

DOT-HAR-O-19-17

The work shall consist of furnishing of all materials, construction equipment, supplies, appurtenances, labor and supervision necessary to perform waterline repairs at Pier 8 at Honolulu Harbor, complete in place, ready for use, all items of work in accordance with the plans and these specifications. C-900 pipe, clevis and trapeze pipe supports shall be provided by DOT Harbors Oahu District Maintenance.

Bidders are advised to examine the existing conditions at the proposed project site to familiarize themselves with the nature and extent of work involved and working conditions.

Repair and replacement locations are indicated on the plans. Locations and quantities are approximate for information only, Contractor to verify exact locations and quantities prior to bidding.

The sizes, locations and types of repair work specified on the drawings are intended to be approximate only. The actual amount and type of repair work to be done shall be determined after completion of the work.

The Harbors Division reserves the right to alter repair methods, sizes, and locations to suit field conditions.

Scope of Work

The work to be done includes, but is not necessarily limited to, the following major items of work:

- A. Mobilization and demobilization
- B. Installation of 6" C-900 waterline at Pier 8 and installing new clevis and trapeze pipe supports. C-900 pipe, clevis and trapeze pipe supports shall be provided by DOT Harbors Oahu District Maintenance.
- C. Provide a ¼" Plexi Glass drilling template to the project manager upon completion of the project.
- D. BMP Plans, including temporary water pollution, dust, and erosion control measures.
- E. Work to be conducted is roughly within the 0' to 200' area of Pier 8.

Harbor Operations

The Contractor shall coordinate its work so as to minimize interference with harbor operations

All work shall be scheduled with the Harbors Division whenever its work will render a portion of the pier for equipment or pedestrian traffic.

General

Work included in this Article must be completed by a valid State of Hawaii Specialty Contractor licensed "C-37" Plumbing Contractor. The "C-37: Plumbing Contractor must be listed within the submitted Proposal at the time of bidding.

Provide all labor, materials, equipment, services and related work to complete all plumbing work as shown on the submitted drawings and as specified. The work shall include the following:

1. Proper removal of existing materials, piping, supports, and related appurtenances in accordance with all laws, codes, and regulations. All materials to be removed shall be disposed of off-site by the Contractor, unless directed by the Project Manager or an authorized designee to be salvaged, at no additional cost to the State.
2. Plumbing fixtures and equipment and connections thereto.
3. Domestic cold water piping and related appurtenances.
4. Disinfection and chlorination of water supply lines.
5. All testing required.
6. As-built drawings.

All installation shall comply with the latest accepted edition of the Uniform Plumbing Code, applicable ordinances of the City and County of Honolulu, the applicable regulations of the Department of Health of the State of Hawaii and all other applicable codes.

Warranty and Certificate

All work and materials executed under this section shall be under warranty to be free from defects of materials and workmanship for one (1) year from date of final acceptance of project as a whole by the Harbors Division. All work of repair and replacement required, including other work damaged by this work's defects shall be performed without cost to the Owner.

Furnish certificates for evidence of proper performance or compliance with code for the following:

1. Sterilization of domestic water piping
2. Water leak testing of domestic water piping

Materials

All materials shall be new and of the best quality in their respective kinds, compatible with existing materials and free from all defects.

Installation and Workmanship

All workmanship shall be of the highest standard.

The installation shall comply with the latest accepted edition of all codes and regulations of the State of Hawaii, the regulations of the Department of Health of the State of Hawaii and all other applicable codes.

The Contractor shall obtain and pay for all permits and licenses for the work. At completion, transmit to the Harbors Division, applicable certificates or inspections.

No pipe shall be closed up, buried or otherwise hidden until it has been inspected, tested and approved by the Harbors Division Construction Engineer.

Cutting and Repairing

The work shall be carefully laid out in advance providing sleeves, templates or details for chases and openings to be left in the walls, floors, structural members or partitions. Any access cutting of construction will not be permitted. Cutting shall be carefully done, and damage to walls, piping, wiring or equipment as a result of cutting for installation shall be repaired by skilled mechanics of the trade

involved at no additional expense to the State. Written permission from the Harbors Division shall be obtained before any cutting is done.

