AGENDA ADDENDUM

9 b) DEVELOPMENT OF A SERIES OF LOW IMPACT DEVELOPMENT RETROFIT GUIDELINES FOR SMALL, MEDIUM AND LARGE MUNICIPALITIES AS PART OF SHOWCASING WATER INNOVATION (SWI) PROJECT

A report on the above mentioned subject as submitted by Christine Zimmer, Manager Water Resource Management and Restoration; John Kinkead, Director Water Resource Management and Restoration; and Gerry Robin, Director Corporate Services is attached as Schedule ‘G’.

Recommended Resolution

RESOLVED THAT the report entitled, “Development of a Series of Low Impact Development Retrofit Guidelines for Small, Medium and Large Municipalities as Part of Showcasing Water Innovation (SWI) Project” be received and appended to the minutes of this meeting as Schedule ‘G’; and
THAT the CVC Board of Directors authorize that Aquafor Beech Limited be awarded the contract for developing the “Infrastructure Optimization: Adaptive Management Planning and Water Management Approach for Small, Medium & Large Municipalities” in the amount of $700,510.00 including applicable taxes.

17. ‘IN-CAMERA’ – LEGAL UPDATES

Updates on the above-mentioned subject will be presented to the members as items (a) and (b).
TO: The Chair and Members
of the Board of Directors,
Credit Valley Conservation

SUBJECT: DEVELOPMENT OF A SERIES OF LOW IMPACT
DEVELOPMENT RETROFIT GUIDELINES FOR SMALL,
MEDIUM AND LARGE MUNICIPALITIES AS PART OF
SHOWCASING WATER INNOVATION (SWI) PROJECT

PURPOSE: To request approval by the Board of Directors of CVC for a
contract above $100,000 as part of the MOE agreement for
Showcasing Water Innovation (SWI) funding.

BACKGROUND:
On January 17th, the Province of Ontario awarded Credit Valley Conservation (CVC) a
$1 million grant through its Showcasing Water Innovation (SWI) Program. In addition to
provincial funding CVC will be receiving over $900,000 dollars of cash and in-kind
ccontributions towards the $3.86 million dollar project titled “Infrastructure Optimization:
An Adaptive Planning and Water Management Approach to Retrofit for Small, Medium
and Large Municipalities”.

The SWI Project (also known as “Infrastructure Optimization: An Adaptive Planning and
Water Management Approach to Retrofit for Small, Medium and Large Municipalities”) involves the design, construction, monitoring, evaluation of demonstration sites across
the watershed. The major deliverable will provide stakeholders with five transferrable
Guidance documents and tools to assist our municipal and private sector stakeholders to
mitigate the negative impacts of urban stormwater runoff.

These documents will vault CVC, our municipal partners and the Province of Ontario
ahead of other provinces while producing opportunity to market technologies and
provide useful tools consistent with CVC’s Strategic Plan and the Region of Peel’s
Council Priorities.

Project Deliverables:
The SWI project includes several initiatives that will examine and/or implement low
impact development (LID) techniques among a variety of settings and land use types.
These initiatives include: LID retrofits on industrial/commercial (IC) lands, road right-of-
ways (ROW), public lands and residential lands. A series of “how to” retrofit guidelines
shall be prepared to provide municipalities, developers, engineers, landscape architects,
contractors and other stakeholders with needed direction and tools for conducting LID
retrofits within these land use types, including best practices on LID design, construction,
maintenance and marketing to residents. Each guideline document will be tailored to best address stakeholders within each land use type for small, medium and large municipalities using various case studies from across Ontario with focus on Halton Hills, Alton, Orangeville and Mississauga as examples of municipal LID retrofits. An overarching urban retrofit guide will provide a ‘top-down’ approach to LID retrofits designed to assist municipalities identify restoration priorities, perform economic analysis, etc.

The direct and indirect outcomes of the project, guidelines and case studies shall include:

- Improved stormwater management in keeping with CVC’s Strategic Plan and the Region of Peel Council Priorities to improve water quality of local waterways, the Great Lakes, and reduce flooding and erosion risks;
- Demonstration of the marketing potential and success of innovative LID technologies;
- Tools for private and public stakeholders to address the perceived barriers to implementing LID in Ontario communities;
- Showcasing CVC and its municipal partners as leaders in Low Impact Development and watershed management;
- Support for municipal efforts to meet provincial requirements under the Water Opportunities Act;
- Addressing urban pollution prevention by providing tools and case studies for public and private stakeholders;
- Performance and maintenance monitoring data to inform municipalities and the private sector on the effectiveness of LID to enhance stormwater management within existing urban areas.

