
To: York Region Rapid Transit Corporation Board of Directors

From: Mary-Frances Turner, President

Subject: Request for Authorization for Payment to the City of Vaughan for Millway Avenue By-Pass Storm System Work

Ref: YORK- #8014560

Recommendations

It is recommended that:

1. The Board approve a payment to the City of Vaughan for the Millway Avenue by-pass storm system work for a total cost of approximately \$366,905, plus applicable taxes and fees, of which 50% of the cost is to be reimburse to YRRTC by York Region.

Purpose

The purpose of this report is to seek the Board's approval, as required under the YRRTC Purchasing Policy, to allow YRRTC to make a payment to the City of Vaughan for the Millway Avenue by-pass storm system work.

Background

As part of the Vaughan Metropolitan Centre (VMC) subway station construction by TYSSE, Millway Avenue has been relocated and reconstructed

- The location of the subway alignment and VMC Station entrance building necessitated the relocation and reconstruction of Millway Avenue approximately 20 metres east of the original alignment

- The Toronto-York Spadina Subway Extension (TYSSE) project completed the design and construction of the VMC Station and relocation of Millway Avenue, south of New Park Place
- The original Millway Avenue stormwater system allowed for overland flow from Millway Avenue onto Highway 7

YRRTC has completed the reconstruction and widening of Highway 7 in the VMC area for the H2-VMC BRT project

- As part of the H2-VMC BRT project, Highway 7 was widened to accommodate a new vivastation in the middle of Highway 7 that includes direct stair, elevator, and escalator access from each platform into the below ground TTC VMC Station
- YYSSE completed the design and construction of the below ground subway station and BRT station and YRRTC completed the design and construction of the above ground BRT station and Highway 7

In September 2015, YYSSE raised concerns due to possible ponding and flooding of the main VMC Station entrance in the event of 100-year storm

- The local municipal storm system could backflow onto Millway Avenue and ponding could occur on Millway Avenue in the vicinity of the TTC VMC Station main entrance
- This ponding would also impact adjacent lands owned by York Region for the SmartCentres Place Bus Terminal and land developer SmartREIT

To help alleviate the ponding, YRRTC undertook to lower the elevation of the northeast corner of Highway 7 & Millway Avenue to allow stormwater to outlet to the Highway 7 storm system

- Discussions between the affected stakeholders took place and various solutions were explored
- One option included lowering of the northeast corner of Highway 7 and Millway Avenue and YRRTC issued a change order to the H2-VMC contractor for \$114,000 to complete the work
- While the lowering did help to reduce the amount of ponding, it did not completely resolve the 100-year storm event ponding risk

- It was agreed that the City of Vaughan would take the leadership on designing and implementing next steps to completely resolve the long-term storm water requirements in this precinct

Analysis and Implications

The City of Vaughan retained a consultant to assess the stormwater system in the VMC area and identify a preferred option to resolve the ponding issue and stakeholder needs

- SCS Consulting was retained to undertake the analysis of the municipal stormwater system and develop options to eliminate the ponding along Millway Avenue
- The consultant conducted its analysis to ensure the impacts and/or needs of the stakeholders were addressed:
 - City of Vaughan:
 - The local storm system was deemed insufficient and this new pipe needed to add capacity to help protect the local municipal road system and upstream development from ponding
 - SmartREIT:
 - Additional stormwater flows from the new Applemill Road extension from Millway Avenue to Jane Street needed to be accounted for in the design of the by-pass system
 - SmartREIT, as the local landowner and developer, is responsible for the costs of implementing the Applemill Road extension
 - York Region/YRRTC:
 - The existing system used by the SmartCentres Place Bus Terminal site is the same system that experiences ponding; the bus terminal lands would benefit from additional protection to ensure transit operations can continue to operate in extreme weather scenarios
 - The by-pass storm system should reduce the amount of stormwater overflowing to Highway 7 from Millway Avenue, thereby reducing the extent of storm flows to the Highway 7 storm system

- TYSSE (TTC):
 - TYSSE requested the existing storm outlet for the VMC Station TTC-owned lands be disconnected from the existing storm system and reconnected to the new system to avoid backflow into the TTC station

The recommended solution agreed to by all parties was to add a new isolated stormwater by-pass pipe to take stormwater to the Edgeley Pond east of Jane Street

- This new by-pass storm water solution resolves the ponding issue along Millway Avenue and the VMC Station entrance and provides the required benefits to the stakeholders as noted above
- In February 2017, all parties agreed that the proposed design solution presented by SCS Consulting achieved the required results
- SCS proceeded to design the system and prepare a cost-estimate for the works

