### The Regional Municipality of York

Committee of the Whole Transportation Services June 13, 2019

Report of the Commissioner of Transportation Services

## Award of Consultant Services for Major Mackenzie Drive Islington Avenue to Pine Valley Drive City of Vaughan

#### 1. Recommendations

- Council approve the award of the contract for Site Coordination and Inspection Services for Major Mackenzie Drive (Y.R. 25) improvements, from Islington Avenue (Y.R. 17) to Pine Valley Drive (Y.R. 57) to AECOM Canada Ltd., pursuant to Request for Proposal P-19-88 at a total cost of \$2,113,294, excluding HST.
- 2. The Commissioner of Transportation Services be authorized to execute the agreement on behalf of the Region.

#### 2. Summary

This report seeks approval for the Region to enter into a contract with AECOM Canada Ltd. for Site Coordination and Inspection Services for Major Mackenzie Drive (Y.R. 25) improvements, from Islington Avenue (Y.R. 17) to Pine Valley Drive (Y.R. 57), in the City of Vaughan, under RFP P-19-88. Council approval is required under the Purchasing Bylaw because the quoted contract price exceeds \$2,000,000.

Key Points:

- Major Mackenzie Drive is under construction in phases from Highway 50 to Highway 400 and will provide a major six-lane east-west roadway in the City of Vaughan
- The construction contracts are complex and require site coordination and inspection services
- Due to the number of construction projects currently underway and planned for 2019 and 2020, existing internal staff resources are not adequate to manage this project
- The proposal submitted by AECOM Canada Ltd. achieved the highest total score and as such is the successful proponent pursuant to the requirements of the RFP and the terms of the Region's Purchasing Bylaw

### 3. Background

### The approved Western Vaughan Individual Environmental Assessment identified widening Major Mackenzie Drive to six lanes as one of the near-term projects to serve the growing communities in the City of Vaughan

The City of Vaughan and, in particular, the Nashville Heights and Kleinburg subdivisions are growing rapidly. Currently, there are approximately 2500 homes adjacent to the Major Mackenzie Drive corridor within these two subdivisions, with more development planned over the coming years. The Ministry of Transportation Ontario (MTO) is extending Highway 427 from Highway 7 to Major Mackenzie Drive. With the terminus on Major Mackenzie Drive, there will be more traffic on Major Mackenzie Drive going to and from the highway. Prior to development in the area, the Average Annual Daily Traffic along this section of Major Mackenzie Drive was approximately 3000. With Highway 427 in place, and development proceeding as planned, this volume is expected to rise to approximately 40,000 by 2031.

The Western Vaughan Individual Environmental Assessment was approved in July 2012. One of the key findings was that Major Mackenzie Drive from Highway 50 to Highway 400 be widened to six lanes by 2031. The reconstruction of Major Mackenzie Drive from Highway 50 to Highway 400 is included in the Region's current 10-Year Roads Capital Construction Program.

The location map and construction timelines for the various sections are outlined in Attachment 1.

# The section of Major Mackenzie Drive from Islington Avenue to Pine Valley Drive was tendered in spring 2019

Detailed design is complete and permits are secured. Utility relocation is complete, except for the components to be done through the road construction contract. Staff is working to finalize the land exchange with Ontario Heritage Trust (OHT) for the necessary property. The contract for this section of work was tendered in spring 2019 with construction is expected to begin in summer 2019.

The improvements on this section of Major Mackenzie Drive include the construction of a sixlane urban roadway with illumination, multi-use path, sidewalk, curb and storm sewers. There are also two new bridges at East Humber River and Purpleville Creek and three large box culverts for wildlife crossings. The estimated pre-construction contract value is \$38 million and is expected to take three years to complete.

## Significant coordination with external agencies will be required throughout construction

The project also has some significant coordination and monitoring requirements as a result of the land exchange with OHT. Land was required from OHT on the north side of Major

Mackenzie Drive and the Toronto and Region Conservation Authority on the south side in order to build the new road. The agreement with OHT includes conditions such as construction requirements associated with protection of their property, temporary and permanent fence construction, temporary access, protection of the natural environment and OHT presence/involvement during construction.

In addition, as part of the indigenous consultation during the OHT property purchase process, the Region also entered into agreements with Mississaugas of the Credit First Nation and Huron-Wendat Nation. These indigenous groups have requested to be present during construction activities affecting the natural environment, such as tree clearing and stream work, and/or adjacent to archaeological sites. The Region and contractor will need to coordinate/monitor these external agencies to ensure they are on site when required as per the conditions of each of their agreements.

There is sensitivity to the construction of the bridges and adjacent roadway due to the presence of an endangered fish species, Redside Dace, in the stream crossings. Construction activity will need to be closely monitored to ensure no sediment or pollutants enter the watercourses.

# The Region is targeting completion of the Major Mackenzie Drive project at the same time as completion of the Highway 427 extension by Ministry of Transportation

The Ontario Ministry of Transportation is constructing an extension of Highway 427, from Highway 7 to Major Mackenzie Drive. The MTO's project includes an interchange and the reconstruction of Major Mackenzie Drive through the Highway 427 corridor. The Region and MTO are coordinating the construction of their respective projects, both currently under construction, with a targeted completion date in 2021.

