

Clause 6 in Report No. 4 of Committee of the Whole was adopted, without amendment, by the Council of The Regional Municipality of York at its meeting held on March 23, 2017.

6

Consultant Services Fee for Additional Scope of Work
Bathurst Street from Highway 7 to Teston Road/Elgin Mills Road
City of Vaughan and Town of Richmond Hill

Committee of the Whole recommends adoption of the following recommendation contained in the report dated February 15, 2017 from the Commissioner of Transportation Services:

1. Council authorize the agreement between the Region and Parsons Corporation for detailed design of Bathurst Street (Y.R. 38) from Highway 7 (Y.R. 7) to Teston Road/Elgin Mills Road (Y.R. 49), in the City of Vaughan and the Town of Richmond Hill be amended to increase the contract price, within the Capital Spending Authority, from \$2,987,235 to \$3,582,235, excluding HST, associated with scope changes related to satisfying requirements of regulatory agencies and coordinating the design with the requirements of various stakeholders.

Report dated February 15, 2017 from the Commissioner of Transportation Services now follows:

1. Recommendation

It is recommended that:

1. Council authorize the agreement between the Region and Parsons Corporation for detailed design of Bathurst Street (Y.R. 38) from Highway 7 (Y.R. 7) to Teston Road/Elgin Mills Road (Y.R. 49), in the City of Vaughan and the Town of Richmond Hill be amended to increase the contract price, within the Capital Spending Authority, from \$2,987,235 to \$3,582,235, excluding HST, associated with scope changes related to satisfying requirements of regulatory agencies and coordinating the design with the requirements of various stakeholders.

2. Purpose

This report seeks Council authorization to increase the value of the contract with Parsons Corporation (Parsons) for the detailed design of Bathurst Street (Y.R. 38), from Highway 7 (Y.R. 7) to Teston Road/Elgin Mills Road (Y.R. 49), in the City of Vaughan and the Town of Richmond Hill, shown in Attachment 1. The increase is required to undertake additional tasks not anticipated in the original assignment.

In accordance with the Region's Purchasing Bylaw, Council authorization is required when an increase to the contract price exceeds scope and contingency allowances.

3. Background

There is a compelling need for improvements to Bathurst Street between Highway 7 and Teston Road/ Elgin Mills

Existing Bathurst Street between Highway 7 and Teston Road/Egin Mills Road is a four-lane road with high traffic volumes. The roadway is located at the border of the City of Vaughan and the Town of Richmond Hill. There is a compelling need for the project to address growth in the area. The area adjacent to this section of Bathurst Street continues to develop and there is a corresponding increase in traffic to, from and through the area. The need for the project was confirmed through an Environmental Assessment Study (EA Study) for this section of roadway, completed in July 2009.

While the detailed design assignment for Bathurst Street was awarded to Parsons Corporation in 2011, construction is planned to commence in 2020

The detailed design assignment for the Bathurst Street improvements was awarded to Parsons Corporation (formerly Delcan Corporation) in June 2011. The project was originally planned for construction starting in 2014 but has been deferred to avoid concurrent construction with the vivaNext project on Yonge Street, as it would be too disruptive to have major construction on two adjacent Regional roads. Construction is currently scheduled to commence in 2020 following the completion of the vivaNext project.

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The six kilometre section of Bathurst Street is to be widened to a six-lane urban roadway that will accommodate all modes of travel

The detailed design assignment involves reconstruction and widening of Bathurst Street from the Highway 7 Ramp to Teston Road/Elgin Mills Road, from four to six lanes. This section is six kilometres long and includes the following work:

- Reconstruction of 14 signalized intersections and four unsignalized intersections, making them Accessibility for Ontarians Disability Act (AODA) compliant and incorporating required bike and pedestrian facilities
- Installation of bike lanes and bike boxes similar to facilities constructed on the recently completed vivaNext project on Highway 7 at Leslie Street
- Incorporation of transit/high occupancy vehicle lane markings and signing for two transit/high occupancy vehicle lanes
- Installation of median planters and boulevard tree planting where space permits
- Replacement of six existing small corrugated steel pipe culverts with five large structural concrete culverts and associated retaining walls
- Replacement of the Region's watermain from the Highway 7 ramp to Birch Avenue and replacement of the Town of Richmond Hill watermain from Birch Avenue to Teston Road, for a total of six kilometres of pipe length
- Construction of full illumination and sidewalks on both sides
- Installation and replacement of storm sewers
- Construction of traffic noise attenuation barriers, stream realignments and intersection streetscape treatments for the development community
- Relocation of existing Powerstream, Bell, Rogers and Enbridge utilities within the corridor

The scope of the detailed design assignment has increased to address changes that were not envisaged when the Environmental Assessment Study was completed in 2009

The detailed design assignment scope of work for the Bathurst Street reconstruction and widening project was based on work completed in support of the EA Study completed in 2009.

