



TO: GENERAL COMMITTEE


SUBJECT: AWARD OF CONTRACT 2016-014T FOR MAPLEVIEW DRIVE EAST,
HURONIA ROAD TO COUNTRY LANE

WARDS: 9

**PREPARED BY AND
KEY CONTACT:** D. JAMES, P. Eng.,
SENIOR PROJECT ENGINEER (Ext. 4444) 

SUBMITTED BY: J. WESTON, M.A.Sc., P. Eng., PMP
DIRECTOR OF ENGINEERING 

**GENERAL MANAGER
APPROVAL:** R. J. FORWARD, M.B.A., M.Sc., P. Eng.
GENERAL MANAGER OF INFRASTRUCTURE & GROWTH MANAGEMENT 

**CHIEF ADMINISTRATIVE
OFFICER APPROVAL:** C. LADD
CHIEF ADMINISTRATIVE OFFICER 

RECOMMENDED MOTION

1. That Contract 2016-014T, for Mapleview Drive East Improvements, Huronia Road to Country Lane be awarded to Arnott Construction Limited, (Arnott), in accordance with their tender dated May 31, 2016, in the amount \$13,378,690.00 excluding HST, with the funding adjusted as per Appendix A.

PURPOSE & BACKGROUND

2. The purpose of this report is to obtain the additional funding to proceed with contract award and construction of the Mapleview Drive East Improvements, Huronia Road to Country Lane.
3. A Schedule C Class Environmental Assessment for Mapleview Drive from Bayview Drive to Yonge Street was completed in 2007 with the mandatory public consultation process included. In the past 2 years right of way widenings and/or easements have been purchased from all properties fronting the works. The abutting property owners have also been recently contacted regarding water and sanitary servicing of their properties.
4. On April 11, 2016 Council passed Motion No. 16-G-059 authorizing the preparation of by-laws to authorize the recovery of sanitary sewer and watermain costs through a per metre frontage charge and lateral charges as provided under Section 326 of the Municipal Act.
5. Tenders were prepared with the bidders providing pricing for three alternatives related to the accommodation of traffic through the work zone: Alternative 1 included maintaining 2 lanes of traffic through the work zone; Alternative 2 included maintaining 1 lane of traffic through the work zone; and Alternative 3 included a 4 month closure of Mapleview Drive East at the Lover's Creek crossing.

6. Tenders for Contract 2016-014T closed on May 31, 2016 at 2:00 p.m. Six (6) tenders were opened on May 31, 2016 at 2:15 p.m., all were deemed compliant. The engineer's estimate for the construction portion of the project was \$12.5M for Alternative 1, \$11.5M for Alternative 2 and \$11.0M for Alternative 3. The three lowest bids (excluding HST) are:

	Alternative 1	Alternative 2	Alternative 3
a) Arnott Construction Limited	\$13,378,690.00	\$13,378,690.00	\$12,986,138.00
b) John Bravakis Enterprises Ltd.	\$16,336,961.47	\$15,727,062.14	\$15,536,961.47
c) Drainstar Contracting Limited	\$18,045,434.15	\$17,545,343.15	\$15,745,708.15

7. The low bid is 7% higher than the engineer's estimate, which is attributed to the complex nature of the work and the fact that there was limited unit price data available from previous projects for similar large diameter, deep sanitary sewer construction. The low bid is considered reasonable and is recommended for award.

ANALYSIS

8. Arnott Construction Limited (Arnott) are a well-known local contractor that have successfully completed several projects of similar scope and size for the City of Barrie such as: Mapleview Drive East Improvement, Welham Road to Huronia Road (2011-027T) and Essa Road Improvements, Ferndale Drive to Coughlin Road (2015-004).
9. Although the price for Alternative 3 is \$392,522 less expensive than Alternatives 1 and 2, Engineering staff are not recommending that the Alternative 3 be implemented as it includes a 4 month full closure of Mapleview Drive East at the Lover's Creek crossing. As there are no convenient detours around the work site for this closure and based on the large number of vehicles that use Mapleview Drive East between Huronia and Country Lane (approximately 15,000 vehicles per day that would be inconvenienced for 4 months), the significant disruption to traffic is not justified by the potential cost saving. Staff are recommending the award to Arnott for Alternative 1 - maintain 2 lanes of traffic through the work area.
10. Staff recommend proceeding with award of this tender as there are future projects such as the Huronia Road SPS decommissioning and reconstruction and widening of Mapleview Drive from Country Lane to Yonge Street that would be affected if this contract is not awarded.

