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### **CONSULTANT SELECTION FOR ENGINEERING SERVICES 16<sup>TH</sup> AVENUE DETAILED DESIGN TOWN OF MARKHAM (REQUEST FOR PROPOSAL P-09-76)**

**The Transportation Services Committee recommends the adoption of the recommendations contained in the following report dated December 17, 2009, from the Commissioner of Transportation Services.**

#### **1. RECOMMENDATIONS**

It is recommended that:

1. Regional Council authorize staff to retain the consulting firm HDR Corporation (HDR/iTrans), to undertake the detailed design for road improvements on 16<sup>th</sup> Avenue (Y.R. 73) from Donald Cousens Parkway (Y.R. 48) to east of Reesor Road, in the Town of Markham, at a cost not to exceed \$625,093.00, excluding GST.
2. The Commissioner of Transportation Services be authorized to execute the contract, subject to terms and conditions acceptable to the Commissioner of Transportation Services and the Regional Solicitor's approval as to form and content.

#### **2. PURPOSE**

This report recommends the award of the consulting assignment for the detailed design of road improvements on 16<sup>th</sup> Avenue from Donald Cousens Parkway to east of Reesor Road, in the Town of Markham. A location plan is appended to this report (*see Attachment 1*).

This report is before Transportation Services Committee because the Region's Purchasing By-law requires Regional Council approval for awards over \$500,000.

#### **3. BACKGROUND**

York Region's Transportation Master Plan Update has identified the need for realigning 16<sup>th</sup> Avenue at the Reesor Road intersection to eliminate the jog and the Class Environmental Assessment (EA) identified the need for replacing the single-lane Bailey bridge, which carries 16<sup>th</sup> Avenue over the Little Rouge Creek east of Reesor Road.

**16<sup>th</sup> Avenue and Reesor Road are both two-lane roads with many opportunities to enhance safety and operations through intersection improvements**

Within the study limits, 16<sup>th</sup> Avenue is a two-lane rural road with ditches on both sides. Sightlines at both the legs of the jogged intersection at Reesor Road are limited due to the existing alignment and roadside vegetation. The north and south intersections are separated by about 70 metres. Together with the bridge replacement, the opportunity to improve the sightlines and reduce the potential number of turning conflicts can be accommodated by a new four-way intersection.

**16<sup>th</sup> Avenue is carried over the Little Rouge Creek by a single lane Bailey bridge, parts of which are of heritage interest**

Immediately east of Reesor Road, the Little Rouge Creek Bridge is a 20m span Bailey bridge on concrete abutments providing a narrow one-lane driving platform on timber with timber curbs. Recently, Regional maintenance needs at this bridge have increased due to rapid deterioration and increasing traffic volumes.

The Bailey bridge is of heritage interest. Rouge Park, a major stakeholder in this area, had indicated their desire to maintain the Bailey bridge for pedestrian use.

The Little Rouge Creek valley is part of the Rouge River watershed and contains a significant amount of forested and naturalized lands. The area was designated as part of Rouge Park North and a part of a functional linear riparian corridor.

**A Class Environmental Assessment was completed March 2009 and subsequently received clearance**

A Class Environmental Assessment (Class EA) Study for the improvements of 16<sup>th</sup> Avenue from Donald Cousens Parkway to York-Durham Line was completed in March 2009 and received *Environmental Assessment Act* clearance in May 2009.

The Class EA concluded that improvements are needed in this area to enhance safety on 16th Avenue at Reesor Road intersection and replace the single-lane Bailey bridge, immediately east of Reesor Road.

Widening 16<sup>th</sup> Avenue or Reesor Road was not recommended in the Class EA and there are no plans at this time to widen these roadways.

**The 2010 – 10 Year Roads Construction Program has scheduled the construction to start in 2011**

The approved 2010 10-Year Roads Construction Program has identified the construction of this project in 2011.

**This assignment is required to provide the necessary engineering and technical expertise to complete the detailed design and deliver a contract ready package for tender in 2011**

The purpose of this assignment is to complete the detailed design for improvements on 16<sup>th</sup> Avenue from Donald Cousens Parkway to east of Reesor Road.

The project will include:

- A new four-way intersection at 16<sup>th</sup> Avenue and Reesor Road.
- A new three-span two-lane bridge over Little Rouge Creek.
- Bike lanes and sidewalks.

#### **4. ANALYSIS AND OPTIONS**

**A Request for Qualifications led to the identification of three interested firms qualified to submit detailed proposals**

The first phase of the procurement process for consulting engineering services included the Supplies and Services Branch issuing Request for Qualifications (RFQ) for Engineering Services No. P-07-43.

The purpose for issuing this RFQ was to solicit interest from as broad a market for engineering services as possible. In response to RFQ P-07-43, 14 engineering consulting firms expressed interest in this project and submitted their qualifications and proposed team members. These 14 submissions were evaluated and scored based on our standard criteria, which includes:

- Project Manager experience.
- Team completeness and experience with York Region projects.
- Industry experience of key project lead members.
- York Region needs and team availability.
- References.
- Added value.

