

EXTRACT FROM COUNCIL MEETING MINUTES OF JUNE 28, 2016

3 BUDGET AMENDMENT – MAJOR MACKENZIE DRIVE TWIN CULVERTS WARD 1

Recommendation

1. That a budget amendment to Capital Project CO-0074-14 – VHPD Culvert Work on Major Mackenzie Drive inclusive of administration recovery and applicable taxes in the amount of \$862,476.23 be approved and be funded from the City's Wastewater Reserve; and
2. That the inclusion of this matter on a Public Committee or Council agenda with respect to increasing the Capital Budget identified as "Budget Amendment – Major Mackenzie Twin Culverts", is deemed sufficient notice pursuant to Section 2(1)(c) of By-Law 394-2002.

Not Applicable.

The culvert works on Major Mackenzie Drive alleviate a pre-existing flooding condition on the Vaughan Healthcare Precinct lands, resulting from upstream catchment area flows. These works require utility relocation to facilitate the completion of these works, and are therefore proposed to be funded from the Wastewater Reserve in the amount of \$862,476.23.

To ensure that appropriate funding is available, a budget amendment to Capital Project CO-0074-14 in the amount of \$862,476.23, plus applicable taxes and administration recovery, funded from the City's Wastewater Reserve is required.

Once a purchase order is provided to Enbridge Gas to initiate the work, staff will advise affected property owners in the area.

To obtain Council approval to amend Capital Project CO-0074-14 – VHPD Culvert Work on Major Mackenzie to include the costs associated with the required gas main relocation.

The culvert works on Major Mackenzie Drive alleviates a pre-existing flooding condition on the Vaughan Healthcare Precinct lands

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF JUNE 28, 2016

Item 3, Special Finance Report No. 8 – Page 2

Since the twin culvert work on Major Mackenzie Drive is designed to alleviate a pre-existing flooding condition on the site that will also benefit the entire Vaughan Healthcare Precinct, CO-0074-14 - VHPD Culvert Work on Major Mackenzie was funded from the Wastewater Reserve.

As the allotted timeframe to complete the detailed design was very aggressive it did not provide sufficient time to undertake all risk mitigation activities. To date, the tunneling portion of the culvert work on Major Mackenzie Drive and the associated upstream drainage channel has been completed. The remaining work includes the open cut installation of approximately 50m of downstream pipe and the outfall structure. This work was originally scheduled to take place in Fall of 2015, in order to avoid disruption with operations within Canada's Wonderland property, where the outfall structure will be constructed.

The compressed design schedule has resulted in the resolution of issues during construction.

During the detailed design phase, an existing 300mm diameter gas main was identified within the proposed construction area. However, based on the information provided by Enbridge at that time, there was no apparent conflict between the proposed outfall structure for the twin culverts and the gas main. In the Fall of 2015, after construction commenced on the outfall structure, it was determined that the actual location of the gas main differed from the original information provided by Enbridge, resulting in a conflict with the proposed infrastructure.

Upon discovery of the utility conflict, staff have been working in partnership with Enbridge and the City's design consultant, Cole Engineering Group (CEG), to determine if the design of the outfall structure for the twin culverts could be modified to avoid relocating the gas main. After exploring all potential design alternatives, the project team has determined that the most appropriate course of action is to lower the existing gas main and eliminate the conflict with the outfall structure.

In order to complete the storm outfall and associated piping for the twin culverts, the relocation of an existing Enbridge gas main is required

Staff have continued to work expeditiously, with Enbridge to have a design for the gas main relocation completed. During this time, other related culvert construction activities, not impacted by the gas relocation have been ongoing, in order to mitigate other potential delays to the project as well as not jeopardizing the delivery of an unencumbered site to Infrastructure Ontario for construction of the Mackenzie Vaughan Hospital (MVH).

In April 2016, staff received the design and the estimated costs for the relocation of the 300mm diameter gas main from Enbridge. The construction activities that are required to complete relocation of the gas main have been tentatively scheduled for August 2016, to be undertaken by Enbridge, while discussions with them and other affected stakeholders remain ongoing with respect to the estimated costs. Any residual funds, related to savings realized through these discussions, will be returned to the original funding.

