

Section II – Items for Executive Action

TO: Chair and Members of the Executive Committee
Meeting #8/18, Friday, October 05, 2018

FROM: Darryl Gray, Director, Education, Training and Outreach

RE: **LOW IMPACT DEVELOPMENT STORMWATER MANAGEMENT TREATMENT TRAIN ENHANCEMENTS**
Contract #10008977 – Software Enhancements

KEY ISSUE

Award of a preferred source contract for software enhancements for the Low Impact Development Stormwater Management Treatment Train Tool for Ontario.

RECOMMENDATION

WHEREAS Toronto and Region Conservation Authority (TRCA) is part of a consortium of research partners including Lake Simcoe Region Conservation Authority (LSRCA) and Credit Valley Conservation (CVC);

AND WHEREAS Phase I and II of the stormwater management treatment train tool has been completed by Golder Associates Ltd,

THEREFORE LET IT BE RESOLVED THAT Contract #10008977 for software enhancements to the Low Impact Development Stormwater Management Treatment Train Tool for Ontario be awarded to Golder Associates Ltd. on a preferred source basis for a total cost not to exceed \$85,080, plus HST;

AND FURTHER THAT authorized TRCA officials be directed to take the action necessary to implement the contract including signing and execution of documents.

BACKGROUND

New stormwater management criteria requiring control of runoff volumes and rates has created the need for models and tools to assess whether stormwater management plans submitted by developers are in conformance with the new design standards and goals. TRCA, CVC and LSRCA, collectively referred to herein as the Greater Toronto Area (GTA) conservation authorities (CAs), initiated a project in September 2016 to develop and validate a modelling tool that would support improvements in the planning and design of low impact development (LID) stormwater management across Ontario.

LSRCA was selected as the lead CA providing overall project management and administration of The Low Impact Development Treatment Train Tool (LIDTTT). A competitive selection process to create and develop the tool was undertaken in accordance with the GTA CA's purchasing procedures. Eight proponents were specifically notified of the Request for Proposal (RFP) for the Provision of the LIDTTT, but the RFP was open to all interested proponents.

Three proposal submissions were received, evaluated by a GTA CAs proposal review committee formed for the RFP process. This committee consisted of one senior stormwater modelling specialist and one manager of water resources - technical services, from each GTA CA (a total of six committee members).

Item 9.2

Each GTA CA evaluated the proposals independently, providing scores for each proposal submission in an evaluation spreadsheet reflecting the scoring matrix provided in the RFP. The Ministry of the Environment and Climate Change (MOECC) provided observation and comment but did not officially participate in the evaluation and/or selection of the successful proponent.

Based on this process, Golder Associates Ltd. was selected through a competitive process as the successful proponent to provide the LIDTTT as they were the highest ranked, meeting all of the terms, conditions and objectives defined in the RFP, at a reasonable cost of \$94,208. Each of the three CAs covered one third of the total project cost.

The project, ending in September 2016, produced a functioning Beta version of the LIDTTT, which met the requirements identified in the initial contract between LSRCA and Golder Associates Ltd. The GTA CAs subsequently identified a number of enhancements that were required to improve its functionality and further tailor it for the purposes it was intended. These enhancements included a number of features, including but not limited to the integration of GIS functionality and significant improvements in the tool report generator, which is used to display and present model results for comparison and evaluation.

In order to complete these enhancements, the GTA CAs collectively agreed to request a second proposal submission from Golder Associates Ltd. The resulting proposal was carefully reviewed, and after several meetings and proposal versions, a final proposal was accepted at a cost of \$91,876.

Once approved, the GTA CAs decided that administration of the new proposal should be transferred from LSRCA to TRCA's Sustainable Technologies Evaluation Program (STEP). The rationale for the transfer of administration to STEP was based on the good reputation of the Program in developing stormwater management research, tools and guidance, and acknowledgement of the Program's unique capacity to manage distribution and maintenance of the tool over the long term on behalf of the project partners.

