



695 MOORES CREEK LANE
CHARLOTTESVILLE, VA 22902-9016
TEL: 434.977.2970
FAX: 434.293.8858
WWW.RIVANNA.ORG

MEMORANDUM

TO: File
FROM: Michelle Simpson, P.E. – RWSA Senior Civil Engineer
DATE: July 19, 2016
SUBJECT: Sole Source Procurement Determination – Va. Code Section 2.2-4303.E
Installation of Second Centrifuge at the MCAWRRF Sludge Handling Building

The Rivanna Water and Sewer Authority operates the Moores Creek Advanced Water Resource Recovery Facility (MCAWRRF) in Charlottesville, VA. As part of the Nutrient Removal Improvements Project completed in 2012, one new centrifuge was installed to replace one of the two existing plate and frame presses to process anaerobically digested solids. Following its installation, the centrifuge has been solely used to process solids and the plate and frame press is unable to provide redundancy due to its state of disrepair. The Authority has hired the engineering consultant Hazen and Sawyer (Hazen) to design the installation of a second centrifuge in the Sludge Handling Building to replace the existing dilapidated plate and frame press which is currently unoperable and not cost beneficial to repair compared to installing a new centrifuge.

The Second Centrifuge project is in the current Capital Improvement Program, and funding is in place. A preliminary design alternatives analysis and technical memorandum has been completed by Hazen and Sawyer. To save on construction and demolition costs, the existing plate and frame press will be auctioned off and the buyer will disassemble and remove the existing press and appurtenances from the Sludge Handling Building. This will leave a blank slate in the building for installation of the new centrifuge in that floor space. By utilizing a similar footprint to the plate and frame press, RWSA will minimize the length of new conveyors, sludge feed piping, and drain piping needed to tie into the existing system. The proposed location for the new centrifuge will also allow the re-use of the existing hoist and monorail system remaining from the existing press.

The installation of the second centrifuge was scheduled to begin in Fiscal Year 2017. Following an emergency repair of the existing centrifuge in the past year which required challenging operation of a portable centrifuge around the clock, the criticality of having redundancy for biosolids management became evident. It is imperative to provide redundancy as soon as possible, however, the MCAWRRF site is currently undergoing two major construction improvements as part of the New Rivanna Pump Station and Odor Control Phase 2 Projects. Both of these projects include work in the Sludge Handling Building where the new centrifuge will be installed and will be directly impacted by installation of the second centrifuge.

Adams Robinson Enterprises (ARCO) was awarded the New Rivanna Pump Station project contract, and mobilized to the site in spring 2014. The New Rivanna Pump Station project contract is worth approximately \$23.5M with an estimated project completion date in summer 2017. ARCO's limits of disturbance and staging area include the parking lot up to the garage doors of

the Sludge Handling Building. A temporary plant road was also constructed in the parking lot adjacent to the Sludge Handling Building and ARCO's project trailers and conex boxes are located adjacent to the Sludge Handling Building. Their work includes new electrical duct banks in the parking lot with conduits connecting into the electrical room of the building as well as maintaining erosion and sediment control in the parking lot. Heavy construction traffic related to ARCO's work is constantly moving around the building. ARCO will need to pave the entire parking lot adjacent to the building when complete with their project.

Mid-Eastern Builders (MEB) was awarded the Odor Control Phase 2 project contract, and recently mobilized to the site in June 2016. The Odor Control Phase 2 project contract is worth approximately \$6.8M with an estimated project completion date in December 2017. MEB's work includes installation of sludge conveyor modifications in the Sludge Handling Building and related electrical work in the electrical room. MEB is required to coordinate their work with ARCO as part of their contract, however, conflicts are still potentially feasible based on unforeseen circumstances.

The work room inside of the Sludge Handling Building is limited due to the existing piping, electrical conduits, conveyors, pumps, tanks and related appurtenances. There is one electrical room with one door and working in there is cramped. It became apparent that completing the Second Centrifuge project work and mobilizing a third contractor to perform work not only in the same building but in the same electrical room as two other large contractors as well as sharing the site for access and laydown, deliveries and storage was going to be extremely difficult and possibly unsafe. After reviewing the available space onsite and in the building, and the project schedule with Hazen and RWSA personnel, the following logistical problems with having three separate contractors share the site were identified:

- The Sludge Handling Building is located adjacent to ARCO's work, staging area, material delivery, parking and office trailers, as well as the temporary plant road. The area around the Sludge Handling Building is always busy with construction traffic, RWSA staff traffic, chemical deliveries to the Sludge Handling Building, large trucks turning around, and daily hauling of biosolids out of the building. The available, useable space onsite is extremely limited already for the two contractors under contract to perform work at the building. It is likely that a third contractor could cause an un-anticipated loss of production to the current contractors already sharing this congested site. Furthermore, an additional contractor may invoke additional safety hazards as well as increase the potential for disputes and claims between multiple contractors.
- The New Rivanna Pump Station and the Odor Control Phase 2 work both involve upgrades to the existing electrical systems in the electrical room of the Sludge Handling Building. The space in the electrical room is tight and has only one access door, and this interior space needs to be accessed by both contractors currently on site. Having a third contractor would limit available space even further, increases safety concerns, and may potentially increase electrical shutdowns which would create more operational challenges for RWSA operating the current centrifuge in the building.

- ARCO is already several months late on their project schedule and has multiple claims outstanding with RWSA and several subcontractors, as well as pending litigation. Adding another contractor to the site may exacerbate the problems they are currently having.
- MEB has obtained all construction permits required, including site and grading permits. If another contractor is mobilized, they will have to obtain their own permits.
- There is approximately a 4-6 month lead time to deliver the new centrifuge. It is anticipated that the new centrifuge will not be able to be ordered until the end of 2016 following final design, RFP negotiation, and contractor shop drawing submittal and approval. Based on a delivery schedule estimated in summer 2017, it is anticipated that award of this RFP will work better within the current MEB construction schedule timeframe. If this project were to be publicly bid instead, it may take twice as long due to the longer design timeframe, permitting, bidding and awarding process and project startup with a new contractor leaving RWSA without operational redundancy for a much longer period of time.

Sole source procurement is permitted under the Virginia Public Procurement Act, Section 2.2-4303.E upon a determination, in writing, that the goods or services required are practicably available from only one source. After discussion and review with the design engineers and RWSA staff, it is apparent that the services required for the timely completion of the Second Centrifuge improvement work, are practicably available from only one source, MEB, the current on-site contractor for the Odor Control Phase 2 project.

This document serves as the written determination required by Section 2.2-4303.E for a sole source procurement, and has been reviewed by the Authority. Once approved by the Authority's Executive Director, the Authority and its design engineers will begin negotiations with MEB to include the Second Centrifuge Installation work as a Change Order to the existing Odor Control Phase 2 project contract. Upon the successful completion of the negotiations and inclusion in the Odor Control Phase 2 project contract, the Authority will post a notice on its website detailing the sole source procurement.