

STAFF REPORT



SUBJECT: Lillian Pump Station – Distribution Pump Project – Professional Services Agreement
MEETING: Regular Business Meeting – 01 AUG 2023
DEPARTMENT: Public Works
STAFF CONTACT: Nick Williams

RECOMMENDATION:

Staff recommends entering into a professional services agreement with Provenance Engineering for the budgeted design of the Lillian Pump Station - Distribution Pump Project.

BACKGROUND:

The Lillian Pump Station receives and treats raw water and pumps potable water into the Stephenville distribution system. The water distribution system consists of a high zone, on the western side of the city, and a low zone, on the eastern side of the city. When the pump station was constructed in 2001, three pumps were installed for the high zone and two pumps were installed for the low zone. Piping was installed for a future third pump for the low zone. This project would complete the engineering specifications and provide construction documents to install the third pump, motor, and electrical components at the station.

PROPOSAL:

A professional services proposal has been received from Provenance Engineering to provide plans, detailed technical specifications for the civil, electrical, and instrumentation and control disciplines for the project. The proposal provides an 18-month term to provide the design, bid, and construction phase services.

FISCAL IMPACT SUMMARY:

The full \$50,000 design cost was approved in the FY22-23 budget.

The agreement provides for the preparation of construction drawings, detailed specifications as well as pre-bid and bidding assistance, contractor review and recommendation, and construction phase services for \$50,000.

The estimated construction cost is listed at \$600,000 and would be completed with the expansion of the station with a new 1MG ground storage tank currently forecasted for FY25-26.

Once the design is completed, the bid and construction phase services would only commence with written authorization.

ALTERNATIVES:

The following alternatives are provided for consideration:

1. Delay the design portion of the booster pump project.

ADVANTAGES:

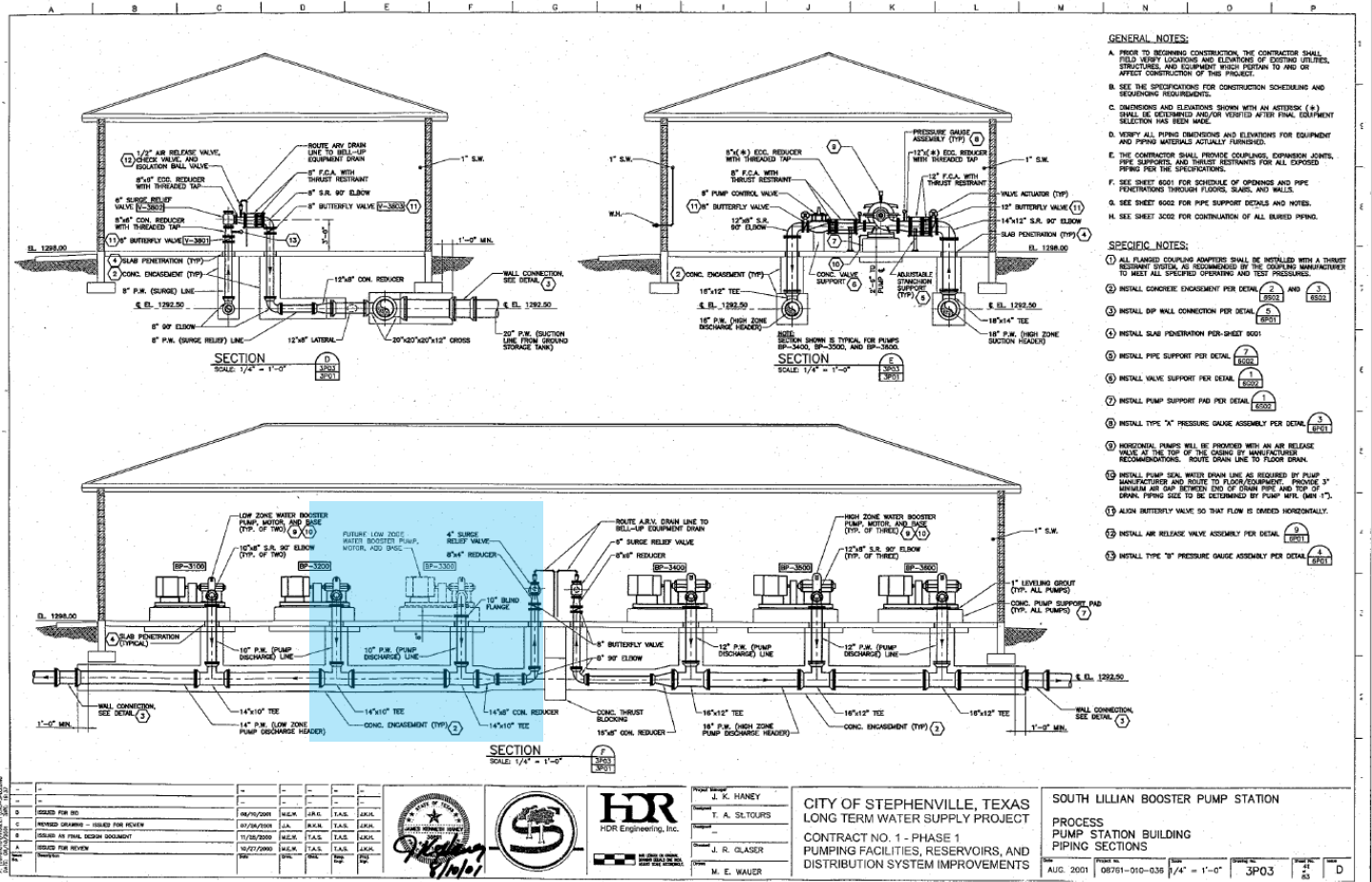
Approval of the agreement remains within the approved, allocated budget. The agreement provides for the on-site services under a single contract. Approval provides a shelf-ready set of construction plans and project bid documents.

