

SUBJECT: Award of Contract 025-T-18 Rouge Valley Trail and Pedestrian Bridge Construction from Markham Road to Tuclor Lane and from 14th Ave. to Treeline Court - Phase 4A (Wards 4 & 7)

PREPARED BY: Dereje Tafesse, Senior Capital Works Engineer, ext. 2034
Tony Casale, Senior Construction Buyer, ext. 3190

REVIEWED BY: Alain Cachola, Senior Manager, Infrastructure and Capital Works, ext. 2711

RECOMMENDATION:

- 1) That the report entitled "Award of Contract 025-T-18 Rouge Valley Trail and Pedestrian Bridge Construction from Markham Road to Tuclor Lane and from 14th Ave. to Treeline Court - Phase 4A (Wards 4 & 7)" be received; and,
- 2) That the contract for the Rouge Valley Trail and Pedestrian Bridge Construction from Markham Road to Tuclor Lane and from 14th Avenue to Treeline Court be awarded to the lowest priced bidder, Orin Contractors Inc. in the amount of \$1,227,841.25 inclusive of HST; and,
- 3) That a contingency in the amount of \$98,227.30 (8%), inclusive of HST, be established to cover any additional construction requirements and that authorization to approve expenditures of this contingency amount up to the specified limit be in accordance with the Expenditure Control Policy; and,
- 4) That the construction award be funded from account 083-5350-18049-005 'Rouge Valley Trial Multi-Use Pathway' in the amount of \$1,326,068.55 (\$1,227,841.25 + \$98,227.30); and,
- 5) That a Capital Administration fee in the amount of \$132,455.14, be allocated to project #18049 'Rouge Valley Trial Multi-Use Pathway, Phase 4'; and,
- 6) That the Internal Contract Administration fee in the amount of \$79,564.11 be allocated to project #18049 'Rouge Valley Trial Multi-Use Pathway, Phase 4'; and,
- 7) That the Toronto & Region Conservation Authority (TRCA) permit / archaeological fees in the amount of \$20,000 be funded from project #18049 'Rouge Valley Trial Multi-Use Pathway, Phase 4'; and,
- 8) That the total cost for the project in the amount of \$1,558,087.80 inclusive of HST (\$1,227,841.25 + \$98,227.30 + \$132,455.14 + \$79,564.11 + \$20,000.00) be funded from capital project #18049 'Rouge Valley Trail Multi-Use Pathway, Phase 4' with an available budget of \$1,268,903.16; and,

- 9) That the budget shortfall of \$289,184.64 (\$1,558,087.80 - \$1,268,903.16) in capital budget #18049 'Rouge Valley Trail Multi-Use Pathway, Phase 4' be funded from the Development Charges Reserve in the amount of \$187,970.02 and from the Ramp-Up Reserve in the amount of \$101,214.62; and furthermore,
- 10) That Staff be authorized and directed to do all things necessary to give effect to this resolution.

PURPOSE:

The purpose of this report is to obtain Council approval to increase the approved budget for the Rouge Valley Trail and Pedestrian Bridge Construction from Markham Road to Tuclor Lane and from 14th Avenue to Treeline Court Phase 4A by \$289,184.64, and to award the contract for the Rouge Valley Trail and Pedestrian Bridge (Phase 4A).

BACKGROUND:

Council approved the Cycling Master Plan in 2010 and the Pathways and Trails Master Plan in 2008. Both plans implement the Official Plan policies that encourage pedestrian and cycling movement throughout the City of Markham. Both plans were developed with comprehensive public consultation. A Municipal Class Environmental Assessment ("EA") was completed by the City for the portion of Rouge Valley Trail from 16th Avenue to Bob Hunter Memorial Park through Toogood Pond and the Milne Dam Conservation Park. The EA was completed and approved by Council and the Minister of the Environment in 2012. The multi-use pathway system includes limestone & asphalt trail, boardwalks, trail entry features, and a number of pedestrian/cyclist bridges.

