in the Interim General Conditions and provide all supporting information with this proposal. Additional information may be requested to qualify a product.

The following definitions are applicable to the CERTIFICATION OF RECYCLED CONTENT form:

"Post-consumer recovered material" means any product used by a consumer, including a business that purchases the material, that has served its intended end use, and that has been separated or diverted from the solid waste stream for the purpose of use, reuse, or recycling.

"Product" includes materials, manufactures, supplies, merchandise, goods, wares, and foodstuffs.

"Recovered material" means waste material and by-products that have been separated, diverted, or removed from the solid waste stream after a manufacturing process for the purpose of use, reuse, or recycling. Recovered material does not include those materials and by-products that are generated and normally reused on-site or within original manufacturing processes (such as mill broke, in the case of paper products).

"Recycled content" means the percentage of a product composed of recovered material, or post-consumer recovered material, or both.

"Recycled product" means a product containing recovered material, or post-consumer recovered material, or both.

The bidder agrees that preference for recycled products shall be taken into consideration to determine the low bidder in accordance with said Section and the rules promulgated, however, the award of contract will be in the amount of the bid offered exclusive any preference.

APPRENTICESHIP AGREEMENT PREFERENCE

1. If applicable to this project, any bidder seeking the preference must be a party to an apprenticeship agreement registered with the State Department of Labor and Industrial Relations (DLIR) at the time the bid is submitted for each apprenticeable trade the bidder will employ to construct the project. “Employ” means the employment of a person in an employer-employee relationship.
 - a. The apprenticeship agreement shall be registered with the DLIR and conform to the requirements of Hawaii Revised Statutes Chapter 372.
 - b. Subcontractors do not have to be a party to an apprenticeship agreement for the bidder to obtain preference.
 - c. The bidder is not required to have apprentices in its employ at the time the bid is submitted to qualify for the preference.
2. A bidder seeking the preference must state the apprenticeable trade the bidder will employ for each trade to be employed to perform the work by submitting a completed signed original Certification Form 1 verifying participation in an apprenticeship program registered with DLIR. “Apprenticeable trade” shall have the same meaning as “apprenticeable occupation” pursuant to Hawaii Administrative Rules (HAR) §12-30-5.
 - a. The *Certification Form 1* shall be authorized by an apprenticeship sponsor listed on the DLIR list of registered apprenticeship programs. “Sponsor” means an operator of an apprenticeship program and in whose name the program is approved and registered with the DLIR pursuant to HAR §12-30-1.
 - b. The authorization shall be an original signature by an authorized official of the apprenticeship sponsor.
 - c. The completed signed original Certification Form 1 for each trade must be submitted with the bid. Previous certifications shall not apply.
 - d. When filling out the *Certification Form 1*, the name of Apprenticeable Trade and Apprenticeship Sponsor must be the same as recorded in the List of Construction Trades in Registered Apprenticeship Programs that is posted on the DLIR website. “Registered apprenticeship program” means a construction trade program approved by the DLIR pursuant to HAR §12-301 and §12-30-4.
 - e. The *Certificate Form 1* and the List of Construction Trades in Registered Apprenticeship Programs is available on the DLIR website at: <http://hawaii.gov/labor/wdd>.
3. Upon receiving the *Certification Form 1*, the Procurement Officer will verify that the apprenticeship program is on the List of Construction Trades in Registered Apprenticeship Programs and that the form is signed by an authorized official of the Apprenticeship Program Sponsor. If the programs and signature are not confirmed by the DLIR, the bidder will not qualify for the preference.
4. If the bidder is certified to participate in an apprenticeship program for each trade which will be

employed by the bidder for the project, a preference will be applied to decrease the bidder's bid amount by five percent (5%) for evaluation purposes.

5. Should the bidder qualify for other preferences (e.g. Hawaii Products), all applicable preferences shall be applied to the bid price.

CONTRIBUTIONS BY STATE AND COUNTY CONTRACTORS PROHIBITED

Contractors are hereby notified of the applicability of Section 11-355, HRS, 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.

CONDITION OF AWARD

It is understood that the award of the contract will be made on the basis of the lowest responsible Total Base Bid (Items 1 to 6) selected by the Board of Land and Natural Resources. Write the total of bid items 1 to 6 on page P-1.

It is understood and agreed that the Board of Land and Natural Resources reserves the right to reject any and/or all bids and waive any defects when, in the Board's opinion, such rejection or waiver will be for the best interest of the State of Hawaii.

In the event all bids exceed available funds certified by the appropriate fiscal officer, the head of the purchasing agency responsible for the procurement in question is authorized in situations where time or economic considerations preclude resolicitation of work of a reduced scope to negotiate an adjustment of the bid price, including changes in the bid requirements, with the low responsible and responsive bidder, in order to bring the bid within the amount of available funds. It is understood and agreed upon that the head of the purchasing agency may delete a portion or all of any item(s) in the proposal at the stated unit or lump sum price as necessary to stay within the available funding. The bidder is responsible to make an earnest effort to represent the actual cost of each item, including all materials, labor, equipment, overhead and profit in their bid proposal to preclude claims of anticipated profit or loss of profit because of an unbalanced bid proposal.

It is also understood that if a mutually agreeable cost for the reduced scope of work necessitated by a lack of available funds cannot be agreed upon between the bidder and the head of the purchasing agency within 14 calendar days after the bid opening, then the bid may be rejected in the best interest of the purchasing agency, and the head of the purchasing agency may negotiate in progressive order (lowest to highest) with the next lowest responsible and responsive bidder.

It is also understood and agreed that the award of the contract shall be conditioned upon funds being made available for this project and further upon the right of the Board of Land and Natural Resources to hold all bids received for a period of ninety (90) days from the date of the opening thereof, unless otherwise required by law, during which time no bid may be withdrawn.

It is also understood that Notice to Proceed may be delayed up to one (1) year after the bid opening date, and that no additional compensation will be provided for any claim for escalation or delay for issuance of Notice to Proceed on or before that date.

It is also understood and agreed that the quantities given herewith are approximate only and are subject to increase or decrease, and that the undersigned will perform all quantities of work as either increased

or decreased, in accordance with the provisions of the Contract Specifications.

It is also understood and agreed that the estimated quantities shown for the items for which a UNIT PRICE is asked in this Proposal are only for the purpose of comparing on a uniform basis, bids offered for the work under this contract, and the undersigned agrees that he is satisfied with and will at no time, dispute said estimated quantities as a means of claims for anticipated profit or loss of profit, because of a difference between the quantities of the various classes of work done or the materials and equipment installed, and the said estimated quantities. On UNIT PRICE bids, payment will be made only for the actual number of units incorporated into the finished project at the contract UNIT PRICE.

After the proposals are opened and read, the figures will be extended and/or totaled in accordance with the bid prices of the acceptable proposals and the totals will be compared. In the comparison of bids, words written in the proposal shall govern over figures and unit prices will govern over totals. Until the award of the contract, however, the right will be reserved to reject any and all proposals and to waive any defects or technicalities as may be deemed best for the interest of the State.

It is also understood and agreed that liquidated damages in the amount of Two hundred and No/100 (\$200.00) for each and every calendar day in excess thereof prior to completion of the contract shall be withheld from payments due to the Contractor.

It is also understood and agreed that if this bid is accepted, the successful bidder must enter into and execute a contract with the Board of Land and Natural Resources and furnish a Performance and Payment Bond, as required by law. These bonds shall conform to provisions of Section 103D-324 and 325, Hawaii Revised Statutes and any law applicable hereto.

It is also understood and agreed that the successful bidder will provide all necessary labor, materials, tools, equipment, and other incidentals necessary to do all the work and furnish all the materials specified in the contract in the manner and time herein prescribed, and according to the requirements of the Engineer as therein set forth.

It is understood that by submitting this proposal, the undersigned is declaring that his firm has not been assisted or represented on this matter by an individual who has, in a State capacity, been involved in the subject matter of this contract in the past two years.

It is understood that by submitting this proposal in accordance with HAR 3-122-192, the undersigned is declaring that the price submitted is independently arrived without collusion.

It is also understood that by submitting this proposal, a Certification for Safety and Health Programs for bids in excess of \$100,000 (in accordance with HRS 396-18), the undersigned certifies that his organization will have a written safety and health plan for this project that will be available and implemented by the Notice to Proceed date of this project. Details of the requirements of this plan may be obtained from the Department of Labor and Industrial Relations, Occupational, Safety and Health Division (HIOSH).

It is further understood and agreed that the successful bidder shall comply with paragraph 3.1.a "SUBCONTRACTING" of the General Provisions which requires that the contractor shall perform with his own organization and with the assistance of workmen under his immediate superintendence, work of a value not less than twenty percent (20%) of the value of all work embraced in the Contract, except that certain contract items of work, if specifically referred to in the special provisions, will be exempted from said twenty percent requirement.

Compliance with §103-310 HRS. As a condition of award all bidders shall comply with all laws governing entities doing business in the State, including Chapter 237 HRS (general excise tax); Chapter 383 HRS (employment security – unemployment insurance); Chapter 386 HRS (workers compensation); Chapter 392 HRS (temporary disability insurance); and Chapter 393 HRS (pre-paid health care), and shall produce all documents to the State (DLNR, Engineering Division) required to demonstrate compliance with these subsections. Any bidder making a false affirmation or certification under this subsection shall be suspended and may be debarred from further offerings or awards pursuant to §103D-702 HRS.

RECEIPT OF ADDENDA

The bidder also acknowledges receipt of any and all addenda issued by the Engineering Division, by recording the date of receipt of the respective addenda in the space provided below:

<u>Addendum</u>	<u>Date Received</u>	<u>Addendum</u>	<u>Date Received</u>
No. 1	_____	No. 5	_____
No. 2	_____	No. 6	_____
No. 3	_____	No. 7	_____
No. 4	_____	No. 8	_____

It is understood that failure to receive any such addendum shall not relieve the Contractor from any obligation under this Proposal as submitted.

It is also understood and agreed that if this Proposal is accepted and the undersigned should fail or neglect to contract as aforesaid, the Board may determine that the bidder has abandoned the Contract, and thereupon, forfeiture of the security accompanying his proposal shall operate and the same shall become the property of the Board.

JOINT CONTRACTORS OR SUBCONTRACTORS
TO BE ENGAGED ON THIS PROJECT

The Bidder agrees that the following is a complete listing of all joint contractors or subcontractors covered under Chapter 444, Hawaii Revised Statutes (HRS), who will be engaged by the Bidder on this project to perform the required work indicated pursuant to Section 103D-302, HRS. 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. The Bidder certifies that the completed listing of joint contractors or subcontractors fulfills the requirements for the project and the Bidder, together with the listed subcontractors or joint contractors have all the specialty contractor's licenses to complete the work, except as provided for in HRS §103D-302(b). Failure of the Bidder to comply with this requirement may be just cause for rejection of the bid.

“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 in which 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.

General Engineering “A” Contractors automatically have these “C” specialty contractor’s licenses: C-3, C-9, C-10, C-17, C-24, C-31a, C-32, C-35, C-37a, C-37b, C-38, C-43, C-49, C-56, C-57a, C-57b and C-61.

General Building “B” Contractors automatically have these “C” specialty contractor’s licenses: C-5, C-6, C-10, C-12, C-24, C-25, C-31a, C-32a, C-42a and C-42b.

In completing the Joint Contractors or Subcontractors List, describe the specialty contractor’s nature and scope of work to be performed for this project and provide the complete firm name of the joint contractor or subcontractor in the respective columns. If the Bidder is a general contractor providing the work of a required specialty contractor, whose license is not automatically held pursuant to HAR 16-77-32, fill in the Bidder’s (general contractor’s) name and nature and scope of work to be performed on this project.

List only one joint contractor or subcontractor per required specialty contractor’s classification, unless within the same specialty, the work of each joint contractor or subcontractor can be described so that there is no overlap in work descriptions.

If a contractor’s license is required by law for the performance of the work which is called for in this bid, the bidder and all subcontractors must have the required license before the submission of the bidder’s proposal in the case of a non-federal aid project, and for federal-aid projects, the bidder must have the required license prior to the award of the project and all subcontractors prior to the start of the subcontracted work.

COMPLETE FIRM NAME OF JOINT CONTRACTOR OR SUBCONTRACTOR	NATURE AND SCOPE OF WORK TO BE PERFORMED

Enclosed herewith is a:

- 1. Surety Bond (*1))
- 2. Legal Tender (*2))
- 3. Cashier's Check (*3))
- 4. Certificate of Deposit (*3)) in the
- 5. Certified Check (*3)) amount
- 6. Official Check (*3)) of
- 7. Share Certificate (*3))
- 8. Teller's Check (*3))
- 9. Treasurer's Check (*3))

(Cross Out Those Not Applicable)

Dollars (\$ _____)

as required by law.

Respectfully submitted,

Name of Company, Joint Venture
or Partnership

Contractor's License No.

By _____
Signature (*4)

Title _____

Print Name _____

Date _____

Address _____

Telephone No. _____

E-Mail Address _____

NOTES:

1. Surety bond underwritten by a company licensed to issue bonds in this State;
2. Legal tender; or
3. A certificate of deposit; share certificate; or cashier's, treasurer's, teller's, or official check drawn by, or a certified check accepted by, and payable on demand to the State by a bank, a savings institution, or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration.
 - A. These instruments may be utilized only to a maximum of \$100,000.
 - B. If the required security or bond amount totals over \$100,000, more than one instrument not exceeding \$100,000 each and issued by different financial institutions shall be accepted.
4. Please attach to this page evidence of the authority of this officer to submit bids on behalf of the Company and also the names and residence addresses of all officers of the Company.
5. Fill in all blank spaces with information asked for or bid may be invalidated. PROPOSAL MUST BE INTACT, MISSING PAGES MAY INVALIDATE YOUR BID.

End of Proposal

SPECIAL PROVISIONS

Amend INTERIM GENERAL CONDITIONS, dated October 1994, as follows:

Section 2 – Proposal Requirements and Conditions

1. **AMEND** Section 2.1 Qualification of Bidder with the following:

Written Notice of Intent to Bid or Offer: A written Notice of Intent to Bid is not required for the Solicitation.

Standard Qualification Questionnaire: Bidders may be required to complete a standard qualifications questionnaire. When requested, the information shall be furnished within two working days or longer at the discretion of the Engineer. Failure to furnish the requested information within the time allowed may be grounds for a determination of non-responsibility, in accordance with HRS Section 103D-310 and HAR Section 3-122-108.

Hawaii Business or Compliant Non-Hawaii Business Requirement: Bidders shall be incorporated or organized under the laws of the State or be registered to do business in the State as a separate branch or division that is capable of fully performing under the contract, as stipulated in §3-122-112 HAR. A certified letter is not required prior to bid opening.

Compliance with §3-122-112 HAR: As a condition for award of the contract and as proof of compliance with the requirements of 103D-310(c) HRS, the apparent low bidder shall furnish the required documents to the Department. If the valid required certificates are not submitted on a timely basis for award of a contract, a bidder otherwise responsive and responsible may not receive the award. Bidder is responsible to apply for and submit the following documents to the Department.

- A. Tax Clearance (HRS Chapter 237): Bidder shall obtain a tax clearance certificate from the Hawaii State Department of Taxation (DOTAX) and the Internal Revenue Service (IRS). The certificate is valid for six months from the most recently approved stamp date on the certificate; the certificate must be valid on the date received by the Department.
- B. Department of Labor (DLIR) “Certificate of Compliance”. (HRS Chapter 383 - Unemployment Insurance, Chapter 386 - Workers’ Compensation, Chapter 392 - Temporary Disability Insurance, and 393 – Prepaid Health Care): Bidder shall obtain a certificate of compliance from the Hawaii State Department of Labor and Industrial relations (DLIR). The certificate is valid for six months from the date of issue; certificates must be valid on the date received by the Department.
- C. Department of Commerce and Consumer Affairs (DCCA), Business Registration Division (BREG) “Certificate of Good Standing”. Bidder shall obtain a certificate of good standing issued by the Department of Commerce and Consumer Affairs (DCCA), Business Registration Division (BREG). The certificate of good standing is valid for six months from the date of issue; certificates must be valid on the date received by the Department.

Hawaii Compliance Express. Alternately, instead of separately applying for these certificates at the various state agencies, bidder may choose to use the Hawaii Compliance Express (HCE), which allows businesses to register online through a simple wizard interface at <http://vendors.ehawaii.gov> to acquire a “Certificate of Vendor compliance” indicating that bidder’s status is compliant with requirements of §103D-310(c), HRS, shall be accepted for contracting and final payment purposes.

Bidders that elect to use the new HCE services will be required to pay an annual fee of \$15.00 to the Hawaii

Information Consortium, LLC (HIC). Bidders choosing not to participate in the HCE program will be required to provide the paper certificates as instructed in the previous paragraphs.

