



City of Tualatin

CITY OF TUALATIN Staff Report

TO: Honorable Mayor and Members of the City Council
THROUGH: Sherilyn Lombos, City Manager
FROM: Nic Westendorf, Deputy Public Works Director
DATE: September 12, 2022

SUBJECT:

Consideration of Resolution 5643-22 Authorizing the City Manager to Execute an Amendment to the Contract to complete Supervisory Control and Data Acquisition (SCADA) System Improvements.

RECOMMENDATION:

Staff recommends Council approve the resolution authorizing the City Manager to execute an amendment to the contract with Control Systems Northwest LLC to complete the design, build, testing, and installation of a new Supervisory Control and Data Acquisition (SCADA) System.

EXECUTIVE SUMMARY:

What's SCADA and why upgrade?

A Supervisory Control and Data Acquisition (SCADA) System is a computerized system used to remotely control and monitor the City's water distribution system.

The current SCADA system was installed in the 1990s and received some updates in 2004. The system no longer meets the operational needs of the City and is nearing the end of its useful life, which is about 20 years. In order to keep the SCADA system functional, a replacement of the system's physical equipment and the software used to run it is required.

Improvements to the SCADA system will allow City staff to better manage the water system, especially during peak summer demand when high levels of water use require more monitoring. A new SCADA system will help the water system accommodate growth within the City, ensuring that water is flowing throughout the system efficiently. Improved SCADA monitoring capabilities can help detect changes within the water system, increasing resiliency and responsiveness of staff to problems that need to be quickly addressed.

Contract Details

A Request for Proposals (RFP) was issued in January of 2021. The City received 11 proposals prior to the close of the RFP on February 19, 2021. Control Systems Northwest LLC was the highest scoring proposal and was selected for the project.

The project will be completed in 4 phases; the development of a masterplan, design of a new system, building/testing of the new system, and finally, installation and implementation of the system. If Council approves the proposed amendment, the total value of the contract will be set at \$1,980,372. This includes Phase 1, which is already underway. Attachment A outlines the deliverables and cost breakdown for each proposed phase of the project.

The current contract only included a not to exceed price for Phase 1 of the project, which began in July 2021. Phase 1 included an assessment of the current SCADA System and the creation of a Master Plan to guide the rest of the upgrade project. The original contract only included Phase 1 of the project, because the cost and fully defined scope of Phases 2-4 was yet to be determined. Now that Phase 1 is nearing completion, staff now have cost and scope for the remaining Phases.

Now that Phase 1 is nearing completion (Sept. 2022), staff is asking Council for authorization to execute an amendment for Phases 2-4; the design, build/testing, and installation of the new SCADA System.

Phase 2 will begin shortly after approval of the proposed contract, with Phases 3 and 4 following over the next year and half. The scope for the 3rd and 4th Phases will be determined after Phase 2 is complete. Due to the nature of the work, each Phase builds upon key decisions made in earlier phases of the project. The entire project is expected to be completed by Spring 2024.

The total not to exceed price being considered includes all phases of the project, including Phase 1 which is nearly complete. The total cost of the entire project is \$1,980,372.

OUTCOMES OF DECISION:

Adopting Resolution 5643-22 will allow the City to proceed with the SCADA System Improvement project as described in the Executive Summary section above.

ALTERNATIVES TO RECOMMENDATION:

The City Council could choose not to adopt Resolution 5643-22 and not proceed with the SCADA System Improvement project. This is not recommended as the system has reached its end of life and needs replacement.

FINANCIAL IMPLICATIONS:

Funds for this project are budgeted in the Water Operating Budget

ATTACHMENTS:

- Attachment A – SCADA Phasing and Cost Overview
- Attachment B – Contract Amendment No.1 - Phase 2 (Design)
- Resolution 5643-22