



1/27/2015 Water Utility Board Meeting  
Unit Well 12 Upgrade and Conversion  
to a Two Zone Well



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# Well 12 Proposed Facility Design and Operational Evaluations

*Presentation and Reports Prepared By:*

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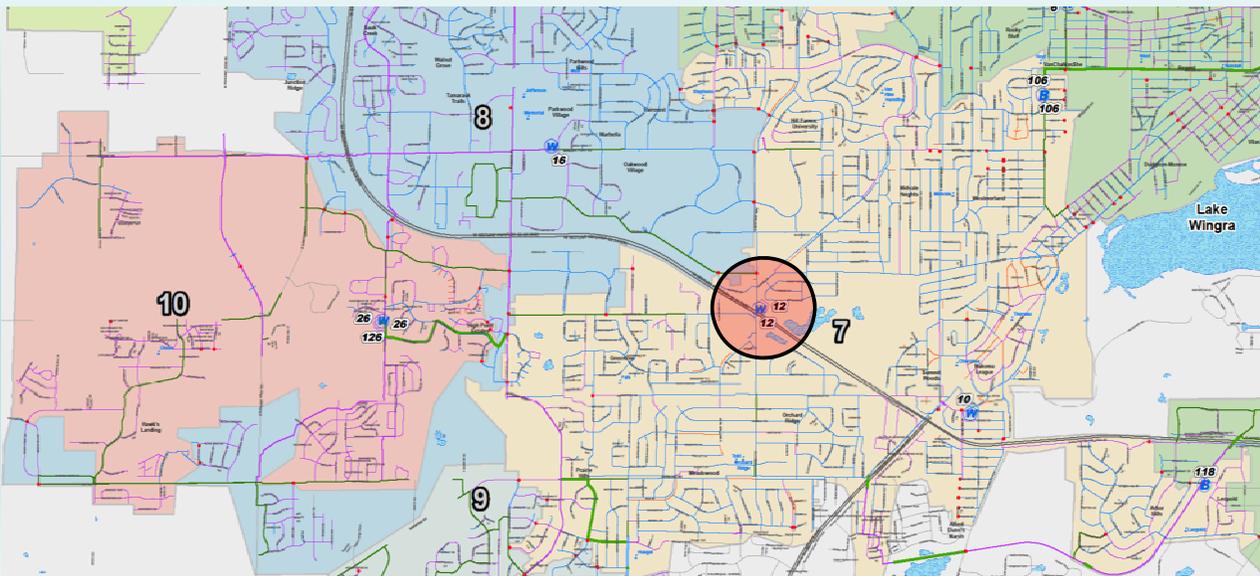
Al Larson, PE, BCEE | Principal Engineer, Madison Water Utility

Doug Hursh, AIA, LEED AP | Director of Design, Potter Lawson

Chris Epstein | Project Engineer, Short Elliot Hendrickson, Inc.

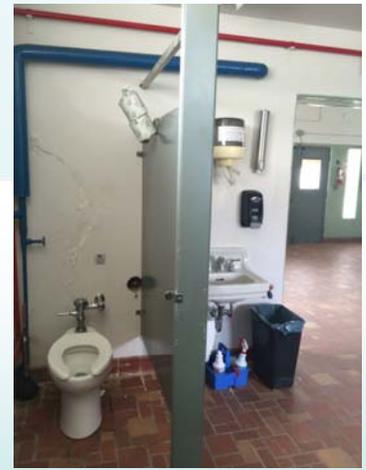
## Project Background

- Recommendation of 2006 Water Master Plan to convert Well 12 to a two-zone well.
- Provide operational flexibility between Pressure Zone 7 and Pressure Zone 8 on the west side.



