Blaine City Hall
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WORKSHOP ITEM *Jon Haukaas, Director of Public Works*

REVIEW PROPOSAL BY BARR ENGINEERING FOR WELLHOUSE REHABILITATION PROJECT SERVICES

The water outage issues from the spring of 2017 prompted the City to begin an assessment of not only the water system communication system, but also the City's water system wellhouses. The Fire Marshall, staff from SBM Fire and Blaine Public Works staff inspected each water supply wellhouse location in June 2017. The results of the inspection identified a number of deficiencies and recommendations for corrective action. All issues requiring immediate attentions have been addressed, however a more detailed plan of action to improve the overall system still needed to be completed.

Barr Engineering Co. (Barr) has been heavily involved in our most recent water system improvement and therefore has the most in-depth knowledge of current conditions. Barr was originally selected through a competitive process for the Northeast Wellfield study to evaluate the siting of wells 17-21. Barr was later selected through a competitive qualification-based process to update the City's Water System Comprehensive Plan. Based on their knowledge and service provided, Barr was also selected to perform an audit and develop improvements to our utility SCADA radio/network system.

The wellhouses, associated controls, and communication systems are an integral component of the water system. Therefore, staff leveraged this knowledge by meeting with Barr to review the findings of the Fire Marshall and consider options for future improvements. Barr was tasked to develop a proposal that would lead the City through a comprehensive Wellhouse Rehabilitation Project plan, which has since been submitted for our consideration.

The project will include the following engineering tasks:

- Detailed evaluation and condition assessment of the wells, pumping equipment, casings and screens, or open holes prior to all other work.
- Detailed evaluation of existing wellhouses including survey and utility locates.
- An assessment of where water from each well could be treated in the future and the impact of that on the current wellhouse rehabilitation project
- Wellhouse standardization design (chemical feed systems, building aesthetics, etc.)
- Wellhouse replacement sequence/schedule based on the water comprehensive plan

(performed under separate contract) and water model for needed water supply
- Preparation of plans and specifications for bidding and construction in two bid packages, scheduled to bid in summer of 2018 and spring of 2019
- Preparation of opinion of probable construction cost for annual construction
- Construction support during key milestones
- Attendance and support at several meetings over the course of the project
- Presentation at City Council meetings, as requested by city staff

Financial Impact

The project will be funded from the Water Enterprise Capital Improvement Fund. Total estimated fees are broken down as follows:

Design Phases

Pre-design	$ 98,000
Bid package 1 design and bidding	$245,000
Bid package 2 design and bidding	$205,000

Construction Administration Phases

(estimated time and expenses)

Bid package 1 construction (2018)	$125,000
Bid package 2 construction (2019)	$125,000
TOTAL	**$798,000**

Coordination of the upgraded communications network programming is critical to the success of the many improvements the City is concurrently doing to its water system. Barr has the best understanding and involvement in these many project components to ensure our continued success. Additionally, Barr continues to provide exceptional service to the City.

Staff recommends the City Council accept the proposal from Barr Engineering to provide project services for the City's Wellhouse Rehabilitation Project.