CITY OF WASHINGTON, ILLINOIS
Committee of the Whole Agenda Communication

Meeting Date: October 13, 2025

Prepared By: Dennis Carr – Interim City Administrator/City Engineer

Agenda Item: IEPA Project Plan and Water Rate Study Update Discussion

Background:

In March of 2024, the City entered into an agreement for CMT to prepare an IEPA Project Plan and Rate Study to secure a State Revolving Fund (SRF) Loan. Offered through the IEPA, the SRF Loan is a low-interest loan program that can be utilized for projects, similar to what is utilized on the wastewater side. As with wastewater, the first step to obtaining an IEPA SRF Loan is to obtain "Project Plan" approval from the IEPA.

At the May COW Meeting, staff had Crawford, Murphy & Tilly (CMT) present several major improvements to our water system that included the construction of Water Tower #3, Cummings Lane Watermain Replacement, Business 24 Watermain Replacement, Bondurant Watermain Replacement, and Well #13.

The Project Plan will need to include a rate study to show how the City will afford to pay the loan payment. The rate study will develop a financial plan for the utility, including the addition of capital costs for the proposed capital improvements, and determine appropriate rates, including examination of the fixed and variable components of the rates along with a section in the written report documenting the methodology, analysis, and findings.

The water rates were presented to the previous Council who chose not to act on the recommendation and asked that it be decided by the Council that was just elected and is seated now.

In June of 2025, we passed an engineering supplement to have CMT/Raftelis update the study based on the CPI increase (5.2%) to the water rates that took place in May '25.

Raftelis has determined that increasing the overall water revenue by an additional 2-2.5% would be sufficient to cover the debt service associated with the IEPA loan for the proposed Project Plan, assuming Business 24 is excluded from the current rate analysis. Raftelis proposed that we achieve this by adjusting the fixed fee for water meters larger than the standard residential size (i.e., 1" and above). This could be done any time but could also be done in coordination with the normal increases in May 2026.

While this adjustment would primarily impact commercial accounts and the Illinois American Water Company (ILAWC), it is important to note that there are 10 residential properties with 1" meters—due to the building being an apartment building, a larger home size or extended setbacks from the roadway—and these properties would also be affected.

Our current code states that the annual water rate increase for consumption should be the greater of 2.5% or the CPI for Water-Sewer-Trash. The increase in recent years has been as follows due to an increase in inflation
-2021 increased 3.2%
-2022 increased 3.47%
-2023 increased 4.95%
-2024 increased 5.2%
-2025 increased 5.2%

Raftelis would also recommend adjusting the 2.5% minimum increase to 4.0%. This would help limit the future increase needed for the Business 24 project if CPI were to be extremely low. This would not have been a factor in the increase the last few years, but it could should inflation flatten out.

Action Requested: Staff requests discussion on Raftelis' findings as it pertains to the changes in the Fixed Fee structure according to meter sizes and the 4% minimum rate increase.

Water System Improvement Projects

City of Washington, IL

Committee of the Whole

May 12, 2025

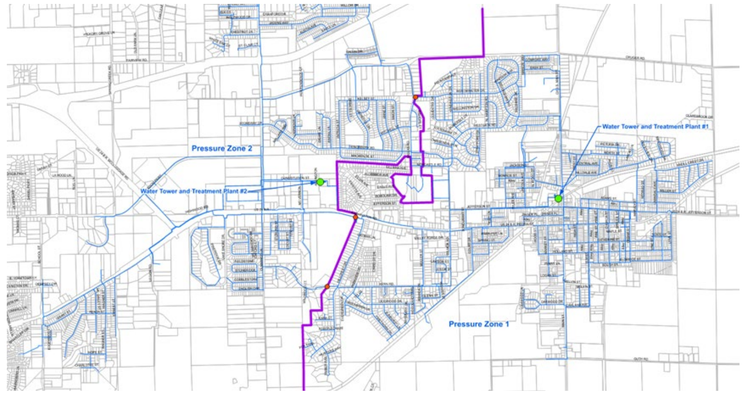
CMT
Engineers and Consultants

Existing Water System Assets

2 Water Treatment Plants

2 Water Towers

450,000 gallons each



Water Distribution Pipe Network

- ~85 miles of watermain ranging in size from 4” – 16”
- ~5,400 customers

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Overview of Projects

- Bondurant Street Watermain Replacement
- Route 24 Watermain Relocation
- Water Tower #3
- Sunnyland Water Service Redundancy
- Southeast Area Watermain Improvements
- Well #13

