

Medina of Medina

Water Treatment Plant Expansion

HF4047 (Robbins)

Testifying: Mayor Todd Albers and City Administrator Erin Barnhart

Request: The City of Medina is requesting \$2.95 million to expand and upgrade its existing Water Treatment Plant (WTP) in order to meet future water demand and address elevated manganese levels in the water supply. The project will increase the plant's capacity from 2.0 million gallons per day (MGD) to 3.0 MGD by adding a third gravity filter and replacing existing filter media. This expansion is necessary to meet projected maximum day demand beyond 2040 and to ensure reliable treatment performance.

Project Scope: In addition to the new filter, the project includes a range of improvements aimed at extending the facility's service life and enhancing overall operations. These upgrades include detention tank improvements, mechanical, electrical, and plumbing (MEP) system upgrades, equipment replacement, minor architectural updates, and installation of new floor surface coatings across approximately 6,200 square feet of the 7,700-square-foot facility. A small addition of about 50 square feet will accommodate a walkway between the existing and new filters.

Project Cost: The total estimated project cost is \$2,950,000, which includes 10% contingency and 25% for indirect costs such as engineering, legal, and administrative expenses. Funding for the project is expected to come from a combination of the City's Water Capital Fund (connection fees), Water Utility Fund (user fees), and requested state capital budget funding.

Desired Outcome: A key driver of the project is the need to reduce manganese levels in the city's water supply. According to the Minnesota Department of Health, high manganese exposure can negatively affect memory, attention, motor skills, and child development. Most of Medina's six wells exceed recommended manganese levels by over 300%, with one exceeding guidance by more than 1000%. Enhancing treatment capacity and filtration is critical to protecting public health and ensuring compliance with state guidance.

The Medina water treatment plant, located at 780 Tower Drive, is currently operating at its maximum capacity with two filters and is only just able to meet existing demand. The addition of a third filter will provide needed redundancy, improve treatment reliability, and allow the city to consistently meet both demand and water quality standards.

Timeline: Project design began in April 2024 and concluded in December 2024. Construction is scheduled to begin in January 2025, with delivery of the new filter in September 2025 and installation in January 2026. Substantial completion is expected by May 8, 2026, and final completion by June 5, 2026. Upon completion, the upgraded facility will be capable of delivering 3.0 MGD, ensuring a safe, reliable, and future-ready water supply for the City of Medina.