2. **ADD** Section 2.4a, Pre-Bid Conferences

Required Pre-bid Conferences: For construction and design-build projects with an estimated value of \$500,000 or more and solicited under the competitive sealed bid method (103D-302 HRS); and for construction and design-build projects with an estimated value of \$100,000 or more and solicited under the competitive sealed proposal method (103D-303 HRS); a pre-bid conference is required.

Other Pre-Bid Conferences: The Department may require a pre-bid conference for construction or design-build projects that are below the dollar threshold listed in above or when projects have special or unusual requirements.

Other Conditions: The Department may require the prospective Bidders to make a physical inspection of the project site and make attendance at the pre-bid conference a condition for submitting an offer.

Nothing stated at the pre-bid conference shall change the solicitation unless a change is made by written addendum.

3. **DELETE** Section 2.5, Addenda and Interpretations, in its entirety and replace with the following:

“Discrepancies, omissions, or doubts as to the meaning of drawings and specifications should be communicated using the question and answer section on the HiePRO solicitation for interpretation and must be received in the time frame set in the HiePRO solicitation. Any interpretation, if made and any supplemental instructions will be in the form of written addenda to the plans and specifications and made available prior to the offer due date. It shall be the prospective bidder’s sole responsibility to verify and obtain any said addenda. Failure of any bidder to receive any such addendum or interpretation shall not relieve such bidder from any obligation under his bid as submitted. All addenda so issued shall become part of the contract documents.”

Section 3 – Award and Execution of Contract

1. **AMEND** Section 3.3, Award of Contract, by deleting “sixty (60)” and replacing with “ninety (90)” in the first paragraph.

2. **AMEND** Section 3.3, Award of Contract, by adding the following after the first paragraph:

“If the contract is not awarded within the ninety (90) days, the Department may request the successful Bidder to extend the time for the acceptance of its bid. The Bidder may reject such a request without penalty; and in such case, the Department may at its sole discretion make a similar offer to the next lowest responsive and responsible bidder and so on until a bid is duly accepted or until the Department elects to stop making such requests.”

3. **AMEND** Section 3.9, Notice to Proceed, by deleting “180 days” and replacing with “one (1) year” in the last paragraph.

4. **ADD** Section 3.10, Protests:

“3.10 PROTESTS—Pursuant to Section 103D-701, Hawaii Revised Statutes, an actual or prospective

offeror who is aggrieved in connection with the solicitation or award may submit a protest. Any protest shall be submitting in writing to the Chairperson, Department of Land and Natural Resources, 1151 Punchbowl Street, Honolulu, Hawaii 96813, or designee as specified in the solicitation.

A protest shall be submitted in writing within five (5) working days after the aggrieved person knows or should have known the facts giving rise thereto; provided that a protest based upon the content of the solicitation shall be submitted in writing prior to the date set for receipt of offers. Further provided that a protest of an award or proposed award shall be submitted within five (5) working days after the posting of the award of the contract.

The notice of award, if any, resulting from this solicitation shall be posted on the HiePRO website.

Section 5 – Control of Work

AMEND Section 5.8 Value Engineering Incentive by deleting “\$100,000” and replacing with “\$250,000” in the first paragraph.

Section 6 – Substitution of Materials and Equipment

ADD the following to Section 6.3 Sub-paragraph b:

4. If the substitution meets all the requirements of the specifications and plans.

Section 7 – Prosecution and Progress

1. **DELETE** Section 7.2d in its entirety and replace with the following:

“d. Proof of Insurance Coverage

A Certificate of Insurance or other documentary evidence, to the satisfaction of the Engineer, that the Contractor has in place all insurance coverage required by the contract. The Certificate of Insurance shall contain wording which identifies the Project number and Project title for which the certificate of insurance is issued. Refer to the following for insurance requirements:

1. Insurance Requirements

- (a) **Obligation of Contractor** - Contractor shall not commence any work until it obtains, at its own expense, all required herein insurance. Such insurance must have the approval of the Department as to limit, form and amount and must be maintained with a company authorized by laws of the State to issue such insurance in the State of Hawaii. Coverage by a “Non-Admitted” carrier is permissible provided the carrier has a AM Best’s Rating of “A-VII” or better.
- (b) All insurance described herein will be maintained by the Contractor for the full period of the contract and in no event will be terminated or otherwise allowed to lapse prior to written certification of final acceptance of the work by the Department.
- (c) Certificate(s) of Insurance acceptable to the Department shall be filed with the Engineer prior to commencement of the work. Certificates shall identify if the insurance company is a “captive” insurance company or a “Non-Admitted” carrier to the State of Hawaii. The Best’s Rating must be stated for the “Non-Admitted” carrier. Certificates shall contain a provision

that coverages afforded under the policies will not be canceled or changed until at least thirty (30) days written notice has been given to the Engineer by registered mail. The insurance policies shall name the State of Hawaii, its officers and employees as an additional insured and such coverage shall be noted on the certificate. Should any policy be canceled before final acceptance of the work by the Department, and the Contractor fails to immediately procure replacement insurance as specified, the Department, in addition to all other remedies it may have for such breach, reserves the right to procure such insurance and deduct the cost thereof from any money due to the Contractor.

- (d) Nothing contained in these insurance requirements is to be construed as limiting the extent of Contractor's responsibility for payment of damages resulting from its operations under this contract, including the Contractor's obligation to pay liquidated damages, nor shall it affect the Contractor's separate and independent duty to defend, indemnify and hold the Department harmless pursuant to other provisions of this contract. In no instance will the Department's exercise of an option to occupy and use completed portions of the work relieve the Contractor of its obligation to maintain the required insurance until the date of final acceptance of the work.
 - (e) All insurance described herein shall be primary and cover the insured for all work to be performed under the contract, all work performed incidental thereto or directly or indirectly connected therewith, including traffic detour work or other work performed outside the work area, and all change order work.
 - (f) The Contractor shall, from time to time, furnish the Engineer, when requested, satisfactory proof of coverage of each type of insurance required or a copy of the actual policies covering the work. Failure to comply with the Engineer's request may result in suspension of the work, and shall be sufficient grounds to withhold future payments due the Contractor and to terminate the contract for Contractor's default.
 - (g) If the Contractor is self-insured, it shall furnish, upon the request and the satisfaction of the Engineer, any documentation to demonstrate the ability to self-insure itself. The Engineer, from time to time, can conduct an audit to determine the ability of the Contractor to be self-insured. Failure to comply with the Engineer's request will be considered a material breach of the contract, and at the discretion of the Engineer, may be sufficient grounds to terminate the contract, suspend any work or withhold future payments.
 - (h) It is the responsibility of the Contractor to notify the Department of any changes to its insurance policies or if the Contractor receives a notice of cancellation of any of its insurance policies. The Contractor will immediately provide written notice to the Department should the insurance policies evidenced on its Certificate of Insurance form be cancelled, limited in scope, or not renewed upon expiration.
- 2. Types of Insurance** - The Contractor shall purchase and maintain insurance described below which shall provide coverage against claims arising out of the Contractor's operations under the contract, whether such operations be by the Contractor itself or by the subcontractor or by anyone directly or indirectly employed by any of them or by anyone for whose acts any of them may be liable.
- (a) **Worker's Compensation.** The Contractor and all subcontractors shall obtain worker's compensation insurance for all persons whom they employ or may employ in carrying out the work under this contract. This insurance shall be in strict conformity with the

requirements of the most current and applicable State of Hawaii Worker's Compensation Insurance laws in effect on the date of the execution of this contract and as modified during the duration of the contract.

- (b) Commercial General Liability. The Contractor shall obtain General Liability insurance with a limit of not less than \$1,000,000 per occurrence and \$2,000,000 aggregate. The insurance policy shall contain the following clauses: 1) "The State of Hawaii is added as an additional insured as respects to operations performed for the State of Hawaii."; and 2) "It is agreed that any insurance maintained by the State of Hawaii will apply in excess of, and not contributed with, insurance provided by this policy." The required limit of insurance may be provided by a single policy or with a combination of primary and excess policies."
- (c) Comprehensive Automobile Liability. The Contractor shall obtain Auto Liability insurance covering all owned, non-owned and hired autos with a combined single Limit of not less than \$1,000,000 per accident for bodily injury and property damage. The insurance policy shall contain the following clauses: 1) "The State of Hawaii is added as an additional insured as respects to operations performed for the State of Hawaii."; and 2) "It is agreed that any insurance maintained by the State of Hawaii will apply in excess of, and not contributed with, insurance provided by this policy." The required limit of insurance may be provided by a single policy or with a combination of primary and excess policies.

Furthermore, the Contractor's commercial general liability insurance and automobile liability insurance shall include coverage for bodily injury, sickness, disease or death of any person, arising directly or indirectly out of, or in connection with, the performance of work under this contract.

The Contractor's property damage liability insurance shall provide for all damages arising out of injury to or destruction of property of others including the Department's, arising directly or indirectly out of or in connection with the performance of the work under this contract including explosion or collapse.

The Contractor shall either:

- i. Require each of its subcontractors to procure and to maintain during the life of its subcontract, subcontractors' comprehensive general liability, automobile liability and property damage liability insurance of the type and in the same amounts specified herein; or
- ii. Insure the activities of its subcontractors in its own policy.

The Contractor will be permitted, in cooperation with insurers, to maintain a self-insured retention for up to 25% of the per occurrence combined single limits of the commercial general liability and the automobile liability policies. The existence of the self-insured retention must be noted on the certificate of insurance coverage submitted to the Department or else it will be understood that the insurer is providing first dollar coverage for all claims. For all claims within the self-insured retention amount, the rights, duties and obligations between the Contractor and the Department shall be identical to that between a liability insurer and the Department, as an additional insured, as if there was no self-insured retention.

- (d) **Builder's Risk Insurance.** Unless included in the Specifications of this project, the Contractor shall not be required to provide builder's risk insurance. If required as noted in the Specifications, builder's risk insurance shall be provided during the progress of work and until final acceptance by the Department upon completion of the contract. It shall be "All Risk" (including but not limited to earthquake, windstorm and flood damage) completed value insurance coverage on all completed work and work in progress to the full replacement value thereof. Such insurance shall include the Department as additional name insured. The insurance policy shall contain the following clauses: 1) "The State of Hawaii is added as an additional insured as respects to operations performed for the State of Hawaii."; and 2) "It is agreed that any insurance maintained by the State of Hawaii will apply in excess of, and not contributed with, insurance provided by this policy." The required limit of insurance may be provided by a single policy or with a combination of primary and excess policies.

The Contractor shall submit to the Engineer for its approval all items deemed to be uninsurable. The policy may provide for a deductible in an amount of up to 25% of the amount insured by the policy. With respect to all losses up to any deductible amount, the relationship between the Contractor and the Department shall be that of insurer and additional insured as if no deductible existed".

2. DELETE Section 7.16 in its entirety and replace with the following:

"RESPONSIBILITY FOR DAMAGE CLAIMS; INDEMNITY – The Contractor shall indemnify the State and the Department against all loss of or damage to the State's or the Department's existing property and facilities arising out of any act or omission committed in the performance of the work by the Contractor, any subcontractor or their employees and agents. Contractor shall defend, hold harmless and indemnify the Department and the State, their employees, officers and agents against all losses, claims, suits, liability and expense, including but not limited to attorneys' fees, arising out of injury to or death of persons (including employees of the State and the Department, the Contractor or any subcontractor) or damage to property resulting from or in connection with performance of the work and not caused solely by the negligence of the State or the Department, their agents, officers and employees. The State or the Department may participate in the defense of any claim or suit without relieving the Contractor of any obligation hereunder. The purchase of liability insurance shall not relieve the Contractor of the obligations described herein.

The Contractor agrees that it will not attempt to hold the State and its Departments and Agencies and their officers, representatives, employees or agents, liable or responsible for any losses or damages to third parties from the action of the elements, the nature of the work to be done under these specifications or from any unforeseen obstructions, acts of God, vandalism, fires or encumbrances which may be encountered in the prosecution of the work.

The Contractor shall pay all just claims for materials, supplies, tools, labor and other just claims against the Contractor or any subcontractor in connection with this contract and the surety bond will not be released by final acceptance and payment by the Department unless all such claims are paid or released. The Department may, but is not obligated to, withhold or retain as much of the monies due or to become due the Contractor under this contract considered necessary by the Engineer to cover such just claims until satisfactory proof of payment or the establishment of a payment plan is presented.

The Contractor shall defend, indemnify and hold harmless the State and its Departments and Agencies and their officers, representatives, employees or agents from all suits, actions or claims of any character brought

on account of any claims or amounts arising or recovered under the Worker's Compensation Laws or any other law, by-law, ordinance, order or decree.

Section 8 – Measurement and Payment

1. **DELETE** Section 8.7a in its entirety and replace with the following:

- a. Tax Clearances from the State of Hawaii Department of Taxation and Internal Revenue Service, subject to section 103D-328, HRS, current within two months of issuance date indicating that all delinquent taxes levied or accrued under State Statutes against the contractor have been paid.

2. **ADD** Section 8.7d, Certificate of Compliance:

- d. A Certification from the Contractor affirming that the Contractor has, as applicable, remained in compliance with all laws as required by Section 103D-310, HRS, and Section 3-122-112, HAR. A contractor making a false affirmation shall be suspended and may be debarred pursuant to section 103D-702, HRS.

- 1. Certification of Compliance for Final Payment, State Procurement Office Form-22. Must be Signed Original.

3. **ADD** Section 8.7e, Hawaii Compliance Express:

- e. In lieu of submitting the tax clearances from Taxation and IRS, and SPO Form -22, the Contractor may choose to use the Hawaii Compliance Express as described on page SP-1 of this Special Provisions.

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SECTION 01019

GENERAL SPECIFICATIONS

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS

Work shall consist of furnishing all labor, tools, materials and equipment necessary and required to construct in place complete all work as indicated on the PLANS and as specified herein.

1.2 GENERAL

- A. Examination of Premises: The Contractor shall contact the Engineer and obtain permission before visiting the site.
- B. All lines and grades shall be established by a licensed surveyor, or licensed Civil Engineer, registered in the State of Hawaii. The Contractor shall submit evidence of current and valid registration.
- C. Notices: The Contractor shall notify the Engineer and give at least three (3) working days notice before starting any work.
- D. Disruption of Utility Services: All work related to the temporary disconnection of electrical system shall be pre-arranged with the Engineer so that any disruption of such services will be kept to a minimum. In the event temporary power hook-up is required, the Contractor shall provide the necessary services.
- E. Contractor's Operations
 - 1. The Contractor must employ, insofar as possible, such methods and means of carrying out the work so as not to cause any interruption or interference to the facility's operations. Where the Contractor's operations would result in interruptions which would hamper the operations of the facilities, the Contractor shall rearrange the schedule of work accordingly.
 - 2. The Contractor shall maintain safe passageway to and from the facility for the user agency personnel and the public at all times.
- F. Construction Schedule. Work on the Kuhio Beach Stub Groin shall be completed within 14 consecutive calendar days. The Contractor shall not commence construction until all approved material, tools, and equipment required for the project are ready to be used at the project site.

G. Lead Paint

1. When the project includes paint to be disturbed that was applied prior to 1980, it shall be assumed to contain lead. The Contractor shall inform its employees, subcontractors, and all other persons engaged in the project that lead containing paints are present in the existing buildings at the job site and to follow the requirements of the Department of Labor and Industrial Relations, Division of Occupational Safety and Health, Title 12, Subtitle 8, Chapter 148, Lead Exposure in Construction, Hawaii Administrative Rules (Chapter 12-148, HAR).

H. Parking Policy for Contractor

1. The Contractor and its employees will not be allowed to park in zones assigned to facility personnel.
2. Areas to be used by the Contractor shall be as designated by the Engineer. Any lawn damaged by the Contractor shall be restored as instructed by the Engineer at no cost to the State.

I. Toilet Accommodations: The Contractor may use the existing toilet facilities if so designated by the Engineer; however, it is the Contractor's responsibility to keep same clean and in a sanitary condition at all times.

J. Protection of Property: The Contractor shall continually maintain adequate protection of all its work from damage and shall protect all property, including but not limited to buildings, equipment, furniture, grounds, vegetation, material, utility systems located at and adjoining the job site. The Contractor shall repair, replace or pay the expense of repair of damages resulting from its operations.

K. Use of Power Driven Equipment: The Contractor is cautioned to take all necessary safety precautions to protect the facility personnel, and the public whenever power driven equipment is used.

L. Safety: The Contractor shall carefully read and strictly comply with the requirements of the Hawaii Occupational Safety and Health Law, Chapter 396, Hawaii Revised Statutes, as amended, is applicable and made a part of the Contract.

M. Clean Up Premises: The Contractor shall clean up and remove from premises all debris accumulated from operations as necessary or as directed. See also Section 7.25 of the General Conditions.

N. Responsibility

1. The State will hold the Contractor liable for all the acts of Subcontractors and shall deal only with the prime Contractor in matters pertaining to other trades

employed on the job. The Contractor shall be responsible for coordinating the work of all trades on the job.