At Executive Committee Meeting #10/16, held on December 9, 2016, Resolution #B123/16 approved the award of a contract to Golder Associates Ltd to undertake the enhancements to the Beta version of the LIDTTT. As per the resolution Golder Associates Ltd. provided software enhancements to a number of features, including but not limited to the integration of GIS functionality and significant improvements in the tool report generator, which is used to display and present model results for comparison and evaluation. The enhancements to the Beta version of the tool were completed in March 2017 finalizing Version 1.0 of the LIDTTT.

Since March 2017 the GTA CAs have held hands-on training sessions for Version 1.0 of the LIDTTT. Through this process a number of unanticipated recommendations for improvements to the LIDTTT have been received through user feedback. The GTA CAs reviewed this feedback and have identified a number of enhancements that will extend the functionality of the current version of the LIDTTT which will help to make it more widely used. In order to complete these enhancements, the GTA CAs collectively agreed to request a third proposal submission from Golder Associates Ltd. The resulting proposal was carefully reviewed, and after several meetings and proposal versions, a final proposal was accepted at a cost of \$85,080. As the contract with Golder Associates Ltd. has expired a new contract must be signed for this Version 2.0 of the LIDTTT.

Item 9.2

RATIONALE

The GTA CAs requires services to provide software enhancements for Version 2.0 of the LIDTTT. Golder and Associates Ltd. has provided a proposal which includes the scope of work and costing that meets the GTA CAs expectations and Golder Associates is familiar with the LIDTTT, per their aforementioned work on the project.

Given Golder Associates Ltd. in-depth knowledge, staff recommends award of the contract on a preferred source basis to Golder Associates Ltd. as per Section 9.3.3 of TRCA's Purchasing Policy, which reads as follows:

The required goods and services are to be supplied by a vendor or supplier having specialized knowledge, skills, expertise or experience that cannot be reasonably provided by any other supplier.

FINANCIAL DETAILS

While the cost for this specific software enhancement assignment is \$85,080, plus HST, the total cost for Version 2.0 of the LIDTTT, Phase 1 is \$136,000. The total cost of the project will be covered by a grant received from MOECC for \$86,000, and \$36,000.00 shared equally from LSRCA, CVC and TRCA, as well as \$14,000 total of In-Kind support from LSRCA, CVC and TRCA which covers project management and technical support relating to testing the LIDTTT and producing the help document and user manual.

TRCA portion of funds for the project will be provided by York Region, the City of Toronto and the Region of Peel from account 416-96.

DETAILS OF WORK TO BE DONE

Work to be undertaken by Golder Associates Ltd. during 2018/2019 includes enhancements related to:

- User Defined
 - Custom Scenarios
 - Custom Soil Type
 - Weighted Event Mean Concentration (EMC) Value Calculation
- Default Values
 - Set Defaults for Manning's N, Depression Storage
 - Set Default % for Paved Surfaces
 - Override GIS-Calculated Area and Length
 - Edit Default EMC
- Error Messaging/Help
 - Opening File Warnings
 - Total Area 100% Check
 - RPT Error Assistance
- GIS Canvas
 - CAD File Upload – Text to be added to Help Guide
 - Google Address Search
- Labelling
 - 'Site Rainfall In' to 'Site Rainfall'
 - 'Volume Control' to 'Depth Control'
 - 'Control' vs 'Reduction' for Design Goal

Item 9.2

- Results Report
 - Time Step Alignment
 - Continuity Error
 - Storage Volumes
 - Update Detailed Report Parameters Printout
- Rainfall-Runoff
 - Route to Outfall to Catchment
 - External Flow
 - Conduit Seepage
 - Split Nodes
 - Node Ponding
 - AES Storm Distributions
 - Built-in Continuous Rainfall and Temperature Data
- Help Guide Update

Report prepared by: Tim Van Seters, extension 5792

Emails: tvanseters@trca.on.ca

For Information contact: Tim Van Seters, extension 5792

Emails: tvanseters@trca.on.ca

Date: October 1, 2018