

**CITY OF WEST SACRAMENTO
Yolo County, California**

**Bidding and Contract Documents
Coke and Triangle Sewer Lift Station Rehabilitation Project**

**ADDENDUM NO. 1
Issued March 9, 2020**

Bidder's Note: Bidder shall acknowledge receipt and examination of this addendum on the Bid form and attach a signed copy to the Bid, both as required by the Sealed Proposal. See last page of this addendum for signature line of Bidder.

NOTICE

***** This addendum does not affect the bid date. Bids are due on
Thursday, April 9, 2020 at 2:00 p.m. *****

The Bidding Documents are hereby clarified, corrected, and changed as indicated below.

Submitted Questions (via email):

- None to-date

Specifications:

PART 1, INVITATION TO BID –

In the description of the engineer's estimate, replace "\$1,500,000" with "\$1,460,000".

SECTION 11302 – SUBMERSIBLE PUMPS

Add the following under Section 11302 Paragraph 3.01 "C. Wrap pump power and control cables that will be located in the wet well with M23053/1 Class 2 Neoprene Heat Shrink Tubing. Tubing shall have a minimum reduction ratio of 2:1. Submit cut sheets of planned heat shrink tubing for approval by Engineer. Wrap and shrink prior to installing pumps in the wet well."

SECTION 13418 – FIBERGLASS WET WELL

Add the following under Section 13418 Paragraph 2.02 "Pipe Stubouts – FRP stub-outs must be installed in the field by the manufacturer. Installation of pipe stub-outs will be performed using FRP hand-lay procedures. All resin and fiberglass shall be the same type and grade as used in the manufacturer of the basin."

SECTION 13420 – FACTORY-BUILT ABOVE GROUND VALVE VAULT

Add attached specification in its entirety as part of the contract documents.

SECTION 15100 – VALVES

Add the following under Paragraph 3.02 "Support bricks for valve boxes, when shown on the plans, shall meet the criteria of ASTM C62."

Drawings:

Drawing G200

- Add "Triangle Lift Station" to Title Block

Drawing D100

- Add legend to distinguish demolition limits

Drawing D200

- Add legend to distinguish demolition limits

Drawing M201

- Replace above-ground vault callout "DORR" with "DOOR"

Drawing E102, E103, and E200

- Add clarification that pedestal and cabinets are existing

Attachments:

- Section 13420 – Factory-Built Above Ground Valve Vault

City of West Sacramento,

By: _____

Amber Wallace, P.E. Project Manager

ACKNOWLEDGMENT BY BIDDER,

By: _____

Title: _____

SECTION 13420

FACTORY-BUILT ABOVE GROUND VALVE VAULT

PART 1 - GENERAL

1.01 DESCRIPTION

The work of this section consists of furnishing and installing a factory built above ground valve package as indicated on the project drawings, herein specified, as necessary for proper and complete performance.

1.02 REFERENCES

A. Publications listed below form part of this specification to extent referenced in the text by basic designation only. Consult latest edition of publication unless otherwise noted.

1. American National Std. Institute (ANSI) / American Water Works Assoc. (AWWA)

- | | |
|--------------------------|---|
| a. ANSI B16.1 | Cast iron pipe flanges and flanged fittings. |
| b. ANSI/AWWA C115/A21.51 | Cast/ductile iron pipe with threaded flanges. |
| c. ANSI 253.1 | Safety Color Code for Marking Physical Hazards. |
| d. ANSI B40.1 | Gauges, Pressure and Vacuum. |
| e. AWWA C508 | Single Swing Check Valves. |
| f. AWWA C504 | Plug Valves |

2. American Society for Testing and Materials (ASTM)

- | | |
|--------------|-------------------------------------|
| a. ASTM A48 | Gray Iron Castings. |
| b. ASTM A126 | Valves, Flanges, and Pipe Fittings. |
| c. ASTM A307 | Carbon Steel Bolts and Studs. |
| d. ASTM A36 | Structural Steel. |

1.03 SYSTEM DESCRIPTION

A. The contractor shall furnish and install one factory built automatically controlled above ground valve vault capable of handling raw unscreened sewage or similar liquids.