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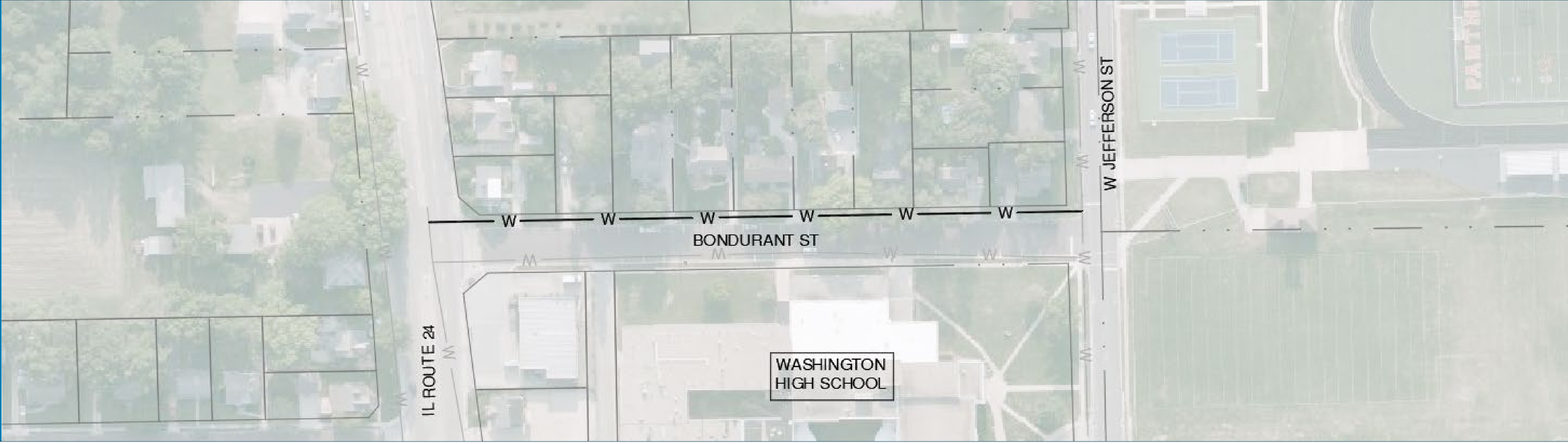

Bondurant Street Watermain Replacement

Need for Project:

- Aging infrastructure of existing watermain serving critical facility – Washington High School

Project Design:

- Replace ~ 670 lineal feet of 4" watermain with new 8" watermain

Estimated Project Construction Cost:

- $375,000

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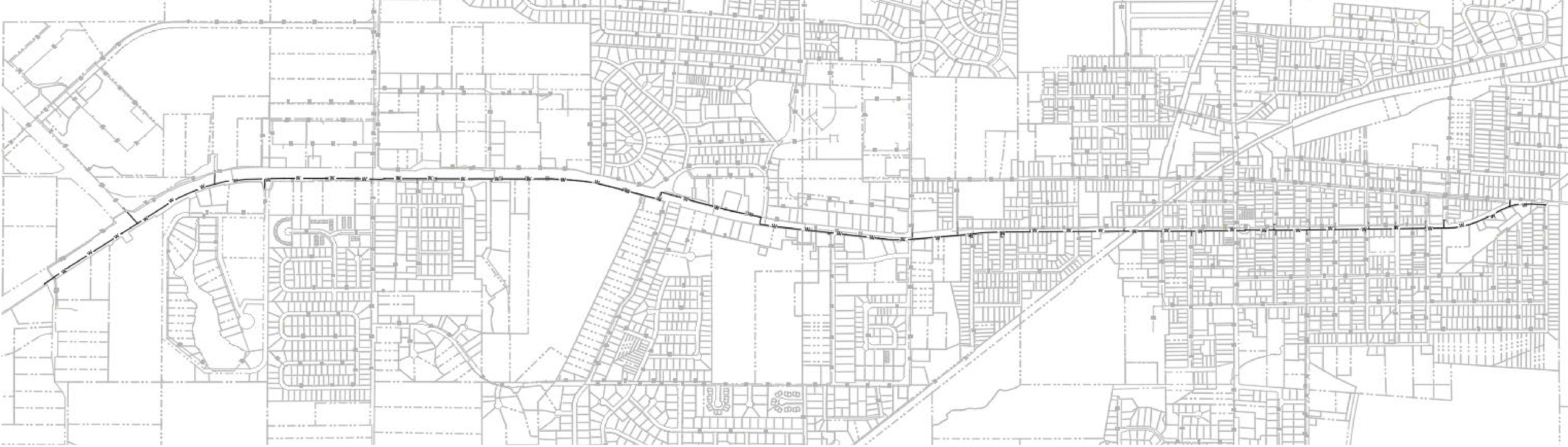

