

9

CONSULTANT SELECTION FOR DETAILED DESIGN, CONTRACT ADMINISTRATION AND SITE INSPECTION FOR LESLIE STREET SEWAGE PUMPING STATION UPGRADES IN THE TOWN OF MARKHAM - PROJECT 79890

The Environmental Services Committee recommends the adoption of the recommendations contained in the following report dated May 31, 2010, from the Commissioner of Environmental Services.

1. RECOMMENDATIONS

It is recommended that:

1. GHD be engaged to undertake the Detailed Design, Contract Administration and Site Inspection for Leslie Street Sewage Pumping Station Upgrades as outlined in this report, at an upset limit fee of \$1,542,545 excluding taxes. The upset limit fee includes:
 - a) \$ 804,891 for detailed design and engineering services during construction.
 - b) \$ 625,798 for contract administration and site inspection services, based on 80 weeks construction duration estimated by staff.
 - c) \$ 111,856 for provisional items and allowances for materials testing and contractor performance evaluation.
2. The Commissioner of Environmental services be authorized to adjust the contract administration and site inspection fees using the competitive unit price of \$5284.07 per week excluding taxes and using the construction duration stipulated in the tender documents.

2. PURPOSE

This report is to engage a qualified consulting engineering firm to carry out Detailed Design, Contract Administration and Site Inspection for Leslie Street Sewage Pumping Station Upgrades.

In compliance with the Region's Purchasing By-law, Council authorization is required when a Request for Proposal has been issued and the successful consultant's fee plus taxes is over \$500,000 or the recommended proponent does not have the lowest cost, but the total cost is greater than \$500,000. In this case, the recommended proponent submitted the lowest responsive bid, however their bid is greater than \$500,000.

3. BACKGROUND

Pumping Station capacity to increase from 3800 to 7500 Litres per Second

All wastewater from the communities of Woodbridge, Maple, Thornhill, part of Town of Markham and a portion of the City of Vaughan flows to the Leslie Street Sewage Pumping Station. This facility was commissioned in 1980. Sewage entering the Leslie Street Sewage Pumping Station is pumped eastward to the forcemain outlet chamber located south of Highway 407 and east of Leslie Street in the Town of Markham where it flows to Duffin Creek Water Pollution Control Plant. The Leslie Street Sewage Pumping Station has a current capacity of 3800 litres per second (l/s).

Based on the York Region Master Plan, this pumping station will be required to pump 7500 litres per second by 2051 to meet approved growth in this area of the Region.

Project scope includes new pumps and electrical upgrades

The Leslie Street Sewage Pumping Station is located at 7033 Leslie Street in the Town of Markham (*see Attachment 1*). Its current firm capacity of 3800 l/s will increase to 7500 l/s to service approved growth in this area of the Region.

Primary improvements to be addressed in this assignment include:

1. Process equipment upgrades including provision of new pumps to meet approved growth in this area of the Region
2. Electrical upgrades including an enhanced back-up power system and to determine the feasibility of participating in Demand Response Program
3. Elimination of hydraulic operational constraints
4. Energy retrofit upgrades to maximize heat recovery and minimize energy loss
5. Facility building upgrades including lighting and HVAC system retrofit
6. Pursue Leadership in Energy and Environmental Design (LEED ®) certification

Successful completion of this project not only enables the Region to address growth in this area of the Region but also upgrade this 30 year old facility based on the Region's Asset Management program.

It is anticipated that detailed design will be completed by Q2 2011, tender by Q3 2011 and substantial completion by the end of 2013.

4. ANALYSIS AND OPTIONS

Request for proposal obtained by eight consulting firms

In accordance with the Region's Purchasing By-law, interested consulting engineering firms were invited to submit proposals for undertaking Detailed Design, Contract

Administration and Site Inspection for Leslie Street Sewage Pumping Station Upgrades. The Request for Proposal (RFP) P-10-53 was advertised in the *Daily Commercial News* and electronically on *Biddingo.com*. While the RFP was obtained by eight consulting firms, only the following six consultants submitted proposals:

- Associated Engineering (Ont.) Ltd.
- Cole Engineering Group Ltd.
- Conestoga-Rover & Associates Limited
- Genivar Consultants LP
- GHD Inc.
- MMM Group Limited

The Request for Proposal detailed the scope of work required, which included the following services:

- Project management, planning and control
- Detailed design and tendering
- Procurement of approvals
- Construction contract administration and site inspection
- Quality assurance and quality control

Proposals were evaluated using two-envelope system

Proposals were evaluated using the two-envelope system with technical and financial information submitted in separate envelopes. Technical proposals were evaluated prior to any knowledge of financial information. Technical content was weighted at 80%.

