



Report to: Development Services Committee

Date Report: June 11, 2013

SUBJECT: Tender Award of 081-T-13 Road Reconstruction of Main Street Markham from Highway 7 to Bullock Drive

PREPARED BY: Dan Foong, Capital Works Engineer Ext 4055
Alain Cachola, Manager Infrastructure and Capital Works
Ext 2711

RECOMMENDATION:

- 1) **THAT** the report entitled “**Tender Award of 081-T-13 Road Reconstruction of Main Street Markham from Highway 7 to Bullock Drive**” be received;
- 2) **AND THAT** Council provide direction of the preferred option as it relates to the funding shortfall for the project:
 - a) Option 1 – Maintain streetscaping level and obtain additional funding
 - b) Option 2 - Reduce streetscaping level and obtain additional funding

AWARD OF CONTRACT

- 3) **AND THAT** if Council selects Option 1, the following recommendations be approved;
 - a) **AND THAT** the contract for “**Tender Award of 081-T-13 Road Reconstruction of Main Street Markham from Highway 7 to Bullock Drive**” be awarded to the highest ranked / lowest priced bidder, Four Seasons Site Development in the amount of \$3,104,887.38, inclusive of HST;
 - b) **AND THAT** a contingency amount of \$465,733.11 (15%), inclusive of HST, be established to cover any additional costs and that authorization to approve expenditures of this contingency amount up to the specified limit be in accordance with the Expenditure Control Policy;
- 4) **AND THAT** if Council selects Option 2, the CAO and Director of Engineering be authorized to finalize negotiations with the lowest priced bidder;
- 5) **AND THAT** if Council selects Option 1 or 2, the following recommendations be approved;
 - a) **AND THAT** Staff be authorized to award the contract for the Contract Administration and Inspection Service to Municipal Engineering Services in the amount of \$176,009.18, inclusive of HST, in accordance with Part II (7)(1)(h) of the Purchasing By-law;

-
- b) **AND THAT** Staff be authorized to award the contingency in the amount of \$17,600.92 (10%), inclusive of HST, to cover potential costs related to Contract Administration and Inspection Services and that authorization to approve expenditures of this contingency amount up to the specified limit be in accordance with the Expenditure Control Policy;
- c) **AND THAT** Staff be authorized to award, if necessary, a contract for the Construction Design Review Services to Morrison Hershfield in the amount of \$15,264.00, inclusive of HST, to cover Engineering and Urban Design drawing revisions required during construction;
- d) **AND THAT** an allowance of \$96,672.00, inclusive of HST, be authorized for a PO (PD 11169) increase request from Morrison Hershfield for additional detailed design fees related to multiple streetscaping revisions, additional public meetings, etc., related to this project and that the Director of Engineering be authorized to finalize the Purchase Order increase request;
- e) **AND THAT** Staff be authorized to award the contract for the Pre and Post Construction Inspection Services to OZA Inspections Limited in the amount of \$35,616.00, inclusive of HST, in accordance with Part II (7)(1)(h) of the Purchasing By-law;
- f) **AND THAT** the Engineering Department Capital Administration Fee in the amount of \$175,536.00, inclusive of HST, be transferred to revenue account 640-998-8871 (Capital Admin Fees);
- g) **AND THAT** the project costs be funded from the following Capital Accounts:
- i. 083-5350-11079-005 (Main Street Markham reconstruction);
 - ii. 083-5350-12048-005 (Main Street Markham reconstruction);
 - iii. 083-5350-13036-005 (Main Street Markham Streetscaping);
 - iv. 058-6150-12403-005 (Storm Sewer Upgrade – Main Street Markham);
 - v. 058-6150-12328-005 (Watermain Construction & Replacement Program);
 - and
 - vi. 053-6150-12334-005 (Sanitary Sewer System Upgrade Program).

as outlined under the **“Financial Consideration and Template”** section of this report;

ROAD CLOSURE / PARKING RESTRICTIONS / MARKETING PLAN

- 6) **AND THAT** Staff be authorized to restrict Main Street Markham, from Highway 7 to Bullock Drive to one (1) southbound lane as required, from July 1, 2013 to November 29, 2013, or as required by the Director of Engineering, to facilitate the proposed roadway and streetscaping improvements;

-
- 7) **AND THAT** Schedule 'C' of Traffic By-Law 2005-188, permanently restricting parking, be amended by including both sides of Water Street, from Wilson Street to Robinson Street, both sides of Centre Street, between Main Street and Jerman Street, and portions of Main Street Markham, between Highway 7 and Bullock Drive starting July 1, 2013;
 - 8) **AND THAT** the existing parking in front of 85 Main Street be maintained on a trial basis, provided that the parking spaces are constructed with a rolled curb and Staff monitor the area for any safety issues (in the event of which the parking spaces will be removed);
 - 9) **AND THAT** the Parking Control Department be directed to enforce the parking prohibition upon the installation of the signs;
 - 10) **AND THAT** a 10-year moratorium be placed on any major servicing and utility installation along Main Street Markham between Highway 7 and Bullock Drive;
 - 11) **AND THAT** the Director of Engineering be authorized to finalize and implement the traffic and pedestrian management plan in consultation with the two (2) local Ward Councilors, the Region of York, the Operations Department, the Fire and Emergency Services Department, and the Project Liaison Committee;
 - 12) **AND THAT** a maximum allowance of \$33,580.80, inclusive of HST, be authorized to implement the draft 2013 Marketing Plan subject to the conditions specified in this report;
 - 13) **AND THAT** Capital Project 13034 (\$1.44 million) for Main Street Markham Storm Sewer Upgrade, from Bullock Drive to 16th Avenue and Hwy 48, Bullock to 16th Avenue portion of Capital Project 13701 (\$1.491 million), be deferred pending Council prioritization of gas tax funded projects, and that the remaining funds be returned to the original funding source;
 - 14) **AND THAT** the Engineering Department 2013 Capital Account 13036 be increased in the amount of \$525,000, inclusive of HST, and is to be funded from Life Cycle Replacement and Capital Reserve;
 - 15) **AND THAT** Staff be authorized and directed to do all things necessary to give effect to this resolution.

