



Date: February 18, 2013
To: Water Utility Board
From: Al Larson, PE, BCEE
Re: **Request to Advertise for Engineering Design Proposals**
Project: **Reservoir 113 Rebuild (Lakeview Reservoir)**

General Scope

Madison Water Utility is seeking to advertise for proposals from interested, qualified firms to provide professional engineering services for the reconstruction of Reservoir 113 (Lakeview Reservoir) located near Northport Drive just north of Warner Park. Professional engineering services shall include but may not be limited to planning, public participation support, alternative development, site layout, design, coordination, and construction administration for the construction of a storage facility on the existing reservoir site. The reservoir shall provide needed storage capacity to Pressure Zone 5 and also to Pressure Zone 6E.

Background

The Lakeview Reservoir is the oldest elevated reservoir in the Madison System and has reached the end of its useful life. It provides service to Pressure Zone 5 and has a capacity of 55,000 gallons. The Utility's Master Plan has identified the reservoir as a priority project due to its age and small capacity. It does not provide the needed volume for either fire protection or emergency reserve.

The Master Plan also identified the need for additional storage capacity in the north end of Pressure Zone 6E. The storage capacity need was established by the Master Plan at 1.0 million gallons to provide the necessary fire protection and emergency backup for the system. This recommendation was verified during system computer modeling conducted as part of the East Side Water Supply Project. The proposed storage volume would hydraulically balance the north end of the system.

Staff Availability

MWU Engineering staff does not have the expertise in foundation and structural engineering to complete this project. MWU will work closely with the selected consultant by leading the public participation effort and providing hydraulic modeling and analysis.

Estimated Cost

Total project budget for the reconstruction of Reservoir 113 is established at \$3.1 million.

Project and MWU mission

This project corrects an identified system storage deficiency and provides needed fire protection and emergency backup capacity. The project would bring Pressure Zone 5 and the north end of Pressure Zone 6E up to current level of service standards.