The Region's proposal evaluation team reviewed the six technical/management proposals based on the following criteria:

- Experience of the proponent
- Experience of key project staff
- Sub-consultants' experience
- Understanding of the project
- Understanding of the deliverables
- Project approach and methodology
- Project management approach
- References

Technical and management components of the proposal must achieve a minimum technical score of 48 out of 80 to have the financial portion of the proposal considered. Technical proposals from the following consultants did not achieve the minimum score:

- a) Associated Engineering (Ont.) Ltd.
- b) Cole Engineering Group Ltd.

- c) Genivar Consultants LP
- d) MMM Group Limited

Accordingly, their submissions were disqualified from further consideration on this assignment.

The financial evaluation composed the remaining 20% weight of the total evaluation. Technical and financial results are summarized in Table 1 below.

Table 1
Consultant Proposal Evaluation Summary

Consulting Engineering Firm	Technical Score (out of 80)	Financial Score (out of 20)	Total Score (out of 100)	Price per technical point	Total Price
Conestoga-Rovers & Associates Limited	63	14.9	77.9	\$32,855.25	\$2,069,881
GHD Inc.	54.6	20	74.6	\$28,251.74	\$1,542,856

Evaluation of proposals resulted in GHD Inc. achieving lowest price per technical point

The firm with the highest total score is Conestoga-Rovers & Associates Limited. Given that the Total Score achieved by GHD Inc. is within five (5) points of the highest total Score, a “dollar cost methodology” calculation was completed, as required by the Purchasing By-law. The result of this calculation, as shown in the last column of Table 1 above, determined that the upset cost submitted by GHD Inc. represents the best overall value to the Region.

5. FINANCIAL IMPLICATIONS

The upset limit fee for the proposed work is \$1,542,856 excluding taxes. The total approved budget for this project is \$15,474,000 including \$1,903,000 for 2010 capital budget. Sufficient funds are available in the 2010 budget for works anticipated to be completed this year.

The engineering fee for this assignment, including contract administration, is 11.9% of the construction cost estimate, which is within the range for this type of retrofit/upgrades project.

The upset limit fees include an amount of \$111,856 for provisional items and allowances that include:

- exposing underground utilities
- participating in value engineering study workshop
- participating in constructability review workshop
- equipment pre-selection and contractor pre-qualification
- additional environmental assessment activities as a result of the Demand Response program
- additional design activities as result of demand response program
- additional contract administration and site inspection as a result of the demand response program if required
- materials testing
- contractor performance evaluation

The consultant will only be reimbursed for the provisional items if the provisional items are authorized, in writing, by the Region to complete such work.

Payment for engineering services during construction is based on construction contract duration. An allowance for contract administration and site inspection services of 400 working days (80 weeks) is included within the financial proposal. Actual construction duration will be determined upon completion of detailed design and construction staging and may vary from the estimated days that were quoted on by all parties in the Request for Proposal. The construction administration and site inspection fees may need to be adjusted based on competitive pricing to match the updated construction duration at the tendering stage for the contract. It is recommended that the Commissioner of Environmental Services be authorized to amend the contract to reflect these changes.

6. LOCAL MUNICIPAL IMPACT

By undertaking the Detailed Design, Contract Administration and Site Inspection for Leslie Street Sewage Pumping Station Upgrades, the Region will provide adequate capacity to service approved growth in the the Town of Markham and the City of Vaughan as recommended in the Water and Wastewater Master Plan.

Throughout the course of the assignment, Regional staff will work closely and cooperatively with Town of Markham and City of Vaughan to engage stakeholders.

7. CONCLUSION

Six proposals for this project were evaluated in accordance with Regional procedures. It is recommended that GHD inc. be engaged to undertake the Detailed Design, Contract

Administration and Site Inspection for Leslie Street Sewage Pumping Station Upgrades at an upset limit cost of \$1,542,545 excluding taxes.

For more information on this report, please contact Daniel Kostopoulos, Director, Capital Planning and Delivery, Environmental Services at extension 5070.

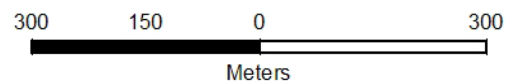
The Senior Management Group has reviewed this report.

(The attachment referred to in this clause is attached to this report.)



LOCATION PLAN

Consultant Selection For Detailed Design,
Contract Administration and Site Inspection
for Leslie Street Sewage Pumping Station
Upgrade in the Town of Markham – Project 79890



Environmental Services

eDOCS # 1841005