ENVIRONMENTAL MATTERS

11. The following environmental matters have been considered in the development of the recommendation:
- The Lake Simcoe Protection Plan.
 - The installation of a watermain to provide domestic service and to provide a missing watermain link to improve system redundancy.
12. The City of Barrie's continued efforts in reducing phosphorus loads to Lake Simcoe through the removal of private septic systems demonstrates an environmental commitment by the City of Barrie to making a positive change within the Lake Simcoe Watershed and ensures that the City stays at the forefront of environmental issues that affect Lake Simcoe.
13. The new domestic watermain will reduce the use of private wells, thereby increasing the water quality security of the water supply for abutting properties.

ALTERNATIVES

14. The following Alternative is available for consideration by General Committee:

Alternative #1 General Committee could award the contract to Arnott based on Alternative 3.

This Alternative is not recommended as it would cause a major disruption to traffic on Mapleview Drive East for a four (4) month time period with only a minor cost saving.

FINANCIAL

15. The Capital Budget for this project is shown in Appendix "A" along with the proposed funding, based on total project cost including tendered prices, design, contract administration, inspection, utility relocations, property acquisition and contingencies.
16. As the total project cost will exceed the lesser of 10% or \$250,000 over the approved budget therefore council approval of the award is required.
17. The total project cost for Contract 2016-014T, based on the low tender, including total tender price, HST, design expenses, utilities, property, inspection and material testing and construction and project contingencies is estimated at \$17,262,878 (see the table below).

	<u>Based on Tender</u>	<u>Original Budget</u>
Total Tender Price (Excluding HST)	\$13,378,690	\$10,000,000
HST non recoverable (1.76%)	\$235,465	\$176,000
Design Expenses	\$614,279	\$659,401
Utilities	\$357,603	\$450,000
Property	\$708,774	\$750,000
Contract Admin., Inspection & Material Testing	\$200,000	\$200,000
Sire Preparation Contract	\$233,067	\$250,000
Construction and Project Contingencies	\$1,535,000	\$1,000,000
TOTAL PROJECT WORK	\$17,262,878	\$13,485,401

18. The overall project is over budget by \$3,777,478. The proposed Funding Adjustment is shown in Appendix A. Additional funds are required as follows: \$245,044 from the Tax Capital Reserve; \$2,328,913 from Federal Gas Tax, \$3,066,842 from the DCA; and \$268,446 from the Wastewater Rate. The original funding from Tax Debt has been eliminated. Finance has confirmed there are sufficient funds in the Tax Capital Reserve and Wastewater Capital Rate Reserve. However, the impact on the DCA fund will need to be mitigated through savings within existing projects, or deferring projects as part of the 2017 Capital Plan development process.
19. This project was identified in Council motion 16-G-018, from January 25, 2016, requesting options be examined to eliminate the use of debt financing. A staff report is planned for June 22, 2016 Finance and Corporate Services Committee addressing this motion. Upon review, it has been determined that Federal Gas Tax Funds are available to be used for this project.

20. Sanitary and water lateral costs in the low bid have been provided to the benefiting property owners in advance of the Staff Report going to Council.

LINKAGE TO 2010 – 2014 COUNCIL STRATEGIC PLAN

21. The recommendation(s) included in this Staff Report support the following goals identified in the 2014-2018 Strategic Plan:

Vibrant Business Environment

Well Planned Transportation

22. The recommendations will provide a sanitary sewer collection system for unserved properties on Maplevue Drive East, which help improve the environment of the Lake Simcoe Watershed by reducing the phosphorus loading associated with septic systems.