EXECUTIVE SUMMARY:

Completed in 2010 and approved by the Ministry of the Environment in 2011, the Environmental Assessment of Main Street Markham, from Highway 407 to Major Mackenzie Drive, supported the vision of Main Street Markham, between Highway 7 and Bullock Drive, as a pedestrian friendly neighbourhood.

The reconstruction of Main Street Markham from Highway 7 to Bullock Drive has been a strategic priority for the City of Markham. The City implemented improved subsurface infrastructure (i.e. storm sewer and watermain) in 2012 and the next stage is to enhance the existing streetscape to promote pedestrian traffic and showcase this heritage and Main Street area.

To ensure that community and stakeholders concerns were properly considered, several public meetings were held. The public meetings were established as a forum for the general public to provide input and observations on the design and implementation of improvements to Main Street Markham.

The vision of Main Street Markham was set out in "*Main Street Markham: A Vision for the Millennium*" (1999) prepared by the Main Street Markham Committee and endorsed by Council in 1999. Based on the vision set out by the Main Street Markham Committee, the proposed design includes roadway pavers (to enhance the "old world feel" of the area), trees, street furniture, enhanced street lighting, and traffic calming initiatives (bumpouts and narrowing of lanes). Every effort was made to balance stakeholder requirements, for bumpouts and parking spaces.

To promote a more pedestrian friendly environment, traffic calming initiatives are being proposed. These include, but are not limited to the introduction of bumpouts and defined parking bays. The intent of these measures is to slow down traffic and allow for additional foot traffic and cycling. The balance between parking spaces and bumpouts were carefully considered by Staff to ensure that the loss of parking would not adversely affect businesses along Main Street. Bumpouts also provide an opportunity to eliminate existing parking within intersections at Wilson Street and Dublin Street.

In addition to temporary parking restrictions along Main Street Markham, permanent parking restrictions are being recommended along both sides of Water Street, between Robinson Street and Wilson Street, both sides of Centre Street, from Main Street Markham to Jerman Street and sections of Main Street Markham, from Hwy 7 to Bullock Drive to address ongoing safety concerns from residents and business owners adjacent to the noted streets.

Construction is expected to begin on the west side of Main Street Markham and once completed, traffic will be reduced to a single southbound lane while construction commences on the east side. Once completed, a 10-year construction moratorium, for major construction, along Main Street Markham is being recommended to ensure that the improvements that are being built will not be disturbed.

To aid the local businesses within the construction limits, Staff are also recommending that the City implement a marketing plan similar to the one utilized in 2012.

The original approved budget for the reconstruction of Main Street Markham was \$2.569M. However, upon completion of the construction tender process, due to higher than anticipated unit costs and increased level of streetscaping and road works, the final cost of the reconstruction is anticipated to be approximately \$4.121M, \$1.551M over the

original budget. Two alternate funding sources have been identified to cover \$0.594M of the budget increase: \$0.069M from Rogers Cable recovery; and, \$0.525M from the Life Cycle program which was available. As such, there is a funding shortfall of \$0.958M. To overcome this shortfall, two (2) options are presented in the “Financial Considerations and Template” section of this report.

PURPOSE:

The purpose of this report is to obtain Council’s direction and approval regarding the following:

- Identify the preferred funding option as it relates to the funding shortfall:
 - Option 1 – Maintain streetscaping level and obtain additional funding;
 - Option 2 – Reduce streetscaping level and obtain additional funding;
- Subject to Council direction, the following approvals are required:
 - Award the construction tender for the road reconstruction and streetscaping of Main Street Markham from Highway 7 to Bullock Drive;
 - Award Contract Administration and Inspection services to Municipal Engineering Services;
 - Award Pre and Post Construction Inspection Services to OZA Inspections Limited; and
 - Award design revisions during construction to Morrison Hershfield.
- Amend Traffic By-law 2005-188 to permanently restrict parking on Water Street, Centre Street, and portions of Main Street Markham adjacent to bumpouts;
- Install legal, non-conforming parking at the intersection of Main Street and Dublin Street;
- Implement the proposed traffic and pedestrian management plan; and
- Obtain approval for the proposed 2013 Marketing Plan for Main Street Markham businesses with Markham Village Business Improvement Area (MVIA);

BACKGROUND:

The Class Environmental Assessment (EA) for the reconstruction of Main Street Markham (Highway 48) from Highway 407 to the future connection of the Donald Cousens Parkway north of Major Mackenzie Drive was completed and the Environmental Study Report was subsequently endorsed by Council and then submitted to the Ministry of the Environment in 2010. The Ministry of the Environment gave its approval to the Environmental Study Report on February 24, 2011.