The Rouge Valley Trail construction work is divided into five Phases. Phase 1, 2 and Phase 3A (see Appendix A for locations) have been completed and are opened to the public. The Phase 3B construction work in the Milne Dam Conservation Park is currently underway and scheduled to be completed in fall 2019, weather permitting. The Phase 4A Rouge Valley Trail construction work from Markham Road to Tuclor Lane and from 14th Avenue to Treeline Court includes the construction of a pedestrian bridge, limestone/asphalt trail, retaining wall, entry features and plantings. The construction work is expected to begin in June 2018 and be completed by December 2018.

The construction of the Rouge Valley Trail east of Markham Road requires the acquisition of a privately owned land. As such, the City has commenced the expropriation process as per Council authorization and the possession date is scheduled for the end of May 2018.

Bid Information

Advertised, place and date	ETN
Bid closed on	April 9, 2018
Number of bidders picking up bid document	31
Numbers of bidders responding to bid	11

Detailed Pricing Information

Bidder	Bid Price (Incl. of HST)
Orin Contractors Inc.	\$ 1,426,273.25
Hawkins Contracting Services Limited	\$ 1,592,497.55
Melfer Construction Inc.	\$ 1,636,862.25
Loc Pave Construction Limited	\$ 1,777,178.87
Rocky River Construction Limited	\$ 1,817,780.73
2220742 Ontario Ltd o/a Bronte Construction	\$ 1,921,922.80
Speedside Construction Ltd.	\$ 2,018,318.02
Grascan Construction Ltd.	\$ 2,341,380.53
Metric Contracting Services Corporation	\$ 2,384,574.64
Aqua Tech Solutions Inc.	\$ 2,480,803.79
HPM Enterprises Inc.	\$ 4,095,651.94

The low bidder's price upon closing exceeded the City's budget and as outlined in Section 17.2 of the City's *General Terms and Conditions*, "The City reserves the right, in its sole discretion, to negotiate with the lowest priced Bidder...in the event that the Bid prices submitted by the Bidders exceed the City's budget..."

Initial Construction Budget vs Tender Bid Price

The original trail budget in project #18049 "Rouge Valley Trail Multi-Use Pathway, Phase 4" is \$1,280,000.00. Of this amount, \$1,007,424.00 (\$915,840.00 plus 10% contingency) was allocated for construction work. The construction budget was prepared in 2017 during the initial design stage of the project using a preliminary design and a high level cost estimate. The detailed design includes additional tasks that are not included in the budget. The low bidder's price inclusive of fees exceeded the City's budget by \$487,616.64.

The increase in the project costs are attributed to two (2) components; one for allowances and provisions associated with a temporary pedestrian bridge and project allowances, the other for an increase in the scope based on new requirements which were not included in the approved budget.

Component 1 (Temporary Bridge and allowances) – No longer required and excluded from the contract.

- The temporary bridge was a provisional item added to the contract in case the City did not obtain authority to access the project from private property. The Legal Department confirmed that the City has the authority to access the lands. As such, the provision in the amount of \$142,464 inclusive of HST is no longer required.
- There were a number of allowances included in the tender for as-built drawings, additional traffic control and survey work. Staff has reviewed these allowances and confirmed that the work will be completed by Staff (Contract Administrator). The allowance will be reduced by \$55,968.00 inclusive of HST.
- Component 1 totaling \$198,432.00 is no longer required and has been excluded from the contract. Therefore, the budget shortfall has been reduced from \$487,616.64 to \$289,184.64 (\$487,616.64-\$198,432.00).

Component 2 (Additional Work)

The remaining budget shortfall of \$289,184.64 is attributed to additional tasks and quantities that were not included in the budget. Staff was aware that the additional requirements may impact the City's budget prior to issuing the Bid, but continued with issuance of the RFT to obtain market pricing.

