

SCOPE OF WORK AND BID SPECIFICATION  
FOR  
RETURN ACTIVATED SLUDGE PUMP REPLACEMENTS (PROJECT 1903B)

The Upper Moreland-Hatboro Joint Sewer Authority (UMHJSA) operates a wastewater treatment facility located at 2875/2895 Terwood Road in Willow Grove, PA. An inspection of the return activated sludge (RAS) pumps and one of the discharge isolation valves indicated that their condition has deteriorated and need to be replaced. To provide flexibility in the operation of the RAS pumps, installation of 2 additional isolation valves along the discharge header piping are required. The Contractor shall install one like-in-kind RAS pump and three isolation valves total.

Due to the plant being required to operate at least one RAS pump at all times, this project must be coordinated closely with the plant superintendent for a suitable time (low flow conditions) to implement this project. The attached drawing shows the layout of the existing RAS pumps and piping. A mandatory pre-bid visit is required for the Contractor to review the project and understand the site conditions. The scope of work (SOW) generally consists of, but is not limited to, the following tasks:

1. The Contractor shall review the drawings and make a detailed inspection of the existing site conditions, along with the Authority-purchased RAS pump, one isolation valve to be installed on the discharge of RAS pump #2, and two isolation valves to be installed in the discharge header to facilitate this project.
2. Contractor shall comply with their corporate or site-specific health and safety plan (e.g., eye and hearing protection).
3. Coordinate with the UMHJSA staff to bypass pump the RAS to the Primary Effluent wet well. After the bypass is completed, UMHJSA will isolate the RAS line force main. Then the Contractor shall drain as much sludge from the RAS header pipe back into an exterior sludge pit as possible. Contractor shall adequately support unconnected portions of the header. Once the header is drained and careful measurements to retrofit both new 14-inch isolation valves (A and C) have been made, installation of these valves may begin. As shown in the drawings, Valve C will be installed to the right of the flow meter proximate to RAS pump #3. Once Valve C is installed, the Contractor can coordinate with Authority personnel to close Valves B and D. Then the bypass pumping will be halted and RAS pump 3 will be put in service. Then Valve A will be installed to the left of RAS pump #2 discharge along the header. Both valves should be installed in one day to minimize disruption to the plant's operation.
4. Once isolation valves A and C are installed, the contractor can coordinate with Authority personnel to put RAS pump #1 back into service and then isolate RAS pump #2 to complete the next step.
5. Contractor shall remove RAS pump #2 and any associated drain/water lines to the pump. Remove the check valve and broken 10-inch isolation valve associated to RAS pump #2 (old valve E). Install the new replacement 10-inch isolation valve E and reinstall the existing check valve. Install the new RAS pump #2. Reconnect all electric, water, and drain lines. The pump and motor shall be aligned, and a digital report provided before being allowed to be tested and put into operation. After testing for operation, the isolation valve for RAS pump #2 can be left in the open position. Note that the existing motor, frame and coupling shall be reused.
6. Stage the old RAS pump, valve, and extra piping from the project to the designated area on the second level of the basement for UMHJSA to relocate.

7. Clean up the area to remove any sludge piping discharge, spillage, or other material that was not present at the start of the project.

UMHJSA's Responsibilities:

- A. UMHJSA will supply the pump and isolation valves that are to be installed.
- B. UMHJSA will install and align RAS pumps #1 and #3 prior to the start of the project
- C. RAS bypass pumping will be set up and operated by UMHJSA until isolation valve C is installed in the header and RAS pump #3 can be isolated and used for pumping.
- D. The RAS pump and valves have been purchased. They will be moved to the job area on the second level of the basement prior to the start of the project for easier access.
- E. Removal of old pumps, valves, and extra piping from the second level after they are removed and staged.

There will be a mandatory pre-bid meeting for all prospective contractors on October 2, 2024 at 10:00AM. It will be held at the UMHJSA Administration Office, 2875 Terwood Road, Willow Grove, PA.

Bids shall specify (1) the cost to complete the project, and (2) a schedule of the proposed work. Bids shall state that the cost is based on your CoStar's pricing. The schedule provided shall specify the approximate time required to be ready to perform the installation after being awarded the contract. Attached are the cut sheets for the pumps and valves, along with the pipe and layout details.

Except as otherwise provided by law, no Bidder may withdraw their bid within sixty (60) consecutive calendar days after the actual date of opening. The Contractor shall maintain general liability insurance at all times during this project, with limits of liability of not less than \$1,000,000 combined single limit per occurrence, and \$2,000,000 aggregate applicable to the Project. The Contractor shall provide the Authority with a certificate of such insurance naming the Authority as an additional insured within 10 days of project award.

Subsequent questions after the pre-bid meeting should be emailed to Dave Thomas ([ops@umhjsa.org](mailto:ops@umhjsa.org)) by October 9, 2024. Answers to these questions will be sent by email to all bidders as an addendum. Bids are due via USPS, overnight carrier, or dropped off in a sealed envelope by 10:00 am on Wednesday, October 16, 2024. The project is anticipated to be awarded after October 23, 2024 and work must be completed by December 19, 2024. The Authority is a tax-exempt entity. Please advise if you need a tax-exempt certificate. UMHJSA reserves the right to reject any and all bids and to waive any bidding informalities.