Various changes to the scope of the project and the assignment, and corresponding increase in the purchase order, were required to address a number of issues. An increase of \$701,307, authorized by Council in September 2013, was required to reflect changes that had taken place since the project started in 2011.

Since September 2013 there have been further significant changes in the project due to changing regulatory requirements, increasing growth and development in the area, new stakeholder requirements and the fact that the project timeline has been extended.

4. Analysis and Options

The complexity of the regulatory environment has increased since the EA Study was originally completed

Since 2013, there have been changes in the acts and regulations related to the environment. As a result, regulatory agencies have increased management and enforcement of the acts and regulations within their purview. For example, watercourses crossing Bathurst Street are all habitat for Redside Dace, an endangered fish. Originally provincially regulated only, the species will also be federally regulated beginning in 2017, requiring authorization from the Department of Fisheries and Oceans.

The Ministry of Natural Resources and Forestry (MNRF) in particular, has been significantly involved in reviewing culvert designs for the Bathurst Street project and ensuring the designs meet their requirements. Working on environmental permits and approvals accounts for a large portion of the increase in fees. There have been numerous design changes/additions and meetings to address Ministry requirements, which have resulted in many changes to the project and overall delay in completing the design.

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The size and complexity of the structural culverts has changed from what was proposed in the EA Study and there have been significant retaining walls added. Additionally, complex geotechnical conditions have added to the difficulty of completing the design and getting environmental approvals. Additional geotechnical investigations were conducted at the culverts to confirm and quantify artesian conditions that exist at some locations.

A stream running parallel to Bathurst Street has to be realigned and restored as the widening encroaches on the original alignment. This requires input and approval from design specialists and regulatory agencies.

To address recent requirements of the Accessibility for Ontarians with Disabilities Act (AODA) all 18 intersections along Bathurst Street had to be redesigned to meet the requirements .

Additional work is required to address increasing growth in the area and incorporate stakeholder requirements

There is continued development activity adjacent to Bathurst Street, especially on the west side. The Region is working closely with the development community to ensure their subdivision grading, access points, intersection requirements, etc. are coordinated with road improvements proposed for Bathurst Street. The Region is also including in the contract streetscaping features of developments on the west side of Bathurst Street.

To ensure additional development and traffic along Bathurst Street will be accommodated, further traffic analysis was undertaken to verify the left turn lane storage requirements.

The Region is also working closely with the Town of Richmond Hill and City of Vaughan to ensure their requirements are incorporated into the project. Additional work has been required related to the design of the Town of Richmond Hill watermain and some parkette reconstruction has been added into the Region's project.

Transportation Services has also had to coordinate with Environmental Services on the design of a two-kilometre section of Regional watermain. The proposed location of the watermain had to be designed to avoid existing and future underground infrastructure. This proposed watermain was recently removed from the road project because of a need to replace the deteriorating pipe sooner due to the number of failures that are occurring.

Other items added to the scope include an additional structural culvert replacement to meet asset management needs. At the time of the EA Study it

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was envisaged the culvert would be adequate but upon further assessment it has been determined the best course of action is to replace the culvert during the roadway construction. Viva has also requested additional bus facilities be provided for vivaNext at the Major Mackenzie Drive intersection.

The complex nature of the design has led to increased work and schedule changes in various areas of the project

Design for the Bathurst Street project was awarded in June 2011 with an anticipated construction start of 2014. Due to the increased complex regulatory nature of the project and ongoing changes in the corridor, the design assignment has taken longer to complete. Additionally, to avoid having the Bathurst Street project and the vivaNext rapidways on Yonge Street under construction at the same time, the Bathurst Street project start has been reprogrammed to 2020. This adjusting of schedules has resulted in extra cost due to additional project management time, inflation on consulting services fees and lost productivity due to slow progress dealing with the regulatory agencies, development activity and coordination with local municipalities and utility companies.

5. Financial Implications

Additional fees in the amount of \$595,000 are required for additional scope

Additional fees in the amount of \$595,000, excluding HST, are required to complete additional tasks. Staff have reviewed and negotiated the request for additional work and associated fees with Parsons and consider the negotiated fee increase to be fair and reasonable.

Amounts that are attributable to work for the City of Vaughan and Town of Richmond Hill will be recovered.

The detailed design fee is within the expected range for the scope of work

The estimated cost of the project is approximately \$75 million, which is in line with current projects of similar scope. Detailed design assignments typically represent five to seven per cent of the project's construction value. The recommended total fee for this assignment is \$3,582,235 which is 4.8 per cent of the estimated construction value.

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The total upset limit fee of \$3,582,235 will be funded from 90 per cent development charges and 10 per cent tax levy

The additional costs will be accommodated within the approved funding for the project in 2017. All expenditures for this project will be funded from 90 per cent development charges and 10 per cent tax levy.

6. Local Municipal Impact

Road improvements on Bathurst Street from Highway 7 to Teston Road/Elgin Mills Road will address traffic growth in the area and provide continuous sidewalk, illumination and bike lanes in the corridor. The Region is also replacing four kilometres of watermain for the Town of Richmond Hill.

