

State of Hawaii
DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION
1151 Punchbowl Street, Room 221
Honolulu, Hawaii 96813

ADDENDUM NO. 5

TO

Job No. F75C646G
Hapuna Beach State Recreation Area
Waterline Improvement Project
Hawaii Island, Hawaii

Aug 29, 2023

This addendum as issued shall become part of the Contract Documents for the subject project. The Request for Proposals documents and specifications shall be amended as follows:

REQUEST FOR PROPOSALS

1. Section 1.1 Introduction, first paragraph shall read (crossed out words – DELETE, underline words – ADD):

The State of Hawaii, Department of Land and Natural Resources (DLNR) is requesting proposals from qualified firms or individuals for completing the Hapuna Beach State Recreation Area (SRA) Waterline Improvement project (Project). Any award will result in a contract for these services for use by DLNR. Currently, the potable water system is had been shut down because of numerous leaks throughout the beach park and cabin area. The leaks started in 2018 and increased in frequency until October 2022 when State Parks shut down the entire water system as repairs were no longer feasible. Although temporary repairs have restored water service, The completion of the project is urgently needed to bring back long-term potable water service throughout the park, which is a necessity for Hawaii Island's most popular beach park. Accordingly, the approach to this contract is to structure a framework that will support a successful partnership between DLNR and the Offeror that will enable the completion of the Project in the shortest possible time. DLNR has stated its requirements on a performance basis, thus allowing and expecting the Offeror to determine, using standard commercial best practices, what design solutions are appropriate. The Offeror is expected to seek out innovative solutions to maximize budget and performance in response to these performance-based requirements.

2. Section 1.4 RFP Schedule and Significant Dates, replace the following dates with:

Best and Final Offer (if necessary)	September 14, 2023
Notice of Award	October 13, 2023
Contract Start Date	November 24, 2023

3. Section 2.1 Project Overview and History, third and fourth paragraphs shall read (crossed out words – DELETE, underline words – ADD):

~~Recently, all fixtures receiving potable water, including the restroom comfort stations, outdoor showers, fountains and foot rinses have been closed due to the numerous breaks in the existing potable water supply lines.~~ The purpose of this project is to bring potable water service back by installing approximately 4,300 linear feet of ~~temporary~~ new water line. A vicinity map and project location are shown in Figure 1. A conceptual water line plan is shown in Figures 2 and 3. A point of connection maps to allow alternative proposed layouts are shown in Figures 4 and 5.

DLNR intends to install the ~~temporary~~ new waterline using the services of a qualified Design-Build Entity (DBE). The DBE will be tasked to design and install a ~~temporary~~ new water distribution system while maintaining safety to HBSRA visitors.

4. Section 2.2.1 shall read (crossed out words – DELETE, underline words – ADD):

Design of ~~Temporary~~ New Waterline

Design ~~HDPE~~ PVC pipes for water distribution such that there is both pressure and steady flow at all service connections. The water line shall have a minimum service life up to three years at time of acceptance by DLNR.

All bend fittings shall be restrained at the joints. Provide isolation valves with anchors (e.g. blocks and straps) at branch fittings. All local high points such as top at vertical bends shall include a manually-operated valve to release trapped air. At minimum, all iron and steel hardware shall have a protective weather and corrosion-resistant coating.

~~AC roadway waterline crossings shall be buried with a 12" diameter ductile iron pipe conduit for the 3" or 4" pipe to pass through and shall have a minimum of 30" cover. Walkway waterline crossing shall be buried with a 10" diameter ductile iron pipe conduit and shall have a minimum of 6" cover.~~

~~The design of the temporary above-ground waterline shall guard against solar thermal energy excessively heating the water in the pipeline and ensure the temperature at all water fixtures, including showers, foot rinses, fountains, and comfort stations shall not exceed 105 degrees Fahrenheit.~~

5. Section 2.2.2 shall read (crossed out words – DELETE, underline words – ADD):

Installation of ~~Temporary~~ New Waterline and Appurtenances

~~Install temporary waterline and appurtenances. Provide aboveground pipe support that is anchored into ground surfaces.~~

The existing pressure reducing valve (PRV) manhole is set for a 100 PSI output. Due to the difference in elevation to the lower service connections, ensure that the system isn't over pressurized by adjusting the PRV output pressure. Lateral lines should not experience pressures over 90 PSI. Include small diameter pressure reducing/relief valves at service laterals if necessary. The existing parallel bypass gate valve should not be opened.

