

11.1.8

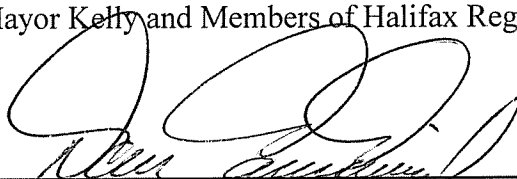


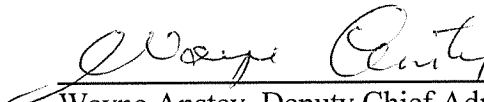
PO Box 1749  
Halifax, Nova Scotia  
B3J 3A5 Canada

Halifax Regional Council  
July 3, 2007

**TO:** Mayor Kelly and Members of Halifax Regional Council

**SUBMITTED BY:**

  
\_\_\_\_\_  
Dan English, Chief Administrative Officer

  
\_\_\_\_\_  
Wayne Anstey, Deputy Chief Administrative Officer - Operations

**DATE:** July 3, 2007

**SUBJECT:** **Award - Unit Price Tender No. 07-237, Fairview Overpass Combined Sewer Rehabilitation - West Region**

---

**ORIGIN**

The Approved 2005/06 Capital Budget and previous Capital Budgets.

**RECOMMENDATIONS**

It is recommended that Council:

1. Authorize staff to close, or reduce the balances in, the projects listed in Attachment 1 of this report.
2. Approve an increase in the gross budget for Capital Account No. CSU00116 in the amount of \$1,406,175, funded from the closure, or reduction in the balance of, the projects listed in Attachment 1.

Recommendations continued on page 2

3. Award Tender No. 07-237, Fairview Overpass Combined Sewer Rehabilitation - West Region to J.R. Eisener Contracting Ltd. for material and services listed at the unit prices quoted for a Total Tender Price of \$2,043,550.18 (net HST included) with funding from Capital Account No. CSU00116 - Fairview Overpass Combined Sewer Rehabilitation, as outlined in the Budget Implications section of this report, subject to the resolution of easement and access issues as outlined in the Discussion section of this report;
4. Approve the appointment of O'Halloran Campbell Consultants Limited for contract administration and construction inspection services for an estimated fee of \$50,000 including net HST from Capital Account No. CSU00116 - Fairview Overpass Combined Sewer Rehabilitation, as outlined in the Budget Implications section of this report, subject to the resolution of easement and access issues as outlined in the Discussion section of this report.

### **BACKGROUND**

In 1998 a study entitled the Fairview Overpass Sewer Study was completed by HRM. The objectives of this study were to investigate the structural condition and analyse the capacity of the sewers generally within the area bounded by the Fairview Overpass, Joseph Howe Drive and Bayers Road, and to determine the feasibility of separating stormwater flows from the combined and sanitary sewer flows in these sewers. The Fairview Overpass Combined Sewer Rehabilitation project represents the last remaining recommendation to be implemented from the study.

The project will remove approximately 75% of stormwater from the existing combined sewers in the study area, thereby reducing wastewater overflows into Fairview Cove. This will also result in less stormwater being discharged into the Harbour Interceptor Sewer, which eventually enters the Duffus Street Pumping Station and ultimately the Halifax Wastewater Treatment Facility. It will also result in a considerable reduction in silt and debris (typically found in stormwater) entering the Harbour Interceptor Sewer, resulting in a significant decrease in wear and tear of downstream pumps and related equipment. By reducing combined sewer overflows, this project brings HRM closer to a position of compliance with Federal and Provincial regulations. As a result, the Fairview Overpass Combined Sewer Rehabilitation project has a Priority Two rating based on the Stormwater and Wastewater Priority Rating Process approved by Council on February 1, 2005.

The project also includes the installation of a portion of storm sewer, and the repair and replacement of sections of combined sewers to increase the reliability of these sewers and to reduce maintenance costs and possible future emergency repair costs.

A significant portion of the cost of this project is proposed to be funded from the Canada Strategic Infrastructure Fund. The project is an excellent candidate for CSIF funding.

It involves separation of stormwater from combined sewers, which will reduce combined sewer overflows into Fairview Cove, and will further reduce the daily and total flows to the Harbour Interceptor Sewer, to Duffus Street Pumping Station, and to the new Halifax Harbour Wastewater Treatment Facility.

In order to fund the project with CSIF funds, it will require using CSIF funds that have been previously committed to other capital projects. One key reason for staff recommending that this be done is that CSIF-funded projects must be completed by March 2009, less than two years from now. Therefore staff are recommending that CSIF funds be diverted towards this project, which is ready to be implemented now, so that the CSIF funds are able to be used with certainty in advance of the deadline of March 2009.

