



City of Blaine Anoka County, Minnesota

Blaine City Hall
10801 Town Sq Dr NE
Blaine MN 55449

Legislation Text

File #: RES 21-008, Version: 1

ADMINISTRATION - *Jon Haukaas, Director of Public Works*

APPROVE CONTRACT WITH BARR ENGINEERING FOR DETAIL DESIGN AND CONSTRUCTION SUPPORT OF WELL 16 AND BOOSTER STATION IMPROVEMENTS

Barr Engineering has been awarded the contract to design improvements for city wellhouses and associated water system components as part of an RFP solicitation process in 2018. The work is being completed through a series of phases in order to conduct the improvements and investigations while maintaining service to Blaine customers. The City awarded through MO 19-73 a contract to Barr Engineering on March 21, 2019 to evaluate the Booster Station and determine the current and future need for the booster station as well as options for rehabilitation. The work included considering the need for the pumps under current conditions, conditions after the WTP4 is online, and 2040 projected conditions. Additionally, the piping, motors, pumps, and all controls were evaluated for condition, size, and rehabilitation needs. The deliverables included alternatives with cost estimates to best decide how to bring the station back to providing the service necessary for the Blaine water system. This contract is a result of that earlier work.

Project Scope

Based on the previous evaluation on the condition of the facility that Barr provided to the City, the project will include the following additional improvements at the Booster Pump Station/Well 16 facility:

- Well 16 rehabilitation, including test pump well with existing equipment, removing and rebuilding existing pump and motor, video well, develop well by over-pumping to remove sand.
- Install VFDs on the 2,500 gpm booster pump and the other 5,000 gpm booster pump.
- Rebuild the piping/valves for 5,000 gpm booster pump that was not rebuilt in 2020.
- Replace VFDs for Well 16 pump and Well 16 booster pump
- Replace all electrical and controls systems, including new switchgear and motor control equipment (new SCADA panel designed to the City's SCADA Standard (per 2019 SCADA Improvements Project) was installed in 2020 and will remain).
- Remove existing generator from inside the building and provide new generator outside the building

- Build a separate chemical room in the space currently occupied by the generator to utilizing liquid chlorine
- Replace all other existing chemical feed equipment for continuity with other wellhouses
- Relocate booster pump 1 to allow more room for the new chemical room
- Replace all above-grade piping and appurtenances (booster pump valves and reservoir fill pipe control valve were replaced in 2020 and will remain, assume pipe supports will be reused)
- Remove the air tank associated with Well 16 and replace it with an air/vacuum release valve on the Well 16 discharge piping
- Remove the existing chiller cooling system and replace it with new system that meets code
- Installing canopy above exterior doors
- Perform structural assessment on building and design minor repairs
- Replace all lights and HVAC components

The project will be completed in the following phases and estimated fees:

Phase 1: Project kick-off, and pre-design	\$ 11,500
Phase 2: Detailed design	\$154,000
Phase 3: Construction assistance	\$ 84,000

Financial Impacts

This project was included in the \$600,000 appropriated for Well 16 improvements in the Water Capital Improvement Fund budget. Total estimated fees for the project are \$249,500. Upon completion of the design work, a construction project will be advertised and brought to the City Council for approval under this project budget also.

By Motion, adopt the Resolution.

WHEREAS, the City of Blaine desires to evaluate the Well 16/Booster Station facility and determine the current and future need for the facility as well as options for rehabilitation; and

WHEREAS, a review of the proposal showed that Barr Engineering will provide the best value to the City's needs, and

WHEREAS, sufficient funding exists through the Water Enterprise Fund reserves for this contract.

NOW, THEREFORE, BE IT RESOLVED, that the City Council of the City of Blaine authorize the Mayor and City Manager to enter into a contract with Barr Engineering for Design and Construction Support of Well 16 and Booster Station Improvements in an amount not to exceed \$249,500.00.

BE IT FURTHER RESOLVED by the City Council of the City of Blaine that, where allowed, the City intends and reasonably expects to reimburse itself for the payment of this contract out of the proceeds of a borrowing (general obligation water revenue bonds) to be made by the City after the date of payment of the expenditures.

PASSED by the City Council of the City of Blaine this 20th day of January, 2021.