Major Mackenzie Drive is currently under construction between Highway 427 and Islington Avenue. The section between Islington Avenue and Pine Valley Drive is the last section between Highway 427 and Highway 400 to be constructed. The west-most section of Major Mackenzie Drive, from Highway 50 to Highway 427, is also scheduled to be completed in 2021. Once completed, this will provide a continuous, six-lane roadway between Highway 50 and Highway 400.

# Supplementing internal construction staff resources with external staff is necessary when there are too many construction projects to adequately manage internally

The scope of the proposed work will require significant staff resources to ensure the construction work is completed to Regional standards and contract specifications. Due to the number of construction projects currently underway and planned for in 2019 and 2020, existing internal staff resources will not be adequate to manage this large and complex project with an estimated cost of \$38 million. It is therefore proposed that an external

professional consulting service provider be engaged to provide the staff resources necessary to ensure the construction is undertaken to the requirements and satisfaction of the Region.

### 4. Analysis

## In April 2019, the Region issued a Request for Proposal for site coordination and inspection services

The Procurement Office issued RFP P-19-88 on the Region's website and Biddingo on April 17, 2019. The RFP was open to any qualified proponent and 12 firms submitted proposals:

- AECOM Canada Ltd.
- McIntosh Perry Consulting Engineers Ltd.
- HDR Corporation
- KiHL Construction Management
- GHD Limited
- Highway Construction Inspection Ontario Inc.
- IBI Group Professional Services (Canada) Inc.
- Morrison Hershfield Limited
- PML Consultants Ltd.
- LEA Consulting Ltd.
- Ambashi Engineering & Management Inc.
- Four Corners Engineering Inc.

Proposals were evaluated using a two-envelope system with a weighting of 80 per cent for the technical component and 20 per cent for the financial component. The proponents had to achieve a minimum score of 48 points out of 80 to proceed to the next step and have their financial envelopes opened. Five firms met this criterion.

The proposals were evaluated in accordance with Regional policy, bylaws and practices. The proponents, their technical and financial scores and proposed upset limit fees, are shown in Table 1.

### Table 1 Evaluation Summary

Firm	Technical Score (80%)	Financial Score (20%)	Total Score (100%)	Upset Limit Fee (excluding taxes)
AECOM Canada Ltd.	60.10	15.60	75.70	\$2,113,294.00
McIntosh Perry Consulting Engineers Ltd.	52.60	17.90	70.50	\$1,849,125.00
HDR Corporation	53.10	16.50	69.60	\$1,999,705.78
KiHL Construction Management	48.10	20.00	68.10	\$1,651,250.00
GHD Limited	50.90	14.50	65.40	\$2,281,496.00

## The proposal from AECOM Canada Ltd. achieved the highest total score in response to Request for Proposal P-19-88

The proposal from AECOM Canada Ltd. achieved the highest total score and as such is the successful proponent pursuant to the requirements of the RFP and the terms of the Region's Purchasing Bylaw.

All firms submitted proposals based on a common set of defined tasks and hours allocated to each task. The overall cost and the cost variance amongst the different consultants is as expected for this type work and can be attributed to unit/hourly rate variances.

### 5. Financial

The upset limit fee submitted by AECOM Canada Ltd. for site coordination and inspection services is \$2,113,294, excluding HST.

Site coordination and inspection costs for this project have been included in the 2019 10-Year Capital Budget, and the upset limit is within the approved 2019 Capital Spending Authority. All expenditures for this project will be funded from 90 per cent development charges and 10 per cent tax levy.

### 6. Local Impact

Road improvements to Major Mackenzie Drive, from Islington Avenue to Pine Valley Drive, will address the rapid pace of development and growth in traffic volumes in the area. This project is part of the larger Major Mackenzie Drive reconstruction project and will improve roadway and traffic connectivity from the proposed terminus of Highway 427, west to Highway 50 and east to Highway 400, supporting residential and commercial growth in the area. This vital link will also ease access to local points of interest, such as the Kortright Centre for Conservation, the McMichael Canadian Art Collection and Canada's Wonderland.

Throughout the course of this assignment, Regional staff will work with staff from the City of Vaughan and the Ministry of Transportation to address any local municipal requirements.

### 7. Conclusion

Proposals from 12 professional consulting services firms for the provision of site coordination and inspection services were evaluated in accordance with Regional policy, bylaws and practices. The proposal submitted by AECOM Canada Ltd. achieved the highest total score and as such is the successful proponent pursuant to the requirements of the RFP and the terms of the Region's Purchasing Bylaw.

It is recommended the contract for site coordination and inspection services for Major Mackenzie Drive, from Islington Avenue to Pine Valley Drive, be awarded to AECOM Canada Ltd., as the successful proponent under RFP P-19-88 for a total cost of \$2,113,294.

For more information on this report, please contact Salim Alibhai, Director of Capital Planning and Delivery at 1-877-464-9675 ext. 75229. Accessible formats or communication supports are available upon request.

Recommended by:	Paul Jankowski Commissioner of Transportation Services
Approved for Submission:	Bruce Macgregor Chief Administrative Officer
June 3, 2019 Attachment (1) 9087067	