Route 24 Watermain Relocation

Need for Project:

- Accommodate future IDOT roadway improvements from Legion Road to Lynn Street
- Critical Watermain Location = Wilmor Road to Lynn Street

Project Design:

- Relocate ~20,050 lineal feet of 6" – 10" watermain to outside pavement limits
- ~180 service connections
- 38 connections to existing watermains

Estimated Project Construction Cost:

Total Length – $7,730,000

Critical Length – $4,500,000

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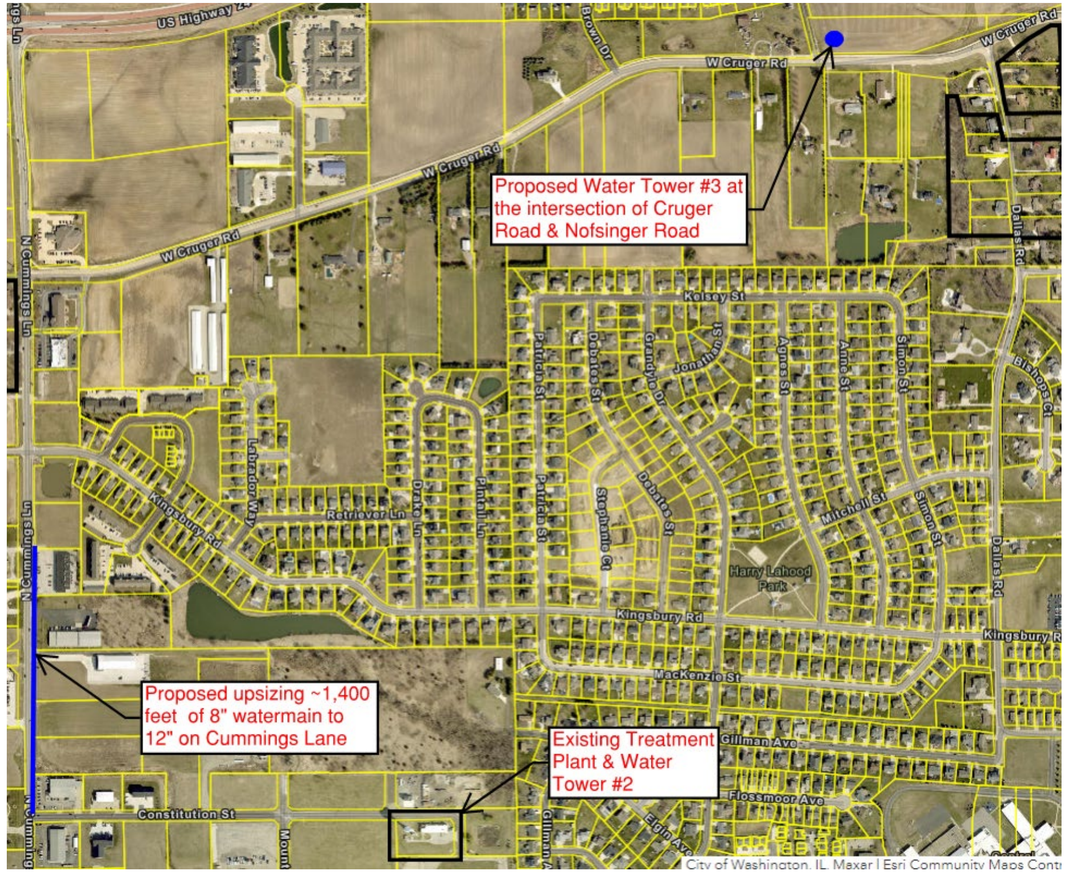
Water Tower #3



Need for Project:

- City does not meet ISO fire flow recommendation of having a minimum storage equal to the highest flow for 3 hours
  - Tower #2 Capacity = 450,000 gallons
  - City's highest flow = 3,500 gpm which equals 630,000 total gallons for a 3 hour period
- City does not meet IEPA Title 35 minimum storage recommendation for systems not providing fire protection – minimum system storage should equal daily consumption
  - City's Average Daily Consumption = 1.1 MGD
  - City's System Storage = 0.9 MGD

Project Design:

- 500,000 gallon elevated spheroid shaped tank
- 1,427 lineal feet of new 12" diameter watermain along Cummings Lane

Estimated Project Construction Cost:

- Water Tower – $4,300,000
- Cummings Lane Watermain – $530,000

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Sunnyland Water Service Redundancy