Subsequent to the filing of the EA, detailed design began on the improvements to Main Street Markham between Highway 407 and Major Mackenzie Drive. The project was divided into the following three (3) sections:

1) Highway 407 to Highway 7 (60% Design Completion)

2) Highway 7 to 16th Avenue

- a) **Highway 7 to Bullock Drive** (*Underground Works Completed*)
- b) **Bullock Drive to 16th Avenue** (*30% Design Completion*)

3) 16th Avenue to Major Mackenzie Road (*To be completed July 2013*)**Public Input**

This project has been a strategic objective for over fifteen (15) years and required extensive consultation with property owners, businesses, residents, interest groups, internal departments and Council. Since the completion of the underground portion of the work in 2012, Staff held two (2) Public Liaison Committee (PLC) meetings and one (1) Public Open House. These meetings were held to present the proposed streetscape and bumpout design to the community. In addition to the above noted meetings, Staff also met with public interest groups (e.g. Main Street Markham Committee and the MVBIA) to discuss the progress of the project. Each of these consultation steps were undertaken to ensure that stakeholders, the general public, and Council had an opportunity to provide input on the design.

The following topics were the main focus of public discussions:

- Bumpout Locations;
- Parking Spaces;
- Tree Locations; and
- Vehicle and Pedestrian Access During Construction.

An additional Public Liaison Committee meeting will be held on June 26, 2013 (2pm to 4pm) to update the public on the final streetscaping status of the project, as well as provide them with an opportunity to review the contractor's proposed Pedestrian and Vehicle Traffic Management Plan.

The City of Markham's website will also be updated as required to provide up-to-date information on the status of the project.

OPTIONS/ DISCUSSION:**Streetscaping**

The current streetscaping layout has attempted to balance on-street parking, widened boulevards (bumpouts), and tree installation locations.

The proposed streetscaping improvements, shown in Attachment 'A', are anticipated to begin this July, subject to award of the construction tender.

The intent of the proposed streetscaping is to enhance the heritage nature of the village while providing modern-day improvements. The vision for Main Street Markham was presented in the report "*Main Street Markham: A Vision for the Millennium*" (1999)

prepared by the Main Street Markham Committee. The report, supported by Council, recommended that the following features be implemented:

- A pedestrian friendly village with street trees;
- Bumpouts;
- Street furniture; and
- Ample free public parking, both onstreet and behind buildings.

The findings of the report were further supported by the results of the “*Main Street Markham Class Environmental Assessment Study – Highway 407 to Future Donald Cousens Parkway*” (2010), an Environmental Assessment (EA) Study completed by McCormick Rankin Corporation (MRC).

The existing brick pavers in the boulevards are to be removed and replaced with a more resilient paver. Additionally, the intersection of Robinson Street and Main Street (commonly known as ‘Festival Square’) is proposed to be re-built using brick pavers. Wider sidewalks and urban Braille are also proposed to enhance accessibility. Streetlighting along Main Street is Markham to be replaced with a more heritage style lantern with LED / Dark Sky features.

Parking spaces are lost as a direct result of the installation of bumpouts. Therefore, the proposed design has attempted to balance bumpouts and on-street parking. There are currently eighty-four (84) on-street parking spaces. The proposed design will reduce the available on-street parking to sixty-one (61) spaces, which includes four (4) designated accessible parking spaces and one (1) passenger loading zone. While, some businesses along Main Street Markham provide on-site parking for their customers, some businesses rely solely on on-street parking.

Throughout the consultation process, business owners along Main Street Markham requested that either bumpouts or parking spaces be installed fronting their property. Some property owners who requested bumpouts also requested that trees not be installed so that the boulevard area can be used as future commercial patio space. Some properties have sufficient private property for patio space and requested parking be provided in front of their properties; or if a bumpout is provided, that a tree be installed. In some cases, bumpouts are being provided in response to Traffic Operation concerns.

Bumpouts provide an ideal location for trees, waste receptacles, and street furniture since there is no conflict with pedestrian and vehicle movement. Bumpouts also provide the necessary soil volumes to support healthy urban trees. By not taking advantage of this space for trees, waste receptacles, and street furniture, the street will be bare and not offer an enhanced pedestrian environment as originally envisioned.

Parking at Uncontrolled T-Intersections

Reducing conflicting movements within an intersection enhances safety; which is why both the Highway Traffic Act (HTA) and City By-law 2005-188 do not allow for parking

within an intersection. Parallel parking within an intersection will require vehicles to remain within the intersection while attempting to park. This causes an uncommon movement at an intersection (vehicles reversing).

Dublin Street and Wilson Street currently have parking within the intersection and records do not suggest that collisions are frequent or that pedestrians are in any additional danger largely because Main Street Markham is a 4 lane road, allowing motorists to pass a vehicle trying to park. However, there is now an opportunity to eliminate a potential hazard and replace it with a more pedestrian and vehicle friendly environment.

In the latest Main Street Markham design, the parking bays are proposed to be eliminated opposite Wilson Street. However, the 85 Main Street property / business owner has requested that parking be maintained opposite Dublin Street.

Staff do not object maintaining the existing parking spaces in front of 85 Main Street; provided that the parking spaces are constructed with a rolled curb. Staff also recommend that the area be monitored for any issues that may arise after construction. If there are any safety concerns raised, Staff recommend that the parking spaces should be removed.

