



R.A. "Tony" Rojas
Executive Director & President

Macon Water Authority

790 Second Street * P.O. Box 108
Macon, GA 31202-0108
(478) 464-5600 * FAX (478) 750-2007
Visit Us @ www.maconwater.org

Members

Samuel F. Hart, Sr., Chairman
Frank Patterson, Vice-Chairman
Javors J. Lucas
Dorothy "Dot" C. Black
Dwight Jones
Bert Bivins, III
Gary Bechtel

TO: All Bidders

RE: Rocky Creek WWTP Final Clarifier 3 and Final Clarifier 4 mechanism replacement

DATE: June 2, 2017

The Macon Water Authority is requesting sealed bids from mechanical contractors, for the removal and installation of the drive mechanisms and associated structures for the Final Clarifier 3 and 4. A mandatory pre-bid meeting is scheduled for Monday, July 10, 2017 at 10:00 am at the Rocky Creek WWTP admin bldg., located at 4705 Mead Rd, Macon 31206.

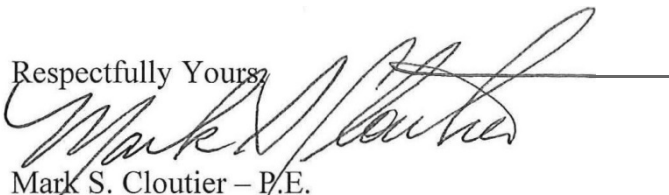
It is emphasized that sealed bids must be received by Macon Water Authority Maintenance Department (the "Owner") at the Owner's office, 951 Fifth Street, Macon, Georgia – 31202, by 1:00 pm local time on Friday, July 28, 2017. The Owner shall not consider late proposals. Your attendance is encouraged but not required.

It will not be sufficient to mail your sealed bid and depend upon the postal services, or any other mail delivery organization, for an on time delivery. Bids received after 11 :00 pm, Friday, July 28, 2017 will not be accepted. Your bid must be sealed and marked "Sealed Bid - Rocky Creek WWTP Final Clarifier 3 and Final Clarifier 4 mechanism replacement".

Please review the attached bid specification documentation. All appurtenances must be fully executed for proper consideration, acceptance, and award by the Macon Water Authority.

Should any question arise regarding this proposal, please feel free to contact Mr. Mark S. Cloutier – Macon Water Authority - P.E. - (478) 256-9388, Mr. Frank Evans - Assistant Maintenance Manager - Macon Water Authority - (478) 256-9376, Mr. Eric Barron - Dynamics Planner - Macon Water Authority - (478) 733-0646

Respectfully Yours,


Mark S. Cloutier – P.E.

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FINAL CLARIFIER 3 AND 4 WORK SCOPE:

Job Scope:

Remove clarifier mechanisms and components as per MWA specification. Supply all material, hand tools, consumables, machines, equipment, portable air compressors, welding machines, lifting straps, hardware, cribbing...etc. and manpower to remove sludge rake structure and peripheral equipment as listed below. Work must be done one clarifier at a time with a minimum of one (1) month between clarifiers. The equipment called, "Final Clarifier #3 and Final Clarifier #4", located on the site of the Rocky Creek Water Treatment plant, 4705 Mead Rd., Macon, Georgia 31206:

1. Work scope shall include the following:
 - a. Remove all structures from the final clarifier concrete structure. This includes the following: (Disposal of materials, unless noted below, is the responsibility of the contractor)
 - i. Cat walk.
 1. Remove and dispose of old.
 2. Install new cat walk supplied by Envirodyne Systems Inc.
 - ii. Gearbox.
 1. Remove and dispose of old.
 2. Install new gearbox supplied by Envirodyne Systems Inc.
 - iii. Rake arms and associated structure.
 1. Remove and dispose of old.
 2. Install new rake arms and associated structure supplied by Envirodyne Systems Inc.
 - iv. Center support column.
 1. Remove and dispose of old.
 2. Existing anchors are to be cut off flush with top of the concrete.
 3. New stainless steel anchor bolts, supplied by Envirodyne, are to be located to clear existing anchors. (See drawing) Core drill to a

minimum of 8” deep. Core interior to be roughed up and dried as per contractor supplied epoxy bonding compound.