The additional work items which attributed to the shortfall are as follows:

- Site preparation and removals – cost increase due to requirements for temporary crane pads and Closed Circuit Television (CCTV) inspections.
- Additional plantings and sediment control as requested by TRCA for the issuance of the TRCA permit.
- Pedestrian bridge structure – increase in the cost of steel by 20-30%.
- Substitution of material from limestone to asphalt due to high water levels and flooding. The replacement of limestone material with asphalt helps to eliminate washout and reduce maintenance costs.
- Culvert works – due to the site location and drainage issues, additional culvert works were required as part of the design to mitigate site erosion during high water levels and flooding.
- Retaining walls – trail has to be raised to match adjacent road grade
- Additional contract and capital administrative fees resulting from the work items identified above.

FINANCIAL CONSIDERATIONS

Original Budget and Account #	\$1,280,600.00	083-5350-18049-005 Rouge Valley Trail Multi-Use Pathway - Phase 4 of 5
Current budget available	\$1,268,903.16	083-5350-18049-005 Rouge Valley Trail Multi-Use Pathway - Phase 4 of 5
Less cost of award	\$1,227,841.25 \$ 98,227.30 \$1,326,068.55	Construction (Incl. of HST impact) Contingency @ 8% Total (Incl. of HST impact)
	\$ 132,455.14 \$ 79,564.11 \$ 20,000.00 \$ 1,558,087.80	Capital Admin Fee Internal Contract Administration Fee @ 6% TRCA Permit/Archeological Fees Total Cost of Award
Budget shortfall	(\$ 289,184.64)	*

*The shortfall in the amount of \$289,184.64 will be funded from the Development Charges Reserve in the amount of \$187,970.02 and the Ramp-Up Reserve in the amount of \$101,214.62.

Operating Budget and Life Cycle Impact

The Operation & Maintenance Plan and Life Cycle Cost for the Rouge Valley Trail was approved by Council in June 2017. The future estimated maintenance, repair and replacement of the expanded Phase 4A pathway system will be approx. \$19,000.00 per year. Incremental operating budget impact will be \$19,000 which will be included in the 2019 Operating budget for consideration.

The new pathway system includes a pedestrian bridge, lime stone screenings and asphalt pathway (i.e. at a location where steep grade is encountered, to minimize and avoid erosion of the pathway material), retaining wall, drainage culverts, entrance features, etc. The bridge component has a cost of 0.230M and a 50 year useful life. The remaining MUP components have a 25 year useful life and therefore, the incremental lifecycle impact over the next 25 years is \$1.096M (\$1.326M – \$0.230M).

HUMAN RESOURCES CONSIDERATIONS

Not Applicable.

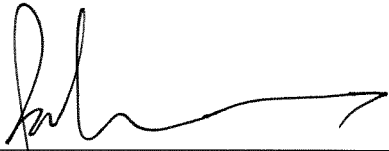
ALIGNMENT WITH STRATEGIC PRIORITIES:

The Rouge Valley Trail- Phase 4A Tender Award is in line with the City of Markham's strategic focus relating to Municipal Services, Parks and Recreation including Accessibility and the Environment

BUSINESS UNITS CONSULTED AND AFFECTED:

Finance and Operations have been consulted and their comments were incorporated into this report.

RECOMMENDED BY:



Brian Lee, P.Eng.
Director, Engineering



Arvin Prasad, MCIP, RPP.
Commissioner, Development
Services

ATTACHMENTS:

Attachment 'A' – Rouge Valley Trail Construction Phasing Map

Attachment 'A' – Rouge Valley Trail Construction Phasing Map

Completed to-date

- Phase 1 - Main St. Unionville/Carlton Rd to Drakefield Rd
- Phase 2 - Tudor Lane to 14th Ave
- Phase 3A - Along the west side of Toogood Pond

Under construction

- Phase 3B - Drakefield Rd to Markham Rd

Scheduled to be constructed

- Phase 4A - East of Markham Rd to Tudor Lane - 14th Ave to Treeline Crt
- Phase 4B - 14th Ave to Bob Hunter Memorial Park

