

то:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON DECEMBER 9, 2013
FROM:	JOHN BRAAM, P.ENG. MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING SERVICES AND CITY ENGINEER
SUBJECT:	HAMILTON ROAD & CLARKE ROAD INTERSECTION IMPROVEMENTS CONSTRUCTION CONTRACT AMENDMENT - EMERGENCY SITUTATION

RECOMMENDATION

That, on the recommendation of the Managing Director, Environmental & Engineering Services and City Engineer the following report **BE RECEIVED** for information, with respect to the contract for the Hamilton Road and Clarke Road Intersection Improvements.

BACKGPOLIND	
BACKGROUND	

Purpose:

This report identifies additional work items encountered after construction was initiated under the contract for the reconstruction of the intersection of Hamilton Road and Clarke Road, that were authorized by the City Engineer and Director of Water and Wastewater. This report provides a Source of Financing to increase the construction contract amount by \$100,000 and the engineering design/contract administration by \$17,577. In both cases, the City's Procurement Policy requires that Council be advised when the Administrative Authority expenditure limits have been exceeded.

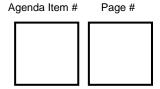
Discussion:

Hamilton Road and Clarke Road Intersection Improvements originally included the following components:

- Replacement of the existing culvert crossing Hamilton Road just east of Clarke Road;
- Installation of new catch basins along Hamilton Road to improve existing drainage conditions;
- Introduction of approximately 400 m of curb and gutter;
- Construction of sidewalk along the north side of Hamilton Road;
- Introduction of a raised median in the N/E corner of the subject intersection, to enhance pedestrian safety in the area.

The original contract price was \$484,312.32, including a \$30,000.00 contingency, exclusive of HST and was awarded to Tri-Con Excavating Inc. on July 9, 2013. The project was competitively tendered and received an Administrative Approval of Tender Acceptance/Contract Award (\$100,000 - \$1,000,000). Funding details were provided in the Administrative Approval of Tender Acceptance/Contract Award report which is attached in Appendix B.

As the project progressed, unanticipated field conditions were identified. Maintenance work on the storm sewer identified a water leak from the adjacent watermain and in another location, a conflict with a natural gas service. When Water Operations staff arrived at the site to assess the leak, it was determined that a water valve chamber and stub watermain should be removed from the intersection to avoid water quality concerns and potential damage to the chamber (which was made redundant if the stub was eliminated). While decisions were made on site with regard to the water chamber and the natural gas service, the issue of the existing watermain in close proximity to the storm sewer was referred to Water Engineering for a decision on how to proceed on August 26, 2013. While the situation was not an emergency, it could have become one if the contractor had continued with his work. The following issues were considered in



authorizing the contractor to undertake the work:

- A significant health and safety risk to workers on the construction site existed if they tried to work on the storm sewer around the existing leaky watermain;
- The watermain would likely have leaked following rebuilding of the sewer and roadworks requiring costly repair within 6 to 12 months;
- A delay claim would have been filed by the contractor while awaiting approval of the added works through Council;
- The construction site would have presented a public safety hazard during the delay or required costly restoration and then re-excavation; and,
- The City could not undertake the additional works as the site was under the care of the contractor, who was identified as the "constructor".

The procurement policy does provide the authority to the City Engineer and Purchasing Manager to exceed the expenditure limits in the event of an emergency. In this case, the contractor was faced with an unsafe working condition and could not progress his work; the City could not intervene in the work site without taking over full safety responsibility for the entire project. This stalemate situation needed to be resolved quickly to avert contract delay claims.

On August 27, 2013 the contractor was authorized to replace the watermain which resulted in several other benefits to the City:

- Sub-standard storm sewer (250 mm) was replaced with 78 metres of 300 mm sewer with minimal risk and intersection storm drainage was also simplified and improved;
- 1950's vintage 150 mm watermain which had experienced previous leakage events was replaced with 120 metres of 300 mm similar to the watermain west of Clarke Road at a fair price;
- By removing these two constraints, the Hamilton Road profile was altered to improve driveway access for adjacent businesses and residents; and,
- The concrete road base was removed which avoids costly future maintenance works in the area.

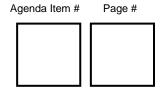
There are no anticipated additional annual operating costs to the Environmental and Engineering Services Department and may in fact be slightly less with less infrastructure to maintain.