# Project Description

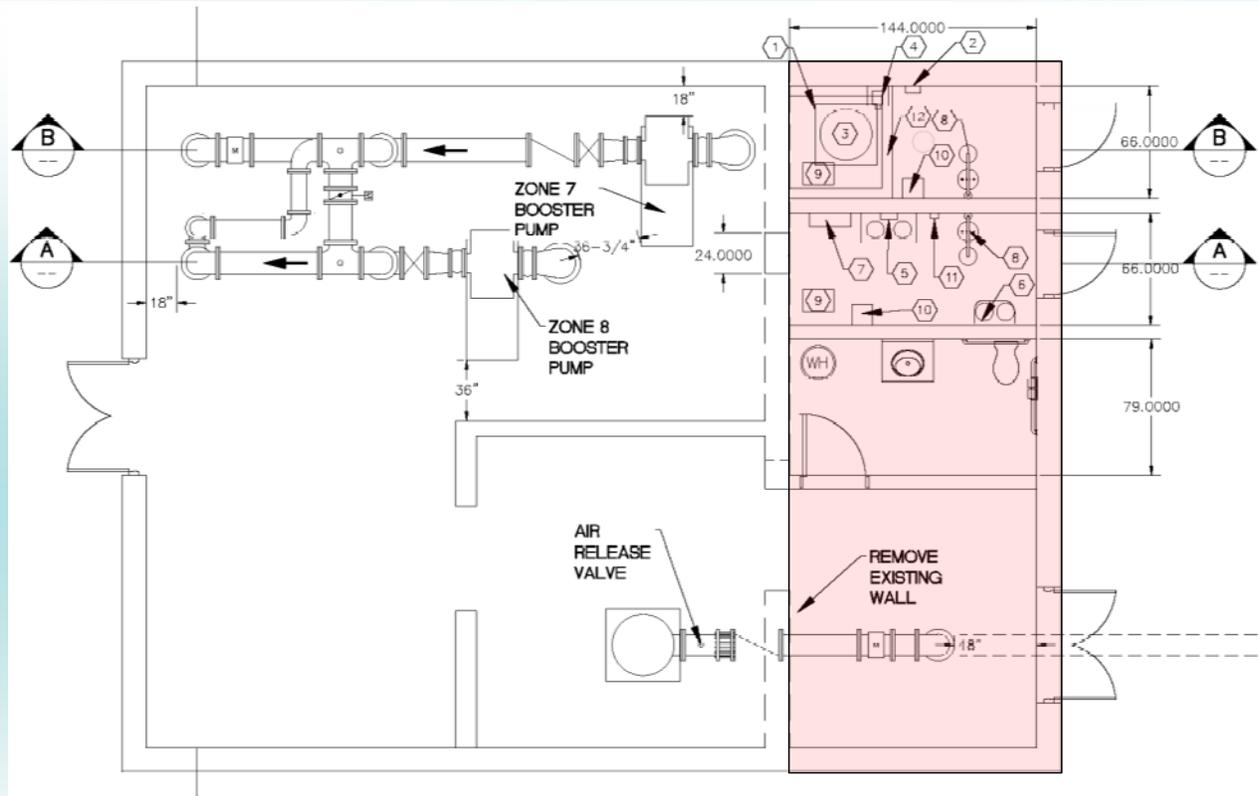
- Installation of 2 new pumps, capable of pumping water to either Pressure Zone 7 or Pressure Zone 8.
- Building addition to enclose the new chemical feed rooms, bathroom, and deep well piping.
- Replacement of the well discharge piping.



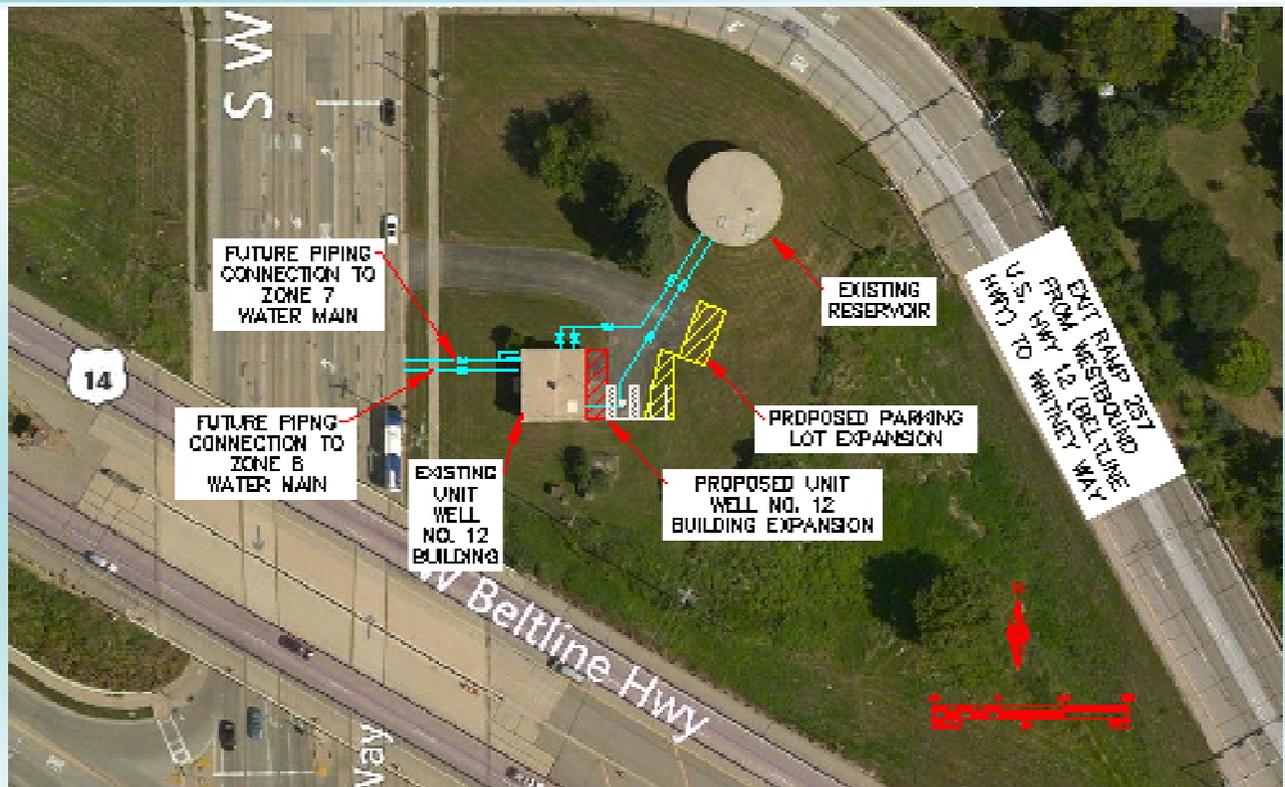
## Project Description, cont.