TABLE 2 : Budget Amendment CO-0074-14	
Additional Funding	\$822,873.00
H.S.T. (1.76%) Not Recoverable	\$14,482.565
Sub-Total	\$837,355.56
Administration Recovery (3%)*	\$25,120.67
Net Additional Consulting Costs	\$862,476.23

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF JUNE 28, 2016

Item 3, Special Finance Report No. 8 – Page 3

Proceeding with the proposed relocation of the gas main is recommended by Staff and has been verified by the City's Cost Control and Risk Mitigation Consultant, p2i Strategies Ltd.

Relationship to Term of Council Service Excellence Strategy Map (2014-2018)

In consideration of the priorities set within the Term of Council Service Excellence Strategy Map, the recommendations in this report support the priority: *Support the development of the hospital.*

Regional Implications

The Regional Municipality of York continues to be a participating stakeholder during the detailed design and construction of infrastructure related to the development of the Vaughan Healthcare Centre Precinct.

Conclusion

As a result of the need to relocate the existing 300mm diameter Enbridge gas main to accommodate the installation and completion of the outfall structure for the twin concrete culverts on Major Mackenzie Drive, additional funding is required to complete the work.

The estimated costs have been reviewed by Staff, and verified by the City's Cost Control and Risk Mitigation Consultant, p2i Strategies Ltd. It is therefore appropriate to approve the budget amendment of \$862,476.23 for CO-0074-14 – VHPD Culvert Work on Major Mackenzie.

Attachment

1. Location Map

Report prepared by:

Paolo Masaro, Manager of Design & Construction, Infrastructure Delivery, Ext. 8446

(A copy of the attachments referred to in the foregoing have been forwarded to each Member of Council and a copy thereof is also on file in the office of the City Clerk.)

**BUDGET AMENDMENT – MAJOR MACKENZIE DRIVE TWIN CULVERTS
WARD 1****Recommendation**

The Deputy City Manager of Public Works and the Director of Infrastructure Delivery, in consultation with the Director of Financial Planning and Development Finance & Deputy City Treasurer and the Director of Financial Services & Deputy City Treasurer, recommend:

1. That a budget amendment to Capital Project CO-0074-14 – VHPD Culvert Work on Major Mackenzie Drive inclusive of administration recovery and applicable taxes in the amount of \$862,476.23 be approved and be funded from the City's Wastewater Reserve; and
2. That the inclusion of this matter on a Public Committee or Council agenda with respect to increasing the Capital Budget identified as "Budget Amendment – Major Mackenzie Twin Culverts", is deemed sufficient notice pursuant to Section 2(1)(c) of By-Law 394-2002.

Contribution to Sustainability

Not Applicable.

Economic Impact

The culvert works on Major Mackenzie Drive alleviate a pre-existing flooding condition on the Vaughan Healthcare Precinct lands, resulting from upstream catchment area flows. These works require utility relocation to facilitate the completion of these works, and are therefore proposed to be funded from the Wastewater Reserve in the amount of \$862,476.23.

To ensure that appropriate funding is available, a budget amendment to Capital Project CO-0074-14 in the amount of \$862,476.23, plus applicable taxes and administration recovery, funded from the City's Wastewater Reserve is required.

Communications Plan

Once a purchase order is provided to Enbridge Gas to initiate the work, staff will advise affected property owners in the area.

Purpose

To obtain Council approval to amend Capital Project CO-0074-14 – VHPD Culvert Work on Major Mackenzie to include the costs associated with the required gas main relocation.

Background - Analysis and Options**The culvert works on Major Mackenzie Drive alleviates a pre-existing flooding condition on the Vaughan Healthcare Precinct lands**

Since the twin culvert work on Major Mackenzie Drive is designed to alleviate a pre-existing flooding condition on the site that will also benefit the entire Vaughan Healthcare Precinct, CO-0074-14 - VHPD Culvert Work on Major Mackenzie was funded from the Wastewater Reserve.

As the allotted timeframe to complete the detailed design was very aggressive it did not provide sufficient time to undertake all risk mitigation activities. To date, the tunneling portion of the

culvert work on Major Mackenzie Drive and the associated upstream drainage channel has been completed. The remaining work includes the open cut installation of approximately 50m of downstream pipe and the outfall structure. This work was originally scheduled to take place in Fall of 2015, in order to avoid disruption with operations within Canada's Wonderland property, where the outfall structure will be constructed.