7. Conclusion

Further design work is needed for the Bathurst Street improvement project due to environmental requirements and coordination with various stakeholders. Additional fees in the amount of \$595,000 are required to complete this assignment. Council authorization is required to increase the overall contract price with Parsons Corporation from \$2,987,235 to \$3,582,235, excluding HST.

For more information on this report, please contact Salim Alibhai, Director, Capital Planning and Delivery at ext. 75229.

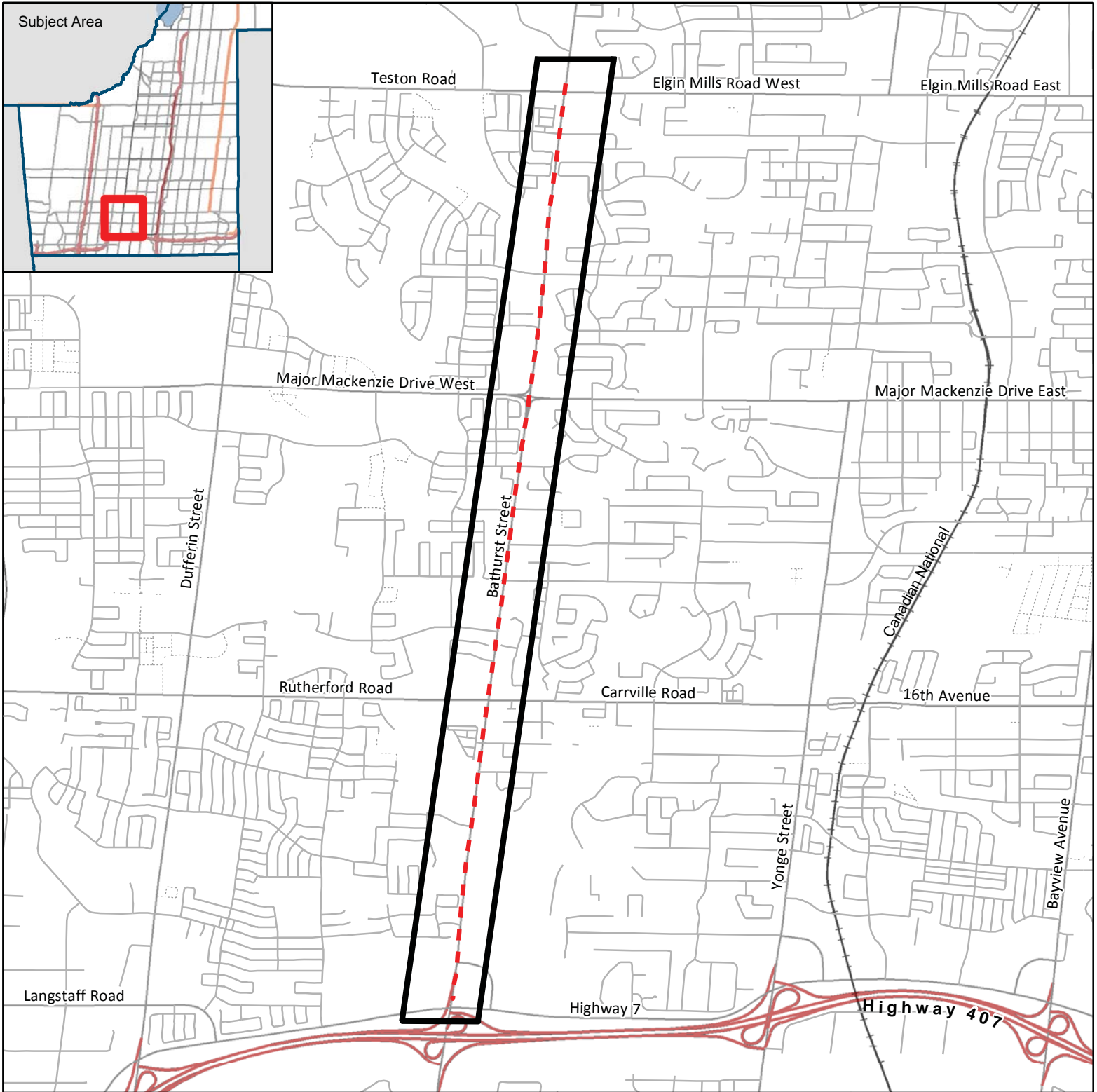
The Senior Management Group has reviewed this report.

February 15, 2017

Attachment (1)

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Accessible formats or communication supports are available upon request



Location Map

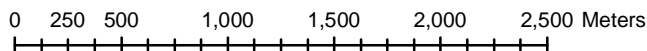
Consultant Services Fee for Additional Scope of Work
 Bathurst Street from Highway 7 to Elgin Mills Road/Teston Road
 City of Vaughan and Town of Richmond Hill
 March 2, 2017



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Legend

- Proposed Road
- Minor Road
- Regional Road
- Freeway
- Railway
- Study Area
- Study Corridor