Protection to Fixtures, Materials and Equipment

Pipe openings shall be closed with caps or plugs during installation. Fixtures and equipment shall be tightly covered and protected against dirt, water and chemical or mechanical injury. Upon completion of all work the fixtures, materials and equipment shall be thoroughly cleaned, repainted as required, adjusted and operated.

Chlorination

Domestic cold water lines shall be sterilized with chlorine before acceptance of the work. Dosage of chlorine shall be not less than 50 ppm. Chlorinating material shall be introduced into the water lines in a manner approved by the Harbors Division Construction Engineer or authorized designee. After a contact period of not less than twenty-four (24) hours the system shall be flushed with clean water until the residual chlorine content is not greater than 0.2 ppm. All valves in the lines being sterilized shall be opened and closed several times during the contact period. A certificate shall be furnished to the Harbors Division Construction Engineer or authorized designee evidencing proper performance of sterilizations.

Testing and Inspection

Contractor shall furnish all equipment for tests and any required retests and pay for all cost of repairing any damage resulting from such tests. Contractor shall adjust systems until they are approved. Tests shall be performed in the presence of, and to the satisfaction of, the Harbors Division Construction and inspector of the official agency involved.

Water piping shall be tested in accordance with the Plumbing Code. Water piping shall be tested at 150 psi for 15 minutes.

Hawaii One Call

Contractor shall comply with the Hawaii One Call law, HRS Section 269E-4. This includes, but is not limited to, coordination with the Hawaii One Call Center (HOCC) for any work involving excavation at least five (5) working days but not more than twenty-eight (28) calendar days prior to commencing excavation. The Contractor shall provide to HOCC a description of the excavation site that may include the county, place, address and measurements as needed. HOCC contact information: telephone 811; website <http://www.digsafelyhawaii.com>

If HOCC, its associated facility operators and/or its contractors require access to any of the State's secure areas, the Contractor shall assist with this access by providing TWIC-credentialed escort(s) as necessary. The Contractor shall contact the District Manager for specific secure area requirements.

Noise and Dust Control

The following noise and dust control measures are listed to reduce the negative impacts to the businesses and customers of the Aloha Tower Marketplace during the construction activities.

1. The Contractor will not be allowed to perform demolition work, or other work that produces excessive sound levels, during the hours of 10:30 am to 2:00 pm and 5:30 pm to 10:30 pm. The Contractor shall provide other measures to minimize noise during construction activities when required. These include, but are not limited to, noise barriers placed between the work area and the Aloha Tower Marketplace.
2. The Contractor shall install dust control measures around its work area to minimize fugitive dust during the construction activities. Dust control measures will include, but are not limited to, use of water over the repair area, placement of fabric filters, etc.
3. The Contractor shall obtain approval from the Project Manager or authorized designee for proposed noise and dust control measures to be implemented during the construction activities prior to placement.

Clean Up

Debris shall not be allowed as a result of this work. Upon completion of this work, remove all debris and excess materials, tools, etc., resulting from this work from the job site and leave the location of this work broom-cleaned in an acceptable manner as approved by the Harbors Division. All work including fixtures, traps and equipment shall be thoroughly cleaned and ready for use.

LINE ITEM #3 FORCE ACCOUNT

An additional \$10,000.00 shall be added to your bid for line items one and two. Line item #3 is a force account to fund unforeseen materials and labor. Any funds drawn from this account shall require approval from Harbors Division in writing before use.

VEHICULAR ACCESS ONTO PIER 8

Contractor will not be allowed to completely close the access to Piers 8 & 9. Contractor and State shall meet after award is issued to determine sufficient work area that does not impede with operations.

PARKING AND STORAGE

Contractor shall be assigned an area for storage of equipment and materials related to the project. At no time, shall any items not related to the awarded project be stored within the designated area.

Parking shall be made available at no charge to company marked vehicles working the project within a designated area as assigned by Harbor Operations. Personally owned vehicles are subject to parking fees.