The three firms who achieved the highest scores were:

- AECOM
- HDR/iTrans Consulting Inc. (HDR/iTrans)
- McCormick Rankin Corporation (MRC)

The second phase of the procurement process was for the Supplies and Services Branch to issue Request for Proposal (RFP) No. P-09-73 to the three firms who achieved the highest score on RFQ P-07-43.

It is our practice to invite only the top three scoring firms to submit a proposal because this results in a significantly higher quality and completeness of the submissions. Further,

through our ongoing consultation with the Consulting Engineers of Ontario and individual firms it has been communicated that the top performing firms are reluctant to participate when five or more firms have been invited because the overall quality of the Technical Proposals is reduced and selection is mainly price driven.

Proposals were received from each of the three firms in response to the RFP.

### **The three proposals were evaluated in conformance with the Region's Purchasing Bylaw process using a two envelope system**

The two envelope system requires the technical proposal and the financial proposal be submitted in two separate envelopes. The proposals were evaluated based on a weighting of 80% for the technical component and 20% for the fee component.

The allocation of 80% for the technical component and 20% for the fee component has been our practice for several years. The reason for this split is to recognize the relative importance to the Region of retaining best available professional services yet demonstrate fiscal prudence. This attention to fiscal prudence is further demonstrated in our RFP process by the "Dollar Cost per Technical Point" methodology, which applies when the total scores of two or more firms are within 5 points of each other.

The technical proposals were opened first and evaluated using the following criteria:

- Qualifications and experience of the Project Team, including project manager, technical support staff and sub-consultants.
- Project deliverables, including project plan, schedule and budget control, staff allocation and quality assurance.
- Project implementation, including project understanding, approach and methodology, key project issues and value and innovation of services.

A technical score was then calculated for each proponent.

The financial proposals were then opened and evaluated. A financial score was calculated for each proponent.

The technical score, weighted at 80%, and the financial score, weighted at 20%, were combined for a total score. As the total points of the two top bid were within 5 points, the dollar cost per technical point methodology was applied.

### **Technical and Financial Evaluation Summary**

The proponents, their technical scores, proposed upset limit fees and dollar cost per technical point are presented in Table 1.

**Table 1**  
Evaluation Summary

<b>Firm</b>	<b>Technical Score (out of 80)</b>	<b>Upset Fee (Excluding GST)</b>	<b>Financial Score (out of 20)</b>	<b>Total Score (out of 100)</b>	<b>Dollars Cost per Point</b>
HDR/iTrans	57.6	\$625,093	20.0	77.6	\$10,861.74
MRC	61.2	693,000	18.0	79.2	11,323.53
AECOM	49.1	719,922	17.4	66.5	N/A

The proposals from MRC and HDR/iTrans both scored well as they put forward a project team that was well qualified and familiar with York Region guidelines and policies, addressed the key issues and challenges for this project and presented a comprehensive and detailed work program tailored for the project.

Additional areas of good attention in the proposals were:

- The submissions were comprehensive and logical demonstrating a thorough understanding of the project issues, known and potential challenges and approach to successfully complete the detailed design.
- Both firms assigned key project team members who have been involved in the past with a number of York Region projects of similar scale and nature.
- Both firms provided a detailed, realistic and complete project schedule incorporating individual components and reasonable review times for agencies and internal approvals.
- Both firms submitted a time-task matrix that presented adequate resource allocation plans reflecting a full understanding and commitment of the resources to complete the full scope of work and included numerous tangible project deliverables.
- The MRC proposal achieved a Total Score of 79.2.
- The HDR/iTrans proposal achieved a Total Score of 77.6.

**With HDR/iTrans achieving a Total Score within 5 points of MRC, the Dollar Cost Per Technical Point methodology for selecting the recommended proponent applies**

As required by the Purchasing Bylaw, in situations where two or more proponents achieve a Total Score within 5 points of each other, the Dollar Cost Per Technical Point methodology shall be used to select the successful proponent.

The MRC proposal achieved a Dollar Cost Per Technical Point of \$11,323.53.

The HDR/iTrans proposal achieved a Dollar Cost Per Technical Point of \$10,861.74, and as such are the preferred proponent.

## **5. FINANCIAL IMPLICATIONS**

The upset limit fee for the detailed design is \$625,093, excluding GST. The 2010 10-Year Roads Construction Program has sufficient funds to cover 2010 anticipated expenditures for this project.

The upset limit fee of \$625,093 for the detailed design represents 5.0% of the total capital cost estimated in the 2009 10-Year Roads Construction Program to complete this project. This total capital cost was estimated to be \$12,367,000.

The upset limit fees include provisional items, such as, coordination and survey of exposed underground utilities, review of contractor's submissions, etc. The consultant will only be paid for these items if required and specifically directed by York Region to complete them.

## **6. LOCAL MUNICIPAL IMPACT**

There are no local municipal implications associated with this report.

Road improvements to 16<sup>th</sup> Avenue will address transportation deficiencies in York Region, and specifically in the Town of Markham.

Throughout the course of this assignment, Regional staff will work with staff from the Town of Markham to accommodate local municipal requirements.

