

SAN ANTONIO WATER SYSTEM Evans PZ 11A Booster Station Improvements Project SAWS Job No. 13-6003 Solicitation No. B-14-052-MF

ADDENDUM NO. 1 July 21, 2014

TO BIDDER OF RECORD:

The following changes, additions, and/or deletions are hereby made a part of the Contract Documents for the Evans PZ 11A Booster Station Improvements Project, for the San Antonio Water System, San Antonio, Texas, Dated July 2, 2014, as fully and completely as if the same were set forth therein.

PART 1 – BIDDING AND CONTRACT DOCUMENTS

1. INVITATION FOR COMPETITIVE SEALED PROPOSALS

REMOVE AND REPLACE this section in its entirety with the revised version attached to this Addendum that provides for a mandatory site visit following the mandatory pre-proposal meeting.

2. SPECIAL CONDITIONS

ADD the following to the end of the section:

SC-5. A Geotechnical Report has been developed for SAWS on this project and upon request will be made available for review by Contractors for information purposes only. To review the document, please contact Maria Franco, Contract Administrator, in writing via email to: mfranco@saws.org or by fax to (210) 233- 4622. SAWS will require the execution of a SAWS disclaimer form by the Contractor as a condition of and prior to the review of the report.

PART 2 – TECHNICAL SPECIFICATIONS

1. <u>SECTION 01652: SYSTEM OPERATION</u>

REPLACE Section 01652 in its entirety with the attached Section.

ALL BIDDERS SHALL ACKNOWLEDGE RECEIPT OF ADDENDUM NO. 1 ON THE BID FORM AND BY HIS/HER SIGNATURE AFFIXED HERETO AND TO FILE SAME AS AN ATTCHMENT TO HIS/HER BID. BID FORMS SUBMITTED WITHOUT THIS ACKNOWLEDGEMENT WILL BE CONSIDERED NON-RESPONSIVE.



Mark B. Hill, P.E. Ford Engineering, Inc. TBPE No. F-1162



ACKNOWLEDGEMENT BY BIDDER

THE UNDERSIGNED ACKNOWLEDGES RECEIPT OF THIS ADDENDUM NO. 1 AND THE BID SUBMITTED HEREWITH IS IN ACCORDANCE WITH THE INFORMATION AND STIPULATION SET FORTH.

Date Signature of bidder

Appended hereto and part of Addendum No. 1 is:

- INVITATION FOR COMPETITIVE SEALED PROPOSALS
- SECTION 01652 SYSTEM OPERATION

END OF ADDENDUM NO. 1

INVITATION FOR COMPETITIVE SEALED PROPOSALS

Solicitation No.: B-14-052-MF

Sealed proposals are requested by the San Antonio Water System for the improvements of the Evans PZ 11A Booster Station, SAWS Job No. 13-6003. The improvements include, but are not limited to, the following:

- Installation of three (3) high service pumps, motors, piping, valves, flow meters and control valves on a new concrete foundation.
- Installation of a pressure relief valve assembly on a new concrete foundation.
- Extension of the existing pump discharge header.
- Installation of a new electrical switchgear system and all appurtenances on a new concrete foundation.
- Construction of new metal canopies over the new PZ 11A and existing PZ 10 switchgears.
- Demolition of an existing packaged booster station with hydro pneumatic tank.
- Demolition of an existing pressure reducing valve assembly.
- Construction of a sound barrier wall.

To view additional project information, as well as obtain the plans and specifications for this project, visit our website located at www.saws.org and click on the Business Center. Then select Bidder, Consultant, and Vendor Registration, which is located on the left-hand side of the screen. Select the Register Now button and proceed with registration. For difficulties downloading plans and specifications, contact the Contracting Department at 210-233-3405.

For questions regarding this solicitation, technical questions or additional information, please contact Maria Franco, Contract Administrator, in writing via email to: mfranco@saws.org or by fax to (210) 233-4622 until **4:00 p.m.** (CT) on August 1, 2014. Answers to the questions will be posted to the website by **4:00 p.m.** (CT) on August 6, 2014 as a separate document or included as part of an addendum.

A <u>mandatory</u> pre-proposal meeting will be held at **11:00 a.m. on July 30, 2014** at the San Antonio Water System's Customer Service Building, 1st Floor, Conference Room C-137, 2800 U.S. Hwy 281 North, San Antonio, Texas. Please be advised that under no circumstances shall any late or non-attendee(s) to the Mandatory Pre-Proposal Meeting be allowed to submit a Proposal for the project. Immediately following the pre-proposal meeting there will be a <u>mandatory</u> site visit.