The various additional work items extended the original completion date of September 13th, 2013 to late October 2013. Some of the additional works are illustrated in Figure 1 and the Contract Change Order Summary appended to this report. This year's construction activites are now complete. The remaining contingency of \$7,641.43 may be utilized for any spring 2014 clean up items or end of warranty items which may be encountered within the project limits. Any surplus contingency would be returned to the appropriate reserve fund after the warranty period has expired.

All parties have agreed that the noted extra costs necessary to complete the works are reasonable and fair.

Item	Approved Budgets (\$)	Projected Final Costs (\$)	Variance (Budget vs. Projected) (\$)
Construction Costs (Tri-Con Excavating Inc.)	484,312	584,312	100,000
Engineering Costs (AGM Surveying & Eng.)	99,000	116,577	17,577

Note: All dollar values in this chart exclude HST.



Summary:

As this project progressed on site, unanticipated conditions were encountered that required additional works to avoid an emergency. To avoid unsafe working conditions and a potential delay claim, additional work was authorized which exceeded the Administrative Authority limits. This report provides details as to the rationale for these decisions and identifies cost and functional benefits that were derived.

The additional funds to complete the project are available from the EW3833-12 and EW3787-12 budgets as identified in the Source of Financing Report.

Acknowledgements:

This report was prepared with the assistance of Doug MacRae, Division Manager, Karl Grabowski, Transportation Design Engineer and Max Kireev, Technologist II of the Transportation Planning & Design Division, as well as Roland Welker, Division Manager and Jake Blancher, Senior Technologist, within Water Engineering Division.

PREPARED BY:	PREPARED BY:
EDWARD SOLDO, P.ENG. DIRECTOR, ROADS AND TRANSPORTATION	JOHN LUCAS, P.ENG. DIRECTOR, WATER AND WASTEWATER
RECOMMENDED BY:	
JOHN BRAAM, P.ENG. MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING SERVICES & CITY ENGINEER	

Attach: Figure 1 and Summary Cost Table

Appendix "A" – Source of Financing Appendix "B" – July 9, 2013 – Administrative Approval of Tender

Acceptance/Contract Award

AGM Surveying and Engineering, 3514 White Oak Road, London, ON C.C.

Tri-Con Excavating Incorporated, 113-4023 Meadowbrook Drive, London ON.

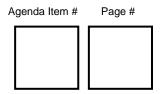
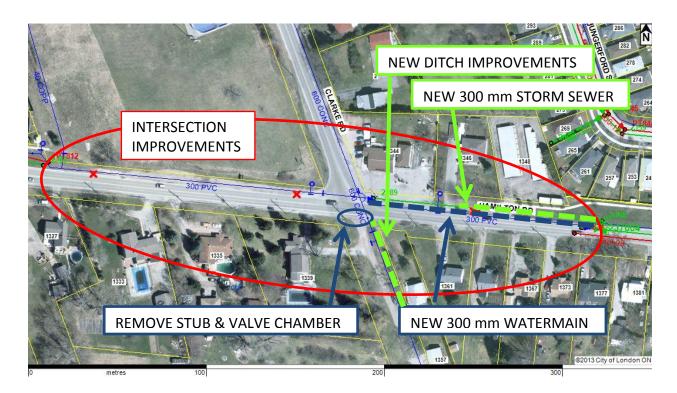


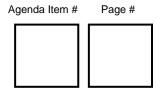
FIGURE 1



CONTRACT CHANGE ORDER SUMMARY

Item	Amount (\$)
Combined value of additional work items (Total 5 Change Orders)	122,358.57
Change Order #1- Extend Storm Sewer Outlet	5,230.00
Change Order #2- Revision to profile of Clarke	5,282.00
Change Order #3- Existing Watermain Stub	15,631.69
and Chamber Removals	
 Change Order #4 Delay Claim Related to Gas Service 	3,532.88
Change Order #5 Watermain Installation	92,682.00
Less contingency within contract	30,000.00
Sub-total – Unfunded Additional Work	92,358.57
Total Additional Funds Requested for completion	100,000.00
Contingency Remaining for Project Completion	7,641.43

Note: All dollar values in this chart exclude HST



Appendix "B"



THE CORPORATION OF THE CITY OF LONDON ADMINISTRATIVE APPROVAL

TENDER ACCEPTANCE/CONTRACT AWARD (\$100,000 - \$1,000,000)

Date: July9th, 2013

Tender: Hamilton Road and Clarke Road Intersection Improvements

Service Area: Roads & Transportation – Transportation Planning and Design Division

SOURCE OF FINANCE: TS1650-11; TS1650-12

That, with Council approval of the 2013 Capital/Operating Budget and on the award approval of the Managing Director and Manager of Purchasing & Supply, the bid submitted by **Tri-Con Excavating Inc.** at their tendered price of \$484,312,32 (excluding HST) **BE ACCEPTED**.