The CSIF program administrators have not been contacted at this time with respect to assigning CSIF funds to this project. There is no application process associated with the CSIF program, and because the Fairview Overpass Sewer project matches the program criteria so well, staff are not anticipating any problems with funding the project from CSIF.

There are a total of five projects from which CSIF funds are proposed to be diverted. Some of these projects are completed, while others have been delayed and so are at risk of not being able to be completed by March 2009. The circumstances associated with each project are described in Attachment 1.

## **DISCUSSION**

Tenders were called on May 5, 2007 and closed on May 30, 2007. Bids were received from the following companies:

| <b><u>Name of Company</u></b>       | <b><u>Bid Price (Net HST Included)</u></b> |
|-------------------------------------|--|
| J.R. Eisener Contracting Ltd.       | \$2,043,550.18*                            |
| A.C.L. Construction Limited         | \$2,523,926.17                             |
| Dexter Construction Company Limited | \$2,631,233.76                             |

### **\*recommended bidder**

The scope of work for this tender generally consists of the rehabilitation and installation of pipework under and adjacent to Canadian National (CN) tracks and on lands leased by the Halifax Port Authority (HPA) from the Province. The work on CN property is located on the south side of the Fairview Overpass while the work on HPA leased property is located on the north side of the Fairview Overpass.

HRM owns the pipes on the Province's property. However, HRM does not have easements over these sewers, and so HRM staff have been working with staff of the Province to acquire the necessary easements. The staff of the Province have committed to providing the easements, as well as permission for early access, so that HRM can commence the work on this part of the project soon. It is anticipated that this permission will be granted within the next two or three weeks, once HRM prepares the necessary easement documents for submission to the Province.

The HPA is currently in the process of redeveloping the above mentioned leased property and plan to begin construction as soon as possible. Since HRM's work on HPA property must be completed prior to HPA's planned work, staff are recommending that this project be awarded now, contingent on the resolution of the easement and access issues, so that HRM's work can start as soon as possible.

Staff are currently reviewing the project with J.R. Eisener Contracting Ltd. (the low bidder) in order to determine if changes in the proposed work may further improve the efficiency of the system. If it's determined that the changes can be implemented, an additional 5% of stormwater can be removed from the Harbour Interceptor Sewer and it may also result in a 5 to 8% reduction in the overall cost of the project. The review is not complete, but staff are recommending that this project be awarded now so as not to hinder the HPA's planned work (as mentioned above).

Since this project was designed by O'Halloran Campbell Consultants Limited, and will require more staff time than can be allocated at this time, it is recommended that that firm be retained to provide contract administration and construction inspection services. The estimated fee for this service is \$50,000, including net HST. If approved, the payment to the consultant will be based on the amount of actual time spent on the project in accordance with the hourly fees quoted in the design proposal.

The project includes a tunnel boring under CN tracks, and due to the unusual nature of this work, a 10% allowance has been added to the lowest tender price for unforeseen work that may be required. This allowance is reflected in the Budget Implications section.

It is anticipated that work will commence within three weeks of the tender award and take 12 weeks to complete.

This is a **UNIT PRICE** contract and the cost will be dependent upon the actual quantities measured and approved by the HRM Project Manager.

There are no Local Improvement Charges associated with this work.

**BUDGET IMPLICATIONS**

Based on the lowest tendered price of \$2,043,550.18, including net HST, plus a 10% allowance for unforeseen works of \$204,355.02, including net HST, plus contract administration and construction services of \$50,000.00, including net HST, and if Recommendations 1 and 2 are approved, funding is available from Account No. CSU00116 - Fairview Overpass Combined Sewer Rehabilitation. The budget availability has been approved by Financial Services.

**Budget Summary: Capital Account No. CSU00116 - Fairview Overpass Combined Sewer Rehabilitation**

|   |                      |
|---|----------------------|
| Cumulative Unspent Budget   | \$ 891,731           |
| <b>Plus: Closed Projects (Recommendation 1 &amp; 2)</b>                   | <b>\$1,406,175</b>   |
| <b>Less: Tender No. 07-237</b>  | <b>\$2,043,551 *</b> |
| <b>Less: Contract Administration and<br/>Contract Inspection Services</b> | <b>\$ 50,000</b>     |
| Balance   | \$ 204,355 **        |

\* This project was estimated by HRM's consultant at \$1,100,000, as compared to the actual tender price of \$2,043,550. The contractor has indicated that the consultant's estimate was too low, given the conditions of the site, including the size of the sewers, the fact that they are combined sewers, the risk of high peak flows during wet weather events, and the uncertainties around the boring under the railway.

Staff have had serious and frequent problems lately with consultants' estimates, sometimes too high, but more often too low, such as this one. Staff have been working with our consultants to ensure that they understand the importance of accurate estimating as related to HRM's budget process and funding limitations.

