

TO:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON JUNE 8, 2016
FROM:	JOHN BRAAM, P. Eng. MANAGING DIRECTOR ENVIRONMENTAL & ENGINEERING SERVICES & CITY ENGINEER
SUBJECT:	CONTRACT PRICE INCREASE: TENDER NO. T13-73 ELGIN MIDDLESEX PUMPING STATION UPGRADES AND INCREASE IN ENGINEERING FEES

RECOMMENDATION

That, on the recommendation of the Managing Director, Environmental & Engineering Services & City Engineer, the following actions **BE TAKEN** with respect to the contract for the Elgin Middlesex Pumping Station Upgrades Project and the Engineering Fees for the same (EW3540):

- (a) the Elgin Middlesex Pumping Station Contract with Baseline Constructors Inc., 550 Conestogo Rd, Waterloo, ON, N2L 4E3, **BE INCREASED** by \$200,000.00 to \$1,580,269.01 (excluding H.S.T.) in accordance with Section 20.3(e) of the City of London's Procurement of Goods and Services Policy ; and
- (b) the Engineering Fees for AECOM (AECOM), 250 York Street, Citi Plaza, Suite 410 London, ON, N6A 6K2, **BE INCREASED** by \$39,677.00 (excluding H.S.T.) to carry out the resident inspection and contract administration for the project in accordance with the fee estimate on file, in accordance with Section 15.2(g) of the City of London's Procurement of Goods and Services Policy;
- (c) future annual operating cost savings of \$50,000 **BE RECOGNIZED** as a result of this project, it being noted that these costs are a result of replacing older maintenance prone pumps and equipment with new more energy efficient pumps and equipment, and will be considered within future Water Operating Budgets;
- (d) the financing for this project **BE APPROVED** as set out in the Sources of Financing Report attached hereto as Appendix "A";
- (e) the Civic Administration **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with this project; and
- (g) the Mayor and City Clerk **BE AUTHORIZED** to execute any contract or other documents, if required, to give effect to these recommendations.

PREVIOUS REPORTS PERTINENT TO THIS MATTER

- [CONTRACT AWARD: TENDER No. t13-73 Elgin Middlesex Pumping Station Upgrades, Civic Works Committee Meeting on September 23, 2013, Agenda Item #3](#)

BACKGROUND

Purpose:

This report recommends an increase in contract price of a tender to the contractor,

Baseline Constructors Inc. and an increase in consulting fees for AECOM for the Elgin Middlesex Pumping Station Pump Upgrades.

Discussion:

This project is being undertaken in order to replace the existing pumps at the Elgin Middlesex Pumping Station which have exceeded their life expectancy, with smaller more energy efficient pumps which will be suited to the operating strategy for this facility in conjunction with the Southeast Pumping Station and Reservoir (SERPS). The pump upgrade at the Elgin Middlesex Pumping Station is required as part of the system integration work necessary for SERPS to operate within the City of London System.

The Elgin Area Water Supply System Master Plan recognizes that the Southeast Reservoir and Pumping Station is part of the strategy for deferring upgrades to the Elgin Area Water Treatment Plant and for enhancement of security including the provision of backfeed capability to the Primary Elgin System Users in an emergency.

Delays to the SERPS facility initially created a need to delay this project after the project was partly completed. Because of the high costs associated with the delay, it was necessary to mitigate the delay to this project and find an alternative to allow the project to move forward while having adequate pumping reliability to the City of London while SERPS was delayed. This included purchasing and installing larger impellers to pump to the City of London System in the short term with the new pumps. Later when SERPS is brought online, the original pump impellers will be reinstalled. Improvements to the control system for the Surge Facility were also added to the project as the existing control system had exceeded its life expectancy. Additional commissioning work will be needed for both the larger impellers and the surge facility than was in the original project scope.

HELP Clean Water Funding

The funding to construct this project is accommodated in the approved Water Capital Works Budget and is available from the EW3540 Elgin Middlesex Pumping Station. This project benefits as being eligible for HELP Clean Water funding from both the Federal and Provincial Governments as part of the Southeast Reservoir and Pumping Station Project at the level of one third funding from each of total project cost.

Hydro One RETROFIT Grant

The Elgin Pumping Station Pump Upgrade did receive approval for subsidy from the OPA under the RETROFIT Grant Program. The approved grant was for up to \$367,000 based on off peak pumping of the facility. There is a requirement to monitor energy consumption for a period of 5 years.

It is anticipated that with the implementation of smaller pumps better suited to the operating strategy, and having the ability to pump at off peak consumption period, will reduce costs by approximately \$50,000 annually. These operating cost savings will be recognized in the 2017 and future years Water Budget.

Consulting Services:

AECOM has completed the design services for the project and has been retained to undertake the contract administration for this project. Due to the changes to the project, administration is recommending that AECOM's fees be increased to reflect the change in scope and to carry out the remainder of engineering services to complete this project for the provided fee estimate of \$39,677.00 (excluding H.S.T.). AECOM has completed hydraulic modelling for the surge facility, hydraulic modelling for the larger pump and impeller as well as administration of the upgrade work. As mentioned, additional commissioning work will also be required for the additional work.

Conclusions:

A change in scope for this project was necessary. This caused price increases for:

- i) the Elgin Middlesex Pumping Station Pump Upgrades Project, Tender T13-73 (EW3540), which requires a construction price increase, and
- ii) The engineering Services Fees for AECOM. The use of AECOM to complete the remainder of engineering services for this project is in the best financial and technical interests of the City.

There is funding available to accommodate these price increases within the available budget for this project.

Funding for this project is being provided for up to two-thirds of eligible project costs by the Federal and Provincial Governments through Help Clean Water Funding, with one-third of project costs funded by the City of London. City staff have requested an extension to the HELP Clean Water Funding for the SERPS Project (which includes this work). It appears that this request is being considered favourably.

Completion of the project will save operating costs to the City of London for the EMPS facility. And the City is eligible for a Grant from Hydro One for this work. City staff have requested an extension to the OPA SaveONEnergy Retrofit Program Grant. This request has been received favorably.

Acknowledgements:

This report was prepared by Patricia Lupton, P.Eng. Environmental Services Engineer, Water Engineering Division.

SUBMITTED BY:	REVIEWED & CONCURRED BY:
ROLAND WELKER, P. ENG. DIVISION MANAGER WATER ENGINEERING	JOHN LUCAS, P. ENG. DIRECTOR, WATER AND WASTEWATER
RECOMMENDED BY:	
JOHN BRAAM, P.ENG. MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING SERVICES & CITY ENGINEER	

May 30, 2016

PAL/jrg

Attach: Appendix "A" – Sources of Financing
c.c. John Simon

Roland Welker
Geordie Gauld
Andrew Henry
Jay Stanford
Baseline Constructors Inc.
AECOM