Permanent Parking Restrictions

In the past year, Staff received complaints from residents regarding the number of vehicles parked on Water Street (Robinson Street to Wilson Street) and Centre Street (Main Street to Jerman Street). The existing road width cannot support on-street parking in these areas. However, parking restrictions along these roads have not been enacted. Parked vehicles on Water Street and Centre Street are a safety concern for pedestrian and vehicular traffic.

Based on the above, Staff recommend Schedule 'C' of By-Law 2005-188 be amended to permanently restrict parking at the following locations:

- Both the east and west side of Water Street, between Robinson Street and Wilson Street;
- Both the north and south side of Centre Street, from Main Street to Jerman Street; and
- Sections of the road between bumpouts along Main Street Markham, from Hwy 7 to Bullock Drive.

A map identifying the proposed parking restrictions on Water Street and Centre Street are shown as Attachment 'C1'. A map identifying the proposed parking restrictions on Main Street Markham is shown as Attachment 'C2'. The required amendment is shown as Attachment 'D'.

Vehicle and Pedestrian Traffic Management Plan

The intent of the vehicle traffic management plan is to divert through traffic onto adjacent parallel roadways before motorists reach the construction zone, thereby alleviating traffic

volumes through the construction area. The plan also advises motorists that Main Street Markham businesses are still open during construction. Attachment 'B' is a draft plan prepared by the design consultant (Morrison Hershfield). The contractor will provide their own plan, which will be reviewed and approved by Staff and the Region. Presentations to the PLC over the past year have reiterated that similar restrictions imposed during the underground construction will be implemented for the streetscaping component of the project. This plan will be reviewed with stakeholders at the June 26, 2013 PLC meeting.

Construction Staging

Staff has reviewed the preliminary construction staging and communications plan as submitted by the lowest priced bidder during the construction tender stage (Four Seasons Site Development Ltd.). Four Seasons is proposing the following staging plan.

Stage 1

Commence boulevard work and road reconstruction on the West side of Main Street Markham starting from Highway 7 going north to Bullock Drive; whenever possible, maintain northbound and southbound traffic. It is estimated that this work will take up to two (2) months to complete.

Stage 2

Commence boulevard work and road reconstruction on the East side of Main Street Markham starting from Highway 7 going north to Bullock Drive. During this stage, traffic will be restricted to a single southbound lane. The lane closure is required to enable the contractor to undertake the work in a safe and expeditious time frame. Lane closures / reduction will be reviewed in detail by Engineering Staff prior to start of construction. It is estimated that this work will take up to two (2) months to complete.

Major challenges for this construction work will be the installation of pavers on the road at the intersection of Main Street Markham and Robinson Street and the installation of the 2.0m sidewalk on the boulevard and how these works will affect vehicular and pedestrian traffic on Main Street Markham. The details of the construction methodology and possible road closures / restriction are to be discussed with the contractor and Engineering Staff upon award of the construction tender.

The pedestrian traffic management plan details how pedestrian access will be maintained throughout construction. Diversions, ramps, and alternate access points are examples of how pedestrian access can be maintained during construction.

Pedestrian and vehicular access to all properties will be maintained throughout the construction period. Access will not be restricted for more than twenty-four (24) hours and proper notice to affected properties will be provided forty-eight (48) hours in advance of closures.

At any point in time during construction, there will always be one available lane for traffic or emergency access. Engineering has discussed preliminary staging plans with other City departments (e.g. Fire, Waste Management, Operations, Waterworks, Asset Management, etc.) and all comments have been addressed.

A PLC meeting is scheduled for Wednesday, June 26, 2013 to present the contractor's staging and communications plan for the proposed work. In addition, the City's website will also be updated to provide general information to the public with respect to the upcoming construction.

Construction Contingency

Staff recommend that a construction contingency (15%) in the amount of \$465,733.11, inclusive of HST, be approved to cover any additional costs associated with the construction of the project. It is anticipated that there will be construction challenges for this section of the road due to close proximity to existing residents and particularly business areas within Main Street Markham.

Contract Administration and Inspection Services

Staff recommend that Municipal Engineering Services (MES) be awarded the contract for the Contract Administration and Inspection Services for the streetscaping construction, in accordance with Part II (7)(1)(h) of the Purchasing By-law in the amount of \$176,009.18, inclusive of HST, and a contingency (10%) in the amount of \$17,600.92, inclusive of HST.

During the underground construction work in 2012, MES was retained to assist Staff with Project Management duties. MES provided exemplary service to Staff, the public, and local Councilors. MES's familiarity with the project will be invaluable during the next phase of construction.

Pre and Post Construction Inspection Services

In order to protect the City's interest and avoid potential claims, Staff recommend that OZA Inspection Services Limited (OZA) be awarded the contract for the Pre and Post Construction Inspection Services for the streetscaping construction, in accordance with Part II (7)(1)(h) of the Purchasing By-law in the amount of \$35,616.00, inclusive of HST.

This inspection report identifies the conditions (external and internal) of all of the buildings adjacent to Main Street Markham prior to and at the end of the construction period. These documents will be used to assess any damage / claims that may arise during or after the construction on Main Street Markham.