Vaughan staff secured Vaughan Council approval to front-end the costs of constructing the storm by-pass system

- In recognition of timing constraints to reconstruct Millway Avenue and implement the storm works prior to opening of the TYSSE project in December 2017, Vaughan staff secured Council Approval in June 2017 to front-end the cost of the works
- The work was completed under direction from SmartREIT through their contactor PCL
- All parties have agreed to make best efforts to secure the approvals necessary to reimburse Vaughan for their equal share of the works, subject to receipt of the final cost of the work

Construction of the work has now been completed and the final cost of the work has been confirmed

- The City of Vaughan, SmartREIT, York Region/YRRTC and TYSSE all benefit from this solution and have agreed, in principle, to make best efforts to secure the necessary approval to share the costs equally amongst the stakeholders:
 - 25% City of Vaughan
 - 25% SmartREIT

- 25% York Region/YRRTC; and
 - 25% TYSSE
- The City of Vaughan has submitted a cost breakdown of the tendered value of the stormwater by-pass work of \$1,467,619.13
 - The 25% equal share by each party is approximately \$366,905

YRRTC and York Region staff have discussed and agreed on the cost allocation between York Region and YRRTC

- York Region staff have agreed to cover half of the costs of the Millway by-pass storm solution with YRRTC, as outlined in Table 1
- In addition, York Region staff have agreed to reimburse YRRTC for half of the change order costs of \$114,000 for the H2-VMC project work to lower the intersection of Highway 7 and Millway Avenue, also outlined in Table 1

Table 1: Cost-sharing between York Region and YRRTC

	Millway-Bypass	YRRTC	York Region
Share of Millway - Bypass	\$ 366,905	\$ 366,905	
YRRTC Contribution \$114,000 - Lowering of Millway Hwy 7 (Note 1)		\$ 114,000	
Total	\$ 366,905	\$ 480,905	\$ -
York Region's 50% share of \$366,905 paid by YRRTC		\$ (183,452)	\$ 183,452
York Region's 50% share of \$114,000 already contributed by YRRTC		\$ (57,000)	\$ 57,000
Total	\$ 366,905	\$ 240,452	\$ 240,452

Note 1 - Cost is 100% absorbed by YRRTC/York Region and not cost shared between other parties

- YRRTC will issue a Confirmation of Funding to York Region for the sum of \$240,452
- The total gross cost to be paid to Vaughan for the Millway by-pass storm system work is approximately \$366,905
- The net cost to YRRTC after recovering 50% of the Millway by-pass storm system costs from York Region is approximately \$183,452
- YRRTC will also receive a reimbursement of \$57,000 from York Region representing 50% of the costs paid for the H2-VMC change order to lower Highway 7 and Millway Avenue that will be a recovery to the H2-VMC project change order

Financial Considerations

- Table 2 outlines the allocation of YRRTC costs, net of the recoveries from York Region, for the H2-VMC and SmartCentres Place VMC Bus Terminal projects:

Table 2: YRRTC allocation of Net Recoveries

Cost Share Should Be	YRRTC	H2-VMC	VMC Terminal
YRRTC Share of Millway - Bypass	\$ 183,452	\$ 91,726	\$ 91,726
YRRTC Contribution \$114,000 - Lowering of Millway Hwy 7	\$ 57,000	\$ 28,500	\$ 28,500
Total	\$ 240,452	\$ 120,226	\$ 120,226

- Funds for the Millway storm sewer by-pass works have been included in the 2018 Facilities & Terminals budget and Metrolinx Capital Program.

Conclusion

- The City of Vaughan hired SCS Consulting to complete an analysis and recommended solution to the Millway ponding and long-term storm water management strategy in the VMC
- The solution was to provide an isolated by-pass storm sewer that connects Millway Avenue to the Edgeley Pond east of Jane Street
- The City of Vaughan agreed to front-end the costs of implementing the solution on the basis that each stakeholder make best efforts to secure approval for a 25% share of the costs of the work, or approximately \$366,905 plus applicable taxes and fees
- Staff are requesting the Board to approve a payment to the City of Vaughan in the amount of approximately \$366,905 plus applicable taxes and fees, of which 50% of the cost is to be reimburse by York Region

For more information on this report, please contact Raj Mohabeer, Chief Design, Infrastructure & Development, York Region Rapid Transit Corporation at 905-886-6767, Ext. 71028.

Mary-Frances Turner
President

January 9, 2018