Brief Description of Contract: This is a Minor Intersection Improvements project involving construction of a left turn lane on Hamilton Road, curb and gutter, sidewalk on the north side of Hamilton Road and improvements to the existing drainage infrastructure.

Statement of Project Work:

Anticipated Start Date: July 19th, 2013

Anticipated Completion Date: September 13st, 2013

Related Project Components:

Project also includes:

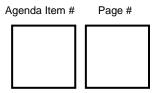
- Replacement of the existing culvert, crossing Hamilton Road just east of Clarke Road.
 Installation of new catch basins along Hamilton Road to improve existing drainage

- Installation or new catch basins along framilion roots to support the conditions
 Introduction of approximately 400m of curb and gutter
 Construction of sidewalk along the north side of Hamilton Road
 Introduction of a raised median in the N/E corner of the subject intersection, to enhance pedestrian safety in the area

Details of Tender Invitation:

Posting date: June 6th, 2013 Closing date: June 26th, 2013

Form rev.5 January 9, 2013





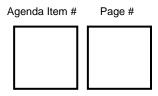
THE CORPORATION OF THE CITY OF LONDON

ADMINISTRATIVE APPROVAL of TENDER ACCEPTANCE/CONTRACT AWARD

	(\$100,000 - S	\$1,000,000)	
Financial Impact:			
Capital Project Number(s):	1: TS1650-	-11 \$ available funds + 484, 312.32	
	2: TS1650-	\$ available funds $^{+}$ $_{484}$, $_{31}$ 2 .32 .32 .32 .32 .32 \$ remainder $\left(\varepsilon_{\text{KCLV 20014}} \right)$	
	3:		
	4:		
Other Contributions:	1:	\$	
PDC's, utilities, grants, donations):	2:	\$	
annual Operating Costs:	\$ N/A	Service Area: N/A	
Recommendation:			
		ng Inc. at their tendered price of \$484,312.32	
excluding HST) is recommended for	contract awar	ra.	
leasons: lowest bid			
voiding Conflict of Interest:			
ontract will be awarded. The tender	r specification	d to declare any conflict of interest before a is and assessment results will be reviewed by any favouritism to particular tenderers if any	
from the following two options, se resence or absence of a conflict of i		propriate statement as a declaration of the	
	est associate	d with this tender.	
There is a conflict of interest a	associated wit	th this tender. Reason:	
PREPARED BY:		RECOMMENDED BY:	
al shift		Colland 2005	
DOUG MACRAE, P.ENG. DIVISION MANAGER TRANSPORTATION PLANNING & DESIGN DIVISION		EDWARD SOLDO, P.ENG. DIRECTOR, ROADS AND TRANSPORTATION	
REVIEWED & APPROVED BY:		REVIEWED & APPROVED BY:	
John Bran	_	J. fr	
JOHN BRAAM, P.ENG. MANAGING DIRECTOR ENVIRONMENTAL & ENGINEERING SERVICES AND CITY		JOHN FREEMAN MANAGER PURCHASING & SUPPLY	

Copies: Rick Brown, TCA Tom Coulter, TCA

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THE CORPORATION OF THE CITY OF LONDON

ADMINISTRATIVE APPROVAL of TENDER ACCEPTANCE/CONTRACT AWARD (\$100,000 - \$1,000,000)

T13-68 Summary for– Hamilton Road & Clarke Road Intersection Improvements

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x *	Tri-Con Excavating Inc.	Dufferin Construction Company	L82 Construction Ltd.	
Sub-Total	\$484,312.32	\$487,840.35	\$492,500.13	
HST	\$62,960.60	\$63,419.25	\$64,025.02	
Total Contract Price	\$547,272.92	\$551,259.60	\$556,525.15	