2. Should the Contractor discover any discrepancy in the plans or specifications, the Contractor shall immediately notify the Engineer before proceeding any further with the work, otherwise, the Contractor will be held responsible for any cost involved in correction of work placed due to such discrepancy.

O. Cooperation With Other Contractors: The State reserves the right at any time to contract for or otherwise perform other or additional work within the contract zone limits of this Contract. The Contractor of this project shall, to the extent ordered by the State, conduct its work so as not to interfere with or hinder the progress or completion of the work performed by other contractors.

P. Division of the Work: The Divisions and Sections into which these Specifications are divided shall not be considered an accurate or complete segregation of work by trades. This also applies to all work specified within each Section.

Q. Drawings and Specifications

1. The Contractor shall not make alterations in the drawings and specifications. In the event the contractor discovers any errors or discrepancies, the Contractor shall immediately notify the Engineer in accordance with the General Conditions.
2. Where devices, or items, or parts thereof are referred to in the singular, it is intended that such reference shall apply to as many such devices, items or parts as are required to properly complete the work.
3. Specifications and drawings are prepared in abbreviated form and include incomplete sentences. Omission of words or phrases such as "the Contractor shall", "as shown on the drawings", "a", "an", and "the" are intentional. Omitted words and phrases shall be provided by inference to form complete sentences.

R. Required Submittals

1. Required submittals as specified in the Technical Sections of these specifications include one or more of the following: Shop drawings; color samples; material samples; technical data; schedules of materials; schedules of operations; guarantees; operating and maintenance manuals; and as-built drawings.
2. The Contractor shall make a comprehensive list of the required submittals, by Specification Section, and submit this list to the Engineer within 15 days after notice to proceed.
3. As-Built Drawings: When as-built drawings are required for submittal, the following shall apply:

- a. As-built drawings, the intent of which is to record the actual in-place construction so that any future renovations or tie-ins can be anticipated accurately, shall be required.
- b. All deviations from alignments, elevations and dimensions which are stipulated on the plans shall be recorded in red on the as-built drawings.
- c. The following procedure shall be followed:
 - 1) Immediately after these changes are constructed in place, the Contractor shall record them on the field office plans.
 - 2) Within two weeks after final inspection of the project, the Contractor shall transfer the changes marked on the field office plans onto a clean copy of plans using a red pencil. Any deletions shall be so noted and redrawn as necessary. The Contractor shall stamp or mark the tracings "AS-BUILT", and also sign and date each drawing so marked.
 - 3) The Contractor shall submit the as-built drawings to the Engineer for review and approval. After the Engineer approves the as-built drawings, the Contractor shall submit an electronic copy in Adobe PDF format on CD ROM.
 - 4) Any as-built drawing which the Engineer determines does not accurately record the deviation shall be corrected by the State, and the Contractor shall be charged for the services.

END OF SECTION

SECTION 01090

STANDARD REFERENCES

PART 1 - GENERAL

Wherever used in the project, the following abbreviations will have the meanings listed:

<u>Abbreviation</u>	<u>Company</u>
AA	Aluminum Association Incorporated 818 Connecticut Avenue, N.W. Washington, D.C. 20006
AASHTO	American Association of State Highway and Transportation Officials 444 North Capitol Street, N.W., Suite 225 Washington, D.C. 20001
ACI	American Concrete Institute P.O. Box 19150 Detroit, MI
AEIC	Association of Edison Illuminating Companies 51 East 42nd Street New York, NY 10017
AFBMA	Anti-Friction Bearing Manufacturer's Association 60 East 42nd Street New York, NY 10017
AGA	American Gas Association 8501 East Pleasant Valley Road Cleveland, OH 44131
AGMA	American Gear Manufacturer's Association 1330 Massachusetts Avenue, N.W. Washington, D.C.
AISC	American Institute of Steel Construction 101 Park Avenue New York, NY 10017
AISI	American Iron and Steel Institute 1000 16th Street, N.W. Washington, D.C. 20036

AITC	American Institute of Timber Construction 333 West Hampden Avenue Englewood, CO 80110
AMCA	Air Moving and Conditioning Association, Inc. 30 West University Drive Arlington Heights, IL 60004
ANSI	American National Standards Institute, Inc. 1430 Broadway New York, NY 10018
APA	American Plywood Association 1119 A Street Tacoma, WA 98401
API	American Petroleum Institute 1801 K Street N.W. Washington, DC 20006
ARI	Air-Conditioning and Refrigeration Institute 1814 North Fort Myer Drive Arlington, VA 22209
ASCE	American Society of Civil Engineers 345 East 47th Street New York, NY 10017
ASCII	American Standard Code for Information Interchange United States of America Standards Institute 1430 Broadway New York, NY 10018
ASE Code	American Standard Safety Code for Elevators, Dumbwaiter and Escalators American National Standards Institute 1430 Broadway New York, NY 10018
ASHRAE	American Society of Heating, Refrigeration and Air Conditioning Engineers United Engineering Center 345 East 47th Street New York, NY 10017

<u>Abbreviation</u>	<u>Company</u>
ASME	American Society of Mechanical Engineers 345 East 47th Street New York, NY 10017
ASTM	American Society for Testing and Materials 1916 Race Street Philadelphia, PA 19103
AWPA	American Wood Preservers Association 1625 Eye Street Washington, DC 20006
AWS	American Welding Society 2501 N.W. 7th Street Miami, FL 33125
AWWA	American Water Works Association 6666 West Quincy Avenue Denver, CO 80235
CBM	Certified Ballast Manufacturers 2120 Keith Building Cleveland, OH 44115
CMAA	Crane Manufacturers Association of America, Inc. (Formerly called: Overhead Electrical Crane Institute - OECI) 1326 Freeport Road Pittsburgh, PA 15238
CRSI	Concrete Reinforcing Steel Institute 180 North La Salle Street Chicago, IL 60601
CSA	Canadian Standards Association 178 Rexdale Boulevard Rexdale, Ontario, M9W 1R3, Canada
DEMA	Diesel Engine Manufacturer's Association 122 East 42nd Street New York, NY 10017

<u>Abbreviation</u>	<u>Company</u>
DIS	Division of Industrial Safety California Department of Industrial Relations 2422 Arden Way Sacramento, CA 95825
EEI	Edison Electric Institute 90 Park Avenue New York, NY 10016
EIA	Electronic Industries Association 2001 Eye Street N.W. Washington, DC 20006
EJMA	Expansion Joint Manufacturer's Association 331 Madison Avenue New York, NY 10017
ESO	Electrical Safety Orders, California Administrative Code, Title 8, Chap. 4, Subarticle 5 Office of Procurement, Publications Section P.O. Box 20191 8141 Elder Creek Road Sacramento, CA 95820
FEDSPEC	Federal Specifications General Services Administration Specification and Consumer Information Distribution Branch Washington Navy Yard, Bldg. 197 Washington, DC 20407
FEDSTDS	Federal Standards (see FEDSPECS)
FM	Factory Mutual Research 1151 Boston-Providence Turnpike Norwood, MA 02062
HEI	Heat Exchange Institute 122 East 42nd Street New York, NY 10017

<u>Abbreviation</u>	<u>Company</u>
HI	Hydraulic Institute 1230 Keith Building Cleveland, OH 44115
IAPMO	International Association of Plumbing and Mechanical Officials 5032 Alhambra Avenue Los Angeles, CA 90032
ICBO	International Conference of Building Officials 5360 South Workman Mill Road Whittier, CA 90601
ICEA	Insulated Cable Engineers Association P.O. Box P South Yarmouth, MA 02664
IEEE	Institute of Electrical and Electronics Engineers, Inc. 345 East 47th Street New York, NY 10017
IES	Illuminating Engineering Society C/O United Engineering Center 345 East 47th Street New York, NY 10017
ISA	Instrument Society of America 400 Stanwix Street Pittsburgh, PA 15222
JIC	Joint Industrial Council 7901 Westpark Drive McLean, VA 22101
MILSPEC	Military Specifications Naval Publications and Forms Center 5801 Tabor Avenue Philadelphia, PA 19120
MSS	Manufacturers Standardization Society of the Valve and Fittings Industry, Inc. 127 Park Street, N.E. Vienna, VA 22180

<u>Abbreviation</u>	<u>Company</u>
NAAMM	National Association of Architectural Metal Manufacturers 100 South Marion Street Oak Park, IL 60302
NACE	National Association of Corrosion Engineers P.O. Box 986 Katy, TX 77450
NEC	National Electric Code National Fire Protection Association 470 Atlantic Avenue Boston, MA 02210
NEMA	National Electrical Manufacturer's Association 155 East 44th Street New York, NY 10017
NESC	National Electric Safety Code American National Standards Institute 1430 Broadway New York, NY 10018
NFPA	National Forest Products Association (Formerly called: National Lumber Manufacturer's Association) 1619 Massachusetts Avenue, N.W. Washington, DC 20036
OSHA	Occupational Safety and Health Act U.S. Department of Labor San Francisco Regional Office 450 Golden Gate Avenue, Box 36017 San Francisco, CA 94102
PPIC	The Plumbing & Piping Industry Council, Inc. Suite 402 510 Shatto Place Los Angeles, CA 90020
SAE	Society of Automotive Engineers 2 Pennsylvania Street New York, NY 10001

<u>Abbreviation</u>	<u>Company</u>
SAMA	Scientific Apparatus Makers Association One Thomas Circle Washington, DC 20005
SBCC	Southern Building Code Congress 1116 Brown-Marx Building Birmingham, AL 35203
SMACNA	Sheet Metal and Air Conditioning Contractors National Association, Inc. 8224 Old Courthouse Road Tysons Corner Vienna, VA 22180
SSPWC	Standard Specifications for Public Works Construction Building News, Inc. 3055 Overland Avenue Los Angeles, CA 90034
TEMA	Tubular Exchanger Manufacturer's Association 331 Madison Avenue New York, NY 10017
UBC	Uniform Building Code Published by ICBO
UL	Underwriters Laboratories Inc. 207 East Ohio Street Chicago, IL 60611
UMC	Uniform Mechanical Code Published by ICBO
UPC	Uniform Plumbing Code Published by IAPMO
USBR	Bureau of Reclamation U.S. Department of Interior Engineering and Research Center Denver Federal Center, Building 67 Denver, CO 80225

<u>Abbreviation</u>	<u>Company</u>
WWPA	Western Wood Products Association (Formerly called: West Coast Lumberman's Association - WCLA) Yeon Building Portland, CA 97204

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

- END OF SECTION -

SECTION 01100

ARCHAEOLOGICAL PROTECTION

PART 1 - GENERAL

- 1.1 This section covers the requirements for the protection and preservation of historical sites and values.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

- 3.1 **CONSTRUCTION METHOD:** Representatives of the State will from time to time examine the area as work proceeds. If historical values are noted, the State may order a halt to the work in the vicinity of the historical values until the State can examine further. The Contractor shall notify the State if he finds anything he suspects to be of historic significance and shall discontinue further work in the vicinity of the find until the State can examine the area. In either case, further work in the vicinity of such historical or suspected historical values may proceed only upon approval by the State. Such approval can be normally expected within one week and shall in no case require more than one month.

END OF SECTION

SECTION 01200

QUALIFICATION OF BIDDERS

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS

- A. The prospective bidders must be capable of working with geotextile sand containers, for which bids are being called, using work force members who meet the minimum experience requirements established by the State. Prior to the opening of bids, the State shall evaluate bidders' work force qualifications and, from these evaluations, the State shall be the sole judge as to whether bidders are "qualified" or "disqualified".
- B. Bidders shall thoroughly reference and understand the provisions and instructions of this section, the NOTICE TO BIDDERS, and the BIDDER'S STATEMENT OF QUALIFICATION form of these Contract Documents.

1.2 BIDDER'S STATEMENT OF QUALIFICATION

- A. In accordance with the Notice to Bidders, each prospective bidder must complete, have notarized, and submit through the HiePRO system the BIDDER'S STATEMENT OF QUALIFICATION form that has been made a part of the Proposal of these Contract Documents. Failure to submit a fully completed and notarized form will be sufficient cause for the State to disqualify a prospective bidder.
- B. From the responses to the BIDDER'S STATEMENT OF QUALIFICATION form and other available information, the State will determine whether a bidder's work force meets the minimum requirements established by the State for satisfactory performance of the intended work. The final decision whether a bidder is deemed qualified or disqualified lies solely with the State. Bidders, who in the judgment of the State have not provided qualified work force members or have not provided adequate evidence of qualification, will be deemed disqualified to undertake the Project and will have their bids rejected.
- C. All members of the Contractor's work force must be under the Contractor's, or his subcontractor's, employment **at the time of Notice to Proceed**.

1.3 WORK FORCE QUALIFICATIONS

- A. All work involving the installation of geotextile sand containers shall be performed by a work force that can be shown to possess experience in work similar in scope and technical requirements to the Project. The following minimum experience requirements shall be met by the work force to be qualified for the Project. The qualified work force shall include, but not be limited to, a work supervisor and a work

crew member experienced in geotextile sand container construction. Qualified work force members must directly provide the specific work for which they have been qualified until such work has been completed and accepted by the State.

1. All phases of the geotextile sand container work shall be performed under the direct supervision of an experienced supervisor who has field experience on successfully completed geotextile sand container projects performed in the United States within the last ten (10) years, in which he had direct supervision over geotextile sand container installation work. The qualifying projects shall have involved the successful installation of large (e.g., 2.5m³ volume or equivalent) sand filled containers in the nearshore marine environment.
2. Besides the geotextile sand container work supervisor, at least one other geotextile sand container work crew member shall have direct experience installing large geotextile sand containers.

1.4 PERSONNEL REASSIGNMENT

1. If the Contractor desires to reassign or replace personnel who have been qualified by the State, a written request to the State naming replacement personnel shall be made. The request shall include documentation of replacement personnel work qualifications and experiences which demonstrates that the minimum qualifications of this special provisions are met. Written favorable review from the State of replacement personnel's qualifications shall be obtained prior to replacing or reassigning qualified personnel on the Project.
2. If qualified personnel leave the Contractor's employment during the Contract, the Contractor shall provide replacement personnel that meet the minimum qualifications established by the State.

END OF SECTION

SECTION 01300

SUBMITTALS

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS

Submittals shall be required for work as called for in the plans, specifications, or by the Engineer.

1.2 SUBMITTALS:

- A. Furnish required submittals specified in this Section and in the Technical Sections. Submittals include one or more of the following: shop drawings, color samples, material samples, technical data, material safety data information, schedules or materials, schedules of operations, guarantees, certifications, operating and maintenance manuals, and field posted as-built drawings.
- B. Required Submittals: Provide a comprehensive list of the required submittals by Specification Section. Furnish this list to the Engineer within fifteen (15) calendar days after award of the contract or upon earlier written instructions from the Engineer.
1. The listing, shall indicate and include the following:
 - a. The number of copies required for submittal.
 - b. Planned submittal date.
 - c. Approval date required by the Contractor.
 - d. A space where the "date of submittal" can be inserted.
 - e. A space where the "date of approval" can be inserted.
 - f. A space where an "action code" can be inserted.
 2. The schedule shall accommodate a minimum of twenty-one (21) calendar days for the State's review.
- C. The following listing of required submittals is provided for the contractor's convenience. The Contractor shall review the technical sections of this specification, prepare and submit a comprehensive listing of required submittals as described under Section 01019 – General Specifications.

SUBMITTAL LIST

Section No.	Title	Description of Submittal	Copies
01581	Project Sign	Project Sign Shop Drawings	6
02243	Geotextile Sand Containers	Manufacturer Brochures, Specifications, and Certificates	6
02244	Geotextile Used as Filters	Manufacturer Brochures, Specifications, and Certificates	6
02250	Sand Material for Geotextile Sand Containers	Container Sand Fill Grain Size Data	6

1.3 BIDDER'S SPECIAL RESPONSIBILITY FOR COORDINATING CONTRACTUAL WORK AND SUBMITTALS:

- A. The Contractor is responsible for the coordination of all contractual work and submittals.
- B. The Contractor shall have a rubber stamp made up in the following format:

CONTRACTOR NAME

PROJECT: _____

JOB NO: _____

THIS SUBMITTAL HAS BEEN CHECKED BY THIS GENERAL CONTRACTOR. IT IS CERTIFIED CORRECT, COMPLETE, AND IN COMPLIANCE WITH CONTRACT DRAWINGS AND SPECIFICATIONS. ALL AFFECTED CONTRACTORS AND SUPPLIERS ARE AWARE OF, AND WILL INTEGRATE THIS SUBMITTAL INTO THEIR OWN WORK.