The compressed design schedule has resulted in the resolution of issues during construction.

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Conclusion

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Report prepared by:

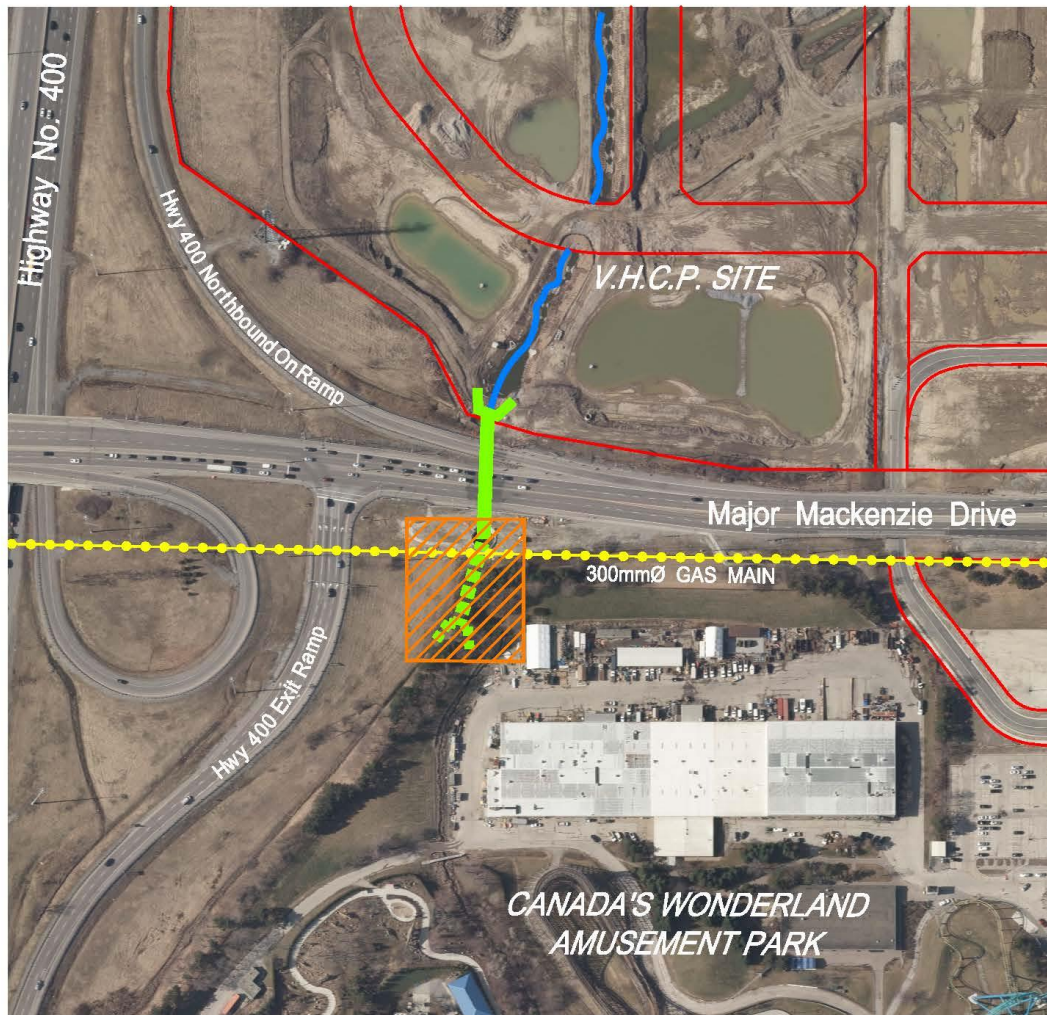
Paolo Masaro, Manager of Design & Construction, Infrastructure Delivery, Ext. 8446

Respectfully submitted,

Paul Jankowski
Deputy City Manager, Public Works

Jack Graziosi
Director of Infrastructure Delivery

LOCATION MAP



MAJOR MACKENZIE DRIVE TWIN CULVERT and OUTFALL STRUCTURE

LEGEND

- COMPLETED WORKS TO DATE
- OUTSTANDING TWIN CULVERT AND OUTFALL STRUCTURE WORKS
- SUBJECT AREA



NOT TO SCALE