APPENDIX A

CAPITAL BUDGET FUNDING

Component	Roads	Sanitary	Storm	Culverts	Sidewalks	Water (domestic)	Water (transmission)	Street Lights	Traffic Signals	TOTAL
Account Numbers	14-16-2510-1135	14-16-2515-1135	14-16-2520-1135	14-16-2521-1135	14-16-2525-1135	14-16-2535-1135	14-16-2535-1786	14-16-2363-1135	14-16-2361-1135	
2010										
Tax Capital Reserve	\$ 27,271		\$ 5,455	\$ 19,701					\$ 1,364	\$ 53,791
DCA	\$ 72,729		\$ 14,545	\$ 28,299					\$ 3,636	\$ 119,209
2011										
Tax Capital Reserve	\$ 5,455		\$ 5,455	\$ 19,701						\$ 30,611
DCA	\$ 14,545		\$ 14,545	\$ 28,299						\$ 57,389
2011										
Tax Capital Reserve	\$ 211,351									\$ 211,351
DCA	\$ 563,649									\$ 563,649
2015										
Tax Capital Reserve	\$ 297,576									\$ 297,576
DCA	\$ 552,639									\$ 552,639
Developer Agreements	\$ 39,785									\$ 39,785
2016										
Tax Debt			\$ 209,344	\$ 590,907	\$ 83,738			\$ 72,188	\$ 39,200	\$ 1,571,127
Tax Capital Reserve										
DCA	\$ 1,069,250	\$ 1,174,560	\$ 388,781	\$ 1,772,718	\$ 155,512		\$ 519,750	\$ 134,062	\$ 72,800	\$ 5,287,433
Developer Agreements	\$ 5,000	\$ 16,800				\$ 9,420			\$ 20,000	\$ 51,220
Section 326 - Property Owners		\$ 83,200				\$ 85,200				\$ 168,400
Water Rate						\$ 394,830				\$ 394,830
Wastewater Rate		\$ 293,640								\$ 293,640
MAY 2016 CSR										
Tax Capital Reserve		\$ 152,499		\$ 200,900						\$ 353,399
DCA		\$ 609,996		\$ 289,100						\$ 899,096
Developer Agreements		\$ 7,506								\$ 7,506
2017										
Tax Debt	\$ 179,158		\$ 69,782	\$ 196,969	\$ 27,913			\$ 24,063	\$ 15,400	\$ 513,285
Tax Capital Reserve										
DCA	\$ 332,720	\$ 394,000	\$ 129,593	\$ 590,906	\$ 51,837		\$ 173,250	\$ 44,687	\$ 28,600	\$ 1,745,593
Developer Agreements	\$ 38,122	\$ 2,500								\$ 40,622
Water Rate						\$ 134,750				\$ 134,750
Wastewater Rate		\$ 98,500								\$ 98,500
TOTAL	\$ 3,985,000	\$ 2,833,201	\$ 837,500	\$ 3,737,500	\$ 319,000	\$ 624,200	\$ 693,000	\$ 275,000	\$ 181,000	\$ 13,485,401

PROPOSED BUDGET FUNDING

Component	Roads	Sanitary	Storm	Culverts	Sidewalks	Water (domestic)	Water (transmission)	Street Lights	Traffic Signals	TOTAL
Account Numbers	14-16-2510-1135	14-16-2515-1135	14-16-2520-1135	14-16-2521-1135	14-16-2525-1135	14-16-2535-1135	14-16-2535-1786	14-16-2363-1135	14-16-2361-1135	
2010										
Tax Capital Reserve	\$27,271		\$ 5,455	\$19,701					\$1,364	\$53,791
DCA	\$72,729		\$14,545	\$28,299					\$3,636	\$119,209
2011										\$ -
Tax Capital Reserve	\$5,455		\$5,455	\$19,701						\$30,611
DCA	\$14,545		\$14,545	\$28,299						\$57,389
2011										\$ -
Tax Capital Reserve	\$ 211,351									\$211,351
DCA	\$563,649									\$563,649
2015										\$ -
Tax Capital Reserve	\$297,576									\$297,576
DCA	\$552,639									\$552,639
Developer Agreements	\$39,785									\$39,785
2016										\$ -
Tax Debt	\$ -		\$ -	\$ -	\$ -			\$ -	\$ -	\$ -
Federal Gas Tax	\$604,022		\$351,817	\$661,264	\$54,051			\$49,988	\$34,802	\$1,755,944
Tax Capital Reserve										\$ -
DCA	\$1,121,755	\$1,978,625	\$653,374	\$1,983,788	\$100,379		\$1,189,216	\$92,834	\$64,632	\$7,184,603
Developer Agreements	\$5,000	\$16,800				\$9,420			\$20,000	\$51,220
Section 326 - Property Owners		\$83,200				\$85,200				\$168,400
Water Rate						\$364,882				\$364,882
Wastewater Rate		\$494,656								\$494,656
MAY 2016 CSR										
Tax Capital Reserve		\$256,895		\$224,820						\$481,715
DCA		\$1,027,579		\$323,522						\$1,351,101
Developer Agreements		\$7,506								\$7,506
2017										\$ -
Tax Debt	\$ -		\$ -	\$ -	\$ -			\$ -	\$ -	\$ -
Federal Gas Tax	\$277,724		\$144,496	\$231,852	\$18,017			\$16,663	\$10,867	\$699,620
Tax Capital Reserve										\$ -
DCA	\$349,058	\$663,719	\$217,790	\$661,263	\$33,460		\$396,405	\$30,944	\$25,391	\$2,378,031
Developer Agreements	\$38,122	\$2,500								\$40,622
Water Rate						\$117,352				\$117,352
Wastewater Rate		\$241,236								\$241,236
TOTAL	\$4,180,681	\$4,772,716	\$1,407,478	\$4,182,509	\$205,907	\$576,854	\$1,585,621	\$190,429	\$160,693	\$17,262,888

