

Legislation Text

File #: 2022-0542, Version: 1

Approving a Professional Services Supplemental Agreement with Ardurra Group, Inc. in the amount of \$3,277,458 for professional engineering services associated with the Water Treatment Plant Facility Expansion Project construction and post-construction phase services, and authorizing the City Manager to execute the same.

City Staff presents this Agenda item in advance of the award of Construction Contract, for Ardurra the Engineer of Record, to provide Construction and Post Construction engineering services.

To comply with the goals included in the City's Strategic Plan for Infrastructure, such as resilient and operational infrastructure that it is designed to grow and to comply with the City's Water Master Plan; the following Supplemental Agreement is necessary to continue with the project Design Engineer services. This Supplemental Agreement is for Construction and Post Construction phase engineering services by Ardurra Group, Inc. the Engineer of Record (EOR) for the Surface Water Treatment Plant Expansion Project.

Ardurra will collaborate with the Owner's Representative and Contractor to ensure improvements meet or exceeds State, Federal and City standards and regulations.

The Surface Water Treatment Plant currently provides 17.7 million gallons per day (MGD) and to maintain adequate capacity for the future population growth, the Water Master Plan recommended that the City expand the SWTP in four phases over the next 30 years. Each expansion will allow the City six to seven years of operation before the next expansion is required. The first expansion, and the basis of this project, is slated to take place this year 2022 to expand the plant 30 MGD. The second expansion is to take place in 2028 to 45 MGD. The third expansion phase is to take place in 2034 to 60 MGD, and the final expansion is to occur in 2041 taking the plant capacity up to 75 MGD.

Ardurra as the Design Engineer or Engineer of Record (EOR) has a critical role throughout the construction of the project and during the initial period of operation after construction is complete. Ardurra will review all technical information submitted by the construction Contractor to verify the process equipment and materials to be supplied by the Contractor for the project meet the standards and operational requirements specified by Ardurra in the contract documents. As the Design Engineer, Ardurra interprets the plans and specifications and answers questions from the Contractor or Construction Manager, provides technical review of any proposed changes, and helps resolve unforeseen conflicts during construction to ensure that any changes are consistent with the design intent. Ardurra's design team members attend construction meetings and provide general engineering observation of the construction in addition to the day-to-day observation by the Construction Manager. As designer of the treatment process, Ardurra has established the parameters and operating conditions for the various treatment unit processes in the Contract Documents. Ardurra will review Start-Up and Commissioning procedures that are developed by the City's Owners Representative (OR) and provide necessary supports during Start-Up and Commissioning phase.

At the completion of construction, Ardurra is responsible for preparation of record drawings. Ardurra will support the City staff with end-of-warranty inspections at the conclusion of the Contractor's warranty period.

Tasks included are:

- 1. General Project Management and Coordination.
- 2. Engineering Services During Construction. (as the Engineer of Record (EOR))
- 3. Regulatory Agency Coordination during Construction.
- 4. Commissioning and Start-up Engineer Support and Witness Factory Testing.
- 5. Final Power System Studies.
- 6. Construction Material Testing Service
- 7. Additional Service Tasks

Bid Package is planned to be ready this month May 2022, Bid Phase June 2022 to July 2022, Construction Award August 2022, and Facility in operation by January 2026 including the new membrane filtration cells and the staggered retrofitting of the existing membrane filtration cells.

Prior City Council Action

On October 27, 2020, City Council approved the Selection of Ardurra for professional engineering services associated with the Water Treatment Plant Facility Expansion Project.

On December 16, 2020, City Council approved a Professional Services Agreement with Ardurra in the amount of \$1,947,512.00 for professional engineering services associated with the for the City of Pflugerville Water Treatment Plant Expansion Project. The services included Preliminary Design (Preliminary Engineering Report) and 30% (Design) PS&E (to expand from 17 MGD to 30 MGD).

On July 13, 2021, City Council approved a Professional Services Supplemental Agreement No.1 with Ardurra in the amount of \$5,203,529 for professional engineering services associated with the for the City of Pflugerville Water Treatment Plant Expansion Project to include final design and bidding phase services.

Deadline for City Council Action

Action is requested on May 24, 2022.

Funding Expected: Revenue ___ Expenditure X_ N/A ___

Budgeted Item: Yes __ No __ N/A <u>X*</u> *This project is identified in the Water CIP budget as WTP, HSPS, and Lake PS Expansion to 30.0 MGD (WIFIA). Amount: <u>\$3,277,458.00</u> 1295 Form Required? Yes <u>X</u> No __ Legal Review Required: N/A __ Required <u>X</u> Date Completed: <u>05/19/2022</u>

Supporting documents attached:

Professional Services Supplemental Agreement Draft Presentation

Recommended Action

Approve a Professional Services Supplemental Agreement with Ardurra Group, Inc. in the amount of \$3,277,458 for professional engineering services associated with the Water Treatment Plant Facility Expansion Project construction and post-construction phase services, and authorize the City Manager to execute the same