OZA was contracted by the City to undertake Pre and Post Construction Inspections for the underground construction in 2012. The community is familiar with OZA and OZA

has contact names and numbers from the last time inspections were completed. Both of these elements will help to expedite the work.

Morrison Hershfield

The design consultant, Morrison Hershfield (MH) requested a Purchase Order (PO) increase in the amount of \$236,996.00, inclusive of HST, for additional fees. The request was made to offset the costs incurred for the work outside the original terms of reference. Tasks completed by MH which are eligible for additional fees, subject to final negotiations by Staff:

- Additional meetings with Staff, MVBIA, and the PLC;
- Additional revisions to streetscaping plans;
- Detailed design and analysis for storm sewer upgrade;
- Additional streetscaping field review to identify individual property frontages and how the revised streetscaping will impact entrances;
- Integration of the LED / Dark Sky Compliance for streetlighting including discussions with manufacturers / suppliers; and
- Separation of the underground servicing contract and aboveground / streetscaping work.

Based on discussion between Staff and Morrison Hershfield, the request for additional fees was reduced down to \$176,726.37, inclusive of HST. Further meetings are required between Staff and Morrison Hershfield to finalize the PO increase. In addition, Staff anticipates extra costs associated with the final revisions to the streetscaping design and would be in the order of \$5,088.00, inclusive of HST. This will bring the PO increase total to \$181,814.37, inclusive of HST.

The existing MH PO has a contingency for the detailed design in the amount of \$85,142.37, inclusive of HST. The actual PO adjustment, if endorsed by Staff, and subject to finalization of the fees will be in the order of \$96,672.00, inclusive of HST.

The coordination of any work during construction would be through City Staff and the City's contract administrator and inspection services consultant (i.e. Municipal Engineering Solutions).

Additionally, if changes to the design are required during construction, the City will need to retain a design consultant to make the necessary modifications. Staff recommends that a sole source award, in accordance with Part II (7)(1)(h) of the Purchasing By-law, in the amount of \$15,264.00, inclusive of HST, be awarded to MH.

Marketing

A marketing budget of \$33,580.80, inclusive of HST, is recommended to be set aside to assist the Markham Village Business Improvement Area (MVBIA) in its implementation of its marketing plan.

In 2012 the City reimbursed the MVBIA \$31,538.14, inclusive of HST, for the implementation of a marketing plan to help minimizing the impact on Main Street Markham businesses during construction. Corporate Communications (CorpComm) has been working with the MVBIA to implement a similar marketing plan for 2013 (2013 Marketing Plan).

The 2013 Marketing Plan is subject to input and endorsement from the two (2) local Ward Councilors and CorpComm. The MVBIA will be solely responsible for the implementation of the work under the 2013 Marketing Plan and will be reimbursed by the City for any third party costs incurred that are consistent with the approved marketing plan.

Costs associated with MVBIA staff implementing any aspect of the marketing plan, which may include associated City costs (e.g. preparation, installation, and removal of signs) will not be eligible for reimbursement.

The following are the conditions to the 2013 Marketing plan:

- Pre-approval required from the CorpComm and the two (2) local Ward Councilors;
- The MVBIA is solely responsible for the implementation of the final plan;
- Reimbursement of third party costs shall be upon submission of invoices, associated with the approved marketing plan, to the City of Markham from the MVBIA and its sub-contractors;
- MVBIA staff costs are not eligible for reimbursement; and
- City to assist the MVBIA in implementing the 2013 Marketing Plan
- The 2013 Marketing Plan is required to include details on specific marketing tactics and / or programs. Examples of advertising creative concepts, related media buying schedules, and a discussion on how these marketing programs will assist in generating local business activity to offset any impacts of the City of Markham's construction activities on Main Street.

Construction Moratorium

In 2012, Engineering Staff advised all utility companies (e.g. Power Stream, Enbridge, and Bell Canada) that all upgrades to their infrastructure along Main Street Markham needs to be completed by June 2013. Some Rogers Cable work is included in the construction tender and the costs will be reimbursed by Rogers Cable to the City.

Prior to the construction of the underground servicing work in 2012, residents and business owners were advised to complete all of the storm, sanitary and water service upgrades on private property no later than July 2013, in anticipation of the aboveground works.

Engineering Staff are requesting that Council approve a 10-year moratorium on major construction work along Main Street Markham between Highway 7 and Bullock Drive,

which is to be enforced immediately after construction is substantially completed. Minor and emergency repairs would be permitted.

The moratorium would not affect major development projects as the applicant would be required to restore the boulevard.

Construction Tender

Request for Tender 081-T-13 was issued as a two (2) envelope Tender. The fourteen (14) contractors who were pre-qualified last year (076-T-12) were again invited to bid on this contract. The first envelope contained the bidder's Pedestrian and Vehicle Traffic Management Plan. Bidders were required to obtain a minimum technical score of 70/100 for their second envelope to be opened. Bidders who did not pass the first evaluation had their bids returned to them unopened.

Eight (8) of the fourteen (14) pre-qualified contractors were in attendance at the required site meeting; of the eight (8) bidders, five (5) submitted bids. All bidders satisfied the technical requirements set out by the Engineering Department.

A summary of the bidder's Technical Score and Bid Price are shown in **Table 1**.

