

TO:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON FEBRUARY 21, 2017
FROM:	KELLY SCHERR, P. ENG., MBA, FEC MANAGING DIRECTOR, ENVIRONMENTAL AND ENGINEERING SERVICES & CITY ENGINEER
SUBJECT:	SOLE SOURCE AWARD ACOUSTIC FIBER OPTIC MONITORING CONTRACT PROJECT No. EW3538

RECOMMENDATION

That, on the recommendation of the Managing Director, Environmental and Engineering Services & City Engineer, the following actions **BE TAKEN** with respect to the Acoustic Fibre Monitoring (AFO) Monitoring Contract:

- (a) The contract value for Pure Technologies Ltd., 3rd Floor, 705-11 Avenue SW, Calgary, Alberta, T2R 0E3, **BE APPROVED**, in accordance with section 14.3(c) of the Corporation of the City of London's Procurement of Goods and Services Policy, in the amount of \$150,922 (excluding H.S.T.) to continuously monitor 15.86km of the City's most critical watermains;
- (b) The financing for this project **BE APPROVED** from current available budget as set out in the Sources of Financing Report attached hereto as Appendix 'A';
- (c) the Civic Administration **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with this project;
- (d) 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
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[Sole Source: Concrete Pressure Pipe Inspection Fibre Optic Installation - EW3717 - Board of Control Meeting on April 14, 2010 - Agenda Item #27](#)

BACKGROUND

Purpose

This report recommends the award of a one-year Acoustic Fiber Optic Monitoring contract to Pure Technologies Ltd. The contract includes continuous condition monitoring of many of the City's most critical watermains. This is the 7th year that Pure Technologies Ltd has provided monitoring services to the City.

Background

In 2006 the City began investigating less invasive pipeline inspection technologies capable of determining the condition of our watermains. The purpose of these non-invasive inspections is to identify minor condition problems before they become catastrophic failures. The field of continuous pipeline monitoring evolved in the late 2000's and during this time the City selected a technology based on fibre optic cable offered by Pure Technologies Ltd. Pure Technologies fibre optic cable was subsequently installed in 15.9km of large diameter watermain throughout the City. Since this time, Pure Technologies has been under contract with the City to provide monitoring services. The

first contract with Pure Technologies was initiated in 2011 and subsequently renewed in 2014.

Discussion

Pure Technologies services provides continuous monitoring of 15.9 km of the City’s most critical large diameter water mains. In the event of detecting a problem, Pure Technologies provides details of the magnitude of the issue and the detected location. The Acoustic Fibre Optic technology allows monitoring of watermains in areas that are otherwise unreachable including watermains located within environmental sensitive areas. The monitoring data is used by staff to identify possible emergencies and informs the short and long-term capital budgeting process.

A warranty component of the contract was added in 2014 and covers all materials associated with the monitoring system. In 2015, a component of the system was replaced under warranty at no cost to the City at a replacement value of \$75,000.

Pure Technologies has provided the City with monitoring services since 2011 with a high quality of customer service. Pure’s acoustic fibre optic technology is proprietary and patented and as such, a sole source procurement is recommended. As noted section 14.3(c) of the City’s Procurement of Goods and Services Policy, services which are unique to one supplier where no alternative or substitute exists may proceed as a sole source subject to Council approval.

Conclusions

It is recommended that Pure Technologies be retained in accordance with Section 14.3 (c) (Sole Source) of the Procurement of Goods and Services Policy to continue to provide the Acoustic Fiber Optic monitoring services of the City’s most critical watermains. The monitoring data provides high value information that helps to identify possible emergencies and informs the capital budgeting process.

<p>PREPARED BY:</p>	<p>REVIEWED & CONCURRED BY:</p>
<p>SCOTT MATHERS, MPA, P. ENG. DIVISION MANAGER WATER ENGINEERING</p>	<p>JOHN LUCAS, P. ENG. DIRECTOR, WATER AND WASTEWATER</p>
<p>RECOMMENDED BY:</p>	
<p>KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING SERVICES & CITY ENGINEER</p>	

February 13, 2017

Attach: Appendix “A” – Sources of Financing
 CC. Stantec Consulting Ltd.
 John Freeman – Manager, Purchasing & Supply