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CONSULTANT SELECTION FOR DETAILED DESIGN, CONTRACT ADMINISTRATION AND SITE INSPECTION SERVICES FOR THE NEWMARKET SEWAGE PUMPING STATION UPGRADE PROJECT, PROJECT 78531-EI08010

The Environmental Services Committee recommends the adoption of the recommendations contained in the following report dated May 24, 2012, from the Commissioner of Environmental Services.

1. RECOMMENDATIONS

It is recommended that:

1. AECOM Canada Ltd. be engaged to undertake detailed design, contract administration and site inspection services for the Newmarket Sewage Pumping Station Upgrade Project, as outlined in this report, at a fee of \$631,945.87 excluding taxes.
2. The Commissioner of Environmental Services be authorized to adjust the contract administration and site inspection fees using the competitive unit price of \$4,226.96 per week, excluding taxes, to match actual construction duration within the Total Project Budget Authority.

2. PURPOSE

This report seeks Council authorization to retain engineering services related to detailed design, contract administration and site inspection of the Newmarket Sewage Pumping Station Upgrade Project. A location plan is appended to this report (*see Attachment 1*).

The Region's Purchasing Bylaw requires Council authorization to award a Request for Proposal over \$500,000 or when the recommended proponent does not have the lowest cost. In this case, the recommended proponent submitted the lowest cost; however the recommended proponent's bid is over \$500,000.

3. BACKGROUND

Newmarket Sewage Pumping Station is a critical facility in the York-Durham Sewage System

The Newmarket Sewage Pumping Station is located at 360 Bayview Parkway in the Town of Newmarket. This pumping station currently transfers an average of just over

200 l/s of wastewater from Newmarket to the Aurora Sewage Pumping Station, ultimately reaching the Duffin Creek Water Pollution Control Plant for treatment. This facility is a critical part of the York Durham Sewage System now and into the future.

Dry weather peak flows at the Newmarket Pumping Station reach just over 610 l/s and maximum capacity is 1290 l/s. The Newmarket Sewage Pumping Station will also provide interim capacity for the communities of Holland Landing and Queensville in 2015 and will also form part of the longer term servicing strategy for system security once servicing is provided through the Upper York Sewer Solution.

The Newmarket Sewage Pumping Station receives wastewater via a 900 mm diameter gravity sanitary sewer and a small pumping station located on the property. Wastewater passes through a screening area into a wet well and discharges through a 900 mm diameter forcemain. The Newmarket Sewage Pumping Station was commissioned in 1984 and has undergone minor upgrades over the past 28 years.

Recent inspection reports identified electrical, process control and process mechanical issues requiring upgrades. In 2011, a full facility condition assessment was completed, including a review of the discharge forcemain. Although no Certificate of Approval compliance issues were identified, this comprehensive assessment provided the Region with a clear understanding of the current condition of station equipment and structure, as well as upgrade requirements to ensure the facility continues to operate at the required performance level.

The condition assessment identified and recommended numerous upgrades including improvements to process mechanical, electrical, instrumentation, health and safety and building structure components. All of these items will be incorporated into the proposed facility upgrade to ensure service levels are maintained. Main upgrades include:

- Replace motor control centre and main switch gear
- Replace two diesel generators
- Replace power transformer
- Replace inlet slide gates
- Replace master control panel and pump auto starters

4. ANALYSIS AND OPTIONS

Request for Proposal P-12-57 issued to pre-qualified engineering consulting firms

In accordance with the Region's Purchasing Bylaw, engineering firms were prequalified (P-12-42) to submit proposals for the assignment. The following engineering consulting firms were selected to submit proposals for this assignment:

- AECOM Canada Ltd.

- Associated Engineering (Ontario) Ltd.
- Cole Engineering Group Ltd.
- Hatch Mott MacDonald
- GHD Inc.
- Stantec Consulting Inc.
- The Municipal Infrastructure Group Ltd.

Request for Proposal P-12-57 detailed the scope of work required, which included the following services:

- Project management, planning and scheduling
- Preliminary and detailed design
- Contract administration
- Site inspection services
- Permits and approvals

Proposals evaluated using the two-envelope system

Proposals were evaluated using the two-envelope system with technical and financial information submitted in two separate envelopes. The overall proposal score was evaluated based on a weighting of 80 points for the technical proposal and 20 points for the financial proposal. Technical proposals were evaluated prior to any knowledge of financial information.

