

PO Box 1749 Halifax, Nova Scotia B3J 3A5 Canada

> Halifax Regional Council July 5, 2005

TO:

Mayor Kelly and Members of Halifax Regional Council

SUBMITTED BY:

George McLellan, Chief Administrative Officer

Dan English, Deputy Chief Administrative Officer

DATE:

June 22, 2005

SUBJECT:

Consultant Award, Request For Proposal No. 05-021

Halifax Wastewater Management Plan - Western Region

ORIGIN

Approved 2004/05 Capital Budget.

RECOMMENDATION

It is recommended to Regional Council that:

- 1. CBCL be awarded the engineering study and pre-design for Halifax Wastewater Management Plan, for an estimated cost of \$434,395 plus net HST for a total of \$449,290.
- 2. Funding for the above to be from the following Capital Account No's: CSE00500, Combined Sewer Overflow Prevention; CGU00686, North West Arm Sewer; CGI00616, Fairfield Holding Tank, Halifax; and CSU00117, Freshwater Brook Sewer Inspection; authorized as per the Budget Implications section of this report.

- 2 -

July 5, 2005

BACKGROUND

This project is for the study and pre-design of various elements of the wastewater collection systems in the area tributary to the Halifax Wastewater Treatment Plant. There are four distinct but related projects included.

- 1. The HALIFAX WET WEATHER FLOW STUDY is intended to provide HRM with a strategy to control and manage wet weather flows within the study area, so as to reduce the impacts on the receiving environment. The strategy will consider techniques that can be applied at the source (e.g. individual lots), within the collection system, at the end of the pipe, and any other measures that may be applied across the study area.
- 2. The NORTH WEST ARM SEWER was constructed in (approximately) 1920. During wet weather events, this system overflows into the North West Arm. Also, some sections of the sewer are known to be in poor structural condition. The goal of this part of the study is to assess the functional condition of the system, to develop a strategy to significantly reduce or eliminate overflows from this system into the North West Arm, and to assess the structural condition of the full system for potential rehabilitation.
- 3. The FAIRFIELD HOLDING TANK was constructed in the 1960s and was designed to reduce peak flows to the North West Arm Sewer by retaining a portion of the flows from the local combined sewers during heavy rainfall events. The holding tank is presently not operating as originally intended and wet weather flows bypass the tank and go directly into the North West Arm Sewer. The goal of this part of the study is to determine if the tank should be modified, rehabilitated, or decommissioned.
- 4. The FRESHWATER BROOK SEWER was originally constructed about 100 years ago to provide a drainage system in the area following development on the Halifax Peninsula. The condition of the system has been assessed and it has been determined that it is in need of rehabilitation. The goal of this part of the study is to develop a plan for the rehabilitation of this system.

The proper management of this infrastructure and the flow entering these (and other) sewer systems is important to the health of our community. The failure of any major piece of sewer infrastructure to function properly can have a negative effect on the natural environment and economy.

DISCUSSION

Terms of Reference, outlining the scope of work, were prepared and a Request for Proposals was issued for the Halifax Wastewater Management Plan in accordance with HRM's procurement policy for Architectural, Engineering, and Surveying services. Proposals were received on April 14, 2005, and the consultant evaluation process took place on May 5, 2005. The evaluation team consisted of staff from Environmental Engineering Services, Design & Construction, and Procurement. The criteria used for the evaluation of the proposals included: expertise of firm and project team, methodology to complete the works, fees, as well as overall proposal quality and compliance with the terms of reference.

- 3 -

The final scoring for each firm and their cost proposals, exclusive of taxes, are as follows:

Consultant	Scoring (max 1000)	<u>Cost</u>
CBCL Ltd.	921	\$434,395
SNC Lavalin / Dillon	879	\$387,626
O'Halloran /ADI	848	\$384,210

The detailed breakdown of the scoring is included as an attachment. Based on the results of the evaluation, it is recommended that this work be awarded to CBCL for an estimated cost of \$434,395 plus net HST.

Staff notes that there is a difference in the price proposals. The proposals also provide a difference in scope of work which was reflected in the scoring. A number of criteria, including cost, were used in the evaluation process, consistent with HRM's Procurement Policy. This process is a standard in the industry and ensures HRM's interests are best served by using the highest-rated consultant for such projects. Staff feel that the proposal from the highest-rated consultant, CBCL, best addresses the desired scope of work of the project.

