FOR BOARD ACTION

Agenda Item #

5

Meeting Date:

1/31/12

SUBJECT:

Proposed Replacement of 4th St SE Reservoir

PREPARED BY:

Doug Rovang, Senior Civil Engineer

ITEM DESCRIPTION:

The Main Level Service Area water system study was completed by Progressive Consulting Engineers in late 2008 and the study report was reviewed with the Utility Board in early 2009. The study noted that the Main Level Service Area (which includes the Central Business District) is currently deficient approximately 1,200,000 gallons of water storage (and, ultimately, 3,500,000 gallons) based on generally accepted water industry operating standards (Ten States Standards). One of the consultant's recommendations was to replace the existing 580,000 gallon 4th St SE Reservoir (which was constructed in 1917) with a larger reservoir to be sited near the Central Business District. With the continuing "densification" of the center City area, staff recommends proceeding with construction of a larger replacement reservoir in the near future.

Staff initially envisioned the replacement reservoir as being located at the existing reservoir site and "half underground", similar to the existing reservoir. However, current Minnesota Department of Health reservoir design guidelines require such structures to be located one foot (1') above the 100 year flood stage. This would place the top of the replacement reservoir approximately fourteen (14') above the existing ground level - and eleven feet (11') higher than the existing reservoir. Staff is aware Utility Board members have expressed reservations about such a reservoir being constructed on the existing reservoir site. Also, the Rochester Downtown Master Plan, accepted by the Rochester City Council in 2010 as an appropriate vision for the future, calls for the existing reservoir site to become open space as a part of a Green Corridor extending along the Zumbro River through the downtown area. Based on the above background information, staff recognizes the need to evaluate various possible water storage facility types and locations which could provide functionality as good as, or better than, a 2,000,000 gallon reservoir located at the existing 4th St SE Reservoir site.

Staff has commissioned a study of various potentially technically viable alternatives for replacing the existing 4th St SE Reservoir. Mr. Verne Jacobson of TKDA Engineers and Mr. Bill Angerman of WHKS Engineers will present the results of that study.

Following the consultants' presentation, RPU staff will present a plan for soliciting input from other appropriate parties/organizations/City government representatives for Utility Board consideration in selecting the appropriate location and type of storage facility to replace the existing 4th St SE Reservoir. Staff anticipates City Council concurrence with the Board's decision would be necessary (and Park Board approval as well depending on the alternative selected). Proceeding with design and construction of the replacement reservoir would require approval by the Utility Board and the City Council. Design and construction of the proposed reservoir would be administered by the City Public Works Department.

General Manager

Date

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FOR CAPITAL PURCHASES/BIDS/MAJOR PROJECTS:

The Water Utility is charged with financing the costs of existing water system infrastructure replacement. Therefore, the 2012 Water Utility capital budget includes \$100,000 for the design phase of the 4th St SE Reservoir replacement, and the current five-year Water Utility capital budget includes \$2,000,000 for construction of a 2,000,000 gallon replacement reservoir during the 2013 - 2014 time period.

Initial conversations have taken place with Public Works Department personnel related to the fact that the City's Water Availability Charge (WAC) funds are collected to pay for the construction of additional (non-replacement) water storage capacity (approximately 1,400,000 gallons of storage for the 4th St SE Reservoir Replacement Project). A decision related to that aspect of the project remains to be made.

UTILITY BOARD ACTION REQUESTED:

This is an informational presentation.	Utility Board feedback is requested,	but no formal	Board action is
required at this time.			