## **7. CONCLUSION**

Three consultants' proposals for provision of professional engineering services were evaluated in accordance with Regional policy, by-laws and practices.

The proposal submitted by MRC achieved the highest Total Score; however, the proposal submitted by HDR/iTrans achieved a Technical Score within five points of MRC. The Dollar Cost Per Technical Point methodology applies for selecting the successful proponent. In this case, the proposal from HDR/iTrans achieved the lowest Dollar Cost Per Technical Point.

It is recommended that a consulting assignment for the detailed design of 16<sup>th</sup> Avenue, from Donald Cousens Parkway to east of Reesor Road be awarded to HDR/iTrans as the successful proponent under Request for Proposal P-09-76.

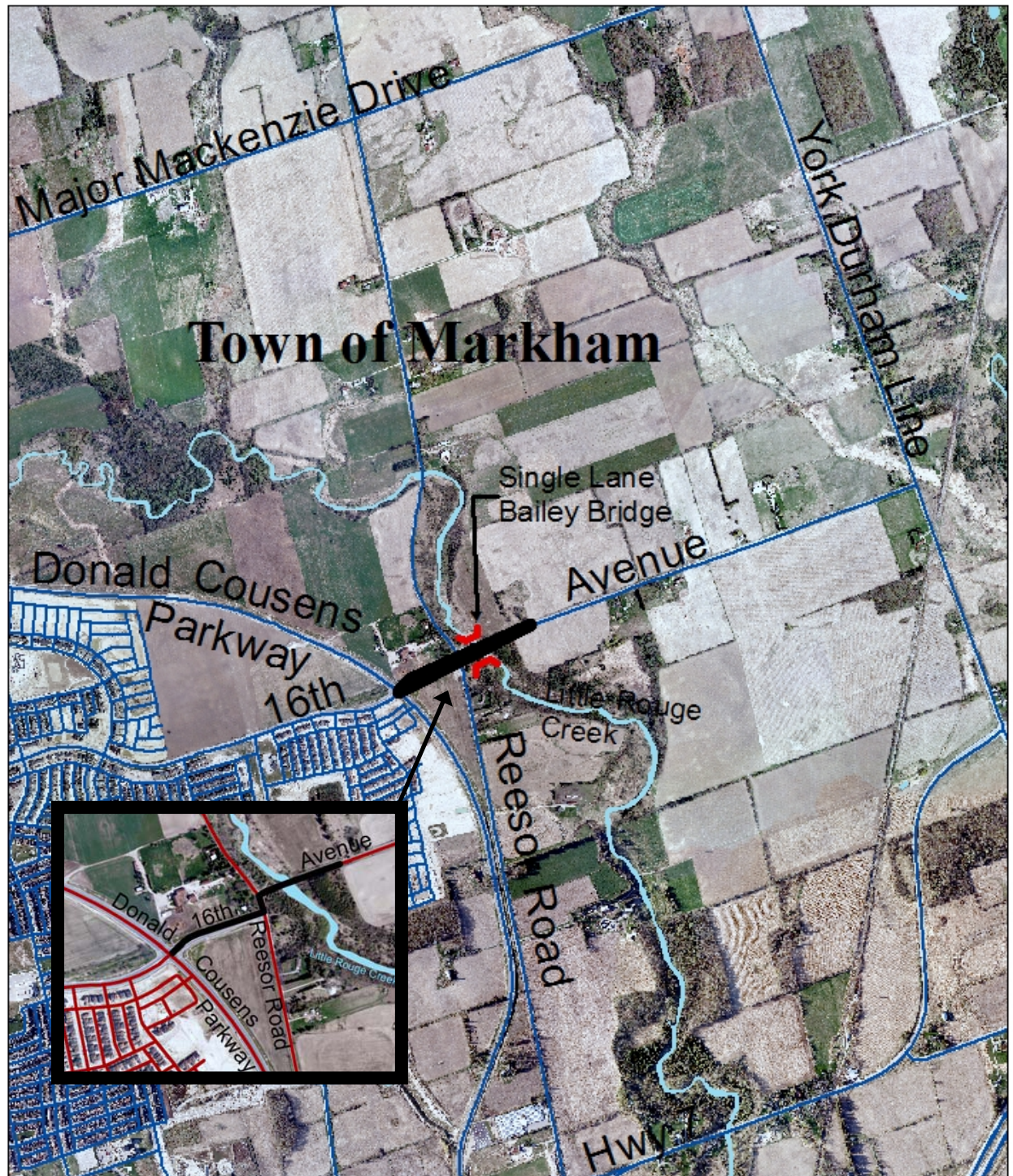
For more information on this report, please contact Paul Jankowski, General Manager of Roads at extension 5901.

Report No. 1 of the Transportation Services Committee  
Regional Council Meeting of January 21, 2010

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The Senior Management Group has reviewed this report.

*(The attachment referred to in this clause was included in the agenda for the January 6, 2010 Committee meeting.)*



## LOCATION PLAN

Proj. 8686 16th Avenue from Donald Cousens Parkway to East of Reesor Road  
Road Reconstruction  
Town of Markham



Roads Branch, Transportation Services