The Region's proposal evaluation team reviewed the five submitted technical proposals based on the following criteria as listed in Request For Proposal P-12-57:

- Corporate experience related to wastewater facility projects
- Project manager and proposed key staff experience for similar projects
- Proposed technical support staff experience for similar projects
- Project approach and methodology
- Project understanding and demonstrated ability to deliver the project
- Sub-consultant experience
- Project management, implementation and allocated resources
- Quality assurance and quality control processes
- References
- Value added services or concepts
- Overall completeness of the consultant's submission

Technical components of the proposal must achieve a minimum technical score of 60 per cent (48 points out of the potential 80 points) to have the financial portion of the proposal considered. If a proponent does not achieve this minimum technical score, their financial proposal is returned unopened. Technical and financial results are summarized in Table 1.

Table 1
Consultant Proposal Evaluation Summary

Consulting Engineering Firm	Technical Score (out of 80)	Total Fee (\$) (excluding taxes)	Financial Score (out of 20)	Total Score (out of 100)	Cost Per Technical Point (\$)
AECOM Canada Ltd.	53.8	631,945.87	20	73.8	11,757.13
Cole Engineering Group Ltd.	54.5	855,037.25	14.8	69.3	15,688.76
The Municipal Infrastructure Group	53.5	889,400.00	14.2	67.7	n/a
GHD Inc.	51.5	992,875.00	12.7	64.2	n/a
Stantec Consulting Inc.	48	646,500.00	19.5	67.5	n/a

Evaluation of proposals revealed AECOM Canada Ltd. achieved the highest total score and lowest price per technical score

The firm with the highest total score is AECOM Canada Ltd. Given that the total score achieved by another firm was within five points of the highest total score, a “dollar cost methodology” calculation was completed, as required by the Purchasing Bylaw. Results of this calculation, as shown in Table 1, determined that the proposal submitted by AECOM Canada Ltd. represents the best overall value to the Region.

Supplies and Services Branch has reviewed the evaluation summary and has issued their internal report confirming that AECOM Canada Ltd. be recommended as the successful overall proponent to undertake the engineering consulting services related to the detailed design, contract administration and site inspection services for the Newmarket Sewage Pumping Station Upgrade Project.

Link to Key Council-approved Plans

The Newmarket Sewage Pumping Station currently transfers an average of 200 l/s of wastewater from Newmarket to the Aurora Sewage Pumping Station, ultimately reaching the Duffin Creek Water Pollution Control Plant for treatment. This facility is critical to the Region’s wastewater system, both now and into the future. The assignment and ultimate upgrade of this facility is a key project that aligns with the Region’s 2011 to 2015 Strategic Planning objective of continuing to deliver and sustain critical infrastructure.

5. FINANCIAL IMPLICATIONS

The fee for the proposed work is \$631,945.87 excluding taxes. This fee is 7% of the estimated capital costs which is within the industry standards. The approved 2012 10 Year Capital Program identifies a Total Project Budget Authority for this project of \$9 million and is funded from wastewater user rates.

The consulting fee includes detailed design, contract administration and site inspection services for an estimated duration of 340 days. The proposal includes unit prices for contract administration and site inspection services, in this case \$4,226.96 per week, which staff deem acceptable for this type of project.

Should the actual duration of construction increase, as determined by the detailed design and specified in the tender documents, it is recommended that the Commissioner of Environmental Services be authorized to adjust the fee accordingly by the amount of \$4,226.96 per week excluding taxes.

6. LOCAL MUNICIPAL IMPACT

Implementation of the Newmarket Sewage Pumping Station Upgrade Project is important as part of the Region's ongoing commitment to invest in its infrastructure and will ensure continued and long-term reliable wastewater servicing for the Towns of Newmarket and East Gwillimbury. In addition, this facility upgrade will improve the overall security of this critical pumping station.

