

Engineering Report to the Water Board

September 23, 2008

Item 8.

Alan L. Larson - Principal Engineer

119 E. Olin Avenue Madison, Wisconsin 53713 Telephone: 608 266-4653 email: allarson@cityofmadison.com

Engineering Systems and Mapping

- 1. GIS: Continue to work on entering completed water main projects and main leaks into GIS.
- 2. Flushing Planning: Continue to coordinate and direct 2008 flushing operations
- 3. Water Utility Strategic Planning: Working on SOP and Work Practices Design Teams.
- 4. Lead Services: Coordinating lead replacements on various water main projects and monitoring PO work.
- 5. Hydraulic Model: The model has been converted by MWH Soft to match our GIS to simplify updating. Working on scenario analysis in support of the Capital Improvement Program scoping documents.

Water Main Design Projects - 2008

<u>Private contract under designs</u>: Design work for the year is winding down as the construction season is ending. We are starting preparations and coordination for the 2009 construction season.

Water Main Construction Projects - 2008

Completed Projects: American Center; Starkweather / Clyde Gallagher; State St.; Waubesa; Marquette / Sach St.; Dixon / St. Paul; Union Corners; Hermina; N. Fourth St.; East Towne Mall Water Relocation; E. Gorham; E. Main (1st to 2nd); W. Doty; Monroe / Randall; Riverside / Yahara; Sherman Av.; Jenifer / Livingston; N. Dickinson; N. Pinckney; Leitch / Jean St.: Leitch St.; Linden Park Ph. 6; Blackhawk 8th Addition Ph. 4; Silicon Park:

<u>Projects under construction</u>: Capitol Square: Two of the three hydrants relocated; Orchard St.: Water main work will not begin until steam tunnel work is finished.; Kendall / Chestnut: work continues on services; Park St.; only removals remain.; Few / Baldwin St.; Cutoff's and removals remain; Jean St. Currently working on services.; Eton Ridge / Rugby Row / Vista: Water main on Rugby Row 80% completed.; Allis Av.: Installing main east towards Shaffer Av.; Allied Dr.: Began work this week.; E. Main – Thornton to Dickinson: Work began on water this week; Truax Water Main Ext.: Work is scheduled to begin on 9/15.

Additional Notes: Linden Park Ph. 7 has been canceled

Maintenance Projects

- 1. Reservoir 126: The painting of the reservoir was re-bid for next spring and the apparent low bidder was Aero Painting.
- 2. Well 30: Deep well motor burned out and has been rewound on warranty. Unit is back in service.

Unidirectional Flushing Operations and Sampling

- 1. Flushing continues in the Well 6, 12, 18, and 27 areas and in the booster station 125 and 129 areas.
- 2. Flushing numbers for August: 21.3 mil gallons (udf) 0.55 mil gallons (conv); 368 udf runs; 89 miles udf; 301 hydrants flushed (udf); 9 hydrants flushed conventionally
- 3. 2008 Year-to-date; 79.9 mil gallons (udf); 1.1 mil gallons (conv); 1707 udf runs; 405 miles udf; 1344 hydrants flushed (udf) 38 hydrants flushed (conv--not counting some others in response to dirty water calls)

East Isthmus Well Siting Study and Public Participation Program

1. No change this month

Well 29 Iron and Manganese Filter

- 1. Executed a \$1,339,000 contract with Staab Construction Corp. for construction of the filter addition.
- 2. Pre-Construction meeting scheduled for September 24th, anticipate start of construction week of September 29th.
- 3. A press release and mailed notice have gone out.

Well 8 Iron and Manganese Filter

1. Starting to develop the public participation plan, communication plan and the scoping document.

Booster Pump Station 118 and the Raymond Road Elevated Reservoir

- 1. Plan to submit the scoping document for Booster Pump Station 118 to the Water Board at the October meeting.
- 2. Starting to develop the public participation plan, communication plan and the scoping document for the Raymond Rd Res.

Whitney Way and Femrite Drive Well Sites

- 1. Continue to work on the scoping document for the projects as required by the public participation plan
- 2. Working with the contaminant source inventory to evaluate the feasibility of the site for the DNR.

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

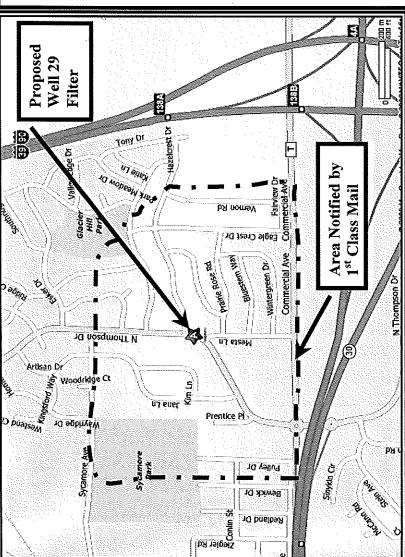
- 1. The Wellhead Protection Plan for Well 16 is in completed draft form and being circulated for comment.
- 2. Working with the contaminant source inventories for the remaining well sites.
- 3. Developing mapping for each of the wellhead protection areas and working through plan requirements.

