



SCADA System Upgrade

Project Update and Construction Contract

August 26, 2024

Overview

- SCADA overview
- Project Overview
- Project Update
- Next Steps
- Resolution No. 5804-24



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SCADA System Overview



Supervisory Control and Data Acquisition (SCADA) System

- Used to manage water distribution system
- Automated system controls
- Remote system changes
- Alarms and notifications

Current system is 20 years old, running 10-year-old software

- End of life, difficult to maintain
- Lacks modern security
- Lacks functions and features

System includes 22 sites including City Services Center

Equipment includes control panels, radio and cellular equipment, and water quality instrumentation



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Project Overview



Project scope includes:

- Develop SCADA System Upgrade Master Plan
- Identify software and hardware upgrades needed
- Program/ design upgrades
- Install/ construct system improvements
- Commission and support new system



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Project Overview



This project will:

- Improve water system operations and security
- Replace equipment at 21 of 22 sites
- Improve communications between sites
- Move most sites above ground
- Install dedicated electric meters at 8 sites*
**Scope change requiring tonight's exemption request*
- Implement new SCADA software
- Train staff on new system and software



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Project Update

First 3 phases complete

1. Master plan
2. Design (electrical and communications)
3. Procurement, fabrication, and testing

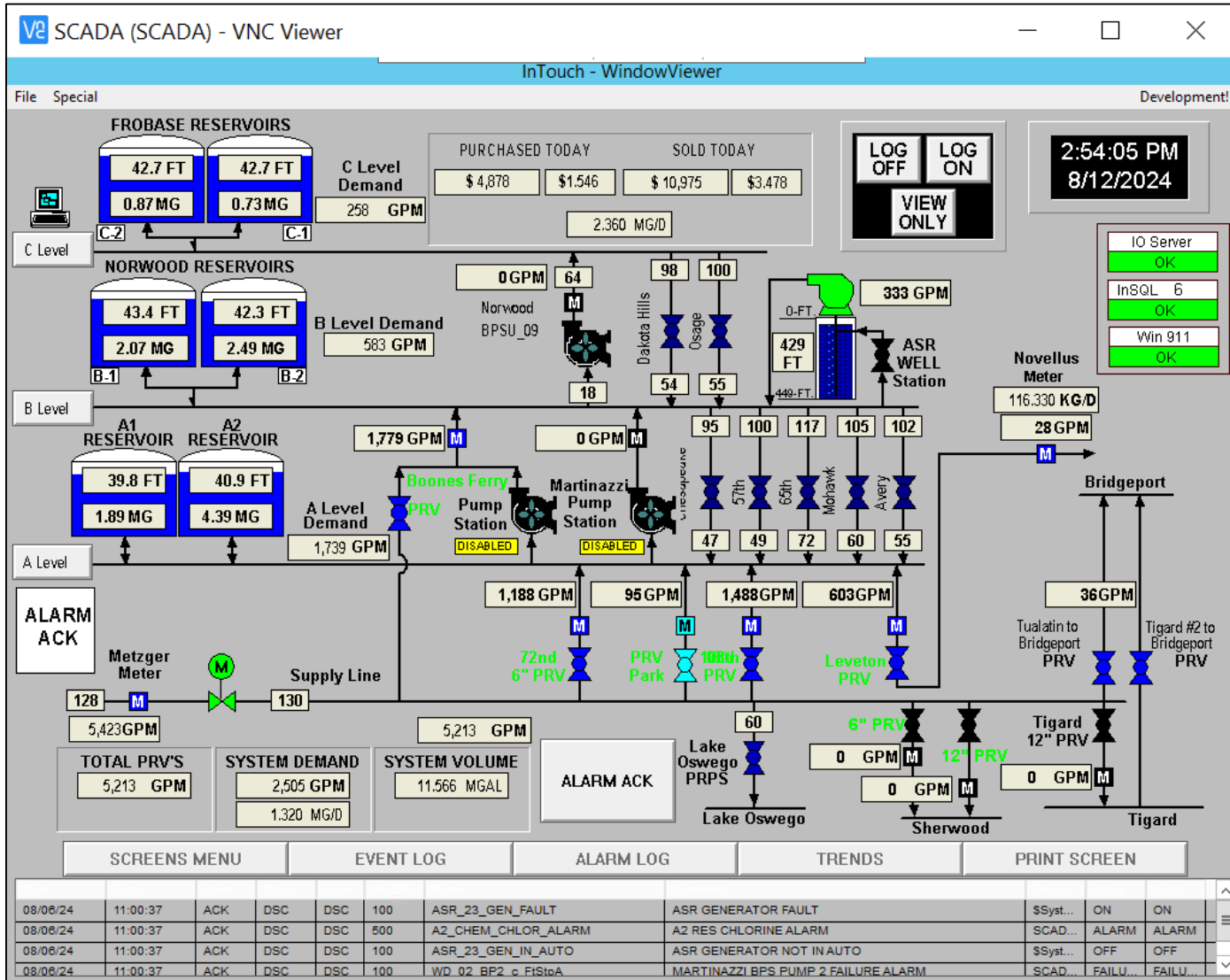
Ready for construction

Finalizing software design



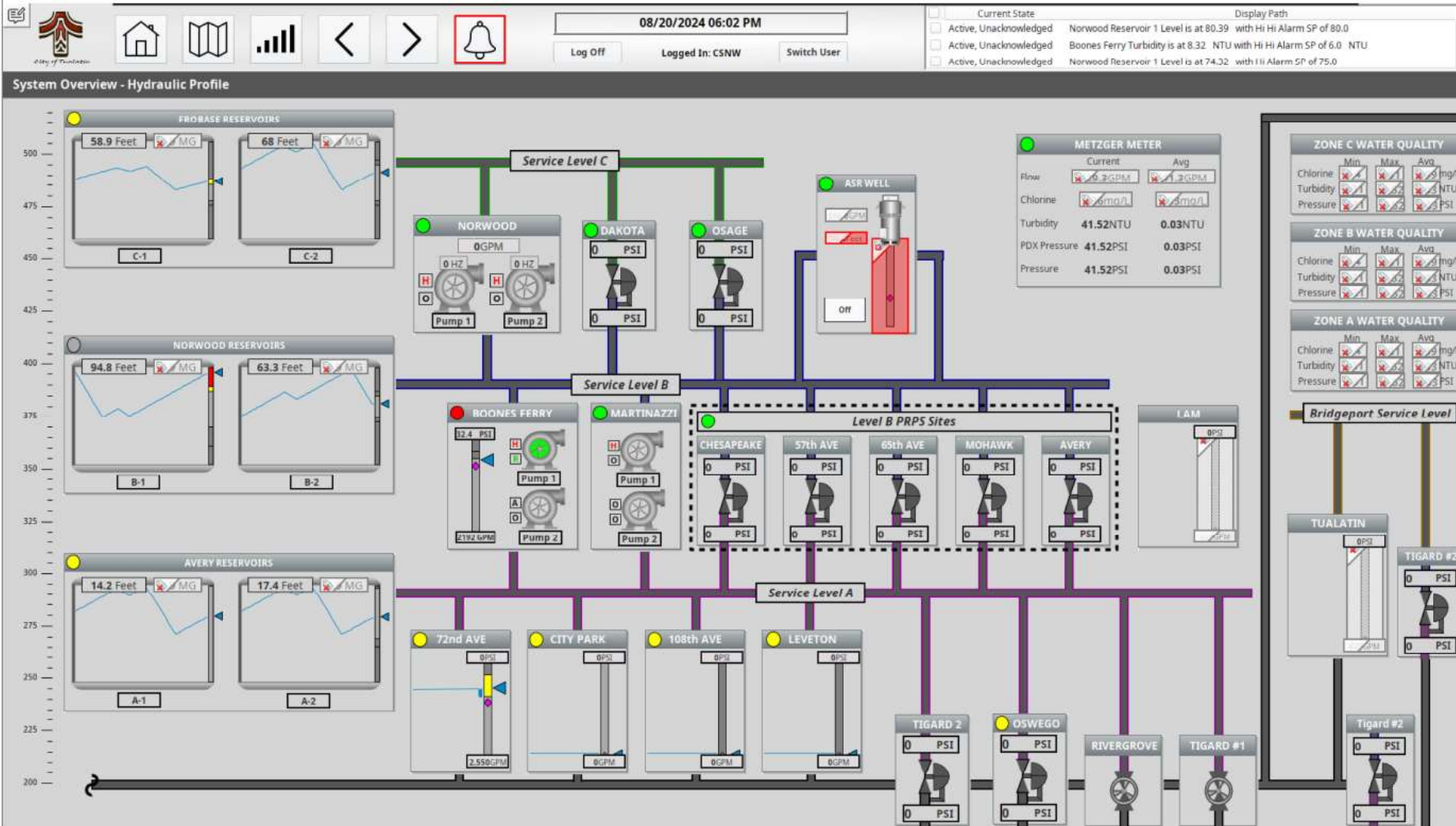
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Current SCADA



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New SCADA



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Project Timeline

- March 2021 – City issues Request for Qualifications
- June 2021 – Control Systems NW selected, master plan work begins
- April 2022 – New software selected
- February 2023 – SCADA Master Plan complete
- February 2024 – Final design plans complete
- August 2024 (**tonight**) – Staff seek approval for construction funding
- *October 2024 – *construction begins*
- *March 2025 – *construction complete, new system live*
- *March – June 2025 – *System testing*
- *March 2025 - March 2027 – *Support period, system live. CSNW supports, changes made as needed.*

*Funding dependent



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Next steps



Finish software design

Construction, including PGE metering work

Turn on and test new system

Monitor and make adjustments over a couple seasons



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Action Item



Consideration of **Resolution No. 5804-24** requesting Council authorization to increase the not-to-exceed price of the SCADA Upgrade project with Control Systems NW, LLC and adopting findings approving an exemption from competitive bidding for the public improvement portion of this project.

Staff recommend approval of Resolution No. 5804-24



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