As indicated earlier in the discussion section of this report, the wastewater management plan includes extensive cleaning of the Northwest Arm Sewer and the Fairfield Holding tank before any detailed investigation or assessment can be made. As part of this work the consultant will prepare tender packages for the cleaning of these systems. This work will be tendered at a later date and brought back before Council for a separate award.

BUDGET IMPLICATIONS

Funding for this project is available from the following Capital Account No's: CSE00500, Combined Sewer Overflow Prevention; CGU00686, North West Arm Sewer; CGI00616, Fairfield Holding Tank, Halifax; and CSU00117, Freshwater Brook Sewer - Inspection.

The budget availability has been confirmed by Financial Services.

- 4 -

July 5, 2005

Budget Summary

Capital Account	Budget	Consulting Fees (incl. Net HST)	Remaining
CSE00500 Combined Sewer Overflow Prevention	\$1,727,000	\$211,202	\$1,515,798
CGU00686 North West Arm Sewer	\$250,000	\$118,628	\$131,372
CGI00616 Fairfield Holding Tank	\$150,000	\$50,680	\$99,320
CSU00117 Freshwater Brook Sewer - Inspection	\$110,107	\$68,780	\$41,327

It should be noted that some of the work included in the Halifax Wastewater Management Plan will be eligible to be funded from the Canada Strategic Infrastructure Fund. A copy of the letter from the Mayor to the Minister of State Responsible for Infrastructure Canada, dated March 15, 2004, is included for reference as Attachment 2.

The amount estimated to be funded from this project is in the order of \$200,000 of the total of \$434,395. HRM staff has been in discussion with CSIF staff to confirm more specifically the components of work that will eligible for CSIF funding. Once these discussions have been concluded, and once the wastewater management plan has been completed, the amount to be funded from CSIF will be able to be estimated with more certainty.

FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN

This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Capital and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Capital and Operating reserves, as well as any relevant legislation.

ALTERNATIVES

Council could choose to award the Wastewater Management Plan to a consultant other than the one recommended by staff. However, staff does not recommend this course of action, as the recommended consultant represents optimum value for the overall project.

- 5 -

July 5, 2005

ATTACHMENTS

- 1. Proposal Evaluation Criteria and Scoring
- 2. Letter from the Mayor to the Minister of State Responsible for Infrastructure Canada, dated March 15, 2004.

A copy of this report of	an be obtained online at http://www.halifax.ca/council/agendasc/cagenda.html ther meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax
490-4208.	meeting date, or by contacting the office of the Municipal Cicik at 470-4210, of 1 as
Report Prepared by:	Charles Lloyd, P.Eng, Sr. Environmental Engineer, Environmental Engineering Services
Report Approved by:	John P.Eng, Manager, Environmental Engineering Services 490-6958
Report Approved by:	Peter Ross, Manager, Procurement, Financial Services 490-6499
Financial Review:	Gary Draper, Financial Consultant, Environmental Management Services 490-6902
Report Approved by:	Brad Anguish, Director, Environmental Management Services 490-4825

ATTACHMENT 1

PROPOSAL EVALUATION CRITERIA

HALIFAX REGIONAL MUNICIPALITY

RFP # 05-021 Halifax Wastewater Management Plan

•						
Criteria	Max Score	SNC- Lavalin/Dillon	O'Halloran/ADI	CBCL		
Expertise of Firm and Project Team	250	220	196	235		
Methodology	550	471	466	508		
Fee Schedule	150	149	150	133		
Overall Proposal Quality & TOR Compliance	50	39	36	45		
TOTAL	1000	879	848	921		
RANKING		2	3	1		

Halifax Kegional Municipality



Peter J. Kelly

Mayor

1841 Argyle Street PO Box 1749 Halifax, Nova Scotia Canada BSJ 3A5

Tel: (902) 490 - 4010 Fax: (902) 490 - 4012 F kellyp@region.halifax.ns.ca

www.region.halifax.ns.ca www.halifax.ca

RECEIVED

MAR 19 2004

ENVIRONMENTAL SERVICES

March 15, 2004

12000 - 20 FFA Copics: TT, HE 35.5 AB Halifax Regional Municipality

MIR LE MIN

Fig. Har Herbour Solutions

The Honourable Andy Scott Minister of State responsible for Infrastructure Canada Infrastructure Canada 90 Sparks Street, Suite 605 Ottawa, Ontario KIP 584