Table 1 - Bidder Information

Bidder	Opened Bid Price (Inclusive of HST)
<i>Four Seasons Site Development</i>	\$3,104,887.38
North Rock Group	\$4,001,359.14
Grascan Construction	\$4,050,048.00
KAPP Contracting	\$5,029,210.04
Trisan Construction	\$6,061,802.80

Based on the above, staff recommends awarding the project to Four Seasons Site Development in the amount of \$3,104,887.38, inclusive of HST.

FINANCIAL CONSIDERATIONS AND TEMPLATE:

Table 2 outlines the available funding and tendered construction costs (Option 1).

Table 2 – Main Street Markham, Hwy 7 to Bullock Drive – Tender Award Summary

Item	Amount (Inclusive of HST)	Supplier
Construction	\$ 3,104,887.38	Four Seasons Site Development Ltd.
Construction Contingency (15%)	\$ 465,733.11	Four Seasons Site Development Ltd.

Contract Administration and Inspections	\$ 176,009.18	Municipal Engineering Solutions
Contract Administration and Inspections Contingency (10%)	\$ 17,600.92	Municipal Engineering Solutions
Design Review	\$ 15,264.00	Morrison Hershfield
PO Increase (Detailed design)	\$ 96,672.00	Morrison Hershfield
Pre / Post Inspections	\$ 35,616.00	OZA Inspections
BIA Marketing Plan	\$ 33,580.80	BIA
Capital Admin Fee	\$ 175,536.00	Admin Fee (7.5%) based on a \$2.3million budget
Total Award:	\$ 4,120,899.39	
*Available Funding:	\$ 2,569,601.71	Capital Accounts 11079, 12048, 13036, 12403, 12328, 12334
Total Shortfall:	-\$ 1,551,297.68	
Funding:	\$ 525,000.00	Life Cycle Replacement and Capital Reserve Fund
Recoveries:	\$ 68,548.33	Infrastructures for Rogers Cable
Total Shortfall:	-\$ 957,749.35	

*Refer to Attachment A1 for breakdown of funding availability

Operations Department has been carrying a cost in the life cycle program for the road resurfacing for Main Street Markham, from Hwy 7 to Bullock Drive. As Main Street is being completely replaced as part of this award report, the road rehabilitation project can be eliminated and the funding associated with this project in the amount of \$525,000 can be utilized as an additional funding source for the Main Street Markham funding shortfall.

The shortfall in the budget in the amount of \$1.551M can be attributed to the items listed in Table 3.

Table 3 – Budget Increase

Description	Cost Estimate	Tender Amount	Variance
Strata Cell (31 Trees)	\$ 72,000	\$ 410,000	\$ 338,000
Pavers on roads, boulevards and crosswalk, including soldier course	\$ 275,000	\$ 544,000	\$ 269,000
Streetlighting (i.e. LED, Heritage)	\$ 214,000	\$ 384,000	\$ 170,000

Uni-Pave base for pavers	\$ 0	\$ 150,000	\$ 150,000
Traffic Intersection Signals	\$ 0	\$ 100,000	\$ 100,000
Purchase Order increase (Design)	\$ 0	\$ 100,000	\$ 100,000
Other (including contingency)	\$ 0	\$ 424,000	\$ 424,000
Total:	\$ 561,000	\$ 2,112,000	\$ 1,551,000

Items with an original cost estimate of \$0, not associated with the design, were not considered during the earlier design phases and were added to the contract for operational / maintenance reasons. Variances from the original cost estimate and the actual tendered amount can be attributed to Contractor markups.

Staff identified at the PLC meeting on January 17, 2013 and in a PowerPoint presentation at DSC on February 5, 2013 that the current cost estimate for the project is within the approved budget and that there may be a possibility that there will be a funding shortfall once the tender is issued. Staff added that if there is a funding shortfall, the two alternatives are to reduce the scope of work for the project or request additional funding from Council.

Two (2) options are proposed to address the funding shortfall:

Option 1 – Maintain streetscaping level and obtain additional funding

Funding the shortfall (\$958K), for the full tender award, can be made available from the following sources:

- Option 1A – Generate funding source by deferring the following capital project:
 - Account 13034 (Main Street Markham storm sewer upgrade, from Bullock Drive to 16th Avenue) is recommended to be deferred for at least 7 years as part of this report. This project has an approved funding of \$1.440 million and is currently funded from Gas Tax. It is anticipated that, subject to Council's approval of the June 17, 2013 report for the Stormwater Funding that the stormwater rehabilitation projects will not be recommended to be funded from Gas Tax.
- Option 1B – Pre-approval of funding from 2014 Capital Budget for tax funded projects
 - Current estimate for 2014 Capital Budget for tax funding is in the order of \$3.21million for all City wide projects.
 - Funding the shortfall of the Main Street Markham project will reduce the available tax funding for 2014 to \$2.25 million for all City wide projects.
- Option 1C – fund the shortfall of \$0.958M from taxes and increase the tax rate
 - The shortfall of \$0.958M will require an increase of \$0.191M (based on a 5 year payback) to the 2014 Operating Budget, equivalent to a one-time tax rate increase of 0.16%.

Pros:

- Enables the project to be built with the preferred streetscaping options.