Replace existing 4" PRV and gate valve with new 6" PRV with 4" PRV bypass. Install new fire hydrant near the existing concession stand and accessible from the parking lot.

New piping must be disinfected, and pressure tested according to the technical specifications. Submit test results to DLNR for approval.

A conceptual waterline plan is shown in Figures 2 ~~and 3~~. The base bid is composed of ~~four~~ two separate areas.

- SOUTH AND CENTRAL AREAS (Shown as Red)
- NORTH AREA (Shown as Orange and Blue)
- ~~• CABINS AREA (Shown as Yellow)~~
- ~~• CABINS AREA, Deductive 1 (Shown as Pink)~~

The DBE also has the option to propose their own waterline alignment. Figures 4 ~~and 5~~ shows required starting point and required points of connection. If the DBE chooses to design their own alignment, it shall ~~follow the red alignment through the parking lot and then~~ connect the following:

- SOUTH AND CENTRAL AREAS (Shown as Red)
 - South Comfort Station
 - South Showers
 - Foot Rinses
 - Fountain
 - Upper Parking Comfort Station
 - Central Shower
 - Concession Stand
- NORTH AREA (Shown as Orange)
 - North Comfort Station
 - North 1 Shower
 - North 2 Shower
 - Foot Rinse
- ~~• CABINS AREA (Shown as Yellow with Pink for Deductive 1)~~
 - ~~○ Maintenance Base Yard~~
 - ~~○ Cabins Comfort Station~~
 - ~~○ Kitchen Pavilion~~

Figure 4 also shows the approximate storm surge extents. The DBE shall design a system to withstand wave action if required.

6. Section 2.2.7.2 Traffic Control, shall read (crossed out words – DELETE, underline words – ADD):

Provide traffic control as required for the installation of the ~~temporary~~ new waterline. The DBE shall coordinate traffic control requirements and locations with DLNR.

7. Section 2.3.2, delete second paragraph (crossed out words – DELETE):

~~Of significance, Old Puako Road that runs between the beach park area and the cabins is owned by the County of Hawaii. DBE will be responsible for getting the necessary permits and approvals to install the waterline across this roadway.~~

8. Section 3.1.5 Project Schedule, shall read (crossed out words – DELETE):

Provide an overall Project schedule in Gantt chart format with twenty (20) or more line items indicating the key elements required to adequately perform design, approvals, procurement (identify any long-lead items), construction, and close out for the Design-Build Contract. The Project schedule shall identify the date potable water service will be restored for each of the four areas of the Hapuna Beach SRA identified on Figures 2 and 3.

The DBE shall bring into service the project in phases in the following order:

- Phase 1: South & Central Areas (shown in Red)
- Phase 2: North Area (shown in Orange and Blue)
- ~~Phase 3: Cabins Area (shown in Yellow)~~
- ~~Phase 4: Cabins Area, Deductive 1 (shown in Pink)~~

~~Of most interest to DLNR is to get Phases 1 and 2 complete and online. DLNR would not like delays in Phases 3 and 4 to hold up completion of Phases 1 and 2.~~

9. Section 6, Figures and Attachments, DELETE Figures 2, 3, 4 and 5 in their entirety and replace with the attached (Attachment 1). Note Figures 3 and 5 are no longer applicable.
10. Offer Form OF-2 – DELETE in its entirety and REPLACE with the attached revised Offer Form OF-2 (Attachment 3).