DATE RECEIVED _____
 SPECIFICATION SECTION _____
 SPECIFICATION PARAGRAPH _____
 DRAWING NUMBER _____
 SUBCONTRACTOR NAME _____
 SUPPLIER NAME _____
 MANUFACTURER NAME _____

CERTIFIED BY: _____

- C. This stamp, "filled in", should appear on the title sheet of each shop drawing, on a cover sheet of submittals in an 8-1/2" x 11" format, or on one face of a cardstock tag (min. 3" x 6") tied to each sample. The tag on the samples should state what the sample is so that, if

the tag is accidentally separated from the sample, it can be matched up again. The back of this tag will be used by the Engineer for his receipt, review, and log stamp and for any comments that relate to the sample.

- D. All submittals for material, equipment, and shop drawings listed in the contract documents, including dimensioned plumbing shop drawings, shall be required and shall be reviewed by the Engineer, prior to any ordering of materials and equipment.
- E. Unless otherwise noted, the Contractor shall submit to the Engineer for his review six copies of all shop drawings, piping layout, and/or catalog cuts for fabricated items and manufactured items (including mechanical and electrical equipment) required for the construction. Drawings shall be submitted in sufficient time to allow the Engineer not less than twenty regular working days for examining the drawings.
- F. The drawing shall be accurate, distinct, and complete and shall contain all required information, including satisfactory identification of items, units and assemblies in relation to the contract drawings and specifications.
- G. Unless otherwise approved by the Engineer, shop drawings shall be submitted only by the Contractor, who shall indicate by a signed stamp on the drawings or other approved means that the Contractor has checked the shop drawings and that the work or equipment shown is in accordance with contract requirements and has been checked for dimensions and relationship with work of all other trades involved. All deviations from the plans and specifications shall be listed. The practice of submitting incomplete or unchecked shop drawings for the Engineer to correct or finish will not be acceptable, and shop drawings which, in the opinion of the Engineer, clearly indicate that they have not been checked by the Contractor will be considered as not complying with the intent of the contract documents and will be returned to the Contractor for resubmission in the proper form.
- H. When the shop drawings have been reviewed by the Engineer, two sets of submittals will be returned to the Contractor appropriately stamped. If major changes or corrections are necessary, the drawing may be rejected and one set will be returned to the Contractor with such changes or corrections indicated, and the Contractor shall correct and resubmit eight copies of the drawings, unless otherwise directed by the Engineer. No changes shall be made by the Contractor to the resubmitted shop drawings other than those changes indicated by the Engineer. The resubmittal shall be so indicated on the shop drawing.
- I. The review of such drawings and catalog cuts by the Engineer shall not relieve the Contractor from responsibility for correctness of the dimensions, fabrication details, and space requirements or for deviations from the contract drawings and specifications, unless the Contractor has called attention to such deviations, in writing, by a letter accompanying the drawings and the Engineer approved the change or deviations, in writing, at the time of submission; nor shall review by the Engineer relieve the Contractor from the responsibility for errors in the shop drawings. When the Contractor does call such deviations to the attention of the Engineer, he shall state in his letter whether or not

such deviations involve any deduction or extra cost adjustment.

- J. The approval of the above drawings, lists, prints, specifications, or other data shall in no way release the Contractor from his responsibility for the proper fulfillment of the requirements of this contract nor for fulfilling the purpose of the installation nor from his liability to replace the same should it prove defective or fail to meet the specified requirements.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01505

MOBILIZATION AND DEMOBILIZATION

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS

A. Description: This section covers the requirements for mobilization and demobilization.

1.2 MOBILIZATION: Mobilization shall consist of the transporting, assembling, constructing, installing, and making ready for use at the job site, all the equipment, machinery, structures, utilities, materials, labor, and incidentals necessary to do the work covered by this contract.

1.3 DEMOBILIZATION: Demobilization shall consist of the dismantling and removal of the above-mentioned equipment, machinery, structures, utilities, materials, and incidentals, and the cleaning up of the site.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 GUIDELINES: If the Contractor utilizes private lands other than the sites provided by the Department for mobilization purposes, the provisions of this section shall apply, and the mobilization and demobilization work on said private lands shall be in accordance with the agreement between the Contractor and the land owner.

Any and all additional mobilization or demobilization costs in excess of the maximum amounts specified in the Proposal shall be included in the appropriate unit prices bid in the Proposal. The Contractor shall not receive any compensation for mobilization and demobilization in addition to those specified in the Proposal.

All equipment, machinery, buildings, utilities and incidentals mobilized and demobilized under this section shall remain the property of the Contractor.

END OF SECTION

SECTION 01530

BARRICADES

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS

- A. Description. This work shall consist of furnishing, installing and maintaining barricades in accordance with the requirements of the contract.

Barricade application shall be provided for in the latest edition of the FHWA publication, Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD), and as amended.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Lumber: Lumber for rails, frames and braces shall be dry, sound, undamaged, well seasoned, and free from any defect which may impair their strength and durability.
- B. Hardware: Nails shall be galvanized wire nails. As many and as large a size as is practicable shall be used.
- C. Paints: Paints shall be exterior enamel paint of the best grade or first line as made by approved manufacturers.
- D. Sheet Reflecting Material: Sheet reflecting material shall conform to the applicable requirements of Subsection 712.20(C) of the "Standard Specifications for Road and Bridge Construction".
- E. Alternate Designs: Alternate barricade designs such as plastic molded barricades may be used subject to the Engineer's approval. The Contractor shall submit shop drawings or catalog cuts for approval.

PART 3 - EXECUTION

3.1 CONSTRUCTION REQUIREMENTS

- A. General: Barricades shall be constructed in a first class, workmanlike manner in accordance with details shown on the plans and as specified herein.

Barricades shall be in good condition and approved by the Engineer for use within the project limits. Barricade application and installation shall be as shown on the plans and as directed by the Engineer in accordance with the guidelines provided in the latest edition of

the FHWA publication, Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD), and any amendments or revisions thereof as may be made from time to time.

Sand bags or other approved weights shall be provided where required or as directed by the Engineer. Sand bags or other approved weights shall not be placed on any striped barricade rail.

Steady burn and/or flashing lamps shall be required on selected barricades used during hours of darkness. Locations shall be as shown on the plans and as directed by the Engineer. Lamps shall be attached on the barricade ends closest to the traveled way and shall be visible to the motorist.

Barricades furnished and paid for as provided herein may be used for temporary detours, construction phasing, or other temporary traffic control work.

Barricades furnished and paid for use in temporary detours or construction phasing may be used for permanent location called for on the plans.

Upon completion of the construction work, barricades shall be left in place, relocated, or removed and disposed of as shown on the plans or as directed by the Engineer. Barricades left in place, or relocated to new permanent locations shall become the property of the State. Barricades directed to be removed and disposed of shall become the property of the Contractor.

- B. Painting: Wooden rails, frames and braces shall be given a prime coat and 2 finish coats of new white exterior enamel paint. Rail faces to be reflectorized may be left unpainted unless otherwise specified or directed.
- C. Reflectorization: Reflectorization of barricade rails shall be done in a first class, workmanlike manner and the attachment of reflective sheeting shall be as shown on the plans, specified herein, or as directed and approved by the Engineer.

Both vertical faces of each barricade rail shall be reflectorized as shown on the plans.

Wooden rails shall be reflectorized with one of the following:

1. Reflective sheeting specified in Subsection 712.20(C)(4) of the "Standard Specifications for Road and Bridge Construction" and backed with a 26 gage galvanized steel sheet, or
2. a hardened aluminum backed reflective sheeting as specified in Subsection 712.20(C)(5) of the "Standard Specifications for Road and Bridge Construction."

D. Color: Rails, frames and braces shall be white.

The front and back faces of barricade rails shall have 6-inch wide alternative colored and white striped sloping downward toward the traveled way at an angle of 45 degrees with the vertical. The colored stripes shall be either orange or red in accordance with the following requirements:

1. Orange and white stripes shall be used in the following conditions:
 - a. Construction work.
 - b. Detours.
 - c. Maintenance work.
2. Red and white stripes shall be used in the following conditions:
 - a. On roadways with no outlet (i.e., dead-ends, cul-de-sacs).
 - b. Ramps or lanes closed for operational purposes.
 - c. Permanent or semipermanent closure or termination of a roadway.

E. Maintenance: Barricades shall be kept in good condition throughout their usage during construction until the end of the contract.

F. The Contractor shall repair, repaint, clean or replace the barricades as required and as directed by the Engineer to maintain their effectiveness and appearance.

The Constructor shall immediately replace all lost, stolen or damaged barricades, lamps, sand bags and other approved weights.

Barricades used during construction phasing, temporary detours or other temporary traffic control work shall be cleaned and repaired as necessary, prior to being relocated to a permanent location shown on the plans or as directed.

No extra payment will be made for any repair work, repainting, or cleaning of barricades. The Engineer shall determine the suitable condition of each barricade and shall determine when each barricade shall be repaired, repainted or cleaned.

END OF SECTION

SECTION 01567

ENVIRONMENTAL PROTECTION

PART 1 - GENERAL

1.1 GENERAL:

This section covers the requirements of environmental and pollution control during construction activities. The Contractor shall be responsible for conformance to Title 11, Chapter 60 of the Public Health Regulations, Department of Health, State of Hawaii.

- A. 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 construction operations under this contract. 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, or degrade the utilization of the environment for aesthetic and recreational purposes.
- B. The work under this section shall include the following:
 - 1. Make sure that all permits required for project construction and/or listed in these specifications are obtained and valid for the construction period.
 - 2. Provide water quality testing and monitoring work required by the permits during construction.
 - 3. Provide all facilities, equipment and structural controls for minimizing adverse impacts upon the environment during the construction period.

1.2 GENERAL REQUIREMENTS:

- A. Applicable Regulations: In order to provide for abatement and control of environmental pollution arising from the construction activities of the Contractor and his subcontractors in the performance of this contract, the work performed shall comply with the intent of the applicable Federal, State, and local laws and regulations concerning environmental pollution control and abatement, including, but not limited to the following regulations:
 - 1. State of Hawaii, Department of Health, Administrative Rules, Chapter 55, WATER POLLUTION CONTROL: Chapter 54, WATER QUALITY STANDARDS.
 - 2. State of Hawaii, Department of Health, Administrative Rules, Chapter 59, AMBIENT AIR QUALITY: Chapter 60, AIR POLLUTION CONTROL LAW.

3. State of Hawaii, Department of Health, Administrative Rules, Chapter 44A, VEHICULAR NOISE CONTROL.
 4. State of Hawaii, Occupational Safety and Health Standards, Title 12, Department of Labor and Industrial Relations, Subtitle 8, Division of Occupational Safety and Health, Subparagraph 12-202-13, ASBESTOS DUST: Environmental Protection Agency, Code of Federal Regulations Title 40, Part 61 Subpart A, NATIONAL EMISSION STANDARDS FOR AIR POLLUTANTS and Subpart B, NATIONAL EMISSION STANDARDS FOR ASBESTOS; and U.S. Department of Labor Occupational Safety and Health Administration (OSHA) Asbestos Regulations, Code of Federal Regulations Title 29, Part 1910.
- B. Permits. The Contractor shall comply with the following permits and complete any information required therein to effectuate the permits:
1. Department of the Army Permit, File No. POH-2018-0220, including all special conditions.
 2. Section 401 Water Quality Certification from the State Department of Health, File No. WQC0997, including the “Applicable Monitoring and Assessment Program for Clean Water Act (CWA) Section 401 Water Quality Certification.”
 3. National Pollutant Discharge Elimination System (NPDES) permit from the State Department of Health, File No. S000574, including all conditions.
 4. Small-Scale Beach Nourishment permit from the Board of Land and Natural Resources, OA-19-4, including all conditions.

Copies of the above permits are included with the bid documents.

- C. The Contractor shall provide the Department of Health with any required general contractor’s information, including the general contractor’s legal name, address (location where papers can be hand-delivered), contact person(s), telephone numbers, and fax numbers.

1.3 SUBMITTAL:

- A. Submit under provisions of Section 01300 – SUBMITTALS.
- B. The Contractor shall provide the State with six (6) copies of the Best Management Practices and Environmental Protection Plan for review and approval by the State. The submittal shall be made a minimum of thirty (30) calendar days prior to the proposed scheduled start of construction work.

1.4 GUIDELINES AND CRITERIA:

The Contractor shall prepare and submit a Best Management Practice Plan (BMPs) specific to his proposed construction operations to help minimize adverse impacts to coastal water quality and the marine ecosystem. The project specifications will require the Construction

Contractor to adhere to environmental protection measures, including, but not limited to, the Guidelines, Criteria, and Environmental Protection Requirements in this specification section and in the attached permits.

1.5 GENERAL BEST MANAGEMENT PRACTICES

A. SUITABLE MATERIAL

1. All equipment and material shall be free of contaminants of any kind including: excessive silt, sludge, anoxic or decaying organic matter, clay, dirt, oil, floating debris, grease or foam or any other pollutant that would produce an undesirable condition to the shoreline or water quality. The equipment will be brought to the site in clean condition.
2. All materials shall be free from any objectionable sludge, oil, grease, scum, excessive silt, organic material or other floating material.

B. HISTORIC OR CULTURAL FEATURES

1. No adverse impacts to any historical or cultural features are expected.
2. The proposed project will cover the old Waikiki Tavern foundation. Project activities will not cause the foundation to be damaged while the demonstration groin is being installed or during sand placement over the foundation.
3. Should any unanticipated archaeological site(s), such as walls, platforms, pavements and mounds, or remains such as artifacts, burials, concentrations of charcoal or shells be uncovered by the work activity, all work shall cease in the immediate area and the contractor shall notify the State Historic Preservation Office at 808.692.8015. No work shall resume until the owner/contractor obtains clearance from the State Historic Preservation Office.

C. ENVIRONMENTAL PROTECTION

1. All permits and clearances shall be obtained prior to the start of any project activities. The contractor and sub-contractors shall ensure that all restoration work complies with all permit conditions and commitments made with environmental agencies.
2. The contractor shall perform the work in a manner that minimizes environmental pollution and damage as a result of construction operations. The environmental resources within the project boundaries and those affected outside the limits of permanent work shall be protected during the entire duration of the project activities.
3. The contractor shall complete daily inspection of equipment for conditions that could cause spills or leaks; clean equipment prior to operation near the water; properly site storage, refueling, and servicing sites; and implement spill response procedures and stormy weather preparation plans.

4. The project shall be completed in accordance with all applicable State and County health and safety regulations.
5. The Contractor shall provide notifications to the National Marine Fisheries Services, 808.944.2200, including the Protected Resources Division, at least 72 hours prior to the scheduled start of project activities.
6. Project operations must cease if unusual conditions, such as large tidal events and high surf conditions affect the project site, except for efforts to avoid or minimize resource damage.

D. DEBRIS MANAGEMENT AND REMOVAL

1. Project site inspection and debris sweeps will be completed at the end of each work day. A full inspection of the project site will be conducted at the end of the project to ensure that no visible debris introduced by recovery efforts or project waste is present at the site upon completion of the project.

E. SOLID WASTE AND DISPOSAL

1. Any project activity related debris that is not a part of the design must be removed from the project site if not actively being used and/or at the conclusion of the project.
2. The Contractor shall not dispose of any concrete, steel, wood, and any other debris into State or Federal waters.
3. No contamination (trash or debris disposal, alien species introductions, etc.) of marine (reef flats, lagoons, open oceans, etc.) environments adjacent to the project site shall result from project related activities.
4. The Contractor shall remove all floating or submerged materials and/or debris at the end of each day, with the exception of any silt containment devices, as needed.
5. No contamination of the marine environment shall result from the permitted activities. Particular care must be taken to ensure that no petroleum products, trash or other debris enter near-shore and open ocean waters. When such material is found within the project area, the Contractor, or his designated construction agent, shall collect and dispose of this material at an approved upland disposal site
6. Waste materials and waste waters directly derived from project activities shall not be allowed to leak, leach or otherwise enter marine waters.

F. WASTE WATERS

1. Project operations shall be conducted so as to prevent discharge or accidental spillage of pollutants, solid waste, debris, and other objectionable wastes in

surface waters and underground water sources.

G. EROSION CONTROL

1. Silt curtains will be individually anchored between five-feet and ten-feet from the groin construction area. The length of the silt curtain will be adequate to completely contain the area where repair work is taking place. On the ends of the project site, sand bags may be used to help anchor the curtain above the MHHW line.
2. Silt curtains will be left in place each night.
3. The Contractor is responsible for the proper handling, storage and/or disposal of all waste generated by project activities.
4. The Contractor shall confine all project activities to areas defined by the drawings and specifications. No materials shall be stockpiled in the marine environment.
5. The Contractor shall keep project activities under surveillance, management and control to avoid pollution of surface or marine waters. Daily visual inspection of the project site and its environs will be conducted by a designated individual, or his representative, to verify that the permitted activities do not result in uncontrolled adverse environmental impacts.
6. Visual inspections will include monitoring of the effectiveness of the silt curtains and/or booms to ensure proper function.
7. Visual inspections will be documented with photographs, a photo-orientation map, and written descriptions.
8. Sandbag or sand removal/placement shall not be done during storms or periods of high surf.
9. Visual monitoring will include ongoing inspections for turbidity outside of the confines of the silt curtain(s). In the event that turbidity is observed outside of the silt curtains, work shall stop, and the silt curtains shall remain in place until the turbidity dissipates. Silt curtains shall be inspected after dissipation and prior to returning to project operations.
10. Wherever equipment and/or vehicles leave the site and enter surrounding paved streets, the contractor shall prevent any material from being carried onto the pavement. There will be no washing of equipment on the beach or near the shoreline.

