Request for Quotation

Water Well Redevelopment and Pump Repair

Quote Well FY20

The Chillicothe Correctional Water System is requesting a quotation to service the three water supply wells that service the facility. The three wells are located adjacent to the Water Treatment Plant for Chillicothe Correctional facility.

The facility has 3 gravel packed type wells that are 38” X 26” X 130 feet deep built with 30 linear feet of 26” diameter screen. The pumps are vertical turbine pumps set on 70 feet of 8” X 1-1/2” water lubricated column assembly, bowl assembly, and 15 feet of 10” suction pipe. Each operates on a 75 HP, 1800 rpm VHS motor driven by a VFD. The wells and pumps are enclosed in buildings with roof hatch for access. The intent of this project is to clean all 3 wells and repair the associated vertical turbine pump to restore operational efficiency.

SCOPE OF WORK
The water well service contractor shall mobilize a cable tool drilling rig, or a pump service rig fitted with an automatic surging apparatus to perform the work. Prior to removing the well pump, the contractor shall perform a stepped flow test at 400, 800, and 1200 gpm and measure & record flow, discharge pressure, and water levels in the well at each flow rate.

The contractor shall pull the pump from the well and lay the components on timbers of a hard surface to avoid contact with the ground. Immediately after the pump is pulled, a down hole survey shall be conducted to provide a visual image of the well casing and screen sections. The pulled pump shall be transported to the contractor’s shop for complete inspection and assessment of required repairs.

The Contractor shall provide pump component prices per the attached Pump Parts List. For bidding purposes, the Owner shall use the total cost of pump parts to evaluate the pump repair on a worse case basis.

The vertical hollow shaft motor shall also be transported to the contractor’s shop for complete inspection and assessment of required repairs. The contractor shall have the motor’ cleaned, dipped, and baked ‘and have new bearings installed as part of their price quotation. Also include in your price a complete rewind for each motor.

The Contractor shall provide two quotes motor repair prices for the proposal evaluation. The first shall be for a clean, dip, bake and bearing replacement, and the second shall be for a
complete motor rewind (for VFD) with new bearings. This will assist the Owner in making a worse case evaluation when evaluating proposals.

**Cleaning the Wells**
To clean the well, the contractor shall follow these steps in sequence,

1. Install air lift surge equipment and surge the entire length of the well screen to remove loosened debris. The materials that are air lifted and discharged shall be discharged to the grassy areas adjacent to the wells.
2. Following the air lift surge, the contractor shall inject muriatic acid solution into the well while distributing the acid solution across the entire length of screen. After mixing for 1 hour, these chemicals shall remain in the well overnight.
3. The following morning, the well cleaning solution will be surged across the length of the screen for a minimum of 3 hours. Afterwards, the well shall be simultaneously surged, and air lifted to removed dissolved and loosened materials. All discharge fluids shall be directed to a tank where neutralizing agents shall be added so the fluids discharged on the grass area has a pH of 7.0 or greater.
4. Steps 2 and 3 shall be repeated so 2 separate doses of acid cleaning solution followed by air lift surging are performed. For quotation purposes, the contractor shall include 275 gallons of muriatic acid per event for a total of 550 gallons of muriatic acid for the cleaning of each well.
5. The next day the contractor shall continue to air lift surge the screened portion of the well until debris are minimized or no further improvement in specific capacity can be measured. For quotation purposes, the contractor should assume 12 hours of air lift surging for this step.
6. The contractor shall remove surge equipment and conduct a post redevelopment down hole survey of the casings and screen. A copy of the pre-service and the post-service inspections shall be provided to Chillicothe Corrections facility in a format easily loaded on a computer. After the video inspection, the well shall be disinfected with a chlorine solution, so the resulting concentration is 50 ppm or greater.
7. The contractor shall install the repaired well pump and repaired motor and conduct a post redevelopment performance flow test. These flow rates should be 400, 800, and 1200 gpm, if possible. The pump shall be reconnected to the system distribution piping.

**NOTE:** At no time shall there be more than 1 well out of service at any time to complete this project.

At the completion of all field work, the contractor shall furnish Chillicothe Correctional Water Treatment with pump installation reports, well flow test reports, bore hole survey copies, and other documents detailing the work performed.

**Purchase order and Service Contract**
A Service Contract will need to be completed for this work before a purchase order will be issued.

Required Background Check and Training
All employees that will be working at the Chillicothe Correctional Water plant must submit 7 forms for a background check to be completed. After the background check is completed and the employees are approved to work, they must receive Contractor Training before work can begin. Training will not exceed 8 hours.
The training will be held at the Chillicothe Correctional wastewater plant. The date and time will be agreed upon once the date to start work has been confirmed.

Duration of Quote
The quoted price will be valid until 06/30/2020. This will allow extra time needed to get State of Ohio Controlling Board approval and a purchase order issued.

Quoted price needs to be emailed or mailed on or before 1/31/20. Please list your company name and contact person with telephone number and email address when returning your quote.
Email: yolanda.cooks@odrc.state.oh.us

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