ANALYSIS:

Aquafor Beech Limited has been approved by the province and our 16 other project partners as the lead consultant for the development of the Series of “How To Guides” in recognition of their in-kind contribution and extensive watershed experience. Listed below are key highlights of the value added Aquafor Beech will bring as a partner to this SWI project:

- Aquafor Beech is the lead consultant hired by the City of Mississauga for the design and construction administration for a road ROW project located in the Lakeview District of Mississauga. As this project shall be featured heavily within the case studies and ROW retrofit guideline, having Aquafor manage this task will save time and reduce cost as they will be intimately familiar with the project, barriers encountered, lessons learned, etc.
- Aquafor Beech has been retained by the City of Mississauga to complete the Mississauga Water Quality Strategy Update. This will form a critical component in the Overarching Retrofit Guide showcasing how a large municipality can carryout a city-wide stormwater enhancement initiative.
- Aquafor Beech has pledged $90,000 of in-kind monitoring equipment towards SWI demonstration sites.
• Aquafor Beech has been involved in the Alton SSMP and Headwater Subwatershed Study Phase 3 reports which will play a critical role in the development of the Overarching Retrofit Guide and Residential Retrofit Guides providing case studies and perspective on small and medium size municipal resources and constraints in developing and implementing LID retrofit initiatives.
• Aquaforbeechech is collaborating with Imbrium, Unilock and Freeman Associates on a number of other LID initiatives and has a good rapport with them, critical for the shortened timelines of the SWI project.

Aquafor Beech has also been a lead consultant on design and construction administration for a variety of LID projects across Southern Ontario, including projects both inside and outside CVC’s jurisdiction including Ministry of Environment (MOE) 2003 Stormwater Management Guidelines. As such, the consultant has developed a familiarity not only with design and implementation, but with the unique challenges facing small, medium and large municipalities across Ontario and provincial stormwater management requirements. This makes them uniquely suited to tailor the case studies and guidelines documents in order to meet the needs of these diverse audiences.

Given the shortened timeframe in which CVC and its partners are to deliver under the SWI funding agreement, Aquafor Beech is the most qualified consultant to lead the series of retrofit Guides as deemed by MOE and its 16 partners.

COMMUNICATIONS PLAN:

This project will be guided by over 17 partners from a variety of sectors (consisting of CVC, municipalities, developers, engineers, contractors and others).

FINANCIAL IMPLICATIONS

A contract over $100,000 requires CVC Board of Directors approval. The total cost of this project is budgeted as part of the SWI Project (partially funded through the Region of Peel, MOE and other funding partners such as the City of Mississauga and Town of Caledon).

CONCLUSION:

In keeping with CVC’s agreement with the MOE as part of the SWI funding grant and its commitment to 16 other partners; it is recommended that Aquafor Beech Limited be awarded the contract for developing the Infrastructure Optimization: Adaptive Management Planning and Water Management Approach for Small, Medium & Large Municipalities in the amount of $700,510.00 including applicable taxes. Costs associated with the guidelines and case study development work shall be as follows:
<table>
<thead>
<tr>
<th>Project</th>
<th>Total</th>
<th>HST</th>
<th>Grand Total</th>
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<td>Road ROW</td>
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<td>Retrofit Guide</td>
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<td>Disbursements (5%)</td>
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<td><strong>Total</strong></td>
<td>$619,920.00</td>
<td>$80,589.60</td>
<td>$700,509.60</td>
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</table>

**RECOMMENDED RESOLUTION:**

**RESOLVED THAT** the report entitled, “Development of a Series of Low Impact Development Retrofit Guidelines for Small, Medium and Large Municipalities as Part of Showcasing Water Innovation (SWI) Project” be received and appended to the minutes of this meeting as Schedule ‘G’; and

**THAT** the CVC Board of Directors authorize that Aquafol Beech Limited be awarded the contract for developing the “Infrastructure Optimization: Adaptive Management Planning and Water Management Approach for Small, Medium & Large Municipalities” in the amount of $700,510.00 including applicable taxes.

Submitted by:

Christine Zimmer, M.Sc. (Eng.), P. Eng,
Manager, Water Resource Management and Restoration

John Kinkead, P.Eng
Director, Water Resource Management and Restoration

Gerry Robin
Director, Corporate Services

Recommended by:

Rae Horst, BSc, MSc, MBA, Chief Administrative Officer