

22126 – MIDLAND WASTEWATER TREATMENT PLANT IMPROVEMENTS

CONTRACT 2024-1: GENERAL CONSTRUCTION

CONTRACT 2024-2: ELECTRICAL CONSTRUCTION

Contractor questions and answers:

Q1: Is there an existing drawing of the pier layout for the Trickling Filter tank?

A1: Yes. Potential bidders may email midlandwwtp@widmerengineering.com and ask for a link to download other site-related documents. Please also refer to 'Instructions to Bidders for Construction Contract', Section 5.03 (on page 6 of 17) for more information.

Q2: Can Sherwin Williams be considered approved equal for coatings?

A2: Additional product information was not received by the engineer in time to decide before the bid. The successful bidder would need to make a submission for this product manufacturer to be considered prior to construction.

Q3: Is a project estimated cost available for the project?

A3: Yes. Approximate ballpark costs for the project are as follows:

General Construction Base Bid: \$1.1 million

Electrical Construction Base Bid: \$600,000

Q4: Where are the details for the work included in Contract 2024-1: General Construction Alternate 1- Spot Repairs to Existing WWTP Structures (Add)?

A4: Refer to Section 01010 – Summary of Work, Section 1.05.A.22 through 1.05.A.28 (beginning on page 01010-6 for description of the work). Refer to plan sheets 6-10 for notes regarding specific buildings.

Q5: Does the Authority have an anticipated construction starting date?

A5: An anticipated construction starting date is not available.

Q6: Where is the Contractor to connect the 1" copper water supply line in the basement of the Administration Building?

A6: There is a 2" non-potable water supply line in the south western portion of the basement on the lowest level (located high on the wall above the sludge pumps). Site visits can be arranged view this location.

Q7: May the Contractor connect the 1" copper water supply line to the 2" non-potable waterline running out of Administration Building in the direction of the garage (in the yard)?

A7: Yes, this would be acceptable. If this option is used, a curb stop must be supplied and placed on the line near the connection point. This has been addressed in Addendum 1.

Q8: Is heat tracing required for the waterline where the waterline exits the ground and on the screen/auger?

A8: Yes. Heat tracing for the waterline and heat tracing and insulation blanket to inhibit freezing for the screen and auger system as supplied by the manufacturer must be provided. This has been addressed in Addendum 1.

Q9: Where does bypass pumping need to begin and end for the headworks portion of the project (i.e. where does the Contractor pump from and to)?

A9: In general, the bypass pumping shall not bypass more treatment units than is strictly necessary to complete the work. For example, pumping from the grit chamber effluent would be preferred to pumping from the junction manhole. See question and answer 10 below for more information.

Q10: How does the Contractor keep the headworks and primary clarifiers operational to the greatest extent practical while completing the modifications to the primary clarifier influent channel (what is the sequence of construction)?

A10: Construction of the new channel (including a screenings removal grinder/auger and flow meter) will be done adjacent to the existing channel. Flow will be unaffected until construction is complete, at which point it will be redirected through the new

channel. The demolition of the existing comminutor and open channel will be completed after the new channel is in service.

Piping into the three primary clarifier tanks is included in this project to provide more even operation and balance the flow between the settling tanks. Currently, wastewater is diverted after exiting the comminutor/flume chamber, flowing into settling tanks 1 and 2 through a 12" pipe and tank 3 through a separate 12" pipe. This arrangement will be updated so that all flow enters the clarifiers through one 16" pipe; a 12" core will be drilled between the distribution chambers for tanks 1&2 and tank 3, connecting all three tanks. New stop gates will be installed, controlling the flow into each tank. Refer to Headworks Sequence of Construction section below for more details.

Headworks Sequence of Construction

1. Construct new open channel for grinder, screenings removal auger and Parshall flume.
2. Isolate primary clarifier tank nos. 1-3 individually and grout closed existing openings between the clarifier and the influent trough. Use existing valve (for tank 3) and/or stop gates (tanks 1 and 2) to isolate individual tanks (in coordination with Plant Staff/Operators). Core new openings and install new stop gates between each clarifier tank and the influent trough.
3. Install new 16" influent line at the center point of influent channel and 16" ductile iron pipe connecting new open channel to clarifiers. Temporarily plug the 16" opening with a removable plug.
4. Isolate primary clarifier no. 3. Grout closed influent line.
5. On a low-flow day, if possible, isolate primary clarifier tank nos. 2 and 3. Core drill the 12" opening to connect influent channels.
6. Transfer flow from the grit chamber into the new channel.
7. Install stop gate on clarifier tank no. 2 side of the old influent line to isolate tank no. 1.
8. Grout old 12" CIP tank no. 1 and 2 influent line closed.
9. Demolish old comminutor and open channel.
10. Portions of the work may require complete bypassing of the primary clarifier tanks to complete (if stop gates or valve do not hold). Bypass pumping in this circumstance shall be provided at no additional cost.

Q11: What is to be done with the lintels?

A11: They shall be cleaned and re-coated in accordance with Section 09910 - General Painting Requirements and Section 09970 - Exterior Coatings.

Q12: Please provide the top of concrete elevation for plan sheets 5 and 11 of 12.

A12: The elevation is 730.00'. Contractor to verify project dimensions in the field prior to ordering gates and stands.

Q13: The gate schedule per specification section 15001 E. calls out equipment #1, I see three new slide gates per the plans. Please confirm the quantity of gates required and each gate equipment ID number.

A13: Three (3) identical 12" x 12" gates are required for this project matching specifications in the gate schedule. They can simply be numbered gate 1, gate 2 and gate 3.

Q14: What are the details for the "non-structural concrete face repairs" shown on plan sheet 8 of 12.

A14: The notes on plan sheet 8 of 12 are to be revised by addendum 1. The "non-structural concrete face repairs" and associated SF totals shall be deleted and replaced with re-sealing of the entire exterior wall surface of the oxidation tower from the foundation up.

The concrete block and brick oxidation tower has been previously coated with Sika ThoroSeal concrete and masonry sealant product and presently exhibits hairline cracks throughout. The oxidation tower shall be recoated with two coats of Sika ThoroSeal-581 or approved equal (Contractor to fill cracks per manufacturer's directions before coating). Refer to Addendum 1.

Q15: Can Franklin Miller be considered approved equal for grinding/screening equipment?

A15: The engineer did not have sufficiently detailed product information in time to decide before the bid that Franklin Miller would be considered an equal. The successful bidder would need to make a submission for this product manufacturer to be considered prior to construction.

Q16: Can CE Sheperd be considered approved equal for oxidation tower media?

A16: Yes. Refer to Addendum 1.