Graduate Research Project

1. Continue to operate the continuous on-line turbidimeter on the east side. We are proposing to leave it in operation through flushing of the area and probably through the end of the year. Continue to collect flushing data throughout the City.

Training and Conferences

 Several employees attended the WWA Conference in Stevens Point. Al Larson presented on the new video surveillance system construction and operation.



Notice of

Start of Construction

Project:

Iron & Manganese Filter at Unit Well 29 829 N. Thompson Drive

Construction on the filter building addition at Well 29 will commence during the week of September 29th. Work will continue though the winter with the facility fully operational June 1, 2009

Contractor: Staab Construction 608.838.7909 McFarland, WI For additional details please go to www.madisonwater.org and click on the "PLANS, PROGRAMS & PROJECTS" pop down menu then click the "UW 29 News" option.

For additional information please contact:

Al Larson, P.E.

Principal Engineer – Madison Water Utility 608-266-4653 allarson@cityofmadison.com







Madison Water Utility

Tom Heikkinen – General Manager Alan L. Larson P.E. – Principal Engineer 119 E. Olin Avenue Madison, Wisconsin 53713 Telephone: 608 266-4653

FAX: 608 266-4426 email: allarson@cityofmadison.com

MEMORANDUM

Date: September 15, 2008

To: Madison Water Utility Water Board

From: Al Larson

cc: Tom Heikkinen

Subject: Public Participation Plan for Well 8 Filter, Raymond Rd Reservoir, and the Whitney Way Well

We will be starting the development of alternatives and project details for the proposed Well 8 iron and manganese filter (PM Al Larson), the Raymond Rd Reservoir (PM Al Larson), and the Whitney Way Well (PM Dennis Cawley). Installing a filter at Well 8 will improve water quality in the area for a well in a developed area of the city. The Raymond Road Reservoir will provide need storage capacity to pressure zone 9. The Whitney Way well would be a two zone well that would pump to both zone 7 and zone 8 providing supplemental sources of supply. All of these projects were identified as critical projects in the 2006 Master Plan and funding was started in the 2009 budget.

The following is a simplified timeline for establishment of the Well 8 Filter, Raymond Road Reservoir, and the Whitney Way Well projects as required by the Gruber resolution.

- October 24, 2008 First draft of Scoping Document for internal review
- October 31, 2008 Second draft of scoping document for internal review
- November 5th, 2008 Final draft of scoping document to Alder and Mayor's office
- Week of November 10th Meet with Alder and Mayor's Office for each project
- November 14, 2008 Post Information on Utility Web Page
- November 14, 2008 Notify stake holders and residents
- November 25, 2008 Water Board refers Scoping Document to January 09 meeting
- Week of December 1st Convene Citizen's Advisory Committee if one exists
- Incorporate Committee's comments
- Week of December 15th Hold first public meeting
- Solicit written comments until January 20th
- January 27, 2009 Public Hearing before the Water Board
- January 27, 2009 Water Board considers the comments and the Scoping Document and acts on establishing the project or moving in a different direction

8-4.



Madison Water Utility

Tom Heikkinen – General Manager Alan L. Larson P.E. – Principal Engineer

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MEMORANDUM

Date: September 15, 2008

To: Madison Water Utility Water Board

From: Al Larson

cc: Tom Heikkinen

Subject: Public Participation Plan for Booster Station 118 and Femrite Well

We are in the process of developing alternatives and project details for the proposed Booster Station 118 (PM Peggy Wischhoff) and the Femrite Well (PM Dennis Cawley). Booster Station 118 will transfer water from the Well 18 service area into the Arbor Hills area to alleviate fire protection deficiencies and to provide redundant supply to the area. The Femrite Well will address fire protection deficiencies in Pressure Zone 4 and will provide a source of redundant supply. Both projects were identified as critical projects in the 2006 Master Plan and are funded in the 2009 budget.

The following is a simplified timeline for establishment of the Booster Station 118 and Femrite Well projects as required by the Gruber resolution.

- September 19, 2008 First draft of Scoping Document for internal review
- September 26, 2008 Second draft of Scoping Document for internal review
- October 3, 2008 Final draft of scoping document out to Alder and Mayor's office
- Week of October 6th Meet with Alder and Mayor's Office for each project
- October 10, 2008 Post Information on Utility Web Page
- October 10, 2008 Notify stake holders and residents
- October 21, 2008 Water Board refers the Scoping Document to December meeting
- Week of October 28th Convene Citizen's Advisory Committee if one exists
- Incorporate Committee's comments
- Week of November 10th Hold first public meeting
- Solicit written comments until December 12th
- December 16, 2008 Public Hearing before the Water Board
- December 16, 2008 Water Board considers the comments and the Scoping Document and acts on establishing the project or moving in a different direction