

Memorandum

To: File

From: Scott Schiller

Date: December 18, 2019

Subject: Sole Source Procurement Determination - Va. Code Section 2.2-4303.E
Observatory and South Rivanna Water Treatment Plants, Rehabilitation and
Expansion Project

cc: Bill Mawyer, Lonnie Wood, Jennifer Whitaker, David Tungate, Matt
Bussell, Greg Marrs

The purpose of this memorandum is to provide a determination regarding the suitability of sole source procurement for the filter underdrains to be installed at the Observatory and South Rivanna Water Treatment Plants as part of the above listed project.

Both plants are conventional surface water treatment plants with coagulation, flocculation, sedimentation and filtration steps and recently underwent upgrades to install granular activated carbon (GAC) contactors to remove some of the disinfection byproduct (DBP) precursors from the water to remain compliant with the Stage 2 Disinfection By-Products Rule. Following the GAC project, both plants were identified for general upgrades. The Observatory Water Treatment Plant (OBWTP) is being upgraded to rehabilitate aged components and increase its treatment capacity to 10 MGD and the South Rivanna Water Treatment Plant (SRWTP) is being upgraded to more efficiently and reliably operate at its current 12 MGD rated capacity.

In order to achieve these improvements at the OBWTP, one part of this project is to completely rebuild the five (5) existing filters. They currently contain the original Wheeler underdrains, filter media and support gravels that were installed in 1953. As a result of their current condition, the capacity of the filters is limited which restricts flow through the plant and impacts the overall capacity of the facility.

At the SRWTP, the four (4) existing filters were completely rebuilt during the GAC project, but in order to efficiently and reliably operate at the plant's rated capacity, two additional filter are to be installed. During the GAC project, the Leopold underdrain system was installed in the four rebuilt filters.

When evaluating the equipment needed to improve and expand the filters at both plants, alternate manufacturers for filter underdrains were evaluated. While underdrain systems can be provided by other manufacturers, it was determined that installation of underdrain systems manufactured by Leopold at both facilities would be in the Authority's best interest.

Benefits associated with the installation of underdrain systems manufactured by Leopold for the five (5) filters at the OBWTP and the two (2) filters at the SRWTP are as follows:

- As indicated above, Leopold underdrain systems were installed in the four (4) existing filters at the SRWTP. At the SRWTP facility, RWSA would not want two different types of underdrain systems at the same facility as they may perform differently and would complicate backwashing procedures.

- Also, as a result of their installation at the SRWTP, it is a proven reliable design that our water department staff have experience with and applying that same operational knowledge and consistency at both the SRWTP for the new filters and at the OBWTP for the filters to be rebuilt, would be a benefit to the RWSA.
- As part of current improvements taking place at the Crozet Water Treatment Plant (CZWTP), Leopold underdrain systems are also being installed.
- Having the same underdrain systems as both plants under this project (and CZWTP under the separate project) would allow for continued standardization of parts and materials associated with operations and maintenance of the systems
- As part of their general design, they can withstand high uplift pressures which reduce their risk of failure, have favorable air and water distribution for more even backwashing procedures, and have a media retainer that reduces their susceptibility to fouling.

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 who are performing the plant upgrade and RWSA staff, it is apparent that the underdrain systems required to rehabilitate and expand the filter capacities at both facilities, are practicably available only from one source, Leopold.

This document serves as the written determination required by Section 2.2-4303.E for 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 Leopold for procurement of the underdrain systems to be included in the upcoming construction project, where the labor and other materials and equipment will be competitively bid. Upon successful completion of the negotiations and inclusion in the larger project, the Authority will post a notice on its website detailing the sole source procurement.

APPROVED BY: William I. Mawyer, Jr., P.E., Executive Director

DATE: 12/19/19