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TO:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON MAY 29, 2012
FROM:	JOHN BRAAM, P.ENG. ACTING EXECUTIVE DIRECTOR, PLANNING, ENVIRONMENTAL & ENGINEERING SERVICES & CITY ENGINEER
SUBJECT:	APPOINTMENT OF CONSULTING SERVICES FOR WATER RESOURCES AND SLOPE STABILITY EVALUATION OF THE CENTRAL THAMES SUBWATERSHED STUDY

RECOMMENDATION

That, on the recommendation of the Acting Executive Director, Planning, Environmental and Engineering Services and City Engineer, the following actions **BE TAKEN** with respect to the appointment of a consultant for the Water Resources Components and Slope Stability Evaluation for a Central Thames Subwatershed Study:

- (a) Delcan Corporation (Consultant) 1069 Wellington Road South, Suite 214, London, Ontario, Canada, N6E 2H6 **BE APPOINTED** Consulting Engineers for the Water Resources Components and Slope Stability Evaluation of the Central Thames Subwatershed Study in the amount of \$479,783. This value includes a contingency allowance of \$110,000, excluding HST, in accordance with Section 15, Clause 15.2(d) of the Procurement of Goods and Services Policy;
- (b) the financing for the project **BE APPROVED** in accordance with the "Sources of Financing Report" attached hereto as Appendix "A";
- (c) the consulting fees for the project identified in (a), above, **BE IN ACCORDANCE** with the estimate, on file, which is based upon the Fee Guideline for Professional Engineering Services, 2006, recommended by the Ontario Society of Professional Engineers;
- (d) the approvals given herein **BE CONDITIONAL** upon the Corporation entering into a formal contract with the consultant for the work; and
- (e) 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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Built and Natural Environment Committee, June 13, 2011, Climate Change Adaptation Strategy Phase 1 Completion

Environment and Transportation Committee, September 27, 2010, Phase 1 – Climate Change Adaptation Strategy Studies

Environment and Transportation Committee, July 14, 2008, Appointment of the consultants for Phase 1 Climate Change Adaptation Strategy

Board of Control, May 28 2008, 2008 Wastewater and Treatment Emergent Projects (a) - ES2470 Climate Change Strategy

Environment and Transportation Committee, December 10, 2007, Review of Rainfall Intensity Duration Frequency Curves for City of London under Climate Change

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BACKGROUND

Purpose:

This report recommends the appointment of an engineering consultant to provide engineering services to complete the Water Resources Components and Slope Stability Evaluation for a Central Thames Subwatershed Study.

Context:

In 2011, the Planning and Environmental Engineering Services Department of the City of London was directed by City Council to undertake the next set of Climate Change Adaptation Strategy studies including developing the water resources and slope stability evaluation for a Central Thames Subwatershed Study using the Climate Change Upper Bound (CC_UB) scenario to assess the impacts on the City's infrastructure and recommend mitigation strategies including associated cost estimates and implementation triggers that will provide input for development of climate change Adaptation Policies.

The Central Thames Study Area is shown on the attached map in Appendix B. The Central Thames Study Area includes two distinct components:

- I. Drainage areas to the Thames River completely contained within the Central Thames area boundaries shown on the map in Appendix A (including Meander Creek, McNay Drain, Huron Creek, Masonville Creek, South River, Vauxhall Creek, Dayus Creek, Fox Bar Creek, Trott Drain, Coves System, and other unnamed drainage areas), and,
- II. the Thames River itself, which includes the North, South, and Main Branches of the Thames River within the boundaries of the City.

The two study area components listed above have some important and distinctly different characteristics with respect to water resources and this study. Component I as listed above can generally be characterized as small urban drainage areas that are predominately developed and are completely contained within the City of London and the boundaries of this study. Component II as listed above is a small portion of a large river system that is predominately located outside the City of London.

The main objectives of this subwatershed study include, but are not limited to:

1. develop the water resources analysis (hydraulic, hydrologic, erosion) for the Central Thames Subwatershed;
2. developing a preliminary slope stability evaluation/assessment;
3. determine the risk impact of flooding from extreme storm events for critical City infrastructure and recommend potential risk-reducing measures/strategy; and
4. provide a slope stability strategy to maintain slope stability under extreme storm events and recommend potential risk-reducing measures/strategy.

The Study will be consistent with the Municipal Class Environmental Assessment (EA) process by completing the first phase and appropriate effort of the second phase such that a mitigation strategy is recommended. The Study will also identify SWM requirements for infill or potential redevelopment of sites within the study area such as SoHo and other infill redevelopment areas.

It is noted that as the Springbank Dam structure is currently under litigation and as such will not be assessed in this study. For the purposes of completing hydrologic and hydraulic analyses for the study the Springbank Dam will be included in the models as functioning and in operation as per current Council direction.

Discussion:

Pursuant to the direction from Council the Stormwater Management (SWM) Unit drafted study terms of reference. The terms of reference were circulated to internal divisions and the Upper Thames River Conservation Authority (UTRCA) for comment.

Progress information meetings are recommended to be conducted every two months to update representatives from internal divisions, the UTRCA and other approval agencies in addition to circulating the draft report and recommendations for comment. Alternatively, a steering committee approach was suggested during the consultation process on the terms of reference.

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A steering committee would be comprised of representatives from City Staff, a member from City Council, First Nations, the Ministry of the Environment, the Upper Thames River Conservation Authority and the Ministry of Natural Resources. Staff felt that a steering committee would prolong the study due to additional coordination and consultive requirements. In addition it estimated that costs for this type of steering committee would be in the range of \$50,000 to \$80,000 and as such is not recommended.

Staff reviewed three qualified engineering proposals and recommends award of this work in accordance with Section 15, Clause 15.2(d) of the Procurement of Goods and Services Policy. Delcan completed the Dingman Creek Subwatershed Study Update and the Stoney Creek Municipal Class Environmental Assessment for Undeveloped Lands. This consultant has extensive knowledge of the subwatershed and of the City's infrastructure. Delcan demonstrated competency and expertise in completing multi-disciplinary water resources projects that meet PEESD's requirements. Staff considers this consultant's work plan to be of good value to the City. The total estimated project cost for the work is \$369,783, excluding contingency and HST. Staff recommends that a contingency of \$110,000 be carried for physical surveys, communication activities with the public, special interest groups, First Nations and approval agencies and additional analyses if required. The use of the contingency funds would be considered only upon additional work required beyond the current scope and work plan proposal accepted by the City. It is noted that the costs of associated with the progress meetings are included in the cost estimate.

Conclusions:

It is recommended that Delcan be retained as the consultant for the Water Resources Components and slope stability evaluation for a Central Thames Subwatershed Study. The estimated total cost associated with completing these works is \$479,783, including a contingency of \$110,000 excluding HST.

Acknowledgements:

This report was prepared within the Planning, Environmental Engineering Services Department within the Stormwater Management Unit by Billy Haklander, Environmental Services Engineer.

SUBMITTED BY:	RECOMMENDED BY:
BERTA KRICKER, M.ENG., F.E.C., P.ENG. MANAGER OF STORMWATER STORMWATER MANAGEMENT UNIT	JOHN BRAAM, P.ENG. ACTING EXECUTIVE DIRECTOR, PLANNING, ENVIRONMENTAL & ENGINEERING SERVICES & CITY ENGINEER

May 18, 2012

/BH

Attach: Appendix "A" – Sources of Financing
Appendix "B" – Location Map

Cc: John Braam – Acting Executive Director Planning, Environmental and Engineering Services and City Engineer
John Freeman – Manager, Purchasing and Supply
Pat Shack – Budget Analyst
Delcan

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