H. PUBLIC SAFETY

1. Operational bounds on land will be marked with and patrolled by project staff as

needed to ensure that members of the public do not enter the project area.

2. A project representative will be available at the project site to answer questions the public may have.
3. Crossing guards will be placed at designated crossings along the shoreline to assist the public in transiting across the access route while trucks are operating.
4. Project implementation will not interfere with the public's right to reasonable navigation.
5. Materials stored or stockpiled shall not interfere with public beach access.
6. Signs will be posted at the project site to educate the public of project activities.
7. Hotels nearby will be informed of the project's purpose and approximate duration.

I. NOISE CONTROL

1. Best management practices shall be utilized to minimize adverse effects to air quality and noise levels, including the use of emission control devices and noise attenuating devices.
2. Noise shall be kept within acceptable levels at all times in conformance with HAR Title 11 § 46 Community Noise Control, State Department of Health, Public Health Regulations. The contractor shall obtain and pay for a community noise permit from the State Department of Health when equipment or other devices emit noise at levels exceeding the allowable limits.
3. Equipment shall be equipped with suitable mufflers to maintain noise within levels complying with applicable regulations.
4. Starting of equipment meeting allowable noise limits shall not be done prior to 7:00 a.m. without prior approval. Equipment exceeding allowable noise limits shall not be started up prior to 7:30 a.m.

J. DUST CONTROL

1. Dust, which could damage property, or cause nuisance to persons, shall be abated and control measures shall be performed.
2. The Contractor, for the duration of the contract, shall maintain all excavations, embankments, paved roads, plant sites, waste disposal areas, and all other work areas within or without 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. Industry accepted methods of stabilization suitable for the area involved, such as sprinkling or similar methods will be permitted. Chemicals or oil treating shall not be used.

3. The Contractor shall prevent dust from becoming airborne at all times including non-working hours, weekends and holidays in conformance with the State Department of Health, Administrative Rules, Title 11, Chapter 60 - Air Pollution Control.

K. AIR POLLUTION CONTROL

1. Emission: The Contractor shall not be allowed to operate equipment and vehicles that show excessive emissions of exhaust gases until corrective repairs or adjustments are made.

L. OIL AND SPILL CONTAINMENT

1. The Contractor shall ensure that the Oil Spill Response Plan, detailed in this document, is in place which shall detail procedures for managing the accidental release of petroleum products to the aquatic environment during construction. Fueling of project related vehicles and equipment should take place away from the water. Absorbent pads, containment booms, and skimmers will be stored on site to facilitate the cleanup of petroleum spills.
2. Any spills or other contaminations shall be immediately reported to the DOH Clean Water Branch (808-586-4309) and through email: cleanwaterbranch@doh.hawaii.gov.

M. MONITORING/MEASURES FOR VISUALLY DETECTED CONTAINMENT

1. All work operations shall be performed in conformance with the applicable provisions of the Hawaii Administrative Rules (HAR), Title 11 Chapter 55 Water Pollution Control and Title 11, Chapter 54 Water Quality Standards, and to the Erosion and Sedimentation Control Standards and Guidelines of the Department of Public Works, County of Honolulu, Hawaii.
2. The Contractor shall keep construction activities under surveillance, management and control to avoid pollution of surface or marine waters. Daily visual inspection of the construction site and its environs will be conducted by a designated individual, or his representative, to verify that the permitted activities do not result in uncontrolled adverse environmental impacts. Visual inspections will be documented with photographs and written descriptions.
 - i. Daily Inspection: The project site will be inspected daily to ensure BMPs are maintained to confine and isolate potential pollutants from being discharged into surrounding areas. The site will be inspected to ensure that materials are properly stored, rubbish is being collected and disposed of properly, etc.
 - ii. Deficiencies identified by daily inspections shall be corrected immediately. Work activities will stop and remain stopped until the deficiencies have been corrected.

3. Prior to delivery to the site, all construction material shall be inspected to ensure they are free of contaminants of any kind including: excessive silt, sludge, anoxic or decaying organic matter, turbidity, temperature or abnormal water chemistry, clay, dirt, organic material, oil, floating debris, grease or foam or any other pollutant that would produce an undesirable condition to the beach or water quality.
4. No contamination of the marine environment shall result from the permitted activities. Particular care must be taken to ensure that no petroleum products, trash or other debris enter near-shore and open ocean waters. When such material is found within the project area, the Contractor, or his designated construction agent, shall collect and dispose of this material at an approved upland disposal site.
5. Waste materials and waste waters directly derived from construction activities shall not be allowed to leak, leach or otherwise enter marine waters.
6. The Contractor shall ensure that the Oil Spill Response Plan (below) is in place and shall detail procedures for managing the accidental release of petroleum products to the aquatic environment during construction. Absorbent pads, containment booms, and skimmers will be available to facilitate the cleanup of petroleum spills.
7. Any spills or other contaminations shall be immediately reported to the DOH Clean Water Branch (808-586-4309).
8. In the event that floating hydrocarbon (oil, gas) products are observed, the Contractor or his designated individual will be responsible for directing that in-water work be halted so that appropriate corrective measures are taken in accordance with the Oil Spill Response Plan. The Department of Land and Natural Resources shall be notified as soon as practicable, and the activity causing the plume will be modified by containment. The responsible individual will document the event and the measures taken to correct the issue and will report the incident (with photographs) to the Office of Conservation and Coastal Lands and the Department of the Army Regulatory Office as soon as is practicable. Work may continue only after the issue is no longer visible.

N. WATER QUALITY MONITORING

1. Water quality monitoring during construction shall be conducted in accordance with the Section 401 Water Quality Certification from the State Department of Health and the “Applicable Monitoring and Assessment Program for Clean Water Act Section 401 Water Quality Certification.”
2. The Contractor shall visually monitor the nearshore for turbidity or other water quality issues that may be associated with the project operations.
3. The Contractor shall incorporate all erosion control measures shown in the

drawings and the BMPP for this project. The plans may be modified as necessary to adjust to conditions that develop during construction. Any changes to the BMPP must immediately be submitted to the DA for review.

4. The water quality will be quantitatively measured following the plan set forth by the approved Applicable Monitoring and Assessment Plan by a qualified individual.

O. PROTECTED SPECIES

1. The project manager shall designate a competent observer to survey the areas adjacent to the proposed action for ESA-listed species, including but not limited to the green sea turtle, hawksbill sea turtle, and Hawaiian monk seal.
2. Visual surveys for ESA-listed species shall be made prior to the start of work each day, and prior to resumption of work following any break of more than one half hour, to ensure that no protected species are in the area (typically within 50 yards of the proposed work).
3. Work shall be postponed or halted when ESA-listed species are within 50 yards of the proposed work and shall only begin/resume after the animals have voluntarily departed the area. If ESA-listed species are noticed after work has already begun, that work may continue only if there is no way for the activity to adversely affect the animal(s).
4. Do not attempt to feed, touch, ride, or otherwise intentionally interact with any ESA listed species.
5. All on-site project personnel must be apprised of the status of any listed species potentially present in the project area and the protections afforded to those species under federal laws. A brochure explaining the laws and guidelines for listed species in Hawaii, American Samoa, and Guam may be downloaded from: http://www.nmfs.noaa.gov/prot_res/MMWatch/Hawaii.htm. A list of protected species in Hawaii can be found at <http://www.wpcouncil.org/managed-fishery-ecosystems/hawaii-archipelago/protected-species-hawaii/>
6. The Contractor shall keep a record of all protected species sightings, incidents of disturbance, or injury, and shall provide a report to the State and the National Marine Fisheries Service (NMFS), and will be the contact person for any issues involving green sea turtles during project activities.
7. Upon sighting of a monk seal or turtle within the safety zone during project activity, immediately halt the activity until the animal has left the zone. In the event that a protected species enters the safety zone and the project activity cannot be halted, conduct observations and immediately contact NMFS staff in Honolulu to facilitate agency assessment of collected data. For monk seals contact the Marine Mammal Response Coordinator at (808) 944-2269, as well

as the monk seal hotline at (888) 256-9840. For turtles, contact the turtle hotline at 983-5730.

8. The Contractor shall immediately report any incidental take of marine mammals. The incident must be reported immediately to NOAA Fisheries' 24-hour hotline at 1-888-256-9840, and the Regulatory Branch of the USACE at 808-835-4303. In Hawaii, any injuries incidents of disturbance or injury to sea turtles must be immediately reported and must include the name and phone number of a point of contact, the location of the incident, and nature of the take and/or injury. The incident should also be reported to the Pacific Island Protected Species Program Manager, Southwest Region (Tel: 808-973-2987, fax: 808-973-2941).
9. Equipment operators shall employ "soft starts" when initiating work that directly impacts the bottom. Buckets and other equipment shall be sent to the bottom in a slow and controlled manner for the first several cycles before achieving full operational impact strength or tempo.
10. For any equipment used in undertaking the authorized work, the 160 dB and 120 dB isopleths shall not exceed the 50-yard shut-down range for impulsive and continuous sounds sources, respectively.

1.6 OPERATIONAL CONTROLS

- A. This plan will be reviewed with the project field staff prior to the start of work.
- B. All activities impacting the environment will not begin until appropriate BMPs are properly installed.
- C. Construction will be immediately stopped, reduced or modified; and/or new or revised BMPs will be immediately implemented as needed to stop or prevent polluted discharges to receiving waters. New or revised BMPs will be approved by appropriate regulatory agencies prior to re-commencing work.

1.7 STRUCTURE, AUTHORITY, AND RESPONSIBILITY

- A. The Project Manager/Superintendent/Project Engineer will ensure compliance with this plan.
- B. The Project Manager/Superintendent/Project Engineer will appoint and train one (1) additional individual to properly install all BMP's and to comply with all aspects of this plan.
- C. The Property Owner(s) is also responsible for compliance with the BMPP.

1.8 TRAINING

- A. Employees will be instructed on the proper installation of the BMPP materials.

- B. BMPs will be covered in a toolbox safety meeting.
- C. BMPs will be discussed, as applicable, for each new phase of work.

1.9 INSPECTION AND MONITORING

- A. The Project Manager/Superintendent/Project Engineer or the assigned trained individual will conduct a visual inspection of all BMPPs daily.
- B. All minor repairs and maintenance of the BMPs will be completed within 48 hours of detection. Major repairs of BMPs shall be completed as soon as practical, and in-water work shall be stopped until repairs are complete.
- C. If any BMPP is damaged, work will immediately be stopped and shall not resume until repairs to the BMPP have been completed.

1.10 EMERGENCY PROCEDURES

- A. Natural disaster related pollutant discharge: See Contingency Plan
- B. Spill prevention and control: See Emergency Spill Response Plan.

1.11 RECORD KEEPING AND DOCUMENTATION

- A. A copy of this plan will be kept on site.
- B. All BMP inspection reports will be kept on site.
- C. Records of inspection and repair of control measures will be retained in the project files for a minimum of five years.

1.12 SITE-SPECIFIC MANAGEMENT PRACTICES

- A. Material Management
 - 1. Only a minimum quantity of materials necessary for the work will be stored on site.
 - 2. All flammable and reactive liquids will be kept in sealed and clearly labeled original or compatible containers and stored under cover more than fifty (50) feet from the edge of the property and away from the nearest drain and receiving waters.
 - 3. Storage area will be kept clean and well organized.
 - 4. Materials will be used in strict accordance with the manufacturer's instructions.
- B. Waste Management

1. All waste will be collected and placed daily in the container located in the staging area.
2. The Contractor will arrange for pick up and disposal of the filled container as necessary.
3. Any spillage on pavement and concrete surfaces will be cleaned up immediately. Cleanup of waste will be conducted through sweeping, shoveling, or vacuuming operations only.
4. Care shall be exercised in the removal and transporting of debris and rubbish for disposal. Loads will be covered when transported.
5. Removed materials stored or stockpiled shall not interfere with public beach access.
6. There will be no effluent, storm discharge, or dewatering caused by this activity.

C. Hazardous Waste Management

Note: No hazardous wastes are anticipated for this project. The following will apply should hazardous waste be encountered:

1. Non-hazardous or less hazardous materials should be used whenever possible.
2. Hazardous waste shall be placed in secondary containment.
3. Hazardous waste shall not be mixed with other waste and repair debris placed in the dumpster.
4. Flammable or reactive waste will be placed in a separate area more than 50 feet from the edge of the property, nearest drain inlet, and the shoreline.

D. Vehicle and Equipment Management

1. Fueling operations will be monitored to prevent spills, leaks and overflows. Equipment will be fueled away from any drain or shoreline. A spill pan will be used to catch spill/leaks. Equipment will not be "topped off". Spill cleanup materials will be readily accessible.
2. Vehicles and construction equipment (except small tools and generators) shall be maintained off-site. If emergency repairs or maintenance on large equipment (i.e. bulldozer) must be performed, drip pans or drop cloth will be placed under the vehicle or equipment to catch any spills/leaks.

E. Erosion and Sediment Control Measures

1. A silt curtain will be deployed outside of the dredge operations and the groin site. The length of the silt curtain will be adequate to completely contain the area where sand recovery, sand placement, and groin construction work is taking place.

1.13 SUSPENSION OF WORK

- A. Violations of any of the above requirements or any other pollution control requirements which may be specified in the Technical Specifications herein 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 will be granted for delays caused by such suspensions.
- B. If no corrective action is taken by the Contractor within 72 hours after a suspension is ordered by the Owner, the Owner reserves the right to take whatever action is necessary to correct the situation and to deduct all cost incurred by the Owner in taking such action from monies due to the Contractor.
- C. The Owner may also suspend any operations which he feels are creating pollution problems although they may not be in violation of the above-mentioned requirements. In this instance, the work shall be done by force account.

1.14 CONTINGENCY PLAN

- A. The following plan will be implemented by the Contractor to prevent/respond to polluted discharges resulting from a severe storm or natural disaster. It is the Contractor's responsibility to abide by the following plan as well as any other binding plan, agreement, regulation, rule, law, or ordinance applicable.
- B. All contractors associated with the following construction project, Kuhio Beach Stub Groin Erosion Remediation, will follow this plan when a severe storm is either forecast or anticipated. Contractors must:
 1. Regularly monitor local weather reports for forecasted and/or anticipated severe storm events, advisories, watches, warnings or alerts. The contractor shall inspect and document the condition of all erosion control measures on that day prior, during, and after the event. The contractor shall prepare for forecasted and/or anticipated severe weather events to minimize the potential for polluted discharges.
 2. Secure the construction site. Securing the site should generally include:
 - i. Removing or securing equipment, machinery, and maintenance materials.
 - ii. Cleaning up all maintenance debris.

iii. Implementing all Best Management Practices detailed in the BMPP. This includes BMPs for materials management, spill prevention, and erosion and sediment control.

3. In the event of a severe weather advisory (hurricanes, tropical storms, natural disasters) or when deemed necessary, cease regular construction operations. Work crews must finalize securing the project site and evacuate until the severe weather condition has passed.

4. Upon return to the site, all BMPs shall be inspected, repaired and/or re-installed as needed. If repair is necessary, it shall be initiated immediately after the inspection and repairs or replacement will be complete within 24 hours. To facilitate repair or replacement, the contractor will be required to store surplus material on the project site if the site is located where replacement materials will not be readily available.

5. When there either has been a discharge which violates Hawaii Water Pollution rules and regulations OR there is an imminent threat of a discharge which violates Hawaii Water Pollution rules and regulations and/or endangers human and/or environmental health, the permittee shall at a minimum execute the following steps:

i. Assess whether construction needs to stop or if additional BMPs are needed to stop or prevent a violation.

ii. Take all reasonable measures to protect human and environmental health.

iii. Notify responsible parties listed below and immediately notify the DOH of the incident. The notification shall also include the identity of the pollutant sources and the implemented control or mitigation measures.

a. Scott Sullivan 1.808.259.7966 ext. 22

b. Sam Lemmo 1.808.587.0381

c. Department of Health:

Clean Water Branch (During regular working hours): 808-586-4309

Hawaii State Hospital Operator (After hours): 808-247-2191

iv. Document corrective actions, take photographs of discharge and receiving waters.

v. Take representative samples of the affected water, as resulted from the discharge(s), and submit analytical reports to the Department of Health Clean Water Branch.

vi. Revise BMPP to prevent future discharges of a similar nature.