- B. The pumps and mechanical slide rail accessories shall be furnished according to SECTION 11302 and installed in the wet well as shown on the project plans. The valves and piping shall be installed within a factory built fiberglass enclosure.

1.04 SUBMITTALS

A. Product Data

1. Prior to fabrication, valve vault manufacturer shall submit 5 copies of submittal data for review and approval.
2. Submittal shall include shop drawings and support data as follows: Catalog cuts sheets reflecting characteristics for major items of equipment, materials of construction, major dimensions.
3. Submittal shall include shop drawings. Shop drawings shall provide layout of mechanical equipment and anchor bolt locations for slide rail components. Pipe penetrations and station access clearances shall be dimensioned relative to the station centerline

B. Operation & Maintenance Manuals

1. Installation shall be in accordance with written instructions provided by the valve vault manufacturer. Comprehensive instructions supplied at time of shipment shall enable personnel to properly operate and maintain all equipment supplied. Content and instructions shall assume operating personnel are familiar with pumps, motors, piping and valves, but lack experience on exact equipment supplied.
2. Documentation shall be specific to the valve vault supplied and collated in functional sections. Each section shall combine to form a complete system manual covering all aspects of equipment supplied by the station manufacturer. Support data for any equipment supplied by others, even if mounted or included in overall station design, shall be provided by those supplying the equipment. Instructions shall include the following as a minimum:
 - a. Functional description of each major component, complete with operating instructions.
 - b. Calibration and adjustment of equipment for initial start-up or as required for routine maintenance.

- c. Support data for commercially available components not produced by the package manufacturer, but supplied in accordance with the specifications, shall be supported by literature from the prime manufacturer and incorporated as appendices.
 - d. Mechanical layout drawing of the vault, valves, and piping, prepared in accordance with good commercial practice, shall provide installation dimensions and location of all pumps, valves and piping.
3. Operation and maintenance instructions which rely on vendor cut-sheets and literature which include general configurations, or require operating personnel to selectively read portions of the manual shall not be acceptable. Operation and maintenance instructions must be specific to equipment supplied in accordance with these specifications.

1.05 QUALITY ASSURANCE

- A. Upon request from the engineer, the manufacturer shall prove financial stability and ability to produce the package within the specified delivery schedules. Evidence of facilities, equipment and expertise shall demonstrate the manufacturer's commitment to long term customer service and product support.
- B. The manufacturer's technical representative shall inspect the completed installation, correct or supervise the correction of any defect or malfunction, and instruct operating personnel in the proper operation and maintenance of the equipment as described in Part 3 of this section.

1.06 MANUFACTURER'S WARRANTY

- A. The manufacturer shall warrant all equipment to be of quality construction, free of defects in material and workmanship. A written warranty shall include specific details described below.
 - 1. In addition to defects in material and workmanship, fiberglass reinforced polyester station enclosures are warranted for sixty (60) months to be resistant to rust, corrosion, corrosive soils, effects of airborne contamination or physical failures occurring in normal service for the period of the pump station warranty.

2. All other equipment, apparatus, and parts furnished shall be warranted for sixty (60) months, excepting only those items that are normally consumed in service, such as light bulbs, oils, grease, packing, gaskets, O-rings, etc. The manufacturer shall be solely responsible for warranty of the station and all components.
- B. Components failing to perform as specified by the engineer, or as represented by the manufacturer, or as proven defective in service during the warranty period, shall be replaced, repaired, or satisfactorily modified by the manufacturer.
 - C. It is not intended that the package manufacturer assume liability for consequential damages or contingent liabilities arising from failure of any vendor supplied product or part which fails to properly operate, however caused. Consequential damages resulting from defects in design, or delays in delivery are also beyond the manufacturer's scope of liability.
 - D. The warranty shall become effective on the date of acceptance by the purchaser or the purchaser's authorized agent, or sixty (60) days after installation, or ninety (90) days after shipment from the factory, whichever occurs first.