Sealed proposals will be received by the Contract Administration Division, 2800 U.S. Hwy 281 North, Customer Center Building, Suite 171, San Antonio, Texas 78212, until **10:00 a.m.**, **August 12, 2014**. Proposals will then be publicly opened and read aloud in Contract Administration, Suite 169, Customer Center Building, 2800 U.S. Hwy 281 North, San Antonio, Texas. Each proposal must be accompanied by a cashier's check, certified check, or bid bond in

an amount not less than five percent of the total price proposal. SAWS reserves the right to reject any and all proposals.

This solicitation requires a Qualification Package, Good Faith Effort Plan, and Conflict of Interest Questionnaire, which should be included as part of the proposals and will become part of the construction documents.

SECTION 01652

SYSTEM OPERATION

1.00 GENERAL

1.01 BACKGROUND

- A. This section provides a general understanding of the intended project operation. Nothing in this section supersedes the plans and specifications and it is not to be construed as a guide for construction.
- B. The new PZ 11A Booster Pump Station (PS) will deliver water to Pressure Zone (PZ) 11A. The pressure zone will be supplied by the proposed pumps in the project. Water to PZ 11A will be delivered via the existing 42-inch line on the east side of Bulverde Road.
- C. Improvements include a 15 MGD pump station with a 12-inch bypass, electrical switchgear and SCADA communications.
- D. The pump station will be SCADA-controlled and the pump sequence and number of units on duty will be driven by prescribed water elevations at the Indian Springs standpipe, approximately 3.65 miles away.

2.00 PRODUCTS (NOT APPLICABLE)

3.00 EXECUTION

3.01 PUMP STATION

- A. The sequence of operations for the proposed project and detailed modifications to the existing top-end SCADA software shall be coordinated with the Owner prior to development of any control and monitoring code.
- B. Refer to Section 13340 for additional control requirements.
- C. The control system shall be developed with sufficient flexibility to allow for adjustments to set points and sequences.
- D. The control system shall allow Operators to operate the station pumps in Automatic or in Manual/Remote.
- E. In Automatic Mode, the PZ11A pumps will run based on the Indian Springs process control booster pump settings.
- F. The PZ11A pumps WILL NOT run when the Pressure Sustaining Valve is open. The pressure sustaining valve will be remotely opened or closed based on the level of the Evan's storage tank. The valve will allow water to flow from Indian Springs to Evans based on Operator request.
- G. The operation and sequencing of the PZ11A pump shall require that the existing sequence of operation for the Indian Spring pumps be modified. Exact operation and sequencing shall be identified by the Contractor in conjunction with Owner's guidance.
- H. A low pressure cut off pressure switch (PSL) is installed in the suction line of each

- pump to prevent cavitation or dry operation due to low tank levels or other upset conditions.
- I. Discharge header pressure is monitored and reported via SCADA.
- J. Motor operated pump control valve on discharge line will open per SCADA coordinated with pump sequencing to reduce transient hydraulic conditions.
- K. Flow Meter on discharge line reports high service pump station flow to SCADA.

3.02 PUMP SEQUENCING

- A. The pump sequence MAY be determined by SCADA signals reflecting the Indian Springs standpipe level. Operator can override flow direction by opening or closing the Pressure Sustaining valve.
- B. Exact sequence of Operations to be coordinated with Owner. The Contractor shall prepare a submittal identifying the exact configuration to be implemented and shall require Owner's approval.

3.03 FAILURE MODE

- A. Coordinate failure mode with electrical schematics.
- B. Exact configuration to be coordinated with Owner.

3.04 INITIAL CONTROL ELEMENT VALUES

A. Table 1 provides the initial set-point values for the control system. SAWS reserves the right to modify any or all of these values during commissioning; Contractor to assist SAWS with programming the final values if necessary at no additional cost to SAWS.

Table 1: CONTROL ELEMENTS TABLE

Control Elements Table							
Label	Function	Initial value	Units	Response Driver			
	Coordinate with Section 13310						

Table 2: PUMP SEQUENCING

PZ 11 Pumps							
Indian Springs Standpipe		Response to Level Set Points					
Level, ft (Pump Start)	Level, ft (Pump Stop)	Rising Level	Falling Level	Comment			
122	124			Adjustment of Start/Stop levels via HMI interface is required (Typical)			
120	123						
118	122						
116	121						
114	120						
112	115						
110	114						

END OF SECTION