

TO:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON JULY 20, 2015
FROM:	JOHN M. BRAAM MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING SERVICES AND CITY ENGINEER
SUBJECT	SPONSORED RESEARCH AGREEMENT WITH THE UNIVERSITY OF WATERLOO – SUSTAINABLE MANAGEMENT OF WATER INFRASTRUCTURE

RECOMMENDATION

That, on the recommendation of the Managing Director, Engineering Services and City Engineer, the following actions **BE TAKEN** with respect to the Sponsored Research Agreement with the University of Waterloo:

- a) the attached proposed agreement to provide funding to support research on the development of tools for sustainable infrastructure **BE APPROVED**;
- b) the financing for the work identified in (a), above, **BE APPROVED** in accordance with the “Sources of Financing Report” attached hereto as Appendix A;
- c) the attached by-law **BE INTRODUCED** at the Municipal Council meeting on July 28, 2015 to authorize the Agreements noted in a), above, on behalf of The Corporation of the City of London, and to authorize the City Engineer to execute the Agreements noted on a) above substantially in the form attached and to the satisfaction of the City Solicitor.

IT BEING NOTED, that all costs are able to be funded from the “Efficiency, Effectiveness and Economy” Reserve Fund from Water and Wastewater without affecting existing budgets or rates.

PREVIOUS REPORTS PERTINENT TO THIS MATTER

None

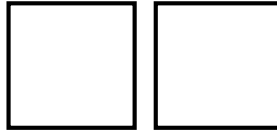
BACKGROUND

PURPOSE

The purpose of this report is to seek the necessary approvals via the proposed by-law (Appendix B) to authorize the approval of the agreement, being the Sponsored Research Agreement – Water, Energy and Affordability: Key Drivers in the Financially Sustainable Management of Urban Water Infrastructure.

DISCUSSION

The University of Waterloo Department of Earth and Environmental Sciences was successful in having their proposal accepted by the Natural Sciences and Engineering Research Council of Canada (NSERC) to investigate key drivers enabling municipalities to manage their urban infrastructure in a financially sustainable manner. The project is proposed to be in partnership with the City of London and other collaborating municipalities including the Region of Waterloo, the City of Waterloo and the City of Niagara Falls.



Some of the anticipated benefits of this research program are:

- to better understand the drivers of and enhance future forecasting of electricity costs;
- to better understand the dynamics of water and wastewater reserve funds to supplement our general reserve fund principles;
- to determine elasticity of water demand relative to rate increases and what the “upper limit” is for such rates;
- to assess real-life inflation as compared to an assumed 3% future inflationary rate and explore the sensitivity of inflation rates on the sustainability equation; and,
- to participate in this knowledge-sharing and benchmarking opportunity to see how our situation aligns with the other participating municipalities.

Many of these issues have been highlighted in the 2015 Water and Wastewater Budgets as major factors that will affect our ongoing financial sustainability. The research will assist the City in its longer term financial planning by narrowing information gaps and benchmarking our situation to other municipalities.

Funding for the annual research contribution is intended to be made available from the “Efficiency, Effectiveness and Economy” Reserve in both Water and Wastewater that is funded through contributions from the Vacancy Management Program. These Reserves are “to be used as a one-time funding source for initiatives recommended by the Senior Leadership Team” that contribute to the efficiency/effectiveness of operations. This research program aligns with the intended purpose of these Reserves and furthermore does not directly impact the 2015 or future Water/Wastewater budgets.

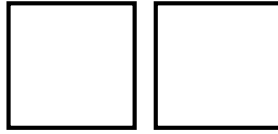
The partnership arrangement and funding from NSERC provides a tremendous leveraging opportunity as London’s funding supports research approaching \$1,000,000 in value. London’s cost is \$25,000 per year for 3 years with the addition of in-kind staff support time. The collaboration of various municipalities will ensure real-world municipal data, assumptions and guidance are applied.

NEXT STEPS

Environmental and Engineering Services staff will ensure the City Solicitor’s office approves the final wording of the Agreement.

SUBMITTED BY:	SUBMITTED 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	

- Appendix A Sources of Financing
- Appendix B By-law to approve and authorize the Agreement
- Schedule A Sponsored Research Agreement SRA# 059300 - draft



APPENDIX B

Bill No.

By-law No.

A by-law to approve and authorize an Agreement between The Corporation of the City of London and the University of Waterloo, to undertake collaborative research exploring Water, Energy and Affordability: Key Drivers in the Financially Sustainable Management of Urban Water Infrastructure; and to authorize the Managing Director, Environmental and Engineering Services and City Engineer to execute the Agreements

WHEREAS section 5(3) of the *Municipal Act, 2001*, S.O. 2001, c. 25, as amended, provides that a municipal power shall be exercised by by-law;

AND WHEREAS section 9 of the *Municipal Act, 2001*, S.O. 2001, c. 25, as amended, provides that a municipality has the capacity, rights, powers and privileges of a natural person for the purpose of exercising its authority under this or any other Act;

AND WHEREAS it is deemed appropriate for The Corporation of the City of London (the "Client") to approve and authorize an Agreement with the University of Waterloo (the "University") with respect to collaborative research exploring Water, Energy and Affordability: Key Drivers in the Financially Sustainable Management of Urban Water Infrastructure;

AND WHEREAS it is appropriate to authorize the Managing Director, Environmental and Engineering Services and City Engineer to endorse the Agreements on behalf of the City;

NOW THEREFORE the Municipal Council of The Corporation of the City of London enacts as follows:

1. The agreement between the City and the University of Waterloo for collaborative research exploring Water, Energy and Affordability: Key Drivers in the Financially Sustainable Management of Urban Water Infrastructure, substantially in the form attached as Schedule A to this By-law, are hereby approved and authorized.
2. The Managing Director, Environmental and Engineering Services and City Engineer is authorized to execute the Agreement authorized in section 1 of this by-law, substantially in the forms attached and to the satisfaction of the City Solicitor.
3. This by-law shall come into force and effect on the day it is passed.

PASSED in Open Council XXX, 2015

Matt Brown
Mayor

Catharine Saunders
City Clerk

First reading – XXXX, 2015
Second reading – XXXX, 2015
Third reading – XXXX, 2015