- Addition of a pressure-reducing valve to allow water to flow from Zone 8 to Zone 7 if necessary.
- Associated piping and motor operated valves to allow station operation to be remotely controlled.
- Metering for the deep well, Zone 7 and Zone 8.
- Total replacement of electrical and control system.
- Installation of new pipelines for Zone 7 and Zone 8 on Whitney Way (separate contract).

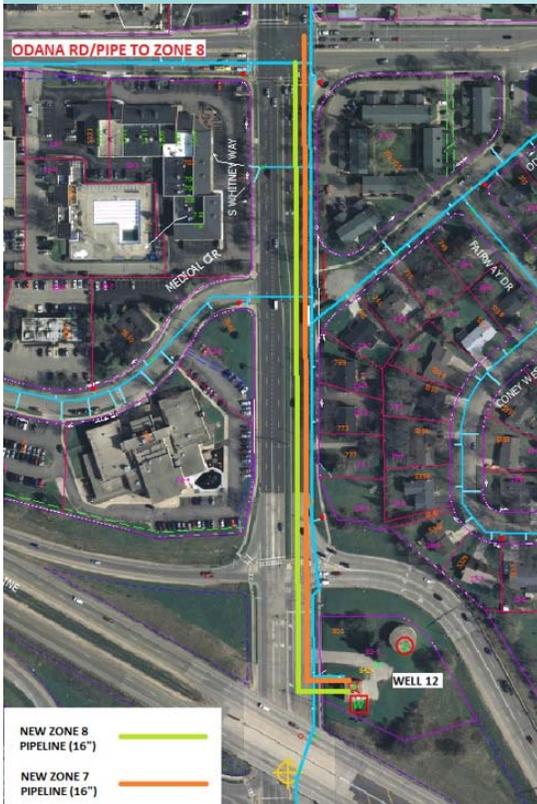
# Interior Piping and Pump Layout



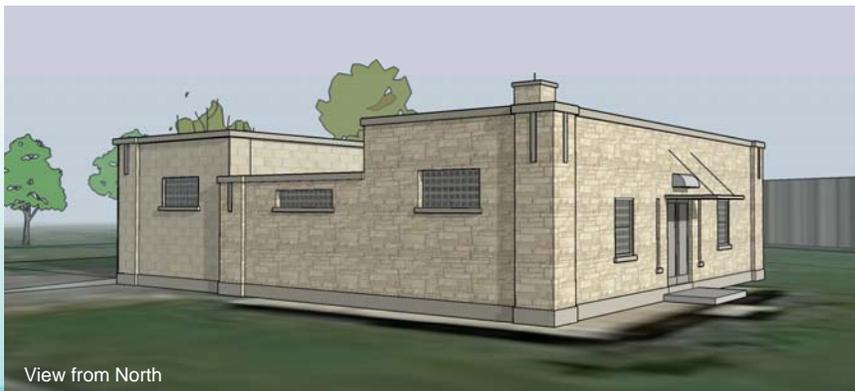
# Site Layout



# Whitney Way Watermain Upgrades



- Separate contract.
- New 16" Pipeline for Pressure Zone 7.
- New 16" Pipeline for Pressure Zone 8.
- Construction to begin late summer, 2015.



Exterior Images  
Option A1



View from North



Cast Stone



View from East



Buechel Stone - Fond Du Lac Blend Smooth

## Exterior Images Option A2



View from North



Terracotta



View from East



Terracotta

## Exterior Images Option B1



## Project Schedule

- Water Utility Board Meeting: 1/27/2015
- BPW Approval of Plans: 4/08/2015
- Bids Received and Opened: 5/22/2015
- Award Approved by CC: 6/16/2015
- Contract Signed: 7/20/2015
- Construction Starts: 8/01/2015
- **Project Completion: 6/01/2016**

\*Note: Facility to be out of service from approximately 9/1/2015 to 5/1/2016. This will not cause system outages in the area.

## Project Cost Update

### Cost Breakdowns

#### *Well 12 Facility:*

- Building Expansion: \$200,000
- Piping and Equipment: \$388,000
- Engineering: \$82,000
- **Total Facility Estimate: \$670,000**

#### *Whitney Way Pipeline:*

- **Total Pipeline Estimate: \$361,000**

**Overall Estimate: \$1,031,000**