Subject: Award of Contract 2018-T-122 (RN 18-22) Garner Road Biosolids Facility Upgrade

Report to: Public Works Committee

Report date: Tuesday, September 25, 2018

Recommendations


Key Facts

- Special Reference
  
  - Given Section 275 of the Municipal Act, 2001, and Regional Council’s delegated authority to the Chief Administrative Officer via report GM 8-2018, that the Chief Administrative Officer consider and authorize:
    - That this report will incur expenditures or liability which exceeds $50,000; and
    - That staff proceed with the gross budget increase for the Garner Road Biosolids Facility Upgrade Project (10SW1220) by $1,741,863 (inclusive of 1.76% non-refundable HST) and that the increase be funded from the Capital Variance - Wastewater Project.
  
  - Should the Chief Administrative Officer incur an expenditure or liability greater than $50,000, then the CAO will report to the new Council all actions taken pursuant to this decision.

- The proposed work at the Garner Road Facility is to replace the mixing systems for the three (3) sludge storage tanks at the site and is required as the systems have reached the end of their service life. A failure of the current system would jeopardize the Region’s ability to maintain the capacity needed for all of the biosolids produced by all the WWTPs and residuals from the Decew and Grimsby WTP.

- This project is scheduled for construction in October 2018, subject to the approval of this report, and is anticipated to be completed by May 31, 2019.

- A public tender for this project was undertaken through competitive bid process, 2018-T-122, in order to select the General Contractor. The tender package was released on July 11, 2018 and closed on August 16, 2018. A total of five (5) bids were received with the lowest compliant bid being received from ASCO Construction in the amount of $4,700,386 (including HST).

- The total tendered amounts (excluding HST) are listed below in ascending order:

  ASCO Construction Ltd. (Mississauga) $4,159,653
SONA Construction Ltd. (Hamilton)  $4,400,823  
Baseline Constructors Inc. (Waterloo)  $4,598,000  
BGL Contractors Corp. (Waterloo)  $4,660,810  
Merit Contractors Niagara (St. Catharines)  $4,801,500  

- Each tender submission included Addendums No. 1, 2 and 3 as well as the necessary tender deposit and Agreement to Bond. The tenders were reviewed and no arithmetic errors were found.  
- This project has been approved for $1,236,490 Federal and Provincial funding through the Clean Water and Wastewater Fund (CWWF) with a project completion deadline of March 31, 2020.  
- The approval of the contract award will be submitted to the CAO for consideration by virtue of the delegated authority under the Restricted Acts after Nomination Day (GM 8-2018).

Financial Considerations

Project 10SW1220 (Garner Road Biosolids Facility Upgrade) has a previously approved capital budget of $3,500,000. The total estimated project cost after the award of Contract 2018-T-122 (RN 18-22) is $5,241,863 (inclusive of 1.76% non-refundable HST), as detailed in Appendix 3 – Total Estimated Project Cost. A budget increase is therefore required in the amount of $1,741,863 (inclusive of 1.76% non-refundable HST), to be funded from the Capital Variance – Wastewater Project. Partial Federal and Provincial funding of $1,236,490 has been awarded through the Clean Water and Wastewater Fund (CWWF).

Analysis

The Garner Road Biosolids Facility is located northeast of the intersection of Chippawa Creek Road (Niagara Regional Road 63) and Garner Road in the City of Niagara Falls, as shown in Appendix 1. This Biosolids Facility consists of ten (10) clay lined lagoons, three (3) storage tanks, and two (2) storm water ponds. The facility occupies 31 hectares and was originally constructed in 1986, while the three storage tanks were added in 1998.

The current storage tank mixing systems at the Garner Road facility are part of the original 1998 installation and have reached the end of their service life. If a failure of the current mixing system were to occur the site would have to shut down, which would jeopardize the Region’s ability to maintain the capacity needed for all of the biosolids produced by all the WWTPs and residuals from Grimsby and Decew WTP.

The intent of this project is to replace the existing submersible mixing system of all three (3) storage tanks with a suitable external hydraulic mixing alternative that will address
key operational and maintenance issues. In addition to the required equipment, a budget increase in the amount of $261,250 (excluding HST) is required to provide contract administration and fulltime inspection due to the criticality of the work and to ensure there is no disruption to the regular operations at the Garner Road facility. Tetratech WEI Inc. was retained through the competitive bid process (2012-RFP-30) to provide detailed design services and will be responsible for all construction related services.

Contract award requires resources from Enterprise Resource Management Services in order to execute the required contract documents. Water & Wastewater staff will be providing resources throughout the project in order to manage the contract with assistance from Enterprise Resource Management Services on contract/project payments.