TECHNICAL SPECIFICATIONS

1. Section 02510 Water Distribution, Paragraph 1.1 General Requirements, paragraph shall read (crossed out words – DELETE, underline words – ADD):

The work to be performed under this section shall include the preparation and installation fused polyvinyl chloride (PVC) ~~of thermo-insulated high density polyethylene (HDPE)~~ pipes ~~3 to 4"~~ to 6" diameter, copper, bronze or steel galvanized laterals, isolation valves and other appurtenances included in this contract. ~~Majority of the alignment will be aboveground with an approved pipe support system. Insulated pipes will be buried at walkways and vehicle access lanes. Ductile iron pipe shall be used as casing at these crossings and shall have a~~

~~diameter large enough to fit the insulated HDPE and pipe support spacers. The temporary water lines and appurtenances shall be designed to last a minimum of three years from the date of acceptance by DLNR.~~

2. Section 02510 Water Distribution, Paragraph 1.2 References, ADD the following standards:

- AWWA C900 (2016) Polyvinyl Chloride (PVC) Pressure Pipe, and Fabricated Fittings, 4 In. Through 60 In.
- AWWA C151/A21.51 (2017) Ductile-Iron Pipe, Centrifugally Cast
- ASTM D1784 (2020) Standard Specification for Rigid Poly(Vinyl Chloride) (PVC) Compounds and Chlorinated Poly(Vinyl Chloride) (CPVC) Compounds
- ASTM D2241 Standard Specification for Poly(Vinyl Chloride) (PVC) Pressure-Rated Pipe (SDR Series)

DELETE the following standards:

- ASTM D2122 – Standard Method of Determining Dimensions of Thermoplastics Pipe and Fittings
- ASTM D2657 – Practice for Heat-Joining of Polyolefin Pipe and Fittings
- ASTM D3261 – Butt Heat Fusion Polyethylene (PE) Plastic Fittings for Polyethylene (PE) Plastic Pipe and Tubing
- ASTM F412 – Standard Terminology Relating to Plastic Piping Systems
- ASTM F714 – Polyethylene (PE) Plastic Pipe (SDR-PR) Based on Outside Diameter
- ASTM F2164 – Field Leak Testing of Polyethylene (PE) Pressure Piping Systems Using Hydrostatic Pressure
- ASTM F2620 – Standard Practice for Heat Fusion Joining of Polyethylene Pipe and Fittings
- ASTM F3190 – Standard Practice for Heat Fusion Equipment (HFE) Operator Qualifications on Polyethylene (PE) and Polyamide (PA) Pipe and Fittings
- Plastic Pipe Institute (PPI) standards
- Plastic Pipe Institute (PPI) Municipal Advisory Board (MAB) standards

3. Section 02510 Water Distribution, Paragraph 1.3 Submittals, Paragraph A shall read (crossed out words – DELETE, underline words – ADD):

1. Ductile-Iron Pipe Material Catalog Cuts

2. ~~HDPE~~ Fusible PVC Pipe Material Catalog Cuts
 3. ~~Manufacturer's Recommended Fusion Procedures for the Products~~
 4. Service Laterals and Appurtenances
 5. Valves and Appurtenances
 6. Aboveground Pipe Supports
4. Section 02510 Water Distribution, delete Paragraph 2.2 in its entirety and replace with the following:
- PVC
- A. Fusible PVC pipe and fittings 4" to 6" diameter shall be in accordance with AWWA C900 and all applicable ASTM standards.
 - B. Table 1 gives the Pressure Class per AWWA C906, Pressure Rating and Allowable Total Pressure during Recurring and Occasional Surge for PE4710 pipe at 80°F or less.

Table 1				
Pressure Class per AWWA C900 for PE 4710 at 80° F or Less				
Pipe Dimension Ratio (DR)	Pressure Class (psi)	Pressure Rating (psi)	Allowable Total Pressure During Recurring Surge (psi)	Allowable Total Pressure During Occasional Surge (psi)
DR 11	200	200	300	400

5. Section 02510 Water Distribution, Paragraph 3.1 General, paragraph C replace "HDPE" with "fusible PVC"

REQUEST FOR INFORMATION

1. None.

GENERAL INFORMATION

1. None.

Engineering Division



Carty S. Chang
Chief Engineer