Cons:

- This option would have an impact on capital projects and finances as follows:
 - Option 1A - Defer the Main Street Markham storm sewer upgrade project (Bullock to 16th Avenue) at least 7 years or until Council prioritizes the Gas Tax and storm rate projects;
 - Option 1B - Defer certain City wide projects to 2015; and
 - Option 1C – Tax rate increase of 0.16%

Option 2 – Reduce Streetscaping level and obtain additional funding

Maintain the current project limits (i.e. Hwy 7 to Bullock Drive), and reduce the streetscaping levels and costs as follows:

- Reduce the pavers at Festival Square (North and South of Robinson Street Intersection) - \$0.143M;
- Reduce the soldier course paving - \$0.188M;
- Reduce the number of trees from 31 to 16 and corresponding strata cells (tree pits) - \$0.211M;
- Replace boulevard pavers with coloured impressed concrete - \$0.005M;
- Remove pavers at crosswalks on Hwy 7, Dublin Street and Wilson Street and replace with asphalt and painted lines - \$0.017M reduction;
- Reduce the base material (Uni-pave base) for the pavers – \$0.049M
- Remove imprinted asphalt on the bus bays - \$0.046M
- The total reduction for all items listed above will be in the order of \$0.659M
- In discussion with the lowest priced bidder (Four Seasons), they advised that the potential additional costs associated with the reduction in streetscaping level would be approximately \$0.099M (±15% of \$0.659M). The price increases are associated with the reduced material quantity, smaller installation runs, higher shipping costs and overhead loss.
- Total net reduction of cost is therefore in the order of \$0.560M

Funding the \$0.397M shortfall (\$0.957M - \$0.560M) can be made available from the following sources:

- Option 2A – Generate funding source by deferring the following capital project:
 - Account 13034 (Main Street Markham storm sewer upgrade, from Bullock Drive to 16th Avenue) is recommended to be deferred for at least 7 years as part of this report. This project has an approved funding of \$1.44 million and is currently funded from Gas Tax. It is anticipated that,

subject to Council's approval of the June 17, 2013 report for the Stormwater Funding that the stormwater rehabilitation projects will not be recommended to be funded from Gas Tax.

- Option 2B – request funding from 2014 Capital Budget for tax funded projects
 - Current estimate for 2014 Capital Budget for tax funding is in the order of \$3.21million for all City wide projects
 - Funding the shortfall of the Main Street Markham project will reduce the available tax funding for 2014 to \$2.81million for all City wide projects
- Option 2C – fund the shortfall in funding from taxes and increase the tax rate
 - The shortfall of \$0.397M will require an increase of \$0.079M (based on a 5 year payback) to the 2014 Operating Budget, equivalent to tax rate increase of 0.07%.

Pros:

- This option enables the total project to proceed and be completed by November 2013.
- Construction period for 2013 may be reduced from four (4) months to three (3) months due to the reduction in the scope of work.

Cons:

- This option would have an impact on capital projects and finances as follows:
 - Urban Design and Heritage departments do not support the magnitude of reductions for the project as this would result in a streetscape that would be contrary to all studies, design guideline and consultation feedback completed over the past 15 years;
 - Reduces the level of service of the streetscaping works on Main Street Markham;
 - There may be objections from the BIA, PLC members, and the community at large relating to the reduction of the level of service for the streetscaping works;
 - Removal / reduction of the streetscaping work will still require \$0.397M of additional funding;
 - If a reduced construction contract is awarded, the reduction will not be a dollar to dollar change. Staff has met with the lowest priced bidder (Four Seasons) and negotiated the reduced streetscaping levels. Four Seasons requested additional costs for the reduced material quantity, smaller installation runs, higher shipping costs, overhead loss and lost profit in the order of 15% of the reduced / removed contract items (\$0.099M);
 - Option 2A - Defer the Main Street Markham storm sewer upgrade project (Bullock to 16th Avenue) at least 7 years;
 - Option 2B - Defer certain City wide projects to 2015;
 - Option 2C – Tax rate increase of 0.07%;

Table 4 – Summary of Options

Option 1	Amounts	Description
Total Project Award Cost	\$4,120,899.39	Maintain streetscaping level
Total Available Funding	\$3,163,150.04	Capital Accounts 11079, 12048, 13036, 12403, 12328, 12334 and Life Cycle Replacement and Capital Reserve Fund
Shortfall in Funding:	-\$957,749.35	
Option 1A - Account 13034	\$957,749.35	Available funding
Option 1B – Pre-approval	\$957,749.35	2014 Capital budget
Option 1C – Tax increase	\$957,749.35	0.16% for 2014
<i>Total Project Cost will be in the order of \$4.12M (Maintain Streetscaping Level)</i>		

Option 2	Amounts	Description
Total Project Award Cost	\$4,120,899.39	
Reduction in Streetscaping	\$659,000.00	Reduced pavers, planters, etc.
Additional cost from contractor (reduced level)	\$99,000.00	±15% of reduced scope
Reduced Project Award:	\$3,560,899.39	
Total Available Funding	\$3,163,150.04	Capital Accounts 11079, 12048, 13036, 12403, 12328, 12334 and Life Cycle Replacement and Capital Reserve Fund
Shortfall in Funding:	-\$397,749.35	
Option 2A - Account 13034	\$397,749.35	Available funding
Option 2B – Pre-approval	\$397,749.35	2014 Capital budget
Option 2C – Tax increase	\$397,749.35	0.07% for 2014
<i>Total Project Cost will be in the order of \$3.56M (Reduced Streetscaping Level)</i>		

Other Award / Funding Alternatives

In addition to the two (2) alternatives listed above, there were other alternative that were considered by Staff:

- Award section of project from Hwy 7 to Robinson Street in 2013 to the lowest priced bidder and retender the remaining section (Robinson Street to Bullock Drive) in 2014
- Award section of project from Hwy 7 to Robinson Street in 2013 and award the remaining section (Robinson Street to Bullock Drive) in 2014 to the lowest priced bidder

Based on review of these alternatives, it was identified that these options may be feasible, but carries a significant increase on the overall project costs (\$0.14M - \$0.66M relative to

Option 1), as well as extends the duration of the project from two (2) years to three (3) years construction period.

