CITY OF TEMPLE, TEXAS
Ave G Pump Station Improvements

ADDENDUM NO. 2
September 23, 2022

The construction plans and specifications for the Avenue G Pump Station Improvements project, on which bids are to be received until 2:30 PM on Wednesday, September 28, 2022, are hereby modified as follows:

I. PLAN SHEETS

1. Refer to Sheet E2.4. Provide and install interlock wiring and relays between the exhaust fans and louvers. When exhaust fans receive a run signal from the thermostat, louvers to open. ¾"C, 4#14 from each exhaust fan to each louver.

2. Refer to Sheet P-11. In Section H-H change the suction pipe reducers labeled "H" to Eccentric Reducers. The flat side of the eccentric reducers shall be faced upward to prevent air pockets from forming on the suction side of the pump.

3. Refer to Sheet S4.7, Detail 2 – Header Pit Cross Section. Galvanized Pipe Straps will not be required.

4. Refer to Sheets P-02 thru P-04. All furniture, desk, chairs, book shelfs, and office machines and devices will be removed by the Owner prior to beginning of construction.

5. Refer to Sheets P-11 thru P-13. Proposed couplings shown on these plan sheets shall be Flanged Dresser Style 128 as manufactured by Smith Blair or approve equal.

6. Refer to Sheet E6.0.

   a. Delete the two (2) Phoenix Radios shown on the RTU Schematic. These were shown in error.
   b. The radio shown in the RTU Schematic shall be a Phoenix Model #2901540 or approved equal.
   c. The Ethernet Switch shown in the RTU Schematic shall be a Automation Direct Stride Model #SE-SWSU-WT or Moxa or approved equal.

II. TECHNICAL SPECIFICATIONS

1. Refer to Technical Specifications Section G06 – Ductile Iron Pipe & Fittings.

   a. Under Subsection G06.02, add Subpart E. Nuts and Bolts as follows:

      1. Aboveground:
         a. Hex head bolts and nuts:
            1) Bolts per ANSI B18.2.1.
            2) Nuts per ANSI B18.2.2.
         b. Number, size, and length per Table 15.2 of AWWA C115.

c. Material:

Stainless Steel 316 (for installation on all flanged and ductile iron pipe in proposed pump station building and pipe chases – supply nylon isolation washers on both the nut and bolt head sides .

2. Underground:
   a. Tee-head bolts and hexagonal nuts per AWWA C111.
   b. Number, size, and length per Table 11.1 of AWWA C111.
   c. Material:

Low alloy steel or high strength cast iron in accordance with AWWA C111.

2. Refer to Technical Specifications Section G08 – Valves and Backflow Preventers.

   a. Change Subsection G08.07 to be G08.09. Add Subsection G08.07. Butterfly Valves, as follows:

      1. General: Butterfly valves shall comply with AWWA C504 and following requirements:
         a. Suitable for throttling operations and infrequent operations after periods of inactivity.
         b. Flanged end, short body type, Class 150.
         c. Elastomer seats bonded or vulcanized to body shall have adhesive integrity of bond between seat and body assured by testing with minimum 75-pound pull in accordance with ASTM D429, Method B.
         d. Bubble-tight with rated pressure applied from either side.
         e. No travel stops for the disc on interior of the body.
         f. Self-adjusting V-type or O-ring shaft seals.
         g. Isolate metal-to-metal thrust bearing surfaces from flow stream.
         h. Buried valves shall be designed for buried service.
         i. Butterfly valves shall be as manufactured by DeZurik or Pratt or approved equal.

   b. Add Subsection G08.08. Flap Valves, as follows:

      1. General: Flap Valve shown in Section K-K on Sheet P-12 and labeled "LL" shall be a 12" Model A25406 as manufactured by Troy Valve or approved equal.

3. Refer to Technical Specifications Section M01 – Horizontal Split Case Pumps and Motors.

   1. Add Subsection M01.01, B, as follows: "Pumps must meet NSF – 61 requirements "

   2. Under Subsection M01.09, A, add Patterson Pumps Model 10x8 M-C as a pre-approved equal. The pumps within each service type shall be identical in every respect with all parts interchangeable. Integral pump nozzles shall be 180 degrees apart and shall have the same centerline axis. Integral pump nozzle sizes for the Patterson Pumps shall be minimum 8" discharge & 10" suction and shall be supplied with ANSI Class 125 flanges. Minimum nozzle sizes shall not be attained by addition of standard ACIP reducing/increasing fittings. Contractor shall coordinate

changes to the suction and discharge reducers required if proposing Patterson Pumps.

3. Under Subsection M01.09, B, Change the Maximum Allowable NPSHR at Design Duty Point (feet) of 10 to "Maximum Allowable NPSHR across entire published pump curve shall not exceed 25 feet. "

4. Under Subsection M01.11 C, motors shall be inverter duty type.

5. Under Subsection M01.13 A.1. remove the wording "except for NPSHR'.

6. Under Subsection M01.13 add Subsection C as follows:

   C. Perform NPSHR testing on the 1st unit ready for testing. Determine the Net Positive Suction Head required under both "1% head drop" and at "3% head drop" conditions and provide a composite curve for each. Conduct in accordance with Hydraulic Institute Standards, but at both the 1% head drop and 3% head drop conditions. Take at least five (5) points for NPSHR condition over the pump's Allowable Operating Range (A.O.R.). One point shall be at each end of the A.O.R. One point will be at approximately at rated point, design point, and minimum head point for continuous operation.

III. BID SUBMITTAL

1. Bidders shall acknowledge receipt of this Addendum in the space provided in the proposal and on the outer envelope of their bid.

9/23/22

Rick N. Kasberg, P.E. — Date

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