



## Request for City Council Committee Action from the Department of Public Works

**Date:** December 9, 2014

**To:** Honorable Kevin Reich, Chair Transportation & Public Works

**Referral to:** Honorable John Quincy, Chair Ways & Means Committee

**Subject: Amendment 1 to Engineering Services Agreement with CDM Smith for  
Fridley Filtration Plant Rehabilitation**

### Recommendation:

Authorize the proper City officials to amend the engineering services agreement with CDM Smith, adding \$4,622,000.00 for final design and construction phase services for the rehabilitation of Fridley Filtration Plant. The total fee will become \$5,587,000.00. Funds are available in the Capital Budget. No additional appropriation is required.

### Previous Directives:

December 13, 2013 - Council authorized development of an engineering services agreement with CDM Smith for \$965,000 for Preliminary Design phase services for the Rehabilitation of Fridley Filtration Plant.

July 19, 2013 – Council authorizes a Request for Proposal (RFP) for design and construction administration services for the Fridley Filtration Plant Rehabilitation project, which will enhance taste and odor control.

December 11, 2013 – Council adoption of 2014 Capital Budget, including \$4,000,000 for WTR24 Fridley Filter Plant Rehabilitation.

December 12, 2012 – Council adoption of 2013 Capital Budget, including \$2,700,000 for WTR24 Fridley Filter Plant Rehabilitation.

December 14, 2011 – Council adoption of 2012 Capital Budget, including \$100,000 for WTR24 Fridley Filter Plant Rehabilitation.

### Department Information

Prepared by: Dale Folen, Senior Professional Engineer, 661-4908

Approved by: \_\_\_\_\_  
Steven A. Kotke, P.E., Director of Public Works

Presenters in Committee: Dale Folen and Glen Gerads, Director

### Reviews

- Permanent Review Committee (PRC): Approval X Date 6/11/2013
- Civil Rights Approval Approval     Date
- Policy Review Group (PRG): Approval     Date

## **Financial Impact**

- No financial impact

## **Community Impact**

- City Goals - Living well, A hub of economic activity and innovation, Great Places, A City that works

## **Supporting Information**

### Project Background

The City constructed the Fridley Filtration Plant (FFP) in two phases during the 1920s to increase the filtration capacity of its potable water system. The plant was operated until the late 1960's when the 10 north filters were rebuilt. Several years later, the 10 south filters were rebuilt. During those reconstruction projects, some equipment necessary for filter operation was replaced, including under-drain systems, filter media, and some of the control valves. Much of the original water piping, backwash supply system, and valves remain in service today. Minneapolis is now facing multiple issues that warrant rehabilitating the filters.

The City conducted (or commissioned) multiple investigations between 2010 and 2012 to evaluate the existing filter media and underdrain conditions, assess long-term water quality goals (in particular with respect to taste and odor control), evaluate technologies to meet those goals, and evaluate operational redundancies needed to meet the desired level of service.

The results of the evaluations and studies identified the major elements for rehabilitation of the plant. The City has included this project in the 5-year capital program to ensure reliability and functionality of FFP for the foreseeable future. The program will extend the life of the existing system, improve filtered water quality and improve system reliability. The construction cost has been estimated to be \$44,500,000.

### Engineering Services Contract

The engineering services agreement has been divided into two parts. The first part, currently nearing completion, included Initial Investigations and Preliminary Design. The current request is for the second part, which will include Final Design and Construction Phase services. A relatively small amendment is planned for the distant future, to develop "record drawings" for the project. That scope of work will be defined near the end of the construction period.

The Initial Investigations work evaluated several ideas to refine the scope of the construction project, including detailed comparison of viable alternatives, and consideration of potential project interactions with other needs in the water treatment system. The Preliminary Design developed a 30 percent complete set of project drawings and a Basis of Design report.

The engineering fee for the final design and bid phase services will be \$ 1,634,000, based on about 10,800 work hours for the multi-discipline team. The engineering fee for services during construction will be \$ 2,988,000, based on 19,300 work hours in the years 2016 to 2019. The agreement will use an hourly-not-to-exceed format.