FUNDING ADJUSTMENT

Component	Roads	Sanitary	Storm	Culverts	Sidewalks	Water (domestic)	Water (transmission)	Street Lights	Traffic Signals	TOTAL
Account Numbers	14-16-2510-1135	14-16-2515-1135	14-16-2520-1135	14-16-2521-1135	14-16-2525-1135	14-16-2535-1135	14-16-2535-1786	14-16-2363-1135	14-16-2361-1135	
2010										
Tax Capital Reserve										\$ -
DCA										\$ -
2011										\$ -
Tax Capital Reserve										\$ -
DCA										\$ -
2011										\$ -
Tax Capital Reserve										\$ -
DCA										\$ -
2015										\$ -
Tax Capital Reserve										\$ -
DCA										\$ -
Developer Agreements										\$ -
2016										\$ -
Tax Debt	\$(575,750)		\$(209,344)	\$(590,907)	\$(83,738)			\$(72,188)	\$(39,200)	\$(1,571,127)
Federal Gas Tax	\$604,022		\$351,817	\$661,264	\$54,051			\$49,988	\$34,802	\$1,755,944
Tax Capital Reserve										\$ -
DCA	\$52,505	\$804,065	\$264,593	\$211,070	\$(55,133)		\$669,466	\$(41,228)	\$(8,168)	\$1,897,170
Developer Agreements										\$ -
Section 326 - Property Owners										\$ -
Water Rate						\$(29,948)				\$(29,948)
Wastewater Rate		\$201,016								\$201,016
MAY 2016 CSR										
Tax Capital Reserve		\$104,396		\$23,920						\$128,316
DCA		\$417,583		\$34,422						\$452,005
Developer Agreements										\$ -
2017										
Tax Debt	\$(179,158)		\$(69,782)	\$(196,969)	\$(27,913)			\$(24,063)	\$(15,400)	\$(513,285)
Federal Gas Tax	\$277,724		\$144,496	\$231,852	\$18,017			\$16,663	\$10,867	\$699,620
Tax Capital Reserve										\$ -
DCA	\$16,338	\$269,719	\$88,197	\$70,357	\$(18,377)		\$223,155	\$(13,743)	\$(3,209)	\$632,438
Developer Agreements										\$ -
Water Rate						\$(17,398)				\$(17,398)
Wastewater Rate		\$142,736								\$142,736
TOTAL	\$195,681	\$1,939,515	\$569,978	\$445,009	\$(113,093)	\$(47,346)	\$892,621	\$(84,571)	\$(20,307)	\$3,777,487

FUNDING ADJUSTMENT SUMMARY

Component	Roads	Sanitary	Storm	Culverts	Sidewalks	Water (domestic)	Water (transmission)	Street Lights	Traffic Signals	TOTAL
Account Numbers	14-16-2510-1135	14-16-2515-1135	14-16-2520-1135	14-16-2521-1135	14-16-2525-1135	14-16-2535-1135	14-16-2535-1786	14-16-2363-1135	14-16-2361-1135	
Tax Debt	\$(754,908)		\$(279,126)	\$(787,876)	\$(111,651)			\$(96,251)	\$(54,600)	\$(2,084,412)
Federal Gas Tax	\$881,746		\$496,314	\$893,116	\$72,068			\$66,651	\$45,669	\$2,455,564
Tax Capital Reserve		\$104,396		\$23,920						\$128,316
DCA	\$68,843	\$1,491,367	\$352,790	\$315,849	\$(73,510)	\$ -	\$892,621	\$(54,971)	\$(11,376)	\$2,981,613
Developer Agreements										\$ -
Section 326 - Property Owners										\$ -
Water Rate						\$(47,346)				\$(47,346)
Wastewater Rate		\$343,752								\$343,752
TOTAL	\$195,681	\$1,939,515	\$569,978	\$445,009	\$(113,093)	\$(47,346)	\$892,621	\$(84,571)	\$(20,307)	\$3,777,487