Alternatives Reviewed

Do Nothing – this alternative does not address the maintenance issues associated with the mixing systems on the current storage tanks and does not ensure reliable infrastructure to support growth and economic development in the Niagara Region. Irreparable mechanical failure of this equipment is imminent if these mixers are not replaced promptly and would cause a catastrophic loss of service at the Garner Road Biosolids Facility.

Relationship to Council Strategic Priorities

This recommendation is related to the Fostering Growth strategic priority since the planned rehabilitation will ensure reliable infrastructure to support growth and economic development within the Niagara Region.

Other Pertinent Reports

None
Prepared by:
Albert Succi
Project Manager – W-WW Engineering
Public Works Department

Recommended by:
Ron Tripp, P.Eng.
Commissioner
Public Works Department

Submitted by:
Carmelo D’Angelo, BSc, MPA
Chief Administrative Officer

This report was prepared in consultation with Lisa Vespi, P.Eng. Senior Project Manager, W-WW Engineering; Michael Leckey, Program Financial Specialist W-WW, and reviewed by Tony Cimino, Associate Director W-WW and Joseph Tonellato, P.Eng., Director W-WW;

Appendices

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Appendix 1 – Key Plan

Contract No. 2018-T-122 (RN 18-22)
GARNER ROAD BIOSOLIDS FACILITY UPGRADE

[Map of Garner Road Biosolids Facility Upgrade]
Appendix 2 – Summary of Bids

Contract No. 2018-T-122 (RN 18-22)
GARNER ROAD BIOSOLIDS FACILITY UPGRADE

<table>
<thead>
<tr>
<th>Bidder</th>
<th>Total Tender Price (excludes HST)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASCO Construction Ltd. (Mississauga)</td>
<td>$4,159,653</td>
</tr>
<tr>
<td>SONA Construction Ltd. (Hamilton)</td>
<td>$4,400,823</td>
</tr>
<tr>
<td>Baseline Constructors Inc. (Waterloo)</td>
<td>$4,598,000</td>
</tr>
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<td>$4,660,810</td>
</tr>
<tr>
<td>Merit Contractors Niagara (St. Catharines)</td>
<td>$4,801,500</td>
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### Total Estimated Project Cost (10SW1220) *

<table>
<thead>
<tr>
<th>Category</th>
<th>Total Estimated Project Cost</th>
<th>Revisions per PW 41-2018</th>
<th>Revised Project Budget</th>
<th>Expended &amp; Committed as of September 6, 2018</th>
<th>Forecast</th>
<th>Budget Remaining</th>
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<tbody>
<tr>
<td>(a) Construction (includes 10% contract contingency)</td>
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<td>4,232,844</td>
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<td>(b) Project Contingency</td>
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<td>158,350</td>
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<td>(c) Consulting Engineering Services</td>
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<tr>
<td>i. Detailed Design</td>
<td>55,073</td>
<td>66,195</td>
<td>121,267</td>
<td>66,294</td>
<td>54,973</td>
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<td>ii. Contract Administration &amp; Inspection</td>
<td>70,520</td>
<td>199,653</td>
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<td>iii. Peer Reviews</td>
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<td>-</td>
<td>-</td>
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<tr>
<td>(d) Project Management (In-House) and Operations</td>
<td>77,233</td>
<td>38,375</td>
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<td>12,330</td>
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<tr>
<td>(e) Materials Testing</td>
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<tr>
<td>(f) Miscellaneous</td>
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<tr>
<td><strong>Total Estimated Project Cost</strong></td>
<td><strong>3,500,000</strong></td>
<td><strong>1,741,863</strong></td>
<td><strong>5,241,863</strong></td>
<td><strong>78,625</strong></td>
<td><strong>5,163,239</strong></td>
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#### Project Funding Sources

<table>
<thead>
<tr>
<th>Source</th>
<th>Total</th>
<th>Revisions per PW 41-2018</th>
<th>Revised</th>
<th>Forecast</th>
<th>Budget Remaining</th>
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<tbody>
<tr>
<td>Regional reserves &amp; debt (includes Federal Gas Tax funding)</td>
<td>(2,263,510)</td>
<td>(1,741,863)</td>
<td>(4,005,373)</td>
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<tr>
<td>CWWF</td>
<td>(1,236,490)</td>
<td>-</td>
<td>(1,236,490)</td>
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</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>(3,500,000)</strong></td>
<td><strong>(1,741,863)</strong></td>
<td><strong>(5,241,863)</strong></td>
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* All costs above include the non-refundable 1.76% portion of HST.