#### SAN ANTONIO WATER SYSTEM PURCHASING DEPARTMENT

Issued By: D. Anthony Rubin Date Issued: August 15, 2018

BID NO.: 18-18106

# FORMAL INVITATION FOR BIDS CONTRACT FOR THE PURCHASE AND INSTALLATION OF WELL PUMPS AND MOTORS AT H2OAK BRACKISH GROUNDWATER DESALINATION PLANT ADDENDUM NO. 1

Sealed bids addressed to the Purchasing Director, San Antonio Water System, 2800 US Hwy 281 North, Administration Bldg., 5<sup>th</sup> Floor, San Antonio, TX 78212 will be received until **3:00 p.m.**, **August 24, 2018** and then publicly opened and read aloud for furnishing materials or services as described herein below,

The San Antonio Water System Purchasing Department is willing to assist any bidder(s) in the interpretation of bid provisions or explanation of how bid forms are to be completed. Assistance may be received by visiting the Purchasing Office in the SAWS Main Office, 2800 US Hwy 281 North, San Antonio, TX 78212, or by calling (210) 233-3819.

### (Contractor's Insurance Requirements Attached)

This invitation includes the following:

| invitation for Bias  | Specifications and General Requirements   |
|--|---|
| Terms and Conditions of Invitation for Bi                        | ds Price Schedule   |
|  | ne/she is authorized to bind the Bidder to fully comply with the nt(s) shown on the accompanying bid sheet(s). By signing below, terms therein. |
| Signer's Name:   | Firm Name:  |
| (Please Print or Type)   | Firm Name:  |
| Signature of Person Authorized to Sign Bid                       | City, State, Zip Code:  |
| Email Address:   | Telephone No.:  |
| Please complete the following: Prompt Payment Discount:%days. (l | Fax No.: If no discount is offered, Net 30 will apply.)   |
| Female OwnedHandicapped OwnedSmall                               | ricanOther Minority (specify)<br>Business (less than \$1 million annual receipts or 100 employees)<br>_Sole ProprietorshipOther (specify)       |
| To report suspected ethics violations impacting                  | the San Antonio Water System, please call 1-800-687-1918.   |

This **Addendum no. 1** is being issued to revise the bid opening date from Thursday, August 23, 2018; 3:00 PM to **Friday**, **August 24, 2018**; **3:00 PM**. Additionally, the scope and price schedule are being revised

IT IS NECESSARY TO RETURN THIS ADDENDUM TOGETHER WITH YOUR ORIGINAL BID DOCUMENT.

• **REPLACE** the first two paragraphs of the SCOPE with the following paragraphs:

The San Antonio Water System (SAWS) is soliciting bids for the replacement, and lowering of seven (7) line shaft turbine well pumps for production wells 5, 6, 7, 8, 9, 11, and 12 at the H<sub>2</sub>Oaks Brackish Groundwater Desalination plant. Replacement of the pumps includes the purchase, delivery, installation, and field testing of seven (7) vertical turbine, line shaft well pumping units. The pumping units include, but are not limited to, column piping, line shafts, pumps, motors, and all fittings and ancillaries, required for a complete pumping unit that meets the field testing requirements. The new pumps will be installed at a lower elevation in the wells. The existing column pipe and well discharge head are to be reused. Additional column pipe, all new line shaft, lineshaft couplings, bearing retainers, and line shaft bearings will be required. Existing column pipe information is provided in the specifications. The existing 250 HP motors may also be used if they meet the requirements for the replacement pumps, existing motor information is provided in the specifications. The CONTRACTOR is also responsible for removal of the existing pumps and complete installation of the new pumps and motors, connecting to the existing discharge piping, and connecting the existing lubrication system. SAWS will be responsible for disconnecting the existing electrical supply and reconnecting the electrical supply to the new equipment.

Delivery date for all pumps and electric motors, additional pump column, shafting, bearings, and other required appurtenances shall be <u>no more than 12 weeks</u> after receipt of the SAWS Purchase Order, and installation shall be completed within <u>30 days of delivery</u>. Failure to deliver and install all components specified herein to the production wells 5, 6, 7, 8, 9, 11, and 12 at the H<sub>2</sub>Oaks Brackish Groundwater Desalination plant at 4588 Hardy Road, Elmendorf, TX, 78112, by the established date will result in a deduction of \$100.00 per day past the established completion date from the total bid price. Performance level shall meet specifications contained herein. All shipping, delivery, installation, and testing costs shall be included in the bid.

- **REPLACE** the paragraph provided in Section VI.2 of the 'Specification' with the following paragraph:
  - "The proposed pumps need to be operated in 'preferred operating regions' for primary design point, secondary design point 1, secondary design point 2, and secondary design point 3. The proposed pumps need to be operated in 'allowable operating regions' for secondary design point 4, and secondary design point 5."
- **Replace** item 6 in Section VII.A of the specification in its entirety and **replace** with the following:
  - 5. The pump bowls for BGD 6, 7, 8, 9, 11, and 12, shall be Cast iron, ASTM A48, Class 30. **The pump bowls for BGD 5, shall be cast 316 stainless steel, ASTM A351 CF8M.** All bowl castings shall be free of blow holes, sand holes and other detrimental defects. They shall be accurately machined with register fit circles. All bowls should be of the flanged type construction (except 6-inch and 8-inch bowls, which may be of the threaded type).
- **REPLACE** item 8 in Section VII.A of the specification in its entirety with the following:
  - 8. Pump supplier must also provide a type 304 stainless steel cone strainer and tail piece on the pump suction. The tail piece may be coated steel, same at the column pipe, but must provide a

smooth waterway entrance to the impeller and has integral splitters to reduce inlet swirl and entrance losses.