1.15 EMERGENCY SPILL RESPONSE PLAN

A. Pre-Emergency Planning

1. An initial and periodic assessment shall be made of the project site and potential hazardous spills that may be encountered during the normal course of work. This plan is not intended to address issues relating to materials such as PCB, Lead, Asbestos, etc. since these types of materials would have specific work plans already developed. This plan should be revised as necessary to correspond to the assessment and resubmitted to the appropriate regulatory agencies.
2. A Hazardous Materials inventory list and MSDS sheets, to include subcontractors' materials, will be filed in a binder and located in the Project Office. The inventory list and MSDS sheets will be updated and maintained by the Project Manager and site safety officer; as new materials are added.
3. Personnel will consult the applicable MSDS sheet prior to its use.
4. Personnel will handle hazardous materials safely and use personal protective equipment (PPE), recommended/required by the MSDS when handling hazardous materials.
5. Personnel will receive "Hazard Communication" training within three (3) working days of arrival and "product specific" training prior to the initial use/exposure of a product. This training will be conducted by the Project Manager/Superintendent or site safety officer.
6. All personnel will be trained on the contents of this plan within the first month of maintenance and at least annually thereafter. The training should include a rehearsal of this plan. An attendance sheet will be kept on file at the Project Office.
7. Only approved containers and portable tanks shall be used for storage and handling of flammable and combustible liquids. Approved safety cans or DOT approved containers shall be used the handling and use of flammable liquids in quantities of five (5) gallons or less. For quantities of one (1) gallon or less, only the original container or approved metal safety can shall be used, for storage, use and handling of flammable liquids.
8. Flammable or combustible liquids shall not be stored in areas used for exits, stairways, or normally used for the safe passage of people.

B. Personal Protective and Emergency Spill Response Equipment

1. ABC fire extinguishers will be located in the project field office and in each of the company vehicles. There will be at least one fire extinguisher, rated at not less than 10B, within 50 feet of any stockpile of 5 gallons of flammable or

combustible liquids or 5 pounds of flammable gas storage.

NOTE: Fire extinguishers should not be located “directly” with hazardous materials, so as to endanger first responders.

2. Spill kits will be located at the project field office and/or within 50 feet of the hazardous material storage area. The spill kit contents shall be determined by the Project Manager/Superintendent based on the anticipated hazardous materials to be stored and/or used on the project. The spill kits will be inventoried quarterly, and appropriate logbook entries made.
3. Emergency response personal protective equipment (PPE) consisting of:
 - iv. Face shield
 - v. Tyvex coveralls
 - vi. Rubber gloves
 - vii. Air-purifying respirators with HEPA and organic vapor combination cartridges will be issued to the Emergency Response Team members and maintained in the project office. Separate Respiratory Protection Equipment shall be designated and labeled as such; this equipment will be inspected at least every 30 calendar days and appropriate logbook entries made.

C. Personnel Roles, Lines of Authority and Communication

1. Emergency Response Coordinator (ERC)
 - i. The Project Superintendent is the designated ERC. If the Project Superintendent is not available, the safety officer is the designated ERC.
 - ii. The ERC will be in charge of and will coordinate the appropriate emergency response procedures in this plan.
2. Emergency Response Team (ERT)
 - i. The ERT consists of Construction General Foreman, Labor Foreman, and a Laborer designated by the Project Superintendent.
 - ii. The ERT will appropriately respond to the emergency in accordance with this plan at the direction of the ERC.

D. Emergency Alerting and Response Procedures

1. Any person causing or discovering a known hazardous or unknown release or spill will:
 - i. Immediately alert nearby personnel who may be exposed to the effects of the release or spill.
 - ii. Report the release or spill immediately to the ERC and the ERT. All pertinent information regarding the release should be provided to the ERC, such as the amount and type of material released, location of the release, and other factors, which may affect the response operation.
 - iii. If the spill or release is a petroleum product or known non-toxic chemical, the person will take immediate and appropriate measures to stop or limit the rate of release, (i.e. close the spigot to the drum or form oil or curing compound) and or contain or stop the migration of the release (i.e. create a berm of dirt around the release) until the ERC and ERT arrive.
 - iv. If the spill release is a toxic, highly flammable, or unknown chemical, the person will first notify the ERC before approaching the spill area from upwind to determine the source, type, and quantity of the release. The person should monitor the spill until the ERC and ERT arrive.
 - v. The ERC will assess possible hazards to human health or the environment that may result from the release, fire, or explosion.
 - vi. If the spill or release is less than 25 gallons of a known petroleum product or non-toxic chemical, the ERC will direct the ERT to contain and cleanup the spill or release.
 - vii. If the spill or release is toxic or unknown, the ERC will immediately notify the City and County of Honolulu Fire Department and ask for assistance from the HAZMAT Response Team.
 - viii. Immediately after the emergency, the ERC will arrange for disposing of the recovered waste, contaminated soil or any other material that results from the release, fire, or explosion at the project site in accordance with the City and County of Honolulu and State regulations and manufacturer's instructions (if source of spill or release is known).

E. Emergency Notification and Reporting Procedures

1. In the event that a release enters the storm or sewer system, the ERC will immediately notify the Nation Response Center (NRC) at 1.800.424.8802, the Hawaii Department of Health, Hazard Evaluation and Emergency Response Office (HEER) at 808.586.4249 and LRPC at 808.935.2785.
2. The ERC will immediately notify appropriate agencies and submit written

follow-up notification in accordance with the Hazardous Substance Release Notification Guideline.

F. Safe Distance Staging Area

1. A staging area at safe distance upwind and higher than the location of the spill or release and its source will be immediately established.
2. Access to the spill or release location will be cleared for emergency vehicles and equipment to be used to contain and clean up the spill or release.

G. Site Security and Control

1. If the spill or release is located on or near the roadway, stop all traffic until the release is cleaned up.
2. If the spill or release is located away from vehicle or pedestrian traffic, install barricades/safety fencing around the affected area.
3. If the spill or release occurs during night operations, provide adequate light and use ground guides to escort emergency vehicles to the affected area.

H. Evacuation Routes and Procedures

1. Persons injured during the emergency condition will be evacuated to the staging area where they will be treated and or further evacuated to the nearest medical facility. The appropriate MSDS(s) will be provided to emergency service personnel and are intended to be delivered to the emergency room physicians.
2. Persons working at the affected area and who are not needed in the response effort; will report the staging areas for accountability.

I. Decontamination and Disposal Procedures

1. Persons involved in the spill clean-up are required to perform personal hygiene, utilizing soap and fresh water prior to eating, drinking, or smoking.
2. Contaminated PPE shall be appropriately cleaned and disinfected if possible. If this is not possible it shall be disposed of per the same requirements of the contaminated substance.
3. Sorbent pads/materials and the spilled substance will be placed in appropriate containers and disposed of as specified by the appropriate MSDS.
4. Contaminated soil will be placed in an appropriate container(s) or on plastic sheeting. The ERC will arrange with an environmental services company to properly characterize, prepare the manifest, label the containers, transport, and dispose of the contaminated soil. The generator's copy of the manifest will be

kept in the project files for a minimum of three (3) years.

5. In the event of a substantial release (25 gallons or more) of a suspected or known toxic chemical, the Fire Department HAZMAT Response Team will be called to control/cleanup the release. They will establish and provide the decontamination operations as required.

J. Emergency Medical Treatment and First Aid

1. First aid kits will be maintained at the project field office, all company vehicles, and gang boxes.
2. Injured person(s) will be treated at the staging area by a certified first aid trained individual at the project site until the ambulance arrives or they are evacuated to the nearest medical facility.
3. The appropriate MSDS(s) will be provided to emergency service personnel and are intended to be delivered to the emergency room physicians.

K. After the Spill Procedures

1. The ERC will review what happened and implement changes and/or corrections to prevent spill from occurring and to improve the spill response and clean-up procedures. This Plan will be revised to reflect those changes/corrections/improvements implemented.
2. The ERC will prepare a record of the spill response and keep it in the project files for a minimum of three (3) years.
3. The ERC will submit Follow-up Notification to HEER when required.
4. Spill response kits shall be replenished directly after the emergency.

1.16 EMERGENCY CONTACTS

National Response Center (NRC)	<i>1.800.424.8802</i>
Coast Guard Operations Center, Honolulu	
(working hours)	<i>1.808.522.8264</i>
(after hours)	<i>1.808.927.0830</i>
Hawaii State Department of Health	
Hawaii Evaluation and Emergency Response (HEER)	<i>1.808.586.4249</i>
City and County of Honolulu Fire Department	<i>911</i>
In the event that a release enters the storm or sewer system, the ERC will immediately notify NRC, HEER, and LEPC	<i>1.808.935.2785</i>

State Historic Preservation Division

1-808-692-8015

David Smith, Project Manager, Sea Engineering, Inc.

1.808.259.7966 x30

(*name*), Contactor Project Manager, (*company*)

TBD

1.6 MEASUREMENT AND PAYMENT

The cost for any environmental protection activity specified above or deemed necessary by the State will not be measured nor paid for directly but will be considered as incidental to and included in the total sum bid.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01581

PROJECT SIGN

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS

Furnish all labor, materials and equipment necessary to construct and install a project sign as specified hereinafter.

1.2 SUBMITTAL

The contractor shall provide the Engineer with six (6) shop drawings of the project sign for review and approval by the Engineer prior to ordering the sign.

1.3 LETTER STYLE

Copy is centered and set in Adobe Type Futura Heavy. If this specific type is not available, Futura Demi Bold may be substituted. Copy should be set and spaced by a professional typesetter and enlarged photographically for photo stencil screen process.

1.4 ART WORK

Constant elements of the sign layout - frame, outline, stripe, and official state information - may be duplicated following drawing measurements, or be reproduced and enlarged photographically using a layout template if provided. The "STATE OF HAWAII" masthead should be reproduced and enlarged as specified, using the artwork provided.

1.5 TITLES

The specific major work of the project under construction is emphasized by using 3-3/4" type, all capitals. Secondary information such as location or buildings uses 2-1/4" type, all capitals. Other related information of lesser importance uses letter heights as indicated on 01581-3, upper / lower case letters.

Design should follow the example on page 01581-3.

PART 2 - PRODUCTS

2.1 MATERIALS

A. LUMBER

1. Panel is 3/4" exterior grade high density overlaid plywood, with resin-bonded surfaces on both sides.
2. 4"x4" sign posts shall be Douglas Fir No. 1 or better.

B. PAINTS & INKS

Screen print inks are matte finish. 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)

C. CONCRETE

Concrete shall be class B with a 2,500 psi 28-day compressive strength.

PART 3 - EXECUTION

3.1 GENERAL

- A. The Project Sign shall be constructed with new materials as specified above.
- B. The Project sign shall be installed at the location indicated on the drawings or as designated by the Engineer. The project sign shall be erected upon commencement of work.

3.2 MEASUREMENTS AND PAYMENT

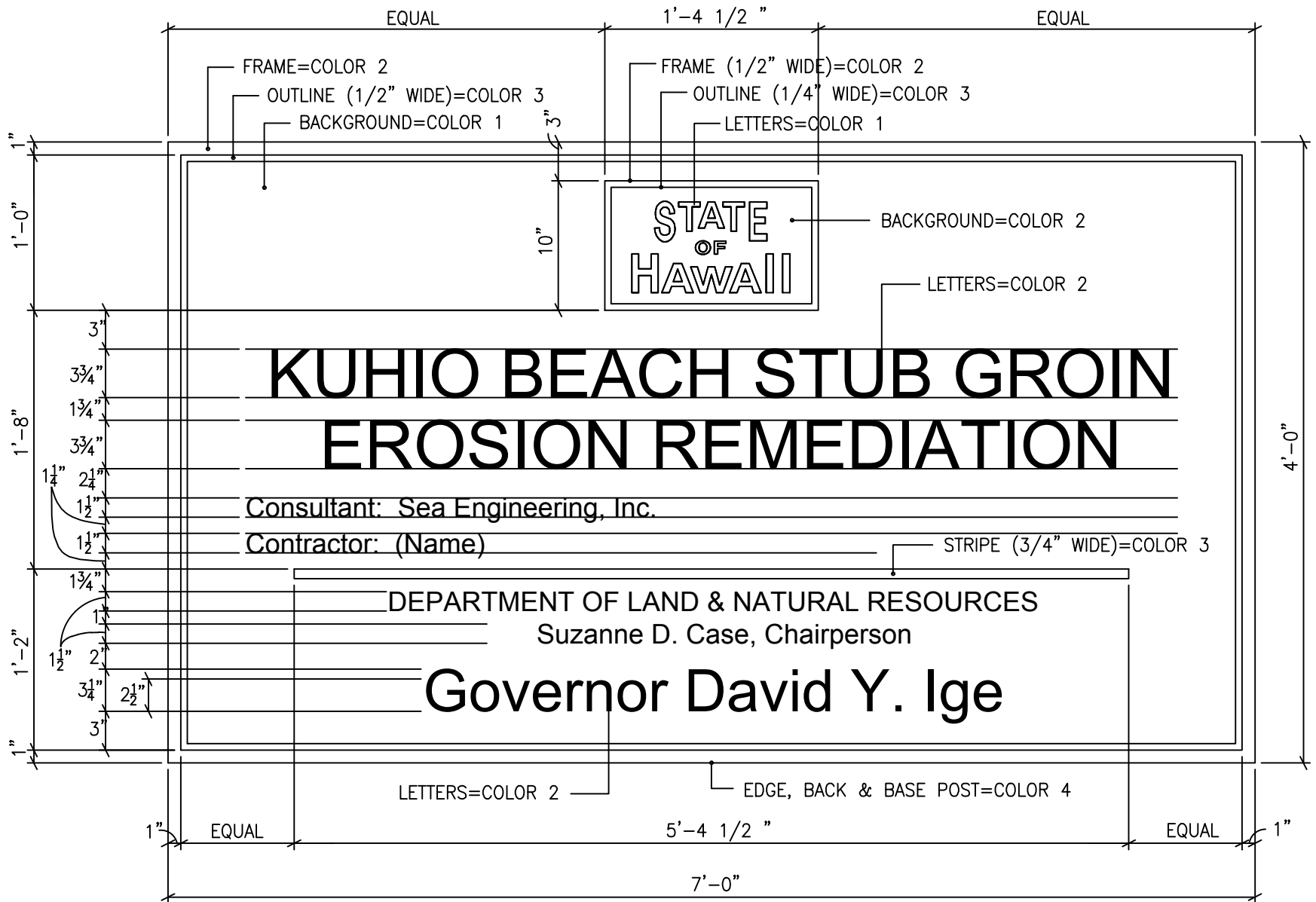
The construction of the project sign, including all equipment, labor and material necessary to furnish and install the project sign will be paid for under the "Project Sign" proposal item.

