

Unit Well 12 Upgrade

General Information

MUNIS No: 10452
Contract No.: 9740
Project Engineer: Pete Holmgren
Project Alder: Alder Bill Tishler (AD 11)
Project Location: Unit Well 12 801 S. Whitney Way

General Information

Madison Water Utility's (MWU) Unit Well 12 (801 South Whitney Way) was established in 1958. It operates year-round and delivers water to Madison's Near West neighborhoods including University Hill Farms, Sunset Village, Midvale Heights, Westmorland, Crawford-Marlborough-Nakoma, Orchard Ridge, Summit Woods, Meadowood, Allied Dunn's Marsh, Arbor Hills and Leopold. In 2024, Well 12 pumped 550 million gallons compared to its 5-year average of 559 million gallons annually. The site consists of a well pump house and a detached 150,000 gallon above-ground water reservoir, both of which are nearing 70 years of life.

As originally constructed, Unit Well 12 operated in Pressure Zone 7 of MWU's water system. MWU's Master Plan documentation dating back to 2006 has identified that system operations would benefit by upgrading Unit Well 12 to a dual-pressure zone well by making pipeline and facility improvements to allow it the ability to supply water to Pressure Zones 7 and 8. This capability was added in 2022 with a smaller project; this more comprehensive project will enhance the dual-pressure zone capabilities while upgrading the well and reservoir buildings.

Short Elliot Hendrickson, Inc. (SEH) has been hired as the professional engineering consultant firm to assist in completing the project plans and specifications.

Project Scope

The major components of the project will include:

- Demolition of the existing building, followed by construction of a completely new facility.
- Reuse of the existing booster pump, plus the addition of a 2nd pump for pumping reliability and fire flow capacity.
- Installation of variable frequency drives on new booster pumps to allow them to pump to either Zone 7 or Zone 8.
- Associated piping and internal motor operated valving to allow the station operation to be remotely controlled.
- Metering for the deep well, Zone 7 and Zone 8 output.
- Addition of a pressure-reducing valve to allow water to flow from Zone 8 to Zone 7 when necessary.
- Construction of new chemical feed rooms to bring the facility up to current code and DNR standards.
- Upgrade of the restroom facility.
- Replacement of the deep well discharge piping and reservoir piping.
- Upgrade of the restroom facility.
- Miscellaneous Station upgrades related to security, lighting, electrical controls, utilities, etc.
- Demolition of the existing 150,000 gallon above ground reservoir, followed by construction of a completely new 1,000,000 gallon above ground reservoir.

Costs:

Total Cost: \$ 8,000,000
Assessments: \$ 0
Water: \$ 8,000,000
Engineering: \$ 0
City Cost: \$ 8,000,000*

Schedule:

Advertise for Bids: February 2026
Construction Start: September 2026
Construction End: August 2027

*Financed by the Wisconsin Safe Drinking Water Loan Program; interest rate approximately 2.475%.