Main Street Markham, Overall Project Schedule

The following are the schedule and associated costs for the reconstruction of Main Street Markham:

- Hwy 407 to Hwy 7 (2014 / 2015)
 - Underground Servicing - \$1.5 million
 - Roads and Streetscaping - \$11.3million
 - Total Project Cost - \$12.8 million
- Hwy 7 to Bullock Drive (2012 / 2013)
 - Underground Servicing (Water and Storm Upgrades) - \$2.1 million
 - Roads and Streetscaping - \$4.1 million
 - Total Project Cost - \$6.2 million
- 16th to Major Mackenzie Drive (2012 / 2013)
 - Underground Servicing) - \$1.8million
 - Roads and Streetscaping - \$6.1million
 - Total Project Cost - \$7.9 million

In 2015 / 2016, we anticipate requesting a budget in the amount of ±\$4.0 million to urbanize the section of Main Street Markham, from Major Mackenzie Drive to Donald Cousens Parkway. The detailed design for this section of the road is to commence in fall 2013.

The section of Main Street Markham, from Bullock Drive to 16th Avenue is outside the BIA area and has largely residential properties fronting into it. Based on the current tender prices of \$5000/lm to \$5500/lm, the cost to install the bumpouts and similar streetscaping, as to the south, will be in the order of \$6.0 - \$6.6million. This project would have to be funded either by Gas Tax or Mill rate.

Staff recommend that the timing of the section of Main Street Markham, from Bullock Drive to 16th Avenue be considered as part of the a prioritization review of Gas Tax / Mill Rate projects over the next 10 years. In addition, Staff also recommend deferring capital project 13034 (Main Street Markham Storm Sewer Upgrade, from Bullock Drive to 16th Avenue) and a portion of capital project 13701 (Main Street Markham Watermain Replacement, from Bullock Drive to 16th Avenue) until Council can review and prioritize the Gas Tax funding projects for the next 10 years.

The storm sewer upgrade for this section of Main Street Markham will be included in the next phase of the City wide Flood Control Strategy and is not scheduled for at least 7 years. The watermain replacement for this section of Main Street is included in the annual watermain replacement program for the Environmental Services Department.

Based on review by the Environmental Services Group, it was identified that the replacement of the existing watermain on this section of Main Street can be deferred for at least 5 years.

Project Schedule

The next phase of for the reconstruction of Main Street Markham project is as follows:

- June 11, 2013 – Award Report to Development Services Committee
- June 17, 2013 – Council Award
- June 26, 2013 – PLC meeting to review final Streetscaping Plan, Contractor Construction Staging, Traffic Management and Communications Plan.
- June / July 2013 – Sierra development to complete façade work for proposed development.
- July 2013 – Pre-construction setup for Contractor.
- Mid to late July 2013 – Tentative Construction start date.
- November 30, 2013 – Completion Date.

ALIGNMENT WITH STRATEGIC PRIORITIES:


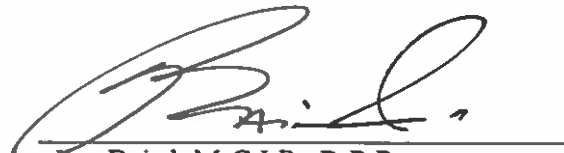
The reconstruction of Main Street Markham from Highway 7 to Bullock has long been contemplated as a strategic priority. The project provides the necessary upgrades to the existing infrastructure, and the opportunity to enhance the existing streetscape, to promote pedestrian traffic and showcase this heritage area.

This project is in line with the City of Markham's strategic focus relating to Growth Management, Transportation/Transit, Safety, the Environment and Municipal Services.

BUSINESS UNITS CONSULTED AND AFFECTED:

The Environmental Services, Asset Management, Operations, Finance, Corporate Communications, By-laws, and Urban Design , Heritage and Legal Departments have been consulted and their comments have been incorporated.

RECOMMENDED BY:


Alan Brown, C.E.T.
Director of Engineering
Jim Baird, M.C.I.P., R.P.P.
Commissioner, Development Services

ATTACHMENTS:

- Attachment 'A1' – Financial Summary
- Attachment 'A' – Streetscaping Layout
- Attachment 'B' – DRAFT Vehicle Traffic Management Plan
- Attachment 'C1' – Water Street and Centre Street Parking Restriction Map
- Attachment 'C2' – Main Street Parking Restriction Map (1 of 5)
- Attachment 'C3' – Main Street Parking Restriction Map (2 of 5)
- Attachment 'C4' – Main Street Parking Restriction Map (3 of 5)
- Attachment 'C5' – Main Street Parking Restriction Map (4 of 5)
- Attachment 'C6' – Main Street Parking Restriction Map (5 of 5)
- Attachment 'D' – Permanent Parking By-Law Amendment