END OF SECTION

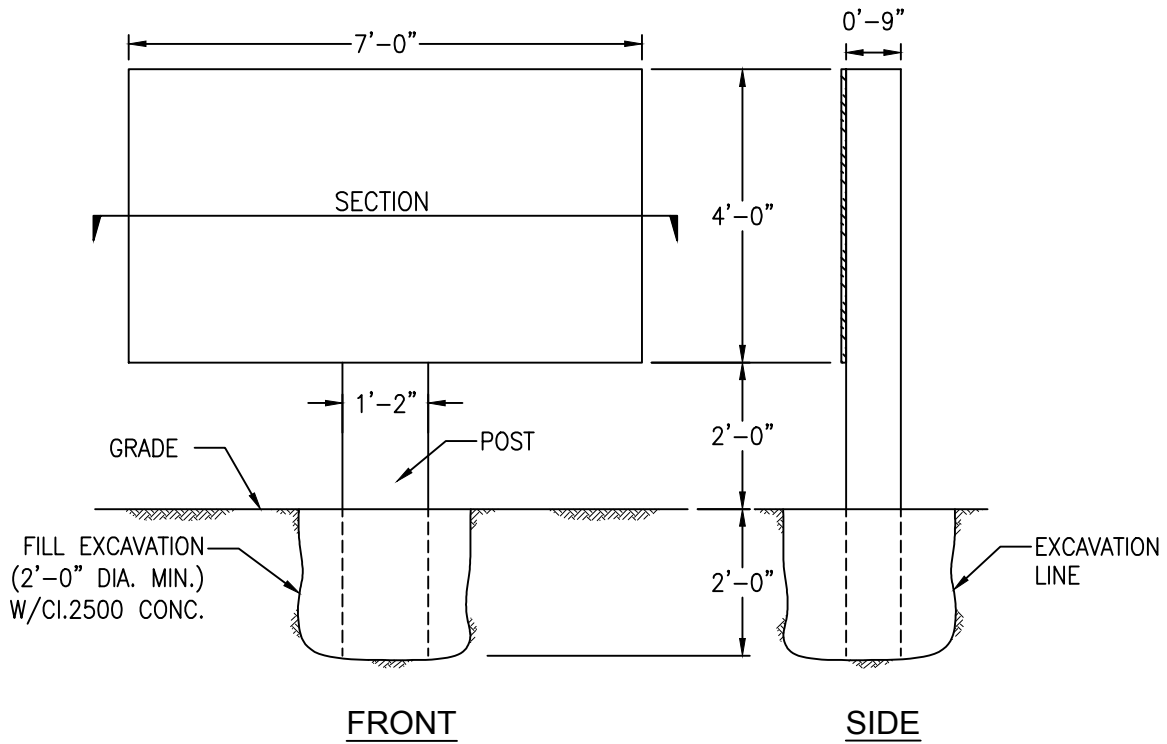
Project Sign
01581-2

Project Sign
01581-3

Job No. E00X030D

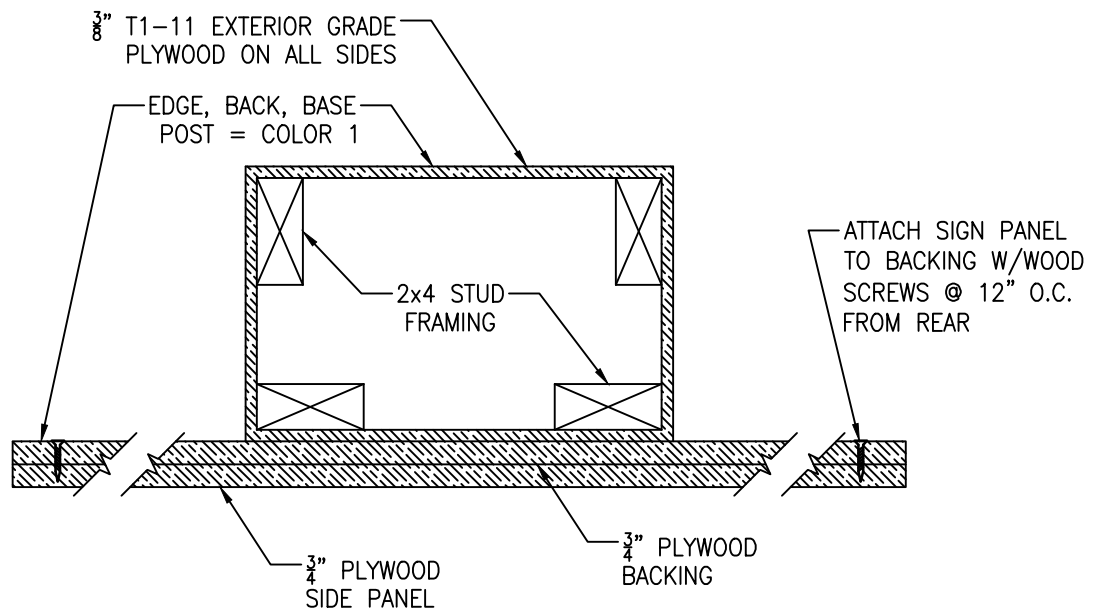


NOTE: Number of signs required 1



ELEVATIONS

NOT TO SCALE



SECTION

NOT TO SCALE

Project Sign
01581-4

SECTION 02100

SITE PREPARATION

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS

The work to be performed under this section shall include clearing the premises of all obstacles and obstructions, the removal of which will be necessary for the proper reception, construction, execution and completion of the other work included in this contract.

1.2 COORDINATION WITH OTHER SECTIONS

- A. Earthwork is specified in Section 02200 - EARTHWORK.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 GENERAL

- A. Maintenance of Traffic: The Contractor shall conduct operations with minimum interference to streets, driveways, sidewalks, passageways, etc. Approved access routes are shown on the PLANS. Operations affecting traffic shall be coordinated with the City and County of Honolulu Department of Transportation Services or other departments as necessary.

When necessary, the Contractor shall provide and erect barriers, signage, etc., with special attention to protection of personnel and the public. A safety fence shall completely surround the work area(s) to control access and protect public safety.

- B. Protection: Throughout the progress of the work protection shall be provided for all property and equipment, and temporary barricades shall be provided as necessary. Work shall be done in accordance with the safety provisions of the Manual of Accident Prevention in Construction, published by the Associated General Contractors of America, and the State of Hawaii's Occupational Safety and Health Standards, Rules and Regulations.
- C. Fires: No burning of fires of any kind will be allowed.
- D. Reference Points: Bench marks, etc., shall be carefully maintained, but if disturbed or destroyed, shall be replaced as directed, at the Contractor's expense.

- E. The Contractor shall protect from damage all improvements, including but not limited to roads, curbs, sidewalks, walls, and foundations. Any damage to existing improvements shall be repaired or replaced by the Contractor to the satisfaction of the Engineer.
- F. The Contractor shall protect from injury and damage all surrounding trees, plants, etc., and shall leave all in as good a condition as at present. Any damage to existing trees, plants, etc., shall be repaired or replaced by the Contractor to the satisfaction of the Engineer.
- G. Disposal: All materials resultant from operations under this Section shall become the property of the Contractor and shall be removed from the site. Loads of materials shall be trimmed to prevent droppings.

3.2 EXISTING UTILITY LINES

- A. The existence of active underground utility lines within the construction area is not definitely known other than those indicated in their approximate locations on the PLANS. Should any unknown line be encountered during excavation, the Contractor shall immediately notify the Engineer of such discovery. The Engineer shall then investigate and issue instructions for the preservation or disposition of the unknown line. Authorization for extra work shall be issued by the Engineer only as he deems necessary.

3.3 CLEAN UP OF PREMISES

- A. Clean up and remove all debris accumulated from construction operations from time-to-time as necessary. Upon completion of the construction work and before final acceptance of the contract work, remove all surplus materials, equipment, etc., and leave entire job site raked clean and neat to the satisfaction of the Engineer.

END OF SECTION

SECTION 02200

EARTHWORK

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS

This section covers the requirements for earthwork.

- A. It shall be the responsibility of the Contractor to examine the project site and determine for himself the existing conditions.
- B. Obvious conditions of the site existing on the date of the bid opening shall be accepted as part of the work, even though they may not be clearly indicated on the PLANS and/or described herein or may vary therefrom.
- C. All debris of any kind accumulated from clearing shall be disposed of from the site, and the whole area left clean. The Contractor shall be required to make all necessary arrangements relative to the proposed place of disposal.

1.2 REMOVAL AND REPAIR WORK

A. General

The Contractor shall exercise every precaution to preserve and protect all structures, walkways or utility improvements which are to remain or be relocated. Portions of walkway and pavement which are to remain shall be saw cut neat and true to line. Restore all pavement and curbs upon completion of the work.

1.3 SEQUENCE OF WORK

All sequence of work shall be subject to the approval of the Engineer.

1.4 PROTECTION

- A. Barricade: Erect temporary barricade and/or safety fence to prevent people from entering into project area, to the extent as approved by the Engineer. Such barricade shall be as defined in Section 01530 - BARRICADES. The extent of barricades may be adjusted as necessary with the approval of the Engineer. This work shall be accomplished at no extra cost to the State of Hawaii.
- B. Take all precautions and safety measures as required to protect the State of Hawaii free and harmless from liability of any kind. Conduct operations with minimum interference to streets, driveways, sidewalks passages, etc.

- C. Adequate precautions shall be taken before commencing and during the course of the work to ensure the protection of life, limb, and property.
- D. The Contractor shall protect from damage all surrounding structures, trees, plants, grass, walks, pavements, etc. Any damage will be repaired or replaced by the Contractor to the satisfaction of the Engineer at no cost to the State.

1.5 PERMITS

Necessary Federal and State permits for construction of the project have been obtained by the State. The Contractor shall adhere to all permit requirements and conditions. Any additional local permit requirements, such as for temporary road closure, are the responsibility of the Contractor. The Contractor shall obtain and pay for all necessary additional permits prior to the commencement of work.

1.6 MAINTAINING TRAFFIC

- A. The Contractor shall conduct operations with minimum interference to streets, driveways, sidewalks, traffic activities, etc. Approved access routes are shown on the PLANS. Operations affecting traffic shall be coordinated with the City and County of Honolulu Department of Transportation Services or other departments as necessary.
- B. When necessary, the Contractor shall provide, erect and maintain lights, barriers, etc., as required by traffic and safety regulations with special attention to protection of life.

1.7 CONSTRUCTION LINES, LEVELS AND GRADES

- A. The Contractor shall verify all lines, levels and elevations indicated on the PLANS before any clearing, excavation or construction begins. Any discrepancy shall be immediately brought to the attention of the Engineer and any changes shall be made in accordance with his instructions. The Contractor shall not be entitled to extra payment if he fails to report the discrepancies before proceeding with any work whether within the area affected or not.
- B. The laying out of base lines, establishment of grades and staking out the entire work shall be done by a licensed Surveyor or a licensed Civil Engineer, registered in the State of Hawaii. He shall be solely responsible for their accuracy. Erect and maintain substantial batter boards showing construction lines and levels.

1.8 CLEANUP

Clean up and remove all debris accumulated from construction operations from time to time, when as directed by the Engineer. Upon completion of the construction work and before final acceptance of work, remove all surplus materials, equipment, etc. and leave entire jobsite clean and neat.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Beach Sand Fill: Beach Sand fill materials shall be obtained from the Diamond Head basin of Kuhio Beach Park as shown on the Plans.

PART 3 - EXECUTION

3.1 EXCAVATION

A. Protective Measures

1. All excavation shall be protected and guarded against danger to life, limb, and property.
2. Shoring, cribbing, and logging, as required to safely preserve the excavations and earth banks, free from damages resulting from the work shall be provided and installed by the Contractor.
3. Grading shall be controlled so that the ground surface is properly sloped to prevent water run-off into structural foundations and open trenching excavations.
4. No underground utilities lines traversing the construction area are known to exist by the designer. Should any be encountered during excavation, the Contractor shall not disconnect same without authorization from the Engineer but shall inform the latter immediately of each discovery. The Engineer shall investigate and issue proper authorization for procedure.

B. General

1. Excavation for the groin construction shall be done to the lines and grades indicated on the Plans. Excavated sand shall be placed in the Sand Fill Area as shown on the Plans.
2. Excavation for groin construction shall be done as uniformly as possible, and result in an unfilled, undisturbed, firm bearing foundation on which to place geotextile filter fabric and construct the groin as shown on the Plans.
3. Excavation to obtain beach sand fill shall be done to the lines and grades indicated. Sand shall be excavated evenly so as not to produce depressions. Excavated profile shall not exceed two (2) feet vertical from existing ground.
4. Concrete slabs, concrete curbs, asphaltic concrete pavement, shore protection structures, etc., shall not be removed or damaged.

3.2 BEACH SAND FILL

A. Sand Fill Area

1. Sand fill shall be placed to the lines and grades shown on the plans.
2. Rough grading shall prevent the drainage of water into construction areas.

END OF SECTION

SECTION 02243

GEOTEXTILE SAND CONTAINERS

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS

This specification covers the furnishing and installing of sand-filled geotextile containers.

1.2 SUBMITTALS

- A Submit under provision of Section 01300 – SUBMITTALS.
- B The Contractor shall furnish six (6) sets of manufacturer brochures, specifications, and certificates 30 days prior to delivery to the project site.
- C The Contractor shall furnish six (6) copies of his work plan 30 days prior to commencement of work.
- D The Contractor shall furnish the Engineer a mill certificate or affidavit signed by a legally authorized official from the company manufacturing the geotextile container 30 days prior to commencement of work. The mill certificate or affidavit shall attest that the geotextile container meets the chemical, physical and manufacturing requirements stated in this specification.

1.3 WARRANTY

The Contractor shall provide the State of Hawaii with a one (1) year warranty against manufacturing defects, in accordance with this specification.

1.4 MOCK-UP GEOTEXTILE SAND CONTAINER

- A Demonstrate the filling of one (1) geotextile sand container.
- B Mock-up geotextile sand container shall be placed at the beginning of the groin and accepted by the Engineer before proceeding with construction. The Mock-up geotextile sand container shall be used as part of the final groin.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. The fabric shall be inert to biological degradation.

- B. Approved geotextile containers are ElcoRock 2.5 m³ Vandal Deterrent Containers, or approved equal.
- C. The empty geotextile containers shall be 275 cm (108.4) long by 220 cm (86.7 in) wide when flat. Typical filled dimensions of the geotextile containers shall be 2.4 m (7.9 ft) long by 1.8 m (5.9 ft) wide. The typical filled height shall be 0.65 m (2.1 ft).

2.2 PHYSICAL PROPERTY REQUIREMENTS FOR GEOTEXTILE CONTAINERS

TABLE 1

Test	Units	Values
Fiber		Polyester / Polypropylene
Mass	g/m ²	2,200
CBR	(N)	13,200
Wide Strip Tensile Strength MD	kN/m	50
Wide Strip Tensile Strength XMD	kN/m	85
Abrasion Resistance MD/XMD	(% strength retained)	>75
Seam Strength MD	kN/m	50
Seam Strength XMD	kN/m	55
Abraded Seam Strength	(% strength retained)	100%
Hydrocarbon (diesel) Resistance MD/XMD	(% strength retained)	>90
UV Resistance 500 hours	(% strength retained)	>80
Pore Size o95-Sieve Method	µm	<75
Permittivity	s ⁻¹	0.15
Coefficient of Permeability	m/s x 10 ⁻⁴	16.8
Flow Rate @ 100 mm head	l/m ² /s	15

Note: all values are typical. MD = Machine Direction, XMD = Cross Machine Direction.

2.3 APPROVALS, TESTS, INSPECTIONS, AND VERIFICATIONS

2.3.1 MANUFACTURING QUALITY CONTROL SAMPLING AND TESTING

Geotextiles and factory seams shall meet the requirements specified in TABLE 1 above. Conformance testing results shall be provided by the manufacturer in accordance with approved Quality Control practices, and paragraph 1.2.D. of this specification. The manufacturer shall submit test results for samples of the geotextile containers before fabrication. Testing shall have been performed at an approved laboratory with personnel experienced in testing Geosynthetics. The Engineer reserves the right for approval of laboratories. Test results from the lot under review shall be submitted and approved prior to deployment of that lot of geotextile containers.

2.3.2 SITE VERIFICATION, SAMPLING AND TESTING

If requested by the Engineer, the Contractor shall provide samples for testing to determine compliance with the requirements in the specification. When samples are to be provided, they shall be submitted a minimum of 30 days before the beginning of installation of the same geotextile container. Samples provided shall be the full manufactured container.

2.4 ADDITIONAL REQUIREMENTS

The Contractor shall provide information on the geotextile to be used to fabricate the geotextile containers and it must be a stock item of the manufacturer or local distributor. The manufacturer must have inventory available of the geotextile in sufficient quantity at the time of the solicitation to fabricate all of the geotextile containers for this project. The Contractor shall also provide verification that the geotextile to be used for fabrication of the geotextile containers has been used successfully in at least two (2) geotextile container projects, which are identifiable and documented.

2.4.1 MANUFACTURERS' PERSONNEL

Each manufacturer must provide at least one employee with geotextile container installation experience to provide the contractor necessary start-up technical assistance. The contractor must identify this individual and provide the professional resume of the person.

PART 3 - EXECUTION

3.1 DELIVERY

The geotextile containers shall be delivered in a protective wrapping which shall protect the fabric from ultraviolet radiation and from abrasion during shipping and handling.

Any damaged geotextile containers that do not meet the required physical property requirements in this specification shall be immediately replaced by the Contractor.

3.2 INSTALLATION

A. Within 10 days after Notice to Proceed, the Contractor shall submit the Plan of Construction specified in the Paragraph: SUBMITTALS above. The Plan shall incorporate the requirements specified herein with respect to geotextile containers and associated components including, geometry, orientation, fabrics, fabrication, installation, anchoring, and filling. The Plan shall demonstrate the Contractor's ability to provide at a minimum the following, to be approved by the Engineer:

1. Geotextile sand container filling and placing apparatus
2. A minimum 15-ton excavator with operator, dedicated to filling the containers

3. A minimum 35-ton excavator with operator, dedicated to placing the containers
4. Tiltrotator or similar excavator attachment to assist in proper placement and alignment of the containers
5. Sufficient water supply to adequately fill and pack the sand in the containers

B. The Contractor shall visually inspect the geotextile container prior to installation for damage and imperfections. Defects shall be marked and repaired according to manufacturer's recommendation.

C. The geotextile sand containers shall be filled and installed in accordance with the manufacturer's specifications, installation guidelines, and the PLANS. Contractor shall submit a list of equipment necessary for filling and installing the sand containers, and a description of the filling and installation methodology, in the proposal work plan.

D. A tolerance of plus or minus six (6) inches from the elevations, lines and grades of the finished groin as shown on the plans will be acceptable.

E. The first and second levels of sand containers shall be placed simultaneously proceeding from the landside groin terminus to the seaward groin terminus in order to provide a stable two-level platform above the water line for the placement equipment to traverse. Groin construction would then proceed from the seaward end and work landward placing the third level to complete the groin.