4. Install new center support column supplied by Envirodyne Systems Inc. as per supplied drawings. Note top platform to be 0.008” of level in two perpendicular directions. There is a hold point for approval by Envirodyne, prior to epoxy grout, (Five Star or equal – to be approved by Macon Water Authority)
 5. Contractor will be responsible for providing grout stop and Epoxy grout (Five Star or equal – to be approved by Macon Water Authority) for installing center support column. Contractor shall follow epoxy grout manufacture standards for substrate conditioning and all bonded surfaces.
- v. Influent Well
1. Remove and dispose of old.
 2. Install new gearbox supplied by Envirodyne Systems Inc. and level to Envirodyne standard.
- vi. Baffles and weirs
1. All baffles and weirs are to be removed.
 2. All existing mounting bolts are to be cut flush with existing concrete structure.
 3. Install new stainless steel baffles and weirs supplied by Envirodyne Systems Inc.
 - a. Weir levels shall be set to the same levels as levels in the existing clarifiers.
 4. All epoxy anchors for mounting the baffles and weirs shall be 304 stainless steel with 316 stainless steel hex nuts. Contractor shall work with Sherwin Williams to properly seal all penetrations to the new coatings in the area of the baffle mountings.
 5. All new weirs are to be sealed to the wall with a material to prevent water from bypassing between the wall and baffle joint.
- vii. Scum box.
1. Remove old scum box.
 2. Install new scum box supplied by Envirodyne Systems Inc.
 3. Install new flexible coupling (supplied by contractor) between new scum box and scum drain line.
- viii. Water spray pipe to center structure. This only applies to Final Clarifier 4.
1. Fabricate and install 1” 304 stainless steel water header.
 - a. Use existing header as pattern for replacement.
 - i. No valves. This pipe is to self-drain when not in use so as to prevent freezing damage.
- ix. Electrical conduit and junction boxes.
1. All conduits shall be stainless-steel.
 - a. Power conduit
 - b. Signal conduit
 - i. Power and signal wires shall not be run in the same

conduit.

2. Each terminal box shall be NEMA4X stainless steel.
 3. All instrumentation shall be terminated at terminal strips.
 - a. All wires shall have wire numbers on both ends of each wire.
 - b. Butt splices are not allowed.
 4. All motor leads shall be connected in the motor junction box and at the outlet lugs of the starter.
 - a. Wires from starter to motor shall be replaced.
 - b. No splices are allowed.
 5. Power supply cables shall have color coding on either ends or each lead and inside the motor terminal box.
 6. Control and signal wiring shall be numbered at each end. These shall match the drawings of the wiring diagrams for all equipment impacted by this refurbishment.
- x. Remove hose rack at entrance to gear box access cat walk.
 1. Fabricate aluminum hose rack and install in same location.
- xi. The aluminum handrail around the outside of the top wall shall remain and is not to be replaced.
- xii. On Final Clarifier #3, remove the existing influent trough spray line and replace with a new stainless steel line.
 1. Remove existing mounting brackets and dispose of. All existing mounting bolts are to be cut flush with the top of the concrete.
 2. New spray piping shall be 2" Sch. 40 stainless steel, with threaded connection every 6'.
 3. At each threaded connection point, a 1-1/2" branch line will need to be installed with spray nozzles.
 - a. MWA will supply the stainless steel spray nozzles for installation.
 - a. Contractor to supply threaded busing with appropriate sized ID to fit supplied spray nozzles.
 4. The branch line will need to set at no more than a 60 degree angle from the top of the wall, with a 40 degree spray nozzle for scum disbursement.
 5. Install new stainless steel mounting brackets at 3' intervals between the connection points.
 - a. Work with Sherwin Williams to properly seal all mounting hardware that penetrates installed coating.
- xiii. All Epoxy and expansion type anchor bolts will be Type 304 stainless steel.
- xiv. All shims, where applicable, will be stainless steel.
- xv. All fasteners to be type 304 stainless steel with type 316 stainless steel hex nuts and washers. (No split washers allowed.)
- xvi. Bridges and operating platforms are to be field drilled for mounting the grating and handrail.
- xvii. All work to be performed to the specifications of the manufacturer, Envirodyne Systems Inc.

- xviii. Prior to being placed in operation, all equipment supplied by ESI must be inspected and certified to be in proper operational order. This must be done by an authorized field representative of ESI after all equipment is completely installed and prior to grouting. (This can be approved via photos and correspondences with ESI.) This will vary from Clarifier #3 and Clarifier #4.
1. Before the inspection can be done, all drive units must be operational with full, permanent electrical power and all overload switches must be properly wired and functional.
 2. The inspection will be limited to reasonably accessible items and does not relieve the erector's responsibility for proper assembly and adjustment.

Shop drawings will be available for pickup at the MWA Maintenance Office, located at 951 5th Street, Macon GA, 31201.