Need for Project:

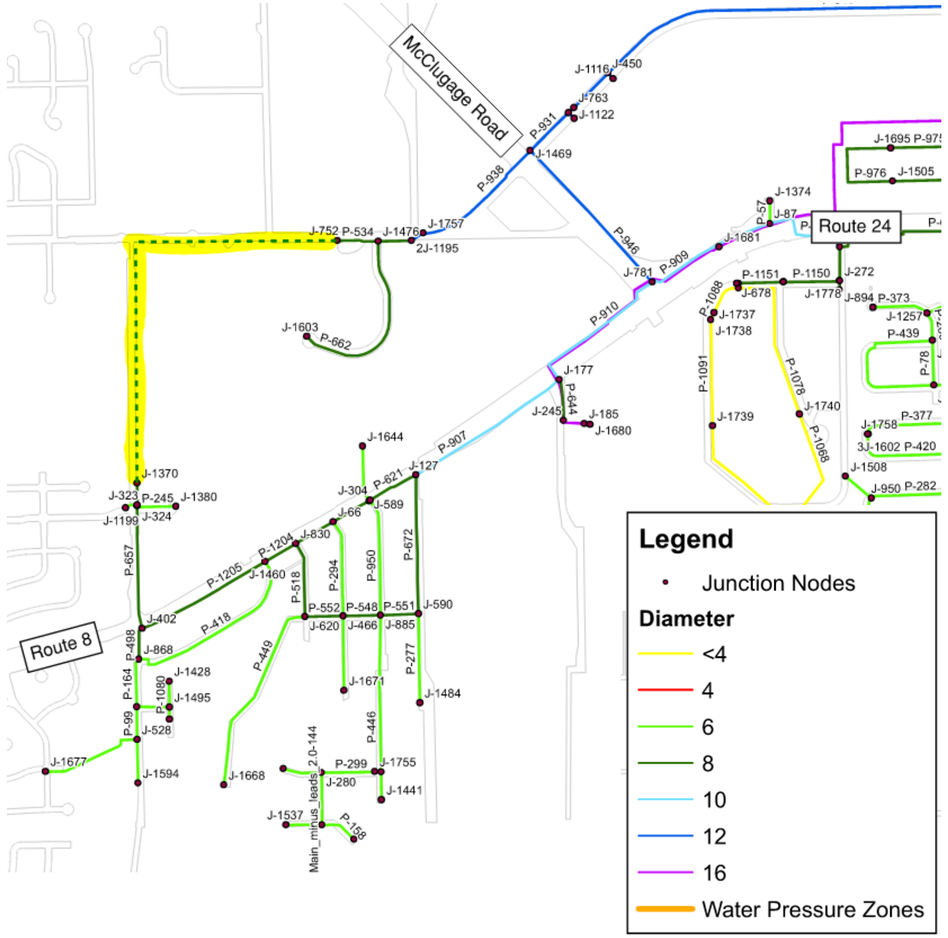
- Currently, a single existing 10” watermain serves Sunnyland
- Any failure of that line would leave Sunnyland with no access to water
- Connecting the existing 8” diameter watermain lines to the North of Sunnyland allows for redundancy in serving those residents

Project Design:

- ~4,100 lineal feet of new 8” diameter watermain along School Street and Centennial Drive

Estimated Project Construction Cost:

- $875,000



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Southeast Area Watermain Improvements

Need for Project:

- Aging infrastructure of cast iron piping pasted its life expectancy
- Cast iron water mains account for 1/3 of the system but represent an average of 2/3 of the breaks
- Oldest watermain in the system is over 100 years old

Project Design:

- ~17,000 lineal feet of 4" diameter watermain replacement
- ~286 service connections

Estimated Project Construction Cost:

- $8,8700,000 (Split into multiple projects over 20 years)

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Well #13

Need for Project:

- Water Treatment Plant #2 is primarily served by Wells #11 and #12 located at the Washington Public Works building off Legion Road
- In an emergency, the Plant can run off wells #9 and #10 located near the Plant. However, the water chemistry of this aquifer location is very high in ammonia. Current plant operations are ill-equipped to remove excess ammonia.
- Increase the treatment capacity at Water Treatment Plant #2 from 1.5 MGD to 2.0 MGD
- Proposed Well #13 is a better suited alternative for a redundant, emergency well

Project Design:

- Submersible well pump located 424 feet deep by an 8" diameter steel column
- ~20 foot x 15 foot block building
- Connected to existing 16" raw water line running to Water Treatment Plant #2

Estimated Project Construction Cost:

- $1,500,000

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Questions