Request for Proposal No. 9117-07-7283
Highland Creek Treatment Plant – Implementation of Odour Control Upgrades

Date: January 24, 2008
To: Public Works & Infrastructure Committee
From: Executive Director, Technical Services
Director, Purchasing and Materials Management Division
Wards: Ward 44 – (Scarborough East)
Reference Number: RFP 9117-07-7283
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SUMMARY

The purpose of this report is to advise on the results of the Request for Proposals (RFP) 9117-07-7283 for the provision of engineering services for the implementation of the odour control upgrades at the Highland Creek Wastewater Treatment Plant, and to request authority to enter into an agreement with the recommended proponent.

RECOMMENDATIONS

The Executive Director of Technical Services and the Director of Purchasing and Materials Managements recommend that:

1. Funds in the amount of $3,069,755.57 net of GST be reallocated to CWW045-01 Odour Control Upgrades - Phase One Engineering from CWW039-01 Effluent System Phase 1 Engineering. Funding is included in the approved 2008 Toronto Water Capital Budget. The additional cash flow and project cost is to be reallocated (net of GST) as follows: $200,000.00 in 2009, $1,500,000.00 in 2010, $1,300,000.00 in 2011 and $69,755.57 in 2012.

2. Subject to approval of Recommendation No. 1, authority be granted to award a contract in the amount of $5,119,755.57 net of GST including provisional items, disbursements and contingencies to Earth Tech (Canada) Inc. having submitted the highest scoring proposal meeting the requirements of the RFP, for the
provision of professional services for the Highland Creek Wastewater Treatment Plant Implementation of Odour Control Upgrades as follows:

a) for the pre-design and detailed design, an amount not to exceed $3,632,837.33 net of GST including provisional items and disbursements. This amount includes a contingency allowance of $333,333.33 net of GST, for additional services, if necessary and authorized by the Executive Director, Technical Services;

b) for services during construction including general office administration and site supervision services, an amount not to exceed $1,211,188.71 net of GST including provisional items and disbursements for a construction period of up to 35 weeks for the headworks electrical room upgrade and 72 weeks for the odour control & process upgrades. This amount includes a contingency allowance of $114,285.71 net of GST, to cover resident staff services during construction beyond a period of 35 weeks for the headworks electrical room upgrade, at a rate not to exceed $7,013.05 net of GST per week including disbursements and a period of 72 weeks for the odour control & process upgrades, at a rate not to exceed $8,399.38 net of GST, if necessary and authorized by the Executive Director, Technical Services; and

c) for the post-construction services, an amount not to exceed $225,729.52 net of GST including disbursements, and including a contingency allowance of $23,809.52 net of GST for additional services, if necessary and authorized by the Executive Director, Technical Services;

d) for a five year service agreement to update the odour model as required to support future Certificate of Air applications, an amount not to exceed $50,000.00 net of GST including disbursements if necessary and authorized by the Executive Director, Technical Services.

3. Subject to approval of recommendations (1) and (2), the appropriate officials be authorized and directed to take the necessary actions to give effect thereto.

**FINANCIAL IMPACT**

The total contract award identified in this report is $5,375,743.35 including all applicable taxes and charges. The cost to the City net of GST is $5,119,755.57. This project is included in the approved 2008 Toronto Water Capital Budget in WBS Element CWW045-01 Odour Control Upgrades - Phase One Engineering. However, at this time, the uncommitted cash flow is insufficient and additional cash flow authority is required to meet these commitments.

The funding approved for WBS Element CWW045-01 is $2,050,000.00, net of GST and an additional $3,069,755.57 is required in order to complete the engineering services for
a total of $5,119,755.57, net of GST. The cash flow requirements for this project are $500,000.00 in 2008, $1,000,000.00 in 2009, $2,000,000.00 in 2010, $1,500,000.00 in 2011 and $119,755.57 in 2012 net of GST.

The engineering estimate for this project is $2,050,000.00 net of GST. The estimate, however, did not include for the refurbishment of the electrical room in the headworks building and the engineering services related to modifications to the screening process. These two items were not previously identified in the odour study but were incorporated into the scope of work for this assignment. The refurbishment of the electrical room was identified by City staff as a requirement due to the risk of failure as a result of ageing and obsolete equipment, and non-compliance with existing electrical code. The modifications to the screening process were deemed necessary by City staff for successful implementation of the project, based on recent experiences in other wastewater facilities in the City.