PART 2 – MATERIALS

2.01 MANUFACTURER

- A. The valve vault shall be manufactured Gorman Rupp, Armorcast, Xylem, or equal.

2.02 STATION ENCLOSURE

- A. The station enclosure shall contain and enclose all valves, and associated controls and shall be constructed to enhance serviceability by incorporating the following design characteristics:
 1. Two access panels per side of station shall be provided. Panels shall be sized and placed to permit routine maintenance operations through the panel openings of the enclosure. For these purposes, routine maintenance shall include frequently performed adjustments and inspections of the valves and instrumentation.

2. The access panels shall be provided with a hinge and latch or bolted door. Hinge shall be the continuous type. Latch shall engage the enclosure at not less than three places, and shall be protected by a keyed lock. If bolted, provide tamper-proof bolts.
 3. One enclosure side shall contain a screened vent to maximize air flow for enclosure ventilation.
 4. Station enclosure, less base, must be removable or able to be disassembled following the removal of reusable hardware.
 5. Removal or disassembly of the enclosure shall be accomplished by not more than two maintenance personnel without the use of lifting equipment.
- B. The station enclosure shall be manufactured of molded reinforced orthophthalic polyester resins with a minimum of 30% fiberglass, and a maximum of 70% resin. Resin fillers or extenders shall not be used.
- C. Glass fibers shall have a minimum average length of 1 1/4 inches. Major design considerations shall be given to structural stability, corrosion resistance, and watertight properties. The polyester laminates shall provide a balance of mechanical, chemical, and electrical properties to insure long life. They must be impervious to micro-organisms, mildew, mold, fungus, corrosive liquids, and gases which can reasonably be expected to be present in the environment surrounding the wet well.
- D. All interior surfaces of the housing shall be coated with a polyester resin-rich finish. It shall provide:
1. Maintenance-free service
 2. Abrasion resistance
 3. Protection from *sewage gases*, greases, oils, gasoline, and other common chemicals
 4. The outside of the enclosure shall be coated with a suitable pigmented resin, compounded to insure long maintenance-free life.

2.03 PACKAGE BASE

- A. Station base shall be constructed of pre-cast, reinforced concrete bonded inside a fiberglass form covering top and sides, and shall be designed to insure adequate strength to resist deformation of the structure during shipping, lifting, or handling. The enclosure base shall function at the wet well top and incorporate a duplex access lid, sized for the installation and removal of the specified pumps, and shall be of sufficient size to permit access to the wet well. Color used shall de-emphasize the presence of dirt, grease, etc., and shall be provided with a non-skid surface.

- B. A static wet well vent shall be mounted in the station base, and be housed in the station enclosure. The station enclosure shall provide a transition area between the wet well and the vent outlet. The vent shall terminate through the station wall with a screened opening which shall be designed to prevent the entrance of rain, snow, rocks and foreign material.

- C. The station base shall be furnished with elastomeric compression sealing devices for all piping penetrations to provide for a vapor tight transition between the wet well and lift station enclosure.

2.04 WET WELL ACCESS

- A. Refer to Section 08310 - Hatches

PART 3 – EXECUTION

3.01 EXAMINATION

- A. Contractor shall off-load equipment at installation site using equipment of sufficient size and design to prevent injury or damage. Station manufacturer shall provide written instruction for proper handling. Immediately after off-loading, contractor shall inspect complete valve package and appurtenances for shipping damage or missing parts. Any damage or discrepancy shall be noted in written claim with shipper prior to accepting delivery. Validate all station serial numbers and parts lists with shipping documentation. Notify the manufacturer's representative of any unacceptable conditions noted with shipper.

3.02 INSTALLATION

- A. Install, level, align, and lubricate package as indicated on project drawings. Installation must be in accordance with written instructions supplied by the manufacturer at time of delivery.

3.03 CLEANING

- A. Prior to acceptance, inspect interior and exterior of pump station for dirt, splashed material or damaged paint. Clean or repair accordingly. Remove from the job site all tools, surplus materials, scrap and debris.

END OF SECTION