Notwithstanding that the cost is much higher than the estimate, the project still represents good value, and staff are recommending that the tender be awarded and the work completed.

\*\* The balance of funds will be made available in the event of unforeseen work, such as the tunnel boring under the CN tracks.

**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**

1. Council may choose not to award the tender, in which case no rehabilitation or improvements to the system will be achieved. The result will be a continuation of the deterioration of the structural condition of the sewers, with an ever-increasing risk of collapse, which carries with it disruption in service, possible damage to nearby property and infrastructure (including the railway), environmental impacts and public health risks, as well as much higher costs related to emergency repairs. Further, combined sewer overflows will continue at the same volume and frequency as at present, with the concurrent environmental impacts and public health risks, and non-compliance with regulations.

Staff do not recommend this alternative.

2. Council could choose to delay the award of the tender until the full resolution of the easement issues with the Province. Staff do not recommend this alternative as any delay in the start of HRM's tender will delay the HPA work in that area. If HPA should choose to start its work in advance of HRM's, there will be a further increase cost to HRM to carry out our work at that time.

**ATTACHMENTS**

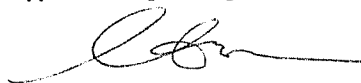
1. List of Completed (or Reduced) Projects

A copy of this report can be obtained online at <http://www.halifax.ca/council/agendasc/agenda.html> then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax at 490-4208.

Report Prepared by: Greg Rice, P.Eng., Environmental Engineer, Environmental Engineering Services at 490-6700



Report Approved by: \_\_\_\_\_  
John Sheppard, P. Eng. Manager, Environmental Engineering Services at 490-6958



Financial Approval by: \_\_\_\_\_  
Catherine Sanderson, Senior Manager, Financial Services at 490-1562



Report Approved by: \_\_\_\_\_  
Brad Anguish, P. Eng., Director, Environmental Management Services at 490-4825

**Attachment 1:  
List of Completed (or Reduced) Projects**

| No.   | Name  | Account No. | CSIF Funding Available |
|---|---|-------------|------------------------|
| 1   | Quigley's Corner PS, Eastern Passage              | CGI00599    | \$785,000.00           |
| 2   | India Street PS - Elimination                     | CGI00790    | \$25,000.00            |
| 3   | North West Arm Sewer                              | CGU00686    | \$250,000.00           |
| 4   | Tupper St. - Combined Sewer Separation, Dartmouth | CGI00765    | \$36,000.00            |
| 5   | Roach's Pond - Forcemain                          | CSR00803    | \$310,175.00           |
| <b>CSIF Funding Available for Tender 07-237</b> |   |             | <b>\$1,406,175.00</b>  |

**1. Quigley's Corner PS, Eastern Passage - \$785,000**

This project is intended to address the issue of wet weather overflows at this pumping station facility. Based on a consultant recommendation, staff were intending to address this by repairing and replacing manhole covers throughout the sewershed. However, staff have found that this approach has not proven to be near as successful as expected at other locations in HRM, and so staff need to develop an alternate strategy for reduction of wet weather flows in this sewershed. This work has not progressed yet to a point where staff can be assured that the CSIF funds can be expended by the date of March 2009, and so staff are recommending diverting the funds to the Fairview Overpass Sewer Project.

**2. India Street PS - Elimination - \$25,000**

This project is nearly completed and \$25,000 is available from this account. Staff are recommending that this amount be directed towards the Fairview Overpass Sewer Project.

**3. North West Arm Sewer - \$250,000**

This sewer was inspected last year using sonar technology, a new technique for HRM. The inspection revealed that the sewer has a significant accumulation of debris. The sewer is scheduled to be cleaned this summer, along with a number of other large sewers in HRM. Until the sewer is cleaned, and its performance then monitored for a period of time, the need for the kind of Combined Sewer Overflow Prevention work eligible to be funded by CSIF will not be known.

Given this uncertainty, and the March 2009 deadline for CSIF-funded projects, staff are recommending that the CSIF funding be withdrawn from CGU00686 - North West Arm Sewer and directed towards the Fairview Overpass Sewer Project.

**4. Tupper St. - Combined Sewer Separation, Dartmouth - \$36,000**

This project is completed and \$36,000 was not spent from this account. Staff are recommending that this amount be directed towards the Fairview Overpass Sewer Project.

**5. Roach's Pond - Forcemain - \$310,175**

This project is funded from CSIF with an approved budget of \$2.4 million. The tender for the force main rehabilitation recently closed. The funding required from this account for the design, the tender, and the construction administration and inspection, with an allowance for contingencies, is estimated to be no greater than \$1.5 million. Staff are recommending that \$310,175 of the remaining \$900,000 be directed towards the Fairview Overpass Sewer Project.