



Request for City Council Committee Action From the Department of Public Works

Date: November 17, 2005
To: Honorable Sandra Colvin Roy, Chair Transportation & Public Works Committee
Referral to: Honorable Barbara Johnson, Chair Ways & Means/Budget Committee
Subject: **Amendment #2 to Contract with Adolfson & Peterson Construction for Columbia Heights Membrane Filtration Plant**

Recommendation:

Authorize execution of amendment to contract with Adolfson and Peterson increasing the contract by \$581,024 (approximately 1.7%) for Change Order #4, for a total contract price of \$36,337,127.78. Funds are available within the project budget (Water, Capital, 7400/ 950/ 9515/ C5200023).

Previous Directives:

- On November 21, 2001, the City Council authorized preparation of an agreement with Black & Veatch for engineering and architectural services for design and construction phase services for the Columbia Heights Membrane Filtration Plant.
- On November 21, 2001, the City Council accepted the bid of Ionics, Inc. for this project (O.P. #5549), and authorized the development of the original agreement for this project.
- On July 11, 2003 the Council accepted the low bid of Adolfson & Peterson, Inc in the amount of \$33,858,000 for membrane filtration plant at Columbia Heights (O.P. #6074).
- On August 22, 2003, the City Council authorized the execution of amendment to contract with Adolfson and Peterson increasing the contract by a maximum of \$445,000 for removal of buried debris at site including asbestos-containing materials.
- On December 23, 2004, the City Council authorized the execution of Amendment #1 to contract with Adolfson & Peterson increasing the contract by \$1,453,104 for Change Orders #1, #2, and #3, and extending the time period until completion.

Prepared by: Dale A. Folen, P.E., Engineering Services, ext. 4908

Approved by: Klara A. Fabry, P.E., City Engineer, Director of Public Works

Klara A. Fabry, P.E., City Engineer, Director of Public Works

Presenters: Dale A. Folen, P.E., or Shahin Rezanian, Interim Director of Water Treatment and Distribution Services, ext. 2418

Financial Impact (Check those that apply)

- No financial impact - or - Action is within current department budget.
(If checked, go directly to Background/Supporting Information)
- Action requires an appropriation increase to the Capital Budget
- Action requires an appropriation increase to the Operating Budget
- Action provides increased revenue for appropriation increase
- Action requires use of contingency or reserves
- Other financial impact (Explain):

Request provided to the Budget Office when provided to the Committee Coordinator

Background/Supporting Information

The Public Works Capital Improvement Plan includes building a new 70 million gallon per day Water Treatment Plant using ultrafiltration membranes as the treatment technology. This new plant, called the Columbia Heights Membrane Filtration Plant (CHMFP), will replace the existing Columbia Heights Filtration Plant, which was mostly constructed in the period from 1913 to 1919. The primary objective of the overall plan is to provide physical removal of pathogenic microorganisms and improve the quality of water delivered to the citizens of Minneapolis.

Current Request

Change Order #4 includes 82 specific items of changes or project clarifications for the contract with Adolfson & Peterson Construction (A&P) for the CHMFP. All items were reviewed by our plant design engineering consultant to confirm the prices were reasonable. The largest cost items are summarized as follows:

- Fabrication and delivery of pipe segments for future installation of four final Ultrafiltration (UF) units, at a cost of approximately \$127,000. These pipe segments match the systems already installed on the other 36 UF units. Purchasing these project-specific pipe segments at this time will reduce future costs in engineering, shop drawing preparation and review.
- Modifications to the design of the chlorine gas storage room. During construction, city operations personnel reviewed the system and identified ways to improve operability and safety. Cost of these changes is approximately \$54,000.
- Expedite the relocation of an existing chlorine gas scrubber to the new plant for a cost of approximately \$17,000, to minimize time when the plant was without this safety device.
- Additional roadway base preparation for about \$13,800.
- Several changes were needed to improve coordination between the UF equipment supplied by GE/Ionics and the systems provided by A&P:
 - Adding grounding conductors for many solenoid valve circuits, at a cost of about \$61,000, that were shown in a late GE/Ionics shop drawing, developed after the project bid by A&P.
 - Adding local control panels for chemical metering pumps to allow operation methods to match those of similar systems included in the project, at a cost of approximately \$26,000.
 - Changing installation features for Membrane Integrity Test panels, at a cost of about \$23,000, to coordinate with information provided in a late shop drawing, developed after the project was bid.

The change order includes several deductions to project:

- Back charges for the repair of a pipe damaged by the contractor, at a credit of \$17,700.
- Several smaller items that were determined to be able to be removed from the project.

The total cost of Change Order #4 is \$581,024.00, about 1.7% of the original bid price, can be paid for by contingency funds in the overall project budget. All Change Orders combined to-date amount to about 7.3 percent of the original bid price.

C: Shahin Rezanian, Interim Director of Water Treatment and Distribution Services
 David Ybarra, Assistant Director, Purchasing