7. CONCLUSION

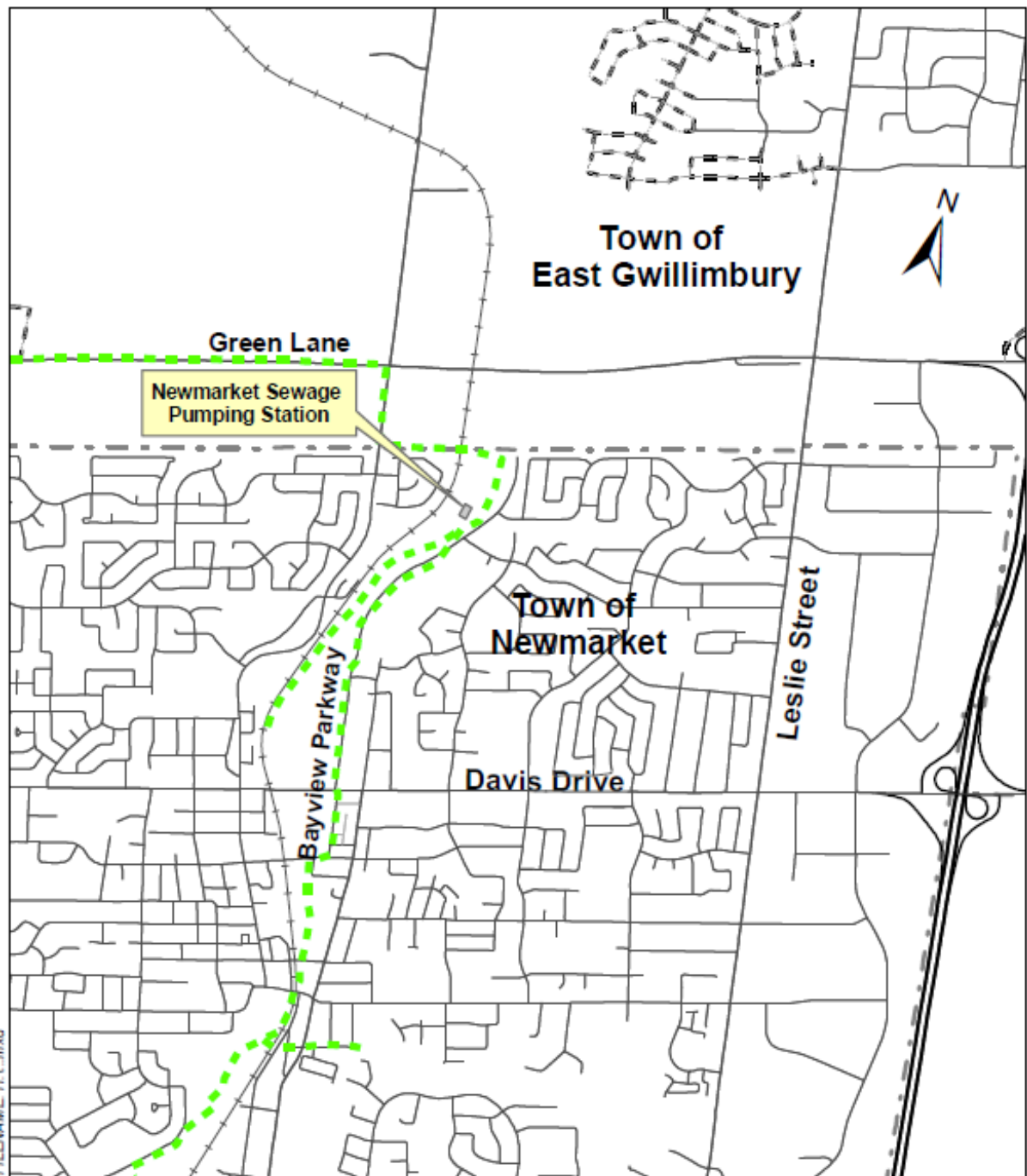
Completion of the Newmarket Sewage Pumping Station facility upgrade will ensure sustainable wastewater collection and conveyance from the Town of Newmarket.

Five proposals from engineering consultants were received and evaluated for this project in accordance with the Region's Purchasing Bylaw. The proposal from AECOM Canada Ltd. represents the best overall value to the Region and it is recommended that AECOM Canada Ltd. be engaged to undertake the detailed design, contract administration and site inspection services for the Newmarket Sewage Pumping Station Upgrade Project at a cost of \$631,945.87, 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 Services for the Newmarket
Sewage Pumping Station Upgrade Project,
Project 78531-EI08010



ENVIRONMENTAL SERVICES

York# 4154432