- **ADD the following items 9 and 10** in Section VII.A of the specification:
  - 9. Pump bowl wear rings shall be constructed of 400 series stainless steel.
  - 10. Pump bowl bearings shall be constructed bronze backed rubber.
- **REPLACE** paragraph VII.B.1 of the specification with the following:
  - 1. Impeller shall be constructed of bronze ASTM No. B584-C90300.
- **REPLACE** paragraph VII.B.6 of the specification with the following:
  - 6. Bronze ASTM B271-C90300 impeller wear rings shall be provided.
- ADD item 7 in Section VIII.A of the specification
  - 7. Pump supplier must also provide a type 304 stainless steel cone strainer and tail piece on the pump suction. The tail piece may be coated steel, same at the column pipe, but must provide a smooth waterway entrance to the impeller and has integral splitters to reduce inlet swirl and entrance losses.
- **REPLACE** the paragraph IX.E.1 of the specification with the following:
  - 1. An adapter plate must be provided, if required to adapt to the existing pump discharge head.
- REPLACE Table 1-A (Design Points for the Proposed Pumps) with the attached Table 1-A
- In Table 1 –B (Information of Key Components at the Well Heads), REPLACE the term, 'Existing Well Casing ID (in)' with the term, 'Existing Well Casing OD (in)'.
- REPLACE line 1 in the Item 1 Price Schedule with the following:

| BGD-05 ( <b>Type 316 Cast Stainless Bowls</b> ) | 1 | LS | \$ | \$ |
|---|---|----|----|----|
|---|---|----|----|----|

• REPLACE Item 2 of the Price Schedule with the following:

## PRICE SCHEDULE

|   | with specifications Description                          | Total      |      | Unit Price | Total |
|---|--|------------|------|------------|-------|
|   |  | Proposed   | Unit |            |       |
|   |  | Linear ft. |      |            |       |
|   | BGD-05   |            |      | \$         | \$    |
| 2 | BGD-06   |            | LEC  | \$         | \$    |
|   | BGD-07   |            | LEC  | \$         | \$    |
|   | BGD-08   |            |      | \$         | \$    |
|   | BGD-09   |            |      | \$         | \$    |
|   | BGD-11   |            |      | \$         | \$    |
|   | BGD-12   |            |      | \$         | \$    |
|   | *Price for Additional Coated 8" Column Pipe if required. | 20         | EA   | \$         | \$    |

<sup>\*</sup>Quoted price is for additional required column pipe to replace any **existing** column pipe that may not be corroded and not useable. Cost for any additional required column must be approved in advance by SAWS and will be added to the total bid amount at the end of the project.

TABLE 1-A: DESIGN POINTS FOR THE PROPOSED PUMPS

| Pump       | Primary Design Point (Full<br>Speed Continuous Flow) |             |                | Secondary Design Point 1<br>(Reduced Speed Continuous<br>Flow) [See NOTE 1] |             | Secondary Design Point 2<br>(Reduced Speed Continuous<br>Flow) [See NOTE 1] |             |             | Secondary Design Point 3<br>(Reduced Speed Continuous<br>Flow) [See NOTE 1] |             |             | Secondary Design<br>Point 4 (Reduced<br>Speed Short Term<br>Intermittent Flow)<br>[See NOTE 2] |             | Secondary Design<br>Point 5 (Reduced<br>Speed Short Term<br>Intermittent Flow)<br>[See NOTE 2] |             |          |
|------------|--|-------------|----------------|---|-------------|---|-------------|-------------|---|-------------|-------------|--|-------------|--|-------------|----------|
|            | Flow<br>GPM  | TDH<br>(ft) | Min Eff<br>(%) | Flow<br>GPM   | TDH<br>(ft) | Min Eff<br>(%)  | Flow<br>GPM | TDH<br>(ft) | Min Eff<br>(%)  | Flow<br>GPM | TDH<br>(ft) | Min Eff<br>(%)   | Flow<br>GPM | TDH<br>(ft)  | Flow<br>GPM | TDH (ft) |
| BGD-5      | 900  | 951         | 75             | 900   | 607         | 75  | 450         | 607         | 70  | 450         | 951         | 70   | 600         | 450  | 600         | 794      |
| BGD-6      | 800  | 942         | 75             | 800   | 654         | 75  | 450         | 654         | 70  | 450         | 942         | 70   | 600         | 502  | 600         | 790      |
| BGD-7      | 1000   | 860         | 75             | 1000  | 685         | 75  | 450         | 685         | 70  | 450         | 860         | 70   | 600         | 551  | 600         | 726      |
| BGD-8      | 900  | 911         | 75             | 900   | 678         | 75  | 450         | 678         | 70  | 450         | 911         | 70   | 600         | 509  | 600         | 742      |
| BGD-9      | 800  | 932         | 75             | 800   | 723         | 75  | 450         | 723         | 70  | 450         | 932         | 70   | 600         | 578  | 600         | 788      |
| BGD-<br>11 | 800  | 966         | 75             | 800   | 774         | 75  | 450         | 774         | 70  | 450         | 966         | 70   | 600         | 609  | 600         | 802      |
| BGD-<br>12 | 800  | 965         | 75             | 800   | 772         | 75  | 450         | 772         | 70  | 450         | 965         | 70   | 600         | 593  | 600         | 786      |

## NOTES:

- 1. Pump Supplier must confirm pump can operate at reduced speed to meet the design conditions.
- 2. Pump will be required to run as needed basis (approximately once in every 72 hours) at specified intermittent flow conditions for approximately 1 hour. Pump Supplier to confirm pump can operate at reduced speed to meet the design conditions, without damaging the pump.

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