Dear Minister Scott:

Re: Halifax Harbour Solutions Project Incremental Funding

On Tuesday, March 10, 2004, Halifax Regional Council approved entering into an agreement for Phase 2 of the Harbour Solutions Project, with DED Water Solutions Inc. to design, construct and commission the three sewage treatment plants. The approval is conditional on the Halifax Regional Municipality (HRM) receiving substantial incremental funding from the Federal government and receiving, from its insurance advisor, confirmation that the terms and conditions of the final insurance package are appropriate, given the nature of the project and current market conditions.

It is anticipated that the substantial incremental funding from the Federal government will comprise of an additional \$30 million contribution to the Halifax Harbour Solutions Project from the Strategic Infrastructure Fund. It is proposed that these funds be applied against the cost of the Dartmouth and Herring Cove Sewage Treatment Plants as detailed in Appendix A.

This additional contribution toward the Harbour Solutions Project will enable HRM to advance incremental and much needed wastewater projects (detailed in Appendix B) to further protect our watersheds and ultimately achieve the water quality objectives for Halifax Harbour. With the exception of the pumping station upgrades, the projects in Appendix B were envisioned in the original scope of the Harbour Solutions Project but could not proceed due to a lack of funding.

Appendix B provides the description of each of the HRM projects with their projected cash flow and timing. The



Page 2 The Honowrable Andy Scott March 15, 2004

combined sewer overflow prevention and pumping station upgrade projects will minimize the pollutants entering into our receiving water and, at the same time, convey, as much as possible, the pollutants to the sewage treatment plants. The diffusion ratio upgrades will enable the treatment plant effluent to be discharged in a manner that will significantly decrease the impact of effluent in the direct vicinity of the receiving water. Implementation of a biosolids dewatering facility will enable all HRM biosolids to be processed to a USEPA Class A standard and will enable the phase out of the biosolids lagoon, thus eliminating a huge volume of methane (>10,000,000 cu. ft) that is released to the atmosphere annually.

Implementation of these complementary projects will greatly enhance HRM's strategic efforts toward a "Healthy, Sustainable and Vibrant Community", and will specifically improve performance in preserving the environment and protecting public health. The additional Federal funding contribution to the Harbour Solutions Project will clearly enable the implementation of these important projects for HRM that could not have otherwise proceeded.

If you require any further information, please do not hesitate to contact me.

Respectfully, I remain

Peter J. Kelly Mayor

/km attach

George McLellan, CAO Dan English, DCAO Brad Anguish, Director, Environmental Management Services Yed Tam, Project Manager, Harbour Members of Halifax Regional Council

Appendix A
Strategic Infrastructure Fund Contribution Areas

Additional funding	Eligible costs	Federal Gov't Contribution	2004-05	2005-06	2006-07
Dartmouth Sewage Treatment Plant	\$45,481,000	\$20,000,000	\$1,750,000	\$18,250,000	
Herring Cove Sewage Treatment Plant	\$32,839,000	\$10,000,000		\$8,250,000	\$1,750,000
Total	\$78,320,000	\$30,000,000	\$1,750,000	\$26,500,000	\$1,750,000

Appendix B
Projects that will be carried out with additional Federal Strategic Infrastructure
Funding

гипахнд		·			
Brief Description of Additional Projects	2004-05	2005-06	2006-07	2007-08	Total
Diffusers Ratio Upgrade	\$1,400,000	\$1,100,000		1- 20	\$2,500,000
Combined Sewer Overflow Prevention	\$ 500,000	\$4,500,000	\$5,000,000	\$5,000,000	\$15,000,000
Pumping Stations Upgrades/Wet Weather Flow Solutions	\$ 500,000	\$3,000,000	\$3,500,000	\$2,000,000	\$9,000,000
Central Biosolids Dewatering Facility (Lagoon Phase-out)	\$1,000,000	\$2,500,000		-	\$3,500,000
Total	\$3,400,000	\$11,100,000	\$8,500,000	\$7,000,000	\$30,000,000