

Engineering Report to the Water Board

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Engineering Systems and Mapping

- 1. GIS: Entering 2007 water main projects and main leaks into GIS. Quality Control review on leak data.
- 2. Flushing Planning for 2008: Evaluating the impact of the weather delay on the overall flushing plans.
- 3. Water Utility Strategic Planning: Working on SOP and Work Practices.
- 4. Lead Services: Continue to coordinate lead replacements on various water main projects and monitor PO work.
- 5. Hydraulic Model: Continue to work with MWH Soft on the model conversion and updating. Starting to develop scenarios for project evaluation and justification.

Water Main Design Projects - 2008

Private contract under design: Tradesman Commerce Park; Silicon Prairie Phase 2; Linden Park Phase 6; Linden Park Phase 7; Blackhawk 8h Add Phase 4; Woodstone; Eastlawn – Phase 1

Water Main Construction Projects – 2008

<u>Projects under construction</u>: Allis Ave; waiting for signed contracts; State St.; Main and services complete; N. Fourth St.: Water main and services complete; E. Gorham: Water main work ongoing; Capitol Square; Two of the three hydrants relocated; Orchard St.: Water work not started; Kendall / Chestnut: Water main work ongoing; Riverside/Yahara: Water main work ongoing; Sherman Av.: Scheduled to start 7/14/08; Jenifer/Livingston: Water main work ongoing; N. Dickinson: Water main work ongoing; N. Pinckney: Water not started.

Completed construction: American Center; Marquette/Sach St.; East Towne Mall Water Relocation; E. Main (1st to 2nd); Dixon / St. Paul: Union Corners; Hermina, W. Doty; Monroe / Randall; E. Main (1st to 2nd); American Center; Starkweather/Clyde Gallagher; Waubesa

Maintenance Projects

- 1. Well 26: Deep well pump has been replaced and the well is back on line. Discussing possibly of a VFD on the deep well.
- 2. Reservoir 225: Awarded the paint repair on the stem of the reservoir to Mill Coatings, will be complete by early August.
- 3. Reservoir 126 Painting: A single bid was received for the project. The Board of Public Works rejected all bids and the project will be rebid for completion in the spring of 2009.

Unidirectional Flushing Operations and Sampling

- 1. Flushing continues in the Well 11, 23, 27 (Night), 28 and 29 areas.
- 2. Flushing operations have resumed following the heavy rains and the flooding conditions.
- 3. 2008 flushing summary numbers through the end of June, 222 miles flushed (26% of system) in 932 runs.

East Isthmus Well Siting Study and Public Participation Program

1. Will meet with the working group to discuss the feasibility of developing a well site in the Anderson & Wright Street area.

Well 29 Iron and Manganese Filter

- 1. Project approved by the Board of Public Works, the Plan Commission and Common Council.
- 2. Advertising July 18, 2008. Bid opening will be August 15th.
- 3. Anticipate start of construction in late September.

Whitney Way Well Site

- 1. Developing the scoping document for the project as a part of the public participation plan
- 2. Developing project evaluation criteria and setting up the analysis.
- 3. Working with the contaminant source inventory to evaluate the feasibility of the site.
- 4. Working on the WDNR well siting permit to allow us to drill the well.

Wellhead Protection Plans - Wells 7, 11, 16, and 17

- 1. Working with the contaminant source inventories for all the well sites.
- 2. Developing mapping for each of the Wellhead Protection Plans.

Graduate Research Project

- 1. Ryan continued a flushing sampling program that looks at the turbidity at several different velocities.
- 2. Ryan finished his thesis and successfully defended it July 16, 2008.
- 3. A presentation of Ryan's thesis work to the Board will be scheduled for the August meeting.
- 4. We have installed an on-line turbidimeter on the east side to continuously evaluate water quality with respect to Well 8. This should provide us with valuable information on the impact of a well that has iron and manganese above the secondary standards.