F. The excavator shall not be driven directly on top of the geotextile sand containers. A temporary geotextile fabric mat or approved alternative shall be placed on top of the containers to allow the excavator to operate on the containers without damaging them. The temporary geotextile fabric mat or approved alternative shall be removed as construction of the third level of bags progresses landward.

END OF SECTION

SECTION 02244

GEOTEXTILE USED AS FILTERS

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS

This specification covers the furnishing and installing of geotextile filter fabric.

1.2 SUBMITTALS

The Bidder shall furnish six (6) sets of manufacturer brochures, specifications and certificates prior to delivery to the project site.

The Contractor shall furnish a mill certificate or affidavit from the geotextile manufacturer attesting that the geotextile meets the chemical, physical, and manufacturing requirements stated in this specification.

1.3 WARRANTY

The Bidder shall provide the State of Hawaii with a one (1) year warranty against manufacturing defects, in accordance with this specification.

1.4 TEST REQUIREMENTS

The geotextile fabrics shall comply with all applicable American Society of Testing Materials (ASTM).

PART 2 - PRODUCTS

2.1 MATERIALS

A. Geotextile. The geotextile shall be a woven or non-woven pervious sheet of plastic yarn as defined by ASTM D 123. The geotextile shall equal or exceed the minimum average roll values listed in TABLE 1, MINIMUM PHYSICAL REQUIREMENTS FOR REVETMENT GEOTEXTILE. Strength values indicated in the table are for the weaker principal direction.

TABLE 1
MINIMUM PHYSICAL REQUIREMENTS FOR GEOTEXTILE FILTER FABRIC

PROPERTY	UNITS	ACCEPTABLE VALUES	TEST	METHOD
GRAB STRENGTH	lb	315	ASTM	D 4632
SEAM STRENGTH	lb	270	ASTM	D 4632
PUNCTURE	lb	115	ASTM	D 4833
TRAPEZOID TEAR	lb	115	ASTM	D 4533
PERMEABILITY	cm/sec	>0.10	ASTM	D 4491
APPARENT OPENING SIZE	U.S. SIEVE	100 - 50	ASTM	D 4751
ULTRAVIOLET DEGRADATION	Percent	50 AT 500 Hrs	ASTM	D 4355

B. Geotextile Fiber. Fibers used in the manufacturing of the geotextile shall consist of a long-chain synthetic polymer composed of at least 85 percent by weight of polyolefins, polyesters, or polyamides. Stabilizers and/or inhibitors shall be added to the base polymer if necessary to make the filaments resistant to deterioration caused by ultraviolet light and heat exposure. Reclaimed or recycled fibers or polymer shall not be added to the formulation. Geotextile shall be formed into a network such that the filaments or yarns retain dimensional stability relative to each other, including the edges. The edges of the geotextile shall be finished to prevent the outer fiber from pulling away from the geotextile.

C. Seams. The seams of the geotextile shall be sewn with thread of a material meeting the chemical requirements given above for geotextile yarn or shall be bonded by cementing or by heat. Seams shall be tested in accordance with method ASTM D 4884. The strength of the seam shall be not less than 90 percent of the required grab tensile strength of the unaged geotextile in any principal direction.

D. Securing Pins. The geotextile shall be secured to the foundation soil by sand bags, stone, steel anchors other appropriate means to prevent movement prior to placement of the groin sand-filled geotextile containers. Geotextile anchoring materials shall be removed following placement of the groin containers.

E. Manufacturing and Sampling. Geotextiles and factory seams shall meet the requirements specified in TABLE 1, MINIMUM PHYSICAL REQUIREMENTS FOR REVETMENT GEOTEXTILE. Conformance testing shall be performed in accordance with the manufacturers approved quality control manual.

PART 3 - EXECUTION

3.1 DELIVERY

The geotextile fabric shall be delivered in a protective wrapping which shall protect the fabric from ultraviolet radiation and from abrasion during shipping and handling.

Any damaged geotextile fabric that does not meet the required physical property requirements in this specification shall be immediately replaced by the Contractor.

3.2 INSTALLATION

A. Surface Preparation. Surface on which the geotextile will be placed shall be prepared to a relatively smooth surface condition, in accordance with the applicable portion of this specification and shall be free from obstructions, debris, rocks, or rubble.

B. Placement. The geotextile shall be placed in the manner and at the locations shown on the PLANS. At the time of installation, the geotextile shall be rejected if it has defects, rips, holes, flaws, deterioration, or damage incurred during manufacture, transportation, or storage.

The geotextile shall be placed as shown on the Plans, and laid smooth and free of undue tension, stress, folds, wrinkles, or creases. The strips shall be placed to provide a minimum width of 24 inches of overlap for each joint. Temporary anchoring of the geotextile to help hold it in place until the sand-filled groin containers are placed shall be allowed. The anchoring shall be removed as the containers are placed to relieve high tensile stress which may occur during placement of material on the geotextile. Trimming shall be performed in such a manner that the geotextile shall not be damaged in any way.

C. Protection. The geotextile shall be protected at all times during construction from damage or contamination, and any geotextile damaged or contaminated shall be removed and replaced. Any damage to the geotextile during its installation or during placement of overlying materials shall be replaced by the Contractor at no cost. Before placement of overlying materials, the Contractor shall demonstrate that the placement technique will not cause damage to the geotextile. In no case shall any type of equipment be allowed on the unprotected geotextile.

D. Acceptance. Material for geotextiles used as permeable separators will be evaluated under Subsections 106.02 and 106.03.

3.3 MEASUREMENT

Geotextiles used as filters will not be measured for payment.

3.3 PAYMENT

Geotextiles used as filters will not be paid for separately but will be included in the contract price for the “Geotextile Container Groin”. Payment will be full compensation for the work prescribed in this section and the contract documents.”

END OF SECTION

SECTION 02250

SAND MATERIAL FOR FILLING GEOTEXTILE SAND CONTAINERS

PART 1 – GENERAL

This work consists of furnishing sand for filling the geotextile sand containers as indicated on the PLANS.

1.1 REFERENCES

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

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM D 75 / D 75M (2009) Standard Practice for Sampling Aggregates

1.2 SUBMITTALS

The following shall be submitted to the Engineer for approval:

- A. Identification of sand sources, and detailed plans for quarry operations (if applicable).
- B. Samples of sand.
- C. Analysis of grain size distribution of sand.

1.3 SOURCES OF SAND

The Contractor shall be responsible for locating and obtaining all sand required to fill the geotextile containers for this project. Sand shall be quarried or obtained from other sources as approved. Sand shall meet the requirements specified herein. Development of sand source and improvements of any access to the site shall be at the Contractor's responsibility and expense. The sources from which the Contractor proposes to obtain the material shall be selected well in advance of the time when the sand will be needed in the work. Approval of a source or sources of sand shall not be construed as an approval of all material from that source or sources. The right is reserved to reject materials produced from localized areas, zones, or strata when such materials are unsuitable as determined by the Engineer.

1.4 SAMPLING AND TESTING OF SAND

- A. Sampling: Samples of sand from sources proposed by the Contractor shall be submitted as standards of the sand quality to be furnished. Duplicate sets of samples shall be taken, numbered, referenced, and identified. One set shall remain at the Contractor's quarry (source) for later comparison with actual sand samples to be furnished for the project. The

second set of samples shall be delivered and tested at the Contractor's expense at an approved independent testing laboratory, no later than 30 days in advance of the time when sand is scheduled for delivery. Sampling, identification, preparation, and transportation of samples shall be in accordance with ASTM D 75.

PART 2 - PRODUCTS

2.1 SAND

Sand for filling the geotextile containers shall consist of quarried natural carbonate sand. Approved sand includes "C33 Fine Aggregate," a.k.a. "Blended" sand produced by Pacific Aggregate, Inc. on Oahu or approved equal. The sand for the geotextile containers shall meet the following guidelines:

- I. The proposed sand shall not contain more than 4% fines, defined as the #200 sieve (0.074 mm).
- II. The proposed sand shall not contain more than 0% coarse sediment, defined as the #4 sieve (4.76 mm).
- III. No more than 50% of the fill sand shall have a grain diameter less than 0.5 mm as measured by #35 Standard Sieve Mesh.
- IV. Sand shall be dominantly composed of naturally-occurring granular carbonate beach sand. Crushed limestone or other man-made or non-carbonate sands are not acceptable.
- V. The Contractor shall demonstrate that the proposed fill sand was obtained from an existing approved source
- VI. All placed material shall be free of contaminants of any kind including: excessive silt, sludge, anoxic or decaying organic matter, turbidity, temperature or abnormal water chemistry, clay, dirt, organic material, oil, floating debris, grease, foam, or any other pollutant that would produce an undesirable condition to the beach or water quality.

PART 3 – EXECUTION (NOT USED)

END OF SECTION

SECTION 02260

SAND BORROW, TRANSPORTATION, AND PLACEMENT

PART 1 – GENERAL

- 1.1 **GENERAL REQUIREMENTS:** The work shall include the furnishing of all labor, materials, and equipment necessary to recover sand from the designated beach location, transport the sand to the placement site, place the sand to the lines and grades shown on the PLANS, and other work required to complete the work as indicated on the PLANS.
- 1.2 **SUBMITTALS:**
- A. The Contractor shall submit six (6) copies or emailed .pdf's of the sand pre- and post-construction placement area surveys within 24 hours of each days sand placement work.
- 1.3 **CONTRACTOR'S RESPONSIBILITY:** The Contractor shall comply with a) all permit requirements and conditions for this project, b) all applicable Federal, State, and County laws, rules and regulations, including Hawaii Public Health regulations, and c) all laws, rules and regulations concerning pollution control and abatement.

The Contractor shall provide, erect, and maintain, at no cost to the State, warning signs, lights, barricades, fences, or other means as necessary to prevent unauthorized persons and the general public from entering onto the site where they may suffer injury or create a hazard to construction operations. The Contractor shall also take all necessary precautions for safety in his operations and to prevent injury to his employees and to others having lawful access to the site.

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, leach, or otherwise enter the water. The Contractor shall promptly retrieve any misplaced materials/equipment. The Contractor shall maintain complete control of the movement of all equipment and material on and below the surface of the water. No loose floating or submerged equipment or material will be permitted.

All work shall be confined to the Contractor work areas and construction easements as shown on the PLANS. The contractor shall exclude the public from the work area in the immediate vicinity of his operations. Any damage to private or public property or structures caused by the Contractor in his execution of the work shall be repaired promptly at the expense of the Contractor. Recognizing that the project area is a very heavily utilized public beach, the Contractor shall endeavor to accomplish the project with the least adverse impact to public and commercial beach activities as is practicable, reasonable and necessary for the accomplishment of the work.

- 1.4 PLAN REVISION: It is understood that the project site is a dynamic sand beach, subject to rapid change. The State reserves the right to revise the sand borrow and placement plan within two (2) weeks of the start of construction in order to reflect beach conditions at the time of construction. If revised the plan shall require sand borrow and placement of not less than 500 cy nor more than 750 cy.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION

3.1 SAND BORROW

- A. Only loose, unconsolidated sand from within the sand recovery area as shown on the PLANS is to be borrowed. The sand may contain coral pieces and rubble. Care shall be exercised to not damage existing coastal infrastructure, including existing groins and cribwalls. The total amount of sand to be borrowed is up to 750 cubic yards.
- C. Rocks, cobbles and coral rubble larger than 1.5 inches in any dimension shall be removed from the borrowed sand and disposed of by the Contractor prior to completion and acceptance of the in-place sand fill.
- D. The sand borrow shall be accomplished utilizing appropriate equipment, e.g., long-arm excavator or similar. The sand borrow equipment shall be sufficient to accomplish the work in as sort a time as is reasonably possible. No equipment shall operate below the waterline.
- E. Interference with Recreation Activities: The Contractor shall avoid interfering with recreational use of the nearshore waters in the project vicinity to the maximum extent practicable.
- F. Ranges and Markers: Place and maintain markers as necessary to ensure that all work activities are conducted within the designated sand recovery area as shown on the PLANS, including turbidity containment devices.
- G. Turbidity Control: Turbidity containment devices as shown on the PLANS shall completely surround the sand borrow and stockpile area. The development of a leak in the turbidity containment devices shall be promptly repaired and work shall be stopped until repairs are completed. Failure to repair the leaks or change the method of operation that is resulting in spillage that exceeds turbidity and water quality standards will result in suspension of work activities.

3.2 SAND TRANSPORTATION AND PLACEMENT

- A. The borrowed beach sand shall be transported to the placement site through the designated transport corridor as shown on the PLANS.

- B. All beach sand fill from the Kuhio Beach Diamond Head basin borrow area shall be placed in the Sand Fill Area to the lines, grades, and cross sections shown on the PLANS.
- C. Sand shall be graded to the to the lines, grades, and elevations shown on the PLANS using as small equipment as is practicable in order to minimize noise and other disturbance to adjacent properties.
- D. The State reserves the right to modify or revise the sand placement lines and grades shown on the PLANS as necessary to accommodate changes in the existing beach conditions and to achieve the required sectional fill volumes at the time of construction.
- E. Immediately following sand fill placement the Contractor shall grade, level and dress the beach fill to meet the required elevations and dimensions indicated on the PLANS. A tolerance of plus or minus six (6) inches from the design beach crest elevation and beach slope will be acceptable. Total sand volume placed shall not exceed 750 cubic yards.
- F. Equipment used to move, distribute, and compact the sand to the design beach profiles shall be the smallest practicable equipment suitable to accomplish the work in order to minimize noise and inconvenience to beach users and adjacent properties. No equipment shall operate on the beach between 10pm and 7am. No land based equipment shall operate in the water or below the mean higher high water elevation (+1.1 feet msl).
- G. Grade stakes and any other stakes for any purpose shall be made of material that can and will be removed after filling to the design cross sections and accepted by the Engineer. All stakes shall have sufficient length above grade so they will not be accidentally covered by the sand fill. The Contractor's Work Plan shall contain a grade stake recovery plan to insure accountability for and complete removal of all grade stakes.
- H. Any fill sand which is lost in transit prior to its being placed as designed will not be subject to payment. If any material is deposited elsewhere than as designated or approved the Contractor may be required to remove such misplaced material and redeposit it where directed by the Engineer at his expense.

3.3 ENVIRONMENTAL CONTROLS: Turbidity containment devices as shown on the PLANS shall be maintained at all times during dredging, dewatering and sand placement work. Regular inspection of the devices shall be conducted by the Contractor, and should any leaks or breaks occur the associated work activities shall cease until the leaks are repaired. All work shall be accomplished in accordance with specification 01567 Environmental Protection.

3.4 EQUIPMENT REMOVAL: Upon completion of the work the Contractor shall promptly remove all equipment, markers and buoys, turbidity containment devices, and any other ancillary equipment or materials.

3.5 MEASUREMENT

- A. Measurement of sand quantity placed for pay purposes will be based on pre and post placement survey cross sections. Surveys for payment shall be made by the Contractor at his expense. The survey methodology and qualifications of the survey personnel shall be included in the Contractor's Work Plan submittal for approval by the Engineer.
- B. Beach profiles shall be surveyed at each 20-foot sand placement increment along the baseline. The profile surveys shall extend from 10 feet landward of the landward-most sand placement and seaward 20 feet past the design placement beach toe. The profile surveys shall be accomplished immediately prior to initiation of sand placement in each increment, and immediately post-placement and compaction to determine and verify the quantity of sand placed. The profiles shall at a minimum contain spot elevations at maximum 10-foot intervals along the profile and at any slope change points. It is understood that there is potential for sand movement after placement, thus the Contractor shall make every effort to perform the pre and post placement beach profile surveys in as timely a manner as possible, and within a maximum time limit of 24 hours for both the pre and post placement surveys for each increment placed.
- C. The Contractor shall maintain detailed survey logs, and the volume difference between pre and post dredge beach fill surveys shall form the basis for measurement and payment for sand dredged and placed. Beach fill satisfactorily placed will be measured for payment by use of the average end area measurement between alongshore beach profiles. The quantities shall be computed by the Contractor. The profile survey data and volume calculations shall be submitted to the Engineer within 48 hours following each placement increment. Each survey and volume calculation submittal to the Engineer shall contain the statement "I hereby certify that this submittal is a correct representation of the work accomplished." The submittal shall be signed by an authorized Contractor's representative.
- D. For purposes of expediency and efficiency, it is the State's intent to utilize the Contractor's surveys and volume calculations for purposes of assessing the work's conformance to the job requirements and for payment. However, the State reserves the right to conduct independent surveys, at its own expense, for the purposes of verifying the Contractor's measurements. In the event that survey discrepancies are developed that cannot be otherwise resolved, the State reserves the right to request the Contractor to re-survey portions of the work at no additional cost to the State; and/or utilize the State's survey for measurement.

END OF SECTION