DISADVANTAGES:

There are no known disadvantages to proceeding as described above.

ATTACHMENTS:

[Lillian Pump Station – Distribution Pump Project – Professional Services Agreement](#)



- GENERAL NOTES:**
- A. PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL FIELD VERIFY LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES, STRUCTURES AND EQUIPMENT WHICH PERTAIN TO AND OR AFFECT CONSTRUCTION OF THIS PROJECT.
 - B. SEE THE SPECIFICATIONS FOR CONSTRUCTION SCHEDULING AND SEQUENCING REQUIREMENTS.
 - C. DIMENSIONS AND ELEVATIONS SHOWN WITH AN ASTERISK (*) SHALL BE OBTAINED AND/OR VERIFIED AFTER FINAL EQUIPMENT SELECTION HAS BEEN MADE.
 - D. VERIFY ALL PIPING DIMENSIONS AND ELEVATIONS FOR EQUIPMENT AND PIPING MATERIALS ACTUALLY FURNISHED.
 - E. THE CONTRACTOR SHALL PROVIDE GROUNDING, EXPANSION JOINTS, PIPE SUPPORTS AND THRUST RESTRAINTS FOR ALL EXPOSED PIPING PER THE SPECIFICATIONS.
 - F. SEE SHEET 8001 FOR SCHEDULE OF OPENINGS AND PIPE PENETRATIONS THROUGH FLOORS, SLABS, AND WALLS.
 - G. SEE SHEET 8002 FOR PIPE SUPPORT DETAILS AND NOTES.
 - H. SEE SHEET 8003 FOR CONTINUATION OF ALL BURIED PIPING.
- SPECIFIC NOTES:**
1. ALL FLANGED COUPLING ADAPTERS SHALL BE INSTALLED WITH A THRUST RESTRAINT SYSTEM, AS RECOMMENDED BY THE COUPLING MANUFACTURER TO MEET ALL SPECIFIED OPERATING AND TEST PRESSURES.
 2. INSTALL CONCRETE ENCASEMENT PER DETAIL 2 AND 3.
 3. INSTALL DIP WALL CONNECTION PER DETAIL 5.
 4. INSTALL SLAB PENETRATION PER SHEET 8001.
 5. INSTALL PIPE SUPPORT PER DETAIL 7.
 6. INSTALL VALVE SUPPORT PER DETAIL 8.
 7. INSTALL PUMP SUPPORT PAD PER DETAIL 9.
 8. INSTALL TYPE "X" PRESSURE GAUGE ASSEMBLY PER DETAIL 10.
 9. HORIZONTAL PIPING WILL BE PROVIDED WITH AN AIR RELEASE VALVE AT THE TOP OF THE CASING BY MANUFACTURER'S RECOMMENDATIONS. ROUTE DRAIN LINE TO FLOOR DRAIN.
 10. INSTALL PUMP SEAL WITH DRAIN LINE AS REQUIRED BY PUMP MANUFACTURER AND ROUTE TO FLOOR EQUIPMENT. PROVIDE 3" MINIMUM AIR GAP BETWEEN END OF DRAIN PIPE AND TOP OF DRAIN PIPING SEE TO BE DETERMINED BY PUMP MFR. (MIN 1").
 11. ALIGN BUTTERFLY VALVE SO THAT FLOW IS DIRECTED HORIZONTALLY.
 12. INSTALL AIR RELEASE VALVE ASSEMBLY PER DETAIL 11.
 13. INSTALL TYPE "B" PRESSURE GAUGE ASSEMBLY PER DETAIL 12.

NO.	REVISION	DATE	BY	CHKD.	APP'D.	DESCRIPTION
1	ISSUED FOR BID	06/29/2001	MLK	JAK	TAS	ADD
2	REVISED DRAWING - ISSUED FOR REVIEW	07/02/2001	MLK	JAK	TAS	ADD
3	ISSUED AS FINAL DESIGN DOCUMENT	10/28/2009	MLK	TAS	TAS	ADD
4	ISSUED FOR REVIEW	10/27/2006	MLK	TAS	TAS	ADD
5	REVISED	06/29/2001	MLK	JAK	TAS	ADD

PROJECT MANAGER
A. K. HANEY

DESIGNER
T. A. STOURS

CHECKER
J. R. CLASER

DATE
M. E. WAUER

CITY OF STEPHENVILLE, TEXAS
LONG TERM WATER SUPPLY PROJECT

CONTRACT NO. 1 - PHASE 1
PUMPING FACILITIES, RESERVOIRS, AND
DISTRIBUTION SYSTEM IMPROVEMENTS

SOUTH LILLIAN BOOSTER PUMP STATION
PROCESS
PUMP STATION BUILDING
PIPING STATIONS

PROJECT NO. 08781-010-036
 DATE: AUG. 2001
 SCALE: 1/4" = 1'-0"
 SHEET NO. 3P03
 OF 43
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