The additional cash flow and project cost (all net of GST) is to be reallocated from approved 2008 capital projects (with net impact of $0) as follows:

<table>
<thead>
<tr>
<th>Account</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>Total</th>
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<tbody>
<tr>
<td>CWW045-01 HCTP Odour Control</td>
<td>$500,000</td>
<td>$800,000</td>
<td>$500,000</td>
<td>$200,000</td>
<td>$50,000</td>
<td>$2,050,000</td>
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<td>Upgrades - Phase One Engineering</td>
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<tr>
<td>CWW039-01 ABTP Effluent System Phase 1 Engineering</td>
<td>$0</td>
<td>$200,000</td>
<td>$1,500,000</td>
<td>$1,300,000</td>
<td>$69,755.57</td>
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<tr>
<td>TOTAL</td>
<td>$500,000</td>
<td>$1,000,000</td>
<td>$2,000,000</td>
<td>$1,500,000</td>
<td>$119,755.57</td>
<td>$5,119,755.57</td>
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The Deputy City Manager and Chief Financial Officer has reviewed this report and agrees with the financial impact information.

**BACKGROUND**

The Highland Creek Treatment Plant (HCTP) is located at the mouth of Highland Creek on a 59 hectares (ha) (145.8 acres) site in the Scarborough community (West Hill). The Municipality of Scarborough initiated the original plant construction under an agreement with the Municipality of Metropolitan Toronto in 1954, and construction was completed in 1956. The plant had a treatment capacity of 18,000 m$^3$/d (4 mgd). Over the years the plant has been enlarged to its present capacity of 219,000 m$^3$/d (48 mgd). The treatment of wastewater at the Highland Creek Treatment Plant is accomplished through the following processes: preliminary treatment, primary treatment, secondary treatment, phosphorous removal, sludge treatment, anaerobic digestion, disinfection, biosolids treatment, and odour control. The HCTP is located in a residential and industrial zone in the east end of the City.
Due to the proximity of a residential subdivision, the plant has instituted various odour control systems in the past. In order to ensure that the odour control systems are functioning at an optimal level, are not contributing to nuisance odours in the surrounding community, and meet the Ministry of the Environment’s (MOE) requirements, the City completed a Plant Wide Odour Assessment at the HCTP (December 2005). As a result of the study, the City made commitments to the community and the Ministry of the Environment (MOE) to implement Phase 1 odour control measures, as recommended in the odour study, at the HCTP. The capital projects associated with implementing the recommendations derived from the Phase 1 portion of this assessment form the basis of this project.

The City of Toronto requires the provision of engineering services for the preliminary design, detailed design, contract administration, post construction services and a five year service agreement to update the odour model as required to support future Certificate of Air applications for the provision of Implementation of the Odour Control Upgrades at the Highland Creek Treatment Plant.

COMMENTS

Ninety-eight (98) firms from the City’s bidders list were notified and invited to submit proposals in response to our RFP 9117-07-7283, issued on August 31, 2007. The RFP was also advertised on the City’s internet website. The RFP included the selection criteria to be used for evaluation. This resulted in a total of three (3) submissions being received on October 31, 2007 from:

1. Earth Tech (Canada) Inc.
2. Stantec Consulting Ltd.
3. CH2M Hill Canada Limited

As required in the RFP Terms of Reference, these detailed written proposals included a separate sealed cost proposal envelope. The selection process stipulated that the envelope containing the cost proposals would not be opened until the evaluation of the technical proposals had been completed.

A formal consultant selection committee comprised of six members of Toronto Water and Technical Services staff evaluated the proposals using the criteria outlined in the Request for Proposals.

The technical submissions were evaluated first independently and then jointly by all members of the consultant selection committee in accordance with a set of pre-established criteria. A threshold proposal evaluation score of 75% or 56.3 points as stated in the RFP had to be met by each technical submission as a criterion for further consideration of submission for a review of the separate cost proposal. The technical proposal of the three (3) firms exceeded this threshold and their separate cost proposal envelopes were opened and reviewed. The cost proposals were scored and added to the technical score. The total scores ranged from 71.8% to 81.6%. In accordance with
Council approved policy, proponents’ scores, financial comparison and staff analysis of the evaluation results can be provided to Councillors in an in-camera presentation if requested by Committee members.

On completion of the above process, the proposal from Earth Tech (Canada) Inc. was ranked first overall with the highest overall point score. The consultant selection committee concluded that the proposal submitted by Earth Tech (Canada) Inc. satisfies the overall project requirements at the highest overall score and demonstrated an appropriate level of effort for the proposed work.

The Fair Wage Office has reported that the recommended firm has indicated that it reviewed and understands the Fair Wage Policy and Labour Trades requirements and has agreed to comply fully.

**CONTACT**

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